UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

[x] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934
For The Fiscal Year Ended December 31, 2013
OR
[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number 1-3610

ALCOA INC.

(Exact name of registrant as specified in its charter)

Pennsylvania	25-0317820
(State of incorporation)	(I.R.S. Employer Identification No.)

390 Park Avenue, New York, New York 10022-4608
(Address of principal executive offices) (Zip code)

Registrant's telephone numbers:

Investor Relations-------------— (212) 836-2674
Office of the Secretary---------—(212) 836-2732

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, par value $1.00	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes___ No ü.

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes __ No ü .

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months, and (2) has been subject to such filing requirements for the past 90 days. Yes ü No __.

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ü No __.

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ü]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer [ü] Accelerated filer [ ] Non-accelerated filer [ ] Smaller reporting company [ ]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes __ No ü .

The aggregate market value of the outstanding common stock, other than shares held by persons who may be deemed affiliates of the registrant, as of the last business day of the registrant's most recently completed second fiscal quarter was approximately $8 billion. As of February 7, 2014, there were 1,077,685,695 shares of common stock, par value $1.00 per share, of the registrant outstanding.

Documents incorporated by reference.

Part III of this Form 10-K incorporates by reference certain information from the registrant's definitive Proxy Statement for its 2014 Annual Meeting of Shareholders to be filed pursuant to Regulation 14A (Proxy Statement).

TABLE OF CONTENTS

Note on Incorporation by Reference

In this Form 10-K, selected items of information and data are incorporated by reference to portions of the Proxy Statement. Unless otherwise provided herein, any reference in this report to disclosures in the Proxy Statement shall constitute incorporation by reference of only that specific disclosure into this Form 10-K.

PART I

Item 1. Business.

General

Formed in 1888, Alcoa Inc. is a Pennsylvania corporation with its principal office in New York, New York. In this report, unless the context otherwise requires, "Alcoa" or the "Company" means Alcoa Inc. and all subsidiaries consolidated for the purposes of its financial statements.

The Company's Internet address is http://www.alcoa.com. Alcoa makes available free of charge on or through its website its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after the Company electronically files such material with, or furnishes it to, the Securities and Exchange Commission (SEC). The SEC maintains an Internet site that contains these reports at http://www.sec.gov.

Forward-Looking Statements

This report contains (and oral communications made by Alcoa may contain) statements that relate to future events and expectations and, as such, constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include those containing such words as "anticipates," "believes," "estimates," "expects," "forecast," "hopes," "outlook," "projects," "should," "targets," "will," "will likely result," or other words of similar meaning. All statements that reflect Alcoa's expectations, assumptions or projections about the future other than statements of historical fact are forward-looking statements, including, without limitation, forecasts concerning aluminum industry growth or other trend projections, anticipated financial results or operating performance, and statements about Alcoa's strategies, objectives, goals, targets, outlook, and business and financial prospects. Forward-looking statements are subject to a number of known and unknown risks, uncertainties and other factors and are not guarantees of future performance. Actual results, performance or outcomes may differ materially from those expressed in or implied by those forward-looking statements. For a discussion of some of the specific factors that may cause Alcoa's actual results to differ materially from those projected in any forward-looking statements, see the following sections of this report: Part I, Item 1A. (Risk Factors), Part II, Item 7. (Management's Discussion and Analysis of Financial Condition and Results of Operations), including the disclosures under Segment Information and Critical Accounting Policies and Estimates, and Note N and the Derivatives Section of Note X to the Consolidated Financial Statements in Part II, Item 8. (Financial Statements and Supplementary Data). Alcoa disclaims any intention or obligation to update publicly any forward-looking statements, whether in response to new information, future events or otherwise, except as required by applicable law.

Overview

Alcoa is a global leader in lightweight metals engineering and manufacturing. Alcoa's innovative, multi-material products, which include aluminum, titanium, and nickel, are used worldwide in aircraft, automobiles, commercial transportation, packaging, building and construction, oil and gas, defense, consumer electronics, and industrial applications.

Alcoa is also the world leader in the production and management of primary aluminum, fabricated aluminum, and alumina combined, through its active participation in all major aspects of the industry: technology, mining, refining, smelting, fabricating, and recycling. Aluminum is a commodity that is traded on the London Metal Exchange (LME) and priced daily. Aluminum (primary and fabricated) and alumina represent approximately 80% of Alcoa's revenues, and the price of aluminum influences the operating results of Alcoa.

Alcoa is a global company operating in 30 countries. Based upon the country where the point of sale occurred, the U.S. and Europe generated 51% and 26%, respectively, of Alcoa's sales in 2013. In addition, Alcoa has investments and operating activities in, among others, Australia, Brazil, China, Guinea, Iceland, Russia, and Saudi Arabia, all of which present opportunities for substantial growth. Governmental policies, laws and regulations, and other economic factors, including inflation and fluctuations in foreign currency exchange rates and interest rates, affect the results of operations in these countries.

Alcoa's operations consist of four worldwide reportable segments: Alumina, Primary Metals, Global Rolled Products, and Engineered Products and Solutions.

Description of the Business

Information describing Alcoa's businesses can be found on the indicated pages of this report:

The following tables and related discussion of the Company's Bauxite Interests, Alumina Refining and Primary Aluminum Facilities and Capacities, Global Rolled Products, Engineered Products and Solutions and Corporate Facilities provide additional description of Alcoa's businesses. The Alumina segment primarily consists of a series of affiliated operating entities referred to as Alcoa World Alumina and Chemicals (AWAC). Alcoa owns 60% and Alumina Limited owns 40% of these individual entities. For more information on AWAC, see Exhibit Nos. 10(a) through 10(f)(1) to this report.

Bauxite Interests

Aluminum is one of the most plentiful elements in the earth's crust and is produced primarily from bauxite, an ore containing aluminum in the form of aluminum oxide, commonly referred to as alumina. Aluminum is made by extracting alumina from bauxite and then removing oxygen from the alumina. Alcoa processes most of the bauxite that it mines into alumina. The Company obtains bauxite from its own resources and from those belonging to the AWAC enterprise, located in the countries listed in the table below, as well as pursuant to both long-term and short-term contracts and mining leases. During 2013, Alcoa consumed 41 million metric tons (mt) from AWAC and its own resources and 7 million mt from entities in which the Company has an equity interest. Tons of bauxite are reported as bone dry metric tons (bdmt) unless otherwise stated. See the glossary of bauxite mining related terms at the end of this section.

The Company has access to large bauxite deposit areas with mining rights that extend in most cases more than 20 years from today. For purposes of evaluating the amount of bauxite that will be available to supply as feedstock to its refineries, the Company considers both estimates of bauxite resources as well as calculated bauxite reserves. Bauxite resources represent deposits for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence based on the amount of exploration sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. Bauxite reserves represent the economically mineable part of resource deposits, and include diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out to define the reserves, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. Alcoa employs a conventional approach (including additional drilling with successive tightening of the drill grid) with customized techniques to define and characterize its various bauxite deposit types allowing Alcoa to confidently establish the extent of its bauxite resources and their ultimate conversion to reserves.

The table below only includes the amount of proven and probable reserves controlled by the Company. While the level of reserves may appear low in relation to annual production levels, they are consistent with historical levels of reserves for our mining locations. Given the Company’s extensive bauxite resources, the abundant supply of bauxite globally and the length of the Company’s rights to bauxite, it is not cost-effective to invest the significant resources necessary to establish bauxite reserves that reflect the total size of the bauxite resources available to the Company. Rather, bauxite resources are upgraded annually to reserves as needed by the location. Detailed assessments are progressively undertaken within a proposed mining area and mine activity is then planned to achieve a uniform quality in the supply of blended feedstock to the relevant refinery. Alcoa believes its present sources of bauxite on a global basis are sufficient to meet the forecasted requirements of its alumina refining operations for the foreseeable future.

Bauxite Resource Development Guidelines

Alcoa has developed best practice guidelines for bauxite reserve and resource classification at its operating bauxite mines. Alcoa’s reserves are declared in accordance with Alcoa’s internal guidelines as administered by the Alcoa Ore Reserve Committee (AORC). The reported ore reserves set forth in the table below are those that Alcoa estimates could be extracted economically with current technology and in current market conditions. Alcoa does not use a price for bauxite, alumina, or aluminum to determine its bauxite reserves. The primary criteria for determining bauxite reserves are the feed specifications required by the customer alumina refinery. In addition to these specifications, a number of modifying factors have been applied to differentiate bauxite reserves from other mineralized material. Alcoa mining locations have annual in-fill drilling programs designed to progressively upgrade the reserve classification of their bauxite.

Table of Contents

Alcoa Bauxite Interests, Share of Reserves and Annual Production[1]

Country	Project	Owners' Mining Rights (% Entitlement)	Expiration Date of Mining Rights	Probable Reserves (million bdmt)	Proven Reserves (million (bdmt)	Available Alumina Content (%) $AvAl_2O_3$	Reactive Silica Content (%) $RxSiO_2$	2013 Annual Production (million bdmt)
Australia	Darling Range Mines ML1SA	Alcoa of Australia Limited (AofA)[2] (100%)	2024	37.0	127.4	33.1	0.91	31.4
Brazil	Poços de Caldas	Alcoa Alumínio S.A. (Alumínio)[3] (100%)	2020[4]	0.3	1.2	38.6	4.5	0.8
	Juruti[4], RN101, RN102, RN103, RN104, #34	Alcoa World Alumina Brasil Ltda. (AWA Brasil)[2] (100%)	2100[4]	23.1	23.2	48.1	4.3	3.9
Jamaica	Harmon's Valley, South Manchester, Porus/Victoria Town	Alcoa Minerals of Jamaica, L.L.C.[2] (55%) Clarendon Alumina Production Ltd.[5] (45%)	2031	0.2	0.6	41.5	2.4	1.8
Suriname	Coermotibo and Onverdacht	Suriname Aluminum Company, L.L.C. (Suralco)[2] (55%) N.V. Alcoa Minerals of Suriname (AMS)[6] (45%)	2033[7]	2.5	-	45.8	4.8	2.7
Equity interests:								
Brazil	Trombetas	Mineração Rio do Norte S.A. (MRN)[8] (18.2%)	2046[4]	3.4	15.5	49.5	4.6	2.9
Guinea	Boké	Compagnie des Bauxites de Guinée (CBG)[9] (22.95%)	2038[10]	42.2	26.3	TAl_2O_3[11] 50.1	$TSiO_2$[11] 1.7	3.4
Kingdom of Saudi Arabia	Al Ba'itha	Ma'aden Bauxite & Alumina Company (25.1%)[12]	2037	33.9	21.3	TAA[13] 47.2	$TSiO_2$[13] 9.8	Production to begin 2014

1 This table shows only the AWAC and/or Alcoa share (proportion) of reserve and annual production tonnage.

2 This entity is part of the AWAC group of companies and is owned 60% by Alcoa and 40% by Alumina Limited.

3 Alumínio is owned 100% by Alcoa.

4 Brazilian mineral legislation does not establish the duration of mining concessions. The concession remains in force until the exhaustion of the deposit. The Company estimates that (i) the concessions at Poços de Caldas will last at least until 2020, (ii) the concessions at Trombetas will last until 2046 and (iii) the concessions at Juruti will last until 2100. Depending, however, on actual and future needs, the rate at which the deposits are exploited and government approval is obtained, the concessions may be extended to (or expire at) a later (or an earlier) date.

5 Clarendon Alumina Production Ltd. is wholly-owned by the Government of Jamaica.

6 Alcoa World Alumina LLC (AWA LLC) owns 100% of N.V. Alcoa Minerals of Suriname (AMS). Suralco and AMS are parts of the AWAC group of companies which are owned 60% by Alcoa and 40% by Alumina Limited.

7 The mining rights in the Onverdacht and Coermotibo areas where Suralco has active mines extend until 2033. Onverdacht reserves were reclassified as resources pending testing during 2014 to confirm ore characteristics. Proven reserves at Coermotibo were reclassified as probable reserves pending new density tests during 2014. Bauxite within these areas will likely be exhausted in the next few years. During 2013, Suralco received for processing 12.7 thousand

mt of Juruti high iron bauxite as test material. Alcoa is actively exploring and evaluating additional sources of bauxite in Suriname. During 2014, Suralco will be mining from both reserves and resources. A feasibility study relating to the development of a mine at the Nassau Plateau is in progress.

8 Alumínio holds an 8.58% total interest, AWA Brasil (formerly Abalco S.A., which merged with Alcoa World Alumina Brasil Ltda. in December 2008) holds a 4.62% total interest and AWA LLC holds a 5% total interest in MRN. MRN is jointly owned with affiliates of Rio Tinto Alcan Inc., Companhia Brasileira de Alumínio, Companhia Vale do Rio Doce, BHP Billiton Plc (BHP Billiton) and Norsk Hydro. Alumínio, AWA Brasil, and AWA LLC purchase bauxite from MRN under long-term supply contracts.

9 AWA LLC owns a 45% interest in Halco (Mining), Inc. (Halco). Halco owns 100% of Boké Investment Company, a Delaware company, which owns 51% of CBG. The Guinean Government owns 49% of CBG, which has the exclusive right through 2038 to develop and mine bauxite in certain areas within a 10,000 square-mile concession in northwestern Guinea.

10 AWA LLC has a bauxite purchase contract with CBG that expires in 2029. Before that expiration date, AWA LLC expects to negotiate an extension of the contract as CBG will have concession rights until 2038. The CBG concession can be renewed beyond 2038 by agreement of the Government of Guinea and CBG should more time be required to commercialize the remaining economic bauxite within the concession.

11 Guinea—Boké: CBG prices bauxite and plans the mine based on the bauxite qualities of total alumina (TAl_2O_3) and total silica (TSiO2).

12 Ma’aden Bauxite & Alumina Company is a joint venture owned by Saudi Arabian Mining Company (Ma’aden) (74.9%) and AWA Saudi Limited (25.1%). AWA Saudi Limited is part of the AWAC group of companies and is owned 60% by Alcoa and 40% by Alumina Limited.

13 Kingdom of Saudi Arabia—Al Ba’itha: Bauxite reserves and mine plans are based on the bauxite qualities of total available alumina (TAA) and total silica ($TSiO_2$).

Qualifying statements relating to the table above:

Australia—**Darling Range Mines:** Huntly and Willowdale are the two active mines in the Darling Range of Western Australia. The mineral lease issued by the State of Western Australia to Alcoa is known as ML1SA and its term extends to 2024. The lease can be renewed for an additional twenty-one year period to 2045. The declared reserves are as of December 31, 2013. The amount of reserves reflect the total AWAC share. Additional resources are routinely upgraded by additional exploration and development drilling to reserve status. The Huntly and Willowdale mines supply bauxite to three local AWAC alumina refineries.

Brazil—Poços de Caldas: Declared reserves are as of December 31, 2013. Tonnage is total Alcoa share. Additional resources are being upgraded to reserves as needed.

Brazil—Juruti RN101, RN102, RN103, RN104, #34: Declared reserves are as of December 31, 2013. All reserves are on Capiranga Plateau. Declared reserves are total AWAC share. Declared reserve tonnages and the annual production tonnage are washed product tonnages. The Juruti mine’s operating license is periodically renewed.

Jamaica—Jamalco: Declared reserves are as of December 31, 2013. The declared reserve and annual production tonnages are AWAC share only (55%). Declared reserves are in the following areas: Harmon’s Valley, South Manchester and Porus/Victoria Town. Current ore mining is in Harmon’s Valley, South Manchester and Porus/Victoria Town. Additional resources remain in Harmon’s Valley, South Manchester, Porus/Victoria Town and North Manchester. Resources are in the process of being promoted to reserves as land acquisition, resettlement and access rights are secured. The Porus/Victoria Town exploration license area was added to Jamalco’s mining license (SML130) during 2013.

Suriname—Suralco—Caramacca: During 2013, the Suriname Ministry of Mines notified Suralco that it is permitted to continue to mine at Caramacca while the application for renewal of the mining permit is pending Ministry action. Remaining bauxite at Caramacca has been reclassified as resources. Suralco intends to complete the mining of the Caramacca resources during 2014.

Kingdom of Saudi Arabia—Al Ba'itha: Declared reserves are as of March 2011 and are for the South Zone of the Az Zabirah Bauxite Deposit. The reserve tonnage in this declaration is AWAC share only (25.1%). The Al Ba'itha Mine is due to begin production during 2014.

Brazil—Trombetas-MRN: Declared reserves are as of December 31, 2013. The CP Report for December 31, 2013 will be issued in February 2014. Declared and annual production tonnages reflect the total for Alumínio and AWAC shares (18.2%). Declared tonnages are washed product tonnages.

Guinea—Boké-CBG: Declared reserves are as of December 31, 2012 (most current CP Report) less the tonnage for 2013 shipments. 2013 shipment tonnage has been subtracted from the Proven Reserves. CBG issues a JORC compliant CP Report once per year. The CP Report for December 31, 2013 reserves is expected to be issued in March 2014. The declared reserves are based on export quality bauxite reserves. Declared reserve tonnages are based on the AWAC share of CBG's reserves. Annual production tonnage reported is based on AWAC's 22.95% share. Declared reserves quality is reported based on total alumina (TAl_2O_3) and total silica ($TSiO_2$) because CBG export bauxite is sold on this basis. Additional resources are being routinely drilled and modeled to upgrade to reserves as needed.

Table of Contents

The following table provides additional information regarding the Company's bauxite mines:

Mine & Location	Means of Access	Operator	Title, Lease or Options	History	Type of Mine Mineralization Style	Power Source	Facilities, Use & Condition
Australia—Darling Range; Huntly and Willowdale.	Mine locations accessed by roads. Ore is transported to refineries by long distance conveyor and rail.	Alcoa	Mining Lease from the Western Australia Government. ML1SA. Expires in 2024.	Mining began in 1963.	Open-cut mines. Bauxite is derived from the weathering of Archean granites and gneisses and Precambrian dolerite.	Electrical energy from natural gas is supplied by the refinery.	Infrastructure includes buildings for administration and services; workshops; power distribution; water supply; crushers; long distance conveyors. Mines and facilities are operating.
Brazil—Poços de Caldas. Closest town is Poços de Caldas, MG, Brazil.	Mine locations are accessed by road. Ore transport to the refinery is by road.	Alcoa	Mining licenses from the Government of Brazil and Minas Gerais. Company claims and third-party leases. Expire in 2020.	Mining began in 1965.	Open-cut mines. Bauxite derived from the weathering of nepheline syenite and phonolite.	Commercial grid power.	Mining offices and services are located at the refinery. Numerous small deposits are mined by contract miners and the ore is trucked to either the refinery stockpile or intermediate stockpile area. Mines and facilities are operating.
Brazil—Juruti Closest town is Juruti located on the Amazon River.	The mine's port at Juruti is located on the Amazon River and accessed by ship. Ore is transported from the mine site to the port by Company owned rail.	Alcoa	Mining licenses from the Government of Brazil and Pará. Mining rights do not have a legal expiration date. See footnote 4 to the table above. The operating license's next renewal date is in 2014.	The Juruti deposit was systematically evaluated by Reynolds Metals Company beginning in 1974. Alcoa merged Reynolds into the Company in 2000. Alcoa then executed a due diligence program and expanded the exploration area. Mining began in 2009.	Open-cut mines. Bauxite derived from weathering during the Tertiary of Cretaceous fine to medium grained feldspathic sandstones. The deposits are covered by the Belterra clays.	Electrical energy from fuel oil is generated at the mine site. Commercial grid power at the port.	At the mine site: Fixed plant facilities for crushing and washing the ore; mine services offices and workshops; power generation; water supply; stockpiles; rail sidings. At the port: Mine and rail administrative offices and services; port control facilities with stockpiles and ship loader. Mine and port facilities are operating.
Jamaica—Harmon's Valley, South Manchester, Porus/Victoria Town. All located in the Parish of Manchester.	The mines are accessed by road. Ore is transported to the refinery by Company rail. The refinery is located near Halse Hall, Clarendon Parish.	Alcoa	Mining licenses from the Government of Jamaica. Expire 2031.	Mining began in 1963.	Open-cut mines. The karst landscape from the White Limestone Formation of Eocene to Miocene age hosts the quasi-funnel shaped bauxite deposits which are residual from the weathering of volcanic and terrestrial materials.	Commercial grid power.	Numerous small to large deposits are mined within the license areas by contract miners and delivered to stockpile areas. The main mine administrative offices and services are located near San Jago. Ore is delivered to San Jago by truck and by Ropecon conveyor. The train loadout area is at San Jago. Mine, railroad and other facilities are operating.
Suriname— Coermotibo and Onverdacht. Mines are located in the districts of Para and Marowijne.	The mines are accessed by road. Ore is delivered to the refinery by road from the Onverdacht area and by river barge from the Coermotibo area.	Alcoa	Brokopondo Concession from the Government of Suriname. Concessions formerly owned by a BHP Billiton (BHP) subsidiary that was a 45% joint venture partner in the Surinamese bauxite mining and alumina refining joint ventures. AWA LLC acquired that subsidiary in 2009. After the acquisition of the subsidiary, its name was changed to N.V. Alcoa Minerals of Suriname. Expires in 2033.	Alcoa began mining in Suriname in 1916. The Brokopondo Agreement was signed in 1958. As noted, Suralco bought the bauxite and alumina interests of a BHP subsidiary from BHP in 2009.	Open-cut mines. For some mines the overburden is dredged and mining progresses with conventional open-cut methods.The protoliths of the bauxite have been completely weathered.The bauxite deposits are mostly derived from the weathering of Tertiary Paleogene arkosic sediments. In a few spots the bauxite overlies Precambrian granitic and gneissic rocks which are now saprolite. Bauxitization likely occurred during the middle to late Eocene Age.	Commercial grid power.	In the Onverdacht mining areas the bauxite is mined and transported to the refinery by truck. In the Coermotibo mining areas the bauxite is mined and stockpiled and then transported to the refinery by barge. Some of the ore is washed in a small beneficiation plant located in the Coermotibo area.The main mining administrative offices and services and workshops and laboratory are located at the refinery in Paranam.The ore is crushed at Paranam. The mines and washing plant are operating.

Mine & Location	Means of Access	Operator	Title, Lease or Options	History	Type of Mine Mineralization Style	Power Source	Facilities, Use & Condition
Brazil—MRN Closest town is Trombetas in the State of Pará, Brazil.	The mine and port areas are connected by sealed road and company owned rail. Washed ore is transported to Porto Trombetas by rail. Trombetas is accessed by river and by air at the airport.	MRN	Mining rights and licenses from the Government of Brazil. Concession rights expire in 2046.	Mining began in 1979. Major expansion in 2003.	Open-cut mines. Bauxite derived from weathering during the Tertiary of Cretaceous fine to medium grained feldspathic sandstones. The deposits are covered by the Belterra clays.	MRN generates its own electricity from fuel oil.	Ore mined from several plateaus is crushed and transported to the washing plant by long distance conveyors. The washing plant is located in the mining zone. Washed ore is transported to the port area by company owned and operated rail. At Porto Trombetas the ore is loaded onto customer ships berthed in the Trombetas River. Some ore is dried and the drying facilities are located in the port area. Mine planning and services and mining equipment workshops are located in the mine zone. The main administrative, rail and port control offices and various workshops are located in the port area. MRN's main housing facilities, 'the city', are located near the port. The mines, port and all facilities are operating.
Guinea—CBG Closest town to the mine is Sangaredi. Closest town to the port is Kamsar. The CBG Lease is located within the Boké, Telimele and Gaoual administrative regions.	The mine and port areas are connected by sealed road and company operated rail. Ore is transported to the port at Kamsar by rail. There are air strips near both the mine and port. These are not operated by the company.	CBG	CBG Lease expires in 2038.The lease is renewable in 25 year increments. CBG's rights are specified within the Basic Agreement and Amendment 1 to the Basic Agreement with the Government of Guinea.	Construction began in 1973. First export ore shipment was in 1973.	Open-cut mines. The bauxite deposits within the CBG lease are of two general types.TYPE 1: In-situ laterization of Ordovician and Devonian plateau sediments locally intruded by dolerite dikes and sills. TYPE. 2: Sangaredi type deposits are derived from clastic deposition of material eroded from the Type 1 laterite deposits and possibly some of the proliths from the TYPE 1 plateaus deposits.	The company generates its own electricity from fuel oil at both Kamsar and Sangaredi.	Mine offices, workshops, power generation and water supply for the mine and company mine city are located at Sangaredi. The main administrative offices, port control, railroad control, workshops, power generation and water supply are located in Kamsar. Ore is crushed, dried and exported from Kamsar. CBG has company cities within both Kamsar and Sangaredi. The mines, railroad, driers, port and other facilities are operating.
Kingdom of Saudi Arabia—Al Ba'itha Mine. Qibah is the closest regional centre to the mine, located in the Qassim province.	The mine and refinery are connected by road and rail. Ore will be transported to the refinery at Ras Al Khair by rail.	Ma'aden Bauxite & Alumina Company	The current mining lease will expire in 2037.	The initial discovery and delineation of bauxite resources was carried out between 1979 and 1984. The southern zone of the Az Zabirah deposit was granted to Ma'aden in 1999. Currently the mine is in development. Production is to begin in 2014.	Open-cut mine. Bauxite occurs as a paleolaterite profile developed at an angular unconformity between underlying late Triassic to early Cretaceous sediments (parent rock sequence Biyadh Formation) and the overlying late Cretaceous Wasia Formation (overburden sequence).	The company will generate electricity at the mine site from fuel oil.	The mine will include fixed plants for crushing and train loading; workshops and ancillary services; power plant; and water supply. There will be a company village with supporting facilities. The mine is under construction. Mining operations are to commence in 2014.

Kingdom of Saudi Arabia Joint Venture

In December 2009, Alcoa and Saudi Arabian Mining Company (Ma'aden) entered into a joint venture to develop a fully integrated aluminum complex in the Kingdom of Saudi Arabia. In its initial phases, the complex includes a bauxite mine with an initial capacity of 4 million bdmtpy; an alumina refinery with an initial capacity of 1.8 million mtpy; an aluminum smelter with an initial capacity of ingot, slab and billet of 740,000 mtpy; and a rolling mill with initial capacity of 380,000 mtpy. The mill will produce sheet, end and tab stock for the manufacture of aluminum cans, as well as other products to serve the automotive, construction, and other industries.

The refinery, smelter and rolling mill are located within the Ras Al Khair industrial zone on the east coast of the Kingdom of Saudi Arabia. First hot metal from the smelter was produced on December 12, 2012. The smelter reached production of 190,000 mtpy in 2013 and is expected to reach full capacity in 2014. The first hot coil from the rolling mill was produced in the fourth quarter of 2013 and the first automotive coil is expected in the fourth quarter of 2014. First production from the mine and refinery is expected in 2014.

Total capital investment is expected to be approximately $10.8 billion (SAR 40.5 billion). Ma'aden owns a 74.9% interest in the joint venture. Alcoa owns a 25.1% interest in the smelter and rolling mill, with the AWAC group holding a 25.1% interest in the mine and refinery. For additional information regarding the joint venture, see the Equity Investments section of Note I to the Consolidated Financial Statements in Part II, Item 8. (Financial Statements and Supplementary Data).

Glossary of Bauxite Mining Related Terms

Term	Abbreviation	Definition
Alcoa Ore Reserves Committee	AORC	The group within Alcoa, which is comprised of Alcoa geologists and engineers, that specifies the guidelines by which bauxite reserves and resources are classified. These guidelines are used by Alcoa managed mines.
Alumina	Al_2O_3	A compound of aluminum and oxygen. Alumina is extracted from bauxite using the Bayer Process. Alumina is a raw material for smelters to produce aluminum metal.
AORC Guidelines		The Alcoa guidelines used by Alcoa managed mines to classify reserves and resources. These guidelines are issued by the Alcoa Ore Reserves Committee (AORC).
Available alumina content	$AvAl_2O_3$	The amount of alumina extractable from bauxite using the Bayer Process.
Bauxite		The principal raw material (rock) used to produce alumina. Bauxite is refined using the Bayer Process to extract alumina.
Bayer Process		The principal industrial means of refining bauxite to produce alumina.
Bone dry metric ton	bdmt	Tonnage reported on a zero moisture basis.
Coermotibo		The mining area in Suriname containing the deposits of Bushman Hill, CBO Explo, Lost Hill and Remnant.
Competent Persons Report	CP Report	JORC compliant Reserves and Resources Report.
Juruti RN101, RN102, RN103, RN104, #34		Mineral claim areas in Brazil associated with the Juruti mine, within which Alcoa has the mining operating licenses issued by the state.
ML1SA		The Mineral lease issued by the State of Western Australia to Alcoa. Alcoa mines located at Huntly and Willowdale operate within ML1SA.
Onverdacht		The mining area in Suriname containing the deposits of Kaaimangrasi, Klaverblad, Lelydorp1 and Sumau 1.
Open-cut mine		The type of mine in which an excavation is made at the surface to extract mineral ore (bauxite). The mine is not underground and the sky is viewable from the mine floor.
Probable reserve		That portion of a reserve, i.e. bauxite reserve, where the physical and chemical characteristics and limits are known with sufficient confidence for mining and to which various mining modifying factors have been applied. Probable reserves are at a lower confidence level than proven reserves.

Term	Abbreviation	Definition
Proven reserve		That portion of a reserve, i. e. bauxite reserve, where the physical and chemical characteristics and limits are known with high confidence and to which various mining modifying factors have been applied.
Reactive silica	$RxSiO_2$	The amount of silica contained in the bauxite that is reactive within the Bayer Process.
Reserve		That portion of mineralized material, i.e. bauxite, that Alcoa has determined to be economically feasible to mine and supply to an alumina refinery.
Resources		Resources are bauxite occurrences and/or concentrations of economic interest that are in such form, quality and quantity that are reasonable prospects for economic extraction.
Silica	SiO_2	A compound of silicon and oxygen.
Total alumina content	TAl_2O_3	The total amount of alumina in bauxite. Not all of this alumina is extractable or available in the Bayer Process.
Total available alumina	TAA	The total amount of alumina extractable from bauxite by the Bayer Process. Commonly this term is used when there is a hybrid or variant Bayer Process that will refine the bauxite.
Total silica	$TSiO_2$	The total amount of silica contained in the bauxite.

Alumina Refining Facilities and Capacity

Alcoa is the world's leading producer of alumina. Alcoa's alumina refining facilities and its worldwide alumina capacity are shown in the following table:

Alcoa Worldwide Alumina Refining Capacity

Country	Facility	Owners (% of Ownership)	Nameplate Capacity[1] (000 MTPY)	Alcoa Consolidated Capacity[2] (000 MTPY)
Australia	Kwinana	AofA[3] (100%)	2,190	2,190
	Pinjarra	AofA (100%)	4,234	4,234
	Wagerup	AofA (100%)	2,555	2,555
Brazil	Poços de Caldas	Alumínio[4] (100%)	390	390
	São Luís (Alumar)	AWA Brasil[3] (39%) Rio Tinto Alcan Inc.[5] (10%) Alumínio (15%) BHP Billiton[5] (36%)	3,500	1,890
Jamaica	Jamalco	Alcoa Minerals of Jamaica, L.L.C.[3] (55%) Clarendon Alumina Production Ltd.[6] (45%)	1,478	841
Spain	San Ciprián	Alúmina Española, S.A.[3] (100%)	1,500	1,500
Suriname	Suralco	Suralco[3] (55%) AMS[7] (45%)	2,207[8]	2,207
United States	Point Comfort, TX	AWA LLC[3] (100%)	2,305[9]	2,305
TOTAL			20,359	18,112

1 Nameplate Capacity is an estimate based on design capacity and normal operating efficiencies and does not necessarily represent maximum possible production.

2 The figures in this column reflect Alcoa's share of production from these facilities. For facilities wholly-owned by AWAC entities, Alcoa takes 100% of the production.

3 This entity is part of the AWAC group of companies and is owned 60% by Alcoa and 40% by Alumina Limited.

4 This entity is owned 100% by Alcoa.

5 The named company or an affiliate holds this interest.

6 Clarendon Alumina Production Ltd. is wholly-owned by the Government of Jamaica.

7 AWA LLC owns 100% of N.V. Alcoa Minerals of Suriname (AMS). AWA LLC is part of the AWAC group of companies and is owned 60% by Alcoa and 40% by Alumina Limited.

8 In May 2009, the Suralco alumina refinery announced curtailment of 870,000 mtpy. The decision was made to protect the long-term viability of the industry in Suriname. The curtailment was aimed at deferring further bauxite extraction until additional in-country bauxite resources are developed and market conditions for alumina improve. The refinery currently has approximately 876,000 mtpy of idle capacity.

9 Reductions in production at Point Comfort resulted mostly from the effects of curtailments initiated in late 2008 through early 2009, as a result of overall market conditions. The reductions included curtailments of approximately 1,500,000 mtpy. Of that original amount, 340,000 mtpy remain curtailed.

As of December 31, 2013, Alcoa had approximately 1,216,000 mtpy of idle capacity against total Alcoa Consolidated Capacity of 18,112,000 mtpy.

As noted above, Alcoa and Ma'aden are developing an alumina refinery in the Kingdom of Saudi Arabia. Initial capacity of the refinery is expected to be 1.8 million mtpy. First production is expected in 2014. For additional information regarding the joint venture, see the Equity Investments section of Note I to the Consolidated Financial Statements in Part II, Item 8. (Financial Statements and Supplementary Data).

In November 2005, AWA LLC and Rio Tinto Alcan Inc. signed a Basic Agreement with the Government of Guinea that sets forth the framework for development of a 1.5 million mtpy alumina refinery in Guinea. In 2006, the Basic Agreement was approved by the Guinean National Assembly and was promulgated into law. The Basic Agreement was originally set to expire in November 2008, but was extended to November 2012, and has been recently extended again until 2015. Pre-feasibility studies were completed in 2008. Additional feasibility study work was completed in 2012, and further activities continued in 2013.

In September 2006, Alcoa received environmental approval from the Government of Western Australia for expansion of the Wagerup alumina refinery to a maximum capacity of 4.7 million mtpy, a potential increase of over 2 million mtpy. This approval had a term of 5 years and included environmental conditions that must be satisfied before Alcoa could seek construction approval for the project. The project was suspended in November 2008 due to global economic conditions and the unavailability of a secure long-term energy supply in Western Australia. These constraints continue and as such the project remains under suspension. In May 2012, the Government of Western Australia granted Alcoa a 5 year extension of the original environmental approval. There were no material developments in 2013.

In 2008, AWAC signed a cooperation agreement with Vietnam National Coal-Minerals Industries Group (Vinacomin) in which they agreed to conduct a joint feasibility study of the Gia Nghia bauxite mine and alumina refinery project located in Vietnam's Central Highlands. The cooperation between AWAC and Vinacomin on Gia Nghia is subject to approval by the Government of Vietnam. If established, the Gia Nghia venture is expected to be 51% owned by Vinacomin, 40% by AWAC and 9% by others. There were no material developments in 2013.

Primary Aluminum Facilities and Capacity

The Company's primary aluminum smelters and their respective capacities are shown in the following table:

Alcoa Worldwide Smelting Capacity

Country	Facility	Owners (% Of Ownership)	Nameplate Capacity[1] (000 MTPY)	Alcoa Consolidated Capacity[2] (000 MTPY)
Australia	Point Henry	AofA (100%)	190	190[3]
	Portland	AofA (55%) CITIC[4] (22.5%) Marubeni[4] (22.5%)	358	197[3,5]
Brazil	Poços de Caldas	Alumínio (100%)	96	96[6]
	São Luís (Alumar)	Alumínio (60%) BHP Billiton[4] (40%)	447	268[6]
Canada	Baie Comeau, Québec	Alcoa (100%)	280[7]	280
	Bécancour, Québec	Alcoa (74.95%) Rio Tinto Alcan Inc.[8] (25.05%)	413	310
	Deschambault, Québec	Alcoa (100%)	260	260
Iceland	Fjarðaál	Alcoa (100%)	344	344
Italy	Portovesme	Alcoa (100%)	150[9]	150
Norway	Lista	Alcoa (100%)	94	94
	Mosjøen	Alcoa (100%)	188	188
Spain	Avilés	Alcoa (100%)	93[10]	93
	La Coruña	Alcoa (100%)	87[10]	87
	San Ciprián	Alcoa (100%)	228	228
United States	Evansville, IN (Warrick)	Alcoa (100%)	269	269
	Massena East, NY	Alcoa (100%)	84[11]	84
	Massena West, NY	Alcoa (100%)	130	130
	Mount Holly, SC	Alcoa (50.33%) Century Aluminum Company[4] (49.67%)	229	115
	Rockdale, TX	Alcoa (100%)	191[12]	191
	Ferndale, WA (Intalco)	Alcoa (100%)	279[13]	279
	Wenatchee, WA	Alcoa (100%)	184[14]	184
TOTAL			4,594	4,037

1 Nameplate Capacity is an estimate based on design capacity and normal operating efficiencies and does not necessarily represent maximum possible production.

2 The figures in this column reflect Alcoa's share of production from these facilities.

3 Figures include the minority interest of Alumina Limited in facilities owned by AofA. From these facilities, Alcoa takes 100% of the production allocated to AofA.

4 The named company or an affiliate holds this interest.

5 In December 2008, approximately 15,000 mtpy annualized production was idled at the Portland facility due to overall market conditions. In July 2009, an additional 15,000 mtpy annualized production was idled, again, due to overall market conditions. This production remains idled.

6 In August 2013, Alcoa initiated the temporary curtailment of 31,000 mtpy at its Poços de Caldas smelter and 97,000 mtpy at its São Luís (Alumar) smelter. This action was completed by the end of September 2013. An additional 3,000 mtpy was temporarily curtailed at the Poços de Caldas smelter by the end of 2013.

[7] In mid-May 2013, in connection with the announcement of a revised modernization plan schedule for the Baie-Comeau smelter, Alcoa stated that it would permanently close the plant's two Soderberg potlines. The closure, which was completed in August, involved 105,000 mtpy of capacity and was part of the 460,000 mtpy of smelting capacity Alcoa announced was under review in May 2013.

[8] Owned through Rio Tinto Alcan Inc.'s interest in Pechiney Reynolds Québec, Inc., which is owned by Rio Tinto Alcan Inc. and Alcoa.

[9] In January 2012, as part of a restructuring of Alcoa's global smelting system, Alcoa announced that it had decided to curtail operations at the Portovesme smelter during the first half of 2012. In March 2012, Alcoa decided to delay the curtailment of the Portovesme smelter until the second half of 2012 based on negotiations with the Italian government and other stakeholders. In the third quarter of 2012, Alcoa began the process of curtailing the Portovesme smelter, and it has since been fully curtailed as of November 2012 with all 150,000 mtpy idled. This action may lead to the permanent closure of the Portovesme facility; however, Alcoa will keep the smelter in restart condition through June 2014.

[10] In January 2012, Alcoa announced its intention to partially and temporarily curtail its Avilés and La Coruña smelters. The partial curtailments were completed in the first half of 2012. As a result of a modification to the load interruptibility regime then in place in the Spanish power market, Alcoa restarted a portion (27,000 mtpy combined for Avilés and La Coruña) of the capacity previously curtailed in the first half of 2012 in order to meet the requirements of the modified interruptibility regime. 35,000 mtpy and 27,000 mtpy remain curtailed at Avilés and La Coruña, respectively. See the Management's Discussion and Analysis of Financial Condition and Results of Operations section for more information.

[11] In August 2013, Alcoa announced the permanent closure of one potline representing 41,000 mtpy at the Massena East facility. In addition, in January 2014, Alcoa announced the permanent shutdown and demolition of the remaining two potlines (capacity of 84,000 mtpy) that employ Soderberg technology at the smelter. The two Soderberg potlines will be fully shut down by the end of the first quarter of 2014.

[12] Between June and November 2008, three of Rockdale's six potlines were idled as a result of uneconomical power prices. The remaining three operating lines were idled in November 2008 due to uncompetitive power supply and overall market conditions. In January 2012, Alcoa announced that it will permanently shut down and demolish two of the six idled potlines as part of a larger strategy to improve its cost position and competitiveness. The remaining four potlines (191,000 mtpy) remain idled.

[13] Approximately half of one potline at the Intalco smelter remains idled, approximately 49,000 mtpy.

[14] One potline at the Wenatchee smelter remains idled, or approximately 41,000 mtpy.

As of December 31, 2013, Alcoa had approximately 655,000 mtpy of idle capacity against total Alcoa Consolidated Capacity of 4,037,000 mtpy.

In June 2013, Alcoa announced its intention to permanently close the Fusina, Italy smelter. The closure is in addition to the 460,000 mtpy of operating smelting capacity that the company announced was under review in May 2013.

As noted above, Alcoa and Ma'aden have developed an aluminum smelter in the Kingdom of Saudi Arabia. The smelter is expected to have an initial capacity of ingot, slab and billet of 740,000 mtpy. First hot metal was produced on December 12, 2012 and the smelter reached production of 190,000 mtpy in 2013. In October 2013, Alcoa announced that it had halted production on one of two potlines. The temporary shutdown was undertaken after a period of pot instability. The joint venture is actively working to restore the potline, and it is expected to be completed and back online between the first and second quarter of 2014. The second potline is operating at capacity. There is no impact to any other part of the joint venture project.

In 2013, Alcoa and the Brunei Economic Development Board agreed to further extend an existing Memorandum of Understanding (MOU) to enable more detailed studies into the feasibility of establishing a modern, gas-powered aluminum smelter in Brunei Darussalam.

In November 2013, following elections in Greenland, the parliament approved changes to framework legislation affecting large scale projects. The impact of those changes on the economic feasibility of the proposed integrated hydro system-aluminum smelter now requires evaluation.

The MOU with the Government of Angola for the feasibility study of an aluminum smelter and related power assets has expired, and will not be extended.

Global Rolled Products

The principal business of the Company's Global Rolled Products segment is the production and sale of aluminum plate, sheet, and specialty foil. This segment includes rigid container sheet (RCS), which is sold directly to customers in the packaging and consumer market. This segment also includes sheet and plate used in the aerospace, automotive, brazing, commercial transportation, and building and construction markets.

As noted above, Alcoa and Ma'aden are developing a rolling mill in the Kingdom of Saudi Arabia. In 2010, the joint venture entity, Ma'aden Rolling Company, signed project financing for its rolling mill and broke ground on the construction of the mill. Initial capacity is approximately 380,000 mtpy. The rolling mill produced its first coil at the end of 2013. In March 2012, Alcoa and Ma'aden announced commencement of work to extend the product mix of their aluminum complex currently under construction, enabling the two companies to include capability for producing approximately 100,000 mt of a wide range of products suitable for further downstream manufacturing in the complex's product lines. The products include automotive heat-treated and non-heat-treated sheet, building and construction sheet and foil stock sheet. The line is expected to start production by the end of 2014.

In January 2011, Alcoa and China Power Investment Corporation (CPI) signed an MOU followed by a Letter of Intent that provides a framework for the creation of a joint venture which includes a focus on producing high-end fabricated aluminum products in China. In February 2012, Alcoa and CPI announced that they finalized an agreement to establish a joint venture company to produce high-end fabricated aluminum products in China. The new joint venture company, Alcoa CPI Aluminum Investment Co. Ltd., with its headquarters in Shanghai, was established in November 2012 and is majority owned and managed by Alcoa. In 2014, during the next phase of this joint venture, three Alcoa businesses will be integrated into the new joint venture company. These three businesses include a brazing sheet facility located in Kunshan, China and a can sheet facility located in Qinhuangdao, China. The third business is discussed below, under the Engineered Products and Solutions segment.

In order to meet rising demand for aluminum auto sheet from the automotive market, the Company invested in a $300 million expansion of its Davenport Works plant. The expansion was completed on time and on budget, with the first coil produced in December 2013. The expansion is creating an additional 150 full time jobs in Davenport. An economic development incentive package from the Iowa Department of Economic Development helped secure the selection of Davenport for the expansion.

In addition, the Company broke ground on a $275 million expansion of its Tennessee operations in August 2013. This expansion will convert some of the plant's existing can sheet capacity to high-strength aluminum automotive sheet capacity, as well as install incremental automotive capacity. Once completed in mid-2015, the expansion will create an additional 200 full time jobs in Alcoa, Tennessee.

On August 31, 2012, Alcoa assumed full control and ownership of Evermore Recycling LLC from its prior joint venture partner, Novelis Corporation, and integrated it into the Company.

Global Rolled Products Principal Facilities

Country	Location	Owners[1,2] (% Of Ownership)	Products
Australia	Point Henry	Alcoa (100%)	Sheet
	Yennora	Alcoa (100%)	Sheet
Brazil	Itapissuma	Alcoa (100%)	Foil Products/Sheet and Plate
China	Kunshan	Alcoa (70%) Shanxi Yuncheng Engraving Group (30%)	Sheet and Plate
	Qinhuangdao[2]	Alcoa (100%)	Sheet and Plate
France	Castelsarrasin	Alcoa (100%)	Sheet and Plate
Hungary	Székesfehérvár	Alcoa (100%)	Sheet and Plate/Slabs
Italy	Fusina	Alcoa (100%)	Sheet and Plate
Russia	Belaya Kalitva	Alcoa (100%)	Sheet and Plate
	Samara	Alcoa (100%)	Sheet and Plate
Spain	Alicante	Alcoa (100%)	Sheet and Plate
	Amorebieta	Alcoa (100%)	Sheet and Plate
United Kingdom	Birmingham	Alcoa (100%)	Plate
United States	Davenport, IA	Alcoa (100%)	Sheet and Plate
	Danville, IL	Alcoa (100%)	Sheet and Plate
	Newburgh, IN	Alcoa (100%)	Sheet
	Hutchinson, KS	Alcoa (100%)	Sheet and Plate
	Lancaster, PA	Alcoa (100%)	Sheet and Plate
	Alcoa, TN	Alcoa (100%)	Sheet
	Texarkana, TX	Alcoa (100%)	Sheet and Plate[3]

1 Facilities with ownership described as “Alcoa (100%)” are either leased or owned by the Company.

2 Leased property or partially leased property.

3 The Texarkana rolling mill facility has been idle since September 2009 due to a continued weak outlook in common alloy markets.

Engineered Products and Solutions

This segment represents Alcoa’s downstream operations and includes titanium, aluminum, and super alloy investment castings; fasteners; aluminum wheels; integrated aluminum structural systems; architectural extrusions; and forgings and hard alloy extrusions. These products, which are used in the aerospace, automotive, building and construction, commercial transportation, power generation, and industrial markets, are sold directly to customers and through distributors.

In 2012, Alcoa announced that it will expand its aluminum lithium capacity and capabilities and began construction of a $90 million greenfield facility adjacent to its Lafayette, Indiana plant. When completed, the facility will produce more than 20,000 mt of aluminum lithium and be capable of casting round and rectangular ingot for rolled, extruded, and forged applications. The facility is expected to cast its first aluminum lithium cast products by the end of 2014. Alcoa completed expanding aluminum lithium production at its Technical Center in Alcoa Center, PA in the third quarter of 2012. In June of 2013, Alcoa also completed its expansion at its Kitts Green plant in the United Kingdom, creating additional aluminum lithium casting capacity.

Alcoa and VSMPO-AVISMA Corporation signed a cooperation agreement in October 2013, which will allow the companies to meet growing demand for high-end titanium and aluminum products for aircraft manufacturers worldwide. Once formed, the new joint venture will focus on manufacturing high-end aerospace products, such as landing gear and forged wing components, at Alcoa's plant in Samara, Russia. The joint venture is expected to be operational in 2016.

As discussed above, in accordance with the February 2012 agreement between Alcoa and CPI, the parties created a joint venture company in November 2012, to produce high-end fabricated aluminum products in China. Three Alcoa businesses in total will be integrated into this company in 2014, during the next phase of the joint venture. One of these businesses will be an aerospace and industrial fastener facility located in Suzhou, China. The other two businesses are discussed above, under the Global Rolled Products segment.

Engineered Products and Solutions Principal Facilities

Country	Facility	Owners[1,2] (% Of Ownership)	Products
Australia	Oakleigh	Alcoa (100%)	Fasteners
Canada	Georgetown, Ontario[2]	Alcoa (100%)	Aerospace Castings
	Laval, Québec	Alcoa (100%)	Aerospace Castings
	Lethbridge, Alberta	Alcoa (100%)	Architectural Products
	Pointe Claire, Québec	Alcoa (100%)	Architectural Products
	Vaughan, Ontario[2]	Alcoa (100%)	Architectural Products
China	Suzhou[2]	Alcoa (100%)	Fasteners/Forgings and Extrusions
France	Dives-sur-Mer	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings
	Evron	Alcoa (100%)	Aerospace and Specialty Castings
	Gennevilliers	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings
	Guérande[2]	Alcoa (100%)	Architectural Products
	Lézat-sur-Lèze[2]	Alcoa (100%)	Architectural Products
	Merxheim[2]	Alcoa (100%)	Architectural Products
	Montbrison	Alcoa (100%)	Fasteners
	St. Cosme-en-Vairais[2]	Alcoa (100%)	Fasteners
	Toulouse	Alcoa (100%)	Fasteners
	Us-par-Vigny	Alcoa (100%)	Fasteners
	Vendargues[2]	Alcoa (100%)	Architectural Products
Germany	Hannover[2]	Alcoa (100%)	Extrusions
	Hildesheim-Bavenstedt[2]	Alcoa (100%)	Fasteners
	Iserlohn	Alcoa (100%)	Architectural Products
	Kelkheim[2]	Alcoa (100%)	Fasteners
Hungary	Nemesvámos	Alcoa (100%)	Fasteners
	Székesfehérvár	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings and Forgings
Japan	Jōetsu City[2]	Alcoa (100%)	Forgings
	Nomi	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings
Netherlands	Harderwijk[2]	Alcoa (100%)	Architectural Products
Mexico	Ciudad Acuña[2]	Alcoa (100%)	Aerospace Castings/Fasteners
	Monterrey	Alcoa (100%)	Forgings
Morocco	Casablanca[2]	Alcoa (100%)	Fasteners
	Casablanca[2]	Alcoa (67%) Ahmed Hattabi (33%)	Architectural Products

Country	Facility	Owners[1,2] (% Of Ownership)	Products
Russia	Belaya Kalitva[3]	Alcoa (100%)	Extrusions and Forgings
	Samara[3]	Alcoa (100%)	Extrusions and Forgings
South Korea	Kyoungnam	Alcoa (100%)	Extrusions
Spain	Irutzun[2]	Alcoa (100%)	Architectural Products
United Kingdom	Exeter[2]	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings and Alloy
	Leicester[2]	Alcoa (100%)	Fasteners
	Redditch[2]	Alcoa (100%)	Fasteners
	Runcorn	Alcoa (100%)	Architectural Products
	Telford	Alcoa (100%)	Fasteners
United States	Springdale, AR[2]	Alcoa (100%)	Architectural Products
	Chandler, AZ	Alcoa (100%)	Extrusions
	Tucson, AZ[2]	Alcoa (100%)	Fasteners
	Carson, CA[2]	Alcoa (100%)	Fasteners
	City of Industry, CA[2]	Alcoa (100%)	Fasteners
	Fullerton, CA[2]	Alcoa (100%)	Fasteners
	Newbury Park, CA	Alcoa (100%)	Fasteners
	Sylmar, CA	Alcoa (100%)	Fasteners
	Torrance, CA	Alcoa (100%)	Fasteners
	Visalia, CA	Alcoa (100%)	Architectural Products
	Branford, CT	Alcoa (100%)	Aerospace Coatings
	Winsted, CT	Alcoa (100%)	Aerospace Machining
	Eastman, GA	Alcoa (100%)	Architectural Products
	Lafayette, IN	Alcoa (100%)	Extrusions
	LaPorte, IN	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings
	Baltimore, MD[2]	Alcoa (100%)	Extrusions
	Whitehall, MI	Alcoa (100%)	Aerospace/Industrial Gas Turbine Castings Coatings/Ti Alloy and Specialty Products
	Dover, NJ	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings and Alloy
	Kingston, NY[2]	Alcoa (100%)	Fasteners
	Massena, NY	Alcoa (100%)	Extrusions
	Barberton, OH	Alcoa (100%)	Forgings/Ingot Castings
	Chillicothe, OH	Alcoa (100%)	Forgings
	Cleveland, OH	Alcoa (100%)	Forgings
	Alcoa Center, PA	Alcoa (100%)	Ingot Castings
	Bloomsburg, PA	Alcoa (100%)	Architectural Products
	Cranberry, PA	Alcoa (100%)	Architectural Products
	Morristown, TN[2]	Alcoa (100%)	Aerospace and Industrial Gas Turbine Ceramic Products
	Denton, TX[2]	Alcoa (100%)	Forgings
	Waco, TX[2]	Alcoa (100%)	Fasteners
	Wichita Falls, TX	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings
	Hampton, VA[2]	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings

Table of Contents

[1] Unless otherwise noted, facilities with ownership described as "Alcoa (100%)" are owned by the Company.

[2] Leased property or partially leased property.

[3] The operating results of this facility are reported in the Global Rolled Products segment.

Corporate Facilities

The Latin American soft alloy extrusions business is reported in Corporate Facilities. For more information, see Note Q to the Consolidated Financial Statements in Part II, Item 8. (Financial Statements and Supplementary Data).

Latin American Extrusions Facilities

Country	Facility	Owners[1] (% Of Ownership)	Products
Brazil	Itapissuma	Alcoa (100%)	Extrusions
	Utinga	Alcoa (100%)	Extrusions
	Tubarão	Alcoa (100%)	Extrusions

[1] Facilities with ownership described as "Alcoa (100%)" are owned by the Company.

Sources and Availability of Raw Materials

The major raw materials purchased in 2013 for each of the Company's reportable segments are listed below.

Alumina
Bauxite
Caustic soda
Electricity
Fuel oil
Lime (CaO)
Natural gas

Primary Metals
Alloying materials
Alumina
Aluminum fluoride
Calcined petroleum coke
Cathode blocks
Electricity
Liquid pitch
Natural gas

Global Rolled Products
Alloying materials
Aluminum scrap
Coatings
Electricity
Natural gas
Primary aluminum (ingot, billet, P1020, high purity)
Steam

Engineered Products and Solutions
Alloying materials
Electricity
Natural gas
Nickel
Primary aluminum (ingot, billet, P1020, high purity)
Resin
Stainless Steel
Steel
Titanium

Generally, other materials are purchased from third party suppliers under competitively-priced supply contracts or bidding arrangements. The Company believes that the raw materials necessary to its business are and will continue to be available.

For each metric ton of alumina produced, Alcoa consumes the following amounts of the identified raw material inputs (approximate range across relevant facilities):

Raw Material	Units	Consumption per MT of Alumina
Bauxite	mt	2.2 – 3.8
Caustic soda	kg	50 – 120
Electricity	kWh	180 – 270 (global average of 230)
Fuel oil and natural gas	GJ	6.5 – 12
Lime (CaO)	kg	7 – 60

For each metric ton of aluminum produced, Alcoa consumes the following amounts of the identified raw material inputs (approximate range across relevant facilities):

Raw Material	Units	Consumption per MT of Aluminum
Alumina	mt	1.92 ±0.02
Aluminum fluoride	kg	16.5 ±6.5
Calcined petroleum coke	mt	0.37 ±0.02
Cathode blocks	mt	0.006 ±0.002
Electricity	kWh	12900 – 17000
Liquid pitch	mt	0.10 ±0.03
Natural gas	mcf	3.5 ±1.5

Explanatory Note: Certain aluminum produced by Alcoa also includes alloying materials. Because of the number of different types of elements that can be used to produce Alcoa's various alloys, providing a range of such elements would not be meaningful. With the exception of a very small number of internally used products, Alcoa produces its alloys in adherence to an Aluminum Association standard. The Aluminum Association, of which Alcoa is an active member, uses a specific designation system to identify alloy types. In general, each alloy type has a major alloying element other than aluminum but will also have other constituents as well, but of lesser amounts.

Energy

Employing the Bayer process, Alcoa refines alumina from bauxite ore. Alcoa then produces aluminum from the alumina by an electrolytic process requiring substantial amounts of electric power. Energy accounts for approximately 25% of the Company's total alumina refining production costs. Electric power accounts for approximately 26% of the Company's primary aluminum production costs. Alcoa generates approximately 20% of the power used at its smelters worldwide and generally purchases the remainder under long-term arrangements. The paragraphs below summarize the sources of power and the long-term power arrangements for Alcoa's smelters and refineries.

North America – Electricity

The Deschambault, Baie Comeau, and Bécancour smelters in Québec purchase electricity under existing contracts that run through 2015, which will be followed by long-term contracts with Hydro-Québec first executed in December 2008, revised twice, in 2012 and 2013, and expiring in 2040, provided that Alcoa completes the modernization of the Baie Comeau smelter by September 2019. The smelter located in Baie Comeau, Québec completed the permanent closure of its two remaining Soderberg potlines in September 2013, consequently reducing its annual production by 105,000 metric tons. Following this curtailment, the Baie-Comeau smelter now purchases approximately 74% of its power needs under the Hydro-Québec contract, and the remainder from a 40% owned hydroelectric generating company, Manicougan Power Limited Partnership. Furthermore, in October 2013, Alcoa provided Hydro-Québec with advanced notification to reduce to close to zero its purchasing obligation under the power contracts for the three smelters effective at the end of 2014. Alcoa's provision of such advanced notification to Hydro-Québec does not require Alcoa to reduce its electricity consumption accordingly. However, providing such notification ensures that Alcoa would have the right to do so if it deems such an action to be necessary.

The Company's wholly-owned subsidiary, Alcoa Power Generating Inc. (APGI), generates approximately 29% of the power requirements for Alcoa's smelters operating in the U.S. The Company generally purchases power under long-term contracts. APGI owns and operates the Yadkin hydroelectric project, consisting of four dams in North Carolina, and the Warrick coal-fired power plant located in Indiana.

For several years, APGI has been pursuing a new long-term license for the Yadkin hydroelectric project from the Federal Energy Regulatory Commission (FERC). In 2007, APGI filed with the Federal Energy Regulatory Commission (FERC) a Relicensing Settlement Agreement signed by a majority of interested stakeholders that broadly resolved open issues. The National Environmental Policy Act process is complete, with a final environmental impact statement having been issued in April 2008. The remaining requirement for relicensing was the issuance by North Carolina of the required water quality certification under Section 401 of the Clean Water Act. North Carolina's Department of Environment and Natural Resources (DENR) issued a Section 401 water quality certification on May 7, 2009, but it was appealed and has been stayed since late May 2009 pending substantive determination on the appeal. In September 2012, APGI filed a new application for a 401 certificate seeking a fresh review of its application. However, on August 2, 2013, the State of North Carolina filed suit in state court seeking a declaratory ruling that it, not APGI, owns the Yadkin riverbed beneath the hydroelectric project as well as a portion of the project dams. Upon the filing of the lawsuit, the DENR denied APGI's 401 certificate, asserting that it cannot review the application given the dispute over ownership of the lands and the project. APGI has appealed that denial in the administrative court of North Carolina and has also informed FERC of the appeal, a necessary step to demonstrate that the relicensing proceeding remains pending before FERC. APGI removed the riverbed lawsuit to federal court in 2013.

Pending completion of the relicensing process, APGI received year-to-year license renewals from FERC starting in May 2008, and will continue to operate under annual licenses until a new Section 401 certification is issued and the FERC relicensing process is complete. Since the permanent closure of the Badin, North Carolina smelter, power generated from APGI's Yadkin system is largely being sold to an affiliate, Alcoa Power Marketing LLC, and then sold into the wholesale market. Proceeds from sales to the wholesale market are used to offset higher priced power contracts at other U.S. operations.

APGI generates substantially all of the power used at the Company's Warrick, Indiana smelter using nearby coal reserves. Since May 2005, Alcoa has owned the nearby Friendsville, Illinois coal reserves, with the Friendsville Mine being operated by Vigo Coal Company, Inc. The Friendsville Mine is producing approximately one million tons of coal per year. In June 2011, the Red Brush West Mine, owned by Alcoa and operated by Vigo Coal, was opened and produced approximately 60,000 tons per month over an eighteen-month period, but operation ceased in 2013. In the second quarter of 2013, Liberty Mine, also owned by Alcoa and operated by Vigo Coal, began producing coal and is operating at a level of approximately one million tons per year. Friendsville and Liberty Mines together combine to supply 95% of the power plant's future needs. The balance of the coal used is royalty coal or purchased coal from the Illinois basin.

In the State of Washington, Alcoa's Wenatchee smelter operates under a contract with Chelan County Public Utility District (Chelan PUD) under which Alcoa receives approximately 26% of the hydropower output of Chelan PUD's Rocky Reach and Rock Island dams.

Starting on January 1, 2013, the Intalco smelter began receiving physical power from the Bonneville Power Administration (BPA) pursuant to a new contract executed between Alcoa and BPA, under which Alcoa receives physical power at the Northwest Power Act mandated industrial firm power (IP) rate through September 30, 2022.

Prior to 2007, power for the Rockdale smelter in Texas was historically supplied from Company-owned generating units and units owned by Luminant Generation Company LLC (formerly TXU Generation Company LP) (Luminant), both of which used lignite supplied by the Company's Sandow Mine. Upon completion of lignite mining in the Sandow Mine in 2005, lignite supply transitioned to the formerly Alcoa-owned Three Oaks Mine. The Company retired its three wholly-owned generating units at Rockdale (Sandow Units 1, 2 and 3) in late 2006, and transitioned to an arrangement under which Luminant is to supply all of the Rockdale smelter's electricity requirements under a long-term power contract that does not expire until at least the end of 2038, with the parties having the right to terminate the contract after 2013 if there has been an unfavorable change in law or after 2025 if the cost of the electricity exceeds the market price. In August 2007, Luminant and Alcoa closed on the definitive agreements under which Luminant has constructed and operates a new circulating fluidized bed power plant (Sandow Unit 5) adjacent to the existing Sandow Unit 4 and, in September 2007, on the sale of Three Oaks Mine to Luminant. Concurrent with entering into the agreements under which Luminant constructed and operates Sandow Unit 5, Alcoa and Luminant entered into a power purchase agreement whereby Alcoa purchased power from Luminant. That Sandow Unit 5 power purchase agreement was terminated by Alcoa, effective December 1, 2010. In June 2008, Alcoa temporarily idled half of the capacity at the Rockdale smelter and in November 2008 curtailed the remainder of Rockdale's smelting capacity. In late 2011, Alcoa announced that it would permanently close two of the six idled potlines at its Rockdale, Texas smelter. Demolition and remediation activities related to these actions began in the first half of 2012 and were completed in 2013. In August 2012, Alcoa and the Lower Colorado River Authority (LCRA) announced that they had entered into an agreement whereby Alcoa would sell to LCRA all of the real estate associated with the Rockdale location, along with all of Alcoa's surface and groundwater rights and certain plant and equipment assets (other than the smelter and atomizer), and assign Alcoa's power contracts with Luminant to LCRA. After conducting due diligence associated with the proposed transaction, LCRA decided not to pursue the proposed transaction and allowed the agreement to terminate in May 2013.

In the Northeast, the purchased power contracts for both the Massena East and Massena West smelters in New York expired on December 31, 2013, subject to their terms and conditions. Commencing on January 1, 2014, the Massena smelters receive physical power pursuant to a new thirty-year energy contract executed between Alcoa and the New York Power Authority (NYPA), as amended in January 2011. The January 2011 amendment provides Alcoa additional time to complete the design and engineering work for its Massena East modernization plan. Implementation of the Massena East modernization plan is subject to further approval of the Alcoa Board of Directors. Alcoa announced on January 15, 2014 the accelerated closure of the remaining potlines at its Massena East smelter.

The Mt. Holly smelter in South Carolina purchases electricity from Santee Cooper under a contract that was amended and restated in 2012, and expires December 31, 2015. The contract includes a provision for follow-on service at the then current rate schedule for industrial customers.

Australia – Electricity

Power is generated from extensive brown coal deposits covered by a long-term mineral lease held by AofA, and that power currently provides approximately 40% of the electricity for AofA's Point Henry smelter. The State Electricity Commission of Victoria (SECV) provides the remaining power for this smelter, and all power for the Portland smelter, under contracts with Alcoa Portland Aluminium Pty Ltd, a wholly-owned subsidiary of AofA, in respect of its interest in Portland, that extend to 2014 and 2016, respectively. Upon the expiration of these contracts, both smelters will purchase power from the Australian National Energy Market (NEM) variable spot market. In March 2010, AofA and Eastern Aluminium (Portland) Pty Ltd (in respect of the Portland Smelter only) separately entered into fixed for floating swap contracts with Loy Yang Power in order to manage exposure to variable energy rates from the NEM for the Point Henry and Portland smelters. The fixed for floating swap contract with Loy Yang Power for the Point Henry smelter was terminated in 2013. The fixed for floating swap contract with Loy Yang Power for the Portland smelter commences from the date of expiration of the current contract with the SECV and is in place until December 2036.

Brazil – Electricity

The Alumar smelter is partially supplied by Centrais Elétricas do Norte do Brasil S.A. (Eletronorte) under a long-term power purchase agreement originally expiring in December 2024. Eletronorte has supplied the Alumar smelter from the beginning of its operations in 1984. Since 2006, Alumínio's power needs of the Poços de Caldas smelter have been supplied from self-generated energy. In March 26, 2012, the Eletronorte contract supply was reduced from 423 MW to 263 MW. In March 2012, Alumínio declared that the Eletronorte contract will be terminated by March 31, 2014 and alternatives for supplying the remaining power needs of both smelters are being analyzed.

Alumínio owns a 25.74% stake in Consórcio Machadinho, which is the owner of the Machadinho hydroelectric power plant located in southern Brazil. Alumínio's share of the plant's output is supplied to the Poços de Caldas smelter, and is sufficient to cover 55% of its operating needs at full capacity.

Alumínio has a 42.18% interest in Energética Barra Grande S.A.(BAESA), which built the Barra Grande hydroelectric power plant in southern Brazil. Alumínio's share of the power generated by BAESA covers the remaining power needs of the Poços de Caldas smelter and a portion of the power needs of Alumínio's interest in the Alumar smelter.

Alumínio also has 34.97% share in Serra do Facão in the southeast of Brazil, which began commercial generation in July 2010. Alumínio's share of the Serra do Facão output is currently being sold in the market. Starting April 1, 2014, when the existing contract with Eletronorte is terminated, this share of the power from Serra do Facao will supply the Alumar smelter, replacing power currently being purchased from Eletronorte.

Alumínio is also participating in the Estreito hydropower project in northern Brazil, holding a 25.49% share, which began commercial operations with its first turbine in 2011. Its eighth and last turbine became operational in March 2013. Aluminio's share of the plant's output is supplied to the Alumar smelter which replaced the 160 MW Eletronorte power contract reduction on March 26, 2012.

With Machadinho, Barra Grande, Serra do Facão and Estreito, Alumínio's power self-sufficiency is approximately 70%, to meet a total energy demand of approximately 690 MW from Brazilian primary aluminum plants at full capacity.

Consortia in which Alumínio participates have received concessions for the Pai Querê hydropower project in southern Brazil (Alumínio's share is 35%). Development of this concession has not yet begun.

Europe – Electricity

Alcoa's smelters at San Ciprián, La Coruña and Avilés, Spain purchase electricity under bilateral power contracts. The contracts that commenced in May 2009 expired on December 31, 2012 and have been replaced with new bilateral contracts commencing on January 1, 2013. The contracts for San Ciprián and Avilés smelters each have a 4 year term (expiring December 31, 2016). The contract for the La Coruña smelter, originally for one year, has been extended for an additional year (expiring December 31, 2014). Prior to the establishment of power supply under the bilateral contracts, Alcoa was supplied under a regulated power tariff. On January 25, 2007, the European Commission (EC) announced that it has opened an investigation to establish whether the regulated electricity tariffs granted by Spain comply with European Union (EU) state aid rules. Alcoa operated in Spain for more than ten years under a power supply structure approved by the Spanish Government in 1986, an equivalent tariff having been granted in 1983. The investigation is limited to the year 2005 and it is focused both on the energy-intensive consumers and the distribution companies. It is Alcoa's understanding that the Spanish tariff system for electricity is in conformity with all applicable laws and regulations, and therefore no state aid is present in that tariff system. If the EC's investigation concludes that the regulated electricity tariffs for industries are unlawful, Alcoa will have an opportunity to challenge the decision in the EU courts. On February 4, 2014, the EC announced a decision in this matter stating that the electricity tariffs granted by Spain for year 2005 do not constitute unlawful state aid. Due to the high cost position of the La Coruña and Avilés smelters, combined with rising raw material costs and falling aluminum prices, in early January 2012, Alcoa announced its intentions to partially and temporarily curtail its La Coruña and Avilés, Spain smelters. The partial curtailments were completed in the first half of 2012. As a result of a modification to the load interruptibility regime currently in place in the Spanish power market, in the first quarter of 2013, Alcoa restarted a portion (25,000 mpty combined for Avilés and La Coruña) of the capacity previously curtailed in the first half of 2012 to meet the requirements of the modified interruptibility regime. See the Management's Discussion and Analysis of Financial Condition and Results of Operations section for more information.

Alcoa owns two smelters in Norway, Lista and Mosjøen, which have long-term power arrangements in place that continue until the end of 2019.

Iceland – Electricity

Alcoa's Fjarðaál smelter in eastern Iceland began operation in 2007. Central to those operations is a forty-year power contract under which Landsvirkjun, the Icelandic national power company, built the Kárahnjúkar dam and hydropower project, and supplies competitively priced electricity to the smelter. In late 2009, Iceland imposed two new taxes on power intensive industries, both for a period of three years, from 2010 through 2012. One tax is based on energy consumption; the other is a pre-payment of certain other charges, and will be recoverable from 2013 through 2015. In 2012, Iceland extended the energy consumption tax though 2015.

Spain – Natural Gas

In order to facilitate the full conversion of the San Ciprian, Spain alumina refinery from fuel oil to natural gas, in October 2013, Alumina Española SA (AE) and Gas Natural Transporte SDG SL (GN) signed a take or pay gas pipeline utilization agreement. Pursuant to that agreement, the ultimate shareholders of AE, Alcoa Inc. and Alumina Limited, have agreed to guarantee the payment of AE's contracted gas pipeline utilization over the four years of the commitment period in the event AE fails to do so, each shareholder being responsible for its respective proportionate share (i.e., 60/40). Such commitment will come into force six months after the gas pipeline is put into operation by GN. It is expected that the gas pipeline will be completed by January 2015.

North America – Natural Gas

In order to supply its refinery and smelters in the U.S. and Canada, Alcoa generally procures natural gas on a competitive bid basis from a variety of sources including producers in the gas production areas and independent gas marketers. For Alcoa's larger consuming locations in Canada and the U.S., the gas commodity and the interstate pipeline transportation are procured to provide increased flexibility and reliability. Contract pricing for gas is typically based on a published industry index or New York Mercantile Exchange (NYMEX) price. The Company may choose to reduce its exposure to NYMEX pricing by hedging a portion of required natural gas consumption.

Australia – Natural Gas

AofA holds a 20% equity interest in a consortium that bought the Dampier-to-Bunbury natural gas pipeline in October 2004. This pipeline transports gas from the northwest gas fields to AofA's alumina refineries and other users in the Southwest of Western Australia. AofA uses gas to co-generate steam and electricity for its alumina refining processes at the Kwinana, Pinjarra and Wagerup refineries. More than 90% of AofA's gas requirements for the remainder of the decade are secured under long-term contracts. AofA is considering multiple supply options to replace expiring contracts, including investing directly in projects that have the potential to deliver cost-based gas.

Energy Facilities

The following table sets forth the electricity generation capacity and 2013 generation of Company-owned facilities:

Country	Facility	Alcoa Consolidated Capacity (MW)	2013 Generation (MWh)
Australia	Anglesea	150	979,732
Brazil	Barra Grande	161	1,282,905
	Estreito	159	1,299,578
	Machadinho	119	1,323,214
	Serra do Facão	64	173,331
Canada	Manicouagan	132	1,161,285
Suriname	Afobaka	156	1,091,246
United States	Warrick	524	4,399,091
	Yadkin	215	1,064,174
TOTAL		1,680	12,774,556

Patents, Trade Secrets and Trademarks

The Company believes that its domestic and international patent, trade secret and trademark assets provide it with a significant competitive advantage. The Company's rights under its patents, as well as the products made and sold under them, are important to the Company as a whole and, to varying degrees, important to each business segment. The patents owned by Alcoa generally concern particular products or manufacturing equipment or techniques. Alcoa's business as a whole is not, however, materially dependent on any single patent, trade secret or trademark. As a result of product development and technological advancement, the Company continues to pursue patent protection in jurisdictions throughout the world. At the end of 2013, the Company's worldwide patent portfolio consisted of approximately 794 pending patent applications and 1,980 granted patents.

The Company has a number of trade secrets, mostly regarding manufacturing processes and material compositions that give many of its businesses important advantages in their markets. The Company continues to strive to improve those processes and generate new material compositions that provide additional benefits.

The Company also has a number of domestic and international registered trademarks that have significant recognition within the markets that are served. Examples include the name "Alcoa" and the Alcoa symbol for aluminum products, Howmet metal castings, Huck® fasteners, Kawneer® building panels and Dura-Bright® wheels with easy-clean surface treatments. The Company's rights under its trademarks are important to the Company as a whole and, to varying degrees, important to each business segment.

Competitive Conditions

Alcoa is subject to highly competitive conditions in all aspects of its aluminum and non-aluminum businesses. Competitors include a variety of both U.S. and non-U.S. companies in all major markets. Price, quality, and service are the principal competitive factors in Alcoa's markets. Where aluminum products compete with other materials—such as steel and plastics for automotive and building applications; magnesium, titanium, composites, and plastics for aerospace and defense applications—aluminum's diverse characteristics, particularly its strength, light weight, recyclability, and flexibility are also significant factors. For Alcoa's segments that market products under Alcoa's brand names, brand recognition, and brand loyalty also play a role. In addition Alcoa's competitive position depends, in part, on the Company's access to an economical power supply to sustain its operations in various countries.

Research and Development

Alcoa, a light metals technology leader, engages in research and development programs that include process and product development, and basic and applied research. Expenditures for research and development (R&D) activities were $192 million in 2013, $197 million in 2012, and $184 million in 2011.

Most of the major process areas within the Company have a Technology Management Review Board (TMRB) or Center of Excellence (CoE) consisting of members from various worldwide locations. Each TMRB or CoE is responsible for formulating and communicating a technology strategy for the corresponding process area, developing and managing the technology portfolio and ensuring the global transfer of technology. Alternatively, certain business units conduct these activities and research and development programs within the worldwide business unit, supported by the Alcoa Technical Center (ATC). Technical personnel from the TMRBs, ATC and such business units also participate in the corresponding Market Sector Teams. In this manner, research and development activities are aligned with corporate and business unit goals.

During 2013, the Company continued to work on new developments for a number of strategic projects in all business segments. In Primary Metals, progress was made on inert anode technology with tests carried out on a pilot scale. Progress has been successful in many respects as a result of full pot testing of anode assemblies, although technical and cost targets remain to be achieved. If the technology proves to be commercially feasible, the Company believes that it would result in significant operating cost savings, and generate environmental benefits by reducing certain emissions and eliminating carbon dioxide. No timetable has been established for commercial use. The Company is also continuing to develop the carbothermic aluminum process, which is in the research and development phase. The technology holds the potential to produce aluminum at a lower cost, driven by reduced conversion costs, lower energy requirements and lower emissions at a lower capital cost than traditional smelting.

The Company continued its progress leveraging new science and technologies in 2013. For example, a new, higher strength wheel alloy (MagnaForce™) was developed for next generation wheels, as was the development and deployment of a more corrosion resistant, more environmentally friendly Dura-Bright EVO™ surface treatment. In addition, the Company expects to launch in 2014 a commercial truck wheel using the MagnaForce™ alloy.

A number of products were commercialized in 2013 including new fasteners, aluminum lithium (Al-Li) and more traditional 7xxx series alloys for various aerospace applications, numerous innovations in the building and construction market for enhanced thermal performance and increased functionality. New, high strength foundry alloys are being tested at multiple automotive OEMs. The Company continues to develop its Micromill™ technology and ran numerous customer trials in the RCS, automotive and packaging markets. The Company has also continued to externally license technology including the A951 pretreatment technology, shaping technology, and Colorkast™ products for the consumer electronics segment. In addition, the Company licensed its natural wastewater treatment technology to Bauer Resources GmbH in 2013.

Alcoa's research and development focus is on product development to support sustainable, profitable growth; manufacturing technologies to improve efficiencies and reduce costs; and environmental risk reductions. Environmental technologies continue to be an area of focus for the Company, with projects underway that address emissions reductions, the reduction of spent pot lining, advanced recycling, and the beneficial use of bauxite residue.

Environmental Matters

Information relating to environmental matters is included in Note N to the Consolidated Financial Statements under the caption "Environmental Matters" on pages 122-126. Approved capital expenditures for new or expanded facilities for environmental control are approximately $55 million for 2014 and $12 million for 2015.

Employees

Total worldwide employment at the end of 2013 was approximately 60,000 employees in 30 countries. About 40,000 of these employees are represented by labor unions. The Company believes that relations with its employees and any applicable union representatives generally are good.

In the U.S., approximately 9,500 employees are represented by various labor unions. The largest of these is the master collective bargaining agreement between Alcoa and the United Steelworkers (USW). This agreement covers 10 locations and approximately 6,100 U.S. employees. It expires on May 15, 2014. The parties will negotiate in early May with the intent of reaching a new long-term agreement. To the extent a new long-term agreement is not reached, a work stoppage at some of the 10 locations could begin on May 16, 2014. There are 16 other collective bargaining agreements in the U.S. with varying expiration dates. On a regional basis, collective bargaining agreements with varying expiration dates cover approximately 16,500 employees in Europe and Russia, 11,800 employees in North America, 7,000 employees in Central and South America, 4,100 employees in Australia, and 1,000 employees in China.

Executive Officers of the Registrant

The names, ages, positions and areas of responsibility of the executive officers of the Company as of February 13, 2014 are listed below.

Michael T. Barriere, 51, Executive Vice President, Human Resources and Environment, Health, Safety and Sustainability. Mr. Barriere was elected to his current position effective August 1, 2013. He joined Alcoa in 2011 as Chief Talent Officer and served as Vice President, Human Resources from May 2012 to July 2013. Before joining Alcoa, Mr. Barriere was Senior Vice President, Human Resources at New York Life Insurance from 2008 to 2010.

Prior to New York Life Insurance, he held executive human resource positions at Citigroup from 2002 to 2008. From 1995 to 2002, Mr. Barriere had his own consultancy business, providing corporate clients with training evaluation and leadership development processes.

Robert S. Collins, 47, Vice President and Controller. Mr. Collins was elected to his current position in October 2013. He served as Assistant Controller from May 2009 to October 2013. Prior to his role as Assistant Controller, Mr. Collins was Director of Financial Transactions and Policy, providing financial accounting support of Alcoa's transactions in global mergers, acquisitions and divestitures. Before joining Alcoa in 2005, Mr. Collins worked in the audit and mergers and acquisitions practices at PricewaterhouseCoopers LLP for 14 years.

Olivier M. Jarrault, 52, Executive Vice President—Alcoa and Group President, Engineered Products and Solutions. Mr. Jarrault was elected an Alcoa Executive Vice President effective January 21, 2011 and was named Group President of Engineered Products and Solutions effective January 1, 2011. He served as Chief Operating Officer of Engineered Products and Solutions from February 2010 to January 1, 2011. Mr. Jarrault joined Alcoa in 2002 when Alcoa acquired Fairchild Fasteners from The Fairchild Corporation. He served as President of Alcoa Fastening Systems from 2002 to February 2010. He was elected a Vice President of Alcoa in November 2006.

Klaus Kleinfeld, 56, Director, Chairman of the Board and Chief Executive Officer. Mr. Kleinfeld was elected to Alcoa's Board of Directors in November 2003 and became Chairman on April 23, 2010. He has been Chief Executive Officer of Alcoa since May 8, 2008. He was President and Chief Executive Officer from May 8, 2008 to April 23, 2010. He was President and Chief Operating Officer of Alcoa from October 1, 2007 to May 8, 2008. Mr. Kleinfeld was President and Chief Executive Officer of Siemens AG, the global electronics and industrial conglomerate, from January 2005 to June 2007. He served as Deputy Chairman of the Managing Board and Executive Vice President of Siemens AG from 2004 to January 2005. He was President and Chief Executive Officer of Siemens Corporation, the U.S. arm of Siemens AG, from 2002 to 2004.

Kay H. Meggers, 49, Executive Vice President—Alcoa and Group President, Global Rolled Products. Mr. Meggers was elected an Alcoa Executive Vice President in December 2011. He was named Group President, Global Rolled Products effective November 14, 2011. Before his most recent appointment, he led Alcoa's Business Excellence/ Corporate Strategy resource unit and was also responsible for overseeing Alcoa's Asia-Pacific region. He joined Alcoa in February 2010 as Vice President, Corporate Initiatives, a position responsible for planning and coordinating major strategic initiatives from enhancing technology and innovation as part of the Alcoa Technology Advantage program to spearheading growth strategies for China and Brazil. He was elected a Vice President of Alcoa in June 2011. Before joining Alcoa, Mr. Meggers was Senior Vice President at Siemens U.S. Building Technologies Division and served for three years as Business Unit Head of Building Automation. In 2006, he served for nine months as Division Head of Fire Safety, also part of Siemens U.S. Building Technologies Division. Between 2002 and 2005, he served as Vice President of Strategic Planning at Siemens U.S.

William F. Oplinger, 47, Executive Vice President and Chief Financial Officer. Mr. Oplinger was elected to his current position effective April 1, 2013. Since joining Alcoa in 2000, Mr. Oplinger has held key corporate positions in financial analysis and planning and as director of investor relations. He also has held key positions in the Global Primary Products business, including as controller, operational excellence director, chief financial officer and chief operating officer. As chief operating officer of Alcoa's Global Primary Products business from December 2011 to March 2013, Mr. Oplinger was responsible for the day-to-day operations of the business' global network of aluminum smelters, refineries and mines.

Audrey Strauss, 66, Executive Vice President, Chief Legal Officer and Secretary. Ms. Strauss was elected to her current position upon joining Alcoa in May 2012. Prior to joining Alcoa, she was a senior litigation partner from 1990 to 2012 at Fried Frank Harris Shriver and Jacobson LLP (Fried Frank), a law firm based in New York. Prior to her practice at Fried Frank, Ms. Strauss served in the U.S. Attorney's office for the Southern District of New York from 1975 to 1982, where she was Chief Appellate Attorney and Chief of the Fraud Unit.

Robert G. Wilt, 46, Executive Vice President—Alcoa and Group President, Global Primary Products. Mr. Wilt was elected to his current position effective June 1, 2013. From January 2013 to May 2013, he was Chief Operating Officer for Global Primary Products, responsible for that business' day-to-day operations. Prior to that, Mr. Wilt was President of Global Primary Products for the US Region from September 2009 to December 2012. In addition to these roles, Mr. Wilt has held other key positions in the Global Primary Products business, including as Vice President of Operational Excellence for U.S. Primary Products and as Vice-President, Energy Development for Global Primary Products. Since joining Alcoa in July 1999, he has also worked in line positions as the Works Manager at Wenatchee Works in Washington, and as Carbon Plant Manager at Tennessee Operations.

The Company's executive officers are elected or appointed to serve until the next annual meeting of the Board of Directors (held in conjunction with the annual meeting of shareholders) except in the case of earlier death, retirement, resignation or removal.

Item 1A. Risk Factors.

Alcoa's business, financial condition and results of operations may be impacted by a number of factors. In addition to the factors discussed elsewhere in this report, the following risks and uncertainties could materially harm our business, financial condition or results of operations, including causing Alcoa's actual results to differ materially from those projected in any forward-looking statements. The following list of significant risk factors is not all-inclusive or necessarily in order of importance. Additional risks and uncertainties not presently known to Alcoa or that Alcoa currently deems immaterial also may materially adversely affect us in future periods.

The aluminum industry and aluminum end-use markets are highly cyclical and are influenced by a number of factors, including global economic conditions.

The aluminum industry generally is highly cyclical, and Alcoa is subject to cyclical fluctuations in global economic conditions and aluminum end-use markets. Alcoa sells many products to industries that are cyclical, such as the commercial construction and transportation industries, and the demand for our products is sensitive to, and quickly impacted by, demand for the finished goods manufactured by our customers in these industries, which may change as a result of changes in the general U.S. or worldwide economy, currency exchange rates, energy prices or other factors beyond our control. While Alcoa believes that the long-term prospects for aluminum remain positive, the Company is unable to predict the future course of industry variables or the strength, pace or sustainability of the economic recovery and the effects of government intervention. Negative economic conditions, such as another major economic downturn, a prolonged recovery period, or disruptions in the financial markets, could have a material adverse effect on Alcoa's business, financial condition or results of operations.

Market-driven balancing of global aluminum supply and demand may be disrupted by non-market forces or other impediments to production closures.

In response to market-driven factors relating to the global supply and demand of aluminum, Alcoa has recently curtailed portions of its aluminum production. Certain other aluminum producers have independently undertaken to make cuts in production as well. However, the existence of non-market forces on global aluminum industry capacity, such as political pressures in certain countries to keep jobs or to maintain or further develop industry self-sufficiency, may prevent or delay the closure or curtailment of certain producers' smelters, irrespective of their position on the industry cost curve. Other production cuts may be impeded by long-term contracts to buy power or raw materials. If industry overcapacity persists due to the disruption by such non-market forces on the market-driven balancing of the global supply and demand of aluminum, the resulting weak pricing environment and margin compression may adversely affect the operating results of aluminum producers, including Alcoa.

A reduction in demand, or a lack of increased demand, for aluminum or aluminum products by China, Europe or a combined number of other countries may negatively impact Alcoa's results.

The aluminum industry's demand is highly correlated to economic growth. For example, the European sovereign debt crisis had an adverse effect on European supply and demand for aluminum and aluminum products. The Chinese market is a significant source of global demand for commodities, including aluminum. A sustained slowdown in China's economic growth and aluminum demand that is not offset by increased aluminum demand in emerging economies, such as India, Brazil, and several South East Asian countries, or the combined slowdown of other markets, could have an adverse effect on the global supply and demand for aluminum and aluminum prices. A reduction in demand, or a lack of increased demand, in global markets could materially harm Alcoa's business, financial condition or results of operations.

Alcoa could be materially adversely affected by declines in aluminum prices and regional premiums.

The price of aluminum is frequently volatile and changes in response to general economic conditions, expectations for supply and demand growth or contraction, and the level of global inventories. Speculative trading in aluminum and the influence of hedge funds and other financial institutions participating in commodity markets have also increased in recent years, contributing to higher levels of price volatility. In 2013, the LME price of aluminum reached a high of $2,123 per metric ton and a low of $1,695 per metric ton. Continued high LME inventories could lead to a reduction in the price of aluminum. Declines in the LME price have had a negative impact on Alcoa's results of operations. Additionally, Alcoa's results could be adversely affected by decreases in regional premiums that participants in the physical metal market pay for immediate delivery of aluminum, which are part of the overall aluminum price. A sustained weak aluminum pricing environment, a deterioration in aluminum prices or a decrease in regional premiums could have a material, adverse effect on Alcoa's business, financial condition, results of operations or cash flow.

Alcoa's operations consume substantial amounts of energy; profitability may decline if energy costs rise or if energy supplies are interrupted.

Alcoa's operations consume substantial amounts of energy. Although Alcoa generally expects to meet the energy requirements for its alumina refineries and primary aluminum smelters from internal sources or from long-term contracts, certain conditions could negatively affect Alcoa's results of operations, including the following:

- significant increases in electricity costs rendering smelter operations uneconomic;
- significant increases in fuel oil or natural gas prices;
- unavailability of electrical power or other energy sources due to droughts, hurricanes or other natural causes;
- unavailability of energy due to energy shortages resulting in insufficient supplies to serve consumers;
- interruptions in energy supply or unplanned outages due to equipment failure or other causes;
- curtailment of one or more refineries or smelters due to the inability to extend energy contracts upon expiration or to negotiate new arrangements on cost-effective terms or due to the unavailability of energy at competitive rates; or
- curtailment of one or more smelters due to a regulatory authority's determination that power supply interruptibility rights granted to Alcoa under an interruptibility regime in place under the laws of the country in which the smelter is located do not comply with the regulatory authority's state aid rules, thus rendering the smelter operations that had been relying on such country's interruptibility regime uneconomic.

If events such as those listed above were to occur, the resulting high energy costs or the disruption of an energy source or the requirement to repay all or a portion of the benefit Alcoa received under a power supply interruptibility regime could have a material adverse effect on Alcoa's business and results of operations.

Alcoa's profitability could be adversely affected by increases in the cost of raw materials or by significant lag effects of decreases in commodity or LME-linked costs.

Alcoa's results of operations are affected by changes in the cost of raw materials, including energy, carbon products, caustic soda and other key inputs, as well as freight costs associated with transportation of raw materials to refining and smelting locations. Alcoa may not be able to fully offset the effects of higher raw material costs or energy costs through price increases, productivity improvements or cost reduction programs. Similarly, Alcoa's operating results are affected by significant lag effects of declines in key costs of production that are commodity or LME-linked. For example, declines in the LME-linked costs of alumina and power during a particular period may not be adequate to offset sharp declines in metal price in that period. Increases in the cost of raw materials or decreases in input costs that are disproportionate to concurrent sharper decreases in the price of aluminum could have a material adverse effect on Alcoa's operating results.

Alcoa is exposed to fluctuations in foreign currency exchange rates and interest rates, as well as inflation, and other economic factors in the countries in which it operates.

Economic factors, including inflation and fluctuations in foreign currency exchange rates and interest rates, competitive factors in the countries in which Alcoa operates, and continued volatility or deterioration in the global economic and financial environment could affect Alcoa's revenues, expenses and results of operations. Changes in the valuation of the U.S. dollar against other currencies, particularly the Australian dollar, Brazilian real, Canadian dollar, Euro and Norwegian kroner, may affect Alcoa's profitability as some important raw materials are purchased in other currencies, while the Company's products are generally sold in U.S. dollars.

Alcoa may not be able to successfully realize goals established in each of its four business segments, at the levels or by the dates targeted for such goals.

Alcoa established targets for each of its four major business segments, including the following:

- by 2016, driving the alumina business further down the industry cost curve into the 21st percentile;
- by 2016, driving the aluminum business further down the industry cost curve into the 38th percentile;
- by 2016, increasing the revenues of the Global Rolled Products segment, while improving margins that exceed historical levels, by $1.0 billion, with 90% expected to be generated from innovation and share gains; and
- by 2016, increasing the revenues of the Engineered Products and Solutions segment, while improving margins that exceed historical levels, by $1.2 billion, with 75% expected to be generated from innovation and share gains.

For more information regarding Alcoa's targets, see "Management Review of 2013 and Outlook for the Future" in Part II, Item 7. (Management's Discussion and Analysis of Financial Condition and Results of Operations) of this report. There can be no assurance that any of these targets or other goals will be completed as anticipated. Market conditions or other factors may prevent Alcoa from accomplishing its goals at the levels or by the dates targeted, if at all, and failure to do so may have a material adverse effect on our business, financial condition, results of operations or the market price of our securities.

Alcoa may not be able to realize expected benefits from its growth projects or from its streamlining portfolio strategy.

Alcoa's growth projects include the joint venture with Ma'aden in Saudi Arabia; the automotive expansions in Davenport, Iowa and Alcoa, Tennessee; the aluminum lithium capacity expansion in Lafayette, Indiana, at the Alcoa Technical Center in Pennsylvania and at the Kitts Green plant in the United Kingdom; and the China and Russia growth projects. Although management believes that these projects will be beneficial to Alcoa, there is no assurance that anticipated benefits will be realized. Adverse factors may prevent Alcoa from realizing the benefits of its growth projects, including unfavorable global economic conditions, currency fluctuations, or unexpected delays in target timelines.

Alcoa has made, and may continue to plan and execute, acquisitions and divestitures and take other actions to grow or streamline its portfolio. Alcoa may face barriers to exit from unprofitable businesses or operations, including high exit costs or objections from various stakeholders. In addition, Alcoa may retain unforeseen liabilities for divested entities if the buyer fails to honor all commitments. Acquisitions also present significant challenges and risks, including the effective integration of the business into the Company and unanticipated costs and liabilities, and the Company may be unable to manage acquisitions successfully. There can be no assurance that acquisitions and divestitures will be undertaken or completed in their entirety as planned or that they will be beneficial to Alcoa.

Joint ventures and other strategic alliances may not be successful.

Alcoa participates in joint ventures and has formed strategic alliances and may enter into other similar arrangements in the future. For example, in December 2009, Alcoa formed a joint venture with Ma'aden, the Saudi Arabian Mining Company, to develop a fully integrated aluminum complex (including a bauxite mine, alumina refinery, aluminum smelter and rolling mill) in the Kingdom of Saudi Arabia. In November 2012, Alcoa and China Power Investment Corporation (CPI) established a joint venture company to produce high-end fabricated aluminum products in China. Although the Company has, in connection with the Saudi Arabia joint venture and its other existing joint ventures and strategic alliances, sought to protect its interests, joint ventures and strategic alliances inherently involve special risks. Whether or not Alcoa holds majority interests or maintains operational control in such arrangements, its partners may:

- have economic or business interests or goals that are inconsistent with or opposed to those of the Company;
- exercise veto rights so as to block actions that Alcoa believes to be in its or the joint venture's or strategic alliance's best interests;
- take action contrary to Alcoa's policies or objectives with respect to its investments; or
- as a result of financial or other difficulties, be unable or unwilling to fulfill their obligations under the joint venture, strategic alliance or other agreements, such as contributing capital to expansion or maintenance projects.

In addition, the joint venture with Ma'aden is subject to risks associated with large infrastructure construction projects. There can be no assurance that the project as a whole will be completed within budget or that the project phases will be completed by their targeted completion dates, or that it or Alcoa's other joint ventures or strategic alliances will be beneficial to Alcoa, whether due to the above-described risks, unfavorable global economic conditions, increases in construction costs, currency fluctuations, political risks, or other factors.

Alcoa faces significant competition, which may have an adverse effect on profitability.

As discussed in Part I, Item 1. (Business—Competitive Conditions) of this report, the markets for most aluminum products are highly competitive. Alcoa's competitors include a variety of both U.S. and non-U.S. companies in all major markets, including some that are subsidized. In addition, aluminum competes with other materials, such as steel, plastics, composites, and glass, among others, for various applications in Alcoa's key markets. The willingness of customers to accept substitutes for the products sold by Alcoa, the ability of large customers to exert leverage in the marketplace to affect the pricing for fabricated aluminum products, or other developments by or affecting Alcoa's competitors or customers could affect Alcoa's results of operations. In addition, Alcoa's competitive position depends, in part, on the Company's access to an economical power supply to sustain its operations in various countries.

Any further downgrade of Alcoa's credit ratings could limit Alcoa's ability to obtain future financing, increase its borrowing costs, increase the pricing of its credit facilities, adversely affect the market price of its securities, trigger letter of credit or other collateral postings, or otherwise impair its business, financial condition, and results of operations.

Alcoa's long-term debt is currently rated BBB- by Standard and Poor's Ratings Services and BBB- by Fitch Ratings; BBB- is the lowest level of investment grade rating. In April 2013, both Standard and Poor's and Fitch lowered Alcoa's ratings outlook to negative. In May 2013, Moody's Investors Service downgraded Alcoa's long-term debt rating from Baa3 to Ba1, which is below investment grade, and changed the outlook from rating under review to stable. There can be no assurance that one or more of these or other rating agencies will not take further negative actions with respect to Alcoa's ratings. Increased debt levels, adverse aluminum market or macroeconomic conditions, a deterioration in the Company's debt protection metrics, a contraction in the Company's liquidity, or other factors could potentially trigger such actions. A rating agency may lower, suspend or withdraw entirely a rating or place it on negative outlook or watch if, in that rating agency's judgment, circumstances so warrant.

As a result of the Moody's downgrade, certain counterparties have required Alcoa to post letters of credit or cash collateral, and the cost of issuance of commercial paper has increased. For more information regarding the effects of the downgrade on the Company's liquidity, see "Liquidity and Capital Resources —Financing Activities" in Part II, Item 7. (Management's Discussion and Analysis of Financial Condition and Results of Operations) of this report.

If Standard & Poor's or Fitch also downgrades Alcoa's credit rating below investment grade, Alcoa may be subject to additional requests for letters of credit or other collateral and exclusion from the commercial paper market. For example, under the project financings for the joint venture project in the Kingdom of Saudi Arabia, a downgrade of Alcoa's credit ratings below investment grade by at least two of the three rating agencies (Standard and Poor's, Moody's, and Fitch) would require Alcoa to provide a letter of credit or fund an escrow account for a portion or all of Alcoa's remaining equity commitment to the joint venture. For additional information regarding the project financings, see Note I to the Consolidated Financial Statements. Any additional or further downgrade of Alcoa's credit ratings by one or more rating agencies could also adversely impact the market price of Alcoa's securities, adversely affect existing financing (for example, a downgrade by Standard and Poor's or a further downgrade by Moody's would subject Alcoa to higher costs under Alcoa's Five-Year Revolving Credit Agreement and certain of its other revolving credit facilities), limit access to the capital (including commercial paper) or credit markets or otherwise adversely affect the availability of other new financing on favorable terms, if at all, result in more restrictive covenants in agreements governing the terms of any future indebtedness that the Company incurs, increase the cost of borrowing or fees on undrawn credit facilities, result in vendors or counterparties seeking collateral or letters of credit from Alcoa, or otherwise impair Alcoa's business, financial condition and results of operations.

Alcoa may not be able to realize expected benefits from the change to index pricing of alumina.

Alcoa has implemented a move to a pricing mechanism for alumina based on an index of alumina prices rather than a percentage of the LME-based aluminum price. Alcoa believes that this change more fairly reflects the fundamentals of alumina including raw materials and other input costs involved. There can be no assurance that such index pricing ultimately will be accepted for all third-party shipments of alumina or that such index pricing will result in consistently greater profitability from sales of alumina.

Alcoa's business and growth prospects may be negatively impacted by reductions in its capital expenditures.

Alcoa requires substantial capital to invest in greenfield and brownfield projects and to maintain and prolong the life and capacity of its existing facilities. For 2014, generating positive cash flow from operations that will exceed capital spending continues to be an Alcoa target. Insufficient cash generation may negatively impact Alcoa's ability to fund as planned its sustaining and growth capital projects. Over the long term, Alcoa's ability to take advantage of improved aluminum or other market conditions may be constrained by earlier capital expenditure restrictions, and the long-term value of its business could be adversely impacted. The Company's position in relation to its competitors may also deteriorate.

Alcoa may also need to address commercial and political issues in relation to its reductions in capital expenditures in certain of the jurisdictions in which it operates. If Alcoa's interest in its joint ventures is diluted or it loses key concessions, its growth could be constrained. Any of the foregoing could have a material adverse effect on the Company's business, results of operations, financial condition and prospects.

Alcoa's global operations are exposed to political and economic risks, commercial instability and events beyond its control in the countries in which it operates.

Alcoa has operations or activities in numerous countries and regions outside the U.S. that have varying degrees of political and economic risk, including Brazil, China, Europe, Guinea, Russia, and the Kingdom of Saudi Arabia. Risks include those associated with sovereign and private debt default, political instability, civil unrest, expropriation, nationalization, renegotiation or nullification of existing agreements, mining leases and permits, commercial instability caused by corruption, and changes in local government laws, regulations and policies, including those related to tariffs and trade barriers, taxation, exchange controls, employment regulations and repatriation of earnings. While the impact of these factors is difficult to predict, any one or more of them could adversely affect Alcoa's business, financial condition or operating results.

Alcoa could be adversely affected by changes in the business or financial condition of a significant customer or customers.

A significant downturn or further deterioration in the business or financial condition of a key customer or customers supplied by Alcoa could affect Alcoa's results of operations in a particular period. Alcoa's customers may experience delays in the launch of new products, labor strikes, diminished liquidity or credit unavailability, weak demand for their products, or other difficulties in their businesses. If Alcoa is not successful in replacing business lost from such customers, profitability may be adversely affected.

Cyber attacks and security breaches may threaten the integrity of Alcoa's intellectual property and other sensitive information, disrupt our business operations, and result in reputational harm and other negative consequences that could have a material adverse effect on our financial condition and results of operation.

Alcoa faces global cybersecurity threats, which may range from uncoordinated individual attempts to sophisticated and targeted measures, known as advanced persistent threats, directed at the Company. Cyber attacks and security breaches may include, but are not limited to, attempts to access information, computer viruses, denial of service and other electronic security breaches.

We believe that Alcoa faces a heightened threat of cyber attacks due to the industries we serve, the locations of our operations and our technological innovations. The Company has experienced cybersecurity attacks in the past, including breaches of our information technology systems in which information was taken, and may experience them in the future, potentially with more frequency or sophistication. Based on information known to date, past attacks have not had a material impact on Alcoa's financial condition or results of operations. However, due to the evolving nature of cybersecurity threats, the scope and impact of any future incident cannot be predicted. While the Company continually works to safeguard our systems and mitigate potential risks, there is no assurance that such actions will be sufficient to prevent cyber attacks or security breaches that manipulate or improperly use our systems or networks, compromise confidential or otherwise protected information, destroy or corrupt data, or otherwise disrupt our operations. The occurrence of such events could negatively impact our reputation and our competitive position and could result in litigation with third parties, regulatory action, loss of business, potential liability and increased remediation costs, any of which could have a material adverse effect on our financial condition and results of operations. In addition, such attacks or breaches could require significant management attention and resources, and result in the diminution of the value of our investment in research and development.

Alcoa may be exposed to significant legal proceedings, investigations or changes in U.S. federal, state or foreign law, regulation or policy.

Alcoa's results of operations or liquidity in a particular period could be affected by new or increasingly stringent laws, regulatory requirements or interpretations, or outcomes of significant legal proceedings or investigations adverse to Alcoa. The Company may experience a change in effective tax rates or become subject to unexpected or rising costs associated with business operations or provision of health or welfare benefits to employees due to changes in laws, regulations or policies. The Company is also subject to a variety of legal compliance risks. These risks include, among other things, potential claims relating to product liability, health and safety, environmental matters, intellectual property rights, government contracts, taxes, and compliance with U.S. and foreign export laws, anti-bribery laws, competition laws and sales and trading practices. Alcoa could be subject to fines, penalties, damages (in certain cases, treble damages), or suspension or debarment from government contracts.

While Alcoa believes it has adopted appropriate risk management and compliance programs to address and reduce these risks, the global and diverse nature of its operations means that these risks will continue to exist, and additional legal proceedings and contingencies may arise from time to time. In addition, various factors or developments can lead the Company to change current estimates of liabilities or make such estimates for matters previously not susceptible of reasonable estimates, such as a significant judicial ruling or judgment, a significant settlement, significant regulatory developments or changes in applicable law. A future adverse ruling or settlement or unfavorable changes in laws, regulations or policies, or other contingencies that the Company cannot predict with certainty could have a material adverse effect on the Company's results of operations or cash flows in a particular period. For additional information regarding the legal proceedings involving the Company, see the discussion in Part I, Item 3. (Legal Proceedings) of this report and in Note N to the Consolidated Financial Statements in Part II, Item 8. (Financial Statements and Supplementary Data).

Alcoa is subject to a broad range of health, safety and environmental laws and regulations in the jurisdictions in which it operates and may be exposed to substantial costs and liabilities associated with such laws and regulations.

Alcoa's operations worldwide are subject to numerous complex and increasingly stringent health, safety and environmental laws and regulations. The costs of complying with such laws and regulations, including participation in assessments and cleanups of sites, as well as internal voluntary programs, are significant and will continue to be so for the foreseeable future. Environmental laws may impose cleanup liability on owners and occupiers of contaminated property, including past or divested properties, regardless of whether the owners and occupiers caused the contamination or whether the activity that caused the contamination was lawful at the time it was conducted. Environmental matters for which we may be liable may arise in the future at our present sites, where no problem is currently known, at previously owned sites, sites previously operated by us, sites owned by our predecessors or sites that we may acquire in the future. Compliance with environmental, health and safety legislation and regulatory requirements may prove to be more limiting and costly than we anticipate. Alcoa's results of operations or liquidity in a particular period could be affected by certain health, safety or environmental matters, including remediation costs and damages related to certain sites. Additionally, evolving regulatory standards and expectations can result in increased litigation and/or increased costs, all of which can have a material and adverse effect on earnings and cash flows.

Climate change, climate change legislation or regulations and greenhouse effects may adversely impact Alcoa's operations and markets.

Energy is a significant input in a number of Alcoa's operations. There is growing recognition that consumption of energy derived from fossil fuels is a contributor to global warming.

A number of governments or governmental bodies have introduced or are contemplating legislative and regulatory change in response to the potential impacts of climate change. There is also current and emerging regulation, such as the mandatory renewable energy target in Australia, Australia's carbon pricing mechanism introduced in 2012, Québec's transition to a "cap and trade" system with compliance required beginning 2013 and the European Union Emissions Trading Scheme. Alcoa will likely see changes in the margins of greenhouse gas-intensive assets and energy-intensive assets as a result of regulatory impacts in the countries in which the Company operates. These regulatory mechanisms may be either voluntary or legislated and may impact Alcoa's operations directly or indirectly through customers or Alcoa's supply chain. Inconsistency of regulations may also change the attractiveness of the locations of some of the Company's assets. Assessments of the potential impact of future climate change legislation, regulation and international treaties and accords are uncertain, given the wide scope of potential regulatory change in countries in which Alcoa operates. The Company may realize increased capital expenditures resulting from required compliance with revised or new legislation or regulations, costs to purchase or profits from sales of, allowances or credits under a "cap and trade" system, increased insurance premiums and deductibles as new actuarial tables are developed to reshape coverage, a change in competitive position relative to industry peers and changes to profit or loss arising from increased or decreased demand for goods produced by the Company and indirectly, from changes in costs of goods sold.

The potential physical impacts of climate change on the Company's operations are highly uncertain, and will be particular to the geographic circumstances. These may include changes in rainfall patterns, shortages of water or other natural resources, changing sea levels, changing storm patterns and intensities, and changing temperature levels. These effects may adversely impact the cost, production and financial performance of Alcoa's operations.

Additional tax expense or additional tax exposures could affect Alcoa's future profitability.

Alcoa is subject to income taxes in both the United States and various non-U.S. jurisdictions. Our domestic and international tax liabilities are dependent upon the distribution of income among these different jurisdictions. Alcoa's tax expense includes estimates of additional tax which may be incurred for tax exposures and reflects various estimates and assumptions. In addition, the assumptions include assessments of future earnings of the Company that could impact the valuation of its deferred tax assets. The Company's future results of operations could be adversely affected by changes in the effective tax rate as a result of a change in the mix of earnings in countries with differing statutory tax rates, changes in the overall profitability of the Company, changes in tax legislation and rates, changes in generally accepted accounting principles, changes in the valuation of deferred tax assets and liabilities, the results of audits and examinations of previously filed tax returns and continuing assessments of its tax exposures. Corporate tax reform and tax law changes continue to be analyzed in the United States and in many other jurisdictions. Significant changes to the U.S. corporate tax system in particular could have a substantial impact, positive or negative, on Alcoa's effective tax rate, cash tax expenditures, and deferred tax assets and liabilities.

Adverse decline in liability discount rate, lower-than-expected investment return on pension assets and other factors could affect Alcoa's results of operations or amount of pension funding contributions in future periods.

Alcoa's results of operations may be negatively affected by the amount of expense Alcoa records for its pension and other postretirement benefit plans, reductions in the fair value of plan assets and other factors. U.S. generally accepted accounting principles (GAAP) require that Alcoa calculate income or expense for the plans using actuarial valuations.

These valuations reflect assumptions about financial market and other economic conditions, which may change based on changes in key economic indicators. The most significant year-end assumptions used by Alcoa to estimate pension or other postretirement benefit income or expense for the following year are the discount rate applied to plan liabilities and the expected long-term rate of return on plan assets. In addition, Alcoa is required to make an annual measurement of plan assets and liabilities, which may result in a significant charge to shareholders' equity. For a discussion regarding how Alcoa's financial statements can be affected by pension and other postretirement benefits accounting policies, see "Critical Accounting Policies and Estimates—Pension and Other Postretirement Benefits" in Part II, Item 7. (Management's Discussion and Analysis of Financial Condition and Results of Operations) and Note W to the Consolidated Financial Statements—Pension and Other Postretirement Benefits in Part II, Item 8. (Financial Statements and Supplementary Data).

Although GAAP expense and pension funding contributions are impacted by different regulations and requirements, the key economic factors that affect GAAP expense would also likely affect the amount of cash or securities Alcoa would contribute to the pension plans. Potential pension contributions include both mandatory amounts required under federal law and discretionary contributions to improve the plans' funded status. The Moving Ahead for Progress in the 21st Century Act, enacted in 2012, provides temporary relief for employers like Alcoa who sponsor defined benefit pension plans related to funding contributions under the Employee Retirement Income Security Act of 1974 by allowing the use of a 25-year average discount rate within an upper and lower range for purposes of determining minimum funding obligations instead of an average discount rate for the two most recent years, as currently is the case. Alcoa has elected this temporary relief and believes that it will moderately reduce the cash flow sensitivity of the Company's U.S. pension plans' funded status to potential declines in discount rates over the next two to three years. However, higher than expected pension contributions due to a further decline in our funded status as a result of additional declines in the discount rate or lower-than-expected investment returns on plan assets could have a material negative effect on our cash flows. Adverse capital market conditions could result in reductions in the fair value of plan assets and increase the Company's liabilities related to such plans, adversely affecting Alcoa's liquidity and results of operations.

Union disputes and other employee relations issues could adversely affect Alcoa's financial results.

A significant portion of Alcoa's employees are represented by labor unions in a number of countries under various collective bargaining agreements with varying durations and expiration dates. For more information, see "Employees" in Part I, Item 1. (Business) of this report. The master collective bargaining agreement between Alcoa and the United Steelworkers, which covers 10 locations and approximately 6,100 U.S. employees, expires on May 15, 2014. If a new long-term agreement is not reached, work stoppage at some of the 10 locations could begin on May 16, 2014. While Alcoa was previously successful in renegotiating the agreement with the United Steelworkers in June 2010, Alcoa may not be able to satisfactorily renegotiate this or other collective bargaining agreements in the U.S. and other countries when they expire. In addition, existing collective bargaining agreements may not prevent a strike or work stoppage at Alcoa's facilities in the future. Alcoa may also be subject to general country strikes or work stoppages unrelated to its business or collective bargaining agreements. Any such work stoppages (or potential work stoppages) could have a material adverse effect on Alcoa's financial results.

Alcoa's human resource talent pool may not be adequate to support the Company's growth.

Alcoa's existing operations and development projects require highly skilled executives, and staff with relevant industry and technical experience. The inability of the Company or the industry to attract and retain such people may adversely impact Alcoa's ability to adequately meet project demands and fill roles in existing operations. Skills shortages in engineering, technical service, construction and maintenance contractors and other labor market inadequacies may also impact activities. These shortages may adversely impact the cost and schedule of development projects and the cost and efficiency of existing operations.

Alcoa may not realize expected long-term benefits from its productivity and cost-reduction initiatives.

Alcoa has undertaken, and may continue to undertake, productivity and cost-reduction initiatives to improve performance and conserve cash, including new procurement strategies for raw materials, such as backward integration and non-traditional sourcing from numerous geographies, deployment of company-wide business process models, such as Alcoa's degrees of implementation process in which productivity ideas are executed in a series of steps, and overhead cost reductions. There is no assurance that these initiatives will be successful or beneficial to Alcoa or that estimated cost savings from such activities will be realized.

Alcoa may not be able to successfully develop and implement technology initiatives.

Alcoa is working on new developments for a number of strategic projects in all business segments, including advanced smelting process technologies such as inert anode and carbothermic technology, alloy development, engineered finishes and product design and manufacturing. For more information on Alcoa's research and development programs, see "Research and Development" in Part I, Item 1. (Business) of this report. There can be no assurance that such developments or technologies will be commercially feasible or beneficial to Alcoa.

Unexpected events may increase Alcoa's cost of doing business or disrupt Alcoa's operations.

Unexpected events, including fires or explosions at facilities, natural disasters, war or terrorist activities, unplanned outages, supply disruptions, or failure of equipment or processes to meet specifications may increase the cost of doing business or otherwise impact Alcoa's financial performance. Further, existing insurance arrangements may not provide protection for all of the costs that may arise from such events.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Alcoa's principal office is located at 390 Park Avenue, New York, New York 10022-4608. Alcoa's corporate center is located at 201 Isabella Street, Pittsburgh, Pennsylvania 15212-5858. The Alcoa Technical Center for research and development is located at 100 Technical Drive, Alcoa Center, Pennsylvania 15069.

Alcoa leases some of its facilities; however, it is the opinion of management that the leases do not materially affect the continued use of the properties or the properties' values.

Alcoa believes that its facilities are suitable and adequate for its operations. Although no title examination of properties owned by Alcoa has been made for the purpose of this report, the Company knows of no material defects in title to any such properties. See Notes A and H to the financial statements for information on properties, plants and equipment.

Alcoa has active plants and holdings under the following segments and in the following geographic areas:

ALUMINA

Bauxite: See the tables and related text in the **Bauxite Interests** section on pages 7-9 of this report.

Alumina: See the table and related text in the **Alumina Refining Facilities and Capacity** section on pages 10-11 of this report.

PRIMARY METALS

See the table and related text in the **Primary Aluminum Facilities and Capacity** section on pages 12-14 of this report.

GLOBAL ROLLED PRODUCTS

See the table and related text in the **Global Rolled Products Facilities** section on page 14-15 of this report.

ENGINEERED PRODUCTS AND SOLUTIONS

See the table and related text in the **Engineered Products and Solutions Facilities** section on pages 15-18 of this report.

CORPORATE

See the table and related text in the **Corporate Facilities** section on page 18 of this report.

Item 3. Legal Proceedings.

In the ordinary course of its business, Alcoa is involved in a number of lawsuits and claims, both actual and potential.

Litigation

Alba and Related Matters

Alba Civil Suit

As previously reported, on February 27, 2008, Alcoa Inc. received notice that Aluminium Bahrain B.S.C. ("Alba") had filed suit against Alcoa, Alcoa World Alumina LLC ("AWA"), and William Rice (collectively, the "Alcoa Parties"), and others, in the U.S. District Court for the Western District of Pennsylvania (the "Court"), Civil

Action number 08-299, styled Aluminium Bahrain B.S.C. v. Alcoa Inc., Alcoa World Alumina LLC, William Rice, and Victor Phillip Dahdaleh. The complaint alleged that certain Alcoa entities and their agents, including Victor Phillip Dahdaleh, had engaged in a conspiracy over a period of 15 years to defraud Alba. The complaint further alleged that Alcoa and its employees or agents (1) illegally bribed officials of the government of Bahrain and/or officers of Alba in order to force Alba to purchase alumina at excessively high prices, (2) illegally bribed officials of the government of Bahrain and/or officers of Alba and issued threats in order to pressure Alba to enter into an agreement by which Alcoa would purchase an equity interest in Alba, and (3) assigned portions of existing supply contracts between Alcoa and Alba for the sole purpose of facilitating alleged bribes and unlawful commissions. The complaint alleged that Alcoa and the other defendants violated the Racketeer Influenced and Corrupt Organizations Act (RICO) and committed fraud. Alba claimed damages in excess of $1 billion. Alba's complaint sought treble damages with respect to its RICO claims; compensatory, consequential, exemplary, and punitive damages; rescission of the 2005 alumina supply contract; and attorneys' fees and costs.

On October 9, 2012, the Alcoa Parties, without admitting any liability, entered into a settlement agreement with Alba. The agreement called for AWA to pay Alba $85 million in two equal installments, one-half at time of settlement and one-half one year later, and for the case against the Alcoa Parties to be dismissed with prejudice. Additionally, AWA and Alba entered into a long-term alumina supply agreement. On October 9, 2012, pursuant to the settlement agreement, AWA paid Alba $42.5 million, and all claims against the Alcoa Parties were dismissed with prejudice. On October 9, 2013, pursuant to the settlement agreement, AWA paid the remaining $42.5 million. Based on the settlement agreement, in the 2012 third quarter, Alcoa recorded a $40 million charge in addition to the $45 million charge it recorded in the 2012 second quarter in respect of the suit (see Agreement with Alumina Limited).

Government Investigations

As previously reported, on February 26, 2008, Alcoa Inc. advised the Department of Justice ("DOJ") and the Securities and Exchange Commission ("SEC") that it had recently become aware of the claims by Alba as alleged in the Alba civil suit, had already begun an internal investigation, and intended to cooperate fully in any investigation that the DOJ or the SEC may commence. On March 17, 2008, the DOJ notified Alcoa that it had opened a formal investigation. The SEC subsequently commenced a concurrent investigation. Alcoa has been cooperating with the government since that time.

On January 9, 2014, Alcoa resolved the investigations by the DOJ and the SEC. The settlement with the DOJ was reached with AWA. Under the terms of a plea agreement entered into with the DOJ, effective January 9, 2014, AWA pled guilty to one count of violating the anti-bribery provisions of the Foreign Corrupt Practices Act of 1977, as amended (the "FCPA"). As part of the DOJ resolution, AWA agreed to pay a total of $223 million, including a fine of $209 million payable in five equal installments over four years. The first installment of $41.8 million, plus a one-time administrative forfeiture of $14 million, was paid on January 22, 2014, and the remaining installments of $41.8 million each will be paid in the first quarters of 2015-2018. The DOJ is bringing no case against Alcoa Inc.

Effective January 9, 2014, the Company also settled civil charges filed by the SEC in an administrative proceeding relating to the anti-bribery, internal controls, and books and records provisions of the FCPA. Under the terms of the settlement with the SEC, the Company agreed to a settlement amount of $175 million, but will be given credit for the $14 million one-time forfeiture payment, which is part of the DOJ resolution, resulting in a total cash payment to the SEC of $161 million payable in five equal installments over four years. The first installment of $32.2 million was paid to the SEC on January 22, 2014, and the remaining installments of $32.2 million each will be paid in the first quarters of 2015-2018.

There was no allegation in the filings by the DOJ and there was no finding by the SEC that anyone at Alcoa Inc. knowingly engaged in the conduct at issue.

Agreement with Alumina Limited

In October 2012, Alcoa and Alumina Limited entered into an agreement to allocate the costs of the Alba civil settlement and all legal fees associated with this matter (including the government investigations discussed above) between Alcoa and Alumina Limited on an 85% and 15% basis, respectively, but this would occur only if a settlement is reached with the DOJ and the SEC regarding their investigations. As such, the $85 million civil settlement in 2012 and all legal costs associated with the civil suit and government investigations incurred prior to 2013 were allocated on a 60% and 40% basis in the respective periods on Alcoa's Statement of Consolidated Operations. As a result of the resolutions of the government investigations, the $384 million charge and legal costs incurred in 2013 were allocated on an 85% and 15% basis per the allocation agreement with Alumina Limited. Additionally, the $85 million civil settlement from 2012 and all legal costs associated with the civil suit and government investigations incurred prior to 2013 were reallocated on the 85% and 15% basis.

Derivative Actions

As previously reported, on July 21, 2008, the Teamsters Local #500 Severance Fund and the Southeastern Pennsylvania Transportation Authority filed a shareholder derivative suit in the civil division of the Court of Common Pleas of Allegheny County, Pennsylvania against certain officers and directors of Alcoa claiming breach of fiduciary duty, gross mismanagement, and other violations. This derivative action stems from the civil litigation brought by Alba against Alcoa, AWA, Victor Phillip Dahdaleh, and others, and the subsequent investigation of Alcoa by the DOJ and the SEC with respect to Alba's claims. This derivative action claims that the defendants caused or failed to prevent the matters alleged in the Alba lawsuit. The director defendants filed a motion to dismiss on November 21, 2008. On September 3, 2009, a hearing was held on Alcoa's motion and, on October 12, 2009, the court issued its order denying Alcoa's motion to dismiss but finding that a derivative action during the conduct of the DOJ investigation and pendency of the underlying complaint by Alba would be contrary to the interest of shareholders and, therefore, stayed the case until further order of the court. This derivative action is in its preliminary stages, and the Company is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

As previously reported, on March 6, 2009, the Philadelphia Gas Works Retirement Fund filed a shareholder derivative suit in the civil division of the Court of Common Pleas of Philadelphia County, Pennsylvania. This action was brought against certain officers and directors of Alcoa claiming breach of fiduciary duty and other violations and is based on the allegations made in the previously disclosed civil litigation brought by Alba against Alcoa, AWA, Victor Phillip Dahdaleh, and others, and the subsequent investigation of Alcoa by the DOJ and the SEC with respect to Alba's claims. This derivative action claims that the defendants caused or failed to prevent the conduct alleged in the Alba lawsuit. On August 7, 2009, the director and officer defendants filed an unopposed motion to coordinate the case with the Teamsters Local #500 suit, described immediately above, in the Allegheny County Common Pleas Court. The Allegheny County court issued its order consolidating the case on September 18, 2009. Thereafter, on October 31, 2009, the court assigned this action to the Commerce and Complex Litigation division of the Allegheny County Court of Common Pleas and on November 20, 2009, the court granted defendants' motion to stay all proceedings in the Philadelphia Gas action until the earlier of the court lifting the stay in the Teamsters derivative action or further order of the court in this action. This derivative action is in its preliminary stages and the Company is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

As previously reported, on June 19, 2012, Catherine Rubery (plaintiff) filed a shareholder derivative suit in the United States District Court for the Western District of Pennsylvania against William Rice, Victor Dahdaleh and current and former members of the Alcoa Board of Directors (collectively, defendants) claiming breach of fiduciary duty and corporate waste. This derivative action stems from the previously disclosed civil litigation brought by Alba against Alcoa, and the subsequent investigation of Alcoa by the DOJ and the SEC described above. This derivative action claims that defendants caused or failed to prevent illegal bribes of foreign officials, failed to implement an internal controls system to prevent bribes from occurring and wasted corporate assets by paying improper bribes and incurring substantial legal liability. Furthermore, plaintiff seeks an order of contribution and indemnification from defendants. The derivative action is in its preliminary stage and Alcoa is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

Italian Energy Matter

As previously reported, before 2002, Alcoa purchased power in Italy in the regulated energy market and received a drawback of a portion of the price of power under a special tariff in an amount calculated in accordance with a published resolution of the Italian Energy Authority, Energy Authority Resolution n. 204/1999 (“204/1999”). In 2001, the Energy Authority published another resolution, which clarified that the drawback would be calculated in the same manner, and in the same amount, in either the regulated or unregulated market. At the beginning of 2002, Alcoa left the regulated energy market to purchase energy in the unregulated market. Subsequently, in 2004, the Energy Authority introduced regulation no. 148/2004 which set forth a different method for calculating the special tariff that would result in a different drawback for the regulated and unregulated markets. Alcoa challenged the new regulation in the Administrative Court of Milan and received a favorable judgment in 2006. Following this ruling, Alcoa continued to receive the power price drawback in accordance with the original calculation method, through 2009, when the European Commission declared all such special tariffs to be impermissible “state aid.” In 2010, the Energy Authority appealed the 2006 ruling to the Consiglio di Stato (final court of appeal). On December 2, 2011, the Consiglio di Stato ruled in favor of the Energy Authority and against Alcoa, thus presenting the opportunity for the energy regulators to seek reimbursement from Alcoa of an amount equal to the difference between the actual drawback amounts received over the relevant time period, and the drawback as it would have been calculated in accordance with regulation 148/2004. On February 23, 2012, Alcoa filed its appeal of the decision of the Consiglio di Stato (this appeal was subsequently withdrawn in March 2013). On March 26, 2012, Alcoa received a letter from the agency (Cassa Conguaglio per il Settore Eletrico (CCSE)) responsible for making and collecting payments on behalf of the Energy Authority demanding payment in the amount of approximately $110 million (€85 million), including interest. By letter dated April 5, 2012, Alcoa informed CCSE that it disputes the payment demand of CCSE since (i) CCSE was not authorized by the Consiglio di Stato decisions to seek payment of any amount, (ii) the decision of the Consiglio di Stato has been appealed (see above), and (iii) in any event, no interest should be payable. On April 29, 2012, Law No. 44 of 2012 (“44/2012”) came into effect, changing the method to calculate the drawback. On February 21, 2013, Alcoa received a revised request letter from CCSE demanding Alcoa’s subsidiary, Alcoa Trasformazioni S.r.l., make a payment in the amount of $97 million (€76 million), including interest, which reflects a revised calculation methodology by CCSE and represents the high end of the range of reasonably possible loss associated with this matter of $0 to $97 million (€76 million). Alcoa has rejected that demand and has formally challenged it through an appeal before the Administrative Court on April 5, 2013. The Administrative Court scheduled a hearing for December 19, 2013, which was subsequently postponed until April 17, 2014. At this time, the Company is unable to reasonably predict an outcome for this matter.

European Commission Matters

As previously reported, in July 2006, the European Commission (EC) announced that it had opened an investigation to establish whether an extension of the regulated electricity tariff granted by Italy to some energy-intensive industries complied with European Union (EU) state aid rules. The Italian power tariff extended the tariff that was in force until December 31, 2005 through November 19, 2009 (Alcoa had been incurring higher power costs at its smelters in Italy subsequent to the tariff end date through the end of 2012). The extension was originally through 2010, but the date was changed by legislation adopted by the Italian Parliament effective on August 15, 2009. Prior to expiration of the tariff in 2005, Alcoa had been operating in Italy for more than 10 years under a power supply structure approved by the EC in 1996. That measure provided a competitive power supply to the primary aluminum industry and was not considered state aid from the Italian Government. The EC’s announcement expressed concerns about whether Italy’s extension of the tariff beyond 2005 was compatible with EU legislation and potentially distorted competition in the European market of primary aluminum, where energy is an important part of the production costs.

On November 19, 2009, the EC announced a decision in this matter stating that the extension of the tariff by Italy constituted unlawful state aid, in part, and, therefore, the Italian Government is to recover a portion of the benefit Alcoa received since January 2006 (including interest). The amount of this recovery was to be based on a calculation prepared by the Italian Government (see below). In late 2009, after discussions with legal counsel and reviewing the bases on which the EC decided, including the different considerations cited in the EC decision regarding Alcoa’s two smelters in Italy, Alcoa recorded a charge of $250 million (€173 million), which included $20 million (€14 million) to write off a receivable from the Italian Government for amounts due under the now expired tariff structure and $230 million (€159 million) to establish a reserve. On April 19, 2010, Alcoa filed an appeal of this decision with the General Court of the EU. Alcoa will pursue all substantive and procedural legal steps available to annul the EC's decision. Prior to 2012, Alcoa was involved in other legal proceedings related to this matter that sought the annulment of the EC's July 2006 decision to open an investigation alleging that such decision did not follow the applicable procedural rules and requested injunctive relief to suspend the effectiveness of the EC's November 19, 2009 decision. However, the decisions by the General Court, and subsequent appeals to the European Court of Justice, resulted in the denial of these remedies.

In June 2012, Alcoa received formal notification from the Italian Government with a calculated recovery amount of $375 million (€303 million); this amount was reduced by $65 million (€53 million) for amounts owed by the Italian Government to Alcoa, resulting in a net payment request of $310 million (€250 million). In a notice published in the Official Journal of the European Union on September 22, 2012, the EC announced that it had filed an action against the Italian Government on July 18, 2012 to compel it to collect the recovery amount, and on October 17, 2013, the ECJ ordered Italy to so collect. On September 27, 2012, Alcoa received a request for payment in full of the $310 million (€250 million) by October 31, 2012. Following discussions with the Italian Government regarding the timing of such payment, Alcoa paid the requested amount in five quarterly installments of $69 million (€50 million) beginning in October 2012 through December 2013. Notwithstanding the payment request, Alcoa's estimate of the most probable loss of the ultimate outcome of this matter and the low end of the range of reasonably possible loss, which is $219 million (€159 million) to $418 million (€303 million), remains the $219 million (€159 million) (the U.S. dollar amount reflects the effects of foreign currency movements since 2009) recorded in 2009. At December 31, 2013, Alcoa no longer has a reserve for this matter. Instead, Alcoa has a noncurrent asset of $126 million (€91 million) reflecting the excess of the total of the five payments made to the Italian Government over the reserve Alcoa recorded in 2009. The full extent of the loss will not be known until the final judicial determination, which could be a period of several years.

As previously reported, in January 2007, the EC announced that it had opened an investigation to establish whether the regulated electricity tariffs granted by Spain comply with EU state aid rules. At the time the EC opened its investigation, Alcoa had been operating in Spain for more than nine years under a power supply structure approved by the Spanish Government in 1986, an equivalent tariff having been granted in 1983. The investigation is limited to the year 2005 and is focused both on the energy-intensive consumers and the distribution companies. The investigation provided 30 days to any interested party to submit observations and comments to the EC. With respect to the energy-intensive consumers, the EC opened the investigation on the assumption that prices paid under the tariff in 2005 were lower than a pool price mechanism, therefore being, in principle, artificially below market conditions. Alcoa submitted comments in which the company provided evidence that prices paid by energy-intensive consumers were in line with the market, in addition to various legal arguments defending the legality of the Spanish tariff system. It is Alcoa's understanding that the Spanish tariff system for electricity is in conformity with all applicable laws and regulations, and therefore no state aid is present in the tariff system. While Alcoa does not believe that an unfavorable decision is probable, management has estimated that the total potential impact from an unfavorable decision could be approximately $95 million (€70 million) pretax. Also, while Alcoa believes that any additional cost would only be assessed for the year 2005, it is possible that the EC could extend its investigation to later years. If the EC's investigation concludes that the regulated electricity tariffs for industries are unlawful, Alcoa will have an opportunity to challenge the decision in the EU courts. On February 4, 2014, the EC announced a decision in this matter stating that the electricity tariffs granted by Spain for year 2005 do not constitute unlawful state aid.

Environmental Matters

Alcoa is involved in proceedings under the Comprehensive Environmental Response, Compensation and Liability Act, also known as Superfund (CERCLA) or analogous state provisions regarding the usage, disposal, storage or treatment of hazardous substances at a number of sites in the U.S. The Company has committed to participate, or is engaged in negotiations with federal or state authorities relative to its alleged liability for participation, in clean-up efforts at several such sites. The most significant of these matters, including the remediation of the Grasse River in Massena, NY, are discussed in the Environmental Matters section of Note N to the Consolidated Financial Statements under the caption "Environmental Matters" on pages 122-126.

As previously reported, in August 2005, Dany Lavoie, a resident of Baie Comeau in the Canadian Province of Québec, filed a Motion for Authorization to Institute a Class Action and for Designation of a Class Representative against Alcoa Canada Ltd., Alcoa Limitée, Societe Canadienne de Metaux Reynolds Limitée and Canadian British Aluminum in the Superior Court of Québec in the District of Baie Comeau. Plaintiff seeks to institute the class action on behalf of a putative class consisting of all past, present and future owners, tenants and residents of Baie Comeau's St. Georges neighborhood. He alleges that defendants, as the present and past owners and operators of an aluminum smelter in Baie Comeau, have negligently allowed the emission of certain contaminants from the smelter, specifically Polycyclic Aromatic Hydrocarbons or "PAHs," that have been deposited on the lands and houses of the St. Georges neighborhood and its environs causing damage to the property of the putative class and causing health concerns for those who inhabit that neighborhood. Plaintiff originally moved to certify a class action, sought to compel additional remediation to be conducted by the defendants beyond that already undertaken by them voluntarily, sought an injunction against further emissions in excess of a limit to be determined by the court in consultation with an independent expert, and sought money damages on behalf of all class members. In May 2007, the court authorized a class action suit to include only people who suffered property damage or personal injury damages caused by the emission of PAHs from the smelter. In September 2007, plaintiffs filed the claim against the original defendants, which the court had authorized in May. Alcoa has filed its Statement of Defense and plaintiffs filed an Answer to that Statement. Alcoa also filed a Motion for Particulars with respect to certain paragraphs of plaintiffs' Answer and a Motion to Strike with respect to certain paragraphs of plaintiffs' Answer. In late 2010, the Court denied these motions. The Soderberg smelting process that plaintiffs allege to be the source of emissions of concern have ceased operations and are being dismantled. No further formal court proceedings or discovery has occurred, while technical advisors nominated by agreement of the parties confer on potential health impacts of prior emissions. This protocol has been agreed to by the parties who have also advised the court regarding the process. The plaintiffs have not quantified the damages sought. Without such amount and given the various damages alleged, at this stage of the proceeding the Company is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

As previously reported, in January 2006, in Musgrave v. Alcoa, et al., Warrick Circuit Court, County of Warrick, Indiana; 87-C01-0601-CT-0006, Alcoa Inc. and a subsidiary were sued by an individual, on behalf of himself and all persons similarly situated, claiming harm from alleged exposure to waste that had been disposed in designated pits at the Squaw Creek Mine in the 1970s. During February 2007, class allegations were dropped and the matter proceeded as an individual claim. Alcoa filed a renewed motion to dismiss (arguing that the claims are barred by the Indiana Workers' Compensation Act), amended its answer to include Indiana's Recreational Use Statute as an affirmative defense and filed a motion for summary judgment based on the Recreational Use Statute. The court granted Alcoa's motion to dismiss regarding plaintiffs' occupationally-related claims and denied the motion regarding plaintiffs' recreationally-related claims. On January 17, 2012, the court denied all outstanding motions with no opinion issued. A jury trial commenced on April 10, 2012 and on May 1, 2012 the jury returned a verdict in favor of defendants Alcoa Inc. and its subsidiary. The court entered its judgment on May 14, 2012. On May 31, 2012, plaintiffs filed a notice of appeal. On August, 6, 2013, the Indiana Court of Appeals issued a unanimous opinion affirming the jury verdict in favor of Alcoa. The Court of Appeals also affirmed the trial court's pre-trial ruling dismissing Mr. Musgrave's work-related exposure claims as barred by Indiana's Workers' Compensation Act. The Musgraves' petition for rehearing filed on September 5, 2013 was denied by the Court of Appeals on October 16, 2013. On November 14, 2013, plaintiffs filed a petition for review at the Indiana Supreme Court. A decision on allowing the appeal has not been rendered.

Also as previously reported, in October 2006, in Barnett, et al. v. Alcoa and Alcoa Fuels, Inc., Warrick Circuit Court, County of Warrick, Indiana; 87-C01-0601-PL-499, forty-one plaintiffs sued Alcoa Inc. and a subsidiary, asserting claims similar to the Musgrave matter, discussed above. In November 2007, Alcoa Inc. and its subsidiary filed motions to dismiss both the Musgrave and Barnett cases. In October 2008, the Warrick County Circuit Court granted Alcoa's motions to dismiss, dismissing all claims arising out of alleged occupational exposure to wastes at the Squaw Creek Mine, but in November 2008, the trial court clarified its ruling, indicating that the order does not dispose of plaintiffs' personal injury claims based upon alleged "recreational" or non-occupational exposure. Plaintiffs also filed a "second amended complaint" in response to the court's orders granting Alcoa's motions to dismiss. On July 7, 2010, the court granted the parties' joint motions for a general continuance of trial settings. Discovery in this matter is stayed pending the outcome of the Musgrave matter. The Company is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss because plaintiffs have merely alleged that their medical condition is attributable to exposure to materials at the Squaw Creek Mine but no further information is available due to the discovery stay.

As previously reported, in 1996, Alcoa acquired the Fusina, Italy smelter and rolling operations and the Portovesme, Italy smelter (both of which are owned by Alcoa's subsidiary, Alcoa Trasformazioni S.r.l.) from Alumix, an entity owned by the Italian Government. Alcoa also acquired the extrusion plants located in Feltre and Bolzano, Italy. At the time of the acquisition, Alumix indemnified Alcoa for pre-existing environmental contamination at the sites. In 2004, the Italian Ministry of Environment (MOE) issued orders to Alcoa Trasformazioni S.r.l. and Alumix for the development of a clean-up plan related to soil contamination in excess of allowable limits under legislative decree and to institute emergency actions and pay natural resource damages. On April 5, 2006, Alcoa Trasformazioni S.r.l.'s Fusina site was also sued by the MOE and Minister of Public Works (MOPW) in the Civil Court of Venice for an alleged liability for environmental damages, in parallel with the orders already issued by the MOE. Alcoa Trasformazioni S.r.l. appealed the orders, defended the civil case for environmental damages (which is still pending) and filed suit against Alumix, as discussed below. Similar issues also existed with respect to the Bolzano and Feltre plants, based on orders issued by local authorities in 2006. All the orders have been challenged in front of the Administrative Regional Courts, and all trials are still pending. However, in Bolzano the Municipality of Bolzano withdrew the order, and the Regional Administrative Tribunal of Veneto suspended the order in Feltre. Most, if not all, of the underlying activities occurred during the ownership of Alumix, the governmental entity that sold the Italian plants to Alcoa.

As noted above, in response to the 2006 civil suit by the MOE and MOPW, Alcoa Trasformazioni S.r.l. filed suit against Alumix claiming indemnification under the original acquisition agreement, but brought that suit in the Court of Rome due to jurisdictional rules. The Court of Rome has appointed an expert to assess the causes of the pollution. In June 2008, the parties (Alcoa and now Ligestra S.r.l. (Ligestra), the successor to Alumix) signed a preliminary agreement by which they have committed to pursue a settlement and asked for a suspension of the technical assessment during the negotiations. The Court of Rome accepted the request, and postponed the technical assessment, reserving its ability to fix the deadline depending on the development of negotiations. Alcoa and Ligestra agreed to a settlement in December 2008 with respect to the Feltre site. Ligestra paid the sum of 1.08 million Euros and Alcoa committed to clean up the site. Further postponements were granted by the Court of Rome, and the next hearing is fixed for April 22, 2014. In the meantime, Alcoa Trasformazioni S.r.l. and Ligestra reached a preliminary agreement for settlement of the liabilities related to Fusina, allocating 80% and 20% of the remediation costs to Ligestra and Alcoa, respectively. In January 2014, a final agreement with Ligestra was signed, and on February 5, 2014, Alcoa signed a final agreement with the MOE and MOPW settling all environmental issues at the Fusina site. As set out in the agreement between Alcoa and Ligestra, those two parties will share the remediation costs and environmental damages claimed by the MOE and MOPW. The remediation project filed by Alcoa and Ligestra has been approved by the MOE. To provide time for settlement with Ligestra, the MOE and Alcoa jointly requested and the Civil Court of Venice has granted a series of postponements of hearings in the Venice trial, assuming that the case will be closed. The next hearing is fixed for March 28, 2014, when the case will be closed.

Alcoa and Ligestra have signed a similar agreement relating to the Portovesme site. However, that agreement is contingent upon final acceptance of the proposed soil remediation project for Portovesme that was rejected by the MOE in the fourth quarter of 2013. Alcoa intends to submit a revised proposal in 2014. Alcoa is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss beyond what is described in Footnote N to the Consolidated Financial Statements for several reasons. First, the MOE has approved the remediation plan for Fusina only and certain costs relating to the remediation are not yet fixed. In connection with the proposed plan for Portovesme, the Company understands that the MOE has substantial discretion in defining what must be managed under the Italian soils law. The availability of appropriate landfills must also be considered as well as the nature of these sites. As a result, the scope and cost of the final remediation plan remain uncertain for Portovesme. In addition, even though the plan was rejected by the MOE and the settlement with Ligestra relating to Portovesme has become void, Alcoa should be held responsible only for its share of pollution. However, the area is impacted by many sources of pollution, as well as historical pollution. Consequently, the allocation of liabilities would need a very complex technical evaluation by the authorities that has not yet been performed.

As previously reported, on November 30, 2010, Alumínio received service of a lawsuit that had been filed by the public prosecutors of the State of Pará in Brazil in November 2009. The suit names the Company and the State of Pará, which, through its Environmental Agency, had issued the operating license for the Company's new bauxite mine in Juruti. The suit concerns the impact of the project on the region's water system and alleges that certain conditions of the original installation license were not met by the Company. In the lawsuit, plaintiffs requested a preliminary injunction suspending the operating license and ordering payment of compensation. On April 14, 2010, the court denied plaintiffs' request. Alumínio presented its defense in March 2011, on grounds that it was in compliance with the terms and conditions of its operating license, which included plans to mitigate the impact of the project on the region's water system. In April, 2011, the State of Pará defended itself in the case asserting that the operating license contains the necessary plans to mitigate such impact, that the State monitors the performance of Aluminio's obligations arising out of such license, that the licensing process is valid and legal, and that the suit is meritless. The Company's position is that any impact from the project had been fully repaired when the suit was filed. The Company also believes that Jará Lake has not been affected by any project activity and any evidence of pollution from the project would be unreliable. Following the preliminary injunction, the plaintiffs have taken no further action. The Company is not certain whether or when the action will proceed. Given that this proceeding is in its preliminary stage and the current uncertainty in this case, the Company is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

As previously reported, by an amended complaint filed April 21, 2005, Alcoa Global Fasteners, Inc. was added as a defendant in Orange County Water District (OCWD) v. Northrop Corporation, et al., civil action 04cc00715 (Superior Court of California, County of Orange). OCWD alleges contamination or threatened contamination of a drinking water aquifer by Alcoa, certain of the entities that preceded Alcoa at the same locations as property owners and/or operators, and other current and former industrial and manufacturing businesses that operated in Orange County in past decades. OCWD seeks to recover the cost of aquifer remediation and attorney's fees. Trial on statutory, non-jury claims commenced on February 10, 2012, and continued through September 2012 when the case was submitted to the court for decision. On December 11, 2012, the court issued its tentative ruling in the matter dismissing plaintiff OCWD's remaining statutory claims against all defendants. The court's tentative ruling also invited further briefing on the decision and it is subject to modification. On January 21, 2013, defendants filed a joint brief responding to ten specific questions posed by the court's tentative ruling. The joint brief argued that the court should make further findings of fact and law in favor of the defendants in response to the ten questions. Alcoa Global Fasteners, Inc. also filed a separate brief on two of the questions arguing that the court should determine that it is neither a cause of ground water contamination nor a cause of plaintiffs' incurred costs. Remaining in the case at this time are common law trespass and nuisance claims for a Phase 2 trial which has not been scheduled. OCWD has asserted a total remedy cost of at least $150 million plus attorneys' fees; however, the amount in controversy at this stage is limited to sums already expended by the OCWD, approximately $4 million. The court has indicated that it is not likely to grant the OCWD's request for declaratory relief as to future sums the OCWD expends. On February 28, 2013, the court held a hearing on its tentative Statement of Decision finding that OCWD had not met its burden on the element of causation and, following that hearing, on May 10, 2013, issued a supplemental tentative decision, finding that plaintiff had not met its burden of proof. On that date, the court ordered defendants to submit a proposed statement of decision, followed by filing of objections and counter-proposed statement of decision by the plaintiff and responses by the defendants. All filings were completed by September 23, 2013 at which time the matter was submitted to the court for final decision. On October 29, 2013, the court issued its final Statement of Decision ("SOD") which resolved the statutory law liability claims of the Phase I trial favorably to Alcoa and the other Phase I trial defendants. The plaintiff and the trial defendants disagree on the consequences of the SOD and the Phase I trial on the remaining two tort claims of nuisance and trespass. On December 19, 2013, the court held a Case Management Conference and approved the parties' proposed briefing schedule regarding remaining issues. Trial defendants filed their opening motions on January 24, 2014; OCWD's responsive brief is due March 10, 2014; and defendants' reply brief is due by March 25, 2014.

St. Croix Proceedings

Josephat Henry. As previously reported, in September 1998, Hurricane Georges struck the U.S. Virgin Islands, including the St. Croix Alumina, L.L.C. (SCA) facility on the island of St. Croix. The wind and rain associated with the hurricane caused material at the location to be blown into neighboring residential areas. SCA undertook or arranged various cleanup and remediation efforts. The Division of Environmental Protection (DEP) of the Department of Planning and Natural Resources (DPNR) of the Virgin Islands Government issued a Notice of Violation that Alcoa has contested. In February 1999, certain residents of St. Croix commenced a civil suit in the Territorial Court of the Virgin Islands seeking compensatory and punitive damages and injunctive relief for alleged personal injuries and property damages associated with "bauxite or red dust" from the SCA facility. The suit, which has been removed to the District Court of the Virgin Islands (the Court), names SCA, Alcoa and Glencore Ltd. as defendants, and, in August 2000, was accorded class action treatment. The class was defined to include persons in various defined neighborhoods who "suffered damages and/or injuries as a result of exposure during and after Hurricane Georges to red dust and red mud blown during Hurricane Georges." All of the defendants have denied liability, and discovery and other pretrial proceedings have been underway since 1999. Plaintiffs' expert reports claim that the material blown during Hurricane Georges consisted of bauxite and red mud, and contained crystalline silica, chromium, and other substances. The reports further claim, among other things, that the population of the six subject neighborhoods as of the 2000 census (a total of 3,730 people) has been exposed to toxic substances through the fault of the defendants, and hence will be able to show entitlement to lifetime medical monitoring as well as other compensatory and punitive relief. These opinions have been contested by the defendants' expert reports, that state, among other things, that plaintiffs were not exposed to the substances alleged and that in any event the level of alleged exposure does not justify lifetime medical monitoring. Alcoa and SCA turned over this matter to their insurance carriers who have been providing a defense. Glencore Ltd. is jointly defending the case with Alcoa and SCA and has a pending motion to dismiss. In June 2008, the Court granted defendants' joint motion to decertify the original class of plaintiffs, and certified a new class as to the claim of ongoing nuisance, insofar as plaintiffs seek cleanup, abatement, or removal of the red mud currently present at the facility. (The named plaintiffs had previously dropped their claims for medical monitoring as a consequence of the court's rejection of plaintiffs' proffered expert opinion testimony). The Court expressly denied certification of a class as to any claims for remediation or cleanup of any area outside the facility (including plaintiffs' property). The new class could seek only injunctive relief rather than monetary damages. Named plaintiffs, however, could continue to prosecute their claims for personal injury, property damage, and punitive damages. In August 2009, in response to defendants' motions, the Court dismissed the named plaintiffs' claims for personal injury and punitive damages, and denied the motion with respect to their property damage claims. In September 2009, the Court granted defendants' motion for summary judgment on the class plaintiffs' claim for injunctive relief. In October 2009, plaintiffs appealed the Court's summary judgment order dismissing the claim for injunctive relief and in March 2011, the U.S. Court of Appeals for the Third Circuit dismissed plaintiffs' appeal of that order. In September 2011, the parties reached an oral agreement to settle the remaining claims in the case which would resolve the personal property damage claims of the 12 remaining individual plaintiffs. On March 12, 2012, final judgment was entered in the District Court for the District of the Virgin Islands. Alcoa's share of the settlement is fully insured. On March 23, 2012, plaintiffs filed a notice of appeal of numerous non-settled matters, including but not limited to discovery orders, Daubert rulings, summary judgment rulings, as more clearly set out in the settlement agreement/release between the parties. Plaintiffs' appellate brief was filed in the Third Circuit Court on January 4, 2013, together with a motion seeking leave to file a brief of excess length. The court has suspended the remainder of the briefing schedule, including the date for Alcoa's reply brief, until it rules on plaintiffs' motion to file its brief of excess length. The Third Circuit Court of Appeals issued a new scheduling order regarding briefing in the matter. The matter has been fully briefed with plaintiffs' brief filed on November 25, 2013 and the matter is now before the court.

Abednego. As previously reported, on January 14, 2010, Alcoa was served with a complaint involving approximately 2,900 individual persons claimed to be residents of St. Croix who are alleged to have suffered personal injury or property damage from Hurricane Georges or winds blowing material from the property since the time of the hurricane. This complaint, Abednego, et al. v. Alcoa, et al. was filed in the Superior Court of the Virgin Islands, St. Croix Division. The complaint names as defendants the same entities as were sued in the February 1999 action earlier described and have added as a defendant the current owner of the alumina facility property. In February 2010, Alcoa and SCA removed the case to the federal court for the District of the Virgin Islands. Subsequently, plaintiffs filed motions to remand the case to territorial court as well as a third amended complaint, and defendants have moved to dismiss the case for failure to state a claim upon which relief can be granted. On March 17, 2011, the court granted plaintiffs' motion to remand to territorial court. Thereafter, Alcoa filed a motion for allowance of appeal. The motion was denied on May 18, 2011. The parties await assignment of the case to a trial judge.

Phillip Abraham. As previously reported, on March 1, 2012, Alcoa was served with a complaint involving approximately 200 individual persons claimed to be residents of St. Croix who are alleged to have suffered personal injury or property damage from Hurricane Georges or winds blowing material from the property since the time of the hurricane in September 1998. This complaint, Abraham, et al. v. Alcoa, et al. alleges claims essentially identical to those set forth in the Abednego v. Alcoa complaint. The matter was originally filed in the Superior Court of the Virgin Islands, St. Croix Division, on March 30, 2011. By motion filed March 12, 2012, Alcoa sought dismissal of this complaint on several grounds, including failure to timely serve the complaint and being barred by the statute of limitations. That motion is still pending.

Other Matters

As previously reported, along with various asbestos manufacturers and distributors, Alcoa and its subsidiaries as premises owners are defendants in several hundred active lawsuits filed on behalf of persons alleging injury predominantly as a result of occupational exposure to asbestos at various Company facilities. In addition, an Alcoa subsidiary company has been named, along with a large common group of industrial companies, in a pattern complaint where the Company's involvement is not evident. Since 1999, several thousand such complaints have been filed. To date, the subsidiary has been dismissed from almost every case that was actually placed in line for trial. Alcoa, its subsidiaries and acquired companies, all have had numerous insurance policies over the years that provide coverage for asbestos based claims. Many of these policies provide layers of coverage for varying periods of time and for varying locations. Alcoa has significant insurance coverage and believes that its reserves are adequate for its known asbestos exposure related liabilities. The costs of defense and settlement have not been and are not expected to be material to the results of operations, cash flows, and financial position of the Company.

As previously reported, in November 2006, in Curtis v. Alcoa Inc., Civil Action No. 3:06cv448 (E.D. Tenn.), a class action was filed by plaintiffs representing approximately 13,000 retired former employees of Alcoa or Reynolds Metals Company and spouses and dependents of such retirees alleging violation of the Employee Retirement Income Security Act (ERISA) and the Labor-Management Relations Act by requiring plaintiffs, beginning January 1, 2007, to pay health insurance premiums and increased co-payments and co-insurance for certain medical procedures and prescription drugs. Plaintiffs alleged these changes to their retiree health care plans violated their rights to vested health care benefits. Plaintiffs additionally alleged that Alcoa had breached its fiduciary duty to plaintiffs under ERISA by misrepresenting to them that their health benefits would never change. Plaintiffs sought injunctive and declaratory relief, back payment of benefits, and attorneys' fees. Alcoa had consented to treatment of plaintiffs' claims as a class action. Trial in the matter was held over eight days commencing September 22, 2009 and ending on October 1, 2009 in federal court in Knoxville, TN before the Honorable Thomas Phillips, U.S. District Court Judge.

On March 9, 2011, the court issued a judgment order dismissing plaintiffs' lawsuit in its entirety with prejudice for the reasons stated in its Findings of Fact and Conclusions of Law. On March 23, 2011, plaintiffs filed a motion for clarification and/or amendment of the judgment order, which sought, among other things, a declaration that plaintiffs' retiree benefits are vested subject to an annual cap and an injunction preventing Alcoa, prior to 2017, from modifying the plan design to which plaintiffs are subject or changing the premiums and deductibles that plaintiffs must pay. Also on March 23, 2011, plaintiffs filed a motion for award of attorneys' fees and expenses. On June 11, 2012, the court issued its memorandum and order denying plaintiffs' motion for clarification and/or amendment to the original judgment order. On July 6, 2012, plaintiffs filed a notice of appeal of the court's March 9, 2011 judgment. On July 12, 2012, the trial court stayed Alcoa's motion for assessment of costs pending resolution of plaintiffs' appeal. The appeal was docketed in the United States Court of Appeals for the Sixth Circuit as case number 12-5801. On August 29, 2012, the trial court dismissed plaintiffs' motion for attorneys' fees without prejudice to refiling the motion following the resolution of the appeal at the Sixth Circuit Court of Appeals. On May 9, 2013, the Sixth Circuit Court of Appeals issued an opinion affirming the trial court's denial of plaintiffs' claims for lifetime, uncapped retiree healthcare benefits. Plaintiffs filed a petition for rehearing on May 22, 2013, to which Alcoa filed a response on June 7, 2013. On September 12, 2013, the Sixth Circuit Court of Appeals denied plaintiffs' petition for rehearing. The trial court is now considering Alcoa's request for an award of costs, which had been stayed pending resolution of the appeal, and the plaintiffs' request for attorneys' fees, which had been dismissed without prejudice to refiling following resolution of the appeal. On December 17, 2013 the United States Supreme Court docketed the plaintiffs' petition for writ of certiorari to the Sixth Circuit Court of Appeals as Charles Curtis, et al., Individually and on Behalf of All Others Similarly Situated, Petitioners v. Alcoa Inc., et al., Docket No.13-728. Alcoa's opposition to the Petition was filed on January 16, 2014 and Petitioners filed their reply on January 29, 2014.

As previously reported, on August 2, 2013, the State of North Carolina, by and through its agency, the North Carolina Department of Administration, filed a lawsuit against Alcoa Power Generating, Inc. in Superior Court, Wake County, North Carolina (Docket No. 13-CVS-10477). The lawsuit asserts ownership of certain submerged lands and hydropower generating structures situated at Alcoa's Yadkin Hydroelectric Project (the "Yadkin Project"), including the submerged riverbed of the Yadkin River throughout the Yadkin Project and a portion of the hydroelectric dams that Alcoa owns and operates pursuant to a license from the Federal Energy Regulatory Commission. The suit seeks declaratory relief regarding North Carolina's alleged ownership interests in the riverbed and the dams and further declaration that Alcoa has no right, license or permission from North Carolina to operate the Yadkin Project. By notice filed on September 3, 2013, Alcoa removed the matter to the U.S. District Court for the Eastern District of North Carolina (Docket No. Civil Action No. 5:13-cv-633). By motion filed September 3, 2013, the Yadkin Riverkeeper sought permission to intervene in the case. On September 25, 2013, Alcoa filed its answer in the case and also filed its opposition to the motion to intervene by the Yadkin Riverkeeper. The Court denied the State's Motion to Remand and initially permitted the Riverkeeper to intervene although the Riverkeeper has now voluntarily withdrawn as an intervening party and will participate as amicus. The parties filed a Joint Rule 26(f) Report and Discovery Plan which was modified by the Court on January 8, 2014. The order provides that the case will be ready for trial on October 31, 2014 and provides a schedule for discovery and other pretrial activity. At this time, the Company is unable to reasonably predict an outcome for this matter.

In September 2010, following a corporate income tax audit covering the 2003 through 2005 tax years, an assessment was received as a result of Spain's tax authorities disallowing certain interest deductions claimed by a Spanish consolidated tax group owned by the Company. An appeal of this assessment in Spain's Central Tax Administrative Court by the Company was denied in October 2013. In December 2013, the Company filed an appeal of the assessment in Spain's National Court.

Additionally, following a corporate income tax audit of the same Spanish tax group for the 2006 through 2009 tax years, Spain's tax authorities issued an assessment in July 2013 similarly disallowing certain interest deductions. In August 2013, the Company filed an appeal of this second assessment in Spain's Central Tax Administrative Court.

The combined assessments total $334 million (€242 million). The Company believes it has meritorious arguments to support its tax position and intends to vigorously litigate the assessments through Spain's court system. However, in the event the Company is unsuccessful, a portion of the assessments may be offset with existing net operating losses available to the Spanish consolidated tax group. Additionally, it is possible that the Company may receive similar assessments for tax years subsequent to 2009. At this time, the Company is unable to reasonably predict an outcome for this matter.

Between 2000 and 2002, Alumínio sold approximately 2,000 metric tons of metal per month from its Poços de Caldas facility, located in the State of Minas Gerais (the "State"), to Alfio, a customer also located in the State. Sales in the State were exempted from value-added tax (VAT) requirements. Alfio subsequently sold metal to customers outside of the State, but did not pay the required VAT on those transactions. In July 2002, Alumínio received an assessment from State auditors on the theory that Alumínio should be jointly and severally liable with Alfio for the unpaid VAT. In June 2003, the administrative tribunal found Alumínio liable, and Alumínio filed a judicial case in the State in February 2004 contesting the finding. In May 2005, the Court of First Instance found Alumínio solely liable, and a panel of a State appeals court confirmed this finding in April 2006. Alumínio filed a special appeal to the Superior Tribunal of Justice (STJ) in Brasilia (the federal capital of Brazil) later in 2006. In 2011, the STJ (through one of its judges) reversed the judgment of the lower courts, finding that Alumínio should neither be solely nor jointly and severally liable with Alfio for the VAT, which ruling was then appealed by the State. In June 2012, the STJ agreed to have the case reheard before a five-judge panel. A decision from this panel is pending, but additional appeals are likely. At December 31, 2013, the assessment totaled $53 million (R$125 million), including penalties and interest. While the Company believes it has meritorious defenses, the Company is unable to reasonably predict an outcome.

Other Contingencies

In addition to the matters discussed above, various other lawsuits, claims, and proceedings have been or may be instituted or asserted against Alcoa, including those pertaining to environmental, product liability, safety and health, and tax matters. While the amounts claimed in these other matters may be substantial, the ultimate liability cannot now be determined because of the considerable uncertainties that exist. Therefore, it is possible that the Company's liquidity or results of operations in a particular period could be materially affected by one or more of these other matters. However, based on facts currently available, management believes that the disposition of these other matters that are pending or asserted will not have a material adverse effect, individually or in the aggregate, on the financial position of the Company.

Item 4. Mine Safety Disclosures.

The information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K (17 CFR 229.104) is included in Exhibit 95 of this report, which is incorporated herein by reference.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

The Company's common stock is listed on the New York Stock Exchange where it trades under the symbol AA. The Company's quarterly high and low trading stock prices and dividends per common share for 2013 and 2012 are shown below.

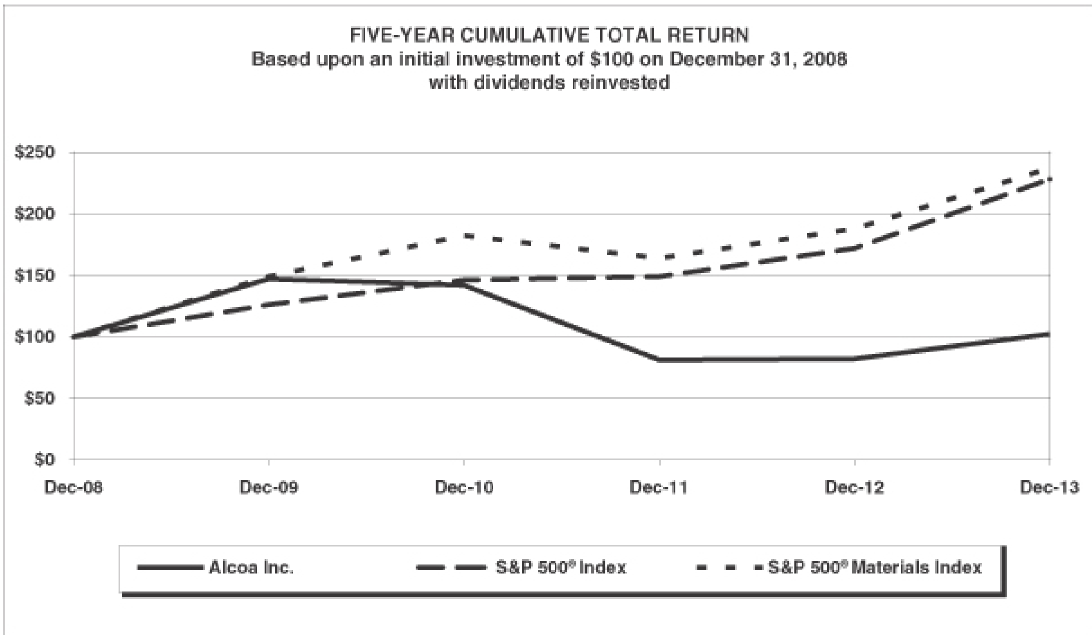
	2013			2012		
Quarter	High	Low	Dividend	High	Low	Dividend
First	$ 9.37	$8.30	$ 0.03	$10.92	$8.89	$ 0.03
Second	8.88	7.71	0.03	10.24	8.21	0.03
Third	8.68	7.63	0.03	9.93	7.97	0.03
Fourth	10.77	7.82	0.03	9.34	7.98	0.03
Year	10.77	7.63	$ 0.12	10.92	7.97	$ 0.12

The number of holders of common stock was approximately 484,000 as of January 27, 2014.

[Table of Contents](#)

Stock Performance Graph

The following graph compares the most recent five-year performance of Alcoa's common stock with (1) the Standard & Poor's 500 ® Index and (2) the Standard & Poor's 500 ® Materials Index, a group of 31 companies categorized by Standard & Poor's as active in the "materials" market sector. Such information shall not be deemed to be "filed."



As of December 31,	2008	2009	2010	2011	2012	2013
Alcoa Inc.	$ 100	$ 147	$ 142	$ 81	$ 82	$ 102
S&P 500 ® Index	100	126	146	149	172	228
S&P 500 ® Materials Index	100	149	182	164	188	237

Source: Research Data Group, Inc. (www.researchdatagroup.com/S&P.htm)

Table of Contents

Item 6. Selected Financial Data.

(dollars in millions, except per-share amounts and ingot prices; shipments in thousands of metric tons [kmt])

For the year ended December 31,	2013	2012	2011	2010	2009
Sales	$23,032	$23,700	$24,951	$21,013	$18,439
Amounts attributable to Alcoa common shareholders:					
(Loss) income from continuing operations	$ (2,285)	$ 191	$ 614	$ 262	$ (985)
Loss from discontinued operations	-	-	(3)	(8)	(166)
Net (loss) income	$ (2,285)	$ 191	$ 611	$ 254	$ (1,151)
Earnings per share attributable to Alcoa common shareholders:					
Basic:					
(Loss) income from continuing operations	$ (2.14)	$ 0.18	$ 0.58	$ 0.25	$ (1.06)
Loss from discontinued operations	-	-	(0.01)	-	(0.17)
Net (loss) income	$ (2.14)	$ 0.18	$ 0.57	$ 0.25	$ (1.23)
Diluted:					
(Loss) income from continuing operations	$ (2.14)	$ 0.18	$ 0.55	$ 0.25	$ (1.06)
Loss from discontinued operations	-	-	-	(0.01)	(0.17)
Net (loss) income	$ (2.14)	$ 0.18	$ 0.55	$ 0.24	$ (1.23)
Shipments of alumina (kmt)	9,966	9,295	9,218	9,246	8,655
Shipments of aluminum products (kmt)	4,994	5,197	5,037	4,757	5,097
Alcoa's average realized price per metric ton of aluminum	$ 2,243	$ 2,327	$ 2,636	$ 2,356	$ 1,856
Cash dividends declared per common share	$ 0.12	$ 0.12	$ 0.12	$ 0.12	$ 0.26
Total assets	35,742	40,179	40,120	39,293	38,472
Short-term borrowings	57	53	62	92	176
Commercial paper	-	-	224	-	-
Long-term debt, including amounts due within one year	8,262	8,776	9,085	9,073	9,643

The data presented in the Selected Financial Data table should be read in conjunction with the information provided in Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II Item 7 and the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

(dollars in millions, except per-share amounts and ingot prices; production and shipments in thousands of metric tons [kmt])

Overview

Our Business

Alcoa is a global leader in lightweight metals engineering and manufacturing. Alcoa's innovative, multi-material products, which include aluminum, titanium, and nickel, are used worldwide in aircraft, automobiles, commercial transportation, packaging, building and construction, oil and gas, defense, consumer electronics, and industrial applications.

Alcoa is also the world leader in the production and management of primary aluminum, fabricated aluminum, and alumina combined, through its active participation in all major aspects of the industry: technology, mining, refining, smelting, fabricating, and recycling. Aluminum is a commodity that is traded on the London Metal Exchange (LME) and priced daily. Aluminum (primary and fabricated) and alumina represent approximately 80% of Alcoa's revenues, and the price of aluminum influences the operating results of Alcoa.

Alcoa is a global company operating in 30 countries. Based upon the country where the point of sale occurred, the U.S. and Europe generated 51% and 26%, respectively, of Alcoa's sales in 2013. In addition, Alcoa has investments and operating activities in, among others, Australia, Brazil, China, Guinea, Iceland, Russia, and Saudi Arabia, all of which present opportunities for substantial growth. Governmental policies, laws and regulations, and other economic factors, including inflation and fluctuations in foreign currency exchange rates and interest rates, affect the results of operations in these countries.

Management Review of 2013 and Outlook for the Future

In 2013, growth in global aluminum demand reached 7%, which was consistent with management's projection at the end of 2012; however, LME pricing levels declined on average 9% year-over-year. The continued weakness in the primary aluminum market led management to review existing high cost capacity for potential curtailment or shut down, resulting in 277 kmt of capacity taken offline in 2013 with another potential 183 kmt to be removed in 2014. Additionally, from a nonoperational perspective, the outlook for the smelting operations led to two significant, unusual noncash negative impacts to Alcoa's results related to the impairment of goodwill and the potential future realizability of certain deferred tax assets. The Company was able to more than offset cost headwinds with continued net productivity improvements across all operations. Additionally, the midstream and downstream operations continue to grow revenue through share gains and innovation while generating significant profits for the Company. Management continued its focus on liquidity and cash flows generating incremental improvements in procurement efficiencies, overhead rationalization, working capital, and disciplined capital spending. These actions enabled Alcoa to decrease debt while maintaining a stable level of cash on hand, resulting in a strengthened balance sheet.

The following financial information reflects some key measures of Alcoa's 2013 results:

- Sales of $23,032 and Loss from continuing operations of $2,285, or $2.14 per diluted share;
- Total segment after-tax operating income of $1,217, of which 80% was generated from the midstream and downstream operations;
- Cash from operations of $1,578, reduced by pension contributions of $462;
- Capital expenditures of $1,193, under $1,500 for the fourth consecutive year;
- Cash on hand at the end of the year of $1,437, in excess of $1,400 for the fifth consecutive year;
- Decrease in total debt of $510, and a decline of $2,259 since 2008; and
- Debt-to-capital ratio of 38.1%.

In 2014, management is projecting continued growth (increase of 7%) in the global consumption of primary aluminum, consistent with that of the last two years. All regions, except Europe, are expected to have three-to-eight percent increases in aluminum demand over 2013 with China (10%) expected to have the highest growth rate in 2014. After considering forecasted added production, along with few industry-wide capacity curtailments, management anticipates a balanced aluminum market. For alumina, growth in global consumption is estimated to be 9%, and supply is expected to slightly exceed overall demand due to new capacity in Australia, Saudi Arabia, and India, combined with added production in China.

Management also anticipates improved market conditions for value-add products in the aerospace, building and construction, packaging, and automotive global end markets, despite declines in certain regions. Aerospace is expected to be driven by large commercial aircraft, as well as strength in regional and business jets. As it relates to building and construction, awarded nonresidential contracts are up in North America while the decline in Europe is slowing down. The packaging market continues to see a conversion from steel cans to aluminum cans for existing products and the emergence of new products is increasing. For automotive, growth continues in both the U.S., as automakers strive to meet stricter emissions regulations, and China, due to a higher percentage of the population driving automobiles. Conversely, management expects a decline in the industrial gas turbine global end market due to pressure from low price coal in Europe and rising gas prices in the U.S. In the commercial transportation global end market, growth in the U.S., as orders and backlog have increased significantly, is expected to be offset by declines in Europe, due to regulatory change in emissions requirements.

On a company-wide basis, management has established and is committed to achieving the following specific goals in 2014:

- generating incremental savings over those realized in the previous five years from procurement, overhead, and working capital programs;
- generating positive cash flow from operations that will exceed capital spending; and
- achieving a debt-to-capital ratio between 30% and 35%.

Looking ahead over the next one to three years, management will focus on new strategic targets that build on the ones established three years ago. Previously, these targets included lowering Alcoa's refining and smelting operations on the cost curve to the 23rd (from 30th) and 41st (from 51st) percentiles, respectively, by 2015 and driving revenue growth, while improving margins that exceed historical levels, in the midstream (increase of $2,500) and downstream (increase of $1,600) operations by 2013. Management made significant progress on the 2010 targets as described below.

At December 31, 2013, Alcoa's refining operations were in the 27th percentile, a three-percentage point improvement, and smelting operations were in the 43rd percentile, an eight-percentage point improvement, on the respective cost curves. In 2013, actions taken to improve Alcoa's position on the cost curve for both refining and smelting operations included productivity improvements, which encompassed new initiatives as well as the full capitalization of initiatives implemented in 2012. Additionally, for the smelting operations, management initiated a permanent shutdown of 146 kmt of capacity in Canada and the U.S. combined and a temporary curtailment of 131 kmt of capacity in Brazil, virtually all of which was completed during the second half of 2013. These decisions were based on a 460 kmt smelting capacity review initiated by management in May 2013. The review of the remaining 183 kmt is expected to be completed in the first half of 2014 (see Primary Metals in Segment Information below).

The new targets for the refining and smelting operations are to further extend the 2015 target reductions on the cost curve by an additional two-percentage points and three-percentage points, respectively, by 2016, resulting in attaining the 21st percentile and 38th percentile, respectively. The full operation of the smelter and the refinery at the joint venture in Saudi Arabia is expected to provide a two-percentage point reduction on each of the respective cost curves. Additionally, initiatives to drive further productivity improvements will continue.

The new targets for the midstream and downstream operations are to increase revenue, while improving margins that meet or exceed historical levels, by $1,000 and $1,200, respectively, by 2016, of which 90% and 75%, respectively, is expected to be generated from innovation and share gains. A portion of the revenue increase for the midstream operations is expected to be generated from the expansion of the rolling facilities in both Davenport, IA (beginning in 2014) and in Tennessee (beginning in 2015) to meet rising U.S. automotive demand due to changing emission regulations and the construction of the rolling mill as part of a joint venture in Saudi Arabia (began in December 2013, additional automotive capacity by the end of 2014). For the downstream operations, the expansion of aluminum lithium capabilities in Lafayette, IN (beginning end of 2014) to meet the growing demand in the aerospace market is expected to contribute to the increase in revenue.

Results of Operations

Earnings Summary

Loss from continuing operations attributable to Alcoa for 2013 was $2,285, or $2.14 per diluted share, compared with Income from continuing operations attributable to Alcoa of $191, or $0.18 per share, in 2012. The decrease of $2,476 in the results from continuing operations was mostly due to an impairment of goodwill, a discrete income tax charge for valuation allowances on certain deferred tax assets, and charges for the resolution of a legal matter. Other significant changes in the results from continuing operations included the following: lower realized prices for aluminum in the upstream and midstream businesses, higher input costs across three of the four segments, the absence of a gain on the sale of U.S. hydroelectric power assets, and restructuring and other charges related to the permanent shutdown of smelter capacity. These other changes were mostly offset by net productivity improvements, net favorable foreign currency movements, the absence of both a net charge for certain environmental remediation matters and a charge for the civil portion of a legal matter, and stronger volumes in three of the four segments.

Income from continuing operations attributable to Alcoa for 2012 was $191, or $0.18 per share, compared with $614, or $0.55 per share, in 2011. The decline of $423 in the results from continuing operations was primarily due to the following: lower realized prices for aluminum and alumina, higher input costs, and charges for the civil portion of a legal matter and certain environmental remediation matters. These items were partially offset by net productivity improvements, a gain on the sale of U.S. hydroelectric power assets, a decline in the results attributable to noncontrolling interests, lower restructuring charges, net favorable foreign currency movements, lower income taxes due to a decline in operating results, a favorable LIFO (last in, first out) impact, and higher volumes in the midstream and downstream segments.

Net loss attributable to Alcoa for 2013 was $2,285, or $2.14 per share, compared with Net income attributable to Alcoa of $191, or $0.18 per share, in 2012, and Net income attributable to Alcoa of $611, or $0.55 per share, in 2011. In 2011, net income of $611 included a loss from discontinued operations of $3 (see Loss From Discontinued Operations below).

Sales—Sales for 2013 were $23,032 compared with sales of $23,700 in 2012, a decline of $668, or 3%. The decrease was primarily due to lower primary aluminum volumes, including those related to curtailed and shutdown smelter capacity; a decline in realized prices for aluminum, driven by lower London Metal Exchange (LME) prices; and unfavorable pricing in the midstream segment due to a decrease in metal prices; somewhat offset by higher volumes in the Alumina, midstream, and downstream segments.

Sales for 2012 were $23,700 compared with sales of $24,951 in 2011, a decrease of $1,251, or 5%. The decline was mainly the result of a drop in realized prices for aluminum and alumina, driven by lower LME prices, unfavorable pricing in the midstream segment due to a decrease in metal prices, and unfavorable foreign currency movements, mostly due to a weaker euro, somewhat offset by higher volumes in the midstream and downstream segments and favorable product mix in the midstream segment.

Cost of Goods Sold—COGS as a percentage of Sales was 83.7% in 2013 compared with 86.1% in 2012. The percentage was positively impacted by net productivity improvements across all segments, the absence of a net charge for five environmental remediation matters ($194), net favorable foreign currency movements due to a stronger U.S. dollar, and a positive impact related to the March 2012 fire at the cast house in Massena, NY (insurance recovery in 2013 plus the absence of business interruption and repair costs that occurred in 2012). These items were partially offset by the previously mentioned realized price impacts and higher input costs, including those related to bauxite mining and planned maintenance outages at various power plants.

COGS as a percentage of Sales was 86.1% in 2012 compared with 82.1% in 2011. The percentage was negatively impacted by the previously mentioned lower realized prices in the upstream and midstream segments, higher input costs, and a net charge for five environmental remediation matters ($194). These items were somewhat offset by net productivity improvements, net favorable foreign currency movements due to a stronger U.S. dollar, and a change in LIFO adjustments from unfavorable to favorable, primarily due to lower prices for alumina and metal and lower costs for calcined coke.

Selling, General Administrative, and Other Expenses—SG&A expenses were $1,008, or 4.4% of Sales, in 2013 compared with $997, or 4.2% of Sales, in 2012. The increase of $11 was principally the result of higher labor costs, partially offset by a decrease in professional expenses and contract services and lower bad debt expense.

SG&A expenses were $997, or 4.2% of Sales, in 2012 compared with $1,027, or 4.1% of Sales, in 2011. The decline of $30 was mostly due to lower stock-based compensation expense; a decrease in bad debt expense due to the absence of charges for anticipated customer credit losses, primarily related to those in Europe; a decline in travel expense; and less spending across various other expenses. These items were partially offset by higher pension costs, due to the recognition of higher net actuarial losses, and increased professional expenses, due to consulting fees associated with productivity initiatives and higher legal expenses.

Research and Development Expenses—R&D expenses were $192 in 2013 compared with $197 in 2012 and $184 in 2011. The decrease in 2013 as compared to 2012 was mainly driven by lower spending related to inert anode and carbothermic technology for the Primary Metals segment and other various projects, mostly offset by new spending related to an upgrade of a Micromill™ in San Antonio, TX for the Global Rolled Products segment. This upgrade is expected to be completed by the end of 2015 and, as a result, the Micromill™ will develop and qualify aluminum products for the automotive and packaging end markets. The increase in 2012 as compared to 2011 was primarily caused by additional spending related to inert anode technology for the Primary Metals segment.

Provision for Depreciation, Depletion, and Amortization—The provision for DD&A was $1,421 in 2013 compared with $1,460 in 2012. The decrease of $39, or 3%, was mostly due to net favorable foreign currency movements due to a stronger U.S. dollar, particularly against the Australian dollar and Brazilian real; a reduction in expense related to the permanent shutdown of smelter capacity in Canada, the U.S., and Italy that occurred mid 2013; and the absence of expense due to the divestiture of U.S. hydroelectric power assets in late 2012. These declines were slightly offset by new depreciation associated with a hydroelectric power project in Brazil (Machadinho). In early 2013, there was a change in the legal structure of the entity that owned the project resulting in Alcoa recording its 30.99% share of the project's assets directly, whereas in 2012, Alcoa's share was recorded as an equity method investment.

The provision for DD&A was $1,460 in 2012 compared with $1,479 in 2011. The decrease of $19, or 1%, was principally the result of the cessation of DD&A due to the decision at the end of 2011 to permanently shut down and demolish the smelter in Tennessee (see Restructuring and Other Charges below) and the absence of DD&A on various in-use assets that reached the end of their estimated useful life in 2011. These declines were partially offset by an increase related to assets placed into service associated with a new hydroelectric power project in Brazil (Estreito) and higher DD&A due to the capitalization of new haul roads and the write-off of old haul roads no longer in use for mining sites in Australia.

Impairment of Goodwill—In 2013, Alcoa recognized an impairment of goodwill in the amount of $1,731 ($1,719 after noncontrolling interest) related to the annual impairment review of the Primary Metals segment (see Goodwill in Critical Accounting Policies and Estimates below).

Restructuring and Other Charges—Restructuring and other charges for each year in the three-year period ended December 31, 2013 were comprised of the following:

	2013	2012	2011
Resolution of a legal matter	$391	$ 85	$ -
Layoff costs	201	47	93
Asset impairments	116	40	150
Other	82	21	61
Reversals of previously recorded layoff and other exit costs	(8)	(21)	(23)
Restructuring and other charges	$782	$172	$281

Layoff costs were recorded based on approved detailed action plans submitted by the operating locations that specified positions to be eliminated, benefits to be paid under existing severance plans, union contracts or statutory requirements, and the expected timetable for completion of the plans.

2013 Actions. In 2013, Alcoa recorded Restructuring and other charges of $782 ($585 after-tax and noncontrolling interests), which were comprised of the following components: $391 ($305 after-tax and noncontrolling interest) related to a legal matter; $245 ($183 after-tax) for exit costs related to the permanent shutdown and demolition of certain structures at three smelter locations (see below); $87 ($61 after-tax and noncontrolling interests) for layoff costs, including the separation of approximately 1,110 employees (340 in the Primary Metals segment, 260 in the Engineered Products and Solutions segment, 250 in the Global Rolled Products segment, 85 in the Alumina segment, and 175 in Corporate), of which 590 relates to a global overhead reduction program, and $9 in pension plan settlement charges related to previously separated employees; $25 ($17 after-tax) in net charges, including $12 ($8 after-tax) for asset impairments, related to retirements and/or the sale of previously idled structures; $25 ($13 after-tax and noncontrolling interests) for asset impairments related to the write-off of capitalized costs for projects no longer being pursued due to the market environment; a net charge of $17 ($12 after-tax and noncontrolling interests) for other miscellaneous items, including $3 ($2 after-tax) for asset impairments; and $8 ($6 after-tax and noncontrolling interests) for the reversal of a number of small layoff reserves related to prior periods.

In May 2013, management approved the permanent shutdown and demolition of (i) two potlines (capacity of 105 kmt-per-year) that utilize Soderberg technology at the smelter located in Baie Comeau, Québec, Canada (remaining capacity of 280 kmt-per-year composed of two prebake potlines) and (ii) the smelter located in Fusina, Italy (capacity of 44 kmt-per-year). Additionally, in August 2013, management approved the permanent shutdown and demolition of one potline (capacity of 41 kmt-per-year) that utilizes Soderberg technology at the Massena East, N.Y. smelter (remaining capacity of 84 kmt-per-year composed of two Soderberg potlines – see Primary Metals in Segment Information below). The aforementioned Soderberg lines at Baie Comeau and Massena East were fully shut down by the end of September 2013 while the Fusina smelter was previously temporarily idled in 2010. Demolition and remediation activities related to all three facilities began in late 2013 and are expected to be completed by the end of 2014 (Massena East), 2015 (Baie Comeau), and 2017 (Fusina).

The decisions on the Soderberg lines for Baie Comeau and Massena East are part of a 15-month review of 460 kmt of smelting capacity initiated by management in May 2013 for possible curtailment, while the decision on the Fusina smelter is in addition to the capacity being reviewed. Factors leading to all three decisions were in general focused on achieving sustained competitiveness and included, among others: lack of an economically viable, long-term power solution (Italy); changed market fundamentals; other existing idle capacity; and restart costs. The remaining 183 kmt of smelting capacity subject to this review is expected to be completed during the first half of 2014 (see Primary Metals in Segment Information below). As such, future restructuring charges may be recognized if the decision to shut down more capacity is made in 2014.

In 2013, exit costs related to these actions included $114 for the layoff of approximately 550 employees (Primary Metals segment), including $83 in pension costs; accelerated depreciation of $58 (Baie Comeau) and asset impairments of $18 (Fusina and Massena East) representing the write-off of the remaining book value of all related properties, plants, and equipment; and $55 in other exit costs. Additionally in 2013, remaining inventories, mostly operating supplies and raw materials, were written down to their net realizable value resulting in a charge of $9 ($6 after-tax), which was recorded in Cost of goods sold on the Statement of Consolidated Operations. The other exit costs of $55 represent $48 in asset retirement obligations and $5 in environmental remediation, both triggered by the decisions to permanently shut down and demolish these structures, and $2 in other related costs.

As of December 31, 2013, approximately 1,020 of the 1,660 employees were separated. The remaining separations for the 2013 restructuring programs are expected to be completed by the end of 2014. In 2013, cash payments of $33 were made against layoff reserves related to the 2013 restructuring programs.

2012 Actions. In 2012, Alcoa recorded Restructuring and other charges of $172 ($106 after-tax and noncontrolling interests), which were comprised of the following components: $85 ($33 after-tax and noncontrolling interest) related to the civil portion of a legal matter; $47 ($29 after-tax and noncontrolling interests) for the layoff of approximately 800 employees (390 in the Engineered Products and Solutions segment, 250 in the Primary Metals segment, 85 in the Alumina segment, and 75 in Corporate), including $10 ($7 after-tax) for the layoff of an additional 170 employees related to the previously reported smelter curtailments in Spain (see 2011 Actions below); $30 ($30 after-tax) in asset impairments and $6 ($6 after-tax) for lease and contract termination costs due to a decision to exit the lithographic sheet business in Bohai, China; $11 ($11 after-tax) in costs to idle the Portovesme smelter (see 2011 Actions below); $10 ($8 after-tax) in other asset impairments; a net charge of $4 ($4 after-tax and noncontrolling interests) for other miscellaneous items; and $21 ($15 after-tax and noncontrolling interests) for the reversal of a number of layoff reserves related to prior periods, including $10 ($7 after-tax) related to the smelters in Spain. The reversal related to the smelters in Spain is due to lower than expected costs based on agreements with employee representatives and the government, as well as a reduction of 55 in the number of layoffs due to the anticipation of the restart of a portion of the previously curtailed capacity based on an agreement with the Spanish government that will provide interruptibility rights (i.e. compensation for power interruptions when grids are overloaded) to the smelters during 2013. A portion of this reversal relates to layoff costs recorded at the end of 2011 (see 2011 Actions below) and a portion of this reversal relates to layoff costs recorded during 2012 (see above).

As of December 31, 2013, the separations associated with 2012 restructuring programs were essentially complete. In 2013 and 2012, cash payments of $17 and $16, respectively, were made against layoff reserves related to the 2012 restructuring programs.

2011 Actions. In 2011, Alcoa recorded Restructuring and other charges of $281 ($181 after-tax and noncontrolling interests), which were comprised of the following components: $127 ($82 after-tax) in asset impairments and $36 ($23 after-tax) in other exit costs related to the permanent shutdown and planned demolition of certain idled structures at two U.S. locations (see below); $93 ($68 after-tax and noncontrolling interests) for the layoff of approximately 1,600 employees (820 in the Primary Metals segment, 470 in the Global Rolled Products segment, 160 in the Alumina segment, 20 in the Engineered Products and Solutions segment, and 130 in Corporate), including the effects of planned smelter curtailments (see below); $23 ($12 after-tax and noncontrolling interests) for other asset impairments, including the write-off of the carrying value of an idled structure in Australia that processed spent pot lining and adjustments to the fair value of the one remaining foil location while it was classified as held for sale due to foreign currency movements; $20 ($8 after-tax and noncontrolling interests) for a litigation matter related to the former St. Croix location; a net charge of $5 ($4 after-tax) for other miscellaneous items; and $23 ($16 after-tax) for the reversal of previously recorded layoff reserves due to normal attrition and changes in facts and circumstances, including a change in plans for Alcoa's aluminum powder facility in Rockdale, TX.

In late 2011, management approved the permanent shutdown and demolition of certain facilities at two U.S. locations, each of which was previously temporarily idled for various reasons. The identified facilities are the smelter located in Alcoa, TN (capacity of 215 kmt-per-year) and two potlines (capacity of 76 kmt-per-year) at the smelter located in Rockdale, TX (remaining capacity of 191 kmt-per-year composed of four potlines). Demolition and remediation activities related to these actions began in 2012 and are expected to be completed in 2015 for the Tennessee smelter and in 2013 for the two potlines at the Rockdale smelter (essentially complete at December 31, 2013). This decision was made after a comprehensive strategic analysis was performed to determine the best course of action for each facility. Factors leading to this decision were in general focused on achieving sustained competitiveness and included, among others: lack of an economically viable, long-term power solution; changed market fundamentals; cost competitiveness; required future capital investment; and restart costs. The asset impairments of $127 represent the write off of the remaining book value of properties, plants, and equipment related to these facilities. Additionally, remaining inventories, mostly operating supplies, were written down to their net realizable value resulting in a charge of $6 ($4 after-tax), which was recorded in Cost of goods sold on the Statement of Consolidated Operations. The other exit costs of $36 represent $18 ($11 after-tax) in environmental remediation and $17 ($11 after-tax) in asset retirement obligations, both triggered by the decision to permanently shut down and demolish these structures, and $1 ($1 after-tax) in other related costs.

Also, at the end of 2011, management approved a partial or full curtailment of three European smelters as follows: Portovesme, Italy (150 kmt-per-year); Avilés, Spain (46 kmt out of 93 kmt-per-year); and La Coruña, Spain (44 kmt out of 87 kmt-per-year). These curtailments were completed by the end of 2012. The curtailment of the Portovesme smelter may lead to the permanent closure of the facility, which would result in future charges, while the curtailments at the two smelters in Spain are planned to be temporary. These actions were the result of uncompetitive energy positions, combined with rising material costs and falling aluminum prices (mid-2011 to late 2011). As a result of these decisions, Alcoa recorded costs of $33 ($31 after-tax) for the layoff of approximately 650 employees. As Alcoa engaged in discussions with the respective employee representatives and governments, additional charges were recognized in 2012 (see 2012 Actions above).

As of December 31, 2013, the separations associated with 2011 restructuring programs were essentially complete. In 2013 and 2012, cash payments of $11 and $23, respectively, were made against layoff reserves related to the 2011 restructuring programs.

Alcoa does not include Restructuring and other charges in the results of its reportable segments. The pretax impact of allocating such charges to segment results would have been as follows:

	2013	2012	2011
Alumina	$ 11	$ 3	$ 39
Primary Metals	295	20	212
Global Rolled Products	15	43	19
Engineered Products and Solutions	27	13	(3)
Segment total	348	79	267
Corporate	434	93	14
Total restructuring and other charges	$782	$172	$281

Interest Expense—Interest expense was $453 in 2013 compared with $490 in 2012. The decrease of $37, or 8%, was primarily due to a 7% lower average debt level, which was mostly attributable to lower outstanding long-term debt due to the June 2013 repayment of $422 in 6.00% Notes and payments associated with the loans supporting growth projects in Brazil.

Interest expense was $490 in 2012 compared with $524 in 2011. The decline of $34, or 6%, was principally caused by the absence of a $41 net charge related to the early retirement of various outstanding notes ($74 in purchase premiums paid partially offset by a $33 gain for “in-the-money” interest rate swaps), somewhat offset by lower capitalized interest ($8). The decrease in capitalized interest was largely attributable to the Estreito hydroelectric power project in Brazil as construction was nearly complete, partially offset by an increase related to the aluminum complex in Saudi Arabia.

Other Income, net—Other income, net was $25 in 2013 compared with $341 in 2012. The change of $316 was mainly the result of the absence of a $320 gain on the sale of U.S. hydroelectric power assets (see below). Also, a higher equity loss ($40) related to Alcoa's share of the joint venture in Saudi Arabia due to start-up costs and a shutdown of one of the two smelter potlines due to a period of instability was partially offset by net favorable foreign currency movements ($28).

Other income, net was $341 in 2012 compared with $87 in 2011. The increase of $254 was mostly due to a gain on the sale of U.S. hydroelectric power assets ($320: see Primary Metals in Segment Information below) and net favorable foreign currency movements ($21). These two items were somewhat offset by lower equity income ($43), largely attributable to Alcoa's share of expenses of the joint venture in Saudi Arabia and the absence of a discrete income tax benefit recognized by the consortium related to an investment in a natural gas pipeline in Australia (Alcoa World Alumina and Chemicals' share of the benefit was $24); the absence of a gain on the sale of land in Australia ($43); and a net unfavorable change in mark-to-market derivative contracts ($39), principally driven by the absence of a favorable change in an energy contract that expired in September 2011.

Income Taxes—Alcoa's effective tax rate was 23.6% in 2013 (provision on a loss) compared with the U.S. federal statutory rate of 35%. The effective tax rate differs (by (58.6)% points) from the U.S. federal statutory rate primarily due to a $1,731 impairment of goodwill (see Impairment of Goodwill above) and a $209 charge for a legal matter (see Restructuring and Other Charges above) that are nondeductible for income tax purposes, a $372 discrete income tax charge for valuation allowances on certain deferred tax assets in Spain and the U.S. (see Income Taxes in Critical Accounting Policies and Estimates below), restructuring charges related to operations in Canada (benefit at a lower tax rate) and Italy (no tax benefit) (see Restructuring and Other Charges above), and a $9 discrete income tax charge related to prior year taxes in Spain and Australia. These items were slightly offset by an $18 discrete income tax benefit related to new U.S. tax legislation.

On January 2, 2013, the American Taxpayer Relief Act of 2012 was signed into law and reinstated various expired or expiring temporary business tax provisions through 2013. Two specific temporary business tax provisions that expired in 2011 and impacted Alcoa are the look-through rule for payments between related controlled foreign corporations and the research and experimentation credit. The expiration of these two provisions resulted in Alcoa recognizing a higher income tax provision of $18 in 2012. As tax law changes are accounted for in the period of enactment, Alcoa recognized the previously mentioned discrete income tax benefit in 2013 related to the 2012 tax year to reflect the extension of these provisions. For tax years beginning after December 31, 2013, these two provisions once again expire. Absent a retroactive extension enacted in 2014, Alcoa would recognize a higher income tax provision of $5 in 2014.

Alcoa's effective tax rate was 50.0% (provision on income) in 2012 compared with the U.S. federal statutory rate of 35%. The effective tax rate differs from the U.S. federal statutory rate principally due to the tax impact from the gain recognized on the sale of U.S. hydroelectric power assets (see Primary Metals in Segment Information below) and an $8 discrete income tax charge related to prior year U.S. taxes on certain depletable assets, slightly offset by a $13 discrete income tax benefit related to a change in the legal structure of an investment.

Alcoa's effective tax rate was 24.0% (provision on income) in 2011 compared with the U.S. federal statutory rate of 35%. The effective tax rate differs from the U.S. federal statutory rate mainly due to foreign income taxed in lower rate jurisdictions.

Management anticipates that the effective tax rate in 2014 will be approximately 45%. However, changes in the current economic environment, tax legislation or rate changes, currency fluctuations, ability to realize deferred tax assets, and the results of operations in certain taxing jurisdictions may cause this estimated rate to fluctuate.

In December 2011, one of the Company's subsidiaries in Brazil applied for a tax holiday related to its expanded mining and refining operations. During 2013, the application was amended and re-filed and, separately, a similar application was filed for another one of the Company's subsidiaries in Brazil. If approved, the tax rate for these subsidiaries will decrease significantly, resulting in future cash tax savings over the 10-year holiday period (would be retroactively effective as of January 1, 2013). Additionally, the net deferred tax asset of one of the subsidiaries would be remeasured at the lower rate in the period the holiday is approved (the net deferred tax asset of the other subsidiary would not be remeasured since it could still be utilized against future earnings of the subsidiary not subject to the tax holiday). This remeasurement would result in a decrease to that subsidiary's net deferred tax asset and a noncash charge to earnings of approximately $50. As of December 31, 2013, Alcoa's subsidiaries' applications are still pending.

Noncontrolling Interests—Net income attributable to noncontrolling interests was $41 in 2013 compared with Net loss attributable to noncontrolling interests of $29 in 2012. The change of $70 was primarily due to the results of Alcoa World Alumina and Chemicals (AWAC), which is owned 60% by Alcoa and 40% by Alumina Limited. In 2013, the change in AWAC's results was impacted by improved operating results and items related to a legal matter. The increase in AWAC's operating results was principally driven by net favorable foreign currency movements and net productivity improvements, somewhat offset by an increase in input costs. Completely offsetting the improved operating results of AWAC was the difference between a $384 charge for a legal matter in 2013 and an $85 charge related to the civil portion of the same legal matter in 2012. A description of how these charges for this legal matter impacted Noncontrolling interests follows.

The noncontrolling interest's share of AWAC's charge for a legal matter in 2013 and 2012 was $58 and $34, respectively. In 2012, the $34 was based on the 40% ownership interest of Alumina Limited, while, in 2013, the $58 was based on 15%. The application of a different percentage was due to the criteria in a 2012 allocation agreement between Alcoa and Alumina Limited related to this legal matter being met. Additionally, the $34 charge, as well as costs related to this legal matter, was retroactively adjusted to reflect the terms of the allocation agreement, resulting in a credit to Noncontrolling interests of $41. In summary, Noncontrolling interests included a charge of $17 and $34 related to this legal matter in 2013 and 2012, respectively.

Net loss attributable to noncontrolling interests was $29 in 2012 compared with Net income attributable to noncontrolling interests of $194 in 2011. The change of $223 was mostly due to lower earnings of AWAC. The decline in AWAC's earnings was attributed primarily to lower realized prices, due to a decrease in contractual LME-based pricing, higher input costs, particularly caustic and fuel oil, and an $85 charge for the civil portion of a legal matter ($34 is noncontrolling interest's share). These items were somewhat offset by net productivity improvements and net favorable foreign currency movements due to a stronger U.S. dollar.

Loss From Discontinued Operations—Loss from discontinued operations in 2011 was $3 comprised of an additional loss of $3 ($5 pretax) related to the wire harness and electrical portion (divested in June 2009) of the Electrical and Electronic Solutions (EES) business as a result of a negotiated preliminary settlement related to claims filed in 2010 against Alcoa by Platinum Equity in an insolvency proceeding in Germany, a net gain of $2 ($3 pretax) related to both the wire harness and electrical portion and the electronics portion (divested in December 2009) of the EES business for a number of small post-closing and other adjustments, and a $2 ($2 pretax) reversal of the gain recognized in 2006 related to the sale of the home exteriors business for an adjustment to an outstanding obligation, which was part of the terms of sale.

Segment Information

Alcoa's operations consist of four worldwide reportable segments: Alumina, Primary Metals, Global Rolled Products, and Engineered Products and Solutions. Segment performance under Alcoa's management reporting system is evaluated based on a number of factors; however, the primary measure of performance is the after-tax operating income (ATOI) of each segment. Certain items such as the impact of LIFO inventory accounting; interest expense; noncontrolling interests; corporate expense (general administrative and selling expenses of operating the corporate headquarters and other global administrative facilities, along with depreciation and amortization on corporate-owned assets); restructuring and other charges; discontinued operations; and other items, including intersegment profit eliminations, differences between tax rates applicable to the segments and the consolidated effective tax rate, the results of the soft alloy extrusions business in Brazil, and other nonoperating items such as foreign currency transaction gains/losses and interest income are excluded from segment ATOI.

On January 1, 2013, management revised the inventory-costing method used by certain locations within the Global Rolled Products and Engineered Products and Solutions segments, which affects the determination of the respective segment's profitability measure, ATOI. Management made the change in order to improve internal consistency and enhance industry comparability. This revision does not impact the consolidated results of Alcoa. Segment information for all prior periods presented was revised to reflect this change.

ATOI for all reportable segments totaled $1,217 in 2013, $1,357 in 2012, and $1,885 in 2011. See Note Q to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K for additional information. The following discussion provides shipments, sales, and ATOI data for each reportable segment and production data for the Alumina and Primary Metals segments for each of the three years in the period ended December 31, 2013.

Alumina

	2013	2012	2011
Alumina production (kmt)	16,618	16,342	16,486
Third-party alumina shipments (kmt)	9,966	9,295	9,218
Alcoa's average realized price per metric ton of alumina	$ 328	$ 327	$ 370
Alcoa's average cost per metric ton of alumina*	$ 295	$ 310	$ 312
Third-party sales	$ 3,326	$ 3,092	$ 3,462
Intersegment sales	2,235	2,310	2,727
Total sales	$ 5,561	$ 5,402	$ 6,189
ATOI	$ 259	$ 90	$ 607

* Includes all production-related costs, including raw materials consumed; conversion costs, such as labor, materials, and utilities; depreciation, depletion, and amortization; and plant administrative expenses.

This segment represents a portion of Alcoa's upstream operations and consists of the Company's worldwide refinery system, including the mining of bauxite, which is then refined into alumina. Alumina is mainly sold directly to internal and external smelter customers worldwide or is sold to customers who process it into industrial chemical products. A portion of this segment's third-party sales are completed through the use of agents, alumina traders, and distributors. Slightly more than half of Alcoa's alumina production is sold under supply contracts to third parties worldwide, while the remainder is used internally by the Primary Metals segment.

In 2013, alumina production increased by 276 kmt compared to 2012. The improvement was mostly the result of higher production in the Atlantic refinery system, primarily at the Point Comfort, TX refinery.

In 2012, alumina production decreased by 144 kmt compared to 2011. The decline was mainly driven by lower production in the Atlantic refinery system as a result of management's plan to reduce annual production capacity by approximately 390 kmt. This decision was made to align production with smelter curtailments initiated at the beginning of 2012 and to reflect prevailing market conditions. The decrease at these refineries was partially offset by higher production at the Pinjarra and Kwinana refineries in Australia, due to system process improvements.

Third-party sales for the Alumina segment improved 8% in 2013 compared with 2012, largely attributable to an increase of 7% in volume and positive impacts from moving customer contracts to alumina index pricing and spot pricing, somewhat offset by a decrease in contractual LME-based pricing (fewer sales subject to LME pricing and lower average LME prices for those sales subject to LME pricing).

Third-party sales for this segment dropped 11% in 2012 compared with 2011, primarily related to a 12% decline in realized prices, driven by a decrease in contractual LME-based pricing, slightly offset by realized benefits from moving customer contracts to alumina index pricing and from improved spot pricing.

Intersegment sales for the Alumina segment declined 3% in 2013 compared with 2012, primarily the result of lower demand from the Primary Metals segment. Intersegment sales for this segment decreased 15% in 2012 compared with 2011, principally due to lower realized prices and decreased demand from the Primary Metals segment.

ATOI for the Alumina segment increased $169 in 2013 compared with 2012, mainly caused by net favorable foreign currency movements due to a stronger U.S. dollar, especially against the Australian dollar, and net productivity improvements. These positive impacts were somewhat offset by cost increases for bauxite due to a new mining site in Suriname and a crusher equipment move in Australia, rising natural gas prices in Australia, and higher maintenance costs in Australia and Latin America.

ATOI for this segment dropped $517 in 2012 compared with 2011, mostly due to the previously mentioned lower realized prices, higher input costs, particularly caustic and fuel oil, and the absence of a gain on the sale of land in Australia ($30). These negative impacts were somewhat offset by net productivity improvements and net favorable foreign currency movements due to a stronger U.S. dollar, especially against the Brazilian real.

In 2014, the continued shift towards alumina index and spot-pricing is expected to average 65% of third-party shipments. Also, a higher equity loss related to preoperational ramp-up activities at the refinery in Saudi Arabia and overall higher energy prices in this segment's refinery system are expected.

Primary Metals

	2013	2012	2011
Aluminum production (kmt)	3,550	3,742	3,775
Third-party aluminum shipments (kmt)	2,801	3,056	2,981
Alcoa's average realized price per metric ton of aluminum	$2,243	$ 2,327	$ 2,636
Alcoa's average cost per metric ton of aluminum*	$2,201	$ 2,287	$ 2,492
Third-party sales	$6,596	$ 7,432	$ 8,240
Intersegment sales	2,621	2,877	3,192
Total sales	$9,217	$10,309	$11,432
ATOI	$ (20)	$ 309	$ 481

* Includes all production-related costs, including raw materials consumed; conversion costs, such as labor, materials, and utilities; depreciation and amortization; and plant administrative expenses.

This segment represents a portion of Alcoa's upstream operations and consists of the Company's worldwide smelter system. Primary Metals receives alumina, mostly from the Alumina segment, and produces primary aluminum used by Alcoa's fabricating businesses, as well as sold to external customers and traders. Results from the sale of aluminum powder, scrap, and excess power are also included in this segment, as well as the results of aluminum derivative contracts and buy/resell activity. Primary aluminum produced by Alcoa and used internally is transferred to other segments at prevailing market prices. The sale of primary aluminum represents more than 90% of this segment's third-party sales. Buy/resell activity occurs when this segment purchases metal from external or internal sources and resells such metal to external customers or the midstream and downstream segments in order to maximize smelting system efficiency and to meet customer requirements.

In November 2012, Alcoa completed the sale of its 351-megawatt Tapoco Hydroelectric Project ("Tapoco") to Brookfield Renewable Energy Partners for $597 in cash. Alcoa recognized a gain of $320 ($173 after-tax) in Other income, net on the Statement of Consolidated Operations, of which a gain of $426 ($275 after-tax) was reflected in the Primary Metals segment and a loss of $106 ($102 after-tax) was reflected in Corporate. The amount in Corporate represents the write-off of goodwill and capitalized interest related to Tapoco that were not included in the assets of the Primary Metals segment. Tapoco is a four-station hydroelectric project located on the Little Tennessee and Cheoah Rivers in eastern Tennessee and western North Carolina. The transaction included four generating stations and dams, 86 miles of transmission lines, and approximately 14,500 acres of land associated with and surrounding Tapoco. The power generated by Tapoco was primarily consumed by Alcoa's smelter in Tennessee, which was temporarily idled in 2009 and permanently shut down in 2011. Since 2009, the power generated from Tapoco was sold into the open market.

At December 31, 2013, Alcoa had 655 kmt of idle capacity on a base capacity of 4,037 kmt. In 2013, idle capacity increased 64 kmt compared to 2012 mostly due to the temporary curtailment of 131 kmt combined at two smelters in Brazil, partially offset by the permanent closure of the Fusina smelter in Italy (44 kmt-per-year) and the restart of a portion (27 kmt combined) of the capacity that was temporary curtailed in 2012 related to the Avilés and La Coruña smelters in Spain. Base capacity declined 190 kmt between December 31, 2013 and 2012 due to the permanent closure of three potlines combined at smelters in Canada and in the U.S. and the previously mentioned permanent shutdown of the Fusina smelter. A detailed description of each of these actions follows.

The restarts in Spain occurred in order to meet the requirements of the modified interruptibility regime in the Spanish power market. In December 2012, the Spanish Government issued a Ministerial Order that modified the interruptibility regime previously in place in the Spanish power market. The interruptibility regime allows certain industrial customers who are willing to be subject to temporary interruptions in the supply of power to sell interruption rights to the high voltage transmission system operator. In January 2013, Alcoa applied for and was granted rights to sell interruption services under the modified regime from its San Ciprian, Avilés, and La Coruña smelters in Spain. The commitment is taken for a one-year period, which has since been extended until October 2014. In 2013, the Spanish Government notified the European Commission of the modification in the interruptibility regime for review under European state aid rules.

In May 2013, Alcoa announced that management will review 460 kmt of smelting capacity over a 15-month period for possible curtailment. This review is aimed at maintaining Alcoa's competitiveness despite falling aluminum prices and will focus on the highest-cost smelting capacity and those plants that have long-term risk due to factors such as energy costs or regulatory uncertainty.

As part of this review, also in May 2013, management approved the permanent shutdown and demolition of two potlines (105 kmt-per-year) that utilize Soderberg technology at the Baie Comeau smelter in Quebec, Canada. Additionally, in August 2013, management approved the permanent shutdown and demolition of one potline (41 kmt-per-year) that utilizes Soderberg technology at the Massena East, NY plant. The shutdown of these three lines was completed by the end of September 2013. The Baie Comeau smelter has a remaining capacity of 280 kmt-per-year composed of two prebake potlines and the Massena East smelter has a remaining capacity of 84 kmt-per-year composed of two Soderberg potlines.

Also in August 2013 as part of this review, management initiated the temporary curtailment of 97 kmt at the São Luís smelter and 31 kmt at the Poços de Caldas smelter, both in Brazil. This action was also completed by the end of September 2013. An additional 3 kmt was temporarily curtailed at the Poços de Caldas smelter by the end of 2013.

The remaining 183 kmt of smelting capacity subject to this review is expected to be completed during the first half of 2014 (see 2014 outlook below).

In June 2013, management decided to permanently close the Fusina smelter as the underlying conditions that led to the idling of the smelter in 2010 have not fundamentally changed, including low aluminum prices and the lack of an economically viable, long-term power solution.

At December 31, 2012, Alcoa had 591 kmt of idle capacity on a base capacity of 4,227 kmt. In 2012, idle capacity decreased 53 kmt compared to 2011 due to the permanent shutdown of the smelter in Tennessee (215 kmt-per-year) and two potlines at the smelter located in Rockdale, TX (76 kmt-per-year), mostly offset by the curtailment of the Portovesme smelter in Italy (150 kmt-per-year) and the temporary curtailment of a portion of the smelters in Spain: Avilés (46 kmt out of 93 kmt-per-year) and La Coruña (44 kmt out of 87 kmt-per-year). Base capacity declined 291 kmt between December 31, 2012 and 2011 due to the previously mentioned permanent shutdowns.

In late 2011, management approved the permanent shutdown and demolition of the Tennessee smelter and two potlines at the Rockdale smelter (remaining capacity of 191 kmt-per-year composed of four potlines), each of which was previously temporarily idled for various reasons. This decision was made after a comprehensive strategic analysis was performed to determine the best course of action for each facility. Factors leading to this decision were in general focused on achieving sustained competitiveness and included, among others: lack of an economically viable, long-term power solution; changed market fundamentals; cost competitiveness; required future capital investment; and restart costs.

Also, at the end of 2011, management approved a full curtailment of the Portovesme smelter and a partial curtailment at the Avilés and La Coruña smelters. The curtailment of the Portovesme smelter may lead to the permanent closure of the facility, while the curtailments at the two smelters in Spain are planned to be temporary. These actions were the result of uncompetitive energy positions, combined with rising material costs and falling aluminum prices (mid-2011 to late 2011).

In 2013, aluminum production declined by 192 kmt, mainly the result of the absence of production at the Portovesme smelter (fully curtailed at the end of 2012), the temporary curtailment of capacity at two smelters in Brazil, and the permanent shutdown of three potlines combined at smelters in Canada and in the U.S.

In 2012, aluminum production decreased by 33 kmt, mostly due to the previously mentioned curtailments at the Portovesme, Avilés, and La Coruña smelters, partially offset by the benefit of a full year of production related to capacity restarted in 2011 at the Massena East (125 kmt-per-year), Wenatchee, WA (43 kmt-per-year), and Ferndale, WA (Intalco: 47 kmt-per-year) smelters.

Third-party sales for the Primary Metals segment declined 11% in 2013 compared with 2012, primarily due to lower volumes, including from the curtailed smelters in Italy, Spain, and Brazil and the permanent shutdown of certain capacity in Canada and the U.S. Also contributing to the decrease was a 4% decline in average realized prices, somewhat offset by higher energy sales related to excess power, mostly in Brazil, and favorable product mix. The change in realized prices was driven by an 8% lower average LME price (on 15-day lag), somewhat offset by higher regional premiums, including an average of 12% in the U.S and 13% in Europe.

Third-party sales for this segment dropped 10% in 2012 compared with 2011, mainly due to a 12% decline in average realized prices, driven by a 16% lower average LME price (on 15-day lag), slightly offset by higher buy/resell activity. The U.S. capacity restarted in 2011 contributed positively to third-party sales in 2012, but was completely offset by the curtailments of European capacity in 2012.

Intersegment sales for the Primary Metals segment declined 9% in 2013 compared with 2012, mainly the result of a decrease in both realized prices, driven by a lower LME price, and demand from the midstream and downstream businesses. Intersegment sales for this segment decreased 10% in 2012 compared with 2011, principally due to a decline in realized prices, driven by a lower LME price.

ATOI for the Primary Metals segment decreased $329 in 2013 compared with 2012, primarily caused by a decline in realized prices, the absence of a gain on the sale of Tapoco (see above), higher costs for labor and transportation, a higher equity loss related to the joint venture in Saudi Arabia due to start-up costs and a shutdown of one of the two potlines due to a period of instability, and costs related to planned maintenance outages at the Anglesea power plant in Australia and two U.S. power plants. These negative impacts were somewhat offset by lower costs for carbon and energy, net productivity improvements, net favorable foreign currency movements due to a stronger U.S. dollar against most major currencies, favorable product mix, and a positive impact (insurance recovery in 2013 plus the absence of business interruption and repair costs that occurred in 2012) related to the March 2012 fire at the Massena West cast house ($36).

ATOI for this segment dropped $172 in 2012 compared with 2011, principally related to the previously mentioned decrease in realized prices, higher costs, particularly labor and other raw materials, and an unfavorable impact as a result of business interruption and repair costs related to a fire in March 2012 at the Massena West cast house ($21). These negative impacts were partially offset by a gain on the sale of Tapoco (see above), lower costs for alumina and energy, net favorable foreign currency movements due to a stronger U.S. dollar, particularly against the euro and Brazilian real, and net productivity improvements.

In 2014, pricing is expected to follow a 15-day lag on the LME. Also, a higher equity loss related to start-up activities at the smelter in Saudi Arabia (will be fully operational in the second half of 2014) and overall higher energy prices in this segment's smelting system are expected. Additionally, the remaining 183 kmt of smelting capacity subject to the management review initiated in May 2013 will be completed (in January 2014 management decided to permanently shut down the remaining 84 kmt at the Massena East smelter).

Global Rolled Products

	2013	2012	2011
Third-party aluminum shipments (kmt)	1,905	1,867	1,780
Alcoa's average realized price per metric ton of aluminum	$3,730	$3,953	$4,293
Third-party sales	$7,106	$7,378	$7,642
Intersegment sales	178	163	218
Total sales	$7,284	$7,541	$7,860
ATOI	$ 252	$ 346	$ 260

This segment represents Alcoa's midstream operations, whose principal business is the production and sale of aluminum plate and sheet. A small portion of this segment's operations relate to foil produced at one plant in Brazil. This segment includes rigid container sheet (RCS), which is sold directly to customers in the packaging and consumer market and is used to produce aluminum beverage cans. Seasonal increases in RCS sales are generally experienced in the second and third quarters of the year. Approximately one-half of the third-party sales in this segment consist of RCS. This segment also includes sheet and plate used in the aerospace, automotive, commercial transportation, building and construction, and industrial products (mainly used in the production of machinery and equipment and consumer durables) end markets, which is sold directly to customers and through distributors. While the customer base for flat-rolled products is large, a significant amount of sales of RCS, sheet, and plate is to a relatively small number of customers.

Third-party sales for the Global Rolled Products segment declined 4% in 2013 compared with 2012, primarily driven by unfavorable pricing, mostly due to a decrease in metal prices, and unfavorable product mix, partially offset by increased demand. Volume improvements were mostly due to the packaging, automotive, and building and construction end markets, partially offset by a decline in the industrial products end market (especially in North America).

Third-party sales for this segment decreased 3% in 2012 compared with 2011, principally caused by unfavorable pricing, due to a decrease in metal prices, and unfavorable foreign currency movements, mostly due to a weaker euro, somewhat offset by higher volumes and favorable product mix. The higher volumes were largely attributable to the packaging, automotive, building and construction, and aerospace end markets, slightly offset by the industrial products end market.

ATOI for the Global Rolled Products segment declined $94 in 2013 compared with 2012, primarily attributable to a combination of unfavorable pricing and product mix; higher input costs, including metal premiums, energy, and labor; and a negative impact from the timing lag in metal prices (i.e., this segment realized a lower average metal price in sales compared to the average cost of the metal purchased). These items were partially offset by net productivity improvements across most businesses.

ATOI for this segment improved $86 in 2012 compared with 2011, mainly the result of net productivity improvements across all businesses, favorable product mix, and the previously mentioned higher volumes, somewhat offset by higher input costs, particularly labor and transportation.

In 2014, automotive demand is expected to remain strong for both auto and brazing sheet, while industrial volumes are expected to strengthen with the recovering economies in the U.S. and Europe. Also, volume and continued pricing pressures are expected to negatively impact the aerospace (due to high original equipment manufacturer inventories) and packaging end markets.

Engineered Products and Solutions

	2013	2012	2011
Third-party aluminum shipments (kmt)	229	222	221
Third-party sales	$5,733	$5,525	$5,345
ATOI	$ 726	$ 612	$ 537

This segment represents Alcoa's downstream operations and includes titanium, aluminum, and super alloy investment castings; fasteners; aluminum wheels; integrated aluminum structural systems; architectural extrusions; and forgings and hard alloy extrusions. These products, which are used in the aerospace, automotive, building and construction, commercial transportation, power generation, and industrial products end markets, are sold directly to customers and through distributors.

On March 9, 2011, Alcoa completed an acquisition of the aerospace fastener business of TransDigm Group Inc. for $240. This business is a leading global designer, producer, and supplier of highly engineered aircraft components, with three locations (one in the state of California and two in the United Kingdom) that employ a combined 400 people (at time of acquisition). Specifically, this business provides a wide variety of high-strength, high temperature nickel alloy specialty engine fasteners, airframe bolts, and slotted entry bearings. In 2010, this business generated sales of $61. The assets and liabilities of this business were included in the Engineered Products and Solutions segment as of March 31, 2011; this business' results of operations were included in this segment beginning March 9, 2011.

Third-party sales for the Engineered Products and Solutions segment improved 4% in 2013 compared with 2012, largely attributable to higher volumes related to the aerospace end market.

Third-party sales for this segment increased 3% in 2012 compared with 2011, primarily due to higher volumes, slightly offset by unfavorable foreign currency movements due to a weaker euro. The higher volumes were mostly related to the aerospace, industrial gas turbine, and commercial transportation end markets, slightly offset by lower volumes from the building and construction end market.

ATOI for the Engineered Products and Solutions segment rose $114 in 2013 compared with 2012, principally the result of net productivity improvements across all businesses and the previously mentioned volume impact, somewhat offset by higher costs, including labor and research and development expenses, and unfavorable price/product mix.

ATOI for this segment climbed $75 in 2012 compared with 2011, mainly due to net productivity improvements in four of the five businesses and the previously mentioned higher volumes.

In 2014, the aerospace end market is expected to remain strong, while the building and construction end market is expected to improve as the gradual recovery in North America continues and the decline in Europe slows down. Also, weaker global demand in the industrial gas turbine end market is anticipated, while stronger North America build rates in the commercial transportation end market will be offset by declines in Europe.

Reconciliation of ATOI to Consolidated Net (Loss) Income Attributable to Alcoa

Items required to reconcile total segment ATOI to consolidated net (loss) income attributable to Alcoa include: the impact of LIFO inventory accounting; interest expense; noncontrolling interests; corporate expense (general administrative and selling expenses of operating the corporate headquarters and other global administrative facilities, along with depreciation and amortization on corporate-owned assets); restructuring and other charges; discontinued operations; and other items, including intersegment profit eliminations, differences between tax rates applicable to the segments and the consolidated effective tax rate, the results of the soft alloy extrusions business in Brazil, and other nonoperating items such as foreign currency transaction gains/losses and interest income.

The following table reconciles total segment ATOI to consolidated net (loss) income attributable to Alcoa:

	2013	2012	2011
Total segment ATOI	$ 1,217	$1,357	$1,885
Unallocated amounts (net of tax):			
Impact of LIFO	52	20	(38)
Interest expense	(294)	(319)	(340)
Noncontrolling interests	(41)	29	(194)
Corporate expense	(284)	(282)	(290)
Impairment of goodwill	(1,731)	-	-
Restructuring and other charges	(607)	(142)	(196)
Discontinued operations	-	-	(3)
Other	(597)	(472)	(213)
Consolidated net (loss) income attributable to Alcoa	$(2,285)	$ 191	$ 611

The significant changes in the reconciling items between total segment ATOI and consolidated net (loss) income attributable to Alcoa for 2013 compared with 2012 consisted of:

- a change in the Impact of LIFO, mostly due to lower prices for aluminum, driven by lower LME prices, and significant reductions in LIFO inventory quantities, which caused a partial liquidation of the lower cost LIFO inventory base;
- a decrease in Interest expense, principally caused by a 7% lower average debt level, which was mostly attributable to lower outstanding long-term debt due to the June 2013 repayment of $422 in 6.00% Notes and payments associated with the loans supporting growth projects in Brazil;
- a change in Noncontrolling interests, mainly due to improved operating results of AWAC, principally driven by net favorable foreign currency movements and net productivity improvements, somewhat offset by an increase in input costs, and a favorable change in charges allocated to Noncontrolling interest related to a legal matter (see Noncontrolling Interests in Earnings Summary above);
- an Impairment of goodwill related to the annual impairment review of the Primary Metals segment (see Goodwill in Critical Accounting Policies and Estimates below);
- an increase in Restructuring and other charges, mostly due to a charge for a legal matter ($322) and exit costs related to the permanent shutdown and demolition of certain structures at three smelter locations ($183), slightly offset by the absence of a charge for the civil portion of a legal matter ($67); and
- a change in Other, primarily due to a $372 discrete income tax charge for valuation allowances on certain deferred tax assets in Spain and the U.S., partially offset by the absence of both a net charge for five environmental remediation matters ($129) and a charge for the write-off of goodwill and capitalized interest related to the 2012 sale of U.S. hydroelectric power assets that were not included in the assets of the Primary Metals segment ($102).

The significant changes in the reconciling items between total segment ATOI and consolidated net income attributable to Alcoa for 2012 compared with 2011 consisted of:

- a change in the Impact of LIFO, due to lower prices for alumina and metal, both of which were driven by a decline in LME prices, and lower costs for calcined coke;

- a decrease in Interest expense, primarily due to the absence of a $27 net charge related to the early retirement of various outstanding notes ($48 in purchase premiums paid partially offset by a $21 gain for "in-the-money" interest rate swaps), somewhat offset by lower capitalized interest ($6);
- a change in Noncontrolling interests, mainly the result of lower earnings of AWAC, principally driven by lower realized prices, due to a decrease in contractual LME-based pricing, higher input costs, particularly caustic and fuel oil, and a charge for the civil portion of a legal matter ($34 is noncontrolling interest's share), somewhat offset by net productivity improvements and net favorable foreign currency movements due to a stronger U.S. dollar;
- a decrease in Restructuring and other charges, principally caused by fewer asset impairments and a lower number of employee separations, partially offset by a charge for the civil portion of a legal matter ($67); and
- a change in Other, largely attributable to a net charge for five environmental remediation matters ($129), a charge for the write-off of goodwill and capitalized interest related to the sale of U.S. hydroelectric power assets that were not included in the assets of the Primary Metals segment ($102), and a net unfavorable change in mark-to-market derivative contracts ($24).

Environmental Matters

See the Environmental Matters section of Note N to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

Liquidity and Capital Resources

Alcoa maintains a disciplined approach to cash management and strengthening of its balance sheet. In 2013, as in the prior four years, management initiated actions to significantly improve Alcoa's cost structure and liquidity, providing the Company with the ability to operate effectively as the global economy continues to recover from the economic downturn that began in 2008. Such actions include procurement efficiencies and overhead rationalization to reduce costs, working capital initiatives to yield significant cash improvements, and maintaining a sustainable level of capital expenditures. In 2014, this approach will continue with the ultimate goal of generating cash from operations that exceeds capital expenditures.

Along with the foregoing actions, cash provided from operations and financing activities is expected to be adequate to cover Alcoa's current operational and business needs. For an analysis of long-term liquidity, see Contractual Obligations and Off-Balance Sheet Arrangements below.

At December 31, 2013, cash and cash equivalents of Alcoa were $1,437, of which $544 was held outside the U.S. Alcoa has a number of commitments and obligations related to the Company's growth strategy in foreign jurisdictions, resulting in the need for cash outside the U.S. As such, management does not have a current expectation of repatriating cash held in foreign jurisdictions.

Cash from Operations

Cash from operations in 2013 was $1,578 compared with $1,497 in 2012. The increase of $81, or 5%, was largely attributable to higher operating results (net loss plus net add back for noncash impacts to earnings) and lower pension contributions of $99, mostly offset by a negative change associated with all of the following: working capital of $235, noncurrent assets of $162, and noncurrent liabilities of $128.

The lower pension contributions were principally driven by a change in minimum funding obligations for U.S. pension plans due to enacted legislation in 2012 (see below).

The major components of the negative change in working capital were as follows: an unfavorable change of $245 in receivables; a negative change of $71 in inventories, principally due to a lower LIFO reserve; a favorable change of

$53 in prepaid expenses and other current assets, mostly caused by the sale of excess carbon credits in Australia; a positive change of $338 in accounts payable, trade, principally the result of timing of payments, including a policy change in Alcoa's vendor payment process; an unfavorable change of $252 in accrued expenses, largely attributable to a decrease in deferred revenue and payments made to the Italian Government (see below); and a negative change of $58 in taxes, including income taxes.

The unfavorable change in noncurrent assets was mostly related to an increase in deferred mining costs in Australia and the absence of value-added tax receipts in Brazil. The negative change in noncurrent liabilities was largely attributable to the absence of a net increase in the environmental reserve of $194 related to five remediation matters.

In 2014, Alcoa World Alumina LLC, a majority-owned subsidiary of Alcoa, and Alcoa Inc. will pay a combined $88 to the United States government due to the resolution of a legal matter (paid on January 22, 2014). Additionally, another $74 will be paid in each of the four subsequent years, 2015 through 2018.

Cash from operations in 2012 was $1,497 compared with $2,193 in 2011. The decrease of $696, or 32%, was primarily due to lower operating results, higher pension contributions of $225, and an unfavorable change associated with working capital of $141, somewhat offset by a favorable change of $445 in noncurrent liabilities and a positive change of $163 in noncurrent assets.

The higher pension contributions were principally driven by the fact that in 2012 all contributions to the U.S. pension plans were made in cash, whereas, in 2011, a $600 noncash contribution to the U.S. pension plans was made in the form of Company common stock.

The major components of the unfavorable change in working capital were as follows: a favorable change of $219 in receivables, primarily related to fewer uncollected receivables related to sales programs and lower customer sales; a positive change of $435 in inventories, mostly due to lower levels of on-hand alumina and aluminum products and a decrease in the LME price of aluminum; a negative change of $139 in prepaid expenses and other current assets, largely attributable to the absence of a reduction in collateral posted related to mark-to-market derivative contracts and an increase in both excess carbon emission credits and prepayments for natural gas in Australia; an unfavorable change of $406 in accounts payable, trade, principally the result of timing of payments; a negative change of $150 in accrued expenses, largely attributable to a payment made to the Italian Government (see below), a decrease in deferred revenue, a payment made in the civil portion of a litigation matter (see below), and the absence of a charge related to the former St. Croix location; and a negative change of $100 in taxes, including income taxes, mainly due to less income taxes caused by lower operating results, somewhat offset by an income tax refund received for the carryback of a loss from a prior year in Canada.

The favorable change in noncurrent liabilities was primarily caused by a net increase in the environmental reserve of $194 related to five remediation matters, higher accrual for pension plans, and an increase in deferred revenue related to a contract to deliver sheet and plate to a customer beginning in 2014.

In June 2012, Alcoa received formal notification from the Italian Government requesting a net payment of $310 (€250) related to a November 2009 European Commission decision on electricity pricing for smelters. Alcoa commenced payment of the requested amount in five quarterly installments of $69 (€50) beginning in October 2012 through December 2013.

On July 6, 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law by the United States government. MAP-21, in part, provides temporary relief for employers who sponsor defined benefit pension plans related to funding contributions under the Employee Retirement Income Security Act of 1974. Specifically, MAP-21 allows for the use of a 25-year average interest rate within an upper and lower range for purposes of determining minimum funding obligations instead of an average interest rate for the two most recent years. This relief had an immediate impact on the calculation of the then remaining funding contributions in 2012, resulting in a reduction of $130 in minimum required pension funding. In 2013, this relief resulted in a reduction of $250 in minimum required pension funding.

On October 9, 2012, Alcoa World Alumina LLC, a majority-owned subsidiary of Alcoa, paid $42.5 to the plaintiff of the civil portion of a legal matter pursuant to a settlement agreement. The remaining $42.5 was paid on October 9, 2013.

Financing Activities

Cash used for financing activities was $679 in 2013 compared with cash used for financing activities of $798 in 2012 and cash provided from financing activities of $62 in 2011.

The use of cash in 2013 was primarily due to $2,317 in payments on debt, mainly related to $1,850 for the repayment of borrowings under certain revolving credit facilities (see below), a $422 early repayment of 6.00% Notes due July 2013, and $27 for previous borrowings on the loans supporting the Estreito hydroelectric power project in Brazil; $132 in dividends paid to shareholders; and net cash paid to noncontrolling interests of $97, most of which relates to Alumina Limited's share of AWAC. These items were partially offset by $1,852 in additions to debt, virtually all of which was the result of borrowings under certain revolving credit facilities (see below).

The use of cash in 2012 was principally the result of $1,489 in payments on debt, mainly related to $600 for the repayment of borrowings under certain revolving credit facilities (see below), $322 for the repayment of 6% Notes due 2012 as scheduled, $280 for the repayment of short-term loans to support the export operations of a subsidiary in Brazil, and $272 for previous borrowings on the loans supporting the São Luís refinery expansion, Juruti bauxite mine development, and Estreito hydroelectric power project in Brazil; a change of $224 in commercial paper; and $131 in dividends paid to shareholders. These items were partially offset by $972 in additions to debt, due to $600 in borrowings under certain revolving credit facilities (see below), $280 in short-term loans to support the export operations of a subsidiary in Brazil, and $92 in borrowings under loans that support the Estreito hydroelectric power project in Brazil; and net cash received from noncontrolling interests of $76, all of which relates to Alumina Limited's share of AWAC.

The source of cash in 2011 was mostly driven by $1,256 in additions to long-term debt, of which $1,248 was for the issuance of 5.40% Notes due 2021, and a change of $224 in commercial paper. These items were mostly offset by $1,194 in payments on long-term debt, principally related to $881 for the early retirement of all of the 5.375% Notes due 2013 and a portion of the 6.00% Notes due 2013, $217 for previous borrowings on the loans supporting the São Luís refinery expansion, Juruti bauxite mine development, and Estreito hydroelectric power project in Brazil, and $45 for a loan associated with the Samara, Russia facility; net cash distributed to noncontrolling interests of $88, all of which relates to Alumina Limited's share of AWAC; and $131 in dividends paid to shareholders.

As a result of an agreement between Alcoa and Alumina Limited in September 2012, Alcoa of Australia (part of the AWAC group of companies) made minimum dividend payments to Alumina Limited of $100 in 2013.

Alcoa has outstanding $575 of 5.25% convertible notes due on March 15, 2014, which are included in Long-term debt due within one year on the Company's Consolidated Balance Sheet at December 31, 2013. The notes are payable in cash at maturity unless holders exercise their option by the close of business on March 13, 2014 to convert the notes into shares of Alcoa common stock. The initial conversion rate provided under the terms of the Notes is 155.4908 shares of common stock per $1,000 (whole dollars) principal amount of notes, equivalent to a conversion price of approximately $6.43 per share of common stock.

Alcoa maintains a Five-Year Revolving Credit Agreement, dated July 25, 2011, (the "Credit Agreement") with a syndicate of lenders and issuers named therein. The Credit Agreement provides a $3,750 senior unsecured revolving credit facility (the "Credit Facility"), the proceeds of which are to be used to provide working capital or for other general corporate purposes of Alcoa. Subject to the terms and conditions of the Credit Agreement, Alcoa may from time to time request increases in lender commitments under the Credit Facility, not to exceed $500 in aggregate principal amount, and may also request the issuance of letters of credit, subject to a letter of credit sublimit of $1,000 under the Credit Facility.

The Credit Facility was scheduled to mature on July 25, 2016; however, on December 7, 2012, Alcoa received approval for a one-year extension of the maturity date by the lenders and issuers that support $3,700 of the Credit Facility (approval for the remaining $50 was received on January 8, 2013). As such, the Credit Facility now matures on July 25, 2017, unless extended or earlier terminated in accordance with the provisions of the Credit Agreement. Alcoa may make one additional one-year extension request during the remaining term of the Credit Facility, subject to the lender consent requirements set forth in the Credit Agreement. Under the provisions of the Credit Agreement, Alcoa will pay a fee of 0.25% (based on Alcoa's long-term debt ratings as of December 31, 2013) of the total commitment per annum to maintain the Credit Facility.

The Credit Facility is unsecured and amounts payable under it will rank *pari passu* with all other unsecured, unsubordinated indebtedness of Alcoa. Borrowings under the Credit Facility may be denominated in U.S. dollars or euros. Loans will bear interest at a base rate or a rate equal to LIBOR, plus, in each case, an applicable margin based on the credit ratings of Alcoa's outstanding senior unsecured long-term debt. The applicable margin on base rate loans and LIBOR loans will be 0.50% and 1.50% per annum, respectively, based on Alcoa's long-term debt ratings as of December 31, 2013. Loans may be prepaid without premium or penalty, subject to customary breakage costs.

The Credit Agreement includes the following covenants, among others, (a) a leverage ratio, (b) limitations on Alcoa's ability to incur liens securing indebtedness for borrowed money, (c) limitations on Alcoa's ability to consummate a merger, consolidation or sale of all or substantially all of its assets, and (d) limitations on Alcoa's ability to change the nature of its business. As of December 31, 2013 and 2012, Alcoa was in compliance with all such covenants.

The obligation of Alcoa to pay amounts outstanding under the Credit Facility may be accelerated upon the occurrence of an "Event of Default" as defined in the Credit Agreement. Such Events of Default include, among others, (a) Alcoa's failure to pay the principal of, or interest on, borrowings under the Credit Facility, (b) any representation or warranty of Alcoa in the Credit Agreement proving to be materially false or misleading, (c) Alcoa's breach of any of its covenants contained in the Credit Agreement, and (d) the bankruptcy or insolvency of Alcoa.

There were no amounts outstanding at December 31, 2013 and 2012 and no amounts were borrowed during 2013 or 2012 under the Credit Facility.

In 2012, Alcoa entered into two term loan agreements and six revolving credit agreements, providing a combined borrowing capacity of $990, each with a different financial institution. The two term loan agreements (totaling $350) and one of the revolving credit agreements ($150) were terminated during 2012 and 2013, respectively, upon repayment of existing borrowings. Also, in 2013, four of the revolving credit agreements were due to expire, and, therefore, were extended to September 2014 through September 2015.

In 2013, Alcoa entered into five additional credit arrangements, one term loan agreement (later replaced with a revolving credit agreement) and four revolving credit agreements, providing a combined borrowing capacity of $700, each with a different financial institution. These five additional revolving credit agreements expire between February 2014 and December 2014 (two of these agreements were originally due to expire in 2013).

The purpose of any borrowings under all arrangements in both 2013 and 2012 was to provide working capital and for other general corporate purposes, including contributions to Alcoa's pension plans. The covenants contained in all the arrangements are the same as the Credit Agreement (see above).

In 2013 and 2012, Alcoa borrowed and repaid $1,850 and $600, respectively, under the respective credit arrangements. The weighted-average interest rate and weighted-average days outstanding of the respective borrowings during 2013 and 2012 were 1.57% and 1.89%, respectively, and 213 days and 260 days, respectively.

In summary, at December 31, 2013, Alcoa has ten revolving credit facilities (excluding the Credit Facility above), providing a combined capacity of $1,190, of which $1,040 is due to expire in 2014 and $150 is due to expire in 2015.

In February 2011, Alcoa filed an automatic shelf registration statement with the Securities and Exchange Commission for an indeterminate amount of securities for future issuance. This shelf registration statement replaced Alcoa's existing shelf registration statement (filed in March 2008). As of December 31, 2013 and 2012, $1,250 in senior debt securities were issued under the current shelf registration statement.

Alcoa's cost of borrowing and ability to access the capital markets are affected not only by market conditions but also by the short- and long-term debt ratings assigned to Alcoa's debt by the major credit rating agencies.

On April 11, 2013, Fitch Ratings (Fitch) affirmed the following ratings for Alcoa: long-term debt at BBB- and short-term debt at F3. Additionally, Fitch changed the current outlook from stable to negative.

On April 26, 2013, Standard and Poor's Ratings Services (S&P) affirmed the following ratings for Alcoa: long-term debt at BBB- and short-term debt at A-3. Additionally, S&P changed the current outlook from stable to negative.

On May 29, 2013, Moody's Investors Service (Moody's) downgraded the following ratings for Alcoa: long-term debt from Baa3 to Ba1 and short-term debt from Prime-3 to Speculative Grade Liquidity Rating-1. Additionally, Moody's changed the current outlook from rating under review to stable.

The following is a summary of Alcoa's liquidity position as it relates to the ratings downgrade by Moody's.

Cash and letters of credit. As a result of the ratings downgrade by Moody's, certain power companies and counterparties to derivative contracts required Alcoa to post letters of credit and cash collateral, respectively, in the amount of $167 and $18, respectively, in June 2013. During the remainder of 2013, the amount of letters of credit posted increased by $2 and the amount of cash collateral posted declined to $6. Other vendors and third-parties may require Alcoa to post additional letters of credit and/or cash collateral in future periods.

Outstanding debt. Alcoa's outstanding debt as of December 31, 2013 totaled $8,319. There were no ramifications to Alcoa as a result of the ratings downgrade and interest payments and fees related to the outstanding debt remain unchanged.

Revolving credit facilities. Alcoa has a $3,750 revolving credit facility that expires in July 2017 and ten other revolving credit facilities totaling $1,190. This $4,940 of borrowing capacity was also unaffected by the ratings downgrade, including the margins that would be applicable to any borrowings, and remains available for use by Alcoa at its discretion.

Commercial paper. During the seven months since the downgrade, Alcoa was able to issue the desired level of commercial paper to support operations without difficulty. At the time of the downgrade, the spreads on commercial paper increased slightly, however, by one to three basis points, which did not result in a significant change to Alcoa's total interest costs. While Alcoa expects it can continue to issue commercial paper, there is no assurance about the amount or cost at which it could issue commercial paper.

Investing Activities

Cash used for investing activities was $1,290 in 2013 compared with $759 in 2012 and $1,852 in 2011.

The use of cash in 2013 was primarily due to $1,193 in capital expenditures (includes costs related to environmental control in new and expanded facilities of $143), 34% of which related to growth projects, including the automotive expansion at the Davenport, IA fabrication plant, the aluminum-lithium capacity expansion at the Lafayette, IN plant, and the automotive sheet expansion at the Alcoa, TN plant; and $293 in additions to investments, including equity contributions of $171 related to the aluminum complex joint venture in Saudi Arabia and the purchase of $54 in equities and fixed income securities held by Alcoa's captive insurance company. These items were slightly offset by a net change in restricted cash of $170, mostly related to the release of funds to be used for capital expenditures of the automotive expansion at the Davenport, IA fabrication plant (see Noncash Financing and Investing Activities below).

The use of cash in 2012 was mainly due to $1,261 in capital expenditures (includes costs related to environmental control in new and expanded facilities of $153), 33% of which related to growth projects, including the automotive expansion at the Davenport, IA fabrication plant and the Estreito hydroelectric power project; and $300 in additions to investments, principally for the equity contributions of $253 related to the aluminum complex joint venture in Saudi Arabia. These items were somewhat offset by $615 in proceeds from the sale of assets, mostly the result of $597 received for the sale of U.S. hydroelectric power assets (see Primary Metals in Segment Information above), and a net change in restricted cash of $87, principally related to the release of funds to be used for capital expenditures of the automotive expansion at the Davenport, IA fabrication plant (see Noncash Financing and Investing Activities below).

The use of cash in 2011 was principally due to $1,287 in capital expenditures (includes costs related to environmental control in new and expanded facilities of $148), 28% of which related to growth projects, including the Estreito hydroelectric power project and Juruti bauxite mine development; $374 in additions to investments, mostly for the equity contributions of $249 related to the aluminum complex joint venture in Saudi Arabia and purchase of $41 in available-for-sale securities held by Alcoa's captive insurance company; and $239 (net of cash acquired) for the acquisition of an aerospace fastener business. These items were slightly offset by $54 in sales of investments, primarily related to available-for-sale securities held by Alcoa's captive insurance company, and $38 in proceeds from the sale of assets, mainly attributable to the sale of land in Australia.

Noncash Financing and Investing Activities

In August 2012, Alcoa received a loan of $250 for the purpose of financing all or part of the cost of acquiring, constructing, reconstructing, and renovating certain facilities at Alcoa's rolling mill plant in Davenport, IA. Because this loan can only be used for this purpose, the net proceeds of $248 were classified as restricted cash. Since restricted cash is not part of cash and cash equivalents, this transaction was not reflected in the Statement of Consolidated Cash Flows as it represents a noncash activity. As funds are expended for the project, the release of the cash will be reflected as both an inflow on the Net change in restricted cash line and an outflow on the Capital expenditures line in the Investing Activities section of the Statement of Consolidated Cash Flows. At December 31, 2013 and 2012, Alcoa had $13 and $171, respectively, of restricted cash remaining related to this transaction.

Contractual Obligations and Off-Balance Sheet Arrangements

Contractual Obligations. Alcoa is required to make future payments under various contracts, including long-term purchase obligations, financing arrangements, and lease agreements. Alcoa also has commitments to fund its pension plans, provide payments for other postretirement benefit plans, and fund capital projects. As of December 31, 2013, a summary of Alcoa's outstanding contractual obligations is as follows (these contractual obligations are grouped in the same manner as they are classified in the Statement of Consolidated Cash Flows in order to provide a better understanding of the nature of the obligations and to provide a basis for comparison to historical information):

	Total	2014	2015-2016	2017-2018	Thereafter
Operating activities:					
Energy-related purchase obligations	$15,511	$1,490	$ 2,563	$ 2,826	$ 8,632
Raw material purchase obligations	6,389	1,839	1,017	726	2,807
Other purchase obligations	946	149	152	137	508
Operating leases	925	198	300	183	244
Interest related to total debt	4,159	461	873	807	2,018
Estimated minimum required pension funding	2,570	625	1,175	770	-
Other postretirement benefit payments	2,485	260	520	510	1,195
Layoff and other restructuring payments	138	107	29	2	-
Deferred revenue arrangements	164	13	36	36	79
Uncertain tax positions	74	-	-	-	74
Financing activities:					
Total debt	8,300	715	60	1,824	5,701
Dividends to shareholders	-	-	-	-	-
Investing activities:					
Capital projects	1,094	612	412	38	32
Equity contributions	268	151	117	-	-
Payments related to acquisitions	-	-	-	-	-
Totals	$43,023	$6,620	$ 7,254	$ 7,859	$ 21,290

Obligations for Operating Activities

Energy-related purchase obligations consist primarily of electricity and natural gas contracts with expiration dates ranging from 1 year to 34 years. Raw material obligations consist mostly of bauxite (relates to Alcoa's bauxite mine interests in Guinea and Brazil), caustic soda, alumina, aluminum fluoride, calcined petroleum coke, cathode blocks, and various metals with expiration dates ranging from less than 1 year to 19 years. Other purchase obligations consist principally of freight for bauxite and alumina with expiration dates ranging from 1 to 18 years. Many of these purchase obligations contain variable pricing components, and, as a result, actual cash payments may differ from the estimates provided in the preceding table. Operating leases represent multi-year obligations for certain land and buildings, alumina refinery process control technology, plant equipment, vehicles, and computer equipment.

Interest related to total debt is based on interest rates in effect as of December 31, 2013 and is calculated on debt with maturities that extend to 2042. The effect of outstanding interest rate swaps, which are accounted for as fair value hedges, was included in interest related to total debt. As of December 31, 2013, these hedges effectively convert the interest rate from fixed to floating on $200 of debt through 2018. As the contractual interest rates for certain debt and interest rate swaps are variable, actual cash payments may differ from the estimates provided in the preceding table.

Estimated minimum required pension funding and postretirement benefit payments are based on actuarial estimates using current assumptions for discount rates, long-term rate of return on plan assets, rate of compensation increases, and health care cost trend rates, among others. The minimum required contributions for pension funding are estimated to be $625 for 2014, $625 for 2015, $550 for 2016, $440 for 2017, and $330 for 2018. These expected pension contributions reflect the impacts of the Pension Protection Act of 2006, the Worker, Retiree, and Employer Recovery Act of 2008, and the Moving Ahead for Progress in the 21st Century Act. The expected decline in pension contributions assumes that all actuarial assumptions are realized and remain the same in the future. Other postretirement benefit payments are expected to approximate $255 to $260 annually for years 2014 through 2018 and $240 annually for years 2019 through 2023. Such payments will be slightly offset by subsidy receipts related to Medicare Part D, which are estimated to be approximately $25 to $30 annually for years 2014 through 2023. Alcoa has determined that it is not practicable to present pension funding and other postretirement benefit payments beyond 2018 and 2023, respectively.

Layoff and other restructuring payments expected to be paid within one year primarily relate to severance costs. Amounts scheduled to be paid beyond one year are related to lease termination costs, ongoing site remediation work, and special termination benefit payments.

Deferred revenue arrangements require Alcoa to deliver alumina and sheet and plate to certain customers over the specified contract period (through 2027 for an alumina contract and through 2020 for a sheet and plate contract). While these obligations are not expected to result in cash payments, they represent contractual obligations for which the Company would be obligated if the specified product deliveries could not be made.

Uncertain tax positions taken or expected to be taken on an income tax return may result in additional payments to tax authorities. The amount in the preceding table includes interest and penalties accrued related to such positions as of December 31, 2013. The total amount of uncertain tax positions is included in the "Thereafter" column as the Company is not able to reasonably estimate the timing of potential future payments. If a tax authority agrees with the tax position taken or expected to be taken or the applicable statute of limitations expires, then additional payments will not be necessary.

Obligations for Financing Activities

Total debt amounts in the preceding table represent the principal amounts of all outstanding debt, including short-term borrowings and long-term debt. Maturities for long-term debt extend to 2042.

Alcoa has historically paid quarterly dividends on its preferred and common stock. Including dividends on preferred stock, Alcoa paid $132 in dividends to shareholders during 2013. Because all dividends are subject to approval by Alcoa's Board of Directors, amounts are not included in the preceding table unless such authorization has occurred. As of December 31, 2013, there were 1,071,011,162 and 546,024 shares of outstanding common stock and preferred stock, respectively. The annual preferred stock dividend is at the rate of $3.75 per share and the annual common stock dividend is $0.12 per share.

Obligations for Investing Activities

Capital projects in the preceding table only include amounts approved by management as of December 31, 2013. Funding levels may vary in future years based on anticipated construction schedules of the projects. It is expected that significant expansion projects will be funded through various sources, including cash provided from operations. Total capital expenditures are anticipated to be approximately $1,250 in 2014.

Equity contributions represent Alcoa's committed investment related to a joint venture in Saudi Arabia. Alcoa is a participant in a joint venture to develop a new aluminum complex in Saudi Arabia, comprised of a bauxite mine, alumina refinery, aluminum smelter, and rolling mill, which will require the Company to contribute approximately $1,100. As of December 31, 2013, Alcoa has made equity contributions of $832. The timing of the amounts included in the preceding table may vary based on changes in anticipated construction schedules of the project.

Payments related to acquisitions are based on provisions in certain acquisition agreements that state additional funds are due to the seller from Alcoa if the businesses acquired achieve stated financial and operational thresholds. Amounts are only presented in the preceding table if it is has been determined that payment is more likely than not to occur. In connection with the 2005 acquisition of two fabricating facilities in Russia, Alcoa could be required to make contingent payments of approximately $50 through 2015, but are not included in the preceding table as they have not met such standard.

Off-Balance Sheet Arrangements. At December 31, 2013, Alcoa has maximum potential future payments for a guarantee issued on behalf of a third party of $542. This guarantee expires in 2019 and relates to project financing for the aluminum complex in Saudi Arabia. In February 2013, a guarantee related to project financing for a hydroelectric power project in Brazil was terminated as the outstanding debt of the consortium was repaid in full. Alcoa also has outstanding bank guarantees related to tax matters, outstanding debt, workers compensation, environmental obligations, energy contracts, and customs duties, among others. The total amount committed under these guarantees, which expire at various dates between 2014 and 2022 was $370 at December 31, 2013.

Alcoa has outstanding letters of credit primarily related to workers' compensation, energy contracts, and leasing obligations. The total amount committed under these letters of credit, which automatically renew or expire at various dates, mostly in 2014, was $333 at December 31, 2013. Alcoa also has outstanding surety bonds primarily related to tax matters, contract performance, workers compensation, environmental-related matters, and customs duties. The total amount committed under these bonds, which automatically renew or expire at various dates, mostly in 2014, was $170 at December 31, 2013.

In March 2012, Alcoa entered into an arrangement with a financial institution to sell certain customer receivables without recourse on a revolving basis. The sale of such receivables is completed through the use of a bankruptcy remote special purpose entity, which is a consolidated subsidiary of Alcoa. This arrangement originally provided for minimum funding of $50 up to a maximum of $250 for receivables sold. In May 2013, the arrangement was amended to increase the maximum funding to $500 and include two additional financial institutions. On March 30, 2012, Alcoa initially sold $304 of customer receivables in exchange for $50 in cash and $254 of deferred purchase price under this arrangement. Alcoa received additional net cash funding of $5 ($388 in draws and $383 in repayments) and $155 ($160 in draws and $5 in repayments) in 2013 and 2012, respectively. As of December 31, 2013 and 2012, the deferred purchase price receivable was $248 and $18, respectively, which was included in Other receivables on the Consolidated Balance Sheet. The deferred purchase price receivable is reduced as collections of the underlying receivables occur; however, as this is a revolving program, the sale of new receivables will result in an increase in the deferred purchase price receivable. The net change in the deferred purchase price receivable was reflected in the (Increase) decrease in receivables line item on the Statement of Consolidated Cash Flows. This activity is reflected as an operating cash flow because the related customer receivables are the result of an operating activity with an insignificant, short-term interest rate risk. In 2013 and 2012, the gross cash outflows and inflows associated with the deferred purchase price receivable were $6,985 and $6,755, respectively, and $3,339 and $3,321, respectively. The gross amount of receivables sold and total cash collected under this program since its inception was $10,324 and $9,866, respectively. Alcoa services the customer receivables for the financial institutions at market rates; therefore, no servicing asset or liability was recorded.

Alcoa had three other arrangements, each with a different financial institution, to sell certain customer receivables outright without recourse on a continuous basis. On March 22, 2013, Alcoa terminated these arrangements. All receivables sold under these arrangements were collected as of March 31, 2013. Alcoa serviced the customer receivables for the financial institutions at market rates; therefore, no servicing asset or liability was recorded.

Critical Accounting Policies and Estimates

The preparation of the Consolidated Financial Statements in accordance with accounting principles generally accepted in the United States of America requires management to make certain judgments, estimates, and assumptions regarding uncertainties that affect the amounts reported in the Consolidated Financial Statements and disclosed in the accompanying Notes. Areas that require significant judgments, estimates, and assumptions include accounting for derivatives and hedging activities; environmental and litigation matters; asset retirement obligations; the testing of goodwill, equity investments, and properties, plants, and equipment for impairment; estimating fair value of businesses to be divested; pension plans and other postretirement benefits obligations; stock-based compensation; and income taxes.

Management uses historical experience and all available information to make these judgments, estimates, and assumptions, and actual results may differ from those used to prepare the Company's Consolidated Financial Statements at any given time. Despite these inherent limitations, management believes that Management's Discussion and Analysis of Financial Condition and Results of Operations and the Consolidated Financial Statements and accompanying Notes provide a meaningful and fair perspective of the Company.

A summary of the Company's significant accounting policies is included in Note A to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K. Management believes that the application of these policies on a consistent basis enables the Company to provide the users of the Consolidated Financial Statements with useful and reliable information about the Company's operating results and financial condition.

Derivatives and Hedging. Derivatives are held for purposes other than trading and are part of a formally documented risk management program. For derivatives designated as fair value hedges, Alcoa measures hedge effectiveness by formally assessing, at least quarterly, the historical high correlation of changes in the fair value of the hedged item and the derivative hedging instrument. For derivatives designated as cash flow hedges, Alcoa measures hedge effectiveness by formally assessing, at least quarterly, the probable high correlation of the expected future cash flows of the hedged item and the derivative hedging instrument. The ineffective portions of both types of hedges are recorded in sales or other income or expense in the current period. If the hedging relationship ceases to be highly effective or it becomes probable that an expected transaction will no longer occur, future gains or losses on the derivative instrument are recorded in other income or expense.

Alcoa accounts for interest rate swaps related to its existing long-term debt and hedges of firm customer commitments for aluminum as fair value hedges. As a result, the fair values of the derivatives and changes in the fair values of the underlying hedged items are reported in other current and noncurrent assets and liabilities in the Consolidated Balance Sheet. Changes in the fair values of these derivatives and underlying hedged items generally offset and are recorded each period in sales or interest expense, consistent with the underlying hedged item.

Alcoa accounts for hedges of foreign currency exposures and certain forecasted transactions as cash flow hedges. The fair values of the derivatives are recorded in other current and noncurrent assets and liabilities in the Consolidated Balance Sheet. The effective portions of the changes in the fair values of these derivatives are recorded in other comprehensive income and are reclassified to sales, cost of goods sold, or other income or expense in the period in which earnings are impacted by the hedged items or in the period that the transaction no longer qualifies as a cash flow hedge. These contracts cover the same periods as known or expected exposures, generally not exceeding five years.

If no hedging relationship is designated, the derivative is marked to market through earnings.

Cash flows from derivatives are recognized in the Statement of Consolidated Cash Flows in a manner consistent with the underlying transactions.

Environmental Matters. Expenditures for current operations are expensed or capitalized, as appropriate. Expenditures relating to existing conditions caused by past operations, which will not contribute to future revenues, are expensed. Liabilities are recorded when remediation costs are probable and can be reasonably estimated. The liability may include costs such as site investigations, consultant fees, feasibility studies, outside contractors, and monitoring expenses. Estimates are generally not discounted or reduced by potential claims for recovery. Claims for recovery are recognized as agreements are reached with third parties. The estimates also include costs related to other potentially responsible parties to the extent that Alcoa has reason to believe such parties will not fully pay their proportionate share. The liability is continuously reviewed and adjusted to reflect current remediation progress, prospective estimates of required activity, and other factors that may be relevant, including changes in technology or regulations.

Litigation Matters. For asserted claims and assessments, liabilities are recorded when an unfavorable outcome of a matter is deemed to be probable and the loss is reasonably estimable. Management determines the likelihood of an unfavorable outcome based on many factors such as the nature of the matter, available defenses and case strategy, progress of the matter, views and opinions of legal counsel and other advisors, applicability and success of appeals processes, and the outcome of similar historical matters, among others. Once an unfavorable outcome is deemed probable, management weighs the probability of estimated losses, and the most reasonable loss estimate is recorded. If an unfavorable outcome of a matter is deemed to be reasonably possible, then the matter is disclosed and no liability is recorded. With respect to unasserted claims or assessments, management must first determine that the probability that an assertion will be made is likely, then, a determination as to the likelihood of an unfavorable outcome and the ability to reasonably estimate the potential loss is made. Legal matters are reviewed on a continuous basis to determine if there has been a change in management's judgment regarding the likelihood of an unfavorable outcome or the estimate of a potential loss.

Asset Retirement Obligations. Alcoa recognizes asset retirement obligations (AROs) related to legal obligations associated with the normal operation of Alcoa's bauxite mining, alumina refining, and aluminum smelting facilities. These AROs consist primarily of costs associated with spent pot lining disposal, closure of bauxite residue areas, mine reclamation, and landfill closure. Alcoa also recognizes AROs for any significant lease restoration obligation, if required by a lease agreement, and for the disposal of regulated waste materials related to the demolition of certain power facilities. The fair values of these AROs are recorded on a discounted basis, at the time the obligation is incurred, and accreted over time for the change in present value. Additionally, Alcoa capitalizes asset retirement costs by increasing the carrying amount of the related long-lived assets and depreciating these assets over their remaining useful life.

Certain conditional asset retirement obligations (CAROs) related to alumina refineries, aluminum smelters, and fabrication facilities have not been recorded in the Consolidated Financial Statements due to uncertainties surrounding the ultimate settlement date. A CARO is a legal obligation to perform an asset retirement activity in which the timing and/or method of settlement are conditional on a future event that may or may not be within Alcoa's control. Such uncertainties exist as a result of the perpetual nature of the structures, maintenance and upgrade programs, and other factors. At the date a reasonable estimate of the ultimate settlement date can be made, Alcoa would record an ARO for the removal, treatment, transportation, storage and/or disposal of various regulated assets and hazardous materials such as asbestos, underground and aboveground storage tanks, polychlorinated biphenyls, various process residuals, solid wastes, electronic equipment waste, and various other materials. Such amounts may be material to the Consolidated Financial Statements in the period in which they are recorded. If Alcoa was required to demolish all such structures immediately, the estimated CARO as of December 31, 2013 ranges from less than $1 to $52 per structure (131 structures) in today's dollars.

Goodwill. Goodwill is not amortized; instead, it is reviewed for impairment annually (in the fourth quarter) or more frequently if indicators of impairment exist or if a decision is made to sell or exit a business. A significant amount of judgment is involved in determining if an indicator of impairment has occurred. Such indicators may include deterioration in general economic conditions, negative developments in equity and credit markets, adverse changes in the markets in which an entity operates, increases in input costs that have a negative effect on earnings and cash flows, or a trend of negative or declining cash flows over multiple periods, among others. The fair value that could be realized in an actual transaction may differ from that used to evaluate the impairment of goodwill.

Goodwill is allocated among and evaluated for impairment at the reporting unit level, which is defined as an operating segment or one level below an operating segment. Alcoa has nine reporting units, of which five are included in the Engineered Products and Solutions segment. The remaining four reporting units are the Alumina segment, the Primary Metals segment, the Global Rolled Products segment, and the soft alloy extrusions business in Brazil, which is included in Corporate. More than 80% of Alcoa's total goodwill is allocated to two reporting units as follows: Alcoa Fastening Systems (AFS) ($1,166) and Alcoa Power and Propulsion (APP) ($1,617) businesses, both of which are included in the Engineered Products and Solutions segment. These amounts include an allocation of Corporate's goodwill.

In reviewing goodwill for impairment, an entity has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not (greater than 50%) that the estimated fair value of a reporting unit is less than its carrying amount. If an entity elects to perform a qualitative assessment and determines that an impairment is more likely than not, the entity is then required to perform the existing two-step quantitative impairment test (described below), otherwise no further analysis is required. An entity also may elect not to perform the qualitative assessment and, instead, proceed directly to the two-step quantitative impairment test. The ultimate outcome of the goodwill impairment review for a reporting unit should be the same whether an entity chooses to perform the qualitative assessment or proceeds directly to the two-step quantitative impairment test.

Alcoa's policy for its annual review of goodwill is to perform the qualitative assessment for all reporting units not subjected directly to the two-step quantitative impairment test. Management will proceed directly to the two-step quantitative impairment test for a minimum of three reporting units (based on facts and circumstances) during each annual review of goodwill. This policy will result in each of the nine reporting units being subjected to the two-step quantitative impairment test at least once during every three-year period.

Under the qualitative assessment, various events and circumstances (or factors) that would affect the estimated fair value of a reporting unit are identified (similar to impairment indicators above). These factors are then classified by the type of impact they would have on the estimated fair value using positive, neutral, and adverse categories based on current business conditions. Additionally, an assessment of the level of impact that a particular factor would have on the estimated fair value is determined using high, medium, and low weighting. Furthermore, management considers the results of the most recent two-step quantitative impairment test completed for a reporting unit and compares the weighted average cost of capital (WACC) between the current and prior years for each reporting unit.

During the 2013 annual review of goodwill, management performed the qualitative assessment for two reporting units, the Global Rolled Products segment and one of the five reporting units in the Engineered Products and Solutions segment. Management concluded that it was not more likely than not that the estimated fair values of the two reporting units were less than their carrying values. As such, no further analysis was required.

Under the two-step quantitative impairment test, the evaluation of impairment involves comparing the current fair value of each reporting unit to its carrying value, including goodwill. Alcoa uses a discounted cash flow (DCF) model to estimate the current fair value of its reporting units when testing for impairment, as management believes forecasted cash flows are the best indicator of such fair value. A number of significant assumptions and estimates are involved in the application of the DCF model to forecast operating cash flows, including markets and market share, sales volumes and prices, production costs, tax rates, capital spending, discount rate, and working capital changes. Most of these assumptions vary significantly among the reporting units. Cash flow forecasts are generally based on approved business unit operating plans for the early years and historical relationships in later years. The betas used in calculating the individual reporting units' WACC rate are estimated for each business with the assistance of valuation experts.

In the event the estimated fair value of a reporting unit per the DCF model is less than the carrying value, additional analysis would be required. The additional analysis would compare the carrying amount of the reporting unit's goodwill with the implied fair value of that goodwill, which may involve the use of valuation experts. The implied fair value of goodwill is the excess of the fair value of the reporting unit over the fair value amounts assigned to all of the assets and liabilities of that unit as if the reporting unit was acquired in a business combination and the fair value of the reporting unit represented the purchase price. If the carrying value of goodwill exceeds its implied fair value, an impairment loss equal to such excess would be recognized, which could significantly and adversely impact reported results of operations and shareholders' equity.

During the 2013 annual review of goodwill, management proceeded directly to the two-step quantitative impairment test for seven reporting units as follows: the Primary Metals segment, the Alumina segment, the soft alloy extrusions business in Brazil, and four of the five reporting units in the Engineered Products and Solutions segment, including

AFS and APP. The estimated fair values of the four Engineered Products and Solutions businesses, and the soft alloy extrusions business were substantially in excess of their respective carrying value, resulting in no impairment.

During the 2012 annual testing of goodwill, the estimated fair value of the Alumina segment exceeded the carrying value by 7%. In connection with the 2013 testing, the estimated fair value of the Alumina segment exceeded the carrying value by 18%. This increase is attributable to several factors: improved pricing due to the continued implementation of the Alumina Price Index; operating and productivity improvements in the business; and a stronger U.S. dollar, all of which increased management's estimates of operating results and cash flows used in assessing Alumina's goodwill for impairment. These improvements were partially offset by an increase in the discount rate used in the DCF models. Unfavorable movements in one or more of these trends in the future could have a negative impact on the estimated fair value of the Alumina segment.

For Primary Metals, the estimated fair value as determined by the DCF model was lower than the associated carrying value. As a result, management performed the second step of the impairment analysis in order to determine the implied fair value of Primary Metals' goodwill. The results of the second-step analysis showed that the implied fair value of goodwill was zero. Therefore, in the fourth quarter of 2013, Alcoa recorded a goodwill impairment of $1,731 ($1,719 after noncontrolling interest). As a result of the goodwill impairment, there is no goodwill remaining for the Primary Metals reporting unit.

The impairment of Primary Metals' goodwill results from several causes: the prolonged economic downturn; a disconnect between industry fundamentals and pricing that has resulted in lower metal prices; and the increased cost of alumina, a key raw material, resulting from expansion of the Alumina Price Index throughout the industry. All of these factors, exacerbated by increases in discount rates, continue to place significant downward pressure on metal prices and operating margins, and the resulting estimated fair value, of the Primary Metals business. As a result, management decreased the near-term and long-term estimates of the operating results and cash flows utilized in assessing Primary Metals' goodwill for impairment. The valuation of goodwill for the second step of the goodwill impairment analysis is considered a level 3 fair value measurement, which means that the valuation of the assets and liabilities reflect management's own judgments regarding the assumptions market participants would use in determining the fair value of the assets and liabilities.

Goodwill impairment tests in prior years indicated that goodwill was not impaired for any of the Company's reporting units and there were no triggering events since that time that necessitated an impairment test.

Equity Investments. Alcoa invests in a number of privately-held companies, primarily through joint ventures and consortia, which are accounted for on the equity method. The equity method is applied in situations where Alcoa has the ability to exercise significant influence, but not control, over the investee. Management reviews equity investments for impairment whenever certain indicators are present suggesting that the carrying value of an investment is not recoverable. This analysis requires a significant amount of judgment from management to identify events or circumstances indicating that an equity investment is impaired. The following items are examples of impairment indicators: significant, sustained declines in an investee's revenue, earnings, and cash flow trends; adverse market conditions of the investee's industry or geographic area; the investee's ability to continue operations measured by several items, including liquidity; and other factors. Once an impairment indicator is identified, management uses considerable judgment to determine if the impairment is other than temporary, in which case the equity investment is written down to its estimated fair value. An impairment that is other than temporary could significantly and adversely impact reported results of operations.

Properties, Plants, and Equipment. Properties, plants, and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets (asset group) may not be recoverable. Recoverability of assets is determined by comparing the estimated undiscounted net cash flows of the operations related to the assets (asset group) to their carrying amount. An impairment loss would be recognized when the carrying amount of the assets (asset group) exceeds the estimated undiscounted net cash flows. The amount of the impairment loss to be recorded is calculated as the excess of the carrying value of the assets (asset group) over their fair value, with fair value determined using the best information available, which generally is a DCF model. The determination of what constitutes an asset group, the associated estimated undiscounted net cash flows, and the estimated useful lives of assets also require significant judgments.

Discontinued Operations and Assets Held For Sale. The fair values of all businesses to be divested are estimated using accepted valuation techniques such as a DCF model, valuations performed by third parties, earnings multiples, or indicative bids, when available. A number of significant estimates and assumptions are involved in the application of these techniques, including the forecasting of markets and market share, sales volumes and prices, costs and expenses, and multiple other factors. Management considers historical experience and all available information at the time the estimates are made; however, the fair value that is ultimately realized upon the divestiture of a business may differ from the estimated fair value reflected in the Consolidated Financial Statements.

Pension and Other Postretirement Benefits. Liabilities and expenses for pension and other postretirement benefits are determined using actuarial methodologies and incorporate significant assumptions, including the interest rate used to discount the future estimated liability, the expected long-term rate of return on plan assets, and several assumptions relating to the employee workforce (salary increases, health care cost trend rates, retirement age, and mortality).

The interest rate used to discount future estimated liabilities is determined using a Company-specific yield curve model (above-median) developed with the assistance of an external actuary. The cash flows of the plans' projected benefit obligations are discounted using a single equivalent rate derived from yields on high quality corporate bonds, which represent a broad diversification of issuers in various sectors, including finance and banking, consumer products, transportation, insurance, and pharmaceutical, among others. The yield curve model parallels the plans' projected cash flows, which have an average duration of 10 years, and the underlying cash flows of the bonds included in the model exceed the cash flows needed to satisfy the Company's plans' obligations multiple times. In 2013, 2012, and 2011, the discount rate used to determine benefit obligations for U.S. pension and other postretirement benefit plans was 4.80%, 4.15%, and 4.90%, respectively. The impact on the liabilities of a change in the discount rate of 1/4 of 1% would be approximately $460 and either a charge or credit of $21 to after-tax earnings in the following year.

The expected long-term rate of return on plan assets is generally applied to a five-year market-related value of plan assets (a four-year average or the fair value at the plan measurement date is used for certain non-U.S. plans). The process used by management to develop this assumption is one that relies on a combination of historical asset return information and forward-looking returns by asset class. As it relates to historical asset return information, management focuses on the annual, 10-year moving, and 20-year moving averages when developing this assumption. Management also incorporates expected future returns on current and planned asset allocations using information from various external investment managers and consultants, as well as management's own judgment.

For 2013, 2012, and 2011, management used 8.50% as its expected long-term rate of return, which was based on the prevailing and planned strategic asset allocations, as well as estimates of future returns by asset class. This rate falls within the respective range of the 20-year moving average of actual performance and the expected future return developed by asset class. For 2014, management determined that 8.00% will be the expected long-term rate of return. The decrease of 50 basis points in the expected long-term rate of return is due to a combination of a decrease in the 20-year moving average of actual performance and lower future expected market returns.

A change in the assumption for the expected long-term rate of return on plan assets of 1/4 of 1% would impact after-tax earnings by approximately $18 for 2014.

In 2013, a net benefit of $876 ($531 after-tax) was recorded in other comprehensive loss, primarily due to a 65 basis point increase in the discount rate and the amortization of actuarial losses. In 2012, a net charge of $769 ($529 after-tax) was recorded in other comprehensive loss, primarily due to a 75 basis point decrease in the discount rate, which was slightly offset by the favorable performance of the plan assets and the amortization of actuarial losses. In 2011, a net charge of $991 ($593 after-tax) was recorded in other comprehensive loss, primarily due to an 85 basis point decrease in the discount rate, which was slightly offset by the favorable performance of the plan assets and the amortization of actuarial losses.

Stock-based Compensation. Alcoa recognizes compensation expense for employee equity grants using the non-substantive vesting period approach, in which the expense (net of estimated forfeitures) is recognized ratably over the requisite service period based on the grant date fair value. The fair value of new stock options is estimated on the date of grant using a lattice-pricing model. Determining the fair value of stock options at the grant date requires judgment, including estimates for the average risk-free interest rate, dividend yield, volatility, annual forfeiture rate, and exercise behavior. These assumptions may differ significantly between grant dates because of changes in the actual results of these inputs that occur over time.

Equity grants are issued in January each year. As part of Alcoa's stock-based compensation plan design, individuals who are retirement-eligible have a six-month requisite service period in the year of grant. As a result, a larger portion of expense will be recognized in the first half of each year for these retirement-eligible employees. Compensation expense recorded in 2013, 2012, and 2011 was $71 ($48 after-tax), $67 ($46 after-tax), and $83 ($56 after-tax), respectively. Of this amount, $14, $13, and $18 in 2013, 2012, and 2011, respectively, pertains to the acceleration of expense related to retirement-eligible employees.

Most plan participants can choose whether to receive their award in the form of stock options, stock awards, or a combination of both. This choice is made before the grant is issued and is irrevocable.

Income Taxes. The provision for income taxes is determined using the asset and liability approach of accounting for income taxes. Under this approach, the provision for income taxes represents income taxes paid or payable (or received or receivable) for the current year plus the change in deferred taxes during the year. Deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid, and result from differences between the financial and tax bases of Alcoa's assets and liabilities and are adjusted for changes in tax rates and tax laws when enacted.

Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not (greater than 50%) that a tax benefit will not be realized. In evaluating the need for a valuation allowance, management considers all potential sources of taxable income, including income available in carryback periods, future reversals of taxable temporary differences, projections of taxable income, and income from tax planning strategies, as well as all available positive and negative evidence. Positive evidence includes factors such as a history of profitable operations, projections of future profitability within the carryforward period, including from tax planning strategies, and Alcoa's experience with similar operations. Existing favorable contracts and the ability to sell products into established markets are additional positive evidence. Negative evidence includes items such as cumulative losses, projections of future losses, or carryforward periods that are not long enough to allow for the utilization of a deferred tax asset based on existing projections of income. Deferred tax assets for which no valuation allowance is recorded may not be realized upon changes in facts and circumstances, resulting in a future charge to establish a valuation allowance. Existing valuation allowances are re-examined under the same standards of positive and negative evidence. If it is determined that it is more likely than not that a deferred tax asset will be realized, the appropriate amount of the valuation allowance, if any, is released. Deferred tax assets and liabilities are also re-measured to reflect changes in underlying tax rates due to law changes and the granting and lapse of tax holidays.

In 2013, Alcoa recognized a $372 discrete income tax charge for valuation allowances on certain deferred tax assets in Spain and the U.S. Of this amount, a $237 valuation allowance was established on the full value of the deferred tax assets related to a Spanish consolidated tax group. As of December 31, 2013, these deferred tax assets have an expiration period ranging from 2014 to 2030. After weighing all available positive and negative evidence, as described above, management determined that it was no longer more likely than not that Alcoa will realize the tax benefit of these deferred tax assets. This was mainly driven by a decline in the outlook of the Primary Metals business (2013 realized prices were the lowest since 2009) combined with prior year cumulative losses of the Spanish consolidated tax group. The need for this valuation allowance will be assessed on a continuous basis in future periods and, as a result, a portion or all of the allowance may be reversed based on changes in facts and circumstances.

The remaining $135 relates to a valuation allowance established on a portion of available foreign tax credits in the U.S. These credits can be carried forward for 10 years, and, as of December 31, 2013, have an expiration period ranging from 2016 to 2023. After weighing all available positive and negative evidence, as described above, management determined that it was no longer more likely than not that Alcoa will realize the full tax benefit of these foreign tax credits. This was primarily due to lower foreign sourced taxable income after consideration of tax planning strategies and after the inclusion of earnings from foreign subsidiaries projected to be distributable as taxable foreign dividends. Similar to the outlook related to Spain above, lower levels of both distributable future foreign earnings and projected foreign sourced taxable income are principally attributable to a decline in the outlook of the Primary Metals business. The need for this valuation allowance will be assessed on a continuous basis in future periods and, as a result, an increase or decrease to this allowance may result based on changes in facts and circumstances.

Tax benefits related to uncertain tax positions taken or expected to be taken on a tax return are recorded when such benefits meet a more likely than not threshold. Otherwise, these tax benefits are recorded when a tax position has been effectively settled, which means that the statute of limitation has expired or the appropriate taxing authority has completed their examination even though the statute of limitations remains open. Interest and penalties related to uncertain tax positions are recognized as part of the provision for income taxes and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law until such time that the related tax benefits are recognized.

Related Party Transactions

Alcoa buys products from and sells products to various related companies, consisting of entities in which Alcoa retains a 50% or less equity interest, at negotiated arms-length prices between the two parties. These transactions were not material to the financial position or results of operations of Alcoa for all periods presented.

Recently Adopted Accounting Guidance

See the Recently Adopted Accounting Guidance section of Note A to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

Recently Issued Accounting Guidance

See the Recently Issued Accounting Guidance section of Note A to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

See the Derivatives section of Note X to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

Item 8. Financial Statements and Supplementary Data.

Management's Reports to Alcoa Shareholders

Management's Report on Financial Statements and Practices

The accompanying Consolidated Financial Statements of Alcoa Inc. and its subsidiaries (the "Company") were prepared by management, which is responsible for their integrity and objectivity. The statements were prepared in accordance with accounting principles generally accepted in the United States of America and include amounts that are based on management's best judgments and estimates. The other financial information included in the annual report is consistent with that in the financial statements.

Management also recognizes its responsibility for conducting the Company's affairs according to the highest standards of personal and corporate conduct. This responsibility is characterized and reflected in key policy statements issued from time to time regarding, among other things, conduct of its business activities within the laws of the host countries in which the Company operates and potentially conflicting outside business interests of its employees. The Company maintains a systematic program to assess compliance with these policies.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. In order to evaluate the effectiveness of internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act, management has conducted an assessment, including testing, using the criteria in *Internal Control—Integrated Framework (1992)*, issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's system of internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. The Company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Based on the assessment, management has concluded that the Company maintained effective internal control over financial reporting as of December 31, 2013, based on criteria in *Internal Control—Integrated Framework (1992)* issued by the COSO.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2013 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report, which is included herein.

/s/ Klaus Kleinfeld

Klaus Kleinfeld
Chairman and
Chief Executive Officer

/s/ William F. Oplinger

William F. Oplinger
Executive Vice President and
Chief Financial Officer

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Alcoa Inc.

In our opinion, the accompanying consolidated balance sheet and the related statements of consolidated operations, consolidated comprehensive loss, changes in consolidated equity, and consolidated cash flows present fairly, in all material respects, the financial position of Alcoa Inc. and its subsidiaries (the "Company") at December 31, 2013 and 2012, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2013 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on criteria established in *Internal Control—Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 13, 2014

Alcoa and subsidiaries
Statement of Consolidated Operations
(in millions, except per-share amounts)

For the year ended December 31,	2013	2012	2011
Sales (Q)	$23,032	$23,700	$24,951
Cost of goods sold (exclusive of expenses below)	19,286	20,401	20,480
Selling, general administrative, and other expenses	1,008	997	1,027
Research and development expenses	192	197	184
Provision for depreciation, depletion, and amortization	1,421	1,460	1,479
Impairment of goodwill (A & E)	1,731	-	-
Restructuring and other charges (D)	782	172	281
Interest expense (V)	453	490	524
Other income, net (O)	(25)	(341)	(87)
Total costs and expenses	24,848	23,376	23,888
(Loss) income from continuing operations before income taxes	(1,816)	324	1,063
Provision for income taxes (T)	428	162	255
(Loss) income from continuing operations	(2,244)	162	808
Loss from discontinued operations	-	-	(3)
Net (loss) income	(2,244)	162	805
Less: Net income (loss) attributable to noncontrolling interests	41	(29)	194
Net (Loss) Income Attributable to Alcoa	$ (2,285)	$ 191	$ 611
Amounts Attributable to Alcoa Common Shareholders:			
(Loss) income from continuing operations	$ (2,285)	$ 191	$ 614
Loss from discontinued operations	-	-	(3)
Net (loss) income	$ (2,285)	$ 191	$ 611
Earnings per Share Attributable to Alcoa Common Shareholders (S):			
Basic:			
(Loss) income from continuing operations	$ (2.14)	$ 0.18	$ 0.58
Loss from discontinued operations	-	-	(0.01)
Net (loss) income	$ (2.14)	$ 0.18	$ 0.57
Diluted:			
(Loss) income from continuing operations	$ (2.14)	$ 0.18	$ 0.55
Loss from discontinued operations	-	-	-
Net (loss) income	$ (2.14)	$ 0.18	$ 0.55

The accompanying notes are an integral part of the consolidated financial statements.

Alcoa and subsidiaries
Statement of Consolidated Comprehensive Loss
(in millions)

	Alcoa			Noncontrolling Interests			Total		
For the year ended December 31,	**2013**	**2012**	**2011**	**2013**	**2012**	**2011**	**2013**	**2012**	**2011**
Net (loss) income	$(2,285)	$ 191	$ 611	$ 41	$ (29)	$ 194	$(2,244)	$ 162	$ 805
Other comprehensive loss, net of tax (B):									
Change in unrecognized net actuarial loss and prior service cost/benefit related to pension and other postretirement benefits	531	(529)	(593)	26	22	(59)	557	(507)	(652)
Foreign currency translation adjustments	(968)	(202)	(543)	(367)	(94)	(165)	(1,335)	(296)	(708)
Net change in unrealized gains on available-for-sale securities	(1)	2	-	-	-	-	(1)	2	-
Net change in unrecognized losses on derivatives	181	(46)	184	3	(1)	(5)	184	(47)	179
Total Other comprehensive loss, net of tax	(257)	(775)	(952)	(338)	(73)	(229)	(595)	(848)	(1,181)
Comprehensive loss	$(2,542)	$(584)	$(341)	$(297)	$(102)	$ (35)	$(2,839)	$(686)	$ (376)

The accompanying notes are an integral part of the consolidated financial statements.

Aloca and subsidiaries
Consolidated Balance Sheet
(in millions)

December 31,	2013	2012
Assets		
Current assets:		
Cash and cash equivalents (X)	$ 1,437	$ 1,861
Receivables from customers, less allowances of $20 in 2013 and $39 in 2012 (U)	1,221	1,399
Other receivables (U)	597	340
Inventories (G)	2,705	2,825
Prepaid expenses and other current assets	1,009	1,275
Total current assets	6,969	7,700
Properties, plants, and equipment, net (H)	17,639	18,947
Goodwill (A & E)	3,415	5,170
Investments (I)	1,907	1,860
Deferred income taxes (T)	3,184	3,790
Other noncurrent assets (J)	2,628	2,712
Total Assets	$35,742	$40,179
Liabilities		
Current liabilities:		
Short-term borrowings (K & X)	$ 57	$ 53
Accounts payable, trade	2,960	2,702
Accrued compensation and retirement costs	1,013	1,058
Taxes, including income taxes	376	366
Other current liabilities	1,044	1,298
Long-term debt due within one year (K & X)	655	465
Total current liabilities	6,105	5,942
Long-term debt, less amount due within one year (K & X)	7,607	8,311
Accrued pension benefits (W)	3,183	3,722
Accrued other postretirement benefits (W)	2,354	2,603
Other noncurrent liabilities and deferred credits (L)	2,971	3,078
Total liabilities	22,220	23,656
Contingencies and commitments (N)		
Equity		
Alcoa shareholders' equity:		
Preferred stock (R)	55	55
Common stock (R)	1,178	1,178
Additional capital	7,509	7,560
Retained earnings	9,272	11,689
Treasury stock, at cost	(3,762)	(3,881)
Accumulated other comprehensive loss (B)	(3,659)	(3,402)
Total Alcoa shareholders' equity	10,593	13,199
Noncontrolling interests (M)	2,929	3,324
Total equity	13,522	16,523
Total Liabilities and Equity	$35,742	$40,179

The accompanying notes are an integral part of the consolidated financial statements.

Alcoa and subsidiaries
Statement of Consolidated Cash Flows
(in millions)

For the year ended December 31,	2013	2012	2011
Cash from Operations			
Net (loss) income	$(2,244)	$ 162	$ 805
Adjustments to reconcile net (loss) income to cash from operations:			
Depreciation, depletion, and amortization	1,422	1,462	1,481
Deferred income taxes (T)	178	(99)	(181)
Equity income, net of dividends	77	2	(26)
Impairment of goodwill (A & E)	1,731	-	-
Restructuring and other charges (D)	782	172	281
Net gain from investing activities—asset sales (O)	(10)	(321)	(41)
Loss from discontinued operations	-	-	3
Stock-based compensation (R)	71	67	83
Excess tax benefits from stock-based payment arrangements	-	(1)	(6)
Other	4	63	53
Changes in assets and liabilities, excluding effects of acquisitions, divestitures, and foreign currency translation adjustments:			
(Increase) decrease in receivables	(141)	104	(115)
Decrease (increase) in inventories	25	96	(339)
(Increase) decrease in prepaid expenses and other current assets	(9)	(62)	77
Increase (decrease) in accounts payable, trade	326	(12)	394
(Decrease) in accrued expenses	(418)	(166)	(16)
(Decrease) increase in taxes, including income taxes	(43)	15	115
Pension contributions (W)	(462)	(561)	(336)
(Increase) decrease in noncurrent assets	(153)	9	(154)
Increase in noncurrent liabilities	442	570	125
Cash provided from continuing operations	1,578	1,500	2,203
Cash used for discontinued operations	-	(3)	(10)
Cash provided from operations	1,578	1,497	2,193
Financing Activities			
Net change in short-term borrowings (original maturities of three months or less) (K)	5	(10)	(31)
Net change in commercial paper (K)	-	(224)	224
Additions to debt (original maturities greater than three months) (K)	1,852	972	1,256
Debt issuance costs	(3)	(5)	(17)
Payments on debt (original maturities greater than three months) (K)	(2,317)	(1,489)	(1,194)
Proceeds from exercise of employee stock options (R)	13	12	37
Excess tax benefits from stock-based payment arrangements	-	1	6
Dividends paid to shareholders	(132)	(131)	(131)
Distributions to noncontrolling interests	(109)	(95)	(257)
Contributions from noncontrolling interests (M)	12	171	169
Cash (used for) provided from financing activities	(679)	(798)	62
Investing Activities			
Capital expenditures	(1,193)	(1,261)	(1,287)
Acquisitions, net of cash acquired (F & P)	-	-	(240)
Proceeds from the sale of assets and businesses (F)	13	615	38
Additions to investments (I & N)	(293)	(300)	(374)
Sales of investments (I)	-	31	54
Net change in restricted cash (P)	170	87	(4)
Other	13	69	(39)
Cash used for investing activities	(1,290)	(759)	(1,852)
Effect of exchange rate changes on cash and cash equivalents	(33)	(18)	(7)
Net change in cash and cash equivalents	(424)	(78)	396
Cash and cash equivalents at beginning of year	1,861	1,939	1,543
Cash and cash equivalents at end of year	$ 1,437	$ 1,861	$ 1,939

The accompanying notes are an integral part of the consolidated financial statements.

Table of Contents

Alcoa and subsidiaries
Statement of Changes in Consolidated Equity
(in millions, except per-share amounts)

	Alcoa Shareholders							
	Preferred stock	**Common stock**	**Additional capital**	**Retained earnings**	**Treasury stock**	**Accumulated other comprehensive loss**	**Noncontrolling interests**	**Total equity**
Balance at December 31, 2010	$ 55	$ 1,141	$ 7,087	$ 11,149	$ (4,146)	$ (1,675)	$ 3,475	$17,086
Net income	-	-	-	611	-	-	194	805
Other comprehensive loss	-	-	-	-	-	(952)	(229)	(1,181)
Cash dividends declared:								
Preferred @ $3.75 per share	-	-	-	(2)	-	-	-	(2)
Common @ $0.12 per share	-	-	-	(129)	-	-	-	(129)
Stock-based compensation (R)	-	-	83	-	-	-	-	83
Common stock issued: compensation plans (R)	-	-	(172)	-	194	-	-	22
Issuance of common stock (R)	-	37	563	-	-	-	-	600
Distributions	-	-	-	-	-	-	(257)	(257)
Contributions (M)	-	-	-	-	-	-	169	169
Other	-	-	-	-	-	-	(1)	(1)
Balance at December 31, 2011	55	1,178	7,561	11,629	(3,952)	(2,627)	3,351	17,195
Net income (loss)	-	-	-	191	-	-	(29)	162
Other comprehensive loss	-	-	-	-	-	(775)	(73)	(848)
Cash dividends declared:								
Preferred @ $3.75 per share	-	-	-	(2)	-	-	-	(2)
Common @ $0.12 per share	-	-	-	(129)	-	-	-	(129)
Stock-based compensation (R)	-	-	67	-	-	-	-	67
Common stock issued: compensation plans (R)	-	-	(68)	-	71	-	-	3
Distributions	-	-	-	-	-	-	(95)	(95)
Contributions (M)	-	-	-	-	-	-	171	171
Other	-	-	-	-	-	-	(1)	(1)
Balance at December 31, 2012	55	1,178	7,560	11,689	(3,881)	(3,402)	3,324	16,523
Net (loss) income	-	-	-	(2,285)	-	-	41	(2,244)
Other comprehensive loss	-	-	-	-	-	(257)	(338)	(595)
Cash dividends declared:								
Preferred @ $3.75 per share	-	-	-	(2)	-	-	-	(2)
Common @ $0.12 per share	-	-	-	(130)	-	-	-	(130)
Stock-based compensation (R)	-	-	71	-	-	-	-	71
Common stock issued: compensation plans (R)	-	-	(122)	-	119	-	-	(3)
Distributions	-	-	-	-	-	-	(109)	(109)
Contributions (M)	-	-	-	-	-	-	12	12
Other	-	-	-	-	-	-	(1)	(1)
Balance at December 31, 2013	$ 55	$ 1,178	$ 7,509	$ 9,272	$ (3,762)	$ (3,659)	$ 2,929	$13,522

The accompanying notes are an integral part of the consolidated financial statements.

Alcoa and subsidiaries
Notes to the Consolidated Financial Statements
(dollars in millions, except per-share amounts)

A. Summary of Significant Accounting Policies

Basis of Presentation. The Consolidated Financial Statements of Alcoa Inc. and subsidiaries ("Alcoa" or the "Company") are prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) and require management to make certain judgments, estimates, and assumptions. These may affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements. They also may affect the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates upon subsequent resolution of identified matters. Certain amounts in previously issued financial statements were reclassified to conform to the 2013 presentation.

Principles of Consolidation. The Consolidated Financial Statements include the accounts of Alcoa and companies in which Alcoa has a controlling interest. Intercompany transactions have been eliminated. The equity method of accounting is used for investments in affiliates and other joint ventures over which Alcoa has significant influence but does not have effective control. Investments in affiliates in which Alcoa cannot exercise significant influence are accounted for on the cost method.

Management also evaluates whether an Alcoa entity or interest is a variable interest entity and whether Alcoa is the primary beneficiary. Consolidation is required if both of these criteria are met. Alcoa does not have any variable interest entities requiring consolidation.

Related Party Transactions. Alcoa buys products from and sells products to various related companies, consisting of entities in which Alcoa retains a 50% or less equity interest, at negotiated arms-length prices between the two parties. These transactions were not material to the financial position or results of operations of Alcoa for all periods presented.

Cash Equivalents. Cash equivalents are highly liquid investments purchased with an original maturity of three months or less.

Inventory Valuation. Inventories are carried at the lower of cost or market, with cost for a substantial portion of U.S. and Canadian inventories determined under the last-in, first-out (LIFO) method. The cost of other inventories is principally determined under the average-cost method.

Properties, Plants, and Equipment. Properties, plants, and equipment are recorded at cost. Depreciation is recorded principally on the straight-line method at rates based on the estimated useful lives of the assets. For greenfield assets, which refer to the construction of new assets on undeveloped land, the units of production method is used to record depreciation. These assets require a significant period (generally greater than one-year) to ramp-up to full production capacity. As a result, the units of production method is deemed a more systematic and rational method for recognizing depreciation on these assets. Depreciation is recorded on temporarily idled facilities until such time management approves a permanent shutdown. The following table details the weighted-average useful lives of structures and machinery and equipment by reporting segment (numbers in years):

Segment	Structures	Machinery and equipment
Alumina:		
Alumina refining	30	26
Bauxite mining	31	17
Primary Metals:		
Aluminum smelting	35	21
Power generation	30	21
Global Rolled Products	32	21
Engineered Products and Solutions	29	18

Gains or losses from the sale of assets are generally recorded in other income or expenses (see policy below for assets classified as held for sale and discontinued operations). Repairs and maintenance are charged to expense as incurred. Interest related to the construction of qualifying assets is capitalized as part of the construction costs.

Properties, plants, and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets (asset group) may not be recoverable. Recoverability of assets is determined by comparing the estimated undiscounted net cash flows of the operations related to the assets (asset group) to their carrying amount. An impairment loss would be recognized when the carrying amount of the assets (asset group) exceeds the estimated undiscounted net cash flows. The amount of the impairment loss to be recorded is calculated as the excess of the carrying value of the assets (asset group) over their fair value, with fair value determined using the best information available, which generally is a discounted cash flow (DCF) model. The determination of what constitutes an asset group, the associated estimated undiscounted net cash flows, and the estimated useful lives of assets also require significant judgments.

Mineral Rights. Alcoa recognizes mineral rights upon specific acquisitions of land that include such underlying rights, primarily in Jamaica. This land is purchased for the sole purpose of mining bauxite. The underlying bauxite reserves are known at the time of acquisition based on associated drilling and analysis and are considered to be proven reserves. The acquisition cost of the land and mineral rights are amortized as the bauxite is produced based on the level of minable tons determined at the time of purchase. Mineral rights are included in Properties, plants, and equipment on the accompanying Consolidated Balance Sheet.

Deferred Mining Costs. Alcoa recognizes deferred mining costs during the development stage of a mine life cycle. Such costs include the construction of access and haul roads, detailed drilling and geological analysis to further define the grade and quality of the known bauxite, and overburden removal costs. These costs relate to sections of the related mines where Alcoa is either currently extracting bauxite or is preparing for production in the near term. These sections are outlined and planned incrementally and generally are mined over periods ranging from one to five years, depending on mine specifics. The amount of geological drilling and testing necessary to determine the economic viability of the bauxite deposit being mined is such that the reserves are considered to be proven, and the mining costs are amortized based on this level of reserves. Deferred mining costs are included in Other noncurrent assets on the accompanying Consolidated Balance Sheet.

Goodwill and Other Intangible Assets. Goodwill is not amortized; instead, it is reviewed for impairment annually (in the fourth quarter) or more frequently if indicators of impairment exist or if a decision is made to sell or exit a business. A significant amount of judgment is involved in determining if an indicator of impairment has occurred. Such indicators may include deterioration in general economic conditions, negative developments in equity and credit markets, adverse changes in the markets in which an entity operates, increases in input costs that have a negative effect on earnings and cash flows, or a trend of negative or declining cash flows over multiple periods, among others. The fair value that could be realized in an actual transaction may differ from that used to evaluate the impairment of goodwill.

Goodwill is allocated among and evaluated for impairment at the reporting unit level, which is defined as an operating segment or one level below an operating segment. Alcoa has nine reporting units, of which five are included in the Engineered Products and Solutions segment. The remaining four reporting units are the Alumina segment, the Primary Metals segment, the Global Rolled Products segment, and the soft alloy extrusions business in Brazil, which is included in Corporate. More than 80% of Alcoa's total goodwill is allocated to two reporting units as follows: Alcoa Fastening Systems (AFS) ($1,166) and Alcoa Power and Propulsion (APP) ($1,617) businesses, both of which are included in the Engineered Products and Solutions segment. These amounts include an allocation of Corporate's goodwill.

In reviewing goodwill for impairment, an entity has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not (greater than 50%) that the estimated fair value of a reporting unit is less than its carrying amount. If an entity elects to perform a qualitative assessment and determines that an impairment is more likely than not, the entity is then required to perform the existing two-step quantitative impairment test (described below), otherwise no further analysis is required. An entity also may elect not to perform the qualitative assessment and, instead, proceed directly to the two-step quantitative impairment test. The ultimate outcome of the goodwill impairment review for a reporting unit should be the same whether an entity chooses to perform the qualitative assessment or proceeds directly to the two-step quantitative impairment test.

Alcoa's policy for its annual review of goodwill is to perform the qualitative assessment for all reporting units not subjected directly to the two-step quantitative impairment test. Management will proceed directly to the two-step quantitative impairment test for a minimum of three reporting units (based on facts and circumstances) during each annual review of goodwill. This policy will result in each of the nine reporting units being subjected to the two-step quantitative impairment test at least once during every three-year period.

Under the qualitative assessment, various events and circumstances (or factors) that would affect the estimated fair value of a reporting unit are identified (similar to impairment indicators above). These factors are then classified by the type of impact they would have on the estimated fair value using positive, neutral, and adverse categories based on current business conditions. Additionally, an assessment of the level of impact that a particular factor would have on the estimated fair value is determined using high, medium, and low weighting. Furthermore, management considers the results of the most recent two-step quantitative impairment test completed for a reporting unit and compares the weighted average cost of capital (WACC) between the current and prior years for each reporting unit.

During the 2013 annual review of goodwill, management performed the qualitative assessment for two reporting units, the Global Rolled Products segment and one of the five reporting units in the Engineered Products and Solutions segment. Management concluded that it was not more likely than not that the estimated fair values of the two reporting units were less than their carrying values. As such, no further analysis was required.

Under the two-step quantitative impairment test, the evaluation of impairment involves comparing the current fair value of each reporting unit to its carrying value, including goodwill. Alcoa uses a DCF model to estimate the current fair value of its reporting units when testing for impairment, as management believes forecasted cash flows are the best indicator of such fair value. A number of significant assumptions and estimates are involved in the application of the DCF model to forecast operating cash flows, including markets and market share, sales volumes and prices, production costs, tax rates, capital spending, discount rate, and working capital changes. Most of these assumptions vary significantly among the reporting units. Cash flow forecasts are generally based on approved business unit operating plans for the early years and historical relationships in later years. The betas used in calculating the individual reporting units' WACC rate are estimated for each business with the assistance of valuation experts.

In the event the estimated fair value of a reporting unit per the DCF model is less than the carrying value, additional analysis would be required. The additional analysis would compare the carrying amount of the reporting unit's goodwill with the implied fair value of that goodwill, which may involve the use of valuation experts. The implied fair value of goodwill is the excess of the fair value of the reporting unit over the fair value amounts assigned to all of the assets and liabilities of that unit as if the reporting unit was acquired in a business combination and the fair value of the reporting unit represented the purchase price. If the carrying value of goodwill exceeds its implied fair value, an impairment loss equal to such excess would be recognized, which could significantly and adversely impact reported results of operations and shareholders' equity.

During the 2013 annual review of goodwill, management proceeded directly to the two-step quantitative impairment test for seven reporting units as follows: the Primary Metals segment, the Alumina segment, the soft alloy extrusions business in Brazil, and four of the five reporting units in the Engineered Products and Solutions segment, including AFS and APP. The estimated fair values of the four Engineered Products and Solutions businesses, and the soft alloy extrusions business were substantially in excess of their respective carrying value, resulting in no impairment.

During the 2012 annual testing of goodwill, the estimated fair value of the Alumina segment exceeded the carrying value by 7%. In connection with the 2013 testing, the estimated fair value of the Alumina segment exceeded the carrying value by 18%. This increase is attributable to several factors: improved pricing due to the continued implementation of the Alumina Price Index; operating and productivity improvements in the business; and a stronger U.S. dollar, all of which increased management's estimates of operating results and cash flows used in assessing Alumina's goodwill for impairment. These improvements were partially offset by an increase in the discount rate used in the DCF models. Unfavorable movements in one or more of these trends in the future could have a negative impact on the estimated fair value of the Alumina segment.

For Primary Metals, the estimated fair value as determined by the DCF model was lower than the associated carrying value. As a result, management performed the second step of the impairment analysis in order to determine the implied fair value of Primary Metals' goodwill. The results of the second-step analysis showed that the implied fair value of goodwill was zero. Therefore, in the fourth quarter of 2013, Alcoa recorded a goodwill impairment of $1,731 ($1,719 after noncontrolling interest). As a result of the goodwill impairment, there is no goodwill remaining for the Primary Metals reporting unit.

The impairment of Primary Metals' goodwill results from several causes: the prolonged economic downturn; a disconnect between industry fundamentals and pricing that has resulted in lower metal prices; and the increased cost of alumina, a key raw material, resulting from expansion of the Alumina Price Index throughout the industry. All of these factors, exacerbated by increases in discount rates, continue to place significant downward pressure on metal prices and operating margins, and the resulting estimated fair value, of the Primary Metals business. As a result, management decreased the near-term and long-term estimates of the operating results and cash flows utilized in assessing Primary Metals' goodwill for impairment. The valuation of goodwill for the second step of the goodwill impairment analysis is considered a level 3 fair value measurement, which means that the valuation of the assets and liabilities reflect management's own judgments regarding the assumptions market participants would use in determining the fair value of the assets and liabilities.

Goodwill impairment tests in prior years indicated that goodwill was not impaired for any of the Company's reporting units and there were no triggering events since that time that necessitated an impairment test.

Intangible assets with indefinite useful lives are not amortized while intangible assets with finite useful lives are amortized generally on a straight-line basis over the periods benefited. The following table details the weighted-average useful lives of software and other intangible assets by reporting segment (numbers in years):

Segment	Software	Other intangible assets
Alumina	10	34
Primary Metals	8	39
Global Rolled Products	9	17
Engineered Products and Solutions	11	19

Equity Investments. Alcoa invests in a number of privately-held companies, primarily through joint ventures and consortia, which are accounted for on the equity method. The equity method is applied in situations where Alcoa has the ability to exercise significant influence, but not control, over the investee. Management reviews equity investments for impairment whenever certain indicators are present suggesting that the carrying value of an investment is not recoverable. This analysis requires a significant amount of judgment from management to identify events or circumstances indicating that an equity investment is impaired. The following items are examples of impairment indicators: significant, sustained declines in an investee's revenue, earnings, and cash flow trends; adverse market conditions of the investee's industry or geographic area; the investee's ability to continue operations measured by several items, including liquidity; and other factors. Once an impairment indicator is identified, management uses considerable judgment to determine if the impairment is other than temporary, in which case the equity investment is written down to its estimated fair value. An impairment that is other than temporary could significantly and adversely impact reported results of operations.

Revenue Recognition. Alcoa recognizes revenue when title, ownership, and risk of loss pass to the customer, all of which occurs upon shipment or delivery of the product and is based on the applicable shipping terms. The shipping terms vary across all businesses and depend on the product, the country of origin, and the type of transportation (truck, train, or vessel).

Alcoa periodically enters into long-term supply contracts with alumina and aluminum customers and receives advance payments for product to be delivered in future periods. These advance payments are recorded as deferred revenue, and revenue is recognized as shipments are made and title, ownership, and risk of loss pass to the customer during the term of the contracts. Deferred revenue is included in Other current liabilities and Other noncurrent liabilities and deferred credits on the accompanying Consolidated Balance Sheet.

Environmental Matters. Expenditures for current operations are expensed or capitalized, as appropriate. Expenditures relating to existing conditions caused by past operations, which will not contribute to future revenues, are expensed. Liabilities are recorded when remediation costs are probable and can be reasonably estimated. The liability may include costs such as site investigations, consultant fees, feasibility studies, outside contractors, and monitoring expenses. Estimates are generally not discounted or reduced by potential claims for recovery. Claims for recovery are recognized as agreements are reached with third parties. The estimates also include costs related to other potentially responsible parties to the extent that Alcoa has reason to believe such parties will not fully pay their proportionate share. The liability is continuously reviewed and adjusted to reflect current remediation progress, prospective estimates of required activity, and other factors that may be relevant, including changes in technology or regulations.

Litigation Matters. For asserted claims and assessments, liabilities are recorded when an unfavorable outcome of a matter is deemed to be probable and the loss is reasonably estimable. Management determines the likelihood of an unfavorable outcome based on many factors such as the nature of the matter, available defenses and case strategy, progress of the matter, views and opinions of legal counsel and other advisors, applicability and success of appeals processes, and the outcome of similar historical matters, among others. Once an unfavorable outcome is deemed probable, management weighs the probability of estimated losses, and the most reasonable loss estimate is recorded. If an unfavorable outcome of a matter is deemed to be reasonably possible, then the matter is disclosed and no liability is recorded. With respect to unasserted claims or assessments, management must first determine that the probability that an assertion will be made is likely, then, a determination as to the likelihood of an unfavorable outcome and the ability to reasonably estimate the potential loss is made. Legal matters are reviewed on a continuous basis to determine if there has been a change in management's judgment regarding the likelihood of an unfavorable outcome or the estimate of a potential loss.

Asset Retirement Obligations. Alcoa recognizes asset retirement obligations (AROs) related to legal obligations associated with the normal operation of Alcoa's bauxite mining, alumina refining, and aluminum smelting facilities. These AROs consist primarily of costs associated with spent pot lining disposal, closure of bauxite residue areas, mine reclamation, and landfill closure. Alcoa also recognizes AROs for any significant lease restoration obligation, if required by a lease agreement, and for the disposal of regulated waste materials related to the demolition of certain power facilities. The fair values of these AROs are recorded on a discounted basis, at the time the obligation is incurred, and accreted over time for the change in present value. Additionally, Alcoa capitalizes asset retirement costs by increasing the carrying amount of the related long-lived assets and depreciating these assets over their remaining useful life.

Certain conditional asset retirement obligations (CAROs) related to alumina refineries, aluminum smelters, and fabrication facilities have not been recorded in the Consolidated Financial Statements due to uncertainties surrounding the ultimate settlement date. A CARO is a legal obligation to perform an asset retirement activity in which the timing and/or method of settlement are conditional on a future event that may or may not be within Alcoa's control. Such uncertainties exist as a result of the perpetual nature of the structures, maintenance and upgrade programs, and other factors. At the date a reasonable estimate of the ultimate settlement date can be made, Alcoa would record an ARO for the removal, treatment, transportation, storage, and/or disposal of various regulated assets and hazardous materials such as asbestos, underground and aboveground storage tanks, polychlorinated biphenyls (PCBs), various process residuals, solid wastes, electronic equipment waste, and various other materials. Such amounts may be material to the Consolidated Financial Statements in the period in which they are recorded.

Income Taxes. The provision for income taxes is determined using the asset and liability approach of accounting for income taxes. Under this approach, the provision for income taxes represents income taxes paid or payable (or received or receivable) for the current year plus the change in deferred taxes during the year. Deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid, and result from differences between the financial and tax bases of Alcoa's assets and liabilities and are adjusted for changes in tax rates and tax laws when enacted.

Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. In evaluating the need for a valuation allowance, management considers all potential sources of taxable income, including income available in carryback periods, future reversals of taxable temporary differences, projections of taxable income, and income from tax planning strategies, as well as all available positive and negative evidence. Positive evidence includes factors such as a history of profitable operations, projections of future profitability within the carryforward period, including from tax planning strategies, and Alcoa's experience with similar operations. Existing favorable contracts and the ability to sell products into established markets are additional positive evidence. Negative evidence includes items such as cumulative losses, projections of future losses, or carryforward periods that are not long enough to allow for the utilization of a deferred tax asset based on existing projections of income. Deferred tax assets for which no valuation allowance is recorded may not be realized upon changes in facts and circumstances, resulting in a future charge to establish a valuation allowance. Existing valuation allowances are re-examined under the same standards of positive and negative evidence. If it is determined that it is more likely than not that a deferred tax asset will be realized, the appropriate amount of the valuation allowance, if any, is released. Deferred tax assets and liabilities are also re-measured to reflect changes in underlying tax rates due to law changes and the granting and lapse of tax holidays.

Tax benefits related to uncertain tax positions taken or expected to be taken on a tax return are recorded when such benefits meet a more likely than not threshold. Otherwise, these tax benefits are recorded when a tax position has been effectively settled, which means that the statute of limitation has expired or the appropriate taxing authority has completed their examination even though the statute of limitations remains open. Interest and penalties related to uncertain tax positions are recognized as part of the provision for income taxes and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law until such time that the related tax benefits are recognized.

Stock-Based Compensation. Alcoa recognizes compensation expense for employee equity grants using the non-substantive vesting period approach, in which the expense (net of estimated forfeitures) is recognized ratably over the requisite service period based on the grant date fair value. The fair value of new stock options is estimated on the date of grant using a lattice-pricing model. Determining the fair value of stock options at the grant date requires judgment, including estimates for the average risk-free interest rate, dividend yield, volatility, annual forfeiture rate, and exercise behavior. These assumptions may differ significantly between grant dates because of changes in the actual results of these inputs that occur over time.

Most plan participants can choose whether to receive their award in the form of stock options, stock awards, or a combination of both. This choice is made before the grant is issued and is irrevocable.

Derivatives and Hedging. Derivatives are held for purposes other than trading and are part of a formally documented risk management program. For derivatives designated as fair value hedges, Alcoa measures hedge effectiveness by formally assessing, at least quarterly, the historical high correlation of changes in the fair value of the hedged item and the derivative hedging instrument. For derivatives designated as cash flow hedges, Alcoa measures hedge effectiveness by formally assessing, at least quarterly, the probable high correlation of the expected future cash flows of the hedged item and the derivative hedging instrument. The ineffective portions of both types of hedges are recorded in sales or other income or expense in the current period. If the hedging relationship ceases to be highly effective or it becomes probable that an expected transaction will no longer occur, future gains or losses on the derivative instrument are recorded in other income or expense.

Alcoa accounts for interest rate swaps related to its existing long-term debt and hedges of firm customer commitments for aluminum as fair value hedges. As a result, the fair values of the derivatives and changes in the fair values of the underlying hedged items are reported in other current and noncurrent assets and liabilities in the Consolidated Balance Sheet. Changes in the fair values of these derivatives and underlying hedged items generally offset and are recorded each period in sales or interest expense, consistent with the underlying hedged item.

Alcoa accounts for hedges of foreign currency exposures and certain forecasted transactions as cash flow hedges. The fair values of the derivatives are recorded in other current and noncurrent assets and liabilities in the Consolidated Balance Sheet. The effective portions of the changes in the fair values of these derivatives are recorded in other comprehensive income and are reclassified to sales, cost of goods sold, or other income or expense in the period in which earnings are impacted by the hedged items or in the period that the transaction no longer qualifies as a cash flow hedge. These contracts cover the same periods as known or expected exposures, generally not exceeding five years.

If no hedging relationship is designated, the derivative is marked to market through earnings.

Cash flows from derivatives are recognized in the Statement of Consolidated Cash Flows in a manner consistent with the underlying transactions.

Foreign Currency. The local currency is the functional currency for Alcoa’s significant operations outside the U.S., except for certain operations in Canada, Russia and Iceland, where the U.S. dollar is used as the functional currency. The determination of the functional currency for Alcoa’s operations is made based on the appropriate economic and management indicators.

Acquisitions. Alcoa’s business acquisitions are accounted for using the acquisition method. The purchase price is allocated to the assets acquired and liabilities assumed based on their estimated fair values. Any excess purchase price over the fair value of the net assets acquired is recorded as goodwill. For all acquisitions, operating results are included in the Statement of Consolidated Operations from the date of the acquisition.

Discontinued Operations and Assets Held For Sale. For those businesses where management has committed to a plan to divest, each business is valued at the lower of its carrying amount or estimated fair value less cost to sell. If the carrying amount of the business exceeds its estimated fair value, an impairment loss is recognized. Fair value is estimated using accepted valuation techniques such as a DCF model, valuations performed by third parties, earnings multiples, or indicative bids, when available. A number of significant estimates and assumptions are involved in the application of these techniques, including the forecasting of markets and market share, sales volumes and prices, costs and expenses, and multiple other factors. Management considers historical experience and all available information at the time the estimates are made; however, the fair value that is ultimately realized upon the divestiture of a business may differ from the estimated fair value reflected in the Consolidated Financial Statements. Depreciation, depletion, and amortization expense is not recorded on assets of a business to be divested once they are classified as held for sale. Businesses to be divested are classified in the Consolidated Financial Statements as either discontinued operations or held for sale.

For businesses classified as discontinued operations, the balance sheet amounts and results of operations are reclassified from their historical presentation to assets and liabilities of operations held for sale on the Consolidated Balance Sheet and to discontinued operations on the Statement of Consolidated Operations, respectively, for all periods presented. The gains or losses associated with these divested businesses are recorded in discontinued operations on the Statement of Consolidated Operations. The Statement of Consolidated Cash Flows is also reclassified for assets and liabilities of operations held for sale and discontinued operations for all periods presented. Additionally, segment information does not include the assets or operating results of businesses classified as discontinued operations for all periods presented. Management does not expect any continuing involvement with these businesses following their divestiture, and these businesses are expected to be disposed of within one year.

For businesses classified as held for sale that do not qualify for discontinued operations treatment, the balance sheet and cash flow amounts are reclassified from their historical presentation to assets and liabilities of operations held for sale for all periods presented. The results of operations continue to be reported in continuing operations. The gains or losses associated with these divested businesses are recorded in restructuring and other charges on the Statement of Consolidated Operations. The segment information includes the assets and operating results of businesses classified as held for sale for all periods presented. Management expects that Alcoa will have continuing involvement with these businesses following their divestiture, primarily in the form of equity participation, or ongoing aluminum or other significant supply contracts.

Recently Adopted Accounting Guidance.

Comprehensive Income—On January 1, 2013, Alcoa adopted changes issued by the Financial Accounting Standards Board (FASB) to the reporting of amounts reclassified out of accumulated other comprehensive income. These changes require an entity to report the effect of significant reclassifications out of accumulated other comprehensive income on the respective line items in net income if the amount being reclassified is required to be reclassified in its entirety to net income. For other amounts that are not required to be reclassified in their entirety to net income in the same reporting period, an entity is required to cross-reference other disclosures that provide additional detail about those amounts. These requirements are to be applied to each component of accumulated other comprehensive income. Other than the additional disclosure requirements (see Note B), the adoption of these changes had no impact on the Consolidated Financial Statements.

On January 1, 2012, Alcoa adopted changes issued by the FASB to the presentation of comprehensive income. These changes give an entity the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements; the option to present components of other comprehensive income as part of the statement of changes in stockholders' equity was eliminated. The items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income were not changed. Additionally, no changes were made to the calculation and presentation of earnings per share. Management elected to present the two-statement option. Other than the change in presentation, the adoption of these changes had no impact on the Consolidated Financial Statements.

Goodwill and Other Intangible Assets—On January 1, 2013, Alcoa adopted changes issued by the FASB to the testing of indefinite-lived intangible assets for impairment, similar to the goodwill changes adopted in October 2011 (see below). These changes provide an entity the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not (greater than 50%) that the fair value of an indefinite-lived intangible asset is less than its carrying amount. Such qualitative factors may include the following: macroeconomic conditions; industry and market considerations; cost factors; overall financial performance; and other relevant entity-specific events. If an entity elects to perform a qualitative assessment and determines that an impairment is more likely than not, the entity is then required to perform the existing two-step quantitative impairment test, otherwise no further analysis is required. An entity also may elect not to perform the qualitative assessment and, instead, proceed directly to the two-step quantitative impairment test. Notwithstanding the adoption of these changes, management plans to proceed directly to the two-step quantitative test for Alcoa's indefinite-lived intangible assets. The adoption of these changes had no impact on the Consolidated Financial Statements.

On January 1, 2011, Alcoa adopted changes issued by the FASB to the testing of goodwill for impairment. These changes require an entity to perform all steps in the test for a reporting unit whose carrying value is zero or negative if it is more likely than not (greater than 50%) that a goodwill impairment exists based on qualitative factors. This will result in the elimination of an entity's ability to assert that such a reporting unit's goodwill is not impaired and additional testing is not necessary despite the existence of qualitative factors that indicate otherwise. Based on the then most recent impairment review of Alcoa's goodwill (2011 fourth quarter), the adoption of these changes had no impact on the Consolidated Financial Statements.

In September 2011, the FASB issued changes to the testing of goodwill for impairment. These changes provide an entity the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not (greater than 50%) that the fair value of a reporting unit is less than its carrying amount. Such qualitative factors may include the following: macroeconomic conditions; industry and market considerations; cost factors; overall financial performance; and other relevant entity-specific events. If an entity elects to perform a qualitative assessment and determines that an impairment is more likely than not, the entity is then required to perform the existing two-step quantitative impairment test, otherwise no further analysis is required. An entity also may elect not to perform the qualitative assessment and, instead, proceed directly to the two-step quantitative impairment test. Under either option, the ultimate outcome of the goodwill impairment test should be the same. These changes were required to become effective for Alcoa for any goodwill impairment test performed on January 1, 2012 or later; however, early adoption is permitted. Alcoa elected to early adopt these changes in conjunction with management's annual review of goodwill in the fourth quarter of 2011 (see Goodwill and Other Intangible Assets policy in Note A above). The adoption of these changes had no impact on the Consolidated Financial Statements.

Other—On January 1, 2013, Alcoa adopted changes issued by the FASB to the disclosure of offsetting assets and liabilities. These changes require an entity to disclose both gross information and net information about both instruments and transactions eligible for offset in the statement of financial position and instruments and transactions subject to an agreement similar to a master netting arrangement. The enhanced disclosures will enable users of an entity's financial statements to understand and evaluate the effect or potential effect of master netting arrangements on an entity's financial position, including the effect or potential effect of rights of setoff associated with certain financial instruments and derivative instruments. Other than the additional disclosure requirements (see Note X), the adoption of these changes had no impact on the Consolidated Financial Statements.

On July 17, 2013, the FASB issued and Alcoa adopted changes related to hedge accounting. These changes permit an entity to use the Fed Funds Effective Swap Rate as a U.S. benchmark interest rate for hedge accounting purposes. Previously only interest rates on direct Treasury obligations of the U.S. government and the London Interbank Offered Rate swap rate were considered benchmark interest rates. The benchmark interest rate is used to assess the interest rate risk associated with a hedged item's fair value or a hedged transaction's cash flows. Also, the changes remove the restriction on using different benchmark rates for similar hedges. These changes are effective prospectively for qualifying new or redesignated hedging relationships entered into on or after July 17, 2013. The adoption of these changes had no impact on the Consolidated Financial Statements.

On January 1, 2012, Alcoa adopted changes issued by the FASB to conform existing guidance regarding fair value measurement and disclosure between GAAP and International Financial Reporting Standards. These changes both clarify the FASB's intent about the application of existing fair value measurement and disclosure requirements and amend certain principles or requirements for measuring fair value or for disclosing information about fair value measurements. The clarifying changes relate to the application of the highest and best use and valuation premise concepts, measuring the fair value of an instrument classified in a reporting entity's shareholders' equity, and disclosure of quantitative information about unobservable inputs used for Level 3 fair value measurements. The amendments relate to measuring the fair value of financial instruments that are managed within a portfolio; application of premiums and discounts in a fair value measurement; and additional disclosures concerning the valuation processes used and sensitivity of the fair value measurement to changes in unobservable inputs for those items categorized as Level 3, a reporting entity's use of a nonfinancial asset in a way that differs from the asset's highest and best use, and the categorization by level in the fair value hierarchy for items required to be measured at fair value for disclosure purposes only. Other than the additional disclosure requirements (see Note X), the adoption of these changes had no impact on the Consolidated Financial Statements.

On January 1, 2011, Alcoa adopted changes issued by the FASB to disclosure requirements for fair value measurements. Specifically, the changes require a reporting entity to disclose, in the reconciliation of fair value measurements using significant unobservable inputs (Level 3), separate information about purchases, sales, issuances, and settlements (that is, on a gross basis rather than as one net number). These changes were applied to the disclosures in Note W and the Derivatives section of Note X to the Consolidated Financial Statements.

On January 1, 2011, Alcoa adopted changes issued by the FASB to the disclosure of pro forma information for business combinations. These changes clarify that if a public entity presents comparative financial statements, the entity should disclose revenue and earnings of the combined entity as though the business combination that occurred during the current year had occurred as of the beginning of the comparable prior annual reporting period only. Also, the existing supplemental pro forma disclosures were expanded to include a description of the nature and amount of material, nonrecurring pro forma adjustments directly attributable to the business combination included in the reported pro forma revenue and earnings. The adoption of these changes had no impact on the Consolidated Financial Statements.

On January 1, 2011, Alcoa adopted changes issued by the FASB to revenue recognition for multiple-deliverable arrangements. These changes require separation of consideration received in such arrangements by establishing a selling price hierarchy (not the same as fair value) for determining the selling price of a deliverable, which will be based on available information in the following order: vendor-specific objective evidence, third-party evidence, or estimated selling price; eliminate the residual method of allocation and require that the consideration be allocated at the inception of the arrangement to all deliverables using the relative selling price method, which allocates any discount in the arrangement to each deliverable on the basis of each deliverable's selling price; require that a vendor determine its best estimate of selling price in a manner that is consistent with that used to determine the price to sell the deliverable on a standalone basis; and expand the disclosures related to multiple-deliverable revenue arrangements. The adoption of these changes had no impact on the Consolidated Financial Statements, as Alcoa does not currently have any such arrangements with its customers.

On January 1, 2011, Alcoa adopted changes issued by the FASB to the classification of certain employee share-based payment awards. These changes clarify that there is not an indication of a condition that is other than market, performance, or service if an employee share-based payment award's exercise price is denominated in the currency of a market in which a substantial portion of the entity's equity securities trade and differs from the functional currency of the employer entity or payroll currency of the employee. An employee share-based payment award is required to be classified as a liability if the award does not contain a market, performance, or service condition. Prior to this guidance, the difference between the currency denomination of an employee share-based payment award's exercise price and the functional currency of the employer entity or payroll currency of the employee was not a factor considered by management when determining the proper classification of a share-based payment award. The adoption of these changes had no impact on the Consolidated Financial Statements.

Recently Issued Accounting Guidance. In February 2013, the FASB issued changes to the accounting for obligations resulting from joint and several liability arrangements. These changes require an entity to measure such obligations for which the total amount of the obligation is fixed at the reporting date as the sum of (i) the amount the reporting entity agreed to pay on the basis of its arrangement among its co-obligors, and (ii) any additional amount the reporting entity expects to pay on behalf of its co-obligors. An entity will also be required to disclose the nature and amount of the obligation as well as other information about those obligations. Examples of obligations subject to these requirements are debt arrangements and settled litigation and judicial rulings. These changes become effective for Alcoa on January 1, 2014. Management has determined that the adoption of these changes will not have an impact on the Consolidated Financial Statements, as Alcoa does not currently have any such arrangements.

In March 2013, the FASB issued changes to a parent entity's accounting for the cumulative translation adjustment upon derecognition of certain subsidiaries or groups of assets within a foreign entity or of an investment in a foreign entity. A parent entity is required to release any related cumulative foreign currency translation adjustment from accumulated other comprehensive income into net income in the following circumstances: (i) a parent entity ceases to have a controlling financial interest in a subsidiary or group of assets that is a business within a foreign entity if the sale or transfer results in the complete or substantially complete liquidation of the foreign entity in which the subsidiary or group of assets had resided; (ii) a partial sale of an equity method investment that is a foreign entity; (iii) a partial sale of an equity method investment that is not a foreign entity whereby the partial sale represents a complete or substantially complete liquidation of the foreign entity that held the equity method investment; and (iv) the sale of an investment in a foreign entity. These changes become effective for Alcoa on January 1, 2014. Management has determined that the adoption of these changes will need to be considered in the Consolidated Financial Statements in the event Alcoa initiates any of the transactions described above.

In July 2013, the FASB issued changes to the presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. These changes require an entity to present an unrecognized tax benefit as a liability in the financial statements if (i) a net operating loss carryforward, a similar tax loss, or a tax credit carryforward is not available at the reporting date under the tax law of the applicable jurisdiction to settle any additional income taxes that would result from the disallowance of a tax position, or (ii) the tax law of the applicable jurisdiction does not require the entity to use, and the entity does not intend to use, the deferred tax asset to settle any additional income taxes that would result from the disallowance of a tax position. Otherwise, an unrecognized tax benefit is required to be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward. Previously, there was diversity in practice as no explicit guidance existed. These changes become effective for Alcoa on January 1, 2014. Management has determined that the adoption of these changes will not have a significant impact on the Consolidated Financial Statements.

B. Accumulated Other Comprehensive Loss

The following table details the activity of the four components that comprise Accumulated other comprehensive (loss) income for both Alcoa's shareholders and noncontrolling interests:

	Alcoa			Noncontrolling Interests		
	2013	2012	2011	2013	2012	2011
Pension and other postretirement benefits (W)						
Balance at beginning of period	$(4,063)	$(3,534)	$(2,941)	$ (77)	$ (99)	$ (40)
Other comprehensive income (loss):						
Unrecognized net actuarial loss and prior service cost/benefit	281	(1,184)	(1,159)	28	15	(97)
Tax (expense) benefit	(88)	398	399	(9)	(4)	32
Total Other comprehensive income (loss) before reclassifications, net of tax	193	(786)	(760)	19	11	(65)
Amortization of net actuarial loss and prior service cost/benefit[1]	520	396	257	11	16	9
Tax expense[2]	(182)	(139)	(90)	(4)	(5)	(3)
Total amount reclassified from Accumulated other comprehensive loss, net of tax[8]	338	257	167	7	11	6
Total Other comprehensive income (loss)	531	(529)	(593)	26	22	(59)
Balance at end of period	$(3,532)	$(4,063)	$(3,534)	$ (51)	$ (77)	$ (99)
Foreign currency translation						
Balance at beginning of period	$ 1,147	$ 1,349	$ 1,892	$ 257	$ 351	$ 516
Other comprehensive loss[3]	(968)	(202)	(543)	(367)	(94)	(165)
Balance at end of period	$ 179	$ 1,147	$ 1,349	$ (110)	$ 257	$ 351
Available-for-sale-securities						
Balance at beginning of period	$ 3	$ 1	$ 1	$ -	$ -	$ -
Other comprehensive (loss) income[4]	(1)	2	-	-	-	-
Balance at end of period	$ 2	$ 3	$ 1	$ -	$ -	$ -
Cash flow hedges (X)						
Balance at beginning of period	$ (489)	$ (443)	$ (627)	$ (5)	$ (4)	$ 1
Other comprehensive income (loss):						
Net change from periodic revaluations	205	(2)	88	4	(1)	(8)
Tax (expense) benefit	(43)	(10)	(25)	(1)	-	2
Total Other comprehensive income (loss) before reclassifications, net of tax	162	(12)	63	3	(1)	(6)
Net amount reclassified to earnings:						
Aluminum contracts[5]	18	(65)	152	-	-	-
Energy contracts[6]	-	-	13	-	-	-
Foreign exchange contracts[5]	2	-	(3)	-	-	-
Interest rate contracts[7]	2	3	5	-	-	1
Sub-total	22	(62)	167	-	-	1
Tax (expense) benefit[2]	(3)	28	(46)	-	-	-
Total amount reclassified from Accumulated other comprehensive loss, net of tax[8]	19	(34)	121	-	-	1
Total Other comprehensive income (loss)	181	(46)	184	3	(1)	(5)
Balance at end of period	$ (308)	$ (489)	$ (443)	$ (2)	$ (5)	$ (4)

(1) These amounts were included in the computation of net periodic benefit cost for pension and other postretirement benefits (see Note W).

(2) These amounts were included in Provision for income taxes on the accompanying Statement of Consolidated Operations.

(3) In all periods presented, there were no tax impacts related to rate changes and no amounts were reclassified to earnings.

(4) In all periods presented, unrealized and realized gains and losses related to these securities were immaterial. Realized gains and losses were included in Other income, net on the accompanying Statement of Consolidated Operations.

(5) These amounts were included in Sales on the accompanying Statement of Consolidated Operations.

(6) This amount was included in Cost of goods sold on the accompanying Statement of Consolidated Operations.

(7) In 2013 and 2012, this amount was included in Interest expense on the accompanying Statement of Consolidated Operations. In 2011, this amount was included in Other income, net on the accompanying Statement of Consolidated Operations.

(8) A positive amount indicates a corresponding charge to earnings and a negative amount indicates a corresponding benefit to earnings. These amounts were reflected on the accompanying Statement of Consolidated Operations in the line items indicated in footnotes 1 through 7.

C. Asset Retirement Obligations

Alcoa has recorded AROs related to legal obligations associated with the normal operations of bauxite mining, alumina refining, and aluminum smelting facilities. These AROs consist primarily of costs associated with spent pot lining disposal, closure of bauxite residue areas, mine reclamation, and landfill closure. Alcoa also recognizes AROs for any significant lease restoration obligation, if required by a lease agreement, and for the disposal of regulated waste materials related to the demolition of certain power facilities.

In addition to AROs, certain CAROs related to alumina refineries, aluminum smelters, and fabrication facilities have not been recorded in the Consolidated Financial Statements due to uncertainties surrounding the ultimate settlement date. Such uncertainties exist as a result of the perpetual nature of the structures, maintenance and upgrade programs, and other factors. At the date a reasonable estimate of the ultimate settlement date can be made (e.g., planned demolition), Alcoa would record an ARO for the removal, treatment, transportation, storage, and/or disposal of various regulated assets and hazardous materials such as asbestos, underground and aboveground storage tanks, PCBs, various process residuals, solid wastes, electronic equipment waste, and various other materials. If Alcoa was required to demolish all such structures immediately, the estimated CARO as of December 31, 2013 ranges from less than $1 to $52 per structure (131 structures) in today's dollars.

The following table details the carrying value of recorded AROs by major category (of which $85 and $75 was classified as a current liability as of December 31, 2013 and 2012, respectively):

December 31,	**2013**	**2012**
Spent pot lining disposal	$182	$182
Closure of bauxite residue areas	179	190
Mine reclamation	178	189
Demolition*	68	28
Landfill closure	18	17
Other	4	4
	$629	$610

* In 2013, AROs were recorded as a result of management's decision to permanently shut down and demolish certain structures (see Note D).

The following table details the changes in the total carrying value of recorded AROs:

December 31,	2013	2012
Balance at beginning of year	$610	$579
Accretion expense	24	25
Payments	(71)	(81)
Liabilities incurred	118	80
Foreign currency translation and other	(52)	7
Balance at end of year	$629	$610

D. Restructuring and Other Charges

Restructuring and other charges for each year in the three-year period ended December 31, 2013 were comprised of the following:

	2013	2012	2011
Resolution of a legal matter (N)	$391	$ 85	$ -
Layoff costs	201	47	93
Asset impairments	116	40	150
Other	82	21	61
Reversals of previously recorded layoff and other exit costs	(8)	(21)	(23)
Restructuring and other charges	$782	$172	$281

Layoff costs were recorded based on approved detailed action plans submitted by the operating locations that specified positions to be eliminated, benefits to be paid under existing severance plans, union contracts or statutory requirements, and the expected timetable for completion of the plans.

2013 Actions. In 2013, Alcoa recorded Restructuring and other charges of $782 ($585 after-tax and noncontrolling interests), which were comprised of the following components: $391 ($305 after-tax and noncontrolling interest) related to a legal matter (see Government Investigations under Litigation in Note N); $245 ($183 after-tax) for exit costs related to the permanent shutdown and demolition of certain structures at three smelter locations (see below); $87 ($61 after-tax and noncontrolling interests) for layoff costs, including the separation of approximately 1,110 employees (340 in the Primary Metals segment, 260 in the Engineered Products and Solutions segment, 250 in the Global Rolled Products segment, 85 in the Alumina segment, and 175 in Corporate), of which 590 relates to a global overhead reduction program, and $9 in pension plan settlement charges related to previously separated employees; $25 ($17 after-tax) in net charges, including $12 ($8 after-tax) for asset impairments, related to retirements and/or the sale of previously idled structures; $25 ($13 after-tax and noncontrolling interests) for asset impairments related to the write-off of capitalized costs for projects no longer being pursued due to the market environment; a net charge of $17 ($12 after-tax and noncontrolling interests) for other miscellaneous items, including $3 ($2 after-tax) for asset impairments; and $8 ($6 after-tax and noncontrolling interests) for the reversal of a number of small layoff reserves related to prior periods.

In May 2013, management approved the permanent shutdown and demolition of (i) two potlines (capacity of 105,000 metric-tons-per-year) that utilize Soderberg technology at the smelter located in Baie Comeau, Québec, Canada (remaining capacity of 280,000 metric-tons-per-year composed of two prebake potlines) and (ii) the smelter located in Fusina, Italy (capacity of 44,000 metric-tons-per-year). Additionally, in August 2013, management approved the permanent shutdown and demolition of one potline (capacity of 41,000 metric-tons-per-year) that utilizes Soderberg technology at the Massena East, N.Y. smelter (remaining capacity of 84,000 metric-tons-per-year composed of two Soderberg potlines). The aforementioned Soderberg lines at Baie Comeau and Massena East were fully shut down by the end of September 2013 while the Fusina smelter was previously temporarily idled in 2010. Demolition and remediation activities related to all three facilities began in late 2013 and are expected to be completed by the end of 2014 (Massena East), 2015 (Baie Comeau), and 2017 (Fusina).

The decisions on the Soderberg lines for Baie Comeau and Massena East are part of a 15-month review of 460,000 metric tons of smelting capacity initiated by management in May 2013 for possible curtailment, while the decision on the Fusina smelter is in addition to the capacity being reviewed. Factors leading to all three decisions were in general focused on achieving sustained competitiveness and included, among others: lack of an economically viable, long-term power solution (Italy); changed market fundamentals; other existing idle capacity; and restart costs. The remaining 183,000 metric tons of smelting capacity subject to this review is expected to be completed during the first half of 2014. As such, future restructuring charges may be recognized if the decision to shut down more capacity is made in 2014 (see Note Y).

In 2013, exit costs related to these actions included $114 for the layoff of approximately 550 employees (Primary Metals segment), including $83 in pension costs (see Note W); accelerated depreciation of $58 (Baie Comeau) and asset impairments of $18 (Fusina and Massena East) representing the write-off of the remaining book value of all related properties, plants, and equipment; and $55 in other exit costs. Additionally in 2013, remaining inventories, mostly operating supplies and raw materials, were written down to their net realizable value resulting in a charge of $9 ($6 after-tax), which was recorded in Cost of goods sold on the accompanying Statement of Consolidated Operations. The other exit costs of $55 represent $48 in asset retirement obligations and $5 in environmental remediation, both triggered by the decisions to permanently shut down and demolish these structures, and $2 in other related costs.

As of December 31, 2013, approximately 1,020 of the 1,660 employees were separated. The remaining separations for the 2013 restructuring programs are expected to be completed by the end of 2014. In 2013, cash payments of $33 were made against layoff reserves related to the 2013 restructuring programs.

2012 Actions. In 2012, Alcoa recorded Restructuring and other charges of $172 ($106 after-tax and noncontrolling interests), which were comprised of the following components: $85 ($33 after-tax and noncontrolling interest) related to the civil portion of a legal matter (see Civil Suit under Litigation in Note N); $47 ($29 after-tax and noncontrolling interests) for the layoff of approximately 800 employees (390 in the Engineered Products and Solutions segment, 250 in the Primary Metals segment, 85 in the Alumina segment, and 75 in Corporate), including $10 ($7 after-tax) for the layoff of an additional 170 employees related to the previously reported smelter curtailments in Spain (see 2011 Actions below); $30 ($30 after-tax) in asset impairments and $6 ($6 after-tax) for lease and contract termination costs due to a decision to exit the lithographic sheet business in Bohai, China; $11 ($11 after-tax) in costs to idle the Portovesme smelter (see 2011 Actions below); $10 ($8 after-tax) in other asset impairments; a net charge of $4 ($4 after-tax and noncontrolling interests) for other miscellaneous items; and $21 ($15 after-tax and noncontrolling interests) for the reversal of a number of layoff reserves related to prior periods, including $10 ($7 after-tax) related to the smelters in Spain. The reversal related to the smelters in Spain is due to lower than expected costs based on agreements with employee representatives and the government, as well as a reduction of 55 in the number of layoffs due to the anticipation of the restart of a portion of the previously curtailed capacity based on an agreement with the Spanish government that will provide interruptibility rights (i.e. compensation for power interruptions when grids are overloaded) to the smelters during 2013. A portion of this reversal relates to layoff costs recorded at the end of 2011 (see 2011 Actions below) and a portion of this reversal relates to layoff costs recorded during 2012 (see above).

As of December 31, 2013, the separations associated with 2012 restructuring programs were essentially complete. In 2013 and 2012, cash payments of $17 and $16, respectively, were made against layoff reserves related to the 2012 restructuring programs.

2011 Actions. In 2011, Alcoa recorded Restructuring and other charges of $281 ($181 after-tax and noncontrolling interests), which were comprised of the following components: $127 ($82 after-tax) in asset impairments and $36 ($23 after-tax) in other exit costs related to the permanent shutdown and planned demolition of certain idled structures at two U.S. locations (see below); $93 ($68 after-tax and noncontrolling interests) for the layoff of approximately 1,600 employees (820 in the Primary Metals segment, 470 in the Global Rolled Products segment, 160 in the Alumina segment, 20 in the Engineered Products and Solutions segment, and 130 in Corporate), including the effects of planned smelter curtailments (see below); $23 ($12 after-tax and noncontrolling interests) for other asset impairments, including the write-off of the carrying value of an idled structure in Australia that processed spent pot lining and adjustments to the fair value of the one remaining foil location while it was classified as held for sale due to foreign currency movements; $20 ($8 after-tax and noncontrolling interests) for a litigation matter related to the former St. Croix location (see Other Matters under Litigation in Note N); a net charge of $5 ($4 after-tax) for other miscellaneous items; and $23 ($16 after-tax) for the reversal of previously recorded layoff reserves due to normal attrition and changes in facts and circumstances, including a change in plans for Alcoa's aluminum powder facility in Rockdale, TX.

In late 2011, management approved the permanent shutdown and demolition of certain facilities at two U.S. locations, each of which was previously temporarily idled for various reasons. The identified facilities are the smelter located in Alcoa, TN (capacity of 215,000 metric-tons-per-year) and two potlines (capacity of 76,000 metric-tons-per-year) at the smelter located in Rockdale, TX (remaining capacity of 191,000 metric-tons-per-year composed of four potlines). Demolition and remediation activities related to these actions began in 2012 and are expected to be completed in 2015 for the Tennessee smelter and in 2013 for the two potlines at the Rockdale smelter (essentially complete as of December 31, 2013). This decision was made after a comprehensive strategic analysis was performed to determine the best course of action for each facility. Factors leading to this decision were in general focused on achieving sustained competitiveness and included, among others: lack of an economically viable, long-term power solution; changed market fundamentals; cost competitiveness; required future capital investment; and restart costs. The asset impairments of $127 represent the write off of the remaining book value of properties, plants, and equipment related to these facilities. Additionally, remaining inventories, mostly operating supplies, were written down to their net realizable value resulting in a charge of $6 ($4 after-tax), which was recorded in Cost of goods sold on the accompanying Statement of Consolidated Operations. The other exit costs of $36 represent $18 ($11 after-tax) in environmental remediation and $17 ($11 after-tax) in asset retirement obligations, both triggered by the decision to permanently shut down and demolish these structures, and $1 ($1 after-tax) in other related costs.

Also, at the end of 2011, management approved a partial or full curtailment of three European smelters as follows: Portovesme, Italy (150,000 metric-tons-per-year); Avilés, Spain (46,000 metric tons out of 93,000 metric-tons-per-year); and La Coruña, Spain (44,000 metric tons out of 87,000 metric-tons-per-year). These curtailments were completed by the end of 2012. The curtailment of the Portovesme smelter may lead to the permanent closure of the facility, which would result in future charges, while the curtailments at the two smelters in Spain are planned to be temporary. These actions were the result of uncompetitive energy positions, combined with rising material costs and falling aluminum prices (mid-2011 to late 2011). As a result of these decisions, Alcoa recorded costs of $33 ($31 after-tax) for the layoff of approximately 650 employees. As Alcoa engaged in discussions with the respective employee representatives and governments, additional charges were recognized in 2012 (see 2012 Actions above).

As of December 31, 2013, the separations associated with 2011 restructuring programs were essentially complete. In 2013 and 2012, cash payments of $11 and $23, respectively, were made against layoff reserves related to the 2011 restructuring programs.

Alcoa does not include Restructuring and other charges in the results of its reportable segments. The pretax impact of allocating such charges to segment results would have been as follows:

	2013	2012	2011
Alumina	$ 11	$ 3	$ 39
Primary Metals	295	20	212
Global Rolled Products	15	43	19
Engineered Products and Solutions	27	13	(3)
Segment total	348	79	267
Corporate	434	93	14
Total restructuring and other charges	$782	$172	$281

Activity and reserve balances for restructuring charges were as follows:

	Layoff costs	Other exit costs	Total
Reserve balances at December 31, 2010	$ 53	$ 63	$ 116
2011:			
Cash payments	(45)	(9)	(54)
Restructuring charges	93	37	130
Other*	(24)	(34)	(58)
Reserve balances at December 31, 2011	77	57	134
2012:			
Cash payments	(44)	(13)	(57)
Restructuring charges	47	13	60
Other*	(21)	(5)	(26)
Reserve balances at December 31, 2012	59	52	111
2013:			
Cash payments	(63)	(11)	(74)
Restructuring charges	201	85	286
Other*	(101)	(84)	(185)
Reserve balances at December 31, 2013	$ 96	$ 42	$ 138

* Other includes reversals of previously recorded restructuring charges and the effects of foreign currency translation. In 2013, Other for layoff costs also included a reclassification of $92 in pension costs, as this obligation was included in Alcoa's separate liability for pension obligations (see Note W). Also in 2013, Other for other exit costs also included a reclassification of the following restructuring charges: $58 in asset retirement and $12 in environmental obligations, as these liabilities were included in Alcoa's separate reserves for asset retirement obligations (see Note C) and environmental remediation (see Note N), respectively. In 2011, Other for other exit costs also included a reclassification of the following restructuring charges: $18 in environmental and $17 in asset retirement obligations, as these liabilities were included in Alcoa's separate reserves for environmental remediation and asset retirement obligations, respectively.

The remaining reserves are expected to be paid in cash during 2014, with the exception of approximately $30 to $35, which is expected to be paid over the next several years for lease termination costs, ongoing site remediation work, and special separation benefit payments.

E. Goodwill and Other Intangible Assets

The following table details the changes in the carrying amount of goodwill:

	Alumina	Primary Metals	Global Rolled Products	Engineered Products and Solutions	Corporate*	Total
Balance at December 31, 2011:						
Goodwill	$ 11	$ 991	$ 208	$ 2,694	$ 1,281	$ 5,185
Accumulated impairment losses	-	-	-	(28)	-	(28)
	11	991	208	2,666	1,281	5,157
Acquisition of businesses	-	-	-	(1)	-	(1)
Translation	(1)	6	6	12	(9)	14
Balance at December 31, 2012:						
Goodwill	10	997	214	2,705	1,272	5,198
Accumulated impairment losses	-	-	-	(28)	-	(28)
	10	997	214	2,677	1,272	5,170
Impairment	-	(989)	-	-	(742)	(1,731)
Translation	(1)	(8)	4	(7)	(12)	(24)
Balance at December 31, 2013:						
Goodwill	9	989	218	2,698	1,260	5,174
Accumulated impairment losses	-	(989)	-	(28)	(742)	(1,759)
	$ 9	$ -	$ 218	$ 2,670	$ 518	$ 3,415

* As of December 31, 2013, $493 of the amount reflected in Corporate is allocated to three of Alcoa's four reportable segments ($158 to Alumina, $61 to Global Rolled Products, and $274 to Engineered Products and Solutions) included in the table above for purposes of impairment testing (see Note A). This goodwill is reflected in Corporate for segment reporting purposes because it is not included in management's assessment of performance by the three reportable segments.

In 2013, Alcoa recognized an impairment of goodwill in the amount of $1,731 ($1,719 after noncontrolling interest) related to the annual impairment review of the Primary Metals segment (see Goodwill and Other Intangible Assets policy in Note A).

Other intangible assets, which are included in Other noncurrent assets on the accompanying Consolidated Balance Sheet, were as follows:

December 31, 2013	Gross carrying amount	Accumulated amortization
Computer software	$ 988	$ (743)
Patents and licenses	133	(93)
Other intangibles	100	(32)
Total amortizable intangible assets	1,221	(868)
Indefinite-lived trade names and trademarks	46	-
Total other intangible assets	$ 1,267	$ (868)

December 31, 2012	Gross carrying amount	Accumulated amortization
Computer software	$ 907	$ (664)
Patents and licenses	133	(88)
Other intangibles	101	(28)
Total amortizable intangible assets	1,141	(780)
Indefinite-lived trade names and trademarks	46	-
Total other intangible assets	$ 1,187	$ (780)

Computer software consists primarily of software costs associated with an enterprise business solution (EBS) within Alcoa to drive common systems among all businesses.

Amortization expense related to the intangible assets in the tables above for the years ended December 31, 2013, 2012, and 2011 was $73, $82, and $86, respectively, and is expected to be in the range of approximately $60 to $70 annually from 2014 to 2018.

F. Acquisitions and Divestitures

Pro forma results of the Company, assuming all acquisitions described below were made at the beginning of the earliest prior period presented, would not have been materially different from the results reported.

2012 Divestitures. In November 2012, Alcoa completed the sale of its 351-megawatt Tapoco Hydroelectric Project ("Tapoco") to Brookfield Renewable Energy Partners for $597 in cash. Alcoa recognized a gain of $320 ($173 after-tax) in Other income, net on the accompanying Statement of Consolidated Operations, of which a gain of $426 ($275 after-tax) was reflected in the Primary Metals segment and a loss of $106 ($102 after-tax) was reflected in Corporate. The amount in Corporate represents the write-off of goodwill and capitalized interest related to Tapoco that were not included in the assets of the Primary Metals segment. This transaction is no longer subject to post-closing adjustments. Tapoco is a four-station hydroelectric project located on the Little Tennessee and Cheoah Rivers in eastern Tennessee and western North Carolina. The transaction included four generating stations and dams, 86 miles of transmission lines, and approximately 14,500 acres of land associated with and surrounding Tapoco. The power generated by Tapoco was primarily consumed by Alcoa's smelter in Tennessee, which was temporarily idled in 2009 and permanently shut down in 2011. Since 2009, the power generated from Tapoco was sold into the open market. Prior to November 2012, the carrying value of the assets sold, which consisted of properties, plants, and equipment and intangible assets, along with an allocation of goodwill ($94) from the Primary Metals reporting unit, were classified as held for sale.

2011 Acquisitions. On March 9, 2011, Alcoa completed an acquisition of the aerospace fastener business of TransDigm Group Inc. for $240 (cash acquired and post-closing adjustments resulted in a net purchase price of $239). This business is a leading global designer, producer, and supplier of highly engineered aircraft components, with three locations (one in the state of California and two in the United Kingdom) that employ a combined 400 people. Specifically, this business provides a wide variety of high-strength, high temperature nickel alloy specialty engine fasteners, airframe bolts, and slotted entry bearings. In 2010, this business generated sales of $61. The assets and liabilities of this business were included in the Engineered Products and Solutions segment as of March 31, 2011; this business' results of operations were included in this segment beginning March 9, 2011. Based on the preliminary purchase price allocation, goodwill of $154 was recorded for this transaction. In 2012, the purchase price allocation was finalized based on the completion of a valuation study resulting in a $1 reduction of the initial goodwill amount. Approximately $60 of goodwill is deductible for income tax purposes. No other intangible assets were identified as a result of the final valuation. This transaction is no longer subject to post-closing adjustments. This acquisition is part of a strategic plan to accelerate the growth of Alcoa's fastener business, while adding efficiencies, broadening the existing technology base, and expanding product offerings to better serve customers and increase shareholder value.

Contingent Payments. In connection with the 2005 acquisition of two fabricating facilities in Russia, Alcoa could be required to make contingent payments of approximately $50 through 2015 based upon the achievement of various financial and operating targets. Any such payment would be reflected as additional goodwill.

G. Inventories

December 31,	2013	2012
Finished goods	$ 578	$ 542
Work-in-process	828	866
Bauxite and alumina	581	618
Purchased raw materials	474	536
Operating supplies	244	263
	$2,705	$2,825

At December 31, 2013 and 2012, the total amount of inventories valued on a LIFO basis was 34% and 35%, respectively. If valued on an average-cost basis, total inventories would have been $691 and $770 higher at December 31, 2013 and 2012, respectively. During the three-year period ended December 31, 2013, reductions in LIFO inventory quantities caused partial liquidations of the lower cost LIFO inventory base. These liquidations resulted in the recognition of income of $26 ($17 after-tax) in 2013, $1 ($1 after-tax) in 2012, and $2 ($1 after-tax) in 2011.

H. Properties, Plants, and Equipment, Net

December 31,	2013	2012
Land and land rights, including mines	$ 639	$ 676
Structures:		
Alumina:		
Alumina refining	3,049	3,319
Bauxite mining	1,591	1,563
Primary Metals:		
Aluminum smelting	3,863	4,042
Power generation	683	604
Global Rolled Products	1,256	1,232
Engineered Products and Solutions	693	678
Other	755	760
	11,890	12,198
Machinery and equipment:		
Alumina:		
Alumina refining	4,685	5,279
Bauxite mining	596	650
Primary Metals:		
Aluminum smelting	7,674	8,114
Power generation	1,101	994
Global Rolled Products	5,374	5,174
Engineered Products and Solutions	2,481	2,415
Other	859	883
	22,770	23,509
	35,299	36,383
Less: accumulated depreciation, depletion, and amortization	19,227	19,190
	16,072	17,193
Construction work-in-progress	1,567	1,754
	$17,639	$18,947

As of December 31, 2013 and 2012, the net carrying value of temporarily idled smelting assets was $404 and $310, representing 655 kmt and 547 kmt of idle capacity, respectively. Additionally, the net carrying value of permanently idled smelting assets, representing 44 kmt, was written off in 2013 (see Note D). Also, the net carrying value of temporarily idled refining assets was $60 and $68 as of December 31, 2013 and 2012, representing 1,216 kmt and 1,277 kmt of idle capacity, respectively.

I. Investments

December 31,	2013	2012
Equity investments	$1,777	$1,782
Other investments	130	78
	$1,907	$1,860

Equity Investments. As of December 31, 2013 and 2012, Equity investments included an interest in a project to develop a fully-integrated aluminum complex in Saudi Arabia (see below), hydroelectric power projects in Brazil (see Note N), a smelter operation in Canada (50% of Pechiney Reynolds Quebec, Inc.), bauxite mining interests in Guinea (45% of Halco Mining, Inc.) and Brazil (18.2% of Mineração Rio do Norte S.A.), and a natural gas pipeline in Australia (see Note N). Pechiney Reynolds Quebec, Inc. owns a 50.1% interest in the Bécancour smelter in Quebec, Canada thereby entitling Alcoa to a 25.05% interest in the smelter. Through two wholly-owned Canadian subsidiaries, Alcoa also owns 49.9% of the Bécancour smelter. Halco Mining, Inc. owns 100% of Boké Investment Company, which owns 51% of Compagnie des Bauxites de Guinée. The investments in the bauxite mining interests in Guinea and Brazil and the natural gas pipeline in Australia are held by wholly-owned subsidiaries of Alcoa World Alumina and Chemicals (AWAC), which is owned 60% by Alcoa and 40% by Alumina Limited. In 2013, 2012, and 2011, Alcoa received $89, $101, and $100, respectively, in dividends from its equity investments.

Alcoa and Saudi Arabian Mining Company (known as “Ma’aden”) have a 30-year joint venture shareholders’ agreement (automatic extension for an additional 20 years, unless the parties agree otherwise or unless earlier terminated) setting forth the terms for the development, construction, ownership, and operation of an integrated bauxite mine, alumina refinery, aluminum smelter, and rolling mill, in Saudi Arabia. Specifically, the project to be developed by the joint venture will consist of: (i) a bauxite mine for the extraction of approximately 4,000 kmt of bauxite from the Al Ba’itha bauxite deposit near Quiba in the northern part of Saudi Arabia; (ii) an alumina refinery with an initial capacity of 1,800 kmt; (iii) a primary aluminum smelter with an initial capacity of 740 kmt; and (iv) a rolling mill with an initial capacity of 380 kmt. The refinery, smelter, and rolling mill are being constructed in an industrial area at Ras Al Khair on the east coast of Saudi Arabia. The facilities will use critical infrastructure, including power generation derived from reserves of natural gas, as well as port and rail facilities, developed by the government of Saudi Arabia. First production from the rolling mill and the smelter occurred in December 2013 and 2012, respectively. For the mine and refinery, first production is expected in 2014.

In 2012, Alcoa and Ma’aden agreed to expand the capabilities of the rolling mill to include a capacity of 100 kmt dedicated to supplying aluminum automotive, building and construction, and foil stock sheet. First production related to the expanded capacity is expected in 2014. This expansion is not expected to result in additional equity investment (see below) due to significant savings anticipated from a change in the project execution strategy of the initial 380 kmt capacity of the rolling mill.

The joint venture is owned 74.9% by Ma’aden and 25.1% by Alcoa and consists of three separate companies as follows: one each for the mine and refinery, the smelter, and the rolling mill. Following the signing of the joint venture shareholders’ agreement, Alcoa paid Ma’aden $80 representing the initial investment in the project. In addition, Alcoa paid $56 to Ma’aden, representing Alcoa’s pro rata share of certain agreed upon pre-incorporation costs incurred by Ma’aden before formation of the joint venture.

Ma’aden and Alcoa have put and call options, respectively, whereby Ma’aden can require Alcoa to purchase from Ma’aden, or Alcoa can require Ma’aden to sell to Alcoa, a 14.9% interest in the joint venture at the then fair market value. These options may only be exercised in a six-month window that opens five years after the Commercial Production Date (as defined in the joint venture shareholders’ agreement) and, if exercised, must be exercised for the full 14.9% interest.

The Alcoa affiliate that holds Alcoa’s interests in the smelting company and the rolling mill company is wholly owned by Alcoa, and the Alcoa affiliate that holds Alcoa’s interests in the mining and refining company is wholly owned by AWAC. Except in limited circumstances, Alcoa may not sell, transfer or otherwise dispose of or encumber or enter into any agreement in respect of the votes or other rights attached to its interests in the joint venture without Ma’aden’s prior written consent.

A number of Alcoa employees perform various types of services for the smelting, rolling mill, and refining and mining companies as part of the construction of the fully-integrated aluminum complex. At December 31, 2013 and 2012, Alcoa had an outstanding receivable of $31 and $28, respectively, from the smelting, rolling mill, and refining and mining companies for labor and other employee-related expenses.

Capital investment in the project is expected to total approximately $10,800 (SAR 40.5 billion). Alcoa’s equity investment in the joint venture will be approximately $1,100, and Alcoa will be responsible for its pro rata share of the joint venture’s project financing. Alcoa has contributed $832, including $171 and $253 in 2013 and 2012, respectively, towards the $1,100 commitment. As of December 31, 2013 and 2012, the carrying value of Alcoa’s investment in this project was $951 and $816, respectively.

In late 2010, the smelting and rolling mill companies entered into project financing totaling $4,035, of which $1,013 represents Alcoa’s share (the equivalent of Alcoa’s 25.1% interest in the smelting and rolling mill companies). Also, in late 2012, the smelting and rolling mill companies entered into additional project financing totaling $480, of which $120 represents Alcoa’s share. In conjunction with the financings, Alcoa issued guarantees on behalf of the smelting and rolling mill companies to the lenders in the event that such companies default on their debt service requirements through June 2017 and December 2018, respectively, (Ma’aden issued similar guarantees for its 74.9% interest). Alcoa’s guarantees for the smelting and rolling mill companies cover total debt service requirements of $121 in principal and up to a maximum of approximately $60 in interest per year (based on projected interest rates). At December 31, 2013 and 2012, the combined fair value of the guarantees was $10, which was included in Other noncurrent liabilities and deferred credits on the accompanying Consolidated Balance Sheet. Under the project financings, a downgrade of Alcoa’s credit ratings below investment grade by at least two agencies would require Alcoa to provide a letter of credit or fund an escrow account for a portion or all of Alcoa’s remaining equity commitment to the joint venture project in Saudi Arabia.

In late 2011, the refining and mining company entered into project financing totaling $1,992, of which $500 represents AWAC’s 25.1% interest in the mining and refining company. In conjunction with the financing, Alcoa, on behalf of AWAC, issued guarantees to the lenders in the event that the mining and refining company defaults on its debt service requirements through June 2019 (Ma’aden issued similar guarantees for its 74.9% interest). Alcoa’s guarantees for the mining and refining company cover total debt service requirements of $60 in principal and up to a maximum of approximately $25 in interest per year (based on projected interest rates). At December 31, 2013 and 2012, the combined fair value of the guarantees was $4, which was included in Other noncurrent liabilities and deferred credits on the accompanying Consolidated Balance Sheet. In the event Alcoa would be required to make payments under the guarantees, 40% of such amount would be contributed to Alcoa by Alumina Limited, consistent with its ownership interest in AWAC. Under the project financing, a downgrade of Alcoa’s credit ratings below investment grade by at least two agencies would require Alcoa to provide a letter of credit or fund an escrow account for a portion or all of Alcoa’s remaining equity commitment to the joint venture project in Saudi Arabia.

In June 2013, all three joint venture companies entered into a 20-year gas supply agreement with Saudi Aramco, replacing the previous authorized gas allocation of the Ministry of Petroleum and Mineral Resources of Saudi Arabia

Table of Contents

(the “Ministry of Petroleum”). The gas supply agreement provides sufficient fuel to meet manufacturing process requirements as well as fuel to the adjacent combined water and power plant being constructed by Saline Water Conversion Corporation, which is owned by the government of Saudi Arabia and is responsible for desalinating sea water and producing electricity for Saudi Arabia. The combined water and power plant will convert the three joint venture companies’ gas into electricity and water at cost, which will be supplied to the refinery, smelter, and rolling mill. During 2013, the $350 letter of credit that was previously provided to the Ministry of Petroleum by Ma’aden (Alcoa was responsible for its pro rata share) under the gas allocation related to the completion of the refinery was terminated upon the mining and refining company entering into construction contracts. A $60 letter of credit previously provided to the Ministry of Petroleum by Ma’aden (Alcoa is responsible for its pro rata share) under the gas allocation related to the completion of certain auxiliary rolling facilities was outstanding as of December 31, 2013.

The parties subject to the joint venture shareholders’ agreement may not sell, transfer, or otherwise dispose of, pledge, or encumber any interests in the joint venture until certain milestones have been met as defined in both agreements. Under the joint venture shareholders’ agreement, upon the occurrence of an unremedied event of default by Alcoa, Ma’aden may purchase, or, upon the occurrence of an unremedied event of default by Ma’aden, Alcoa may sell, its interest for consideration that varies depending on the time of the default.

Other Investments. As of December 31, 2013 and 2012, Other investments included $119 and $67, respectively, in exchange-traded fixed income and equity securities, which are classified as available-for-sale and are carried at fair value with unrealized gains and losses recognized in other comprehensive income. Unrealized and realized gains and losses related to these securities were immaterial in 2013, 2012, and 2011.

J. Other Noncurrent Assets

December 31,	**2013**	**2012**
Cash surrender value of life insurance	$ 507	$ 464
Intangibles, net (E)	399	407
Value-added tax receivable	339	408
Prepaid gas transmission contract (N)	315	363
Fair value of derivative contracts (X)	220	364
Deferred mining costs, net	219	223
Advance related to European Commission Matter in Italy (N)	126	-
Prepaid pension benefit (W)	88	86
Unamortized debt expense	73	86
Other	342	311
	$2,628	$2,712

K. Debt

Long-Term Debt.

December 31,	2013	2012
6.00% Notes, due 2013	$ -	$ 422
5.25% Convertible Notes, due 2014	575	575
5.55% Notes, due 2017	750	750
6.50% Bonds, due 2018	250	250
6.75% Notes, due 2018	750	750
5.72% Notes, due 2019	750	750
6.150% Notes, due 2020	1,000	1,000
5.40% Notes, due 2021	1,250	1,250
5.87% Notes, due 2022	627	627
5.90% Notes, due 2027	625	625
6.75% Bonds, due 2028	300	300
5.95% Notes due 2037	625	625
BNDES Loans, due 2014-2029 (see below for weighted average rates)	325	397
Iowa Finance Authority Loan, due 2042 (4.75%)	250	250
Other*	185	205
	8,262	8,776
Less: amount due within one year	655	465
	$7,607	$8,311

* Other includes various financing arrangements related to subsidiaries, unamortized debt discounts related to the outstanding notes and bonds listed in the table above, a beneficial conversion feature related to the convertible notes, and adjustments to the carrying value of long-term debt related to interest swap contracts accounted for as fair value hedges (see Derivatives in Note X).

The principal amount of long-term debt maturing in each of the next five years is $658 in 2014, $30 in 2015, $30 in 2016, $778 in 2017, and $1,046 in 2018.

Public Debt—In May 2013, Alcoa elected to call for redemption the $422 in outstanding principal of its 6.00% Notes due July 2013 (the “Notes”) under the provisions of the Notes. The total cash paid to the holders of the called Notes was $435, which includes $12 in accrued and unpaid interest from the last interest payment date up to, but not including, the settlement date, and a $1 purchase premium. The purchase premium was recorded in Interest expense on the accompanying Statement of Consolidated Operations. This transaction was completed on June 28, 2013.

In January 2012, Alcoa repaid the $322 in outstanding principal of its 6.00% Notes as scheduled using available cash on hand.

In August 2012, Alcoa and the Iowa Finance Authority entered into a loan agreement for the proceeds from the issuance of $250 in Midwestern Disaster Area Revenue Bonds Series 2012 due 2042 (the “Bonds”). The Bonds were issued by the Iowa Finance Authority pursuant to the Heartland Disaster Tax Relief Act of 2008 for the purpose of financing all or part of the cost of acquiring, constructing, reconstructing, and renovating certain facilities at Alcoa’s rolling mill plant in Davenport, IA. Alcoa received $248 in net proceeds (reflecting payment of financing costs), which was classified as restricted cash. This transaction is not reflected in the accompanying Statement of Consolidated Cash Flows as it represents a non-cash financing and investing activity. At December 31, 2013 and 2012, Alcoa had $13 and $171, respectively, of restricted cash remaining, all of which was classified in Prepaid expenses and other current assets on the accompanying Consolidated Balance Sheet. Interest on the Bonds is at a rate of 4.75% per annum and is paid semi-annually in February and August, which commenced in February 2013. Alcoa has the option through the loan agreement to redeem the Bonds, as a whole or in part, on or after August 1, 2022, on at least 30 days, but not more than 60 days, prior notice to the holders of the Bonds at a redemption price equal to 100% of the principal amount thereof, without premium, plus accrued interest, if any, to the redemption date. The loan agreement ranks *pari passu* with Alcoa's other unsecured senior unsubordinated indebtedness.

In February 2011, Alcoa filed an automatic shelf registration statement with the Securities and Exchange Commission for an indeterminate amount of securities for future issuance. This shelf registration statement replaced Alcoa's existing shelf registration statement (filed in March 2008). As of December 31, 2013 and 2012, $1,250 in senior debt securities were issued under the current shelf registration statement.

BNDES Loans—Prior to 2012, Alcoa Alumínio (Alumínio) finalized certain documents related to a loan agreement with Brazil's National Bank for Economic and Social Development (BNDES). This loan agreement provides for a commitment of $397 (R$687), which is divided into three subloans, and was used to pay for certain expenditures of the Estreito hydroelectric power project. Interest on the three subloans is a Brazil real rate of interest equal to BNDES' long-term interest rate, 5.00% as of December 31, 2013 and 2012, plus a weighted-average margin of 1.48%. Principal and interest are payable monthly, which began in October 2011 and end in September 2029 for two of the subloans totaling R$667 and began in July 2012 and end in June 2018 for the subloan of R$20. This loan may be repaid early without penalty with the approval of BNDES.

As of December 31, 2013 and 2012, Alumínio's outstanding borrowings were $254 (R$599) and $311 (R$637), respectively, and the weighted-average interest rate was 6.49%. During 2013 and 2012, Alumínio repaid $22 (R$47) and $20 (R$38), respectively, of outstanding borrowings. Additionally, Alumínio borrowed $1 (R$2) and $7 (R$13), under the loan in 2013 and 2012, respectively.

In December 2012, Alumínio finalized certain documents related to another loan agreement with BNDES. This loan agreement provides for a commitment of $85 (R$177) and also was used to pay for certain expenditures of the Estreito hydroelectric power project. Due to the timing of the finalization of the loan documents and the expenditures of the project, Alumínio advanced the cash necessary to the consortium to pay for the expenditures supported by this loan. Interest on the loan is a Brazil real rate of interest equal to BNDES' long-term interest rate plus a margin of 1.55%. Principal and interest are payable monthly, which began in January 2013 and end in September 2029. This loan may be repaid early without penalty with the approval of BNDES. As of December 31, 2013 and 2012, Alumínio's outstanding borrowings were $71 (R$166) and $86 (R$177), respectively, and the interest rate was 6.55%. During 2013, Alumínio repaid $5 (R$11) of outstanding borrowings.

Previously, Alumínio had two other separate loan agreements (the "First Loans") with BNDES, which provided a combined commitment of $622 (R$1,150) and were used to pay for certain expenditures of the Juruti bauxite mine development and the São Luís refinery expansion. During 2012, Alumínio repaid the remaining $252 (R$511) of outstanding borrowings related to the First Loans, which were repaid early without penalty under the approval of BNDES. With the full repayment of the First Loans, the commitments were effectively terminated.

Credit Facilities. Alcoa maintains a Five-Year Revolving Credit Agreement, dated July 25, 2011, (the "Credit Agreement") with a syndicate of lenders and issuers named therein. The Credit Agreement provides a $3,750 senior unsecured revolving credit facility (the "Credit Facility"), the proceeds of which are to be used to provide working capital or for other general corporate purposes of Alcoa. Subject to the terms and conditions of the Credit Agreement, Alcoa may from time to time request increases in lender commitments under the Credit Facility, not to exceed $500 in aggregate principal amount, and may also request the issuance of letters of credit, subject to a letter of credit sublimit of $1,000 under the Credit Facility.

The Credit Facility was scheduled to mature on July 25, 2016; however, on December 7, 2012, Alcoa received approval for a one-year extension of the maturity date by the lenders and issuers that support $3,700 of the Credit Facility (approval for the remaining $50 was received on January 8, 2013). As such, the Credit Facility now matures on July 25, 2017, unless extended or earlier terminated in accordance with the provisions of the Credit Agreement. Alcoa may make one additional one-year extension request during the remaining term of the Credit Facility, subject to the lender consent requirements set forth in the Credit Agreement. Under the provisions of the Credit Agreement, Alcoa will pay a fee of 0.25% (based on Alcoa's long-term debt ratings as of December 31, 2013) of the total commitment per annum to maintain the Credit Facility.

The Credit Facility is unsecured and amounts payable under it will rank *pari passu* with all other unsecured, unsubordinated indebtedness of Alcoa. Borrowings under the Credit Facility may be denominated in U.S. dollars or euros. Loans will bear interest at a base rate or a rate equal to LIBOR, plus, in each case, an applicable margin based on the credit ratings of Alcoa's outstanding senior unsecured long-term debt. The applicable margin on base rate loans and LIBOR loans will be 0.50% and 1.50% per annum, respectively, based on Alcoa's long-term debt ratings as of December 31, 2013. Loans may be prepaid without premium or penalty, subject to customary breakage costs.

The Credit Agreement includes the following covenants, among others, (a) a leverage ratio, (b) limitations on Alcoa's ability to incur liens securing indebtedness for borrowed money, (c) limitations on Alcoa's ability to consummate a merger, consolidation or sale of all or substantially all of its assets, and (d) limitations on Alcoa's ability to change the nature of its business. As of December 31, 2013 and 2012, Alcoa was in compliance with all such covenants.

The obligation of Alcoa to pay amounts outstanding under the Credit Facility may be accelerated upon the occurrence of an "Event of Default" as defined in the Credit Agreement. Such Events of Default include, among others, (a) Alcoa's failure to pay the principal of, or interest on, borrowings under the Credit Facility, (b) any representation or warranty of Alcoa in the Credit Agreement proving to be materially false or misleading, (c) Alcoa's breach of any of its covenants contained in the Credit Agreement, and (d) the bankruptcy or insolvency of Alcoa.

There were no amounts outstanding at December 31, 2013 and 2012 and no amounts were borrowed during 2013 or 2012 under the Credit Facility.

In 2012, Alcoa entered into two term loan agreements and six revolving credit agreements, providing a combined borrowing capacity of $990, each with a different financial institution. The two term loan agreements (totaling $350) and one of the revolving credit agreements ($150) were terminated during 2012 and 2013, respectively, upon repayment of existing borrowings. Also, in 2013, four of the revolving credit agreements were due to expire, and, therefore, were extended to September 2014 through September 2015.

In 2013, Alcoa entered into five additional credit arrangements, one term loan agreement (later replaced with a revolving credit agreement) and four revolving credit agreements, providing a combined borrowing capacity of $700, each with a different financial institution. These five additional revolving credit agreements expire between February 2014 and December 2014 (two of these agreements were originally due to expire in 2013).

The purpose of any borrowings under all arrangements in both 2013 and 2012 was to provide working capital and for other general corporate purposes, including contributions to Alcoa's pension plans. The covenants contained in all the arrangements are the same as the Credit Agreement (see above).

In 2013 and 2012, Alcoa borrowed and repaid $1,850 and $600, respectively, under the respective credit arrangements. The weighted-average interest rate and weighted-average days outstanding of the respective borrowings during 2013 and 2012 were 1.57% and 1.89%, respectively, and 213 days and 260 days, respectively.

In summary, at December 31, 2013, Alcoa has ten revolving credit facilities (excluding the Credit Facility above), providing a combined capacity of $1,190, of which $1,040 is due to expire in 2014 and $150 is due to expire in 2015.

Short-Term Borrowings. At December 31, 2013 and 2012, Short-term borrowings were $57 and $53, respectively. These amounts included $52 and $48 at December 31, 2013 and 2012, respectively, related to accounts payable settlement arrangements with certain vendors and third-party intermediaries. These arrangements provide that, at the vendor's request, the third-party intermediary advances the amount of the scheduled payment to the vendor, less an appropriate discount, before the scheduled payment date and Alcoa makes payment to the third-party intermediary on the date stipulated in accordance with the commercial terms negotiated with its vendors. Alcoa records imputed interest related to these arrangements as interest expense in the Statement of Consolidated Operations.

During 2013 and 2012, Alcoa's subsidiary, Alumínio, borrowed and repaid a total of $52 and $280, respectively, in new loans with a weighted-average interest rate of 0.72% and 2.32%, respectively, and a weighted-average maturity of 70 days and 172 days, respectively, from two financial institutions. The purpose of these borrowings was to support Alumínio's export operations.

Commercial Paper. Alcoa had no outstanding commercial paper at December 31, 2013 and 2012. In 2013 and 2012, the average outstanding commercial paper was $242 and $354, respectively. Commercial paper matures at various times within one year and had an annual weighted average interest rate of 0.8% during each of 2013, 2012, and 2011.

L. Other Noncurrent Liabilities and Deferred Credits

December 31,	**2013**	**2012**
Asset retirement obligations (C)	$ 544	$ 535
Environmental remediation (N)	461	458
Fair value of derivative contracts (X)	420	606
Income taxes (T)	403	460
Accrued compensation and retirement costs	342	322
Liability related to the resolution of a legal matter (N)	296	-
Deferred credit related to derivative contract (X)	157	330
Deferred alumina sales revenue	101	108
Other	247	259
	$2,971	$3,078

M. Noncontrolling Interests

The following table summarizes the noncontrolling shareholders' interests in the equity of certain Alcoa majority-owned consolidated subsidiaries:

December 31,	**2013**	**2012**
Alcoa World Alumina and Chemicals	$2,896	$3,295
Other	33	29
	$2,929	$3,324

In 2013, 2012, and 2011, Alcoa received $9, $171, and $169, respectively, in contributions from the noncontrolling shareholder (Alumina Limited) of Alcoa World Alumina and Chemicals.

In 2013 and 2012, Noncontrolling interests included a charge of $17 and $34, respectively, related to a legal matter (see Settlement with Alumina Limited under Litigation in Note N).

N. Contingencies and Commitments

Contingencies

Litigation

Alba Matter

Civil Suit. On February 27, 2008, Alcoa Inc. received notice that Aluminium Bahrain B.S.C. ("Alba") had filed suit against Alcoa, Alcoa World Alumina LLC ("AWA"), and William Rice (collectively, the "Alcoa Parties"), and others, in the U.S. District Court for the Western District of Pennsylvania (the "Court"), Civil Action number 08-299, styled Aluminium Bahrain B.S.C. v. Alcoa Inc., Alcoa World Alumina LLC, William Rice, and Victor Phillip Dahdaleh. The complaint alleged that certain Alcoa entities and their agents, including Victor Phillip Dahdaleh, had engaged in a conspiracy over a period of 15 years to defraud Alba. The complaint further alleged that Alcoa and its employees or agents (1) illegally bribed officials of the government of Bahrain and/or officers of Alba in order to force Alba to purchase alumina at excessively high prices, (2) illegally bribed officials of the government of Bahrain and/or officers of Alba and issued threats in order to pressure Alba to enter into an agreement by which Alcoa would purchase an equity interest in Alba, and (3) assigned portions of existing supply contracts between Alcoa and Alba for the sole purpose of facilitating alleged bribes and unlawful commissions. The complaint alleged that Alcoa and the other defendants violated the Racketeer Influenced and Corrupt Organizations Act (RICO) and committed fraud. Alba claimed damages in excess of $1,000. Alba's complaint sought treble damages with respect to its RICO claims; compensatory, consequential, exemplary, and punitive damages; rescission of the 2005 alumina supply contract; and attorneys' fees and costs.

On October 9, 2012, the Alcoa Parties, without admitting any liability, entered into a settlement agreement with Alba. The agreement called for AWA to pay Alba $85 in two equal installments, one-half at time of settlement and one-half one year later, and for the case against the Alcoa Parties to be dismissed with prejudice. Additionally, AWA and Alba entered into a long-term alumina supply agreement. On October 9, 2012, pursuant to the settlement agreement, AWA paid Alba $42.5, and all claims against the Alcoa Parties were dismissed with prejudice. On October 9, 2013 pursuant to the settlement agreement, AWA paid the remaining $42.5. Based on the settlement agreement, in the 2012 third quarter, Alcoa recorded a $40 charge in addition to the $45 charge it recorded in the 2012 second quarter in respect of the suit (see Agreement with Alumina Limited below).

Government Investigations. On February 26, 2008, Alcoa Inc. advised the Department of Justice ("DOJ") and the Securities and Exchange Commission ("SEC") that it had recently become aware of the claims by Alba as alleged in the Alba civil suit, had already begun an internal investigation and intended to cooperate fully in any investigation that the DOJ or the SEC may commence. On March 17, 2008, the DOJ notified Alcoa that it had opened a formal investigation. The SEC subsequently commenced a concurrent investigation. Alcoa has been cooperating with the government since that time.

In the past year, Alcoa had been seeking settlements of both investigations. In the second quarter of 2013, Alcoa proposed to settle the DOJ matter by offering the DOJ a cash payment of $103. Based on this offer, Alcoa recorded a charge of $103 in the 2013 second quarter. Also in the second quarter of 2013, Alcoa exchanged settlement offers with the SEC. However, the SEC staff rejected Alcoa's offer of $60 and no charge was recorded. During the remainder of 2013, settlement discussions with both the DOJ and the SEC continued.

On January 9, 2014, Alcoa resolved the investigations by the DOJ and the SEC. The settlement with the DOJ was reached with AWA. Under the terms of a plea agreement entered into with the DOJ, effective January 9, 2014, AWA pled guilty to one count of violating the anti-bribery provisions of the Foreign Corrupt Practices Act of 1977, as amended (the "FCPA"). As part of the DOJ resolution, AWA agreed to pay a total of $223, including a fine of $209 payable in five equal installments over four years. The first installment of $41.8, plus a one-time administrative forfeiture of $14, will be paid in the first quarter of 2014 (paid on January 22, 2014), and the remaining installments of $41.8 each will be paid in the first quarters of 2015-2018. The DOJ is bringing no case against Alcoa Inc.

Effective January 9, 2014, the Company also settled civil charges filed by the SEC in an administrative proceeding relating to the anti-bribery, internal controls, and books and records provisions of the FCPA. Under the terms of the settlement with the SEC, the Company agreed to a settlement amount of $175, but will be given credit for the $14 one-time forfeiture payment, which is part of the DOJ resolution, resulting in a total cash payment to the SEC of $161 payable in five equal installments over four years. The first installment of $32.2 will be paid to the SEC in the first quarter of 2014 (paid on January 22, 2014), and the remaining installments of $32.2 each will be paid in the first quarters of 2015-2018.

There was no allegation in the filings by the DOJ and there was no finding by the SEC that anyone at Alcoa Inc. knowingly engaged in the conduct at issue.

Based on the resolutions with both the DOJ and SEC, in the 2013 fourth quarter, Alcoa recorded a $288 charge, which includes legal costs of $7, in addition to the $103 charge it recorded in the 2013 second quarter in respect of the investigations (see Agreement with Alumina Limited below).

Agreement with Alumina Limited. AWA is a U.S.-based Alcoa World Alumina and Chemicals ("AWAC") company organized under the laws of Delaware that owns, directly or indirectly, alumina refineries and bauxite mines in the Atlantic region. AWAC is an unincorporated global bauxite mining and alumina refining venture between Alcoa and Alumina Limited. AWAC consists of a number of affiliated operating entities, including AWA, which own or operate bauxite mines and alumina refineries in seven countries. Alcoa owns 60% and Alumina Limited owns 40% of these individual entities, which are consolidated by the Company for financial reporting purposes.

In October 2012, Alcoa and Alumina Limited entered into an agreement to allocate the costs of the Alba civil settlement and all legal fees associated with this matter (including the government investigations discussed above) between Alcoa and Alumina Limited on an 85% and 15% basis, respectively, but this would occur only if a settlement is reached with the DOJ and the SEC regarding their investigations. As such, the $85 civil settlement in 2012 and all legal costs associated with the civil suit and government investigations incurred prior to 2013 were allocated on a 60% and 40% basis in the respective periods on Alcoa's Statement of Consolidated Operations. As a result of the resolutions of the government investigations, the $384 charge and legal costs incurred in 2013 were allocated on an 85% and 15% basis per the allocation agreement with Alumina Limited. Additionally, the $85 civil settlement from 2012 and all legal costs associated with the civil suit and government investigations incurred prior to 2013 were reallocated on the 85% and 15% basis. The following table details the activity related to the Alba matter:

	2013			2012		
	Alcoa	Alumina Limited	Total	Alcoa	Alumina Limited	Total
Government investigations[1]	$ 326	$ 58	$ 384	$ -	$ -	$ -
Civil suit[1]	-	-	-	51	34	85
Reallocation of civil suit	21	(21)	-	-	-	-
Reallocation of legal costs	20	(20)	-	-	-	-
Loss before income taxes	367	17	384	51	34	85
Benefit for income taxes	66	-	66	18	-	18
Net loss[2]	$ 301	$ 17	$ 318	$ 33	$ 34	$ 67

(1) The amount in the Total column was recorded in Restructuring and other charges (see Note D).

(2) In 2013 and 2012, the amount for Alcoa was included in Net (loss) income attributable to Alcoa, and the amount for Alumina Limited was included in Net income (loss) attributable to noncontrolling interests.

Other Matters

In November 2006, in Curtis v. Alcoa Inc., Civil Action No. 3:06cv448 (E.D. Tenn.), a class action was filed by plaintiffs representing approximately 13,000 retired former employees of Alcoa or Reynolds Metals Company and spouses and dependents of such retirees alleging violation of the Employee Retirement Income Security Act (ERISA) and the Labor-Management Relations Act by requiring plaintiffs, beginning January 1, 2007, to pay health insurance premiums and increased co-payments and co-insurance for certain medical procedures and prescription drugs. Plaintiffs alleged these changes to their retiree health care plans violated their rights to vested health care benefits. Plaintiffs additionally alleged that Alcoa had breached its fiduciary duty to plaintiffs under ERISA by misrepresenting to them that their health benefits would never change. Plaintiffs sought injunctive and declaratory relief, back payment of benefits, and attorneys' fees. Alcoa had consented to treatment of plaintiffs' claims as a class action. During the fourth quarter of 2007, following briefing and argument, the court ordered consolidation of the plaintiffs' motion for preliminary injunction with trial, certified a plaintiff class, and bifurcated and stayed the plaintiffs' breach of fiduciary duty claims. Trial in the matter was held over eight days commencing September 22, 2009 and ending on October 1, 2009 in federal court in Knoxville, TN before the Honorable Thomas Phillips, U.S. District Court Judge.

On March 9, 2011, the court issued a judgment order dismissing plaintiffs' lawsuit in its entirety with prejudice for the reasons stated in its Findings of Fact and Conclusions of Law. On March 23, 2011, plaintiffs filed a motion for clarification and/or amendment of the judgment order, which sought, among other things, a declaration that plaintiffs' retiree benefits are vested subject to an annual cap and an injunction preventing Alcoa, prior to 2017, from modifying the plan design to which plaintiffs are subject or changing the premiums and deductibles that plaintiffs must pay. Also on March 23, 2011, plaintiffs filed a motion for award of attorneys' fees and expenses. On June 11, 2012, the court issued its memorandum and order denying plaintiffs' motion for clarification and/or amendment to the original judgment order. On July 6, 2012, plaintiffs filed a notice of appeal of the court's March 9, 2011 judgment. On July 12, 2012, the trial court stayed Alcoa's motion for assessment of costs pending resolution of plaintiffs' appeal. The appeal was docketed in the United States Court of Appeals for the Sixth Circuit as case number 12-5801. On August 29, 2012, the trial court dismissed plaintiffs' motion for attorneys' fees without prejudice to refiling the motion following the resolution of the appeal at the Sixth Circuit Court of Appeals. On May 9, 2013, the Sixth Circuit Court of Appeals issued an opinion affirming the trial court's denial of plaintiffs' claims for lifetime, uncapped retiree healthcare benefits. Plaintiffs filed a petition for rehearing on May 22, 2013 to which Alcoa filed a response on June 7, 2013. On September 12, 2013, the Sixth Circuit Court of Appeals denied plaintiffs' petition for rehearing. The trial court is now considering Alcoa's request for an award of costs, which had been stayed pending resolution of the appeal, and the plaintiffs' request for attorneys' fees, which had been dismissed without prejudice to refiling following resolution of the appeal. On December 17, 2013 the United States Supreme Court docketed the plaintiffs' petition for writ of certiorari to the Sixth Circuit Court of Appeals as Charles Curtis, et al., Individually and on Behalf of All Others Similarly Situated, Petitioners v. Alcoa Inc., et al., Docket No.13-728. Alcoa's opposition to this petition was filed on January 16, 2014 and Petitioners filed their reply on January 29, 2014.

On April 23, 2004, St. Croix Renaissance Group, L.L.L.P. (SCRG), Brownfield Recovery Corp., and Energy Answers Corporation of Puerto Rico (collectively referred to as "Plaintiffs") filed a suit against St. Croix Alumina L.L.C. and Alcoa World Alumina, LLC (collectively referred to as "Alcoa") in the Territorial Court of the Virgin Islands, Division of St. Croix for claims related to the sale of Alcoa's former St. Croix alumina refinery to Plaintiffs. Alcoa thereafter removed the case to federal court and after a several year period of discovery and motion practice, a jury trial on the matter took place in St. Croix from January 11, 2011 to January 20, 2011. The jury returned a verdict in favor of Plaintiffs and awarded damages as described: on a claim of breaches of warranty, the jury awarded $13; on the same claim, the jury awarded punitive damages in the amount of $6; and on a negligence claim for property damage, the jury awarded $10. Plaintiffs filed a motion seeking pre-judgment interest on the jury award. On February 17, 2011, Alcoa filed post-trial motions seeking judgment notwithstanding the verdict or, in the alternative, a new trial. On May 31, 2011, the court granted Alcoa's motion for judgment regarding Plaintiffs' $10 negligence award and denied the remainder of Alcoa's motions. Additionally, the court awarded Plaintiffs pre-judgment interest of $2 on the breach of warranty award. As a result of the court's post-trial decisions, Alcoa recorded a charge of $20 in 2011 (see Note D). On June 14, 2011, Alcoa filed a notice of appeal with the U.S. Court of Appeals for the Third Circuit regarding Alcoa's denied post-trial motions. On June 22, 2011, SCRG filed a notice of cross appeal with the Third Circuit Court related to certain pre-trial decisions of the court and of the court's post-trial ruling on the negligence claim. The Third Circuit Court referred this matter to mediation as is its standard practice in appeals. Following mediation and further, separate settlement discussions, the parties executed an agreement dated September 30, 2011 resolving the matter in its entirety, and subsequently jointly petitioned (i) the District Court to release Alcoa from the jury verdict and (ii) the Third Circuit Court of Appeals to dismiss the matter. On March 13, 2012, the District Court entered an order discharging Alcoa from the jury verdict and, on March 14, 2012, the Third Circuit Court of Appeals dismissed the matter. This matter is now fully resolved.

Before 2002, Alcoa purchased power in Italy in the regulated energy market and received a drawback of a portion of the price of power under a special tariff in an amount calculated in accordance with a published resolution of the Italian Energy Authority, Energy Authority Resolution n. 204/1999 ("204/1999"). In 2001, the Energy Authority published another resolution, which clarified that the drawback would be calculated in the same manner, and in the same amount, in either the regulated or unregulated market. At the beginning of 2002, Alcoa left the regulated energy market to purchase energy in the unregulated market. Subsequently, in 2004, the Energy Authority introduced regulation no. 148/2004 which set forth a different method for calculating the special tariff that would result in a different drawback for the regulated and unregulated markets. Alcoa challenged the new regulation in the Administrative Court of Milan and received a favorable judgment in 2006. Following this ruling, Alcoa continued to receive the power price drawback in accordance with the original calculation method, through 2009, when the European Commission declared all such special tariffs to be impermissible “state aid.” In 2010, the Energy Authority appealed the 2006 ruling to the Consiglio di Stato (final court of appeal). On December 2, 2011, the Consiglio di Stato ruled in favor of the Energy Authority and against Alcoa, thus presenting the opportunity for the energy regulators to seek reimbursement from Alcoa of an amount equal to the difference between the actual drawback amounts received over the relevant time period, and the drawback as it would have been calculated in accordance with regulation 148/2004. On February 23, 2012, Alcoa filed its appeal of the decision of the Consiglio di Stato (this appeal was subsequently withdrawn in March 2013). On March 26, 2012, Alcoa received a letter from the agency (Cassa Conguaglio per il Settore Eletrico (CCSE)) responsible for making and collecting payments on behalf of the Energy Authority demanding payment in the amount of approximately $110 (€85), including interest. By letter dated April 5, 2012, Alcoa informed CCSE that it disputes the payment demand of CCSE since (i) CCSE was not authorized by the Consiglio di Stato decisions to seek payment of any amount, (ii) the decision of the Consiglio di Stato has been appealed (see above), and (iii) in any event, no interest should be payable. On April 29, 2012, Law No. 44 of 2012 (“44/2012”) came into effect, changing the method to calculate the drawback. On February 21, 2013, Alcoa received a revised request letter from CSSE demanding Alcoa’s subsidiary, Alcoa Trasformazioni S.r.l., make a payment in the amount of $97 (€76), including interest, which reflects a revised calculation methodology by CCSE and represents the high end of the range of reasonably possible loss associated with this matter of $0 to $97 (€76). Alcoa has rejected that demand and has formally challenged it through an appeal before the Administrative Court on April 5, 2013. The Administrative Court scheduled a hearing for December 19, 2013, which was subsequently postponed until April 17, 2014. At this time, the Company is unable to reasonably predict an outcome for this matter.

European Commission Matters. In July 2006, the European Commission (EC) announced that it had opened an investigation to establish whether an extension of the regulated electricity tariff granted by Italy to some energy-intensive industries complied with European Union (EU) state aid rules. The Italian power tariff extended the tariff that was in force until December 31, 2005 through November 19, 2009 (Alcoa had been incurring higher power costs at its smelters in Italy subsequent to the tariff end date through the end of 2012). The extension was originally through 2010, but the date was changed by legislation adopted by the Italian Parliament effective on August 15, 2009. Prior to expiration of the tariff in 2005, Alcoa had been operating in Italy for more than 10 years under a power supply structure approved by the EC in 1996. That measure provided a competitive power supply to the primary aluminum industry and was not considered state aid from the Italian Government. The EC’s announcement expressed concerns about whether Italy’s extension of the tariff beyond 2005 was compatible with EU legislation and potentially distorted competition in the European market of primary aluminum, where energy is an important part of the production costs.

On November 19, 2009, the EC announced a decision in this matter stating that the extension of the tariff by Italy constituted unlawful state aid, in part, and, therefore, the Italian Government is to recover a portion of the benefit Alcoa received since January 2006 (including interest). The amount of this recovery was to be based on a calculation prepared by the Italian Government (see below). In late 2009, after discussions with legal counsel and reviewing the bases on which the EC decided, including the different considerations cited in the EC decision regarding Alcoa’s two smelters in Italy, Alcoa recorded a charge of $250 (€173), which included $20 (€14) to write off a receivable from the Italian Government for amounts due under the now expired tariff structure and $230 (€159) to establish a reserve. On April 19, 2010, Alcoa filed an appeal of this decision with the General Court of the EU. Alcoa will pursue all substantive and procedural legal steps available to annul the EC’s decision. Prior to 2012, Alcoa was involved in other legal proceedings related to this matter that sought the annulment of the EC’s July 2006 decision to open an investigation alleging that such decision did not follow the applicable procedural rules and requested injunctive relief to suspend the effectiveness of the EC’s November 19, 2009 decision. However, the decisions by the General Court, and subsequent appeals to the European Court of Justice, resulted in the denial of these remedies.

In June 2012, Alcoa received formal notification from the Italian Government with a calculated recovery amount of $375 (€303); this amount was reduced by $65 (€53) for amounts owed by the Italian Government to Alcoa, resulting in a net payment request of $310 (€250). In a notice published in the Official Journal of the European Union on

September 22, 2012, the EC announced that it had filed an action against the Italian Government on July 18, 2012 to compel it to collect the recovery amount, and on October 17, 2013, the ECJ ordered Italy to so collect. On September 27, 2012, Alcoa received a request for payment in full of the $310 (€250) by October 31, 2012. Following discussions with the Italian Government regarding the timing of such payment, Alcoa paid the requested amount in five quarterly installments of $69 (€50) beginning in October 2012 through December 2013. Notwithstanding the payment request, Alcoa's estimate of the most probable loss of the ultimate outcome of this matter and the low end of the range of reasonably possible loss, which is $219 (€159) to $418 (€303), remains the $219 (€159) (the U.S. dollar amount reflects the effects of foreign currency movements since 2009) recorded in 2009. At December 31, 2013, Alcoa no longer has a reserve for this matter. Instead, Alcoa has a noncurrent asset of $126 (€91) reflecting the excess of the total of the five payments made to the Italian Government over the reserve Alcoa recorded in 2009. The full extent of the loss will not be known until the final judicial determination, which could be a period of several years.

As a result of the EC's November 19, 2009 decision, management had contemplated ceasing operations at its Italian smelters due to uneconomical power costs. In February 2010, management agreed to continue to operate its smelters in Italy for up to six months while a long-term solution to address increased power costs could be negotiated. Over a portion of this time, a long-term solution was not able to be reached related to the Fusina smelter, therefore, in May 2010, Alcoa and the Italian Government agreed to a temporary idling of the Fusina smelter. As of June 30, 2010, the Fusina smelter was fully curtailed (44,000 metric-tons-per-year). For the Portovesme smelter, Alcoa executed a new power agreement effective September 1, 2010 through December 31, 2012, replacing the short-term, market-based power contract that was in effect since early 2010. This new agreement along with interruptibility rights (i.e. compensation for power interruptions when grids are overloaded) granted to Alcoa for the Portovesme smelter provided additional time to negotiate a long-term solution (the EC had previously determined that the interruptibility rights were not considered state aid).

At the end of 2011, as part of a restructuring of Alcoa's global smelting system, management decided to curtail operations at the Portovesme smelter during 2012 due to the uncertain prospects for viable, long-term power, along with rising raw materials costs and falling global aluminum prices (mid-2011 to late 2011). As of December 31, 2012, the Portovesme smelter was fully curtailed (150,000 metric-tons-per-year). This curtailment may lead to the permanent closure of the facility; however, Alcoa will keep the smelter in restart condition through June 2014.

In June 2013, Alcoa decided to permanently shut down and demolish the Fusina smelter due to persistent uneconomical conditions (see Note D).

In January 2007, the EC announced that it had opened an investigation to establish whether the regulated electricity tariffs granted by Spain comply with EU state aid rules. At the time the EC opened its investigation, Alcoa had been operating in Spain for more than nine years under a power supply structure approved by the Spanish Government in 1986, an equivalent tariff having been granted in 1983. The investigation is limited to the year 2005 and is focused both on the energy-intensive consumers and the distribution companies. The investigation provided 30 days to any interested party to submit observations and comments to the EC. With respect to the energy-intensive consumers, the EC opened the investigation on the assumption that prices paid under the tariff in 2005 were lower than a pool price mechanism, therefore being, in principle, artificially below market conditions. Alcoa submitted comments in which the company provided evidence that prices paid by energy-intensive consumers were in line with the market, in addition to various legal arguments defending the legality of the Spanish tariff system. It is Alcoa's understanding that the Spanish tariff system for electricity is in conformity with all applicable laws and regulations, and therefore no state aid is present in the tariff system. While Alcoa does not believe that an unfavorable decision is probable, management has estimated that the total potential impact from an unfavorable decision could be approximately $95 (€70) pretax. Also, while Alcoa believes that any additional cost would only be assessed for the year 2005, it is possible that the EC could extend its investigation to later years. If the EC's investigation concludes that the regulated electricity tariffs for industries are unlawful, Alcoa will have an opportunity to challenge the decision in the EU courts.

On February 4, 2014, the EC announced a decision in this matter stating that the electricity tariffs granted by Spain for year 2005 do not constitute unlawful state aid.

Environmental Matters. Alcoa continues to participate in environmental assessments and cleanups at more than 100 locations. These include owned or operating facilities and adjoining properties, previously owned or operating facilities and adjoining properties, and waste sites, including Superfund (Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)) sites. A liability is recorded for environmental remediation when a cleanup program becomes probable and the costs can be reasonably estimated.

As assessments and cleanups proceed, the liability is adjusted based on progress made in determining the extent of remedial actions and related costs. The liability can change substantially due to factors such as the nature and extent of contamination, changes in remedial requirements, and technological changes, among others.

Alcoa's remediation reserve balance was $509 and $532 at December 31, 2013 and 2012 (of which $48 and $74 was classified as a current liability), respectively, and reflects the most probable costs to remediate identified environmental conditions for which costs can be reasonably estimated.

In 2013, the remediation reserve was increased by $18 due to a charge of $12 related to the planned demolition of certain structures at the Massena West, NY and Baie Comeau, Quebec, Canada sites (see Note D) and a net charge of $6 associated with a number of other sites. In 2012, the remediation reserve was increased by $206 due to charges of $165 related to the Massena West, NY site (see below), charges totaling $45 related to smelter sites in Canada and Norway (see below), a charge of $14 related to the former East St. Louis, IL site (see below), a reversal of $30 related to the former Sherwin, TX site (see below), and a net charge of $12 associated with a number of other sites. In both periods, the changes to the remediation reserve, except for the aforementioned $12 in 2013, were recorded in Cost of goods sold on the accompanying Statement of Consolidated Operations.

Payments related to remediation expenses applied against the reserve were $40 and $22 in 2013 and 2012, respectively. These amounts include expenditures currently mandated, as well as those not required by any regulatory authority or third party. In 2013 and 2012, the change in the reserve also reflects a decrease of $1 and an increase of $1, respectively, due to the effects of foreign currency translation.

Included in annual operating expenses are the recurring costs of managing hazardous substances and environmental programs. These costs are estimated to be approximately 2% of cost of goods sold.

The following discussion provides details regarding the current status of certain significant reserves related to current or former Alcoa sites.

Massena West, NY—Alcoa has been conducting investigations and studies of the Grasse River, adjacent to Alcoa's Massena plant site, under a 1989 order from the U.S. Environmental Protection Agency (EPA) issued under CERCLA. Sediments and fish in the river contain varying levels of polychlorinated biphenyls (PCBs).

Beginning in 1998 through 2010, Alcoa submitted a number of Analysis of Alternatives Reports to the EPA documenting the results of river and sediment studies, potential alternatives for remedial actions related to the PCB contamination, and additional information requested by the EPA. Additionally, from 2004 to 2008, Alcoa completed work as outlined in an EPA-approved Remedial Options Pilot Study.

In the first half of 2012, Alcoa received final questions and comments from the EPA and other stakeholders on the then most recent revised Analysis of Alternatives Report submitted in March 2010, including a requirement that would increase the scope of the recommended capping alternative. In June 2012, Alcoa submitted a revised Analysis of Alternatives Report, which included four less alternatives than the previous report and addressed the final questions and comments from all stakeholders. These final questions and comments resulted in a change to Alcoa's recommended capping alternative by increasing the area to be remediated. Consequently, Alcoa increased the reserve associated with the Grasse River by $37 in 2012 to reflect the changes to the recommended alternative.

In October 2012, the EPA selected a proposed remedy from the alternatives included in the June 2012 Analysis of Alternatives Report and released a Proposed Remedial Action Plan (PRAP). The alternative selected by the EPA recommends capping PCB contaminated sediments with concentration in excess of one part per million in the main channel of the river and dredging PCB contaminated sediments in the near-shore areas where total PCBs exceed one part per million. This alternative will result in additional estimated costs above that of the alternative recommended by Alcoa in the June 2012 Analysis of Alternatives Report. As a result, Alcoa increased the reserve associated with the Grasse River by an additional $128 in 2012 to reflect such additional estimated costs of the EPA's proposed remedy. The PRAP was open for public comment until November 29, 2012.

The EPA completed its review of the comments received in early 2013 and, on April 5, 2013, issued a final Record of Decision (ROD). The ROD is consistent with the PRAP issued in October 2012, which reflected the EPA's selection of a remediation alternative estimated to cost $243. No further adjustment to the reserve associated with Grasse River was necessary due to the EPA's selected alternative as this amount was previously fully accrued. At December 31, 2013 and 2012, the reserve balance associated with this matter was $241 and $243, respectively. Alcoa is in the planning and design phase, which is expected to take approximately two to three years, followed by the actual remediation fieldwork that is expected to take approximately four years. The majority of the project funding is expected to be spent between 2016 and 2020.

Sherwin, TX—In connection with the sale of the Sherwin alumina refinery, which was required to be divested as part of the Reynolds merger in 2000, Alcoa agreed to retain responsibility for the remediation of the then existing environmental conditions, as well as a pro rata share of the final closure of the active bauxite residue waste disposal areas (known as the Copano facility). Alcoa's share of the closure costs is proportional to the total period of operation of the active waste disposal areas.

In 2012, Alcoa received a technical analysis of the closure plan for the active waste disposal areas and an operating plan for the Copano facility from Sherwin Alumina Company, both of which were needed in order to develop a closure cost estimate, including an assessment of Alcoa's potential liability. It was determined that the most probable course of action would result in a smaller liability than originally reserved due to new information related to the amount of storage capacity in the waste disposal areas and revised assumptions regarding Alcoa's share of the obligation based on the operating plan provided by Sherwin. As such, Alcoa reduced the reserve associated with Sherwin by $30 in 2012. At December 31, 2013 and 2012, the reserve balance associated with Sherwin was $35 and $36, respectively. Approximately half of the project funding is expected to be spent between 2014 and 2019. The remainder is not expected to be spent in the foreseeable future as it is dependent upon the operating life of the active waste disposal areas.

East St. Louis, IL—In response to questions regarding environmental conditions at the former East St. Louis operations, Alcoa and the City of East St. Louis, the owner of the site, entered into an administrative order with the EPA in December 2002 to perform a remedial investigation and feasibility study of an area used for the disposal of bauxite residue from historic alumina refining operations. A draft feasibility study was submitted to the EPA in April 2005. The feasibility study included remedial alternatives that ranged from no further action to significant grading, stabilization, and water management of the bauxite residue disposal areas. As a result, Alcoa increased the environmental reserve for this location by $15 in 2005.

In April 2012, in response to comments from the EPA and other stakeholders, Alcoa submitted a revised feasibility study to the EPA, which soon thereafter issued a PRAP identifying a soil cover as the EPA's recommended alternative. Based on this recommendation, Alcoa submitted a detailed design and cost estimate for implementation of the remedy. A draft consent decree was issued in May 2012 by the EPA and all parties are actively engaged in negotiating a final consent decree and statement of work. As a result, Alcoa increased the reserve associated with East St. Louis by $14 in 2012 to reflect the necessary costs for this remedy.

On July 30, 2012, the EPA issued a ROD for this matter and Alcoa began the process of bidding and contracting for the construction work. The ultimate outcome of negotiations and the bidding of the construction work could result in additional liability. On November 1, 2013, the Department of Justice lodged a consent decree on behalf of the EPA for

Alcoa to conduct the work outlined in the ROD. Alcoa is waiting final entry of the consent decree to begin work, which is expected in the first half of 2014. At December 31, 2013 and 2012, the reserve balance associated with this matter was $24 and $26, respectively. The majority of the project funding is expected to be spent between 2014 and 2015.

Fusina and Portovesme, Italy—In 1996, Alcoa acquired the Fusina smelter and rolling operations and the Portovesme smelter, both of which are owned by Alcoa's subsidiary Alcoa Trasformazioni S.r.l. ("Trasformazioni"), from Alumix, an entity owned by the Italian Government. At the time of the acquisition, Alumix indemnified Alcoa for pre-existing environmental contamination at the sites. In 2004, the Italian Ministry of Environment and Protection of Land and Sea (MOE) issued orders to Trasformazioni and Alumix for the development of a clean-up plan related to soil contamination in excess of allowable limits under legislative decree and to institute emergency actions and pay natural resource damages. Trasformazioni appealed the orders and filed suit against Alumix, among others, seeking indemnification for these liabilities under the provisions of the acquisition agreement. In 2009, Ligestra S.r.l. ("Ligestra"), Alumix's successor, and Trasformazioni agreed to a stay of the court proceedings while investigations were conducted and negotiations advanced towards a possible settlement.

In December 2009, Trasformazioni and Ligestra reached an agreement for settlement of the liabilities related to Fusina while negotiations continued related to Portovesme. The agreement outlines an allocation of payments to the MOE for emergency action and natural resource damages and the scope and costs for a proposed soil remediation project, which was formally presented to the MOE in mid-2010. The agreement is contingent upon final acceptance of the remediation project by the MOE. As a result of entering into this agreement, Alcoa increased the reserve by $12 in 2009 for Fusina. Based on comments received from the MOE and local and regional environmental authorities, Trasformazioni submitted a revised remediation plan in the first half of 2012; however, such revisions did not require any change to the existing reserve. In October 2013, the MOE approved the project submitted by Alcoa, resulting in no adjustment to the reserve. Alcoa is in the process of negotiating a final administrative agreement for conduct of the work

Additionally, due to new information derived from the site investigations conducted at Portovesme, Alcoa increased the reserve by $3 in 2009. In November 2011, Trasformazioni and Ligestra reached an agreement for settlement of the liabilities related to Portovesme, similar to the one for Fusina. A proposed soil remediation project for Portovesme was formally presented to the MOE in June 2012. Neither the agreement with Ligestra nor the proposal to the MOE resulted in a change to the reserve for Portovesme. In November 2013, the MOE rejected the proposed soil remediation project and requested a revised project be submitted in the first quarter of 2014. It is possible that the revised project may result in a change to the existing reserve for Portovesme.

Baie Comeau, Quebec, Canada—In August 2012, Alcoa presented an analysis of remediation alternatives to the Quebec Ministry of Sustainable Development, Environment, Wildlife and Parks (MDDEP), in response to a previous request, related to known PCBs and polycyclic aromatic hydrocarbons (PAHs) contained in sediments of the Anse du Moulin bay. As such, Alcoa increased the reserve for Baie Comeau by $25 in 2012 to reflect the estimated cost of Alcoa's recommended alternative, consisting of both dredging and capping of the contaminated sediments. In July 2013, Alcoa submitted the Environmental Impact Assessment for the project to the MDDEP and this document is currently in the regulatory review process. The ultimate selection of a remedy may result in additional liability at the time the MDDEP issues a final decision.

Mosjøen, Norway—In September 2012, Alcoa presented an analysis of remediation alternatives to the Norwegian Environmental Agency (NEA) (formerly the Norwegian Climate and Pollution Agency, or "Klif"), in response to a previous request, related to known PAHs in the sediments located in the harbor and extending out into the fjord. As such, Alcoa increased the reserve for Mosjøen by $20 in 2012 to reflect the estimated cost of the baseline alternative for dredging of the contaminated sediments. The ultimate selection of a remedy may result in additional liability at the time the NEA issues a final decision.

Other. In March 2013, Alcoa's subsidiary, Alcoa World Alumina Brasil (AWAB), was notified by the Brazilian Federal Revenue Office (RFB) that approximately $110 (R$220) of value added tax credits previously claimed are being disallowed and a penalty of 50% assessed. Of this amount, AWAB received $41 (R$82) in cash in May 2012.

The value added tax credits were claimed by AWAB for both fixed assets and export sales related to the Juruti bauxite mine and São Luís refinery expansion. The RFB has disallowed credits they allege belong to the consortium in which AWAB owns an interest and should not have been claimed by AWAB. Credits have also been disallowed as a result of challenges to apportionment methods used, questions about the use of the credits, and an alleged lack of documented proof. The assessment is currently in the administrative process, which could take approximately two years to complete. AWAB presented defense of its claim to the RFB on April 8, 2013. If AWAB is successful in the administrative process, the RFB would have no further recourse. If unsuccessful in this process, AWAB has the option to litigate at a judicial level. The estimated range of reasonably possible loss is $0 to $65 ($R155), whereby the maximum end of the range represents the sum of the portion of the disallowed credits applicable to the export sales and a 50% penalty of the gross amount disallowed. Additionally, the estimated range of disallowed credits related to AWAB's fixed assets is $0 to $75 (R$175), which would increase the net carrying value of AWAB's fixed assets if ultimately disallowed. It is management's opinion that the allegations have no basis; however, at this time, management is unable to reasonably predict an outcome for this matter.

In September 2010, following a corporate income tax audit covering the 2003 through 2005 tax years, an assessment was received as a result of Spain's tax authorities disallowing certain interest deductions claimed by a Spanish consolidated tax group owned by the Company. An appeal of this assessment in Spain's Central Tax Administrative Court by the Company was denied in October 2013. In December 2013, the Company filed an appeal of the assessment in Spain's National Court.

Additionally, following a corporate income tax audit of the same Spanish tax group for the 2006 through 2009 tax years, Spain's tax authorities issued an assessment in July 2013 similarly disallowing certain interest deductions. In August 2013, the Company filed an appeal of this second assessment in Spain's Central Tax Administrative Court.

The combined assessments total $334 (€242). The Company believes it has meritorious arguments to support its tax position and intends to vigorously litigate the assessments through Spain's court system. However, in the event the Company is unsuccessful, a portion of the assessments may be offset with existing net operating losses available to the Spanish consolidated tax group. Additionally, it is possible that the Company may receive similar assessments for tax years subsequent to 2009. At this time, the Company is unable to reasonably predict an outcome for this matter.

Between 2000 and 2002, Alcoa Alumínio (Alumínio) sold approximately 2,000 metric tons of metal per month from its Poços de Caldas facility, located in the State of Minas Gerais (the "State"), to Alfio, a customer also located in the State. Sales in the State were exempted from value-added tax (VAT) requirements. Alfio subsequently sold metal to customers outside of the State, but did not pay the required VAT on those transactions. In July 2002, Alumínio received an assessment from State auditors on the theory that Alumínio should be jointly and severally liable with Alfio for the unpaid VAT. In June 2003, the administrative tribunal found Alumínio liable, and Alumínio filed a judicial case in the State in February 2004 contesting the finding. In May 2005, the Court of First Instance found Alumínio solely liable, and a panel of a State appeals court confirmed this finding in April 2006. Alumínio filed a special appeal to the Superior Tribunal of Justice (STJ) in Brasilia (the federal capital of Brazil) later in 2006. In 2011, the STJ (through one of its judges) reversed the judgment of the lower courts, finding that Alumínio should neither be solely nor jointly and severally liable with Alfio for the VAT, which ruling was then appealed by the State. In June 2012, the STJ agreed to have the case reheard before a five-judge panel. A decision from this panel is pending, but additional appeals are likely. At December 31, 2013, the assessment totaled $53 (R$125), including penalties and interest. While the Company believes it has meritorious defenses, the Company is unable to reasonably predict an outcome.

In addition to the matters discussed above, various other lawsuits, claims, and proceedings have been or may be instituted or asserted against Alcoa, including those pertaining to environmental, product liability, safety and health, and tax matters. While the amounts claimed in these other matters may be substantial, the ultimate liability cannot now be determined because of the considerable uncertainties that exist. Therefore, it is possible that the Company's liquidity or results of operations in a particular period could be materially affected by one or more of these other matters.

However, based on facts currently available, management believes that the disposition of these other matters that are pending or asserted will not have a material adverse effect, individually or in the aggregate, on the financial position of the Company.

Commitments

Investments. Alumínio, a wholly-owned subsidiary of Alcoa, is a participant in four consortia that each owns a hydroelectric power project in Brazil. The purpose of Alumínio's participation is to increase its energy self-sufficiency and provide a long-term, low-cost source of power for its two smelters and one refinery. These projects are known as Machadinho, Barra Grande, Serra do Facão, and Estreito.

Alumínio committed to taking a share of the output of the Machadinho and Barra Grande projects each for 30 years and the Serra do Facão and Estreito projects each for 26 years at cost (including cost of financing the project). In the event that other participants in any of these projects fail to fulfill their financial responsibilities, Alumínio may be required to fund a portion of the deficiency. In accordance with the respective agreements, if Alumínio funds any such deficiency, its participation and share of the output from the respective project will increase proportionately.

The Machadinho project reached full capacity in 2002. Alumínio's investment in this project is 30.99%, which entitles Alumínio to approximately 120 megawatts of assured power. In February 2013, the consortium liquidated the legal entity that owned the facility for tax purposes. The consortium is now an unincorporated joint venture, and, therefore, Alumínio's share of the assets and liabilities of the consortium are reflected in the respective lines on the accompanying Consolidated Balance Sheet. Prior to February 2013, Alumínio's investment in Machadinho was accounted for under the equity method. In conjunction with the liquidation, the consortium repaid the remaining outstanding debt related to Machadinho, effectively terminating each partner's guarantee of such debt.

The Barra Grande project reached full capacity in 2006. Alumínio's investment in this project is 42.18% and is accounted for under the equity method. This entitles Alumínio to approximately 160 megawatts of assured power. Alumínio's total investment in this project was $143 (R$336) and $159 (R$326) at December 31, 2013 and 2012, respectively.

The Serra do Facão project reached full capacity in 2010. Alumínio's investment in this project is 34.97% and is accounted for under the equity method. This entitles Alumínio to approximately 65 megawatts of assured power. Alumínio's total investment in this project was $82 (R$192) and $98 (R$200) at December 31, 2013 and 2012, respectively. Alumínio previously issued a third-party guarantee related to its share of the consortium's debt; however, in October 2012, the lender released all of the consortium's investors from their respective guarantees.

Even though the Serra do Facão project has been fully operational since 2010, construction costs continue to be incurred to complete the facility related to environmental compliance in accordance with the installation license (costs are not significant in relation to the overall total project). Total estimated project costs are approximately $430 (R$1,000) and Alumínio's share is approximately $150 (R$350). As of December 31, 2013, approximately $150 (R$350) of Alumínio's commitment was expended on the project (includes both funds provided by Alumínio and Alumínio's share of the long-term financing).

The Estreito project reached full capacity in March 2013. Alumínio's investment in this project is 25.49%, which entitles Alumínio to approximately 150 megawatts of assured power. The Estreito consortium is an unincorporated joint venture, and, therefore, Alumínio's share of the assets and liabilities of the consortium are reflected in the respective lines on the accompanying Consolidated Balance Sheet. Total estimated project costs are approximately $2,200 (R$5,170) and Alumínio's share is approximately $560 (R$1,320). These amounts reflect an approved increase by the consortium in 2012 of approximately $130 (R$270) to complete the Estreito project due to fluctuations in currency, inflation, and the price and scope of construction, among other factors. As of December 31, 2013, approximately $540 (R$1,270) of Alumínio's commitment was expended on the project.

As of December 31, 2013, Alumínio's current power self-sufficiency satisfies approximately 70% of a total energy demand of approximately 690 megawatts from two smelters (São Luís (Alumar) and Poços de Caldas) and one refinery (Poços de Caldas) in Brazil. The total energy demand has temporarily declined by approximately 260 megawatts due to partial capacity curtailments of 131,000 metric-tons-per-year at both smelters combined.

In 2004, Alcoa acquired a 20% interest in a consortium, which subsequently purchased the Dampier to Bunbury Natural Gas Pipeline (DBNGP) in Western Australia, in exchange for an initial cash investment of $17 (A$24). The investment in the DBNGP, which is classified as an equity investment, was made in order to secure a competitively priced long-term supply of natural gas to Alcoa's refineries in Western Australia. Alcoa has made additional contributions of $141 (A$176) for its share of the pipeline capacity expansion and other operational purposes of the consortium through September 2011. No further expansion of the pipeline's capacity is planned at this time. In late 2011, the consortium initiated a three-year equity call plan to improve its capitalization structure. This plan requires Alcoa to contribute $40 (A$40), of which $29 (A$29) was made through December 31, 2013, including $12 (A$12) and $12 (A$11) in 2013 and 2012, respectively. In addition to its equity ownership, Alcoa has an agreement to purchase gas transmission services from the DBNGP. At December 31, 2013, Alcoa has an asset of $315 (A$354) representing prepayments made under the agreement for future gas transmission services. Alcoa's maximum exposure to loss on the investment and the related contract is approximately $440 (A$500) as of December 31, 2013.

Purchase Obligations. Alcoa is party to unconditional purchase obligations for energy that expire between 2015 and 2036. Commitments related to these contracts total $159 in 2014, $157 in 2015, $145 in 2016, $150 in 2017, $149 in 2018, and $2,091 thereafter. Expenditures under these contracts totaled $163 in 2013, $161 in 2012, and $227 in 2011. Additionally, Alcoa has entered into other purchase commitments for energy, raw materials, and other goods and services, which total $3,319 in 2014, $1,802 in 2015, $1,628 in 2016, $1,552 in 2017, $1,838 in 2018, and $9,856 thereafter.

Operating Leases. Certain land and buildings, alumina refinery process control technology, plant equipment, vehicles, and computer equipment are under operating lease agreements. Total expense from continuing operations for all leases was $232 in 2013, $244 in 2012, and $255 in 2011. Under long-term operating leases, minimum annual rentals are $198 in 2014, $165 in 2015, $135 in 2016, $103 in 2017, $80 in 2018, and $244 thereafter.

Guarantees. At December 31, 2013, Alcoa has maximum potential future payments for a guarantee issued on behalf of a third party of $542. This guarantee expires in 2019 and relates to project financing for the aluminum complex in Saudi Arabia (see Note I). In February 2013, a guarantee related to project financing for a hydroelectric power project in Brazil was terminated as the outstanding debt of the consortium was repaid in full (see Investments above). Alcoa also has outstanding bank guarantees related to tax matters, outstanding debt, workers compensation, environmental obligations, energy contracts, and customs duties, among others. The total amount committed under these guarantees, which expire at various dates between 2014 and 2022 was $370 at December 31, 2013.

Letters of Credit. Alcoa has outstanding letters of credit primarily related to workers' compensation, energy contracts, and leasing obligations. The total amount committed under these letters of credit, which automatically renew or expire at various dates, mostly in 2014, was $333 at December 31, 2013.

Surety Bonds. Alcoa has outstanding surety bonds primarily related to tax matters, contract performance, workers compensation, environmental-related matters, and customs duties. The total amount committed under these bonds, which automatically renew or expire at various dates, mostly in 2014, was $170 at December 31, 2013.

O. Other Income, Net

	2013	2012	2011
Equity loss (income)	$ 68	$ 28	$ (15)
Interest income	(13)	(31)	(20)
Foreign currency (gains) losses, net	(33)	(5)	16
Net gain from asset sales	(10)	(321)	(41)
Net gain on mark-to-market derivative contracts (X)	(29)	(13)	(52)
Other, net	(8)	1	25
	$ (25)	$(341)	$ (87)

In 2012, Net gain from asset sales included a $320 gain related to the sale of the Tapoco Hydroelectric Project (see Note F). In 2011, Equity income included higher earnings from an investment in a natural gas pipeline in Australia due to the recognition of a discrete income tax benefit by the consortium (Alcoa World Alumina and Chemicals' share of the benefit was $24). Also in 2011, Net gain from asset sales included a $43 gain related to the sale of land in Australia.

P. Cash Flow Information

Cash paid for interest and income taxes was as follows:

	2013	2012	2011
Interest, net of amount capitalized	$433	$454	$491
Income taxes, net of amount refunded	200	223	382

The details related to cash paid for acquisitions were as follows:

	2013	2012	2011
Assets acquired	$ -	$ -	$253
Liabilities assumed	-	-	(12)
Cash paid	-	-	241
Less: cash acquired	-	-	1
Net cash paid	$ -	$ -	$240

Noncash Financing and Investing Activities. In August 2012, Alcoa received a loan of $250 for the purpose of financing all or part of the cost of acquiring, constructing, reconstructing, and renovating certain facilities at Alcoa's rolling mill plant in Davenport, IA (see Note K). Because this loan can only be used for this purpose, the net proceeds of $248 were classified as restricted cash. Since restricted cash is not part of cash and cash equivalents, this transaction was not reflected in the accompanying Statement of Consolidated Cash Flows as it represents a noncash activity. As funds are expended for the project, the release of the cash will be reflected as both an inflow on the Net change in restricted cash line and an outflow on the Capital expenditures line in the Investing Activities section of the Statement of Consolidated Cash Flows. At December 31, 2013 and 2012, Alcoa had $13 and $171, respectively, of restricted cash remaining related to this transaction.

In 2011, Alcoa issued $600 in common stock to satisfy a portion of its accrued pension benefits liability (see Notes R and W).

Q. Segment and Geographic Area Information

Alcoa is primarily a producer of aluminum products. Aluminum and alumina represent more than 80% of Alcoa's revenues. Nonaluminum products include precision castings and aerospace and industrial fasteners. Alcoa's products are used worldwide in transportation (including aerospace, automotive, truck, trailer, rail, and shipping), packaging, building and construction, oil and gas, defense, and industrial applications. Alcoa's segments are organized by product on a worldwide basis. Segment performance under Alcoa's management reporting system is evaluated based on a number of factors; however, the primary measure of performance is the after-tax operating income (ATOI) of each segment. Certain items such as the impact of LIFO inventory accounting; interest expense; noncontrolling interests; corporate expense (general administrative and selling expenses of operating the corporate headquarters and other global administrative facilities, along with depreciation and amortization on corporate-owned assets); restructuring and other charges; discontinued operations; and other items, including intersegment profit eliminations, differences between tax rates applicable to the segments and the consolidated effective tax rate, the results of the soft alloy extrusions business in Brazil, and other nonoperating items such as foreign currency transaction gains/losses and interest income are excluded from segment ATOI. Segment assets exclude, among others, cash and cash equivalents; deferred income taxes; goodwill not allocated to businesses for segment reporting purposes; corporate fixed assets; LIFO reserves; and other items, including the assets of the soft alloy extrusions business in Brazil and assets classified as held for sale related to discontinued operations.

On January 1, 2013, management revised the inventory-costing method used by certain locations within the Global Rolled Products and Engineered Products and Solutions segments, which affects the determination of the respective segment's profitability measure, ATOI. Management made the change in order to improve internal consistency and enhance industry comparability. This revision does not impact the consolidated results of Alcoa. Segment information for all prior periods presented was revised to reflect this change.

The accounting policies of the segments are the same as those described in the Summary of Significant Accounting Policies (see Note A). Transactions among segments are established based on negotiation among the parties. Differences between segment totals and Alcoa's consolidated totals for line items not reconciled are in Corporate.

Alcoa's operations consist of four worldwide reportable segments as follows:

Alumina. This segment represents a portion of Alcoa's upstream operations and consists of the Company's worldwide refinery system, including the mining of bauxite, which is then refined into alumina. Alumina is mainly sold directly to internal and external smelter customers worldwide or is sold to customers who process it into industrial chemical products. A portion of this segment's third-party sales are completed through the use of agents, alumina traders, and distributors. Slightly more than half of Alcoa's alumina production is sold under supply contracts to third parties worldwide, while the remainder is used internally by the Primary Metals segment.

Primary Metals. This segment represents a portion of Alcoa's upstream operations and consists of the Company's worldwide smelter system. Primary Metals receives alumina, mostly from the Alumina segment, and produces primary aluminum used by Alcoa's fabricating businesses, as well as sold to external customers and traders. Results from the sale of aluminum powder, scrap, and excess power are also included in this segment, as well as the results of aluminum derivative contracts and buy/resell activity. Primary aluminum produced by Alcoa and used internally is transferred to other segments at prevailing market prices. The sale of primary aluminum represents more than 90% of this segment's third-party sales. Buy/resell activity refers to when this segment purchases metal from external or internal sources and resells such metal to external customers or the midstream and downstream segments in order to maximize smelting system efficiency and to meet customer requirements.

Global Rolled Products. This segment represents Alcoa's midstream operations, whose principal business is the production and sale of aluminum plate and sheet. A small portion of this segment's operations relate to foil produced at one plant in Brazil. This segment includes rigid container sheet (RCS), which is sold directly to customers in the packaging and consumer market and is used to produce aluminum beverage cans. Seasonal increases in RCS sales are generally experienced in the second and third quarters of the year. Approximately one-half of the third-party sales in this segment consist of RCS. This segment also includes sheet and plate used in the aerospace, automotive, commercial transportation, building and construction, and industrial products (mainly used in the production of machinery and equipment and consumer durables) end markets, which is sold directly to customers and through distributors. While the customer base for flat-rolled products is large, a significant amount of sales of RCS, sheet, and plate is to a relatively small number of customers.

Engineered Products and Solutions. This segment represents Alcoa's downstream operations and includes titanium, aluminum, and super alloy investment castings; fasteners; aluminum wheels; integrated aluminum structural systems; architectural extrusions; and forgings and hard alloy extrusions. These products, which are used in the aerospace, automotive, building and construction, commercial transportation, power generation, and industrial products end markets, are sold directly to customers and through distributors.

[Table of Contents](#)

The operating results and assets of Alcoa's reportable segments were as follows:

	Alumina	Primary Metals	Global Rolled Products	Engineered Products and Solutions	Total
2013					
Sales:					
Third-party sales	$ 3,326	$ 6,596	$ 7,106	$ 5,733	$22,761
Intersegment sales	2,235	2,621	178	-	5,034
Total sales	$ 5,561	$ 9,217	$ 7,284	$ 5,733	$27,795
Profit and loss:					
Equity loss	$ (4)	$ (51)	$ (13)	$ -	$ (68)
Depreciation, depletion, and amortization	426	526	226	159	1,337
Income taxes	66	(74)	108	348	448
ATOI	259	(20)	252	726	1,217
2012					
Sales:					
Third-party sales	$ 3,092	$ 7,432	$ 7,378	$ 5,525	$23,427
Intersegment sales	2,310	2,877	163	-	5,350
Total sales	$ 5,402	$ 10,309	$ 7,541	$ 5,525	$28,777
Profit and loss:					
Equity income (loss)	$ 5	$ (27)	$ (6)	$ -	$ (28)
Depreciation, depletion, and amortization	455	532	229	158	1,374
Income taxes	(27)	106	159	297	535
ATOI	90	309	346	612	1,357
2011					
Sales:					
Third-party sales	$ 3,462	$ 8,240	$ 7,642	$ 5,345	$24,689
Intersegment sales	2,727	3,192	218	-	6,137
Total sales	$ 6,189	$ 11,432	$ 7,860	$ 5,345	$30,826
Profit and loss:					
Equity income (loss)	$ 25	$ (7)	$ (3)	$ 1	$ 16
Depreciation, depletion, and amortization	444	556	237	158	1,395
Income taxes	179	92	98	258	627
ATOI	607	481	260	537	1,885
2013					
Assets:					
Capital expenditures	$ 322	$ 224	$ 335	$ 224	$ 1,105
Equity investments	628	947	200	-	1,775
Goodwill	9	-	218	2,670	2,897
Total assets	8,248	10,341	4,647	6,011	29,247
2012					
Assets:					
Capital expenditures	$ 374	$ 318	$ 258	$ 200	$ 1,150
Equity investments	658	917	188	-	1,763
Goodwill	10	997	214	2,677	3,898
Total assets	9,709	11,709	4,603	5,891	31,912

The following tables reconcile certain segment information to consolidated totals:

	2013	2012	2011
Sales:			
Total segment sales	$27,795	$28,777	$30,826
Elimination of intersegment sales	(5,034)	(5,350)	(6,137)
Corporate*	271	273	262
Consolidated sales	$23,032	$23,700	$24,951

* For all periods presented, the Corporate amount includes third-party sales of the soft alloy extrusions business located in Brazil.

	2013	2012	2011
Net (loss) income attributable to Alcoa:			
Total segment ATOI	$ 1,217	$1,357	$1,885
Unallocated amounts (net of tax):			
Impact of LIFO	52	20	(38)
Interest expense	(294)	(319)	(340)
Noncontrolling interests	(41)	29	(194)
Corporate expense	(284)	(282)	(290)
Impairment of goodwill	(1,731)	-	-
Restructuring and other charges	(607)	(142)	(196)
Discontinued operations	-	-	(3)
Other	(597)	(472)	(213)
Consolidated net (loss) income attributable to Alcoa	$(2,285)	$ 191	$ 611

December 31,	2013	2012
Assets:		
Total segment assets	$29,247	$31,912
Elimination of intersegment receivables	(385)	(444)
Unallocated amounts:		
Cash and cash equivalents	1,437	1,861
Deferred income taxes	3,410	4,052
Corporate goodwill	518	1,272
Corporate fixed assets, net	879	961
LIFO reserve	(691)	(770)
Other	1,327	1,335
Consolidated assets	$35,742	$40,179

Sales by major product grouping were as follows:

	2013	2012	2011
Sales:			
Alumina	$ 3,151	$ 2,962	$ 3,350
Primary aluminum	6,194	7,121	7,907
Flat-rolled aluminum	7,106	7,378	7,642
Investment castings	1,807	1,747	1,700
Fastening systems	1,505	1,414	1,313
Architectural aluminum systems	977	970	973
Aluminum wheels	702	692	656
Other extruded aluminum and forged products	1,015	955	1,010
Other	575	461	400
	$23,032	$23,700	$24,951

Geographic information for sales was as follows (based upon the country where the point of sale occurred):

	2013	2012	2011
Sales:			
U.S.[(1)]	$11,766	$12,361	$12,295
Australia	3,240	3,222	3,587
Spain[(2)]	2,282	1,203	1,487
Brazil	1,221	1,244	1,371
France	862	807	825
Russia	683	713	761
Hungary	555	492	665
Netherlands[(3)]	524	949	1,025
United Kingdom	475	438	412
Norway[(2)]	283	820	927
China	259	326	283
Germany	230	216	229
Italy	157	379	537
Other	495	530	547
	$23,032	$23,700	$24,951

(1) Sales that occurred in the U.S. include a portion of alumina from Alcoa's refineries in Suriname, Brazil, Australia, and Jamaica and aluminum from Alcoa's smelters in Canada.

(2) In 2013, Sales that occurred in Spain include aluminum from Alcoa's smelters in Iceland and Norway.

(3) In 2012 and 2011, Sales that occurred in the Netherlands include aluminum from Alcoa's smelter in Iceland.

Geographic information for long-lived assets was as follows (based upon the physical location of the assets):

December 31,	2013	2012
Long-lived assets:		
U.S.	$ 4,760	$ 4,621
Brazil	3,746	4,318
Australia	3,024	3,548
Iceland	1,518	1,571
Canada	1,302	1,399
Norway	762	898
Russia	471	494
Spain	446	445
Jamaica	393	414
China	388	395
Other	829	844
	$17,639	$18,947

R. Preferred and Common Stock

Preferred Stock. Alcoa has two classes of preferred stock: Class A Preferred Stock and Class B Serial Preferred Stock. Class A Preferred Stock has 660,000 shares authorized at a par value of $100 per share with an annual $3.75 cumulative dividend preference per share. There were 546,024 of such shares outstanding at December 31, 2013 and 2012. Class B Serial Preferred Stock has 10 million shares authorized (none issued) and a par value of $1 per share.

Common Stock. There are 1.8 billion shares authorized at a par value of $1 per share, and 1,177,906,867 shares and 1,177,906,557 shares, respectively, were issued at December 31, 2013 and 2012. The current dividend yield as authorized by Alcoa's Board of Directors is $0.12 per annum or $0.03 per quarter.

In January 2011, Alcoa contributed 36,518,563 newly issued shares of its common stock to a master trust that holds the assets of certain U.S. defined benefit pension plans in a private placement transaction. These shares were valued at $16.43 per share (the closing price of Alcoa's common stock on January 24, 2011), or $600 in the aggregate, and were issued to satisfy the estimated minimum required funding and to provide additional funding towards maintaining an approximately 80% funded status of Alcoa's U.S. pension plans. On January 25, 2011, the 36,518,563 shares were registered under Alcoa's then-current shelf registration statement dated March 10, 2008 (replaced by shelf registration statement dated February 18, 2011) for resale by the master trust, as selling stockholder.

As of December 31, 2013, 110 million and 119 million shares of common stock were reserved for issuance upon conversion of convertible notes and under Alcoa's stock-based compensation plans, respectively. Alcoa issues shares from treasury stock to satisfy the exercise of stock options and the conversion of stock awards.

Share Activity (number of shares)

	Common stock	
	Treasury	**Outstanding**
Balance at end of 2010	119,362,029	1,022,025,965
Private placement	-	36,518,563
Issued for stock-based compensation plans	(5,867,538)	5,867,538
Balance at end of 2011	113,494,491	1,064,412,066
Issued for stock-based compensation plans	(2,799,887)	2,799,887
Balance at end of 2012	110,694,604	1,067,211,953
Conversion of convertible notes	-	310
Issued for stock-based compensation plans	(3,798,899)	3,798,899
Balance at end of 2013	106,895,705	1,071,011,162

Stock-based Compensation

Stock options under Alcoa's stock-based compensation plans are granted in January each year at market prices on the dates of grant. Features based on date of original grant for stock options outstanding as of December 31, 2013 were as follows:

Date of original grant	Vesting	Term	Reload feature
2008 - 2009	3 years (1/3 each year)	6 years	None
2010 and forward	3 years (1/3 each year)	10 years	None

In addition to the stock options described above, Alcoa grants stock awards that vest three years from the date of grant. Certain of these stock awards were granted with performance conditions. In 2013, 2012, and 2011, the final number of performance stock awards earned will be based on the achievement of sales and profitability targets over a three-year period. One-third of the award will be earned each year based on the performance against pre-established targets for that year. The performance stock awards earned over the three-year period vest at the end of the third year.

Most plan participants can choose whether to receive their award in the form of stock options, stock awards, or a combination of both. This choice is made before the grant is issued and is irrevocable.

The following table summarizes the total compensation expense recognized for all stock options and stock awards (there was no stock-based compensation expense capitalized in 2013, 2012, or 2011):

	2013	2012	2011
Compensation expense recognized:			
Stock option grants	$ 21	$ 27	$ 34
Stock award grants	50	40	49
Total compensation expense before income taxes	71	67	83
Benefit for income taxes	23	21	27
Total compensation expense, net of income taxes	$ 48	$ 46	$ 56

As part of Alcoa's stock-based compensation plan design, individuals who are retirement-eligible have a six-month requisite service period in the year of grant. As a result, a larger portion of expense will be recognized in the first half of each year for these retirement-eligible employees. Of the total compensation expense before income taxes included in the table above, $14, $13, and $18 in 2013, 2012, and 2011, respectively, pertains to the acceleration of expense related to retirement-eligible employees.

The fair value of new options was estimated on the date of grant using a lattice-pricing model with the following assumptions:

	2013	2012	2011
Weighted average fair value per option	$ 2.24	$ 3.11	$ 4.96
Average risk-free interest rate	0.10-1.89%	0.06-1.89%	0.19-3.44%
Dividend yield	1.3%	0.9%	0.9%
Volatility	28-40%	39-45%	36-43%
Annual forfeiture rate	7%	5%	5%
Exercise behavior	45%	45%	45%
Life (years)	6.0	5.8	5.8

The range of average risk-free interest rates was based on a yield curve of interest rates at the time of the grant based on the contractual life of the option. The dividend yield was based on a one-year average. Volatility was based on historical and implied volatilities over the term of the option. Alcoa utilized historical option forfeiture data to estimate annual pre- and post-vesting forfeitures. Exercise behavior was based on a weighted average exercise ratio (exercise patterns for grants issued over the number of years in the contractual option term) of an option's intrinsic value resulting from historical employee exercise behavior. Based upon the other assumptions used in the determination of the fair value, the life of an option was an output of the lattice-pricing model.

The activity for stock options was as follows (options in millions):

	Number of options	Weighted average exercise price
Outstanding, January 1, 2013	45.0	$ 12.58
Granted	8.0	8.88
Exercised	(1.6)	8.32
Expired or forfeited	(6.1)	22.13
Outstanding, December 31, 2013	45.3	10.78

The total intrinsic value of options exercised during 2013, 2012, and 2011 was $2, $2, and $34, respectively. In 2013, 2012, and 2011, the cash received from option exercises was $13, $12, and $37 and the total tax benefit realized from these exercises was $1, $1, and $11, respectively.

The following tables summarize certain stock option information at December 31, 2013 (number of options and intrinsic value in millions):

Options Fully Vested and/or Expected to Vest*

Range of exercise price	Number	Weighted average remaining contractual life	Weighted average exercise price	Intrinsic Value
$8.33	16.3	1.06	$ 8.33	$ 38
$8.34 - $11.33	17.1	8.22	9.60	17
$11.34 - $17.40	10.8	6.14	14.46	-
$17.41 - $34.84	1.1	0.05	28.92	-
Total	45.3	4.94	10.78	$ 55

* Expected forfeitures are immaterial to the Company and are not reflected in the table above.

Options Fully Vested and Exercisable

Range of exercise price	Number	Weighted average remaining contractual life	Weighted average exercise price	Intrinsic Value
$8.33	16.3	1.06	$ 8.33	$ 38
$8.34 - $11.33	3.3	7.40	10.18	1
$11.34 - $17.40	9.7	6.10	14.23	-
$17.41 - $34.84	1.1	0.05	28.92	-
Total	30.4	3.31	11.16	$ 39

In addition to stock option awards, the Company grants stock awards and performance share awards, both of which vest three years from the date of grant. Performance share awards are issued at target and the final award amount is determined at the end of the performance period.

The following table summarizes the outstanding stock and performance share awards (awards in millions):

	Stock Awards	Performance Share Awards	Total	Weighted average FMV per award
Outstanding, January 1, 2013	7.9	4.0	11.9	$ 12.96
Granted	5.5	2.5	8.0	8.86
Converted	(2.6)	(0.7)	(3.3)	13.51
Forfeited	(0.4)	(0.6)	(1.0)	10.76
Performance share adjustment	-	0.3	0.3	10.96
Outstanding, December 31, 2013	10.4	5.5	15.9	10.88

At December 31, 2013, there was $16 and $39 of unrecognized compensation expense (pretax) related to non-vested stock option grants and non-vested stock award grants, respectively. This expense is expected to be recognized over a weighted average period of 1.6 years. As of December 31, 2013, the following table summarizes the unrecognized compensation expense expected to be recognized in future periods:

	Stock-based compensation expense (pretax)
2014	$ 36
2015	18
2016	1
Totals	$ 55

S. Earnings Per Share

Basic earnings per share (EPS) amounts are computed by dividing earnings, after the deduction of preferred stock dividends declared and dividends and undistributed earnings allocated to participating securities, by the average number of common shares outstanding. Diluted EPS amounts assume the issuance of common stock for all potentially dilutive share equivalents outstanding not classified as participating securities.

The information used to compute basic and diluted EPS attributable to Alcoa common shareholders was as follows (shares in millions):

	2013	2012	2011
(Loss) income from continuing operations attributable to Alcoa common shareholders	$(2,285)	$ 191	$ 614
Less: preferred stock dividends declared	2	2	2
(Loss) income from continuing operations available to common equity	(2,287)	189	612
Less: dividends and undistributed earnings allocated to participating securities	-	-	1
(Loss) income from continuing operations available to Alcoa common shareholders—basic	(2,287)	189	611
Add: interest expense related to convertible notes	-	-	30
(Loss) income from continuing operations available to Alcoa common shareholders—diluted	$(2,287)	$ 189	$ 641
Average shares outstanding—basic	1,070	1,067	1,061
Effect of dilutive securities:			
Stock options	-	3	7
Stock and performance awards	-	6	4
Convertible notes	-	-	89
Average shares outstanding—diluted	1,070	1,076	1,161

Participating securities are defined as unvested share-based payment awards that contain nonforfeitable rights to dividends or dividend equivalents (whether paid or unpaid) and are included in the computation of EPS pursuant to the two-class method. Prior to January 1, 2010, under Alcoa's stock-based compensation programs, certain employees were granted stock and performance awards, which entitle those employees to receive nonforfeitable dividends during the vesting period on a basis equivalent to the dividends paid to holders of Alcoa's common stock. As such, these unvested stock and performance awards met the definition of a participating security. Under the two-class method, all earnings, whether distributed or undistributed, are allocated to each class of common stock and participating securities based on their respective rights to receive dividends. At December 31, 2013 and 2012, there were no outstanding participating securities, as all such securities have vested and were converted into shares of common stock. At December 31, 2011 there were 2 million participating securities outstanding.

Effective January 1, 2010, new grants of stock and performance awards do not contain a nonforfeitable right to dividends during the vesting period. As a result, an employee will forfeit the right to dividends accrued on unvested awards if that person does not fulfill their service requirement during the vesting period. As such, these awards are not treated as participating securities in the EPS calculation as the employees do not have equivalent dividend rights as common shareholders. These awards are included in the EPS calculation utilizing the treasury stock method similar to stock options. At December 31, 2013, 2012, and 2011, there were 16 million, 12 million, and 8 million such awards outstanding, respectively.

In 2013, basic average shares outstanding and diluted average shares outstanding were the same because the effect of potential shares of common stock was anti-dilutive since Alcoa generated a loss from continuing operations. As a result, 89 million share equivalents related to convertible notes, 16 million stock awards, and 12 million stock options were not included in the computation of diluted EPS. Had Alcoa generated sufficient income from continuing operations in 2013, 89 million, 9 million, and 2 million potential shares of common stock related to the convertible notes, stock awards, and stock options, respectively, would have been included in diluted average shares outstanding.

In 2012, 89 million share equivalents related to convertible notes were not included in the computation of diluted EPS because their effect was anti-dilutive.

Options to purchase 12 million, 27 million, and 27 million shares of common stock at a weighted average exercise price of $15.81, $15.41, and $24.00 per share were outstanding as of December 31, 2013, 2012, and 2011, respectively, but were not included in the computation of diluted EPS because they were anti-dilutive, as the exercise prices of the options were greater than the average market price of Alcoa’s common stock.

T. Income Taxes

The components of (loss) income from continuing operations before income taxes were as follows:

	2013	2012	2011
U.S.	$(1,269)	$394	$ (98)
Foreign	(547)	(70)	1,161
	$(1,816)	$324	$1,063

The provision for income taxes on income from continuing operations consisted of the following:

	2013	2012	2011
Current:			
Federal*	$ 14	$ 85	$ 10
Foreign	235	167	427
State and local	1	9	(1)
	250	261	436
Deferred:			
Federal*	84	129	28
Foreign	95	(227)	(211)
State and local	(1)	(1)	2
	178	(99)	(181)
Total	$428	$ 162	$ 255

* Includes U.S. taxes related to foreign income

Included in discontinued operations is a tax benefit of $1 in 2011.

The exercise of employee stock options generated a tax charge of $1 in both 2013 and 2012 and a tax benefit of $6 in 2011, representing only the difference between compensation expense recognized for financial reporting and tax purposes. These amounts decreased or increased equity and increased or reduced either current taxes payable or deferred tax assets (not operating losses) in the respective periods.

Alcoa has unamortized tax-deductible goodwill of $35 resulting from intercompany stock sales and reorganizations. Alcoa recognizes the tax benefits (generally at a 30% rate) associated with this tax-deductible goodwill as it is being amortized for local income tax purposes rather than in the period in which the transaction is consummated.

A reconciliation of the U.S. federal statutory rate to Alcoa's effective tax rate for continuing operations was as follows (the effective tax rate for 2013 was a provision on a loss and for both 2012 and 2011 was a provision on income):

	2013	2012	2011
U.S. federal statutory rate	35.0%	35.0%	35.0%
Taxes on foreign operations	(0.3)	(0.1)	(11.0)
Permanent differences on restructuring and other charges and asset disposals	(0.8)	10.8	-
Audit and other adjustments to prior years' accruals	(0.9)	3.5	(1.1)
Noncontrolling interests	(3.1)	3.8	0.8
Statutory tax rate and law changes	0.6	(0.4)	0.8
Changes in valuation allowances	(23.2)	15.2	2.3
Impairment of goodwill	(33.3)	-	-
Amortization of goodwill related to intercompany stock sales/reorganizations	1.1	(7.7)	(2.8)
Change in legal structure of investments	-	(4.1)	-
Interest income related to income tax positions	-	(1.3)	(0.2)
Company-owned life insurance/split-dollar net premiums	1.1	(3.9)	(0.2)
Other	0.2	(0.8)	0.4
Effective tax rate	(23.6)%	50.0%	24.0%

The components of net deferred tax assets and liabilities were as follows:

	2013		2012	
December 31,	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Depreciation	$ 185	$ 1,150	$ 104	$ 1,015
Employee benefits	2,499	36	2,742	46
Loss provisions	437	14	368	17
Deferred income/expense	87	188	53	203
Tax loss carryforwards	2,229	-	2,186	-
Tax credit carryforwards	567	-	508	-
Derivatives and hedging activities	74	25	117	16
Other	310	261	324	297
	6,388	1,674	6,402	1,594
Valuation allowance	(1,804)	-	(1,400)	-
	$ 4,584	$ 1,674	$ 5,002	$ 1,594

The following table details the expiration periods of the deferred tax assets presented above:

December 31, 2013	Expires within 10 years	Expires within 11-20 years	No expiration*	Other*	Total
Tax loss carryforwards	$ 377	$ 898	$ 954	$ -	$ 2,229
Tax credit carryforwards	417	75	75	-	567
Other	-	-	498	3,094	3,592
Valuation allowance	(412)	(843)	(268)	(281)	(1,804)
	$ 382	$ 130	$ 1,259	$ 2,813	$ 4,584

* Deferred tax assets with no expiration may still have annual limitations on utilization. Other represents deferred tax assets whose expiration is dependent upon the reversal of the underlying temporary difference. A substantial amount of Other relates to employee benefits that will become deductible for tax purposes over an extended period of time as contributions are made to employee benefit plans and payments are made to retirees.

The total deferred tax asset (net of valuation allowance) is supported by taxable temporary differences that reverse within the carryforward period (approximately 30%), tax planning strategies (approximately 5%), and projections of future taxable income exclusive of reversing temporary differences (approximately 65%).

Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not (greater than 50%) that a tax benefit will not be realized. In evaluating the need for a valuation allowance, management considers all potential sources of taxable income, including income available in carryback periods, future reversals of taxable temporary differences, projections of taxable income, and income from tax planning strategies, as well as all available positive and negative evidence. Positive evidence includes factors such as a history of profitable operations, projections of future profitability within the carryforward period, including from tax planning strategies, and Alcoa’s experience with similar operations. Existing favorable contracts and the ability to sell products into established markets are additional positive evidence. Negative evidence includes items such as cumulative losses, projections of future losses, or carryforward periods that are not long enough to allow for the utilization of a deferred tax asset based on existing projections of income. In certain jurisdictions, deferred tax assets related to cumulative losses exist without a valuation allowance where in management’s judgment the weight of the positive evidence more than offsets the negative evidence of the cumulative losses. Upon changes in facts and circumstances, management may conclude that deferred tax assets for which no valuation allowance is currently recorded may not be realized, resulting in a future charge to establish a valuation allowance. Existing valuation allowances are re-examined under the same standards of positive and negative evidence. If it is determined that it is more likely than not that a deferred tax asset will be realized, the appropriate amount of the valuation allowance, if any, is released. Deferred tax assets and liabilities are also re-measured to reflect changes in underlying tax rates due to law changes and the granting and lapse of tax holidays.

In 2013, Alcoa recognized a $372 discrete income tax charge for valuation allowances on certain deferred tax assets in Spain and the U.S. Of this amount, a $237 valuation allowance was established on the full value of the deferred tax assets related to a Spanish consolidated tax group. As of December 31, 2013, these deferred tax assets have an expiration period ranging from 2014 to 2030. After weighing all available positive and negative evidence, as described above, management determined that it was no longer more likely than not that Alcoa will realize the tax benefit of these deferred tax assets. This was mainly driven by a decline in the outlook of the Primary Metals business (2013 realized prices were the lowest since 2009) combined with prior year cumulative losses of the Spanish consolidated tax group. The need for this valuation allowance will be assessed on a continuous basis in future periods and, as a result, a portion or all of the allowance may be reversed based on changes in facts and circumstances.

The remaining $135 relates to a valuation allowance established on a portion of available foreign tax credits in the U.S. These credits can be carried forward for 10 years, and, as of December 31, 2013, have an expiration period ranging from 2016 to 2023. After weighing all available positive and negative evidence, as described above, management determined that it was no longer more likely than not that Alcoa will realize the full tax benefit of these foreign tax credits. This was primarily due to lower foreign sourced taxable income after consideration of tax planning strategies and after the inclusion of earnings from foreign subsidiaries projected to be distributable as taxable foreign dividends. Similar to the outlook related to Spain above, lower levels of both distributable future foreign earnings and projected foreign sourced taxable income are principally attributable to a decline in the outlook of the Primary Metals business. The need for this valuation allowance will be assessed on a continuous basis in future periods and, as a result, an increase or decrease to this allowance may result based on changes in facts and circumstances.

In December 2011, one of the Company's subsidiaries in Brazil applied for a tax holiday related to its expanded mining and refining operations. During 2013, the application was amended and re-filed and, separately, a similar application was filed for another one of the Company's subsidiaries in Brazil. If approved, the tax rate for these subsidiaries will decrease significantly, resulting in future cash tax savings over the 10-year holiday period (would be retroactively effective as of January 1, 2013). Additionally, the net deferred tax asset of one of the subsidiaries would be remeasured at the lower rate in the period the holiday is approved (the net deferred tax asset of the other subsidiary would not be remeasured since it could still be utilized against future earnings of the subsidiary not subject to the tax holiday). This remeasurement would result in a decrease to that subsidiary's net deferred tax asset and a noncash charge to earnings of approximately $50. As of December 31, 2013, Alcoa's subsidiaries' applications are still pending.

The following table details the changes in the valuation allowance:

December 31,	2013	2012	2011
Balance at beginning of year	$1,400	$1,398	$1,268
Increase to allowance	471	45	157
Release of allowance	(41)	(31)	(31)
U.S. state tax apportionment and tax rate changes	(32)	(17)	6
Foreign currency translation	6	5	(2)
Balance at end of year	$1,804	$1,400	$1,398

The cumulative amount of Alcoa's foreign undistributed net earnings for which no deferred taxes have been provided was approximately $5,200 at December 31, 2013. Alcoa has a number of commitments and obligations related to the Company's growth strategy in foreign jurisdictions. As such, management has no plans to distribute such earnings in the foreseeable future, and, therefore, has determined it is not practicable to determine the related deferred tax liability.

Alcoa and its subsidiaries file income tax returns in the U.S. federal jurisdiction and various states and foreign jurisdictions. With a few minor exceptions, Alcoa is no longer subject to income tax examinations by tax authorities for years prior to 2004. All U.S. tax years prior to 2013 have been audited by the Internal Revenue Service. Various state and foreign jurisdiction tax authorities are in the process of examining Alcoa's income tax returns for various tax years through 2012.

A reconciliation of the beginning and ending amount of unrecognized tax benefits (excluding interest and penalties) was as follows:

December 31,	2013	2012	2011
Balance at beginning of year	$ 66	$ 51	$ 46
Additions for tax positions of the current year	2	-	-
Additions for tax positions of prior years	11	39	13
Reductions for tax positions of prior years	(2)	(7)	(3)
Settlements with tax authorities	(8)	(18)	(4)
Expiration of the statute of limitations	(2)	-	-
Foreign currency translation	(4)	1	(1)
Balance at end of year	$ 63	$ 66	$ 51

For all periods presented, a portion of the balance at end of year pertains to state tax liabilities, which are presented before any offset for federal tax benefits. The effect of unrecognized tax benefits, if recorded, that would impact the annual effective tax rate for 2013, 2012, and 2011 would be approximately (1)%, 6%, and 2%, respectively, of pretax book (loss) income. Alcoa does not anticipate that changes in its unrecognized tax benefits will have a material impact on the Statement of Consolidated Operations during 2014 (see Other Matters in Note N for a matter for which no reserve has been recognized).

It is Alcoa's policy to recognize interest and penalties related to income taxes as a component of the Provision for income taxes on the accompanying Statement of Consolidated Operations. In 2013, 2012, and 2011, Alcoa recognized $2, $3, and $2, respectively, in interest and penalties. Due to the expiration of the statute of limitations, settlements with tax authorities, and refunded overpayments, Alcoa also recognized interest income of $12, $7, and $2 in 2013, 2012, and 2011, respectively. As of December 31, 2013 and 2012, the amount accrued for the payment of interest and penalties was $11 and $15, respectively.

U. Receivables

Sale of Receivables Programs

In March 2012, Alcoa entered into an arrangement with a financial institution to sell certain customer receivables without recourse on a revolving basis. The sale of such receivables is completed through the use of a bankruptcy remote special purpose entity, which is a consolidated subsidiary of Alcoa. This arrangement originally provided for minimum funding of $50 up to a maximum of $250 for receivables sold. In May 2013, the arrangement was amended to increase the maximum funding to $500 and include two additional financial institutions. On March 30, 2012, Alcoa initially sold $304 of customer receivables in exchange for $50 in cash and $254 of deferred purchase price under this arrangement. Alcoa received additional net cash funding of $5 ($388 in draws and $383 in repayments) and $155 ($160 in draws and $5 in repayments) in 2013 and 2012, respectively. As of December 31, 2013 and 2012, the deferred purchase price receivable was $248 and $18, respectively, which was included in Other receivables on the accompanying Consolidated Balance Sheet. The deferred purchase price receivable is reduced as collections of the underlying receivables occur; however, as this is a revolving program, the sale of new receivables will result in an increase in the deferred purchase price receivable. The net change in the deferred purchase price receivable was reflected in the (Increase) decrease in receivables line item on the accompanying Statement of Consolidated Cash Flows. This activity is reflected as an operating cash flow because the related customer receivables are the result of an operating activity with an insignificant, short-term interest rate risk. In 2013 and 2012, the gross cash outflows and inflows associated with the deferred purchase price receivable were $6,985 and $6,755, respectively, and $3,339 and $3,321, respectively. The gross amount of receivables sold and total cash collected under this program since its inception was $10,324 and $9,866, respectively. Alcoa services the customer receivables for the financial institutions at market rates; therefore, no servicing asset or liability was recorded.

Alcoa had three other arrangements, each with a different financial institution, to sell certain customer receivables outright without recourse on a continuous basis. On March 22, 2013, Alcoa terminated these arrangements. All receivables sold under these arrangements were collected as of March 31, 2013. Alcoa serviced the customer receivables for the financial institutions at market rates; therefore, no servicing asset or liability was recorded.

Allowance for Doubtful Accounts

The following table details the changes in the allowance for doubtful accounts related to customer receivables and other receivables:

	Customer receivables			Other receivables		
December 31,	**2013**	**2012**	**2011**	**2013**	**2012**	**2011**
Balance at beginning of year	$ 39	$ 46	$ 46	$ 74	$ 79	$ 87
Provision for doubtful accounts	3	2	19	29	9	7
Write off of uncollectible accounts	(19)	(8)	(14)	(39)	(3)	(3)
Recoveries of prior write-offs	(3)	(1)	(3)	(10)	(6)	(5)
Other	-	-	(2)	(7)	(5)	(7)
Balance at end of year	$ 20	$ 39	$ 46	$ 47	$ 74	$ 79

V. Interest Cost Components

	2013	**2012**	**2011**
Amount charged to expense	$453	$490	$524
Amount capitalized	99	93	101
	$552	$583	$625

W. Pension and Other Postretirement Benefits

Alcoa maintains pension plans covering most U.S. employees and certain employees in foreign locations. Pension benefits generally depend on length of service, job grade, and remuneration. Substantially all benefits are paid through pension trusts that are sufficiently funded to ensure that all plans can pay benefits to retirees as they become due. Most salaried and non-bargaining hourly U.S. employees hired after March 1, 2006 participate in a defined contribution plan instead of a defined benefit plan.

Alcoa also maintains health care and life insurance benefit plans covering eligible U.S. retired employees and certain retirees from foreign locations. Generally, the medical plans pay a percentage of medical expenses, reduced by deductibles and other coverages. These plans are generally unfunded, except for certain benefits funded through a trust. Life benefits are generally provided by insurance contracts. Alcoa retains the right, subject to existing agreements, to change or eliminate these benefits. All salaried and certain non-bargaining hourly U.S. employees hired after January 1, 2002 and certain bargaining hourly U.S. employees hired after July 1, 2010 are not eligible for postretirement health care benefits. All salaried and certain hourly U.S. employees that retire on or after April 1, 2008 are not eligible for postretirement life insurance benefits.

The funded status of all of Alcoa's pension and other postretirement benefit plans are measured as of December 31 each calendar year.

Obligations and Funded Status

December 31,	Pension benefits 2013	Pension benefits 2012	Other postretirement benefits 2013	Other postretirement benefits 2012
Change in benefit obligation				
Benefit obligation at beginning of year	$14,751	$13,526	$ 2,863	$ 2,844
Service cost	213	203	17	14
Interest cost	611	647	114	132
Amendments	82	6	-	-
Actuarial (gains) losses	(849)	1,120	(170)	107
Settlements	(13)	-	-	-
Benefits paid, net of participants' contributions	(841)	(833)	(249)	(256)
Medicare Part D subsidy receipts	-	-	20	21
Foreign currency translation impact	(224)	82	(3)	1
Benefit obligation at end of year*	$13,730	$14,751	$ 2,592	$ 2,863
Change in plan assets				
Fair value of plan assets at beginning of year	$11,043	$10,311	$ -	$ 8
Actual return on plan assets	109	925	-	-
Employer contributions	473	571	-	-
Participants' contributions	27	32	-	-
Benefits paid	(825)	(822)	-	(8)
Administrative expenses	(40)	(42)	-	-
Settlements	(17)	-	-	-
Foreign currency translation impact	(190)	68	-	-
Fair value of plan assets at end of year*	$10,580	$11,043	$ -	$ -
Funded status*	$ (3,150)	$ (3,708)	$ (2,592)	$ (2,863)
Less: Amounts attributed to joint venture partners	(25)	(40)	(4)	(4)
Net funded status	$ (3,125)	$ (3,668)	$ (2,588)	$ (2,859)
Amounts recognized in the Consolidated Balance Sheet consist of:				
Noncurrent assets	$ 88	$ 86	$ -	$ -
Current liabilities	(30)	(32)	(234)	(256)
Noncurrent liabilities	(3,183)	(3,722)	(2,354)	(2,603)
Net amount recognized	$ (3,125)	$ (3,668)	$ (2,588)	$ (2,859)
Amounts recognized in Accumulated Other Comprehensive Loss consist of:				
Net actuarial loss	$ 5,198	$ 5,880	$ 389	$ 593
Prior service cost (benefit)	94	119	(57)	(76)
Total, before tax effect	5,292	5,999	332	517
Less: Amounts attributed to joint venture partners	38	54	(1)	(1)
Net amount recognized, before tax effect	$ 5,254	$ 5,945	$ 333	$ 518
Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Loss consist of:				
Net actuarial (gain) loss	$ (193)	$ 1,073	$ (169)	$ 107
Amortization of accumulated net actuarial loss	(489)	(384)	(35)	(25)
Prior service cost	-	9	-	-
Amortization of prior service (cost) benefit	(25)	(19)	19	16
Total, before tax effect	(707)	679	(185)	98
Less: Amounts attributed to joint venture partners	(16)	8	-	-
Net amount recognized, before tax effect	$ (691)	$ 671	$ (185)	$ 98

* At December 31, 2013, the benefit obligation, fair value of plan assets, and funded status for U.S. pension plans were $10,643, $7,909, and $(2,734), respectively. At December 31, 2012, the benefit obligation, fair value of plan assets, and funded status for U.S. pension plans were $11,521, $8,437, and $(3,084), respectively.

Pension Plan Benefit Obligations

	Pension benefits	
	2013	2012
The projected benefit obligation and accumulated benefit obligation for all defined benefit pension plans was as follows:		
Projected benefit obligation	$13,730	$14,751
Accumulated benefit obligation	13,324	14,186
The aggregate projected benefit obligation and fair value of plan assets for pension plans with projected benefit obligations in excess of plan assets was as follows:		
Projected benefit obligation	12,180	13,973
Fair value of plan assets	8,930	10,142
The aggregate accumulated benefit obligation and fair value of plan assets for pension plans with accumulated benefit obligations in excess of plan assets was as follows:		
Accumulated benefit obligation	11,776	13,421
Fair value of plan assets	8,890	10,123

Components of Net Periodic Benefit Cost

	Pension benefits[1]			Other postretirement benefits[2]		
	2013	2012	2011	2013	2012	2011
Service cost	$ 194	$ 186	$ 165	$ 17	$ 14	$ 17
Interest cost	602	639	678	114	131	158
Expected return on plan assets	(788)	(808)	(806)	-	-	(2)
Recognized net actuarial loss	489	384	247	35	25	26
Amortization of prior service cost (benefit)	19	19	19	(18)	(16)	(17)
Settlements[3]	9	-	2	-	-	-
Curtailments[4]	6	-	(9)	-	-	-
Special termination benefits[5]	77	-	-	-	-	-
Net periodic benefit cost[6]	$ 608	$ 420	$ 296	$ 148	$ 154	$ 182

(1) In 2013, 2012, and 2011, net periodic benefit cost for U.S pension plans was $391, $288, and $190, respectively.

(2) In 2013, 2012, and 2011, net periodic benefit cost for other postretirement benefits reflects a reduction of $55, $64, and $43, respectively, related to the recognition of the federal subsidy awarded under Medicare Part D.

(3) In all periods presented, settlements were due to the payment of significant lump sum benefits and/or purchases of annuity contracts.

(4) In each period presented, curtailments were due to elimination of benefits or workforce reductions (see Note D).

(5) In 2013, special termination benefits were due to workforce reductions (see Note D).

(6) Amounts attributed to joint venture partners are not included.

Amounts Expected to be Recognized in Net Periodic Benefit Cost

	Pension benefits	Other postretirement benefits
	2014	2014
Net actuarial loss recognition	$ 384	$ 19
Prior service cost (benefit) recognition	15	(18)

Assumptions

Weighted average assumptions used to determine benefit obligations for U.S. pension and other postretirement benefit plans were as follows (assumptions for non-U.S plans did not differ materially):

December 31,	2013	2012
Discount rate	4.80%	4.15%
Rate of compensation increase	3.5	3.5

The discount rate is determined using a Company-specific yield curve model (above-median) developed with the assistance of an external actuary. The cash flows of the plans' projected benefit obligations are discounted using a single equivalent rate derived from yields on high quality corporate bonds, which represent a broad diversification of issuers in various sectors, including finance and banking, consumer products, transportation, insurance, and pharmaceutical, among others. The yield curve model parallels the plans' projected cash flows, which have an average duration of 10 years, and the underlying cash flows of the bonds included in the model exceed the cash flows needed to satisfy the Company's plans' obligations multiple times.

The rate of compensation increase is based upon actual experience. For 2014, the rate of compensation increase will be 3.5%, which approximates the five-year average.

Weighted average assumptions used to determine net periodic benefit cost for U.S. pension and other postretirement benefit plans were as follows (assumptions for non-U.S plans did not differ materially):

	2013	2012	2011
Discount rate*	4.15%	4.90%	5.75%
Expected long-term rate of return on plan assets	8.50	8.50	8.50
Rate of compensation increase	3.50	3.50	3.50

* In all periods presented, the respective discount rates were used to determine net periodic benefit cost for most U.S. pension plans for the full annual period. However, the discount rates for a limited number of plans were updated during 2013 and 2011 to reflect the remeasurement of these plans due to new union labor agreements, settlements, and/or curtailments. The updated discount rates used were not significantly different from the discount rates presented.

The expected long-term rate of return on plan assets is generally applied to a five-year market-related value of plan assets (a four-year average or the fair value at the plan measurement date is used for certain non-U.S. plans). The process used by management to develop this assumption is one that relies on a combination of historical asset return information and forward-looking returns by asset class. As it relates to historical asset return information, management focuses on the annual, 10-year moving, and 20-year moving averages when developing this assumption. Management also incorporates expected future returns on current and planned asset allocations using information from various external investment managers and consultants, as well as management's own judgment.

For 2013, 2012, and 2011, management used 8.50% as its expected long-term rate of return, which was based on the prevailing and planned strategic asset allocations, as well as estimates of future returns by asset class. This rate falls within the respective range of the 20-year moving average of actual performance and the expected future return developed by asset class. For 2014, management determined that 8.00% will be the expected long-term rate of return. The decrease of 50 basis points in the expected long-term rate of return is due to a combination of a decrease in the 20-year moving average of actual performance and lower future expected market returns.

Assumed health care cost trend rates for U.S. other postretirement benefit plans were as follows (assumptions for non-U.S plans did not differ materially):

	2013	2012	2011
Health care cost trend rate assumed for next year	5.5%	6.0%	6.5%
Rate to which the cost trend rate gradually declines	4.5%	4.5%	5.0%
Year that the rate reaches the rate at which it is assumed to remain	2017	2017	2016

The assumed health care cost trend rate is used to measure the expected cost of gross eligible charges covered by Alcoa's other postretirement benefit plans. For 2014, a 5.5% trend rate will be used, reflecting management's best estimate of the change in future health care costs covered by the plans. The plans' actual annual health care cost trend experience over the past three years has ranged from (7.5)% to 3.5%. Management does not believe this three-year range is indicative of expected increases for future health care costs over the long-term.

Assumed health care cost trend rates have an effect on the amounts reported for the health care plan. A one-percentage point change in these assumed rates would have the following effects:

	1% increase	1% decrease
Effect on other postretirement benefit obligations	$ 146	$ (130)
Effect on total of service and interest cost components	7	(6)

Plan Assets

Alcoa's pension plans' investment policy and weighted average asset allocations at December 31, 2013 and 2012, by asset class, were as follows:

		Plan assets at December 31,	
Asset class	**Policy range**	**2013**	**2012**
Equities	20–55%	37%	33%
Fixed income	25–55%	41	50
Other investments	15–35%	22	17
Total		100%	100%

The principal objectives underlying the investment of the pension plans' assets are to ensure that Alcoa can properly fund benefit obligations as they become due under a broad range of potential economic and financial scenarios, maximize the long-term investment return with an acceptable level of risk based on such obligations, and broadly diversify investments across and within the capital markets to protect asset values against adverse movements. Specific objectives for long-term investment strategy include reducing the volatility of pension assets relative to pension liabilities and achieving risk factor diversification across the balance of the asset portfolio. A portion of the assets are matched to the interest rate profile of the benefit obligation through long duration fixed income investments and exposure to broad equity risk has been decreased and diversified through investments in discretionary and systematic macro hedge funds, long/short equity hedge funds, and global and emerging market equities. Investments are further diversified by strategy, asset class, geography, and sector to enhance returns and mitigate downside risk. A large number of external investment managers are used to gain broad exposure to the financial markets and to mitigate manager-concentration risk.

Investment practices comply with the requirements of the Employee Retirement Income Security Act of 1974 (ERISA) and other applicable laws and regulations. The use of derivative instruments is permitted where appropriate and necessary for achieving overall investment policy objectives. Currently, the use of derivative instruments is not significant when compared to the overall investment portfolio.

In the course of managing the pension plans' assets, trustees of the plans may loan securities to brokers/dealers in exchange for a fee. The securities are subsequently returned to the plans in accordance with the brokerage agreement. In support of these transactions, the brokers/dealers provide collateral, which exceeds the value of the securities loaned (102%-105%).

The following section describes the valuation methodologies used by the trustees to measure the fair value of pension plan assets, including an indication of the level in the fair value hierarchy in which each type of asset is generally classified (see Derivatives in Note X for the definition of fair value and a description of the fair value hierarchy).

Equities. These securities consist of: (i) direct investments in the stock of publicly traded U.S. and non-U.S. companies and are valued based on the closing price reported in an active market on which the individual securities are traded (generally classified in Level 1); (ii) the plans' share of commingled funds that are invested in the stock of publicly traded companies and are valued at the net asset value of shares held at December 31(included in Level 1 if quoted in an active market, otherwise these investments are included in Level 2); and (iii) direct investments in long/short equity hedge funds and private equity (limited partnerships and venture capital partnerships) and are valued by investment managers based on the most recent financial information available, which typically represents significant unobservable data (generally classified as Level 3).

Fixed income. These securities consist of: (i) U.S. government debt and are generally valued using quoted prices (included in Level 1); (ii) publicly traded U.S. and non-U.S. fixed interest obligations (principally corporate bonds and debentures) and are valued through consultation and evaluation with brokers in the institutional market using quoted prices and other observable market data (included in Level 2); (iii) cash and cash equivalents, which consist of government securities in commingled funds, and are generally valued using observable market data (included in Level 2); and (iv) commercial and residential mortgage-backed securities and are valued by investment managers based on the most recent financial information available, which typically represents significant unobservable data (generally classified as Level 3).

Other investments. These investments include, among others: (i) exchange traded funds, such as gold, and real estate investment trusts and are valued based on the closing price reported in an active market on which the investments are traded (included in Level 1); (ii) the plans' share of commingled funds that are invested in real estate investment trusts and are valued at the net asset value of shares held at December 31 (generally included in Level 3, however, if fair value is able to be determined through the use of quoted market prices of similar assets or other observable market data, then the investments are classified in Level 2); and (iii) direct investments of discretionary and systematic macro hedge funds and private real estate (includes limited partnerships) and are valued by investment managers based on the most recent financial information available, which typically represents significant unobservable data (generally classified as Level 3, however, if fair value is able to be determined through the use of quoted market prices of similar assets or other observable market data, then the investments are classified in Level 2).

The fair value methods described above may not be indicative of net realizable value or reflective of future fair values. Additionally, while Alcoa believes the valuation methods used by the plans' trustees are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Table of Contents

The following table presents the fair value of pension plan assets classified under the appropriate level of the fair value hierarchy:

December 31, 2013	Level 1	Level 2	Level 3	Total
Equities:				
Equity securities	$ 1,084	$ 1,360	$ 144	$ 2,588
Long/short equity hedge funds	-	-	744	744
Private equity	-	-	520	520
	$ 1,084	$ 1,360	$ 1,408	$ 3,852
Fixed income:				
Intermediate and long duration government/credit	$ 2,251	$ 1,551	$ -	$ 3,802
Other	-	469	-	469
	$ 2,251	$ 2,020	$ -	$ 4,271
Other investments:				
Real estate	$ 124	$ 18	$ 494	$ 636
Discretionary and systematic macro hedge funds	-	-	1,287	1,287
Other	143	-	232	375
	$ 267	$ 18	$ 2,013	$ 2,298
Total*	$ 3,602	$ 3,398	$ 3,421	$10,421

December 31, 2012	Level 1	Level 2	Level 3	Total
Equities				
Equity securities	$ 1,016	$ 1,196	$ 117	$ 2,329
Long/short equity hedge funds	-	-	756	756
Private equity	-	-	550	550
	$ 1,016	$ 1,196	$ 1,423	$ 3,635
Fixed income:				
Intermediate and long duration government/credit	$ 1,169	$ 3,689	$ 215	$ 5,073
Other	-	507	-	507
	$ 1,169	$ 4,196	$ 215	$ 5,580
Other investments:				
Real estate	$ 113	$ 22	$ 438	$ 573
Discretionary macro hedge funds	-	-	796	796
Other	212	-	247	459
	$ 325	$ 22	$ 1,481	$ 1,828
Total	$ 2,510	$ 5,414	$ 3,119	$11,043

* As of December 31, 2013, the total fair value of pension plans' assets excludes a net receivable of $159, which represents securities sold not yet settled plus interest and dividends earned on various investments.

Pension plan assets classified as Level 3 in the fair value hierarchy represent investments in which the trustees have used significant unobservable inputs in the valuation model. The following table presents a reconciliation of activity for such investments:

	2013	2012
Balance at beginning of year	$3,119	$2,816
Realized gains	140	56
Unrealized gains	173	140
Purchases	636	636
Sales	(626)	(538)
Issuances	-	-
Settlements	-	-
Foreign currency translation impact	(21)	9
Transfers in and/or out of Level 3*	-	-
Balance at end of year	$3,421	$3,119

* In 2013 and 2012, there were no transfers of financial instruments into or out of Level 3

Funding and Cash Flows

It is Alcoa's policy to fund amounts for pension plans sufficient to meet the minimum requirements set forth in applicable country benefits laws and tax laws, including the Pension Protection Act of 2006, the Worker, Retiree, and Employer Recovery Act of 2008, and the Moving Ahead for Progress in the 21st Century Act for U.S. plans. From time to time, Alcoa contributes additional amounts as deemed appropriate. In 2013 and 2012, cash contributions to Alcoa's pension plans were $462 and $561. The minimum required contribution to pension plans in 2014 is estimated to be $625 (includes approximately $90 for employees affected by the shutdown of capacity at a smelter in Canada – see Note D), of which $435 is for U.S. plans.

Benefit payments expected to be paid to pension and other postretirement benefit plans' participants and expected Medicare Part D subsidy receipts are as follows:

Year ended December 31,	Pension benefits	Gross Other post-retirement benefits	Medicare Part D subsidy receipts	Net Other post-retirement benefits
2014	$ 880	$ 260	$ 25	$ 235
2015	880	260	25	235
2016	900	260	25	235
2017	910	255	30	225
2018	920	255	30	225
2019 through 2023	4,680	1,195	145	1,050
	$ 9,170	$ 2,485	$ 280	$ 2,205

Defined Contribution Plans

Alcoa sponsors savings and investment plans in several countries, including the U.S. and Australia. Expenses related to these plans were $149 in 2013, $146 in 2012, and $139 in 2011. In the U.S., employees may contribute a portion of their compensation to the plans, and Alcoa matches, mostly in company stock, a portion of these contributions. Effective January 1, 2014, Alcoa's match will equal the employee's investment elections instead of company stock.

X. Derivatives and Other Financial Instruments

Derivatives. Alcoa is exposed to certain risks relating to its ongoing business operations, including financial, market, political, and economic risks. The following discussion provides information regarding Alcoa's exposure to the risks of changing commodity prices, interest rates, and foreign currency exchange rates.

Alcoa's commodity and derivative activities are subject to the management, direction, and control of the Strategic Risk Management Committee (SRMC), which is composed of the chief executive officer, the chief financial officer, and other officers and employees that the chief executive officer selects. The SRMC meets on a periodic basis to review derivative positions and strategy and reports to Alcoa's Board of Directors on the scope of its activities.

The aluminum, energy, interest rate, and foreign exchange contracts are held for purposes other than trading. They are used primarily to mitigate uncertainty and volatility, and to cover underlying exposures. Alcoa is not involved in trading activities for energy, weather derivatives, or other nonexchange commodity trading activities.

The fair values and corresponding classifications under the appropriate level of the fair value hierarchy of outstanding derivative contracts recorded as assets in the accompanying Consolidated Balance Sheet were as follows:

Asset Derivatives	**Level**	**December 31, 2013**	**December 31, 2012**
Derivatives designated as hedging instruments:			
Prepaid expenses and other current assets:			
Aluminum contracts	1	$ 4	$ 23
Aluminum contracts	3	9	7
Foreign exchange contracts	1	2	-
Interest rate contracts	2	9	8
Other noncurrent assets:			
Aluminum contracts	1	-	3
Aluminum contracts	3	16	-
Energy contracts	3	6	3
Interest rate contracts	2	23	37
Total derivatives designated as hedging instruments		$ 69	$ 81
Derivatives not designated as hedging instruments*:			
Prepaid expenses and other current assets:			
Aluminum contracts	3	$ 149	$ 211
Other noncurrent assets:			
Aluminum contracts	3	175	329
Foreign exchange contracts	1	-	1
Total derivatives not designated as hedging instruments		$ 324	$ 541
Less margin held**:			
Prepaid expenses and other current assets:			
Aluminum contracts	1	$ -	$ 9
Interest rate contracts	2	3	8
Other noncurrent assets:			
Interest rate contracts	2	-	9
Sub-total		$ 3	$ 26
Total Asset Derivatives		$ 390	$ 596

* See the "Other" section within Note X for additional information on Alcoa's purpose for entering into derivatives not designated as hedging instruments and its overall risk management strategies.

** All margin held is in the form of cash and is valued under a Level 1 technique. The levels that correspond to the margin held in the table above reference the level of the corresponding asset for which it is held. Alcoa elected to net the margin held against the fair value amounts recognized for derivative instruments executed with the same counterparties under master netting arrangements.

The fair values and corresponding classifications under the appropriate level of the fair value hierarchy of outstanding derivative contracts recorded as liabilities in the accompanying Consolidated Balance Sheet were as follows:

Liability Derivatives	Level	December 31, 2013	December 31, 2012
Derivatives designated as hedging instruments:			
Other current liabilities:			
Aluminum contracts	1	$ 45	$ 13
Aluminum contracts	3	23	35
Other noncurrent liabilities and deferred credits:			
Aluminum contracts	1	14	1
Aluminum contracts	3	387	573
Total derivatives designated as hedging instruments		$ 469	$ 622
Derivatives not designated as hedging instruments*:			
Other current liabilities:			
Aluminum contracts	1	$ 4	$ 1
Aluminum contracts	2	-	21
Embedded credit derivative	3	2	3
Foreign exchange contracts	1	3	-
Other noncurrent liabilities and deferred credits:			
Aluminum contracts	2	-	5
Embedded credit derivative	3	19	27
Total derivatives not designated as hedging instruments		$ 28	$ 57
Less margin posted**:			
Other current liabilities:			
Aluminum contracts	1	$ 18	$ -
Total Liability Derivatives		$ 479	$ 679

* See the "Other" section within Note X for additional information on Alcoa's purpose for entering into derivatives not designated as hedging instruments and its overall risk management strategies.

** All margin posted is in the form of cash and is valued under a Level 1 technique. The levels that correspond to the margin posted in the table above reference the level of the corresponding liability for which it is posted. Alcoa elected to net the margin posted against the fair value amounts recognized for derivative instruments executed with the same counterparties under master netting arrangements.

The gross amounts of recognized derivative assets and liabilities and gross amounts offset in the accompanying Consolidated Balance Sheet were as follows:

	Assets		Liabilities	
	December 31, 2013	December 31, 2012	December 31, 2013	December 31, 2012
Gross amounts recognized:				
Aluminum contracts	$ 40	$ 72	$ 81	$ 69
Interest rate contracts	32	45	3	17
	$ 72	$ 117	$ 84	$ 86
Gross amounts offset:				
Aluminum contracts*	$ (36)	$ (55)	$ (36)	$ (55)
Interest rate contracts**	(3)	(17)	(3)	(17)
	$ (39)	$ (72)	$ (39)	$ (72)
Net amounts presented in the Consolidated Balance Sheet:				
Aluminum contracts	$ 4	$ 17	$ 45	$ 14
Interest rate contracts	29	28	-	-
	$ 33	$ 45	$ 45	$ 14

* The amounts under Assets and Liabilities as of December 31, 2013 include $18 of margin posted with counterparties. The amounts under Assets and Liabilities as of December 31, 2012 include $9 of margin held from counterparties.

** The amounts under Assets and Liabilities as of December 31, 2013 and December 31, 2012 represent margin held from the counterparty.

The following table shows the net fair values of outstanding derivative contracts at December 31, 2013 and the effect on these amounts of a hypothetical change (increase or decrease of 10%) in the market prices or rates that existed at December 31, 2013:

	Fair value asset/(liability)	Index change of + / - 10%
Aluminum contracts	$ (102)	$ 47
Embedded credit derivative	(21)	2
Energy contracts	6	214
Foreign exchange contracts	(1)	14
Interest rate contracts	29	1

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy distinguishes between (1) market participant assumptions developed based on market data obtained from independent sources (observable inputs) and (2) an entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs). The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described below:

- Level 1—Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

- Level 2—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates); and inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- Level 3—Inputs that are both significant to the fair value measurement and unobservable.

The following section describes the valuation methodologies used by Alcoa to measure derivative contracts at fair value, including an indication of the level in the fair value hierarchy in which each instrument is generally classified. Where appropriate, the description includes details of the valuation models, the key inputs to those models, and any significant assumptions. These valuation models are reviewed and tested at least on an annual basis.

Derivative contracts are valued using quoted market prices and significant other observable and unobservable inputs. Such financial instruments consist of aluminum, energy, interest rate, and foreign exchange contracts. The fair values for the majority of these derivative contracts are based upon current quoted market prices. These financial instruments are typically exchange-traded and are generally classified within Level 1 or Level 2 of the fair value hierarchy depending on whether the exchange is deemed to be an active market or not.

For certain derivative contracts whose fair values are based upon trades in liquid markets, such as interest rate swaps, valuation model inputs can generally be verified through over-the-counter markets and valuation techniques do not involve significant management judgment. The fair values of such financial instruments are generally classified within Level 2 of the fair value hierarchy.

Alcoa has other derivative contracts that do not have observable market quotes. For these financial instruments, management uses significant other observable inputs (e.g., information concerning time premiums and volatilities for certain option type embedded derivatives and regional premiums for aluminum contracts). For periods beyond the term of quoted market prices for aluminum, Alcoa uses a model that estimates the long-term price of aluminum by extrapolating the 10-year London Metal Exchange (LME) forward curve. For periods beyond the term of quoted market prices for energy, management has developed a forward curve based on independent consultant market research. Where appropriate, valuations are adjusted for various factors such as liquidity, bid/offer spreads, and credit considerations. Such adjustments are generally based on available market evidence (Level 2). In the absence of such evidence, management's best estimate is used (Level 3). If a significant input that is unobservable in one period becomes observable in a subsequent period, the related asset or liability would be transferred to the appropriate level classification (1 or 2) in the period of such change.

The following table presents Alcoa's derivative contract assets and liabilities that are measured and recognized at fair value on a recurring basis classified under the appropriate level of the fair value hierarchy (there were no transfers in or out of Levels 1 and 2 during the periods presented):

December 31,	2013	2012
Assets:		
Level 1	$ 6	$ 27
Level 2	32	45
Level 3	355	550
Margin held	(3)	(26)
Total	$390	$596
Liabilities:		
Level 1	$ 66	$ 15
Level 2	-	26
Level 3	431	638
Margin posted	(18)	-
Total	$479	$679

Table of Contents

Financial instruments classified as Level 3 in the fair value hierarchy represent derivative contracts in which management has used at least one significant unobservable input in the valuation model. The following tables present a reconciliation of activity for such derivative contracts:

2013	Assets		Liabilities	
	Aluminum contracts	Energy contracts	Aluminum contracts	Embedded credit derivative
Opening balance—January 1, 2013	$ 547	$ 3	$ 608	$ 30
Total gains or losses (realized and unrealized) included in:				
Sales	(5)	-	(24)	-
Cost of goods sold	(202)	-	-	(1)
Other income, net	28	-	-	(8)
Other comprehensive loss	22	3	(174)	-
Purchases, sales, issuances, and settlements*	-	-	-	-
Transfers into and/or out of Level 3*	-	-	-	-
Foreign currency translation	(41)	-	-	-
Closing balance—December 31, 2013	$ 349	$ 6	$ 410	$ 21
Change in unrealized gains or losses included in earnings for derivative contracts held at December 31, 2013:				
Sales	$ -	$ -	$ -	$ -
Cost of goods sold	-	-	-	-
Other income, net	28	-	-	(8)

* In 2013, there were no purchases, sales, issuances or settlements of Level 3 financial instruments. Additionally, there were no transfers of financial instruments into or out of Level 3.

2012	Assets		Liabilities	
	Aluminum contracts	Energy contracts	Aluminum contracts	Embedded credit derivative
Opening balance—January 1, 2012	$ 10	$ 2	$ 602	$ 28
Total gains or losses (realized and unrealized) included in:				
Sales	(8)	-	(33)	-
Cost of goods sold	(107)	-	-	(1)
Other income, net	16	-	-	3
Other comprehensive loss	10	1	39	-
Purchases, sales, issuances, and settlements*	596	-	-	-
Transfers into and/or out of Level 3*	-	-	-	-
Foreign currency translation	30	-	-	-
Closing balance—December 31, 2012	$ 547	$ 3	$ 608	$ 30
Change in unrealized gains or losses included in earnings for derivative contracts held at December 31, 2012:				
Sales	$ -	$ -	$ -	$ -
Cost of goods sold	-	-	-	-
Other income, net	16	-	-	3

* In July 2012, two embedded derivatives contained within existing power contracts became subject to derivative accounting under GAAP (see below). The amount reflected in this table represents the initial fair value of these embedded derivatives and was classified as an issuance of Level 3 financial instruments. There were no purchases, sales or settlements of Level 3 financial instruments. Additionally, there were no transfers of financial instruments into or out of Level 3.

As reflected in the table above, the net unrealized loss on derivative contracts using Level 3 valuation techniques was $76 and $88 as of December 31, 2013 and 2012, respectively. The unrealized losses related to aluminum contracts recognized as liabilities were mainly attributed to embedded derivatives in power contracts that index the price of power to the LME price of aluminum. These embedded derivatives are primarily valued using observable market prices; however, due to the length of the contracts, the valuation model also requires management to estimate the long-term price of aluminum based upon an extrapolation of the 10-year LME forward curve. Significant increases or decreases in the actual LME price beyond 10 years would result in a higher or lower fair value measurement. An increase of actual LME price over the inputs used in the valuation model will result in a higher cost of power and a corresponding increase to the liability. The embedded derivatives have been designated as hedges of forward sales of aluminum and related realized gains and losses were included in Sales on the accompanying Statement of Consolidated Operations.

In July 2012, as provided for in the arrangements, management elected to modify the pricing for two existing power contracts, which end in 2014 and 2016 (see directly below), for Alcoa's two smelters in Australia and the Point Henry rolling mill in Australia. These contracts contain an LME-linked embedded derivative, which previously was not recorded as an asset in Alcoa's Consolidated Balance Sheet. Beginning on January 1, 2001, all derivative contracts were required to be measured and recorded at fair value on an entity's balance sheet under GAAP; however, an exception existed for embedded derivatives upon meeting certain criteria. The LME-linked embedded derivative in these two contracts met such criteria at that time. Management's election to modify the pricing of these contracts qualifies as a significant change to the contracts thereby requiring that the contracts now be evaluated under derivative accounting as if they were new contracts. As a result, Alcoa recorded a derivative asset in the amount of $596 with an offsetting liability (deferred credit) recorded in Other current and non-current liabilities. Unrealized gains and losses from the embedded derivative were included in Other income, net on the accompanying Statement of Consolidated Operations, while realized gains and losses were included in Cost of goods sold on the accompanying Statement of Consolidated Operations as electricity purchases are made under the contracts. The deferred credit is recognized in Other income, net on the accompanying Statement of Consolidated Operations as power is received over the life of the contracts. The embedded derivative is valued using the probability and interrelationship of future LME prices, Australian dollar to U.S. dollar exchange rates, and the U.S. consumer price index. Significant increases or decreases in the LME price would result in a higher or lower fair value measurement. An increase in actual LME price over the inputs used in the valuation model will result in a higher cost of power and a decrease to the embedded derivative asset.

Also, included within Level 3 measurements is a derivative contract that will hedge the anticipated power requirements at Alcoa's Portland smelter in Australia once the existing contract expires in 2016. This derivative hedges forecasted power purchases through December 2036. Beyond the term where market information is available, management has developed a forward curve, for valuation purposes, based on independent consultant market research. The effective portion of gains and losses on this contract was recorded in Other comprehensive loss on the accompanying Consolidated Balance Sheet until the designated hedge period begins in 2016. Once the hedge period begins, realized gains and losses will be recorded in Cost of goods sold. Significant increases or decreases in the power market may result in a higher or lower fair value measurement. Higher prices in the power market would cause the derivative asset to increase in value. Alcoa had a similar contract for its Point Henry smelter in Australia once the existing contract expires in 2014, but elected to terminate the new contract in early 2013. This election was available to Alcoa under the terms of the contract and was made due to a projection that suggested the contract would be uneconomical. Prior to termination, the new contract was accounted for in the same manner as the contract for the Portland smelter.

Additionally, Alcoa has a six-year natural gas supply contract, which has an LME-linked ceiling. This contract is valued using probabilities of future LME aluminum prices and the price of Brent crude oil (priced on Platts), including the interrelationships between the two commodities subject to the ceiling. Any change in the interrelationship would result in a higher or lower fair value measurement. An LME ceiling was embedded into the contract price to protect against an increase in the price of oil without a corresponding increase in the price of LME. An increase in oil prices with no similar increase in the LME price would limit the increase of the price paid for natural gas. Unrealized gains and losses from this contract were included in Other income, net on the accompanying Statement of Consolidated Operations, while realized gains and losses will be included in Cost of goods sold on the accompanying Statement of Consolidated Operations as gas purchases are made under the contract.

Furthermore, an embedded derivative in a power contract that indexes the difference between the long-term debt ratings of Alcoa and the counterparty from any of the three major credit rating agencies is included in Level 3. Management uses market prices, historical relationships, and forecast services to determine fair value. Significant increases or decreases in any of these inputs would result in a lower or higher fair value measurement. A wider credit spread between Alcoa and the counterparty would result in an increase of the future liability and a higher cost of power. Realized gains and losses for this embedded derivative were included in Cost of goods sold on the accompanying Statement of Consolidated Operations and unrealized gains and losses were included in Other income, net on the accompanying Statement of Consolidated Operations.

The following table presents quantitative information for Level 3 derivative contracts:

	Fair value at December 31, 2013	Valuation technique	Unobservable input	Range ($ in full amounts)
Assets:				
Aluminum contract	$ -	Discounted cash flow	Interrelationship of future aluminum and oil prices	Aluminum: $1,774 per metric ton in 2014 to $2,221 per metric ton in 2018 Oil: $112 per barrel in 2014 to $89 per barrel in 2018
Aluminum contract	324	Discounted cash flow	Interrelationship of future aluminum prices, foreign currency exchange rates, and the U.S. consumer price index (CPI)	Aluminum: $1,784 per metric ton in 2014 to $2,064 per metric ton in 2016 Foreign currency: A$1 = $0.89 in 2014 to $0.83 in 2016 CPI: 1982 base year of 100 and 231 in 2014 to 246 in 2016
Aluminum contract	25	Discounted cash flow	Interrelationship of LME price to overall energy price	Aluminum: $1,839 per metric ton in 2014 to $2,239 per metric ton in 2019
Energy contracts	6	Discounted cash flow	Price of electricity beyond forward curve	$82 per megawatt hour in 2014 to $154 per megawatt hour in 2036
Liabilities:				
Aluminum contracts	410	Discounted cash flow	Price of aluminum beyond forward curve	$2,485 per metric ton in 2023 to $2,647 per metric ton in 2027
Embedded credit derivative	21	Discounted cash flow	Credit spread between Alcoa and counterparty	0.98% to 1.66% (1.32% median)

Fair Value Hedges

For derivative instruments that are designated and qualify as fair value hedges, the gain or loss on the derivative as well as the loss or gain on the hedged item attributable to the hedged risk are recognized in current earnings. The gain or loss on the hedged items are included in the same line items as the loss or gain on the related derivative contracts as follows (there were no contracts that ceased to qualify as a fair value hedge in any of the periods presented):

Derivatives in Fair Value Hedging Relationships	Location of Gain or (Loss) Recognized in Earnings on Derivatives	Amount of Gain or (Loss) Recognized in Earnings on Derivatives 2013	2012	2011
Aluminum contracts*	Sales	$ (142)	$ (9)	$ (126)
Interest rate contracts	Interest expense	10	10	64
Total		$ (132)	$ 1	$ (62)

Hedged Items in Fair Value Hedging Relationships	Location of Gain or (Loss) Recognized in Earnings on Hedged Items	Amount of Gain or (Loss) Recognized in Earnings on Hedged Items 2013	2012	2011
Aluminum contracts	Sales	$ 143	$ (9)	$ 133
Interest rate contracts	Interest expense	(10)	(10)	(31)
Total		$ 133	$ (19)	$ 102

* In 2013, 2012, and 2011, the amount of gain or (loss) recognized in earnings includes $1, $(18), and $7, respectively, related to the ineffective portion of the hedging relationships.

Aluminum. Alcoa is a leading global producer of primary aluminum and fabricated aluminum products. As a condition of sale, customers often require Alcoa to enter into long-term, fixed-price commitments. These commitments expose Alcoa to the risk of fluctuating aluminum prices between the time the order is committed and the time that the order is shipped. Alcoa's aluminum commodity risk management policy is to manage, principally through the use of futures and contracts, the aluminum price risk associated with a portion of its firm commitments. These contracts cover known exposures, generally within three years. As of December 31, 2013, Alcoa had 412,000 metric tons of aluminum futures designated as fair value hedges. The effects of this hedging activity will be recognized over the designated hedge periods in 2014 to 2017.

Interest Rates. Alcoa uses interest rate swaps to help maintain a strategic balance between fixed- and floating-rate debt and to manage overall financing costs. As of December 31, 2013, the Company had pay floating, receive fixed interest rate swaps that were designated as fair value hedges. These hedges effectively convert the interest rate from fixed to floating on $200 of debt through 2018. In January 2012, interest rate swaps with a notional amount of $315 expired in conjunction with the repayment of 6% Notes, due 2012 (see Note K).

In 2011, Alcoa terminated interest rate swaps with a notional amount of $550 in conjunction with the early retirement of the related debt. At the time of termination, the swaps were "in-the-money" resulting in a gain of $33, which was recorded in Interest expense on the accompanying Statement of Consolidated Operations.

Cash Flow Hedges

For derivative instruments that are designated and qualify as cash flow hedges, the effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income (OCI) and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings.

Derivatives in Cash Flow Hedging Relationships	Amount of Gain or (Loss) Recognized in OCI on Derivatives (Effective Portion)			Location of Gain or (Loss) Reclassified from Accumulated OCI into Earnings (Effective Portion)	Amount of Gain or (Loss) Reclassified from Accumulated OCI into Earnings (Effective Portion)*			Location of Gain or (Loss) Recognized in Earnings on Derivatives (Ineffective Portion and Amount Excluded from Effectiveness Testing)	Amount of Gain or (Loss) Recognized in Earnings on Derivatives (Ineffective Portion and Amount Excluded from Effectiveness Testing)**		
	2013	2012	2011		2013	2012	2011		2013	2012	2011
Aluminum contracts	$158	$(10)	$72	Sales	$(16)	$36	$(114)	Other income, net	$ (1)	$ (1)	$ 2
Energy contracts	1	-	(3)	Cost of goods sold	-	-	(8)	Other income, net	-	-	-
Foreign exchange contracts	-	-	1	Sales	(2)	-	4	Other income, net	-	-	-
Interest rate contracts	-	-	(2)	Interest expense	(1)	(2)	-	Other income, net	-	-	-
Interest rate contracts	3	(2)	(5)	Other income, net	-	-	(3)	Other income, net	-	-	-
Total	$162	$(12)	$63		$(19)	$34	$(121)		$ (1)	$ (1)	$ 2

* Assuming market rates remain constant with the rates at December 31, 2013, a loss of $13 is expected to be recognized in earnings over the next 12 months.

** In 2013, 2012, and 2011, the amount of gain or (loss) recognized in earnings represents $(1), $(1), and $3, respectively, related to the amount excluded from the assessment of hedge effectiveness. There was also $(1) recognized in earnings related to the ineffective portion of the hedging relationships in 2011. In 2013 and 2012, there was no ineffectiveness related to the derivatives in cash flow hedging relationships.

Aluminum and Energy. Alcoa anticipates the continued requirement to purchase aluminum and other commodities, such as electricity and natural gas, for its operations. Alcoa enters into forwards, futures, and options contracts to reduce volatility in the price of these commodities. Alcoa has also entered into power supply and other contracts that contain pricing provisions related to the LME aluminum price. The LME-linked pricing features are considered embedded derivatives. A majority of these embedded derivatives have been designated as cash flow hedges of future sales of aluminum.

Also, Alcoa has a contract to hedge the anticipated power requirements at its Portland smelter in Australia. This derivative hedges forecasted power purchases through December 2036. Prior to 2013, Alcoa had a similar contract for its Point Henry smelter in Australia but elected to terminate it under the terms of the contract (see additional information in description of Level 3 derivative contracts above).

Interest Rates. Alcoa had no outstanding cash flow hedges of interest rate exposures as of December 31, 2013, 2012 or 2011. An investment accounted for on the equity method by Alcoa has entered into interest rate contracts, which are designated as cash flow hedges. Alcoa's share of the activity of these cash flow hedges is reflected in the table above.

Foreign Exchange. Alcoa is subject to exposure from fluctuations in foreign currency exchange rates. Contracts may be used from time to time to hedge the variability in cash flows from the forecasted payment or receipt of currencies other than the functional currency. These contracts cover periods consistent with known or expected exposures through 2014.

Alcoa had the following outstanding forward contracts that were entered into to hedge forecasted transactions:

December 31,	2013	2012
Aluminum contracts (000 metric tons)	841	1,120
Energy contracts:		
Electricity (megawatt hours)	59,409,328	100,578,295
Natural gas (million British thermal units)	19,980,000	19,160,000
Foreign exchange contracts	$ 335	$ 71

Other

Alcoa has certain derivative contracts that do not qualify for hedge accounting treatment and, therefore, the fair value gains and losses on these contracts are recorded in earnings as follows:

Derivatives Not Designated as Hedging Instruments	Location of Gain or (Loss) Recognized in Earnings on Derivatives	Amount of Gain or (Loss) Recognized in Earnings on Derivatives		
		2013	2012	2011
Aluminum contracts	Sales	$ (9)	$ -	$ (13)
Aluminum contracts	Other income, net	27	16	13
Embedded credit derivative	Other income, net	8	(3)	(5)
Energy contract	Other income, net	-	-	47
Foreign exchange contracts	Other income, net	(6)	-	(3)
Total		$ 20	$ 13	$ 39

The aluminum contracts relate to derivatives (recognized in Sales) and embedded derivatives (recognized in Other income, net) entered into to minimize Alcoa's price risk related to other customer sales and certain pricing arrangements.

The embedded credit derivative relates to a power contract that indexes the difference between the long-term debt ratings of Alcoa and the counterparty from any of the three major credit rating agencies. If the counterparty's lowest credit rating is greater than one rating category above Alcoa's credit ratings, an independent investment banker would be consulted to determine a hypothetical interest rate for both parties. The two interest rates would be netted and the resulting difference would be multiplied by Alcoa's equivalent percentage of the outstanding principal of the counterparty's debt obligation as of December 31 of the year preceding the calculation date. This differential would be added to the cost of power in the period following the calculation date.

The energy contract is associated with a smelter in the U.S. for a power contract that no longer qualified for the normal purchase normal sale exception and a financial contract that no longer qualified as a hedge under derivative accounting in late 2009. Alcoa's obligations under the contracts expired in September 2011.

Alcoa has a forward contract to purchase $54 (C$58) to mitigate the foreign currency risk related to a Canadian-denominated loan due in 2014. Also, in December 2013, Alcoa entered into a forward contract (matures on March 31, 2014) to purchase $231 (R$543) to mitigate the foreign currency risk associated with a potential future transaction denominated in Brazilian reais. All other foreign exchange contracts were entered into and settled within each of the periods presented.

Material Limitations

The disclosures with respect to commodity prices, interest rates, and foreign currency exchange risk do not take into account the underlying commitments or anticipated transactions. If the underlying items were included in the analysis, the gains or losses on the futures contracts may be offset. Actual results will be determined by a number of factors that are not under Alcoa's control and could vary significantly from those factors disclosed.

Alcoa is exposed to credit loss in the event of nonperformance by counterparties on the above instruments, as well as credit or performance risk with respect to its hedged customers' commitments. Although nonperformance is possible, Alcoa does not anticipate nonperformance by any of these parties. Contracts are with creditworthy counterparties and are further supported by cash, treasury bills, or irrevocable letters of credit issued by carefully chosen banks. In addition, various master netting arrangements are in place with counterparties to facilitate settlement of gains and losses on these contracts.

Other Financial Instruments. The carrying values and fair values of Alcoa's other financial instruments were as follows:

	2013		2012	
December 31,	Carrying value	Fair value	Carrying value	Fair value
Cash and cash equivalents	$ 1,437	$1,437	$ 1,861	$1,861
Restricted cash	18	18	189	189
Noncurrent receivables	19	19	20	20
Available-for-sale securities	119	119	67	67
Short-term borrowings	57	57	53	53
Commercial paper	-	-	-	-
Long-term debt due within one year	655	1,040	465	477
Long-term debt, less amount due within one year	7,607	7,863	8,311	9,028

The following methods were used to estimate the fair values of other financial instruments:

Cash and cash equivalents, Restricted cash, Short-term borrowings, and Commercial paper. The carrying amounts approximate fair value because of the short maturity of the instruments. The fair value amounts for Cash and cash equivalents, Restricted cash, and Commercial paper were classified in Level 1, and Short-term borrowings were classified in Level 2.

Noncurrent receivables. The fair value of noncurrent receivables was based on anticipated cash flows, which approximates carrying value, and was classified in Level 2 of the fair value hierarchy.

Available-for-sale securities. The fair value of such securities was based on quoted market prices. These financial instruments consist of exchange-traded fixed income and equity securities, which are carried at fair value and were classified in Level 1 of the fair value hierarchy.

Long-term debt due within one year and Long-term debt, less amount due within one year. The fair value was based on quoted market prices for public debt and on interest rates that are currently available to Alcoa for issuance of debt with similar terms and maturities for non-public debt. The fair value amounts for all Long-term debt were classified in Level 2 of the fair value hierarchy.

Y. Subsequent Events

Management evaluated all activity of Alcoa and concluded that no subsequent events have occurred that would require recognition in the Consolidated Financial Statements or disclosure in the Notes to the Consolidated Financial Statements, except as described below.

In January 2014, Alcoa resolved a legal matter that existed as of December 31, 2013 (see Government Investigations under Litigation in Note N).

Also in January 2014, management approved the permanent shutdown and demolition of the remaining two potlines at the Massena East, N.Y. smelter. This decision was part of a review of smelting capacity initiated in May 2013 (see Note D). As a result of this decision, Alcoa expects to record restructuring-related charges between $90 and $110 ($60 to $70 after-tax, or $0.06 per diluted share) in the first quarter of 2014.

On February 4, 2014, the European Commission announced a decision related to their investigation of a prior tariff structure in Spain (see European Commission Matters in Note N).

Supplemental Financial Information (unaudited)

Quarterly Data
(in millions, except per-share amounts)

	First	Second	Third	Fourth*	Year
2013					
Sales	$5,833	$ 5,849	$5,765	$ 5,585	$23,032
Net income (loss) attributable to Alcoa common shareholders	$ 149	$ (119)	$ 24	$ (2,339)	$ (2,285)
Earnings per share attributable to Alcoa common shareholders**:					
Basic	$ 0.14	$ (0.11)	$ 0.02	$ (2.19)	$ (2.14)
Diluted	$ 0.13	$ (0.11)	$ 0.02	$ (2.19)	$ (2.14)
2012					
Sales	$6,006	$ 5,963	$5,833	$ 5,898	$23,700
Net income (loss) attributable to Alcoa common shareholders	$ 94	$ (2)	$ (143)	$ 242	$ 191
Earnings per share attributable to Alcoa common shareholders**:					
Basic	$ 0.09	$ -	$ (0.13)	$ 0.23	$ 0.18
Diluted	$ 0.09	$ -	$ (0.13)	$ 0.21	$ 0.18

* In the fourth quarter of 2013, Alcoa recorded a $1,731 ($1,719 after noncontrolling interest) impairment of goodwill (see Goodwill and Other Intangible Assets in Note A and Note E), a $372 discrete income tax charge for valuation allowances on certain deferred tax assets in Spain and the U.S. (see Note T), and a $288 ($243 after-tax and noncontrolling interest) charge related to a legal matter (see Note C and Government Investigations under Litigation in Note N).

** Per share amounts are calculated independently for each period presented; therefore, the sum of the quarterly per share amounts may not equal the per share amounts for the year.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

(a) Evaluation of Disclosure Controls and Procedures

Alcoa's Chief Executive Officer and Chief Financial Officer have evaluated the Company's disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as of the end of the period covered by this report, and they have concluded that these controls and procedures are effective.

(b) Management's Annual Report on Internal Control over Financial Reporting

Management's Report on Internal Control over Financial Reporting is included in Part II, Item 8 of this Form 10-K beginning on page 83.

(c) Attestation Report of the Registered Public Accounting Firm

The effectiveness of Alcoa's internal control over financial reporting as of December 31, 2013 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report, which is included in Part II, Item 8 of this Form 10-K on page 84.

(d) Changes in Internal Control over Financial Reporting

There have been no changes in internal control over financial reporting during the fourth quarter of 2013, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by Item 401 of Regulation S-K regarding directors is contained under the caption "Item 1—Election of Directors" of the Proxy Statement and is incorporated by reference. The information required by Item 401 of Regulation S-K regarding executive officers is set forth in Part I, Item 1 of this report under "Executive Officers of the Registrant".

The information required by Item 405 of Regulation S-K is contained under the caption "Section 16(a) Beneficial Ownership Reporting Compliance" of the Proxy Statement and is incorporated by reference.

The Company's Code of Ethics for the CEO, CFO and Other Financial Professionals is publicly available on the Company's Internet website at http://www.alcoa.com under the section "About Alcoa—Corporate Governance." The remaining information required by Item 406 of Regulation S-K is contained under the captions "Corporate Governance" and "Corporate Governance—Business Conduct Policies and Code of Ethics" of the Proxy Statement and is incorporated by reference.

The information required by Items 407(c)(3), (d)(4) and (d)(5) of Regulation S-K is included under the captions "Item 1—Election of Directors—Nominating Board Candidates—Procedures and Director Qualifications" and "Corporate Governance—Committees of the Board—Audit Committee" of the Proxy Statement and is incorporated by reference.

Item 11. Executive Compensation.

The information required by Item 402 of Regulation S-K is contained under the captions "Director Compensation", "Executive Compensation" (excluding the information under the caption "—Compensation Committee Report"), and "Corporate Governance—Recovery of Incentive Compensation" of the Proxy Statement. Such information is incorporated by reference.

The information required by Items 407(e)(4) and (e)(5) of Regulation S-K is contained under the captions "Corporate Governance—Compensation Committee Interlocks and Insider Participation" and "Executive Compensation—Compensation Committee Report" of the Proxy Statement. Such information (other than the Compensation Committee Report, which shall not be deemed to be "filed") is incorporated by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The following table gives information about Alcoa's common stock that could be issued under the company's equity compensation plans as of December 31, 2013.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights *(a)*	Weighted-average exercise price of outstanding options, warrants and rights *(b)*	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) *(c)*
Equity compensation plans approved by security holders[1]	61,240,761[1]	$ 10.78	57,626,410[2]
Equity compensation plans not approved by security holders	0	0	0
Total	61,240,761[1]	$ 10.78	57,626,410[2]

[1] Includes the 2013 Alcoa Stock Incentive Plan (approved by shareholders in May 2013) (2013 ASIP), 2009 Alcoa Stock Incentive Plan (approved by shareholders in May 2009) (2009 ASIP), 2004 Alcoa Stock Incentive Plan (approved by shareholders in April 2004) (2004 ASIP) and the former Alcoa Long Term Stock Incentive Plan (last approved by shareholders in 1992 and amendments thereto approved by shareholders in 1995). Table amounts are comprised of the following:

- 40,133,122 stock options
- 5,208,484 performance options
- 10,437,590 restricted share units
- 5,461,565 performance share awards (2,271,710 granted in 2013 at target)

[2] The 2013 ASIP authorizes, in addition to stock options, other types of stock-based awards in the form of stock appreciation rights, restricted shares, restricted share units, performance awards and other awards. The shares that remain available for issuance under the 2013 ASIP may be issued in connection with any one of these awards. Up to 55 million shares may be issued under the plan. Any award other than an option or a stock appreciation right shall count as 2.33 shares. Options and stock appreciation rights shall be counted as one share for each option or stock appreciation right. In addition, the 2013 ASIP provides the following are available to grant under the 2013 ASIP: (i) shares that are issued under the 2013 ASIP, which are subsequently forfeited, cancelled or expire in accordance with the terms of the award and (ii) shares that had previously been issued under prior plans that are outstanding as of the date of the 2013 ASIP which are subsequently forfeited, cancelled or expire in accordance with the terms of the award.

The information required by Item 403 of Regulation S-K is contained under the captions “Alcoa Stock Ownership—Stock Ownership of Certain Beneficial Owners” and “—Stock Ownership of Directors and Executive Officers” of the Proxy Statement and is incorporated by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by Item 404 of Regulation S-K is contained under the captions “Executive Compensation” (excluding the information under the caption “Compensation Committee Report”), “Corporate Governance—Director Independence and Related Person Transactions” of the Proxy Statement and is incorporated by reference.

The information required by Item 407(a) of Regulation S-K regarding director independence is contained under the captions “Item 1—Election of Directors” and “Corporate Governance” of the Proxy Statement and is incorporated by reference.

Item 14. Principal Accounting Fees and Services.

The information required by Item 9(e) of Schedule 14A is contained under the captions “Item 2—Ratification of the Appointment of the Independent Registered Public Accounting Firm—Report of the Audit Committee” and “Audit and Non-Audit Fees” of the Proxy Statement and in Attachment A (Pre-Approval Policies and Procedures for Audit and Non-Audit Services) thereto and is incorporated by reference.

Table of Contents

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) The consolidated financial statements and exhibits listed below are filed as part of this report.

(1) The Company's consolidated financial statements, the notes thereto and the report of the Independent Registered Public Accounting Firm are on pages 83 through 162 of this report.

(2) Financial statement schedules have been omitted because they are not applicable, not required, or the required information is included in the consolidated financial statements or notes thereto.

(3) Exhibits.

Exhibit Number	Description*
3(a).	Articles of the Registrant as amended effective May 6, 2013, incorporated by reference to exhibit 3(a) to the Company's Current Report on Form 8-K dated May 8, 2013.
3(b).	By-Laws of the Registrant, as amended effective January 17, 2014, incorporated by reference to exhibit 3 to the Company's Current Report on Form 8-K dated January 23, 2014.
4(a).	Articles. See Exhibit 3(a) above.
4(b).	By-Laws. See Exhibit 3(b) above.
4(c).	Form of Indenture, dated as of September 30, 1993, between Alcoa Inc. and The Bank of New York Trust Company, N.A., as successor to J. P. Morgan Trust Company, National Association (formerly Chase Manhattan Trust Company, National Association), as successor Trustee to PNC Bank, National Association, as Trustee (undated form of Indenture incorporated by reference to exhibit 4(a) to Registration Statement No. 33-49997 on Form S-3).
4(c)(1).	First Supplemental Indenture, dated as of January 25, 2007, between Alcoa Inc. and The Bank of New York Trust Company, N.A., as successor to J.P. Morgan Trust Company, National Association (formerly Chase Manhattan Trust Company, National Association), as successor Trustee to PNC Bank, National Association, as Trustee, incorporated by reference to exhibit 99.4 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated January 25, 2007.
4(c)(2).	Second Supplemental Indenture, dated as of July 15, 2008, between Alcoa Inc. and The Bank of New York Mellon Trust Company, N.A., as successor in interest to J. P. Morgan Trust Company, National Association (formerly Chase Manhattan Trust Company, National Association, as successor to PNC Bank, National Association), as Trustee, incorporated by reference to exhibit 4(c) to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated July 15, 2008.
4(c)(3).	Third Supplemental Indenture, dated as of March 24, 2009, between Alcoa Inc. and The Bank of New York Mellon Trust Company, N.A., as successor in interest to J.P. Morgan Trust Company, National Association (formerly Chase Manhattan Trust Company, National Association, as successor to PNC Bank, National Association), as Trustee, incorporated by reference to exhibit 4.2 to the Company's Current Report on Form 8-K dated March 24, 2009.
4(d).	Form of 5.55% Notes Due 2017, incorporated by reference to exhibit 4(d) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2008.

4(e).	Form of 5.90% Notes Due 2027, incorporated by reference to exhibit 4(d) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2008.
4(f).	Form of 5.95% Notes Due 2037, incorporated by reference to exhibit 4(d) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2008.
4(g).	Form of 6.75% Notes Due 2018, incorporated by reference to exhibit 4(b) to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated July 15, 2008.
4(h).	Form of 5.25% Convertible Notes due 2014, incorporated by reference to exhibit 4.1 to the Company's Current Report on Form 8-K dated March 24, 2009.
4(i).	Form of 6.150% Notes due 2020, incorporated by reference to exhibit 4 to the Company's Current Report on Form 8-K dated August 3, 2010.
4(j).	Form of 5.40% Notes due 2021, incorporated by reference to exhibit 4 to the Company's Current Report on Form 8-K, dated April 21, 2011.
4(k).	Alcoa Retirement Savings Plan for Fastener Systems Employees, incorporated by reference to exhibit 4(e) to the Company's Form S-8 Registration Statement dated July 27, 2012.
4(l).	Alcoa Retirement Savings Plan for Bargaining Employees, incorporated by reference to exhibit 4(d) to the Company's Form S-8 Registration Statement dated July 27, 2012.
4(m).	Alcoa Retirement Savings Plan for Salaried Employees, incorporated by reference to exhibit 4(c) to the Company's Form S-8 Registration Statement dated July 27, 2012.
4(n).	Alcoa Retirement Savings Plan for Hourly Non-Bargaining Employees, incorporated by reference to exhibit 4(c) to the Company's Post-Effective Amendment No. 6 to Form S-8 Registration Statement dated November 30, 2010.
10(a).	Alcoa's Summary of the Key Terms of the AWAC Agreements, incorporated by reference to exhibit 99.2 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 28, 2001.
10(b).	Charter of the Strategic Council executed December 21, 1994, incorporated by reference to exhibit 99.3 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 28, 2001.
10(c).	Amended and Restated Limited Liability Company Agreement of Alcoa Alumina & Chemicals, L.L.C. dated as of December 31, 1994, incorporated by reference to exhibit 99.4 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 28, 2001.
10(d).	Shareholders Agreement dated May 10, 1996 between Alcoa International Holdings Company and WMC Limited, incorporated by reference to exhibit 99.5 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 28, 2001.
10(e).	Side Letter of May 16, 1995 clarifying transfer restrictions, incorporated by reference to exhibit 99.6 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 28, 2001.
10(f).	Enterprise Funding Agreement, dated September 18, 2006, between Alcoa Inc., certain of its affiliates and Alumina Limited, incorporated by reference to exhibit 10(f) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2006.

10(f)(1).	Amendments to Enterprise Funding Agreement, effective January 25, 2008, between Alcoa Inc., certain of its affiliates and Alumina Limited, incorporated by reference to exhibit 10(f)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2007.
10(g).	Five-Year Revolving Credit Agreement, dated as of July 25, 2011, among Alcoa Inc., the Lenders and Issuers named therein, Citibank, N.A., as Administrative Agent for the Lenders and Issuers, and JPMorgan Chase Bank, N.A., as Syndication Agent, incorporated by reference to exhibit 10 to the Company's Current Report on Form 8-K dated July 28, 2011.
10(g)(1).	Extension Request, dated as of November 28, 2012, to Five-Year Revolving Credit Agreement by Alcoa Inc. to Citibank, N.A., as Administrative Agent, and Consents to Extension Request executed by the Lenders listed therein, incorporated by reference to exhibit 10(g)(1) to the Company's Annual Report on Form 10-K for the year ended December 31, 2012.
10(h).	Aluminum Project Framework Shareholders' Agreement, dated December 20, 2009, between Alcoa Inc. and Saudi Arabian Mining Company (Ma'aden), incorporated by reference to exhibit 10(i) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(h)(1).	First Supplemental Agreement, dated March 30, 2010, to the Aluminium Project Framework Shareholders Agreement, dated December 20, 2009, between Saudi Arabian Mining Company (Ma'aden) and Alcoa Inc., incorporated by reference to exhibit 10(c) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010.
10(i).	Closing Memorandum, dated December 20, 2009, between Alcoa Inc. and Aluminum Financing Limited, incorporated by reference to exhibit 10(j) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(i)(1).	Parent Guarantee, dated December 20, 2009, between Abdullah Abunayyan Trading Corp. and Alcoa Inc., incorporated by reference to exhibit 10(j)(1) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(i)(2).	Parent Guarantee, dated December 20, 2009, between Alcoa Inc. and Aluminum Financing Limited, incorporated by reference to exhibit 10(j)(2) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(j).	Purchase Agreement, dated March 30, 2010, between Alcoa Inc., Aluminum Financing Limited, and Abdullah Abunayyan Trading Corp., incorporated by reference to exhibit 10(d) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010.
10(k).	Settlement Agreement, dated as of October 9, 2012, by and between Aluminium Bahrain B.S.C., Alcoa Inc., Alcoa World Alumina LLC, and William Rice, incorporated by reference to exhibit 10(a) to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012.
10(l).	Plea Agreement dated January 8, 2014, between the United States of America and Alcoa World Alumina LLC.
10(m).	Offer of Settlement of Alcoa Inc. before the Securities and Exchange Commission dated December 27, 2013.
10(n).	Securities and Exchange Commission Order dated January 9, 2014.
10(o).	Employees' Excess Benefits Plan, Plan A, incorporated by reference to exhibit 10(b) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1980.

10(o)(1).	Amendments to Employees' Excess Benefits Plan, Plan A, effective January 1, 2000, incorporated by reference to exhibit 10(b)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2000.
10(o)(2).	Amendments to Employees' Excess Benefits Plan, Plan A, effective January 1, 2002, incorporated by reference to exhibit 10(j)(2) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2002.
10(o)(3).	Amendments to Employees' Excess Benefits Plan, Plan A, effective December 31, 2007, incorporated by reference to exhibit 10(j)(3) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2007.
10(o)(4).	Amendments to Employees' Excess Benefits Plan, Plan A, effective December 29, 2008, incorporated by reference to exhibit 10(j)(4) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2008.
10(o)(5).	Amendment to Employees' Excess Benefits Plan A, effective December 18, 2009, incorporated by reference to exhibit 10(m)(5) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(o)(6).	Amendment to Employees' Excess Benefits Plan A, effective January 1, 2011, incorporated by reference to exhibit 10(n)(6) to the Company's Annual Report on Form 10-K for the year ended December 31, 2010.
10(o)(7).	Amendments to Employees' Excess Benefits Plan A, effective January 1, 2012, incorporated by reference to exhibit 10(l)(7) to the Company's Annual Report on Form 10-K for the year ended December 31, 2011.
10(p).	Alcoa Internal Revenue Code Section 162(m) Compliant Annual Cash Incentive Compensation Plan, incorporated by reference to Attachment D to the Company's Definitive Proxy Statement on Form DEF 14A, filed March 7, 2011.
10(q).	2004 Summary Description of the Alcoa Incentive Compensation Plan, incorporated by reference to exhibit 10(g) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2004.
10(q)(1).	Incentive Compensation Plan of Alcoa Inc., as revised and restated effective November 8, 2007, incorporated by reference to exhibit 10(k)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2007.
10(q)(2).	Amendment to Incentive Compensation Plan of Alcoa Inc., effective December 18, 2009, incorporated by reference to exhibit 10(n)(2) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(r).	Employees' Excess Benefits Plan, Plan C, as amended and restated effective December 31, 2007, incorporated by reference to exhibit 10(l) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2007.
10(r)(1).	Amendments to Employees' Excess Benefits Plan, Plan C, effective December 29, 2008, incorporated by reference to exhibit 10(l)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2008.
10(r)(2).	Amendment to Employees' Excess Benefits Plan C, effective December 18, 2009, incorporated by reference to exhibit 10(o)(2) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.

10(r)(3).	Amendment to Employees' Excess Benefits Plan C, effective January 1, 2011, incorporated by reference to exhibit 10(p)(3) to the Company's Annual Report on Form 10-K for the year ended December 31, 2010.
10(r)(4).	Amendments to Employees' Excess Benefits Plan C, effective January 1, 2012, incorporated by reference to exhibit 10(o)(4) to the Company's Annual Report on Form 10-K for the year ended December 31, 2011.
10(s).	Deferred Fee Plan for Directors, as amended effective July 9, 1999, incorporated by reference to exhibit 10(g)(1) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended June 30, 1999.
10(t).	Restricted Stock Plan for Non-Employee Directors, as amended effective March 10, 1995, incorporated by reference to exhibit 10(h) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1994.
10(t)(1).	Amendment to Restricted Stock Plan for Non-Employee Directors, effective November 10, 1995, incorporated by reference to exhibit 10(h)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1995.
10(u).	Description of Changes to Non-Employee Director Compensation and Stock Ownership Guidelines, effective January 1, 2011, incorporated by reference to exhibit 10(b) to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010.
10(v).	Summary of 2013 Non-Employee Director Compensation and Stock Ownership Guidelines, incorporated by reference to exhibit 10(mm) to the Company's Annual Report on Form 10-K for the year ended December 31, 2012.
10(w).	Fee Continuation Plan for Non-Employee Directors, incorporated by reference to exhibit 10(k) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1989.
10(w)(1).	Amendment to Fee Continuation Plan for Non-Employee Directors, effective November 10, 1995, incorporated by reference to exhibit 10(i)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1995.
10(w)(2).	Second Amendment to the Fee Continuation Plan for Non-Employee Directors, effective September 15, 2006, incorporated by reference to exhibit 10.2 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated September 20, 2006.
10(x).	Deferred Compensation Plan, as amended effective October 30, 1992, incorporated by reference to exhibit 10(k) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1992.
10(x)(1).	Amendments to Deferred Compensation Plan, effective January 1, 1993, February 1, 1994 and January 1, 1995, incorporated by reference to exhibit 10(j)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1994.
10(x)(2).	Amendment to Deferred Compensation Plan, effective June 1, 1995, incorporated by reference to exhibit 10(j)(2) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1995.
10(x)(3).	Amendment to Deferred Compensation Plan, effective November 1, 1998, incorporated by reference to exhibit 10(j)(3) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1999.

10(x)(4).	Amendments to Deferred Compensation Plan, effective January 1, 1999, incorporated by reference to exhibit 10(j)(4) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1999.
10(x)(5).	Amendments to Deferred Compensation Plan, effective January 1, 2000, incorporated by reference to exhibit 10(j)(5) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2000.
10(x)(6).	Amendments to Deferred Compensation Plan, effective January 1, 2005, incorporated by reference to exhibit 10(q)(6) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2005.
10(x)(7).	Amendments to Deferred Compensation Plan, effective November 1, 2007 incorporated by reference to exhibit 10(p)(7) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2007.
10(x)(8).	Amendments to Deferred Compensation Plan, effective December 29, 2008, incorporated by reference to exhibit 10(p)(8) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2008.
10(x)(9).	Amendment to Deferred Compensation Plan, effective April 1, 2009, incorporated by reference to exhibit 10(s)(9) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(x)(10).	Amendment to Deferred Compensation Plan, effective December 18, 2009, incorporated by reference to exhibit 10(s)(10) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(x)(11).	Amendment to Deferred Compensation Plan, effective January 1, 2011, incorporated by reference to exhibit 10(u)(11) to the Company's Annual Report on Form 10-K for the year ended December 31, 2010.
10(x)(12).	Amendment to the Amendment dated as of December 30, 2010 to Deferred Compensation Plan, effective January 1, 2011, incorporated by reference to exhibit 10(t)(12) to the Company's Annual Report on Form 10-K for the year ended December 31, 2012.
10(x)(13).	Amendment to Deferred Compensation Plan, effective January 1, 2013, incorporated by reference to exhibit 10(t)(13) to the Company's Annual Report on Form 10-K for the year ended December 31, 2012.
10(y).	Summary of the Executive Split Dollar Life Insurance Plan, dated November 1990, incorporated by reference to exhibit 10(m) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1990.
10(z).	Amended and Restated Dividend Equivalent Compensation Plan, effective January 1, 1997, incorporated by reference to exhibit 10(h) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2004.
10(aa).	Form of Indemnity Agreement between the Company and individual directors or officers, incorporated by reference to exhibit 10(j) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1987.
10(bb).	2004 Alcoa Stock Incentive Plan, as amended through November 11, 2005, incorporated by reference to exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 16, 2005.

10(cc).	2009 Alcoa Stock Incentive Plan, incorporated by reference to Attachment C to the Company's Definitive Proxy Statement on Form DEF 14A filed March 16, 2009.
10(cc)(1).	Amended and Restated 2009 Alcoa Stock Incentive Plan, dated February 15, 2011, incorporated by reference to exhibit 10(z)(1) to the Company's Annual Report on Form 10-K for the year ended December 31, 2010.
10(dd).	Terms and Conditions for Special Retention Awards under the 2009 Alcoa Stock Incentive Plan, effective January 1, 2010, incorporated by reference to exhibit 10(e) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010.
10(ee).	Alcoa Supplemental Pension Plan for Senior Executives, as amended and restated effective December 31, 2007, incorporated by reference to exhibit 10(u) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2007.
10(ee)(1).	Amendment to Alcoa Supplemental Pension Plan for Senior Executives, effective December 29, 2008, incorporated by reference to exhibit 10(u)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2008.
10(ee)(2).	Amendment to Alcoa Supplemental Pension Plan for Senior Executives, effective December 16, 2009, incorporated by reference to exhibit 10(y)(2) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(ee)(3).	Amendment to Alcoa Supplemental Pension Plan for Senior Executives, effective December 18, 2009, incorporated by reference to exhibit 10(y)(3) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(ee)(4).	Amendment to Alcoa Supplemental Pension Plan for Senior Executives, effective January 1, 2011, incorporated by reference to exhibit 10(bb)(4) to the Company's Annual Report on Form 10-K for the year ended December 31, 2010.
10(ee)(5).	Amendments to Alcoa Supplemental Pension Plan for Senior Executives, effective January 1, 2012, incorporated by reference to exhibit 10(aa)(5) to the Company's Annual Report on Form 10-K for the year ended December 31, 2011.
10(ff).	Deferred Fee Estate Enhancement Plan for Directors, effective July 10, 1998, incorporated by reference to exhibit 10(r) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1998.
10(gg).	Alcoa Inc. Change in Control Severance Plan, as amended and restated effective November 8, 2007, incorporated by reference to exhibit 10(x) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2007.
10(gg)(1).	Amendment to Alcoa Inc. Change in Control Severance Plan, effective December 16, 2009, incorporated by reference to exhibit 10(bb)(1) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(hh).	Form of Agreement for Stock Option Awards, effective January 1, 2004, incorporated by reference to exhibit 10(a) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2004.
10(ii).	Form of Agreement for Stock Awards, effective January 1, 2004, incorporated by reference to exhibit 10(b) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2004.

10(jj).	Form of Agreement for Performance Share Awards, effective January 1, 2004, incorporated by reference to exhibit 10(c) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2004.
10(kk).	Stock Option Award Rules, revised January 1, 2004, incorporated by reference to exhibit 10(d) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2004.
10(ll).	Stock Awards Rules, effective January 1, 2004, incorporated by reference to exhibit 10(e) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2004.
10(mm).	Performance Share Awards Rules, effective January 1, 2004, incorporated by reference to exhibit 10(f) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2004.
10(nn).	2005 Deferred Fee Plan for Directors, as amended, effective January 17, 2013, incorporated by reference to exhibit 10(jj) to the Company's Annual Report on Form 10-K for the year ended December 31, 2012.
10(oo).	Global Pension Plan, effective January 1, 1998, incorporated by reference to exhibit 10(jj) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2004.
10(oo)(1).	Amendments to Global Pension Plan, incorporated by reference to exhibit 10(jj)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2004.
10(oo)(2).	Amendments to Global Pension Plan, effective January 1, 2005, incorporated by reference to exhibit 10(gg)(2) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2005.
10(oo)(3).	Amendments to Global Pension Plan, effective December 1, 2005, incorporated by reference to exhibit 10(gg)(3) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2005.
10(oo)(4).	Amendments to Global Pension Plan, effective December 29, 2008, incorporated by reference to exhibit 10(ff)(4) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2008.
10(oo)(5).	Amendments to Global Pension Plan, effective July 1, 2009, incorporated by reference to exhibit 10(jj)(5) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(oo)(6).	Amendments to Global Pension Plan, effective December 18, 2009, incorporated by reference to exhibit 10(jj)(6) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(oo)(7).	Amendment to Global Pension Plan, effective January 1, 2011, incorporated by reference to exhibit 10(mm)(7) to the Company's Annual Report on Form 10-K for the year ended December 31, 2010.
10(oo)(8).	Amendment to Global Pension Plan, effective January 1, 2011, incorporated by reference to exhibit 10(kk)(8) to the Company's Annual Report on Form 10-K for the year ended December 31, 2012.
10(pp).	Executive Severance Agreement, as amended and restated effective December 8, 2008, between Alcoa Inc. and Klaus Kleinfeld, incorporated by reference to exhibit 10(gg) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2008.

10(pp)(1).	Form of Executive Severance Agreement between the Company and new officers entered into after July 22, 2010, incorporated by reference to exhibit 10(a) to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010.
10(qq).	Form of Award Agreement for Stock Options, effective January 1, 2006, incorporated by reference to exhibit 10.2 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 16, 2005.
10(rr).	Form of Award Agreement for Stock Awards, effective January 1, 2006, incorporated by reference to exhibit 10.3 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 16, 2005.
10(ss).	Form of Award Agreement for Performance Share Awards, effective January 1, 2006, incorporated by reference to exhibit 10.4 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 16, 2005.
10(tt).	Form of Award Agreement for Performance Stock Options, effective January 1, 2006, incorporated by reference to exhibit 10.5 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 16, 2005.
10(uu).	Form of Award Agreement for Stock Options, effective May 8, 2009, incorporated by reference to exhibit 10.2 to the Company's Current Report on Form 8-K dated May 13, 2009.
10(vv).	Terms and Conditions for Stock Options, effective January 1, 2011, incorporated by reference to exhibit 10(c) to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011.
10(ww).	Form of Award Agreement for Restricted Share Units, effective May 8, 2009, incorporated by reference to exhibit 10.3 to the Company's Current Report on Form 8-K dated May 13, 2009.
10(xx).	Terms and Conditions for Restricted Share Units, effective January 1, 2011, incorporated by reference to exhibit 10(b) to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011.
10(yy).	Summary Description of Equity Choice Program for Performance Equity Award Participants, dated November 2005, incorporated by reference to exhibit 10.6 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 16, 2005.
10(zz).	Reynolds Metals Company Benefit Restoration Plan for New Retirement Program, as amended through December 31, 2005, incorporated by reference to exhibit 10(rr) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2005.
10(zz)(1).	Amendments to the Reynolds Metals Company Benefit Restoration Plan for New Retirement Program, effective December 18, 2009, incorporated by reference to exhibit 10(tt)(1) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(zz)(2).	Amendments to the Reynolds Metals Company Benefit Restoration Plan for New Retirement Program, effective January 1, 2012, incorporated by reference to exhibit 10(xx)(2) to the Company's Annual Report on Form 10-K for the year ended December 31, 2011.
10(aaa).	Global Expatriate Employee Policy (pre-January 1, 2003), incorporated by reference to exhibit 10(uu) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2005.
10(bbb).	Form of Special Retention Stock Award Agreement, effective July 14, 2006, incorporated by reference to exhibit 10.3 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated September 20, 2006.

10(ccc).	Omnibus Amendment to Rules and Terms and Conditions of all Awards under the 2004 Alcoa Stock Incentive Plan, effective January 1, 2007, incorporated by reference to exhibit 10(tt) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2007.
10(ddd).	Letter Agreement, dated August 14, 2007, between Alcoa Inc. and Klaus Kleinfeld, incorporated by reference to exhibit 10(b) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2007.
10(eee).	Employment Offer Letter, dated April 2, 2012, between Alcoa Inc. and Audrey Strauss, incorporated by reference to exhibit 10(b) to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012.
10(fff).	Director Plan: You Make a Difference Award, incorporated by reference to exhibit 10(uu) to the Company's Annual Report on Form 10-K (Commission on file number 1-3610) for the year ended December 31, 2008.
10(ggg).	Form of Award Agreement for Stock Options, effective January 1, 2010, incorporated by reference to exhibit 10(ddd) to the Company's Annual Report on Form 10-K for the year ended December 31, 2009.
10(hhh).	2013 Alcoa Stock Incentive Plan, incorporated by reference to exhibit 10(a) to the Company's Current Report on Form 8-K dated May 8, 2013.
10(iii).	Alcoa Inc. Terms and Conditions for Stock Option Awards, effective May 3, 2013, incorporated by reference to exhibit 10(b) to the Company's Current Report on Form 8-K dated May 8, 2013.
10(jjj).	Alcoa Inc. Terms and Conditions for Restricted Share Units, effective May 3, 2013, incorporated by reference to exhibit 10(c) to the Company's Current Report on Form 8-K dated May 8, 2013.
10(kkk).	Terms and Conditions (Australian Addendum) 2013 Alcoa Stock Incentive Plan, effective May 3, 2013, incorporated by reference to exhibit 10(d) to the Company's Current Report on Form 8-K dated May 8, 2013.
10(lll).	Letter Agreement, dated July 23, 2013, between Alcoa Inc. and Nicholas J. Ashooh, incorporated by reference to exhibit 10 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2013.
10(mmm).	Retention Agreement, dated October 4, 2013, between Alcoa Inc. and Graeme Bottger.
12.	Computation of Ratio of Earnings to Fixed Charges.
21.	Subsidiaries of the Registrant.
23.	Consent of Independent Registered Public Accounting Firm.
24.	Power of Attorney for certain directors.
31.	Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
95.	Mine Safety Disclosure.
101. INS	XBRL Instance Document.

101. SCH	XBRL Taxonomy Extension Schema Document.
101. CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101. DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101. LAB	XBRL Taxonomy Extension Label Linkbase Document.
101. PRE	XBRL Taxonomy Extension Presentation Linkbase Document.

* Exhibit Nos. 10(o) through 10(mmm) are management contracts or compensatory plans required to be filed as Exhibits to this Form 10-K.

Amendments and modifications to other Exhibits previously filed have been omitted when in the opinion of the registrant such Exhibits as amended or modified are no longer material or, in certain instances, are no longer required to be filed as Exhibits.

No other instruments defining the rights of holders of long-term debt of the registrant or its subsidiaries have been filed as Exhibits because no such instruments met the threshold materiality requirements under Regulation S-K. The registrant agrees, however, to furnish a copy of any such instruments to the Commission upon request.

Table of Contents

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ALCOA INC.

February 13, 2014 By /s/ Robert S. Collins

Robert S. Collins
Vice President and Controller
(Also signing as Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Klaus Kleinfeld Klaus Kleinfeld	Chairman and Chief Executive Officer (Principal Executive Officer and Director)	February 13, 2014
/s/ William F. Oplinger William F. Oplinger	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 13, 2014

Arthur D. Collins, Jr., Kathryn S. Fuller, Judith M. Gueron, Michael G. Morris, E. Stanley O'Neal, James W. Owens, Patricia F. Russo, Sir Martin Sorrell, Ratan N. Tata and Ernesto Zedillo, each as a Director, on February 13, 2014, by Robert S. Collins, their Attorney-in-Fact.*

*By /s/ Robert S. Collins

Robert S. Collins
Attorney-in-Fact

UNITED STATES DISTRICT COURT FOR THE

WESTERN DISTRICT OF PENNSYLVANIA

UNITED STATES OF AMERICA	)	CRIMINAL NO. 14-7
v.	)	
ALCOA WORLD ALUMINA LLC,	)	Count 1: FCPA Anti-Bribery Provision, 15 U.S.C. § 78dd-2 and 18 U.S.C. § 2
Defendant.	)	

PLEA AGREEMENT

The United States of America, by and through the Fraud Section of the Criminal Division of the United States Department of Justice and the United States Attorney's Office for the Western District of Pennsylvania (the "United States" or the "Department"), and the defendant, Alcoa World Alumina LLC (the "Defendant"), by and through its undersigned attorneys, and through its authorized representative, pursuant to authority granted by Defendant's Board of Member Representatives, hereby submit and enter into this plea agreement (the "Agreement"), pursuant to Rule 11(c)(1)(C) of the Federal Rules of Criminal Procedure. The terms and conditions of this Agreement are as follows:

The Defendant's Agreement

1. Pursuant to Fed. R. Crim. P. 11(c)(1)(C), the Defendant agrees to waive its right to grand jury indictment and its right to challenge venue in the District Court for the Western District of Pennsylvania, and to plead guilty to a one-count Information charging the Defendant with one count of violating the anti-bribery provisions of the Foreign Corrupt Practices Act of 1977 ("FCPA"), as amended, Title 15, United States Code, Section 78dd-2, and Title 18, United

States Code, Section 2. Upon acceptance by the Court of this Agreement, the Defendant further agrees to persist in that plea through sentencing and, as set forth below, to cooperate fully with the Department in its investigation into all matters related to the conduct charged in the Information.

2. The Defendant understands and agrees that this Agreement is between the Department and the Defendant and does not bind any other division or section of the Department of Justice or any other federal, state, or local prosecuting, administrative, or regulatory authority. Nevertheless, the Department will bring this Agreement and the cooperation of the Defendant, its direct or indirect affiliates, subsidiaries, and majority shareholder to the attention of other prosecuting authorities or other agencies, if requested by the Defendant.

3. The Defendant agrees that this Agreement will be executed by an authorized corporate representative. The Defendant further agrees that a resolution duly adopted by the Defendant's Board of Member Representatives, attached to this Agreement as Exhibit 1, or in similar form, authorizes the Defendant to enter into this Agreement and take all necessary steps to effectuate this Agreement, and that the signatures on this Agreement by the Defendant and its counsel are authorized by the Defendant's Board of Member Representatives on behalf of the Defendant. In connection with this Agreement, the Defendant will also provide to the Department a certified resolution of the Board of Directors of Alcoa Inc., attached as Exhibit 2 hereto, or in similar form, that provides that Alcoa Inc. ("Alcoa"), and its subsidiaries, divisions, groups and affiliates, except for the Defendant, agree to certain undertakings as set forth in this Agreement in exchange for the United States' agreement in paragraph 20.

4. Except as may otherwise be agreed by the parties hereto in connection with a particular transaction, the Defendant agrees that if, at any time while the Defendant has

obligations under this Agreement, the Defendant sells, merges, or transfers all or substantially all of its business operations as they exist as of the date of this Agreement, whether such sale(s) is/are structured as a stock or asset sale, merger, or transfer, the Defendant shall include in any contract for sale, merger, or transfer a provision fully binding the purchaser(s) or any successor(s) in interest thereto to the guarantees and obligations described in this Agreement.

5. The Defendant waives any statute of limitations with regard to any conduct relating to corrupt payments and related internal accounting controls or books and records violations as of the date of this Agreement through the full term of the Defendant's probation and until all of the Defendant's obligations under this Agreement have been satisfied.

6. The Defendant agrees and represents that it has the full legal right, power, and authority to enter into and perform all of its obligations under this Agreement.

7. The Defendant agrees to pay the United States a criminal fine in the amount of $209,000,000 in five equal annual installments of $41,800,000. The first payment shall be made in full on or before the tenth (10) business day after the date of the entry of the judgment of conviction following the Defendant's sentencing, and the second, third, fourth and fifth payments shall be due in full, respectively, on the first, second, third, and fourth-year anniversaries of the entry of the judgment of conviction. The Defendant agrees to wire transfer these payments to the Clerk of the Court for the United States District Court for the Western District of Pennsylvania. The Defendant further agrees to pay the Clerk of the Court for the United States District Court for the Western District of Pennsylvania the mandatory special assessment of $400 within ten (10) business days from the date of entry of the judgment of conviction. The Defendant acknowledges that no tax deductions may be sought in connection with the payment of the fine.

8. As a result of the Defendant's conduct as set forth in the Statement of Facts, attached as Exhibit 3 hereto, the parties agree the Department could institute a civil and/or criminal forfeiture action against certain funds held by the Defendant and that such funds would be forfeitable pursuant to Title 18, United States Code, Section 981 and Title 28, United States Code, Section 2461. The Defendant hereby acknowledges that at least $ 14,000,000 was involved in transactions described in Exhibit 3 in violation of Title 15, United States Code, Section 78dd-2 and Title 18, United States Code, Section 2. The Defendant hereby agrees to administratively forfeit to the United States the sum of $14,000,000 (the "Forfeiture Amount"). The Defendant and Alcoa hereby agree that, in the event the funds used to pay the Forfeiture Amount are not directly traceable to the transactions, the monies used to pay the Forfeiture Amount shall be considered substitute *res* for the purpose of forfeiture to the United States pursuant to Title 18, United States Code, Section 981, and the Defendant and Alcoa release any and all right, title, interest, and claims they may have to such funds. To accomplish this administrative forfeiture, the Defendant agrees to pay the Forfeiture Amount plus any associated transfer fees within ten (10) business days of the date of entry of the judgment of conviction following the Defendant's sentencing by check or wire transfer made payable to the United States Internal Revenue Service-Criminal Investigation. The Defendant and Alcoa agree to sign any additional documents necessary to complete forfeiture of the funds. The Defendant and Alcoa take no position as to the disposition of the funds after payment and waive any statutory or procedural notice requirements with respect to the United States' disposition of the funds. The Defendant and Alcoa knowingly and voluntarily waive any claim or defense they may have under the Eighth Amendment of the United States Constitution, including any claim of excessive fine or penalty with respect to the forfeited assets. In the event of a breach of this Agreement, the Defendant and Alcoa acknowledge that the United States may pursue additional civil and criminal forfeiture in excess of the Forfeiture Amount.

9. The Defendant agrees to abide by all terms and obligations of this Agreement as described herein, including, but not limited to, the following:

a. to plead guilty as set forth in this Agreement;

b. to abide by all sentencing stipulations contained in this Agreement;

c. to appear, through its duly appointed representatives, as ordered for all court appearances, and obey any other ongoing court order in this matter;

d. to commit no further crimes;

e. to be truthful at all times with the Court;

f. to pay the applicable fine and special assessment; and

g. to continue to participate in and abide by the Corporate Compliance Program established by Alcoa, which Alcoa has separately agreed to continue to implement and maintain, attached as Exhibit 4.

10. The Defendant agrees to continue to cooperate fully with the Department, the Internal Revenue Service-Criminal Investigations Division (the "IRS"), the Federal Bureau of Investigation (the "FBI"), and the U.S. Securities and Exchange Commission (the "SEC") in a manner consistent with applicable law and regulations, in any and all matters relating to the conduct described in this Agreement and Exhibit 3, and other conduct under investigation by the Department that has commenced before or during the term of this Agreement, until the date upon which all investigations and prosecutions arising out of such conduct are concluded, whether or not those investigations and prosecutions are concluded within the term of Defendant's probation in paragraph 35(c). At the request of the Department, the Defendant shall also cooperate fully with foreign law enforcement authorities and agencies and the Multilateral Development Banks ("MDBs"). Such cooperation shall include, but not be limited to, the following:

a. The Defendant shall, to the extent consistent with the foregoing, truthfully disclose to the Department all factual information not protected by a valid claim of attorney-client privilege or work product doctrine protection with respect to the activities of the Defendant, Alcoa and their affiliates, their present and former member representatives, directors, officers, employees, agents, consultants, contractors, and subcontractors, concerning all matters relating to corrupt payments to foreign public officials or to employees of private customers or concerning related internal controls or books and records violations about which the Defendant or Alcoa have any knowledge and about which the Department, the FBI, the IRS, the SEC, or, at the request of the Department, any foreign law enforcement authorities and agencies and MDBs, shall inquire;

b. The Defendant shall provide to the Department, upon request, any nonprivileged or non-protected document, record, or other tangible evidence relating to such corrupt payments to foreign public officials or to employees of private customers about which the aforementioned authorities and agencies shall inquire of the Defendant, subject to the direction of the Department; and

c. The Defendant shall ensure that the Department is given access to all current, and to the extent possible, former member representatives, officers, employees, agents, and consultants of the Defendant and Alcoa for interviews and testimony in the United States relating to such payments.

11. The Defendant agrees that if it or any of its direct or indirect affiliates or subsidiaries issues a press release or holds a press conference in connection with this Agreement,

the Defendant shall first consult with the Department to determine whether (a) the text of the release or proposed statements at any press conference are true and accurate with respect to matters between the Department and the Defendant and Alcoa; and (b) the Department has no objection to the release or statement. Statements at any press conference concerning this matter shall be consistent with this press release.

Alcoa's Agreement

12. In exchange for the United States' agreement in paragraph 20, Alcoa agrees that it and its subsidiaries, divisions, groups and affiliates will fulfill the commitments and be bound to the terms outlined in paragraphs 8, 9(g), and 13 to 19 of this Agreement and in Exhibits 2 and 4 attached hereto.

13. Alcoa agrees to guarantee, secure and ensure delivery by the Defendant of all payments due from the Defendant under the Agreement; provided, however, that such guarantee shall be expressly conditioned upon the Court's acceptance of the Agreement and entry of a judgment consistent with all provisions of the Agreement. Alcoa acknowledges that no tax deductions may be sought in connection with the payment of the fine.

14. Alcoa agrees not to institute or participate in any proceeding to interfere with, alter, or bar enforcement of any fine, penalty, special assessment or forfeiture order imposed on the Defendant pursuant to this Agreement pursuant to the automatic stay or other provision of the United States Bankruptcy Code.

15. Except as may otherwise be agreed by the parties hereto in connection with a particular transaction, Alcoa agrees that if, at any time while Alcoa still has obligations and commitments to the United States as set forth in this Agreement, Alcoa sells, merges, or transfers all or substantially all of its business operations as they exist as of the date of this Agreement,

whether such sale(s) is/are structured as a stock or asset sale, merger, or transfer, Alcoa shall include in any contract for sale, merger, or transfer a provision fully binding the purchaser(s) or any successor(s) in interest thereto to the guarantees and obligations described in this Agreement.

16. Alcoa agrees that it and its subsidiaries, divisions, groups and affiliates shall continue to cooperate fully on matters and in a manner substantially similar to the cooperation required of the Defendant in paragraphs 10(a)-(c) with the Department, the IRS, the FBI, and the SEC. Such cooperation shall be in a manner consistent with applicable law and regulations. This includes cooperating fully in any investigation of Alcoa and its subsidiaries, divisions, groups and affiliates, and any of its present and former officers, directors, employees, agents and consultants, or any other party, in any and all matters relating to this Agreement and Exhibit 3.

17. Alcoa agrees that if it or any of its direct or indirect affiliates or subsidiaries issues a press release or holds a press conference in connection with this Agreement, Alcoa shall first consult with the Department to determine whether (a) the text of the release or proposed statements at any press conference are true and accurate with respect to matters between the Department and the Defendant and Alcoa; and (b) the Department has no objection to the release or statement. Statements at any press conference concerning this matter shall be consistent with this press release.

18. Other than as may be necessary with respect to defense of civil litigation or arbitration relating to this matter, Alcoa waives all rights, whether asserted directly or by a representative, to request or receive from any department or agency of the United States any records pertaining to the investigation or prosecution of this case, including without limitation any records that may be sought under the Freedom of Information Act, Title 5, United States Code, Section 552, or the Privacy Act, Title 5, United States Code, Section 552a.

19. Alcoa waives all defenses based on the statute of limitations, venue, speedy trial under the United States Constitution and the Speedy Trial Act, and any and all constitutional and non-jurisdictional defenses with respect to any prosecution of Alcoa that is not time-barred on the date that this Agreement is signed related to or arising from the conduct charged in the Information to be filed against the Defendant, in the event that Alcoa fails to fulfill its commitments as set forth in this Agreement for any reason, provided such prosecution is brought within one year of such breach or failure plus the remaining time period of the statute of limitations as of the date that this Agreement is signed.

The United States' Agreement

20. In exchange for the guilty plea of the Defendant and the complete fulfillment of all of the Defendant's and Alcoa's obligations as set forth in this Agreement, the Department agrees that it will not file additional criminal charges against the Defendant or Alcoa, or any of their direct or indirect affiliates or subsidiaries, relating to (a) any of the conduct described in the Statement of Facts, attached as Exhibit 3, or the criminal information filed pursuant to this Agreement or (b) information disclosed by the Defendant or Alcoa to the Department prior to the date of this Agreement. This paragraph does not provide any protection against prosecution for any corrupt payments, false accounting, or failure to implement internal controls or circumvention of internal controls, if any, made in the future by the Defendant or Alcoa. This Agreement does not close or preclude the investigation or prosecution of any natural persons, including any officers, directors, member representatives, employees, agents, or consultants of the Defendant or Alcoa, who may have been involved in any of the matters set forth in the Information, Statement of Facts, or in any other matters.

Factual Basis

21. The Defendant is pleading guilty because it is guilty of the charge contained in the Information. The Defendant admits, agrees, and stipulates only that the factual allegations with respect to its conduct as set forth in the Statement of Facts, attached hereto as Exhibit 3 and incorporated herein, are true and correct, that it is responsible for the acts of its officers and employees described in the Statement of Facts, and that the Statement of Facts accurately reflects the Defendant's criminal conduct.

Defendant's Waiver of Rights, Including the Right to Appeal

22. Federal Rule of Criminal Procedure 11(f) and Federal Rule of Evidence 410 limit the admissibility of statements made in the course of plea proceedings or plea discussions in both civil and criminal proceedings, if the guilty plea is later withdrawn. The Defendant expressly warrants that it has discussed these rules with its counsel and understands them. Solely to the extent set forth below, the Defendant voluntarily waives and gives up the rights enumerated in Federal Rule of Criminal Procedure 11(f) and Federal Rule of Evidence 410. Specifically, the Defendant understands and agrees that any statements that it makes in the course of its guilty plea or in connection with the Agreement are admissible against it for any purpose in any U.S. federal criminal proceeding if, even though the Department has fulfilled all of its obligations under this Agreement and the Court has imposed the agreed-upon sentence, the Defendant nevertheless withdraws its guilty plea.

23. The Defendant is satisfied that the Defendant's attorneys have rendered effective assistance. The Defendant understands that by entering into this Agreement, the Defendant surrenders certain rights as provided in this Agreement. The Defendant understands that the rights of criminal defendants include the following:

a. If the Defendant had persisted in a plea of not guilty to the charges, the Defendant would have the right to a speedy jury trial with the assistance of counsel. The trial may be conducted by a judge sitting without a jury if the Defendant, the United States, and the Court all agree.

b. At a trial, the United States would be required to present its witnesses and other evidence against the Defendant. The Defendant would be able to confront and cross-examine adverse witnesses. In turn, the Defendant could, but would not be required to, present witnesses and other evidence on its own behalf. If the witnesses for the Defendant would not appear voluntarily, the Defendant could require their attendance through the subpoena power of the Court.

c. At a trial, no inference of guilt could be drawn from the Defendant's refusal to present evidence. However, if the Defendant desired to, do so, it could present evidence on its own behalf.

24. The Defendant also understands that Title 18, United States Code, Section 3742, affords a defendant the right to appeal the sentence imposed. Nonetheless, the Defendant knowingly waives the right to appeal the conviction and sentence imposed by the Court, provided that such sentence is consistent with the terms of this Agreement, in exchange for the concessions made by the United States in this Agreement. This Agreement does not affect the rights or obligations of the United States as set forth in Title 18, United States Code, Section 3742(b).

25. The Defendant is also aware that the United States Constitution and the laws of the United States afford the Defendant the right to contest or "collaterally attack" its conviction or sentence after the conviction has become final. Knowing that, the Defendant knowingly

waives the right to contest or "collaterally attack" the Defendant's plea, conviction, and sentence, provided that such sentence is consistent with the terms of this Agreement, by means of any post-conviction proceeding.

26. Other than as may be necessary with respect to defense of civil litigation or arbitration relating to this matter, the Defendant also hereby waives all rights, whether asserted directly or by a representative, to request or receive from any department or agency of the United States any records pertaining to the investigation or prosecution of this case, including without limitation any records that may be sought under the Freedom of Information Act, Title 5, United States Code, Section 552, or the Privacy Act, Title 5, United States Code, Section 552a.

27. The Defendant waives all defenses based on the statute of limitations and venue with respect to any prosecution that is not time-barred on the date that this Agreement is signed in the event that: (a) the conviction is later vacated for any reason; (b) the Defendant or Alcoa violates this Agreement; or (c) the plea is later withdrawn, provided such prosecution is brought within one year of any such vacation of conviction, violation of agreement, or withdrawal of plea plus the remaining time period of the statute of limitations as of the date that this Agreement is signed. The Department is free to take any position on appeal or any other post-judgment matter.

28. The Defendant waives all defenses to its conduct charged in the Information based on venue, speedy trial under the Unites States Constitution and the Speedy Trial Act, and any and all constitutional and non-jurisdictional defects.

29. The Defendant acknowledges that no threats have been made against the Defendant and that the Defendant is pleading guilty freely and voluntarily because the Defendant is guilty.

Penalty

30. The statutory maximum sentence that the Court can impose for a violation of Title 15, United States Code, Section 78dd-2, is a fine of $2,000,000 or twice the gross pecuniary gain or gross pecuniary loss resulting from the offense, whichever is greatest, Title 18, United States Code, Section 3571(c)(3) and (d); five years' probation, Title 18, United States Code, Section 3561(c)(1); and a mandatory special assessment of $400, Title 18, United States Code, Section 3013(a)(2)(B).

31. The Defendant hereby stipulates and agrees not to institute or participate in any proceeding to interfere with, alter, or bar enforcement of any fine, penalty, special assessment or forfeiture order pursuant to the automatic stay or other provision of the United States Bankruptcy Code.

32. The Defendant agrees that nothing in this Agreement is intended to release the Defendant from any and all of the Defendant's excise and income tax liabilities and reporting obligations for any and all income not properly reported and/or legally or illegally obtained or derived.

Sentencing Recommendation

33. The United States and the Defendant agree that pursuant to *United States v. Booker*, 543 U.S. 220 (2005), the Court must determine an advisory sentencing guideline range pursuant to the United States Sentencing Guidelines. The Court will then determine a reasonable sentence within the statutory range after considering the advisory sentencing guideline range and the factors listed in Title 18, United States Code, Section 3553(a). The parties' agreement herein to any guideline sentencing factors constitutes proof of those factors sufficient to satisfy the applicable burden of proof.

34. The United States and the Defendant agree that a faithful application of the United States Sentencing Guidelines (U.S.S.G.) to determine the applicable fine range yields the following analysis:

a. The 2012 U.S.S.G. are applicable to this matter.

b. Offense Level. Based upon U.S.S.G. § 2C1.1, the total offense level is 48, calculated as follows:

(a)(2)	Base Offense Level	12
(b)(1)	Multiple Bribes	+2
(b)(2)	Value of benefit received More than $400,000,000	+30
(b)(3)	Offense involved a high-level decision-making public official	+4
TOTAL		48

c. Base Fine. Based upon U.S.S.G. § 8C2.4(a)(1) and § 2C1.1(d), the base fine is $446,000,000 (the pecuniary gain from the offense)

d. Culpability Score. Based upon U.S.S.G. § 8C2.5, the culpability score is 5, calculated as follows:

(a)	Base Culpability Score	5
(b)(4)	the organization had 50 or more employees and an individual within substantial authority personnel participated in, condoned, or was willfully ignorant of the offense	+2
(g)(1)	The organization fully cooperated in the investigation and clearly demonstrated recognition and affirmative acceptance of responsibility for its criminal conduct	-2
TOTAL		5

<u>Calculation of Fine Range</u>:

Base Fine	$446,000,000
Multipliers	1.0 (min)/2.0 (max)
Fine Range	$446,000,000 / $892,000,000

35. Pursuant to Rule 11(c)(1)(C) of the Federal Rules of Criminal Procedure, the United States and the Defendant agree that the following represents the appropriate disposition of the case:

a. <u>Fine</u>. Pursuant to Fed. R. Crim. P. 11(c)(1)(C), the United States and the Defendant agree that the appropriate disposition of this case is, and agree to recommend jointly, that the Court impose a sentence requiring the Defendant to pay to the United States a criminal fine of $209,000,000. Because the immediate payment of the entire fine "would pose an undue burden on" the Defendant and Alcoa, U.S.S.G. § 8C3.2(b), the United States and the Defendant agree that the entire fine shall be paid in five equal annual installments of $41,800,000, with the first payment due in full on or before the tenth (10th) business day after the date of the entry of the judgment of conviction. Thereafter, the second, third, fourth and fifth payments shall each be due in full, respectively, on the first, second, third, and fourth-year anniversaries of the date of the entry of judgment of conviction ("the recommended sentence"). The United States and the Defendant have agreed that a fine of $209,000,000 is the appropriate disposition based on the following factors and those in 18 U.S.C. § 3553(a): (a) the impact of a penalty within the guidelines range on the financial condition of the Defendant's majority shareholder, Alcoa, and its potential to "substantially jeopardiz[e]" Alcoa's ability to compete, *see* U.S.S.G. § 8C3.3(b), including, but not limited to, its ability to fund its sustaining and improving capital expenditures, its ability to invest in research and development, its ability to fund its pension obligations, and its ability to maintain necessary cash reserves to fund its operations and meet its liabilities; (b) the significant remedy being imposed on the Defendant's majority shareholder, Alcoa, by the U.S. Securities and Exchange Commission for Alcoa's conduct in this matter; (c) after learning of the allegations of FCPA violations, Alcoa's Board of Directors appointed a Special Committee of the Board of Directors to oversee an internal investigation by independent counsel; (d) the substantial cooperation provided to the Department by the Defendant's majority shareholder, Alcoa, including conducting an extensive internal investigation, voluntarily making employees available for interviews, and collecting, analyzing, and organizing voluminous evidence and information for the Department; (e) the remedial efforts already undertaken and to be undertaken by the Defendant's majority shareholder, Alcoa, which affect both the Defendant's operations and those of Alcoa, including the hiring of new senior legal and ethics and compliance officers and the implementation of enhanced due diligence reviews of the retention of third-party agents and consultants; and (f) Alcoa's separate commitment to ensuring that its anti-corruption compliance program will be maintained to continue to satisfy the minimum elements set forth in Exhibit 4 to this Agreement.

b. Mandatory Special Assessment. The Defendant shall pay to the Clerk of the Court for the United States District Court for the Western District of Pennsylvania within ten (10) business days of the date of the entry of the judgment of conviction the mandatory special assessment of $400.

c. A Term of Four Years Probation. A four-year term of probation shall be imposed on the Defendant. The term of probation shall include the following mandatory and discretionary special conditions, pursuant to 18 U.S.C. § 3563(a) and (b): (i) The Defendant shall not commit another federal, state or local crime; (ii) the Defendant shall provide the probation officer with any information or documents requested by the probation officer; (iii) the Defendant shall notify the Court of any material change in the Defendant's economic circumstances that might affect the Defendant's ability to pay the fines and other financial obligations set forth herein; and (iv) the Defendant shall pay the criminal fine set forth in paragraph 35(a) above.

d. Court Not Bound. This Agreement is presented to the Court pursuant to Fed. R. Crim. P. 11(c)(1)(C). The Defendant understands that, if the Court rejects this Agreement, the Court must: (a) inform the parties that the Court rejects the Agreement; (b) advise the Defendant's counsel that the Court is not required to follow the Agreement and afford the Defendant the opportunity to withdraw its plea; and (c) advise the Defendant that if the plea is not withdrawn, the Court may dispose of this case less favorably toward the Defendant than the Agreement contemplated. If the Court rejects this Agreement pursuant to Fed. R. Crim. P. 11(c)(5), the United States and the Defendant agree that the Defendant will be allowed to withdraw its plea, and that neither the Defendant nor the United States shall be bound by the provisions of this Agreement. If the Defendant withdraws its plea of guilty under the circumstances described in the immediately preceding sentence, this Agreement, the guilty plea, and any statement made in the course of any proceeding under Fed. R. Crim. P. 11 regarding the guilty plea or this Agreement, or made in the course of plea discussions with an attorney for the United States, shall not be admissible against the Defendant in any criminal or civil proceeding. The Defendant, however, also understands that if the Court accepts this Agreement, the Court is bound by the sentencing provisions in paragraphs 35(a), (b) and (c).

36. The parties further agree, with the permission of the Court, to waive the requirement of a pre-sentence investigation report pursuant to Federal Rule of Criminal Procedure 32(c)(l)(A)(ii), based on a finding by the Court that the record contains information sufficient to enable the Court to meaningfully exercise its sentencing power. The parties agree, however, that in the event the Court orders the preparation of a pre-sentence investigation report prior to sentencing, such order will not affect the Agreement set forth herein. In the event the Court so orders, the Department will fully inform the preparer of the pre-sentence report and the Court of the facts and law related to the Defendant's case.

37. The parties further agree to ask the Court's permission to combine the entry of the plea and sentencing into one proceeding, and to conduct the plea and sentencing hearings of the Defendant in one proceeding. The parties agree, however, that in the event the Court orders that the entry of the guilty plea and sentencing hearing occur at separate proceedings, such an order will not affect the Agreement set forth herein.

Breach of Agreement

38. The Defendant agrees that if it breaches the terms of this Agreement, commits any federal crime subsequent to the date of this Agreement, or has provided or provides deliberately false, incomplete, or misleading information in connection with this Agreement, the Department may, in its sole discretion, characterize such conduct as a breach of this Agreement. In the event of such a breach, (a) the Department will be free from its obligations under the Agreement and may take whatever position it believes appropriate as to the sentence; (b) the Defendant will not have the right to withdraw the guilty plea; (c) the Defendant shall be fully subject to criminal prosecution for any other crimes that it has committed, if any, including perjury and obstruction of justice; and (d) the Department will be free to use against the Defendant, directly and indirectly, in any criminal or civil proceeding any of the information or materials provided by the Defendant and Alcoa pursuant to this Agreement, as well as the admitted Statement of Facts.

39. In the event of a breach of this Agreement by the Defendant, if the Department elects to pursue criminal charges or any civil or administrative action that was not filed as a result of this Agreement, then:

a. The Defendant agrees that any applicable statute of limitations is tolled between the date of the Defendant's signing of this Agreement and the discovery by the Department of any breach by the Defendant, plus one year; and

b. The Defendant gives up all defenses based on the statute of limitations relating to the facts and conduct described in the Statement of Facts and the criminal information to be filed against the Defendant pursuant to this Agreement, any claim of pre-indictment delay, or any speedy trial claim with respect to any such prosecution or action, except to the extent that such defenses existed as of the date of the signing of this Agreement.

Complete Agreement

40. This document states the full extent of the agreement between the parties. There are no other promises or agreements, express or implied. Any modification of this Agreement shall be valid only if set forth in writing in a supplemental or revised plea agreement signed by all parties.

AGREED:

FOR ALCOA WORLD ALUMINA LLC:

Date: January 8, 2014

By: /s/ Jeffrey D. Heeter
Jeffrey D. Heeter
Secretary

Date: January 6, 2014

By: /s/ Robert J. Jossen
DECHERT LLP
By: Robert J. Jossen
NY ID No. 1393719
Jonathan R. Streeter
NY ID No. 5034186
Counsel for
Alcoa World Alumina LLC

FOR THE DEPARTMENT OF JUSTICE:

JEFFREY H. KNOX
Chief, Fraud Section
Criminal Division, Department of Justice

By: /s/ Adam G. Safwat
Adam G. Safwat
Deputy Chief, Fraud Section
NY ID No. 2657567
Andrew N. Gentin
DC ID No. 459889
Allan J. Medina
Andrew H. Warren
Trial Attorneys, Fraud Section

By: /s/ DAVID J. HICKTON
DAVID J. HICKTON
United States Attorney
PA ID No. 34524

Date: January 7, 2014

OFFICER'S CERTIFICATE

I have read this Agreement and carefully reviewed every part of it with outside counsel for Alcoa World Alumina LLC (the "Defendant"). I understand the terms of this Agreement and voluntarily agree, on behalf of the Defendant, to each of its terms. Before signing this Agreement, I consulted outside counsel for the Defendant. Counsel fully advised me of the rights of the Defendant, of possible defenses, of the Sentencing Guidelines' provisions, and of the consequences of entering into this Agreement.

I have carefully reviewed the terms of this Agreement with the Board of Member Representatives of the Defendant. I have advised and caused outside counsel for the Defendant to advise the Board of Member Representatives fully of the rights of the Defendant, of possible defenses, of the Sentencing Guidelines' provisions, and of the consequences of entering into the Agreement.

I have read this Statement of Facts and carefully reviewed every part of it with outside counsel for the Defendant. I voluntarily agree, on behalf of the Defendant, that the Statement of Facts, to the extent involving the conduct of the Defendant, is true and accurate.

No promises or inducements have been made other than those contained in this Agreement. Furthermore, no one has threatened or forced me, or to my knowledge any person authorizing this Agreement on behalf of the Defendant, in any way to enter into this Agreement.

I am also satisfied with outside counsel's representation in this matter. I certify that I am Secretary of Alcoa World Alumina LLC and that I have been duly authorized by the Defendant to execute this Agreement on behalf of the Defendant.

Date: January 8, 2014

ALCOA WORLD ALUMINA LLC

By: /s/ Jeffrey D. Heeter

Jeffrey D. Heeter
Secretary

CERTIFICATE OF COUNSEL

We are counsel for Alcoa World Alumina LLC (the "Defendant") in the matter covered by this Agreement. In connection with such representation, we have examined the relevant documents and have discussed the terms of this Agreement with the Defendant's Board of Member Representatives. Based on our review of the foregoing materials and discussions, we are of the opinion that the representative of the Defendant signing this Agreement has been duly authorized to enter into this Agreement on behalf of the Defendant and that this Agreement has been duly and validly authorized, executed, and delivered on behalf of the Defendant and is a valid and binding obligation of the Defendant. Further, we have carefully reviewed the terms of this Agreement with the Board of Member Representatives and the Legal Counsel and Company Secretary of Alcoa World Alumina LLC. We have fully advised them of the rights of the Defendant, of possible defenses, of the Sentencing Guidelines' provisions and of the consequences of entering into this Agreement.

We have carefully reviewed the above Statement of Facts with our client. To our knowledge, the decision of the Defendant to stipulate to these facts, to the extent involving the conduct of the Defendant, based on the authorization of the Board of Member Representatives, is an informed and voluntary one.

To our knowledge, the decision of the Defendant to enter into this Agreement, based on the authorization of the Board of Member Representatives, is an informed and voluntary one.

Date: January 6, 2014

By: /s/ Robert J. Jossen
DECHERT LLP
By: Robert J. Jossen
Jonathan R. Streeter
Counsel for Alcoa World Alumina LLC

EXHIBIT 1

CERTIFICATE OF CORPORATE RESOLUTIONS OF

ALCOA WORLD ALUMINA LLC

A copy of the executed Certificate of Corporate Resolutions of Alcoa World Alumina LLC is annexed hereto as Exhibit 1.

ALCOA WORLD ALUMINA LLC
CERTIFICATE OF CORPORATE RESOLUTIONS

I, Jeffrey D. Heeter, do hereby certify that I am the Secretary of Alcoa World Alumina LLC (the "Company"), a majority-owned subsidiary of Alcoa Inc. formed under the laws of the State of Delaware and maintaining its principal place of business in Pittsburgh, Pennsylvania, and that the following is an accurate excerpt of certain resolutions adopted by the Board of Member Representatives of the Company at a meeting held on December 9, 2013, at which a quorum was present:

WHEREAS, the Board of Member Representatives of the Company has been informed by its counsel of a proposed settlement with the United States Department of Justice ("DOJ") in relation to certain matters which have been under investigation by DOJ (the "Proposed Settlement"), and the key terms of the Proposed Settlement have been reviewed with the members of the Board;

WHEREAS, the Proposed Settlement contemplates:

(1) The Company pleading guilty to one count of violating the anti-bribery provisions of the Foreign Corrupt Practices Act of 1977, as amended, pursuant to a plea agreement with the DOJ (the "Plea Agreement");

(2) the government and the Company agreeing to recommend to the Court a fine of $209,000,000 payable in five equal annual installments of $41,800,000, as appropriate under the circumstances; and the Company agreeing to pay to the United States an administrative, non-refundable forfeiture amount of $14,000,000;

(3) the Court retaining the ability to accept or reject the terms of the Plea Agreement under Fed. R. Crim. P. 11(c)(1)(C);

(4) imposition on the Company of certain commitments set out in the Plea Agreement;

(5) the Company agreeing to include in any agreement for the sale, merger or transfer of all or substantially all of its business operations as they exist on the date of the Plea Agreement the requirement that the successor or purchaser company abide by the commitments set out in clauses (2) and (4) above; and

(6) The Company agreeing to (a) a knowing waiver of its rights to a speedy trial pursuant to the Sixth Amendment to the United States Constitution, Title 18, United States Code, Section 3161, and Federal Rule of Criminal Procedure 48(b); (b). a knowing waiver for purposes of the Plea Agreement and any charges by the United States arising out of the conduct described in the Statement of Facts attached to the Plea Agreement or the criminal Information any objection with respect to venue, and consents to the entry of a guilty plea, as provided pursuant to the terms of the Plea Agreement, in the United States District Court for the Western District of Pennsylvania; and (c) a knowing waiver of any defenses based on the statute of limitations for any prosecution relating to the conduct described in the Statement of Facts, criminal Information, or relating

to conduct known to the DOJ prior to the date on which the Plea Agreement was signed that is not time-barred by the applicable statute of limitations on the date of the signing of the Plea Agreement.

NOW, THEREFORE, BE IT:

RESOLVED, that the Board of Member Representatives of the Company, after thorough consideration of all relevant issues, including considering the costs and benefits of settlement, and considering the advice and conclusions of outside legal counsel and management, deems it advisable and in the best interests of the Company and its relevant constituencies for the Board of Member Representatives to approve the key terms of the Proposed Settlement that have been reviewed with the Board at this meeting, and such key terms of the Proposed Settlement be and they hereby are approved substantially as presented at this meeting; and

FURTHER RESOLVED, that the proper officers and Member Representatives of the Company, and counsel for the Company, are each hereby authorized and directed to execute and deliver all agreements, instruments and documents, and to take such other and further actions which in the opinion of any of them may be necessary or desirable to achieve the purposes of or to consummate the Proposed Settlement and the resolution of the investigation of past payments and practices referenced in the Plea Agreement, including appearing before the United States District Court for the Western District of Pennsylvania to enter a plea of guilty on behalf of the Company and accept the sentence of the Court, the taking of any such action or the execution and delivery of any such agreements, instruments or documents to be conclusive evidence of the authority to take, execute or deliver the same.

I further certify that the aforesaid resolutions have not been amended or revoked in any respect and remain in full force and effect on the date of this certification.

IN WITNESS WHEREOF, I have executed this Certificate on January 8, 2014.

/s/ Jeffrey D. Heeter
Jeffrey D. Heeter
Secretary
Alcoa World Alumina LLC

Signed before me this 8th day of January, 2014.

Notary Public in and for the Commonwealth of Pennsylvania

/s/ Jennifer W. Meares

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Jennifer W. Meares, Notary Public
City of Pittsburgh, Allegheny County
My Commission Expires June 6, 2017
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

EXHIBIT 2

CERTIFICATE OF CORPORATE RESOLUTIONS OF

ALCOA INC.

A copy of the executed Certificate of Corporate Resolutions of Alcoa Inc. is annexed hereto as Exhibit 2.

ALCOA INC.
CERTIFICATE OF CORPORATE RESOLUTIONS

I, Brenda A. Hart, do hereby certify that I am an Assistant Secretary of Alcoa Inc. (the “Company”), a company incorporated under the laws of the Commonwealth of Pennsylvania, and that the following is an accurate excerpt of certain resolutions adopted by the Board of Directors of the Company at a meeting held on December 6, 2013, at which a quorum was present:

WHEREAS, the Board of Directors of the Company has been informed by its counsel of a proposed settlement with the United States Department of Justice (“DOJ”) in relation to certain matters which have been under investigation by DOJ (the “Proposed Settlement”), and the key terms of the Proposed Settlement have been reviewed with the members of the Board;

WHEREAS, the Proposed Settlement contemplates:

(1) The Company’s majority-owned affiliated entity, Alcoa World Alumina LLC, pleading guilty to one count of violating the anti-bribery provisions of the Foreign Corrupt Practices Act of 1977, as amended, pursuant to a plea agreement with the DOJ (the “Plea Agreement”);

(2) the government and Alcoa World Alumina LLC agreeing to recommend to the Court a fine of $209,000,000, payable in five equal annual installments of $41,800,000 by Alcoa World Alumina LLC as appropriate under the circumstances; and Alcoa World Alumina LLC agreeing to pay to the United States an administrative, non-refundable forfeiture amount of $14,000,000;

(3) the Court retaining the ability to accept or reject the terms of the Plea Agreement under Fed. R. Crim. P. 11(c)(1)(C);

(4) imposition of certain commitments set out in the Plea Agreement on the Company and on Alcoa World Alumina LLC, including the Company’s guarantee to the United States of the payment by Alcoa World Alumina LLC of the above-referenced fine and forfeiture amount to be imposed on Alcoa World Alumina LLC under the Plea Agreement and the continued implementation and maintenance of an anti-corruption compliance program as specified by the Plea Agreement;

(5) the Company agreeing to include in any agreement for the sale, merger or transfer of all or substantially all of its business operations as they exist on the date of the Plea Agreement the requirement that the successor or purchaser company abide by the commitments set out in clauses (2) and (4) above; and

(6) The Company agreeing to (a) a knowing waiver of its rights to a speedy trial pursuant to the Sixth Amendment to the United States Constitution, Title 18, United States Code, Section 3161, and Federal Rule of Criminal

Procedure 48(b); (b) a knowing waiver for purposes of the Plea Agreement and any charges by the United States arising out of the conduct described in the Statement of Facts attached to the Plea Agreement or criminal Information any objection with respect to venue in the United States District Court for the Western District of Pennsylvania; and (c) a knowing waiver of any defenses based on the statute of limitations for any prosecution relating to the conduct described in the Statement of Facts, criminal Information, or relating to conduct known to the DOJ prior to the date on which the Plea Agreement was signed that is not time-barred by the applicable statute of limitations on the date of the signing of the Plea Agreement.

NOW, THEREFORE, BE IT:

RESOLVED, that the Board of Directors of the Company, after thorough consideration of all relevant issues, including considering the costs and benefits of settlement, and considering the advice and conclusions of outside legal counsel and management, and upon the recommendation of the Special Committee comprising the Senior Advisors to the Board, deems it advisable and in the best interests of the Company and its relevant constituencies for the Board of Directors to approve the key terms of the Proposed Settlement that have been reviewed with the Board at this meeting, and such key terms of the Proposed Settlement be and they hereby are approved substantially as presented at this meeting; and

FURTHER RESOLVED, that the proper officers of the Company and counsel for the Company are each hereby authorized and directed to take such actions as are necessary to effect the Proposed Settlement, including the guarantees of the Company to the United States, and to execute and deliver all agreements, instruments and documents and to take such other and further actions which in the opinion of any of them may be necessary or desirable to achieve the purposes of or to consummate the Proposed Settlement and the resolution of the investigation of past payments and practices by Alcoa World Alumina LLC referenced in the Plea Agreement, including appearing before the United States District Court for the Western District of Pennsylvania at the time the Plea Agreement is accepted by the Court to confirm the Company’s undertakings pursuant to the Plea Agreement, the taking of any such action or the execution and delivery of any such agreements, instruments or documents to be conclusive evidence of the authority to take, execute or deliver the same.

I further certify that the aforesaid resolutions have not been amended or revoked in any respect and remain in full force and effect on the date of this certification.

IN WITNESS WHEREOF, I have executed this Certificate on January 6th, 2014.

/s/ Brenda A. Hart

Brenda A. Hart
Assistant Secretary
Alcoa Inc.

Signed before me this 6th day of January, 2014.

Notary Public in and for the State of New York

/s/ MARGARET S. LAM

MARGARET S. LAM
Notary Public, State of New York
No. 02LA6245285
Qualified in New York County
Commission Expires July 18, 2015

EXHIBIT 3

STATEMENT OF FACTS

EXHIBIT 3

STATEMENT OF FACTS

The following Statement of Facts is incorporated by reference as part of the Plea Agreement (the "Agreement") between the United States Department of Justice, Criminal Division, Fraud Section (the "Department") and the Defendant, ALCOA WORLD ALUMINA LLC. ALCOA WORLD ALUMINA LLC hereby agrees and stipulates that the following information, to the extent it relates to its actions and the actions of its officers and employees, is true and accurate. ALCOA WORLD ALUMINA LLC does not admit to the conduct of any other entity or person, and references to such conduct are for background purposes only. ALCOA WORLD ALUMINA LLC admits, accepts, and acknowledges that it is responsible for the acts of its officers or employees, as set forth below. ALCOA WORLD ALUMINA LLC further agrees that it will neither contest the admissibility of, nor contradict, this Statement of Facts with respect to its actions or the actions of its officers or employees in any prosecution of it arising from a breach of the Agreement.

If this matter were to proceed to trial, the Department has represented that it would prove beyond a reasonable doubt, by admissible evidence, the facts alleged below, and that this evidence would establish the following:

Relevant Entities and Individuals

The Defendant

1. Defendant **ALCOA WORLD ALUMINA LLC** was a Limited Liability Company formed under Delaware law which maintained its principal place of business in Pittsburgh, Pennsylvania, in the Western District of Pennsylvania. ALCOA WORLD ALUMINA LLC owned and operated (either directly or indirectly) bauxite mining and alumina

refining assets in North America, Europe, South America, Africa and the Caribbean. ALCOA WORLD ALUMINA LLC was a “domestic concern” within the meaning of the FCPA, Title 15, United States Code, Section 78dd-2(a).

Relevant Alcoa Entities

2. **Alcoa Inc**. (“Alcoa”) was a corporation organized under the laws of the Commonwealth of Pennsylvania. Until 2006, Alcoa’s principal place of business was in Pittsburgh, Pennsylvania, in the Western District of Pennsylvania. In 2006, Alcoa moved its principal place of business to New York, New York. Alcoa issued and maintained a class of publicly traded securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934, which were traded on the New York Stock Exchange. Alcoa was therefore an “issuer” within the meaning of the FCPA, Title 15, United States Code, Section 78dd-l(a).

3. Alcoa was a global provider of primary aluminium and fabricated aluminium. Alcoa was also a global provider of smelter grade alumina, the raw material that is supplied to smelters to produce aluminium. Alcoa refined alumina from bauxite it extracted from its global mining operations. Alcoa operated worldwide through subsidiaries and affiliated entities in North America, Asia, Australia, Europe, South America, Africa and the Caribbean.

4. **Alcoa World Alumina and Chemicals** (“AWAC”) was an unincorporated global bauxite mining and alumina refining enterprise formed in 1995 between Alcoa and Alumina Limited (“Alumina”), the majority and minority owners of AWAC, respectively. AWAC conducted its operations by and through the coordinated activity of several affiliated enterprise companies, with each enterprise company being owned by Alcoa and Alumina in proportion to their respective ownership interests in the AWAC enterprise. In matters of strategy and policy, the AWAC enterprise companies received direction and counsel from a “Strategic Council” that was chaired by Alcoa. AWAC was a “domestic concern” within the meaning of the FCPA, Title 15, United States Code, Section 78dd-2(a).

5. Defendant ALCOA WORLD ALUMINA LLC was an AWAC enterprise company. Beginning in or around 2000, executives at ALCOA WORLD ALUMINA LLC’s offices in Pittsburgh and Knoxville, Tennessee, assumed primary responsibility for all of AWAC’s relationships with global alumina customers, including Aluminium Bahrain B.S.C. (“Alba”), a state-owned and state-controlled aluminium smelter in Bahrain. ALCOA WORLD ALUMINA LLC personnel responsible for these functions reported indirectly to Alcoa personnel in New York.

6. **Alcoa of Australia Limited** (“Alcoa of Australia”) was the AWAC enterprise company that owned and operated AWAC’s bauxite mining and alumina refining assets in Australia. Alcoa of Australia’s principal place of business was in Melbourne, Australia, until 1996, and was thereafter in Perth, Australia. Alcoa of Australia owned and operated mines in Western Australia that extracted bauxite, which Alcoa of Australia then processed into smelter grade alumina in refineries it owned and operated. Alcoa of Australia sold the smelter grade alumina to aluminium smelters it owned in the state of Victoria, Australia, as well as to customers and alumina traders around the world.

Relevant ALCOA WORLD ALUMINA LLC Individual

7. **Executive A** held a senior sales and marketing position at ALCOA WORLD ALUMINA LLC in Pittsburgh, Pennsylvania, starting in or around 2000, when he took over responsibility for the relationship with Alba.

The Intermediary and Related Entities

8. **Consultant A** was an international middleman who resided in London and was a citizen of Canada, Jordan, and the United Kingdom. Consultant A had close contacts with certain members of Bahrain's Royal Family, some of whom were senior officials in the Government of Bahrain. Consultant A met with ALCOA WORLD ALUMINA LLC executives in London, New York, and elsewhere to discuss matters relating to the alumina supply relationship with Alba.

9. **Alumet Limited** ("Alumet") was a shell entity controlled by Consultant A and incorporated in the British Virgin Islands, with its purported places of business in Australia, Guernsey, and Switzerland. Alumet had no legitimate business operations and no history in the alumina business. Alumet held bank accounts at the Royal Bank of Canada ("RBC") in Switzerland and the Channel Islands.

10. **AA Alumina and Chemicals Ltd**. ("AAAC") was a shell entity controlled by Consultant A and incorporated in the British Virgin Islands, with its purported places of business in Australia, Guernsey, and Switzerland. AAAC had no legitimate business operations and no history in the alumina business. AAAC held bank accounts at RBC in Switzerland and the Channel Islands.

11. Consultant A held an account at RBC Guernsey in the name of **United Legal Engineering Co.** ("ULECO"), a shell entity, that contained funds from, among other sources, the purported sales of alumina to Alba by Alumet and AAAC on behalf of Alcoa of Australia, as explained more fully in the paragraphs alleged below. Consultant A sometimes used a ULECO bank account to wire money directly or indirectly to accounts beneficially owned by officials of the Kingdom of Bahrain.

12. Consultant A also maintained a bank account at HSBC in Luxembourg under the name of another shell company, La Fosca. Consultant A would wire money to Official C through that account from ULECO's account at RBC Guernsey.

Relevant Entities and Foreign Officials in Bahrain

13. Aluminium Bahrain B.S.C. ("Alba") was an aluminium smelter operating in Bahrain. The state holding company of the Kingdom of Bahrain, the Mumtalakat, which was controlled by the Ministry of Finance, held 77 percent of the shares of Alba. The Saudi Basic Industries Corporation ("SABIC"), which was majority-owned and controlled by the government of the Kingdom of Saudi Arabia, held a 20 percent minority stake in Alba, and three percent of Alba's shares were held by a German investment group. The majority of profits earned by Alba belonged to the Mumtalakat, though part of the profit was permitted to be used by Alba for its operations. The Ministry of Finance had to approve any change in Alba's capital structure and had to be consulted on any major capital projects or contracts material to Alba's operations. Members of the Royal Family of Bahrain and representatives of the government sat on the Board of Directors of Alba, controlled its Board, and had primary authority in selecting its chief executive officer and chief financial officer. Accordingly, Alba was an "agency" and "instrumentality" of the Government of Bahrain and Alba's directors, officers and employees were "foreign officials" within the meaning of the FCPA, Title 15, United Sates Code, Section 78dd-2(h)(2)(A).

14. **Official A** was a member of Bahrain's Royal Family and served as a member of the board of directors of Alba from 1982 to 1997. From 1988 to 1990, Official A was also a member of Alba's tender committee, which was responsible in part for awarding major contracts to Alba's suppliers, such as Alcoa entities supplying alumina to Alba. As an officer of Alba, Official A was a "foreign official" within the meaning of the FCPA, Title 15, United States Code, Section 78dd-2(h)(2)(A).

15. **Official B** served on Alba's board from at least 1986 to 2000 as a representative of SABIC. From 1988 to 1990, Official B also served on Alba's tender committee with Official A. As an officer of Alba, Official B was a "foreign official" within the meaning of the FCPA, Title 15, United States Code, Section 78dd-2(h)(2)(A).

16. **Official C** was a senior member of Bahrain's Royal Family, a senior government official of Bahrain from at least 1995 to 2005, and served as a high-ranking officer of Alba from 1995 to 2005. As a high-ranking officer of Alba, Official C was extremely influential over the assignment of contracts to Alba's suppliers. Official C relied on Consultant A to assist him in opening international bank accounts using various aliases or shell entities for the purpose of receiving corrupt funds from kickbacks from Alba's suppliers. As an officer of Alba and a senior government official, Official C was a "foreign official" within the meaning of the FCPA, Title 15, United States Code, Section 78dd-2(h)(2)(A).

THE CORRUPTION SCHEME IN BAHRAIN

Background

17. From 1989 to approximately 1996, Alcoa of Australia managed its long term supply relationship with Alba. As part of that relationship, Alcoa of Australia retained Consultant A to assist in long-term contract negotiations with Alba and Bahraini government officials. By 2000, when ALCOA WORLD ALUMINA LLC assumed direct oversight of the Alba relationship, Consultant A was playing a significant role in the relationship between Alcoa of Australia and Alba. Executive A, who inherited the Alba oversight relationship as part of his duties at ALCOA WORLD ALUMINA LLC, became the primary liaison with Consultant A regarding the Alba relationship.

Overview

18. In or around 2002, ALCOA WORLD ALUMINA LLC, through Executive A, caused Alcoa of Australia to enter into a purported distributorship for the sale of approximately one million tons of alumina annually to Alba through Consultant A's shell companies, Alumet and AAAC.

19. In or around 2004, ALCOA WORLD ALUMINA LLC, through Executive A, coordinated another purported distribution agreement that involved the sale of up to 1.78 million tons of alumina to Alba every year through Alumet and AAAC. This corrupt arrangement lasted through on or about December 31, 2009.

20. As part of the 2002 and 2004 purported distributorship agreements, Consultant A imposed a mark-up on Alumet's and AAAC's purported sales of alumina to Alba and used the mark-up from those sales to enrich himself and pay bribes to senior government officials of Bahrain. ALCOA WORLD ALUMINA LLC, through Executive A, consciously disregarded the fact that Consultant A would pay bribes to senior government officials from the mark-up on alumina sales to Alba.

I. ALCOA WORLD ALUMINA LLC, through Executive A, Enlarged Consultant A's Role in the Alumina Supply Relationship

21. By 2000, Executive A, who was then based in ALCOA WORLD ALUMINA LLC's offices in Pittsburgh, had assumed direct responsibility for managing the Alba relationship.

22. From April to December 2001, Executive A took a series of steps to cause Alumet and AAAC to become Alcoa of Australia's purported distributors for all of its sales of alumina to Alba.

23. On or about April 12, 2001, Executive A wrote to Official C to advise him that "Alcoa wishes" to extend the "present supply contract [with Alba] for three years to December 31, 2004."

24. On or around August 15, 2001, after receiving a request from Alba to continue the existing supply arrangements through December 2003, Executive A facilitated Alba's entering into an extension of the existing alumina supply arrangement through December 2003.

25. On or about February 14, 2002, Executive A caused Alcoa of Australia to enter into a purported distribution agreement with Alumet and AAAC for the supply of approximately one million tons of alumina intended for sale to Alba.

26. Executive A knew that Alcoa of Australia would continue to ship alumina directly to Alba. Executive A consciously disregarded the fact that the purported contractual arrangement he crafted with Consultant A would permit Alumet and/or AAAC to mark-up sales to Alba of alumina from Alcoa of Australia. In or around February 2002, Alcoa of Australia ceased to invoice Alba directly for shipments of alumina.

The Mark-Up and Commission Payments From 2002 Through 2004

27. From 2002 to 2004, Executive A, acting on behalf of ALCOA WORLD ALUMINA LLC, caused AAAC to receive in excess of $79 million in mark-ups on alumina sales to Alba.

28. AAAC also received a commission under the terms of the 2002 distribution agreement. The purported 2002 distribution agreement provided for a commission of 0.125% of all payments made by AAAC to Alcoa of Australia for alumina. From 2002 to 2004, Alcoa of Australia paid AAAC a commission of $493,509.

Consultant A Channeled Corrupt Payments to Government Officials From 2002 through 2004

29. From 2002 through 2004, Consultant A made corrupt payments to Officials B and C from bank accounts at RBC in Guernsey held in the name of Alumet and ULECO.

II. Executive A Retained Consultant A For Joint Venture Negotiations between Alcoa and Alba

30. In 2002, Alcoa was attempting to negotiate a joint venture with Alba, in which Alcoa would supply Alba with alumina from the AWAC system's smelters, and, in exchange, Alba would supply Alcoa with aluminium. Executive A participated in the negotiations for Alcoa and retained Consultant A to privately lobby Official C on behalf of Alcoa's position. On or about April 27, 2002, Executive A caused Alcoa to enter a consulting agreement with Consultant A pursuant to which Consultant A would receive an $8 million "success fee" based on limited specified negotiation "advice and assistance to Alcoa" if the joint venture were successful.

31. As part of the negotiations, Executive A proposed a joint venture structure that contemplated supplying alumina to Alba through a distributor.

32. On or about March 26, 2003, an in-house attorney in Alcoa's legal department sent an email asking Executive A to explain the role of the distributor. On or about March 27, 2003, Executive A responded that "[t]he Distributorship rol[e] is something the Bahrain Government wants" and that Alcoa "shouldn't get too involved with how the Distributor and the Government interact. We are currently selling the alumna we supply to Alba through a Distributor." In response, the in-house attorney wrote that "we will need to understand the Distributor's role completely … for Foreign Corrupt Practice Act purposes."

33. On September 15, 2003, Alcoa and Alba agreed to a Memorandum of Understanding ("MOU") outlining an equity investment by Alcoa in Alba and providing for alumina to be sold to the Government of Bahrain, as majority shareholder of Alba, "directly or through an associated company of Alcoa satisfactory to GoB [Government of Bahrain] and Alcoa." The MOU was approved by Official C on behalf of Alba. However, the joint venture negotiations fell through, and Consultant A was never paid the $8 million success fee.

34. Within 17 days of the signing of the MOU, Consultant A transferred $2 million to Official C's account at Deutsche Bank in Geneva, Switzerland, from a ULECO bank account at RBC in Guernsey.

III. ALCOA WORLD ALUMINA LLC, Through Executive A, Caused Alcoa of Australia to Secure a 2005 Long-Term Alumina Supply Deal with Alba

35. By the summer of 2004, Alcoa of Australia was supplying approximately one million metric tons of alumina annually to Alba, but was invoicing Alba indirectly through Consultant A's companies. Alba's obligations under pre-existing supply arrangements with Alcoa of Australia were set to expire at the end of 2004.

36. In the summer of 2004, Executive A and one of his supervisors, another senior member of ALCOA WORLD ALUMINA LLC's global alumina sales department, sought to secure a new long term alumina supply agreement with Alba. On or around August 5, 2004, Executive A and his supervisor were advised by a former senior Alcoa executive who had a relationship with Consultant A that if they attempted to negotiate a direct contractual relationship between Alcoa of Australia and Alba, rather than negotiate a supply arrangement through Consultant A and one of his companies, some or all of Alba's business could be lost to another alumina supplier.

37. On or about August 19, 2004, Executive A and his supervisor met with Consultant A at Consultant A's London Office to discuss using Consultant A's companies "as Alcoa's exclusive distributor in the region."

38. On or about August 22, 2004, Executive A sent an email to his supervisor documenting with more specificity certain items that were discussed at the meeting. Among them, Executive A noted that "[w]e agreed to supply [Consultant A] with pricing indications for supply to [AAAC] by 8/24 so he can have these for his meeting [in Bahrain] with [Official C]. We mentioned pricing close to 14%." Executive A's email also noted that "[Official C] is holding on to publishing [Alba's] alumina tender [to the market] until he has further discussions with [Consultant A] on 8/29." The pricing terms per metric ton of alumina that Executive A quoted to Consultant A at the meeting in London were less than the pricing terms for Alba that Executive A had quoted to Official C approximately one month earlier.

39. On or around September 29, 2004, Executive A facilitated AAAC's tendering a bid to supply Alba up to 1.6 million tons of alumina for ten years commencing in 2005.

40. On or about October 8, 2004, Attorney 1, the in-house attorney responsible for supporting the alumina business, suggested terminating the consulting agreement that Alcoa had entered with Consultant A, as "the terms of [Consultant A's] current engagement created a lot of anxiety in the organization." Executive A advised that the consultancy agreement should not be terminated until Alcoa had secured a new long-term alumina supply agreement with Alba.

41. On or about November 1, Official C caused Alba to accept AAAC's tender offer for a ten-year supply of alumina.

42. On or about December 31, 2004, Executive A caused Alcoa of Australia to enter a purported ten-year distributorship agreement with Alumet and AAAC to purportedly supply them with up to 1.78 million tons of alumina for sale to Alba from 2005 to 2014. From 2005 to 2009, the price term was 13.9% of LME minus $0.25 per ton of alumina. From 2010 to 2014, the price decreased to 13.5% of LME minus $0.25 per ton of alumina. Executive A consciously disregarded the fact that Alcoa of Australia would continue to supply alumina directly to Alba that was purportedly being "distributed" through Alumet and AAAC.

43. On or about March 4, 2005, a representative of Consultant A sent the CEO of Alba a final, unexecuted contract for the purported supply agreement between AAAC and Alba.

44. On or about June 8, 2005, the final agreement negotiated between AAAC and Alba was signed by Alba's CEO on behalf of Alba. The agreement's effective date was January 1, 2005, and its term was through December 31, 2014. The agreement provided that AAAC would supply Alba with 1.508 million metric tons of alumina in 2005, and 1.6 million metric tons of alumina thereafter for each remaining contract year. From 2005 to 2009, the price formula in the agreement resulted in an average price to Alba of 14.98% of LME per metric ton of alumina. From 2010 through 2014, the price formula in the agreement resulted in an average price to Alba of 14.42 % of LME per metric ton of alumina. Alba was required to bear the cost of shipping and insurance.

Consultant A's Mark-up on Alumina Sales From 2005 to 2009

45. As a result of ALCOA WORLD ALUMINA LLC's conduct, through Executive A, from 2005 through 2009, Alumet and AAAC received in excess of $188 million on the mark-up of alumina sales to Alba. This money was transferred from the initial accounts in which payment from Alba was received through various bank accounts controlled by Consultant A, including accounts in the name of shell entities Alumet and ULECO at RBC in Guernsey.

Additional Corrupt Payments to Official C

46. From 2005 through 2006, Consultant A made millions in corrupt payments from the account of ULECO at RBC in Guernsey through the account of La Fosca in Luxembourg to accounts that were beneficially owned by Official C under client code names at ABN AMRO Bank in Luxembourg and LGT Bank in Liechtenstein.

47. Under these circumstances, ALCOA WORLD ALUMINA LLC, through Executive A, consciously disregarded the fact that the mark-up imposed by Consultant A on Alumet and AAAC's sales of alumina to Alba was facilitating corrupt payments to government officials who controlled Alba's tender process.

IV. ALCOA WORLD ALUMINA LLC Caused Alcoa to Extend Materially Significant Lines of Credit to Consultant A

48. Consultant A sought a line of credit from Alcoa to cover the cost of alumina shipments to Alba until Alba remitted payment to Alumet and AAAC. Consultant A, however, refused to provide financial statements for Alumet or AAAC to Alcoa's credit department, which was normally required for a significant extension of credit to a third-party. Notwithstanding this, in or around December 2004, ALCOA WORLD ALUMINA LLC, through Executive A, sought and received approval to extend credit to Consultant A's companies and thereby caused Alcoa's credit department to extend a $23 million line of credit to Alumet and AAAC.

49. Thereafter, in each of contract years 2005 through 2009, Alcoa continued to grant business unit overrides to extend materially increasing credit lines to Consultant A's purported distributorships. By 2007, Alcoa was extending a credit line of $58 million to Alumet and AAAC. During this period, Alcoa granted Alumet and AAAC credit lines that were significantly greater than those granted by Alcoa to any other third-party.

50. By facilitating the extension of credit to Consultant A, Executive A enabled the purported distributorship scheme by allowing Consultant A to defer paying Alcoa of Australia for the multi-million dollar shipments of alumina to Alba until Alumet and AAAC received payment from Alba.

EXHIBIT 4

CORPORATE COMPLIANCE PROGRAM

In order to address any deficiencies in its internal controls, compliance code, policies, and procedures regarding compliance with the Foreign Corrupt Practices Act ("FCPA"), 15 U.S.C. §§ 78dd-l, *et seq*., and other applicable anti-corruption laws, ALCOA INC. (the "Company") agrees to continue to conduct, in a manner consistent with all of its obligations under this Agreement, appropriate reviews of its existing internal controls, policies, and procedures.

Where necessary and appropriate, the Company agrees to adopt new or to modify existing internal controls, compliance code, policies, and procedures in order to ensure that it maintains: (a) a system of internal accounting controls designed to ensure that the Company makes and keeps fair and accurate books, records, and accounts; and (b) a rigorous anti-corruption compliance program that includes policies and procedures designed to detect and deter violations of the FCPA and other applicable anti-corruption laws. At a minimum, this should include, but not be limited to, the following elements to the extent they are not already part of the Company's existing internal controls, compliance code, policies, and procedures:

High-Level Commitment

1. The Company will ensure that its directors and senior management provide strong, explicit, and visible support and commitment to its corporate policy against violations of the anti-corruption laws and its compliance code.

Policies and Procedures

2. The Company will develop and promulgate a clearly articulated and visible corporate policy against violations of the FCPA and other applicable foreign law counterparts (collectively, the "anti-corruption laws,"), which policy shall be memorialized in a written compliance code.

3. The Company will develop and promulgate compliance policies and procedures designed to reduce the prospect of violations of the anti-corruption laws and the Company's compliance code, and the Company will take appropriate measures to encourage and support the observance of ethics and compliance policies and procedures against violation of the anti-corruption laws by personnel at all levels of the Company. These anti-corruption policies and procedures shall apply to all directors, officers, and employees and, where necessary and appropriate, outside parties acting on behalf of the Company in a foreign jurisdiction, including but not limited to, agents and intermediaries, consultants, representatives, distributors, teaming partners, contractors and suppliers, consortia, and joint venture partners (collectively, "agents and business partners"). The Company shall notify all employees that compliance with the policies and procedures is the duty of individuals at all levels of the company. Such policies and procedures shall address:

a. gifts;

b. hospitality, entertainment, and expenses;

c. customer travel;

d. political contributions;

e. charitable donations and sponsorships;

f. facilitation payments; and

g. solicitation and extortion.

4. The Company will ensure that it has a system of financial and accounting procedures, including a system of internal controls, reasonably designed to ensure the maintenance of fair and accurate books, records, and accounts. This system should be designed to provide reasonable assurances that:

a. transactions are executed in accordance with management's general or specific authorization;

b. transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles or any other criteria applicable to such statements, and to maintain accountability for assets;

c. access to assets is permitted only in accordance with management's general or specific authorization; and

d. the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

Periodic Risk-Based Review

5. The Company will develop these compliance policies and procedures on the basis of a periodic risk assessment addressing the individual circumstances of the Company, in particular the foreign bribery risks facing the Company, including, but not limited to, its geographical organization, interactions with various types and levels of government officials, industrial sectors of operation, involvement in joint venture arrangements, importance of licenses and permits in the Company's operations, degree of governmental oversight and inspection, and volume and importance of goods and personnel clearing through customs and immigration.

6. The Company shall review its anti-corruption compliance policies and procedures no less than annually and update them as appropriate to ensure their continued effectiveness, taking into account relevant developments in the field and evolving international and industry standards.

Proper Oversight and Independence

7. The Company will assign responsibility to one or more senior corporate executives of the Company for the implementation and oversight of the Company's anti-corruption compliance code, policies, and procedures. Such corporate official(s) shall have the authority to report directly to independent monitoring bodies, including internal audit, the Company's Board of Directors, or any appropriate committee of the Board of Directors, and shall have an adequate level of autonomy from management as well as sufficient resources and authority to maintain such autonomy.

Training and Guidance

8. The Company will implement mechanisms designed to ensure that its anti-corruption compliance code, policies, and procedures are effectively communicated to all directors, officers, employees, and, where necessary and appropriate, agents and business partners. These mechanisms shall include: (a) periodic training for all directors and officers, all employees in positions of leadership or trust, positions that require such training (e.g., internal audit, sales, legal, compliance, finance), or positions that otherwise pose a corruption risk to the Company, and, where necessary and appropriate, agents and business partners; and (b) corresponding certifications by all such directors, officers, employees, agents, and business partners, certifying compliance with the training requirements.

9. The Company will maintain, or where necessary establish, an effective system for providing guidance and advice to directors, officers, employees, and, where necessary and appropriate, agents and business partners, on complying with the Company's anti-corruption compliance code, policies, and procedures, including when they need advice on an urgent basis or in any foreign jurisdiction in which the Company operates.

Internal Reporting and Investigation

10. The Company will maintain, or where necessary establish, an effective system for internal and, where possible, confidential reporting by, and protection of, directors, officers, employees, and, where appropriate, agents and business partners concerning violations of the anti-corruption laws or the Company's anti-corruption compliance code, policies, and procedures.

11. The Company will maintain, or where necessary establish, an effective and reliable process with sufficient resources for responding to, investigating, and documenting allegations of violations of the anti-corruption laws or the Company's anti-corruption compliance code, policies, and procedures.

Enforcement and Discipline

12. The Company will implement mechanisms designed to effectively enforce its compliance code, policies, and procedures, including appropriately incentivizing compliance and disciplining violations.

13. The Company will institute appropriate disciplinary procedures to address, among other things, violations of the anti-corruption laws and the Company's anti-corruption compliance code, policies, and procedures by the Company's directors, officers, and employees. Such procedures should be applied consistently and fairly, regardless of the position held by, or perceived importance of, the director, officer, or employee. The Company shall implement procedures to ensure that where misconduct is discovered, reasonable steps are taken to remedy the harm resulting from such misconduct, and to ensure that appropriate steps are taken to prevent further similar misconduct, including assessing the internal controls, compliance code, policies, and procedures and making modifications necessary to ensure the overall anti-corruption compliance program is effective.

Third-Party Relationships

14. The Company will institute appropriate risk-based due diligence and compliance requirements pertaining to the retention and oversight of all agents and business partners, including:

a. properly documented due diligence pertaining to the hiring and appropriate and regular oversight of agents and business partners;

b. informing agents and business partners of the Company's commitment to abiding by anti-corruption laws, and of the Company's anti-corruption compliance code, policies, and procedures; and

c. seeking a reciprocal commitment from agents and business partners.

15. Where necessary and appropriate, the Company will include standard provisions in agreements, contracts, and renewals thereof with all agents and business partners that are reasonably calculated to prevent violations of the anti-corruption laws, which may, depending upon the circumstances, include: (a) anti-corruption representations and undertakings relating to compliance with the anti-corruption laws; (b) rights to conduct audits of the books and records of the agent or business partner to ensure compliance with the foregoing; and (c) rights to terminate an agent or business partner as a result of any breach of the anti-corruption laws, the Company's compliance code, policies, or procedures, or the representations and undertakings related to such matters.

Mergers and Acquisitions

16. The Company will develop and implement policies and procedures for mergers and acquisitions requiring that the Company conduct appropriate risk-based due diligence on potential new business entities, including appropriate FCPA and anti-corruption due diligence by legal, accounting, and compliance personnel.

17. The Company will ensure that the Company's compliance code, policies, and procedures regarding the anti-corruption laws apply as quickly as is practicable to newly acquired businesses or entities merged with the Company and will promptly:

a. train the directors, officers, employees, agents, and business partners consistent with Paragraph 8 above on the anti-corruption laws and the Company's compliance code, policies, and procedures regarding anti-corruption laws; and

b. where warranted, conduct an FCPA-specific audit of all newly acquired or merged businesses as quickly as practicable.

Monitoring and Testing

18. The Company will conduct periodic reviews and testing of its anti-corruption compliance code, policies, and procedures designed to evaluate and improve their effectiveness in preventing and detecting violations of anti-corruption laws and the Company's anti-corruption compliance code, policies, and procedures, taking into account relevant developments in the field and evolving international and industry standards.

UNITED STATES OF AMERICA
Before the
SECURITIES AND EXCHANGE COMMISSION

ADMINISTRATIVE PROCEEDING
File No.

In the Matter of	:	
	:	
ALCOA INC.,	:	
	:	**OFFER OF SETTLEMENT**
	:	**OF ALCOA INC.**
Respondent.	:	
	:	

I.

Alcoa Inc. ("Alcoa" or "Respondent"), pursuant to Rule 240(a) of the Rules of Practice of the Securities and Exchange Commission ("Commission") [17 C.F.R. § 201.240(a)], submits this Offer of Settlement ("Offer") in anticipation of cease-and-desist proceedings to be instituted against it by the Commission, pursuant to Section 21C of the Securities Exchange Act of 1934 ("Exchange Act").

II.

This Offer is submitted solely for the purpose of settling these proceedings, with the express understanding that it will not be used in any way in these or any other proceedings, unless the Offer is accepted by the Commission. If the Offer is not accepted by the Commission, the Offer is withdrawn without prejudice to Respondent and shall not become a part of the record in these or any other proceedings, except for the waiver expressed in Section V with respect to Rule 240(c)(5) of the Commission's Rules of Practice [17 C.F.R. § 201.240(c)(5)].

III.

On the basis of the foregoing, the Respondent hereby:

A. Consents to the jurisdiction of the Commission over it and over the matters set forth in the Order Instituting Cease-and-Desist Proceedings Pursuant to Section 21C of the Securities Exchange Act of 1934, Making Findings, and Imposing a Cease-and-Desist Order and Disgorgement ("Order");

B. Solely for the purpose of these proceedings and any other proceedings brought by or on behalf of the Commission or in which the Commission is a party, prior to a hearing pursuant to the Commission's Rules of Practice, 17 C.F.R. § 201.100 et seq., consents to the entry of an Order by the Commission containing the following findings[1]:

Summary

1. These proceedings arise from violations of the Foreign Corrupt Practices Act of 1977 (the "FCPA") [15 U.S.C. § 78dd] by Respondent Alcoa Inc. ("Alcoa") concerning alumina sales to Aluminium Bahrain B.S.C. ("Alba"), an aluminum manufacturer owned primarily by the Kingdom of Bahrain.

2. Between 1989 and 2009, Alcoa of Australia ("AofA") and Alcoa World Alumina LLC ("AWA") (collectively, the "AWAC Subsidiaries") retained a consultant to act as their middleman in connection with sales of alumina to Alba and knew or consciously disregarded the fact that the relationship with the consultant was designed to generate funds that facilitated corrupt payments to Bahraini officials. The consultant was paid a commission on sales where he acted as an agent and received a markup on sales where he acted as a purported distributor. On sales where the consultant acted as a purported distributor, no legitimate services were provided to justify the role of the consultant as a distributor. The consultant used these funds to enrich himself and pay bribes to senior government officials of Bahrain.

3. The commission payments to the consultant and the alumina sales to the consultant made pursuant to the distribution agreements were improperly recorded in Alcoa's books and records as legitimate commissions or sales to a distributor and did not accurately reflect the transactions. The false entries were initially recorded by the AWAC Subsidiaries which were then consolidated into Alcoa's books and records. During the relevant period, Alcoa also lacked sufficient internal controls to prevent and detect the improper payments.

Respondent

4. **Alcoa** is a corporation organized under the laws of the Commonwealth of Pennsylvania. Until 2006, Alcoa's principal place of business was in Pittsburgh, Pennsylvania, in the Western District of Pennsylvania. In 2006, Alcoa moved its principal place of business to New York, New York. Alcoa issues and maintains a class of publicly traded securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934, which are traded on the New York Stock Exchange.

5. Alcoa is a global provider of primary aluminum and fabricated aluminum. Alcoa is also a global provider of smelter grade alumina, the raw material that is supplied to smelters to produce aluminum. Alcoa refines alumina from bauxite it extracts from its global mining operations. Alcoa operates worldwide through subsidiaries and affiliated entities in North America, Asia, Australia, Europe, South America, Africa and the Caribbean.

[1] The findings herein are made pursuant to Respondent's Offer of Settlement and are not binding on any other person or entity in this or any other proceeding.

Other Relevant Entities and Persons

6. **Alcoa World Alumina and Chemicals** (“AWAC”) is an unincorporated global bauxite mining and alumina refining enterprise formed in 1995 between Alcoa and Alumina Limited (“Alumina”), the majority and minority owners of AWAC, respectively. AWAC operates through a number of affiliated enterprise companies, including AofA and AWA, with each enterprise company being owned by Alcoa and Alumina in proportion to their respective ownership interests in the AWAC enterprise. In matters of strategy and policy, the AWAC enterprise companies receive direction and counsel from a “Strategic Council” that is chaired by Alcoa. Alcoa controls the Strategic Council and as such the operations and personnel of AWAC report to Alcoa personnel in New York.

7. **Alcoa of Australia Limited** (“AofA.”) is the AWAC enterprise company that owns and operates AWAC’s bauxite mining and alumina refining assets in Australia. AofA’s principal place of business was located in Melbourne, in the state of Victoria, Australia, until 1996, and is now located in Perth, in the state of Western Australia. AofA owns and operates mines in Western Australia that extract bauxite, which AofA then processes into smelter grade alumina in refineries it owns and operates. AofA sells the smelter grade alumina to aluminum smelters it owns in the state of Victoria as well as to customers and alumina traders around the world. AofA maintains bank accounts in the United States. AofA’s books, records, and accounts are consolidated into Alcoa’s books and records and reported by Alcoa in its financial statements.

8. **Alcoa World Alumina LLC** (“AWA”) is a Limited Liability Company formed under Delaware law, which maintains its principal place of business in Pittsburgh, Pennsylvania, in the Western District of Pennsylvania. AWA owns and operates (either directly or indirectly) bauxite mining and alumina refining assets in North America, Europe, South America, and the Caribbean. AWA is an AWAC enterprise company. Beginning in or around 2000, executives at AWA’s offices in Pittsburgh and Knoxville, Tennessee, assumed primary responsibility for all of AWAC’s relationships with global alumina customers, including Alba. AWA personnel responsible for these functions reported to Alcoa personnel in New York.

9. **Consultant A** is an international middleman who resides in London and is a citizen of Canada, Jordan, and the United Kingdom. Consultant A had close contacts with certain members of Bahrain’s Royal Family, some of whom were senior officials in the Government of Bahrain. Consultant A met with Alcoa executives to discuss matters relating to the relationship with Alba. Consultant A operates through many shell companies, including Alumet Ltd (“Alumet”) and AA Alumina and Chemicals Ltd (“AAAC”).

10. **Aluminium Bahrain B.S.C.** (“Alba”) is an aluminum smelter operating in Bahrain. At the relevant times, the state holding company of the Kingdom of Bahrain, the Mumtalakat, which was controlled by the Bahrain Ministry of Finance, held 77 percent of the shares of Alba. The Saudi Basic Industries Corporation (“SABIC”), which is majority-owned and controlled by the government of the Kingdom of Saudi Arabia, held a twenty percent

minority stake in Alba, and three percent of Alba's shares were held by a German investment group. The majority of profits earned by Alba belonged to the Mumtalakat, though part of the profit was permitted to be used by Alba for its operations. The Bahrain Ministry of Finance had to approve any change in Alba's capital structure and had to be consulted on any major capital projects or contracts material to Alba's operations. Members of the Royal Family of Bahrain and representatives of the government sat on the Board of Directors of Alba, controlled its Board, and had primary authority in selecting its chief executive officer and chief financial officer.

Facts

11. Alcoa's global bauxite and alumina refining business (the "Alumina Segment") is part of the Global Primary Products group, one of Alcoa's three business lines. The Alumina Segment operationally consists of multiple subsidiaries. During the relevant time period, the Alumina Segment reported to the global head of the Global Primary Products group, who was an executive of Alcoa and reported directly to Alcoa's CEO.

12. Alcoa exercised control over the Alumina Segment, including the AWAC Subsidiaries. Alcoa appointed the majority of seats on the AWAC Strategic Council, and the head of Global Primary Products served as its chair. Alcoa and AofA transferred personnel between them, including alumina sales staff; Alcoa set the business and financial goals for AWAC and coordinated the legal, audit, and compliance functions of AWAC; and the AWAC Subsidiaries' employees managing the Alba alumina business reported functionally to the global head of the Alumina Segment. Alba was a significant alumina customer for Alcoa's Alumina Segment and during the relevant period, members of Alcoa senior management met both with Alba officials and Consultant A to discuss matters related to the Alba relationship, including a proposed joint venture between Alcoa and Alba. During this time, Alcoa was aware that Consultant A was an agent and distributor with respect to AofA's sales of alumina to Alba and that terms of related contracts were reviewed and approved by senior managers of Alcoa's Alumina Segment in the United States.

13. From at least 1989 to 2009, AofA. supplied alumina to Alba through a series of multi-year contracts. During this period, Alba was one of Alcoa's largest alumina customers purchasing a total of nearly 19 million metric tons beginning with an annual volume of 300,000 metric tons increasing to 1.6 million metric tons.

14. Beginning in approximately 1989, AofA retained Consultant A to assist in longterm contract negotiations with Alba and Bahraini government officials, including the negotiation and execution of a new long-term alumina supply agreement in 1990 (the "1990 Supply Agreement.")

15. By 1996, Consultant A was playing a significant role in the relationship between the AWAC Subsidiaries and Alba. Around this time, Alba complained to the AWAC Subsidiaries that it was paying an above-market price for alumina. AofA learned that Alba was seeking to increase its alumina supply requirements from 600,000 metric tons a year up to 970,000 metric tons a year, and that other major global suppliers of alumina were seeking to capture these additional requirements. The AWAC Subsidiaries' sales team decided that, to "comply with business norms in the Middle East[,]" the AWAC Subsidiaries would propose

supplying some of Alba's alumina through Alumet, which was one of Consultant A's shell companies, which would pay the "required commission." An AofA manager proposed using Consultant A as the intermediary because Consultant A was "well versed in the normal ways of Middle East business" and "will keep the various stakeholders in the Alba smelter happy.…"

16. Despite the red flags inherent in this arrangement, AofA's in-house counsel approved the arrangement without conducting any due diligence or otherwise determining whether there was a legitimate business purpose for the use of a third party intermediary.

17. The AWAC Subsidiaries' sales managers traveled to London in August 1996 to meet with Consultant A to discuss this proposal to route some of AofA's alumina through Consultant A's company for resale to Alba. Upon their return to Australia, an AWA manager told other members of the AWAC Subsidiaries sales team that:

> It feels like we subsidise the Sheiks and end up with a 5 year outcome that is about $10-15/t lower than the average of the rest of our business.

18. In September 1996, the AWAC Subsidiaries' sales managers traveled to London to meet with Alba and Consultant A and agreed to an addendum to the 1990 Supply Agreement ("1996 Addendum"). Under the 1990 Agreement, AofA was supplying 600,000 metric tons per year to Alba under a formula pricing structure (as opposed to a "market"-based price). Under the 1996 Addendum, AofA agreed to supply Alba with an additional 285,000 metric tons per year through one of Consultant A's shell companies using a "market"-based price that resulted in pricing that was, at times, actually below market and allowed Consultant A to mark up his sales of alumina to Alba.

19. Employees at AWA and AofA either knew or were willfully blind to the high probability that Consultant A would use his commissions and markup to pay bribes. For example, in an internal document memorializing the negotiations surrounding the 1996 Addendum, a member of AofA's alumina sales staff wrote:

> The methodology of business in the Middle East is a complex web of interactions that are necessarily difficult to understand to disguise the payment of commissions. We have in the past maintained a position of paying our agent a 1% commission on the basis of the agent work that he has done for us. We have also, however, been asked by Alba to supply some cargoes through other intermediaries, including our agent, on various occasions and we can only assume at the purpose this serves.…Given that we want to supply the full tonnage going into the future we need to fix on the best methodology for us given the commission requirements and the contract structure.

20. The sales staff was concerned that the monies paid to Consultant A come from Consultant A's markup on sales to Alba, rather than through increased commission payments. An AWA manager was concerned that the monies paid to Consultant A not come at AofA's expense and that the sales to Consultant A "protect our position."

21. In 2001, with the coming expiration of the 1990 Supply Agreement and 1996 Addendum, AWA approached Alba to extend and expand the alumina supply relationship. Alba

agreed to extend the existing supply relationship ("2001 Extension"). Following the 2001 Extension, AofA stopped selling alumina directly to Alba; all AofA alumina destined for Alba was instead routed through AAAC, which was one of Consultant A's shell companies.

22. In 2004, AofA entered into another distribution agreement with Consultant A that involved the sale of up to 1.6 million metric tons of alumina to Alba every year through AAAC, which was a shell company of Consultant A. This arrangement lasted until approximately December 31, 2009.

23. The 2001 Extension and 2004 purported distributorship agreements facilitated the corrupt payments by allowing Consultant A to impose an inflated markup on his purported sales of alumina to Alba and used the markup from those sales to enrich himself and pay bribes to senior government officials of Bahrain.

24. From 2002 to 2004, AWA caused Consultant A and AAAC, one of his shell companies to receive in excess of $79 million in markups on alumina sales to Alba. Consultant A also received a commission under the terms of the 2001 Extension. The 2001 Extension provided for a commission of 0.125% of all payments made by Consultant A to AofA for alumina. From 2002 to 2004, AofA paid Consultant A "commissions" of $493,509.

25. In 2002, Alcoa was attempting to negotiate a joint venture with Alba, in which Alcoa would supply Alba with alumina from the AWAC system's refineries, and, in exchange, Alba would supply Alcoa with aluminum. Alcoa retained Consultant A to act as a consultant and to privately lobby a Bahraini government official on behalf of Alcoa, and Alcoa entered a consulting agreement with Consultant A pursuant to which Consultant A would receive an $8 million "success fee" based on limited specified negotiation "advice and assistance to Alcoa" if the joint venture were successful.

26. As part of the negotiations, Alcoa proposed a joint venture structure that contemplated supplying alumina to Alba through a distributor. On or about March 26, 2003, an in-house attorney in Alcoa's legal department raised questions about the deal, and requested an explanation for the role of the distributor. On or about March 27, 2003, AWA sales executive responded that "[t]he Distributorship rol[e] is something the Bahrain Government wants" and that Alcoa "shouldn't get too involved with how the Distributor and the Government interact. We are currently selling the alumina we supply to Alba through a Distributor."

27. On September 15, 2003, Alcoa and Alba agreed to a Memorandum of Understanding ("MOU") outlining an equity investment by Alcoa in Alba and providing for alumina to be sold to the Government of Bahrain, as majority shareholder of Alba, "directly or through an associated company of Alcoa satisfactory to GoB [Government of Bahrain] and Alcoa." The MOU was approved by the same Bahraini government official on behalf of Alba that Consultant A had been hired to lobby. Subsequently, the joint venture negotiations fell through, and Consultant A was never paid the $8 million success fee.

28. By the summer of 2004, AofA was supplying approximately one million metric tons of alumina annually to Alba, but Consultant A's companies were invoicing Alba for the shipments. Unlike a true distributorship, Consultant A's companies never took possession of the

alumina, assisted with the shipping arrangements, or otherwise performed any legitimate services for either the AWAC Subsidiaries or Alba. The only function the shell companies provided was to invoice Alba for the shipments at a significant markup.

29. Alba's obligations under pre-existing supply arrangements with AofA were set to expire at the end of 2004. In the summer of 2004, AWA sought to secure a new long term alumina supply agreement with Alba. On or around August 5, 2004, Alcoa management was advised by a former senior Alcoa executive who had a relationship with Consultant A that if they attempted to negotiate a direct contractual relationship between AofA and Alba, rather than negotiate a supply arrangement through Consultant A and one of his companies, some or all of Alba's business could be lost to another alumina supplier.

30. On or about August 19, 2004, AWA management met with Consultant A at Consultant A's London Office to discuss using Consultant A's companies "as Alcoa's exclusive distributor in the region." On or about August 22, 2004, an AWA executive negotiating with Consultant A sent an email documenting with more specificity certain items that were discussed at the meeting. Among them, the executive noted that "[w]e agreed to supply [Consultant A] with pricing indications for supply to [AAAC, one of Consultant A's shell companies] by 8/24 so he can have these for his meeting with [a Bahraini official]. We mentioned pricing close to 14%." The email also noted that "[a Bahraini official] is holding on to publishing [Alba's] alumina tender [to the market] until he has further discussions with [Consultant A] on 8/29." The pricing terms per metric ton of alumina that the AWA executive quoted to Consultant A at the meeting in London were less than the pricing terms for Alba that an AWA sales executive had quoted to a Bahraini official approximately one month earlier.

31. On or around September 29, 2004, AWA facilitated Consultant A's tendering a bid to supply Alba up to 1.6 million metric tons of alumina for ten years commencing in 2005. On or about October 8, 2004, the in-house attorney responsible for supporting the alumina business suggested terminating the consulting agreement that Alcoa had entered with Consultant A in connection with the proposed joint venture, as "the terms of [Consultant A's] current engagement created a lot of anxiety in the organization." However, an AWA executive decided that the consultancy agreement should not be terminated until AofA had secured a new long-term alumina supply agreement with Alba.

32. On or about November 1, 2004 a Bahraini official caused Alba to accept Consultant A's tender offer for a ten-year supply of alumina. On or about December 31, 2004, AofA entered a sham ten-year distributorship agreement with AAAC, one of Consultant A's shell companies to purportedly supply annually up to 1.78 million metric tons of alumina for sale to Alba from 2005 to 2014 (the "2005 Alba Supply Agreement"). It was actually AofA that would continue shipping the alumina directly from its refineries in Western Australia to Alba.

33. On or about March 4, 2005, a representative of Consultant A sent another Bahraini government official a final, unexecuted contract for the purported supply agreement between Consultant A and Alba. On or about June 8, 2005, the final agreement negotiated between Consultant A and Alba was signed by that government official on behalf of Alba. The agreement's effective date was January 1, 2005, and its term was through December 31, 2014. The agreement provided that Consultant A would supply Alba with 1.508 million metric tons of alumina in 2005 and 1.6 million metric tons of alumina thereafter for each remaining contract year. Alba was required to bear the cost of shipping and insurance.

34. For sales of alumina to Alba, Consultant A did not receive payment until after Consultant A was bound to pay AofA. Given the discrepancy in the timing of payment, Consultant A sought a line of credit from Alcoa to cover the cost of alumina shipments to Alba until Alba remitted payment to Consultant A. Alcoa's policies and procedures required its customers to submit financial statements for an extension of credit. Consultant A, however, refused to provide financial statements to Alcoa's credit department. Nevertheless, in or around December 2004, senior management of AWA invoked an override procedure that resulted in an Alcoa executive approving a $23 million line of credit to Consultant A's companies.

35. Thereafter, in each of contract years 2005 through 2009, Alcoa continued to grant overrides to extend increasing credit lines to Consultant A's purported distributorships. By 2007, Alcoa was extending a credit line of $58 million. During this period, Alcoa granted Consultant A credit lines that were significantly greater than those granted by Alcoa to any other third party. By facilitating the extension of credit to Consultant A, AWA enabled the purported distributorship scheme by allowing Consultant A to defer paying AofA for the multi-million dollar shipments of alumina to Alba until Consultant A received payment from Alba.

36. From 2005 through 2009, AWA caused Consultant A to receive in excess of $188 million on the markup of alumina sales to Alba. This money was transferred from the initial accounts in which payment from Alba was received through various bank accounts controlled by Consultant A, including accounts in the name of shell companies.

37. The AWAC Subsidiaries knew or consciously disregarded the fact that Consultant A was inserted into the Alba sales supply chain to generate funds to pay bribes to Bahraini officials. Ultimately, these funds facilitated at least $110 million in corrupt payments to Bahraini officials. The vast majority of those funds were generated from the markup between the price Consultant A sold to Alba and the price that AofA sold to Consultant A. Those funds were also generated from the commissions that AofA paid to Consultant A.

38. The recipients of the corrupt payments included a senior Bahraini official, members of the board of directors of Alba, and senior management of Alba. Examples of the corrupt payments include:

- In August 2003, Consultant A's shell companies made 2 payments totaling $7 million to accounts for the benefit of a Bahraini government official who Consultant A had been retained to lobby. Two weeks later, Alcoa and Alba signed an agreement in principle to have Alcoa participate in Alba's plant expansion.
- In October 2004, Consultant A's shell company paid $1 million to an account for the benefit of that same government official. Shortly thereafter, Alba agreed in principle to Alcoa's offer for the 2005 Alba Supply Agreement.
- In or around the time of the execution of the final 2005 Alba Supply Agreement, Consultant A-controlled companies paid another Bahraini government official and/or his beneficiaries $41 million in three payments.

Legal Standards and Violations

C. Under Section 21C(a) of the Exchange Act, the Commission may impose a cease-and-desist order upon any person who is violating, has violated, or is about to violate any provision of the Exchange Act or any rule or regulation thereunder, and upon any other person that is, was, or would be a cause of the violation, due to an act of omission the person knew or should have known would contribute to such violation.

FCPA Violations

D. Under Section 30A(a) of the Exchange Act it is unlawful for any issuer, officer, director, employee, or agent of such issuer or any stockholder thereof acting on behalf of the issuer, to make use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay, or authorization of the payment of any money, or offer, gift, promise to give, or authorization of the giving of anything of value to any foreign official or any person, while knowing that all or a portion of such money or thing of value will be offered, given, or promised, directly or indirectly, to any foreign official for the purposes of (i) influencing any act or decision of such foreign official in his official capacity, (ii) inducing such foreign official to do or omit to do any act in violation of the lawful duty of such official, or (iii) securing any improper advantage in order to assist such issuer in obtaining or retaining business for or with, or directing business to, any person. [15 U.S.C. § 78dd-1].

E. Additionally, under Section 30A(g) of the Exchange Act it is unlawful for any issuer organized under the laws of the United States, or a State, territory, possession, or commonwealth of the United States or for any United States person that is an officer, director, employee, or agent of such issuer or a stockholder thereof acting on behalf of such issuer, to corruptly do any act outside the United States in furtherance of an offer, payment, promise to pay, or authorization of the payment of any money, or offer, gift, promise to give, or authorization of the giving of anything of value to any of the persons or entities set forth in paragraphs (i), (ii), and (iii) of subsection (a) of this section for the purposes set forth therein, irrespective of whether such issuer or such officer, director, employee, agent, or stockholder makes use of the mails or any means or instrumentality of interstate commerce in furtherance of such offer, gift, payment, promise, or authorization.

F. This Order contains no findings that an officer, director or employee of Alcoa knowingly engaged in the bribe scheme. As described above, Alcoa violated Section 30A of the Exchange Act by reason of its agents, including subsidiaries AWA and AofA, indirectly paying bribes to foreign officials in Bahrain in order to obtain or retain business. AWA, AofA, and their employees all acted as "agents" of Alcoa during the relevant time, and were acting within the scope of their authority when participating in the bribe scheme. As described above, Alcoa exercised control over the Alumina Segment, including the AWAC Subsidiaries. Alcoa appointed the majority of seats on the AWAC Strategic Council, and the head of the Global Primary Products group served as its chair. Alcoa and AofA transferred personnel between them, including alumina sales staff; Alcoa set the business and financial goals for AWAC and coordinated the legal, audit, and compliance functions of AWAC; and the AWAC Subsidiaries' employees managing the Alba alumina business reported functionally to the global head of the Alumina Segment. Alba was a significant alumina customer for Alcoa's Alumina Segment and during the relevant period, members of Alcoa senior management met both with Alba officials and Consultant A to discuss matters related to the Alba relationship, including a proposed joint venture between Alcoa and Alba. During this time, Alcoa was aware that Consultant A was an agent and distributor with respect to AofA's sales of alumina to Alba and that terms of related contracts were reviewed and approved by senior managers of Alcoa's Alumina Segment in the United States.

G. Under Section 13(b)(2)(A) of the Exchange Act issuers are required to make and keep books, records, and accounts, which, in reasonable detail, accurately and fairly reflect the transactions and disposition of the assets of the issuer. [15 U.S.C. § 78m(b)(2)(A)].

H. Under Section 13(b)(2)(B) of the Exchange Act issuers are required to devise and maintain a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary (I) to permit preparation of financial statements in conformity with generally accepted accounting principles or any other criteria applicable to such statements, and (II) to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. [15 U.S.C. § 78m(b)(2)(B)].

I. As described above, Alcoa violated Section 13(b)(2)(A) of the Exchange Act by improperly recording the payments, to Consultant A, as agent commissions when the true purpose of these payments was to make corrupt payments to Bahraini officials. Alcoa violated Section 13(b)(2)(A) when Alcoa recorded the sales to Consultant A as a distributor. The false entries were initially recorded by the AWAC Subsidiaries which were then consolidated and reported by Alcoa in its consolidated financial statements. Alcoa also violated Section 13(b)(2)(B) by failing to devise and maintain sufficient accounting controls to detect and prevent the making of improper payments to foreign officials.

Alcoa's Remedial Efforts

J. Alcoa made an initial voluntary disclosure of certain of these issues to the Commission and Department of Justice in February 2008, and thereafter Alcoa's Board of Directors appointed a Special Committee of the Board of Directors to oversee an internal investigation by independent counsel. Alcoa's counsel regularly reported on the results of the investigation and fully cooperated with the staff of the Commission.

K. Alcoa also undertook extensive remedial actions including: a comprehensive compliance review of anti-corruption policies and procedures, including its relationship with intermediaries; enhancing its internal controls and compliance functions; developing and implementing enhanced FCPA compliance procedures, including the development and implementation of policies and procedures such as the due diligence and contracting procedure for intermediaries; and conducting comprehensive anti-corruption training throughout the organization.

Criminal Plea Agreement

Respondent's subsidiary AWA has agreed, with the United States Department of Justice, Criminal Division, Fraud Section, to plead guilty for criminal conduct relating to certain of the findings in the Order.

IV.

On the basis of the foregoing, Respondent hereby consents to the entry of an Order by the Commission that:

A. Pursuant to Section 21C of the Exchange Act, Respondent Alcoa cease and desist from committing or causing any violations and any future violations of Sections 30A, 13(b)(2)(A), and 13(b)(2)(B) of the Exchange Act.

B. Respondent shall pay disgorgement of $175,000,000. A portion of Respondent's disgorgement obligation in the amount of $14,000,000 shall be deemed satisfied by Respondent's payment of $14,000,000 in forfeiture as part of Respondent's resolution with the United States Department of Justice ("DOJ") filed in the Western District of Pennsylvania. In the event that Respondent's resolution with DOJ requires a forfeiture payment less than $14,000,000, the Respondent acknowledges that its disgorgement obligation will be credited up to the amount of the payment required by Respondent's resolution with DOJ, with the remaining balance due and payable to the Securities and Exchange Commission within 14 days of payment pursuant to Respondent's resolution with DOJ. In light of the impact of the disgorgement payment upon Respondent's financial condition and its potential to substantially jeopardize Alcoa's ability to fund its sustaining and improving capital expenditures, its ability to invest in research and development, its ability to fund its pension obligations, and its ability to maintain necessary cash reserves to fund its operations and meet its liabilities, Respondent shall pay the disgorgement in five equal payments based upon the following schedule:

Amount	Date Due
$32,200,000	January , 2014
$32,200,000	January , 2015
$32,200,000	January , 2016
$32,200,000	January , 2017
$32,200,000	January , 2018

If timely payment of disgorgement is not made, additional interest shall accrue pursuant to SEC Rule of Practice 600. Payment must be made in one of the following ways:

(1) Respondent may transmit payment electronically to the Commission, which will provide detailed ACH transfer/Fedwire instructions upon request;[2]

(2) Respondent may make direct payment from a bank account via Pay.gov through the SEC website at http://www.sec.gov/about/offices/ofm.htm; or

(3) Respondent may pay by certified check, bank cashier's check, or United States postal money order, made payable to the Securities and Exchange Commission and hand-delivered or mailed to:

Enterprise Services Center
Accounts Receivable Branch
HQ Bldg., Room 181, AMZ-341
6500 South MacArthur Boulevard
Oklahoma City, OK 73169

Payments by check or money order must be accompanied by a cover letter identifying Alcoa Inc. as a Respondent in these proceedings, and the file number of these proceedings; a copy of the cover letter and check or money order must be sent to Charles Cain, Deputy Unit Chief, FCPA Unit, Division of Enforcement, Securities and Exchange Commission, 100 F St., NE, Washington, DC 20549.

V.

By submitting this Offer, Respondent hereby acknowledges its waiver of those rights specified in Rules 240(c)(4) and (5) [17 C.F.R. §201.240(c)(4) and (5)] of the Commission's Rules of Practice. Respondent also hereby waives service of the Order.

2 The minimum threshold for transmission of payment electronically is $50,000.00 as of April 1, 2012. This threshold will be increased to $1,000,000 by December 31, 2012. For amounts below the threshold, respondents must make payments pursuant to option (2) or (3) above.

VI.

Respondent understands and agrees to comply with the Commission's policy "not to permit a defendant or respondent to consent to a judgment or order that imposes a sanction while denying the allegations in the complaint or order for proceedings" (17 C.F.R. §202.5(e)). In compliance with this policy, Respondent agrees: (i) not to take any action or to make or permit to be made any public statement denying, directly or indirectly, any finding in the Order or creating the impression that the Order is without factual basis; and (ii) that upon the filing of this Offer of Settlement, Respondent hereby withdraws any papers previously filed in this proceeding to the extent that they deny, directly or indirectly, any finding in the Order. If Respondent breaches this agreement, the Division of Enforcement may petition the Commission to vacate the Order and restore this proceeding to its active docket. Nothing in this provision affects Respondent's: (i) testimonial obligations; or (ii) right to take legal or factual positions in litigation or other legal proceedings in which the Commission is not a party.

VII.

Consistent with the provisions of 17 C.F.R. § 202.5(f), Respondent waives any claim of Double Jeopardy based upon the settlement of this proceeding, including the imposition of any remedy or civil penalty herein.

VIII.

Respondent hereby waives any rights under the Equal Access to Justice Act, the Small Business Regulatory Enforcement Fairness Act of 1996, or any other provision of law to seek from the United States, or any agency, or any official of the United States acting in his or her official capacity, directly or indirectly, reimbursement of attorney's fees or other fees, expenses, or costs expended by Respondent to defend against this action. For these purposes, Respondent agrees that Respondent is not the prevailing party in this action since the parties have reached a good faith settlement.

IX.

Respondent states that it has read and understands the foregoing Offer, that this Offer is made voluntarily, and that no promises, offers, threats, or inducements of any kind or nature whatsoever have been made by the Commission or any member, officer, employee, agent, or representative of the Commission in consideration of this Offer or otherwise to induce it to submit to this Offer.

27th Day of December

/s/ Audrey Strauss, Executive V.P., CLO & Corporate Secretary
Alcoa Inc.

STATE OF NEW YORK }
} **SS:**
COUNTY OF NEW YORK }

The foregoing instrument was acknowledged before me this 27 day of December 2013, by Audrey Strauss, who ü is personally known to me or who has produced a United States passport as identification and who did take an oath.

/s/ Melissa Ortiz

Notary Public
State of New York

Commission Number	: 01OR5077631
Commission Expiration	: May 12, 2015

MELISSA ORTIZ
Notary Public, State of New York
No. 01OR5077631
Qualified in Suffolk County
Commission Expires May 12, 2015

ALCOA INC. CERTIFICATE OF CORPORATE RESOLUTIONS

I, Audrey Strauss, do hereby certify that I am the duly elected, qualified and acting Executive Vice President. Chief Legal Officer and Secretary of Alcoa Inc. ("Alcoa"), a Pennsylvania corporation, and that the following is a complete and accurate copy of resolutions adopted by the Board of Directors of Alcoa at a meeting held on December 6, 2013 at which a quorum was present:

RESOLVED, that the Board of Directors of the Company, after thorough consideration of all relevant issues, including considering the costs and benefits of settlement, and considering the advice and conclusions of outside legal counsel and management, and upon the recommendation of the Special Committee comprising the Senior Advisors to the Board, deems it advisable and in the best interests of the Company and its relevant constituencies for the Board of Directors to approve the key terms of the proposed settlement with the Securities and Exchange Commission relating to its investigation of the claims made by Aluminium Bahrain B.S.C. (the "Proposed SEC Settlement") that have been reviewed with the Board at this meeting, which include, among other things, a requirement to pay a disgorgement amount of up to $161 million payable in five equal annual installments over four years, and such key terms of the Proposed SEC Settlement be and they hereby are approved substantially as presented at this meeting; and

FURTHER RESOLVED, that the proper officers of the Company and counsel for the Company are each hereby authorized and directed to take such actions as are necessary to effect the Proposed SEC Settlement and to execute and deliver all agreements, instruments and documents and to take such other and further actions which in the opinion of any of them may be necessary or desirable to achieve the purposes of or to consummate the Proposed SEC Settlement, the taking of any such action or the execution and delivery of any such agreements, instruments or documents to be conclusive evidence of the authority to take, execute or deliver the same.

I further certify that the aforesaid resolutions have not been amended or revoked in any respect and remain in full force and effect.

IN WITNESS WHEREOF, I have executed this Certificate as a sealed instrument this 27th day of December, 2013.

By: /s/ Audrey Strauss
Audrey Strauss
Executive Vice President, Chief Legal
Officer and Secretary
Alcoa Inc.

STATE OF NEW YORK }
} SS:
COUNTY OF NEW YORK }

The foregoing instrument was acknowledged before me this day of December 27, 2013, by Audrey Strauss, who ü is personally known to me or who has produced a United States passport as identification and who did take an oath.

/s/ Melissa Ortiz

Notary Public
State of New York
Commission Number : 01OR5077631
Commission Expiration : May 12, 2015

MELISSA ORTIZ
Notary Public, State of New York
No. 01OR5077631
Qualified in Suffolk County
Commission Expires May 12, 2015

Exhibit 10(n)

UNITED STATES OF AMERICA
Before the
SECURITIES AND EXCHANGE COMMISSION

SECURITIES EXCHANGE ACT OF 1934
Release No. 71261 / January 9, 2014

ACCOUNTING AND AUDITING ENFORCEMENT
Release No. 3525 / January 9, 2014

ADMINISTRATIVE PROCEEDING
File No. 3-15673

In the Matter of **ALCOA INC.,** **Respondent.**	**ORDER INSTITUTING CEASE-AND-DESIST PROCEEDINGS PURSUANT TO SECTION 21C OF THE SECURITIES EXCHANGE ACT OF 1934, MAKING FINDINGS, AND IMPOSING A CEASE-AND-DESIST ORDER**

I.

The Securities and Exchange Commission ("Commission") deems it appropriate that cease- and-desist proceedings be, and hereby are, instituted pursuant to Section 21C of the Securities Exchange Act of 1934 ("Exchange Act"), against Alcoa Inc. ("Alcoa" or "Respondent").

II.

In anticipation of the institution of these proceedings, Respondent has submitted an Offer of Settlement (the "Offer") which the Commission has determined to accept. Solely for the purpose of these proceedings and any other proceedings brought by or on behalf of the Commission, or to which the Commission is a party, Respondent consents to the Commission's jurisdiction over the Respondent and the subject matter of these proceedings, and to the entry of this Order Instituting Cease-and-Desist Proceedings Pursuant to Section 21C of the Securities Exchange Act of 1934, Making Findings, and Imposing a Cease-and-Desist Order ("Order"), as set forth below.

III.

On the basis of this Order and Respondent's Offer, the Commission finds[1] that:

Summary

1. These proceedings arise from violations of the Foreign Corrupt Practices Act of 1977 (the "FCPA") [15 U.S.C. § 78dd] by Respondent Alcoa Inc. ("Alcoa") concerning alumina sales to Aluminium Bahrain B.S.C. ("Alba"), an aluminum manufacturer owned primarily by the Kingdom of Bahrain.

2. Between 1989 and 2009, Alcoa of Australia ("AofA") and Alcoa World Alumina LLC ("AWA") (collectively, the "AWAC Subsidiaries") retained a consultant to act as their middleman in connection with sales of alumina to Alba and knew or consciously disregarded the fact that the relationship with the consultant was designed to generate funds that facilitated corrupt payments to Bahraini officials. The consultant was paid a commission on sales where he acted as an agent and received a markup on sales where he acted as a purported distributor. On sales where the consultant acted as a purported distributor, no legitimate services were provided to justify the role of the consultant as a distributor. The consultant used these funds to enrich himself and pay bribes to senior government officials of Bahrain.

3. The commission payments to the consultant and the alumina sales to the consultant made pursuant to the distribution agreements were improperly recorded in Alcoa's books and records as legitimate commissions or sales to a distributor and did not accurately reflect the transactions. The false entries were initially recorded by the AWAC Subsidiaries which were then consolidated into Alcoa's books and records. During the relevant period, Alcoa also lacked sufficient internal controls to prevent and detect the improper payments.

Respondent

4. **Alcoa** is a corporation organized under the laws of the Commonwealth of Pennsylvania. Until 2006, Alcoa's principal place of business was in Pittsburgh, Pennsylvania, in the Western District of Pennsylvania. In 2006, Alcoa moved its principal place of business to New York, New York. Alcoa issues and maintains a class of publicly traded securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934, which are traded on the New York Stock Exchange.

5. Alcoa is a global provider of primary aluminum and fabricated aluminum. Alcoa is also a global provider of smelter grade alumina, the raw material that is supplied to smelters to

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1 The findings herein are made pursuant to Respondent's Offer of Settlement and are not binding on any other person or entity in this or any other proceeding.

produce aluminum. Alcoa refines alumina from bauxite it extracts from its global mining operations. Alcoa operates worldwide through subsidiaries and affiliated entities in North America, Asia, Australia, Europe, South America, Africa and the Caribbean.

Other Relevant Entities and Persons

6. **Alcoa World Alumina and Chemicals** ("AWAC") is an unincorporated global bauxite mining and alumina refining enterprise formed in 1995 between Alcoa and Alumina Limited ("Alumina"), the majority and minority owners of AWAC, respectively. AWAC operates through a number of affiliated enterprise companies, including AofA and AWA, with each enterprise company being owned by Alcoa and Alumina in proportion to their respective ownership interests in the AWAC enterprise. In matters of strategy and policy, the AWAC enterprise companies receive direction and counsel from a "Strategic Council" that is chaired by Alcoa. Alcoa controls the Strategic Council and as such the operations and personnel of AWAC report to Alcoa personnel in New York.

7. **Alcoa of Australia Limited** ("AofA") is the AWAC enterprise company that owns and operates AWAC's bauxite mining and alumina refining assets in Australia. AofA's principal place of business was located in Melbourne, in the state of Victoria, Australia, until 1996, and is now located in Perth, in the state of Western Australia. AofA owns and operates mines in Western Australia that extract bauxite, which AofA then processes into smelter grade alumina in refineries it owns and operates. AofA sells the smelter grade alumina to aluminum smelters it owns in the state of Victoria as well as to customers and alumina traders around the world. AofA maintains bank accounts in the United States. AofA's books, records, and accounts are consolidated into Alcoa's books and records and reported by Alcoa in its financial statements.

8. **Alcoa World Alumina LLC** ("AWA") is a Limited Liability Company formed under Delaware law, which maintains its principal place of business in Pittsburgh, Pennsylvania, in the Western District of Pennsylvania. AWA owns and operates (either directly or indirectly) bauxite mining and alumina refining assets in North America, Europe, South America, and the Caribbean. AWA is an AWAC enterprise company. Beginning in or around 2000, executives at AWA's offices in Pittsburgh and Knoxville, Tennessee, assumed primary responsibility for all of AWAC's relationships with global alumina customers, including Alba. AWA personnel responsible for these functions reported to Alcoa personnel in New York.

9. **Consultant A** is an international middleman who resides in London and is a citizen of Canada, Jordan, and the United Kingdom. Consultant A had close contacts with certain members of Bahrain's Royal Family, some of whom were senior officials in the Government of Bahrain. Consultant A met with Alcoa executives to discuss matters relating to the relationship with Alba. Consultant A operates through many shell companies, including Alumet Ltd ("Alumet") and AA Alumina and Chemicals Ltd ("AAAC").

10. **Aluminium Bahrain B.S.C.** ("Alba") is an aluminum smelter operating in Bahrain. At the relevant times, the state holding company of the Kingdom of Bahrain, the Mumtalakat, which was controlled by the Bahrain Ministry of Finance, held 77 percent of the

shares of Alba. The Saudi Basic Industries Corporation ("SABIC"), which is majority-owned and controlled by the government of the Kingdom of Saudi Arabia, held a twenty percent minority stake in Alba, and three percent of Alba's shares were held by a German investment group. The majority of profits earned by Alba belonged to the Mumtalakat, though part of the profit was permitted to be used by Alba for its operations. The Bahrain Ministry of Finance had to approve any change in Alba's capital structure and had to be consulted on any major capital projects or contracts material to Alba's operations. Members of the Royal Family of Bahrain and representatives of the government sat on the Board of Directors of Alba, controlled its Board, and had primary authority in selecting its chief executive officer and chief financial officer.

Facts

11. Alcoa's global bauxite and alumina refining business (the "Alumina Segment") is part of the Global Primary Products group, one of Alcoa's three business lines. The Alumina Segment operationally consists of multiple subsidiaries. During the relevant time period, the Alumina Segment reported to the global head of the Global Primary Products group, who was an executive of Alcoa and reported directly to Alcoa's CEO.

12. Alcoa exercised control over the Alumina Segment, including the AWAC Subsidiaries. Alcoa appointed the majority of seats on the AWAC Strategic Council, and the head of Global Primary Products served as its chair. Alcoa and AofA transferred personnel between them, including alumina sales staff; Alcoa set the business and financial goals for AWAC and coordinated the legal, audit, and compliance functions of AWAC; and the AWAC Subsidiaries' employees managing the Alba alumina business reported functionally to the global head of the Alumina Segment. Alba was a significant alumina customer for Alcoa's Alumina Segment and during the relevant period, members of Alcoa senior management met both with Alba officials and Consultant A to discuss matters related to the Alba relationship, including a proposed joint venture between Alcoa and Alba. During this time, Alcoa was aware that Consultant A was an agent and distributor with respect to AofA's sales of alumina to Alba and that terms of related contracts were reviewed and approved by senior managers of Alcoa's Alumina Segment in the United States.

13. From at least 1989 to 2009, AofA supplied alumina to Alba through a series of multi-year contracts. During this period, Alba was one of Alcoa's largest alumina customers purchasing a total of nearly 19 million metric tons beginning with an annual volume of 300,000 metric tons increasing to 1.6 million metric tons.

14. Beginning in approximately 1989, AofA retained Consultant A to assist in long-term contract negotiations with Alba and Bahraini government officials, including the negotiation and execution of a new long-term alumina supply agreement in 1990 (the "1990 Supply Agreement.")

15. By 1996, Consultant A was playing a significant role in the relationship between the AWAC Subsidiaries and Alba. Around this time, Alba complained to the AWAC Subsidiaries that it was paying an above-market price for alumina. AofA learned that Alba was seeking to increase its alumina supply requirements from 600,000 metric tons a year up to

970,000 metric tons a year, and that other major global suppliers of alumina were seeking to capture these additional requirements. The AWAC Subsidiaries' sales team decided that, to "comply with business norms in the Middle East[,]" the AWAC Subsidiaries would propose supplying some of Alba's alumina through Alumet, which was one of Consultant A's shell companies, which would pay the "required commission." An AofA manager proposed using Consultant A as the intermediary because Consultant A was "well versed in the normal ways of Middle East business" and "will keep the various stakeholders in the Alba smelter happy."

16. Despite the red flags inherent in this arrangement, AofA's in-house counsel approved the arrangement without conducting any due diligence or otherwise determining whether there was a legitimate business purpose for the use of a third party intermediary.

17. The AWAC Subsidiaries' sales managers traveled to London in August 1996 to meet with Consultant A to discuss this proposal to route some of AofA's alumina through Consultant A's company for resale to Alba. Upon their return to Australia, an AWA manager told other members of the AWAC Subsidiaries sales team that:

> It feels like we subsidise the Sheiks and end up with a 5 year outcome that is about $10-15/t lower than the average of the rest of our business.

18. In September 1996, the AWAC Subsidiaries' sales managers traveled to London to meet with Alba and Consultant A and agreed to an addendum to the 1990 Supply Agreement ("1996 Addendum"). Under the 1990 Agreement, AofA was supplying 600,000 metric tons per year to Alba under a formula pricing structure (as opposed to a "market"-based price). Under the 1996 Addendum, AofA agreed to supply Alba with an additional 285,000 metric tons per year through one of Consultant A's shell companies using a "market"-based price that resulted in pricing that was, at times, actually below market and allowed Consultant A to mark up his sales of alumina to Alba.

19. Employees at AWA and AofA either knew or were willfully blind to the high probability that Consultant A would use his commissions and markup to pay bribes. For example, in an internal document memorializing the negotiations surrounding the 1996 Addendum, a member of AofA's alumina sales staff wrote:

> The methodology of business in the Middle East is a complex web of interactions that are necessarily difficult to understand to disguise the payment of commissions. We have in the past maintained a position of paying our agent a 1% commission on the basis of the agent work that he has done for us. We have also, however, been asked by Alba to supply some cargoes through other intermediaries, including our agent, on various occasions and we can only assume at the purpose this serves. .Given that we want to supply the full tonnage going into the future we need to fix on the best methodology for us given the commission requirements and the contract structure.

20. The sales staff was concerned that the monies paid to Consultant A come from Consultant A's markup on sales to Alba, rather than through increased commission payments. An AWA manager was concerned that the monies paid to Consultant A not come at AofA's expense and that the sales to Consultant A "protect our position."

21. In 2001, with the coming expiration of the 1990 Supply Agreement and 1996 Addendum, AWA approached Alba to extend and expand the alumina supply relationship. Alba agreed to extend the existing supply relationship ("2001 Extension"). Following the 2001 Extension, AofA stopped selling alumina directly to Alba; all AofA alumina destined for Alba was instead routed through AAAC, which was one of Consultant A's shell companies.

22. In 2004, AofA entered into another distribution agreement with Consultant A that involved the sale of up to 1.6 million metric tons of alumina to Alba every year through AAAC, which was a shell company of Consultant A. This arrangement lasted until approximately December 31, 2009.

23. The 2001 Extension and 2004 purported distributorship agreements facilitated the corrupt payments by allowing Consultant A to impose an inflated markup on his purported sales of alumina to Alba and used the markup from those sales to enrich himself and pay bribes to senior government officials of Bahrain.

24. From 2002 to 2004, AWA caused Consultant A and AAAC, one of his shell companies to receive in excess of $79 million in markups on alumina sales to Alba. Consultant A also received a commission under the terms of the 2001 Extension. The 2001 Extension provided for a commission of 0.125 percent of all payments made by Consultant A to AofA for alumina. From 2002 to 2004, AofA paid Consultant A "commissions" of $493,509.

25. In 2002, Alcoa was attempting to negotiate a joint venture with Alba, in which Alcoa would supply Alba with alumina from the AWAC system's refineries, and, in exchange, Alba would supply Alcoa with aluminum. Alcoa retained Consultant A to act as a consultant and to privately lobby a Bahraini government official on behalf of Alcoa, and Alcoa entered a consulting agreement with Consultant A pursuant to which Consultant A would receive an $8 million "success fee" based on limited specified negotiation "advice and assistance to Alcoa" if the joint venture were successful.

26. As part of the negotiations, Alcoa proposed a joint venture structure that contemplated supplying alumina to Alba through a distributor. On or about March 26, 2003, an in-house attorney in Alcoa's legal department raised questions about the deal, and requested an explanation for the role of the distributor. On or about March 27, 2003, AWA sales executive responded that "[t]he Distributorship rol[e] is something the Bahrain Government wants" and that Alcoa "shouldn't get too involved with how the Distributor and the Government interact. We are currently selling the alumina we supply to Alba through a Distributor."

27. On September 15, 2003, Alcoa and Alba agreed to a Memorandum of Understanding ("MOU") outlining an equity investment by Alcoa in Alba and providing for alumina to be sold to the Government of Bahrain, as majority shareholder of Alba, "directly or through an associated company of Alcoa satisfactory to GoB [Government of Bahrain] and Alcoa." The MOU was approved by the same Bahraini government official on behalf of Alba that Consultant A had been hired to lobby. Subsequently, the joint venture negotiations fell through, and Consultant A was never paid the $8 million success fee.

28. By the summer of 2004, AofA was supplying approximately one million metric tons of alumina annually to Alba, but Consultant A's companies were invoicing Alba for the shipments. Unlike a true distributorship, Consultant A's companies never took possession of the alumina, assisted with the shipping arrangements, or otherwise performed any legitimate services for either the AWAC Subsidiaries or Alba. The only function the shell companies provided was to invoice Alba for the shipments at a significant markup.

29. Alba's obligations under pre-existing supply arrangements with AofA were set to expire at the end of 2004. In the summer of 2004, AWA sought to secure a new long term alumina supply agreement with Alba. On or around August 5, 2004, Alcoa management was advised by a former senior Alcoa executive who had a relationship with Consultant A that if they attempted to negotiate a direct contractual relationship between AofA and Alba, rather than negotiate a supply arrangement through Consultant A and one of his companies, some or all of Alba's business could be lost to another alumina supplier.

30. On or about August 19, 2004, AWA management met with Consultant A at Consultant A's London Office to discuss using Consultant A's companies "as Alcoa's exclusive distributor in the region." On or about August 22, 2004, an AWA executive negotiating with Consultant A sent an email documenting with more specificity certain items that were discussed at the meeting. Among them, the executive noted that "[w]e agreed to supply [Consultant A] with pricing indications for supply to [AAAC, one of Consultant A's shell companies] by 8/24 so he can have these for his meeting with [a Bahraini official]. We mentioned pricing close to 14%." The email also noted that "[a Bahraini official] is holding on to publishing [Alba's] alumina tender [to the market] until he has further discussions with [Consultant A] on 8/29." The pricing terms per metric ton of alumina that the AWA executive quoted to Consultant A at the meeting in London were less than the pricing terms for Alba that an AWA sales executive had quoted to a Bahraini official approximately one month earlier.

31. On or around September 29, 2004, AWA facilitated Consultant A's tendering a bid to supply Alba up to 1.6 million metric tons of alumina for ten years commencing in 2005. On or about October 8, 2004, the in-house attorney responsible for supporting the alumina business suggested terminating the consulting agreement that Alcoa had entered with Consultant A in connection with the proposed joint venture, as "the terms of [Consultant A's] current engagement created a lot of anxiety in the organization." However, an AWA executive decided that the consultancy agreement should not be terminated until AofA had secured a new long-term alumina supply agreement with Alba.

32. On or about November 1, 2004, a Bahraini official caused Alba to accept Consultant A's tender offer for a ten-year supply of alumina. On or about December 31, 2004, AofA entered a sham ten-year distributorship agreement with AAAC, one of Consultant A's shell companies to purportedly supply annually up to 1.78 million metric tons of alumina for sale to Alba from 2005 to 2014 (the "2005 Alba Supply Agreement"). It was actually AofA that would continue shipping the alumina directly from its refineries in Western Australia to Alba.

33. On or about March 4, 2005, a representative of Consultant A sent another Bahraini government official a final, unexecuted contract for the purported supply agreement between Consultant A and Alba. On or about June 8, 2005, the final agreement negotiated between Consultant A and Alba was signed by that government official on behalf of Alba. The agreement's effective date was January 1, 2005, and its term was through December 31, 2014. The agreement provided that Consultant A would supply Alba with 1.508 million metric tons of alumina in 2005 and 1.6 million metric tons of alumina thereafter for each remaining contract year. Alba was required to bear the cost of shipping and insurance.

34. For sales of alumina to Alba, Consultant A did not receive payment until after Consultant A was bound to pay AofA. Given the discrepancy in the timing of payment, Consultant A sought a line of credit from Alcoa to cover the cost of alumina shipments to Alba until Alba remitted payment to Consultant A. Alcoa's policies and procedures required its customers to submit financial statements for an extension of credit. Consultant A, however, refused to provide financial statements to Alcoa's credit department. Nevertheless, in or around December 2004, senior management of AWA invoked an override procedure that resulted in an Alcoa executive approving a $23 million line of credit to Consultant A's companies.

35. Thereafter, in each of contract years 2005 through 2009, Alcoa continued to grant overrides to extend increasing credit lines to Consultant A's purported distributorships. By 2007, Alcoa was extending a credit line of $58 million. During this period, Alcoa granted Consultant A credit lines that were significantly greater than those granted by Alcoa to any other third party. By facilitating the extension of credit to Consultant A, AWA enabled the purported distributorship scheme by allowing Consultant A to defer paying AofA for the multi-million dollar shipments of alumina to Alba until Consultant A received payment from Alba.

36. From 2005 through 2009, AWA caused Consultant A to receive in excess of $188 million on the markup of alumina sales to Alba. This money was transferred from the initial accounts in which payment from Alba was received through various bank accounts controlled by Consultant A, including accounts in the name of shell companies.

37. The AWAC Subsidiaries knew or consciously disregarded the fact that Consultant A was inserted into the Alba sales supply chain to generate funds to pay bribes to Bahraini officials. Ultimately, these funds facilitated at least $110 million in corrupt payments to Bahraini officials. The vast majority of those funds were generated from the markup between the price Consultant A sold to Alba and the price that AofA sold to Consultant A. Those funds were also generated from the commissions that AofA paid to Consultant A.

38. The recipients of the corrupt payments included a senior Bahraini official, members of the board of directors of Alba, and senior management of Alba. Examples of the corrupt payments include:

- In August 2003, Consultant A's shell companies made 2 payments totaling $7 million to accounts for the benefit of a Bahraini government official who Consultant A had been retained to lobby. Two weeks later, Alcoa and Alba signed an agreement in principle to have Alcoa participate in Alba's plant expansion.

- In October 2004, Consultant A's shell company paid $1 million to an account for the benefit of that same government official. Shortly thereafter, Alba agreed in principle to Alcoa's offer for the 2005 Alba Supply Agreement.
- In or around the time of the execution of the final 2005 Alba Supply Agreement, Consultant A-controlled companies paid another Bahraini government official and/or his beneficiaries $41 million in three payments.

<u>Legal Standards and Violations</u>

C. Under Section 21C(a) of the Exchange Act, the Commission may impose a cease- and-desist order upon any person who is violating, has violated, or is about to violate any provision of the Exchange Act or any rule or regulation thereunder, and upon any other person that is, was, or would be a cause of the violation, due to an act of omission the person knew or should have known would contribute to such violation.

<u>FCPA Violations</u>

D. Under Section 30A(a) of the Exchange Act it is unlawful for any issuer, officer, director, employee, or agent of such issuer or any stockholder thereof acting on behalf of the issuer, to make use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay, or authorization of the payment of any money, or offer, gift, promise to give, or authorization of the giving of anything of value to any foreign official or any person, while knowing that all or a portion of such money or thing of value will be offered, given, or promised, directly or indirectly, to any foreign official for the purposes of (i) influencing any act or decision of such foreign official in his official capacity, (ii) inducing such foreign official to do or omit to do any act in violation of the lawful duty of such official, or (iii) securing any improper advantage in order to assist such issuer in obtaining or retaining business for or with, or directing business to, any person. [15 U.S.C. § 78dd-1].

E. Additionally, under Section 30A(g) of the Exchange Act it is unlawful for any issuer organized under the laws of the United States, or a State, territory, possession, or commonwealth of the United States or for any United States person that is an officer, director, employee, or agent of such issuer or a stockholder thereof acting on behalf of such issuer, to corruptly do any act outside the United States in furtherance of an offer, payment, promise to pay, or authorization of the payment of any money, or offer, gift, promise to give, or authorization of the giving of anything of value to any of the persons or entities set forth in paragraphs (i), (ii), and (iii) of subsection (a) of this section for the purposes set forth therein, irrespective of whether such issuer or such officer, director, employee, agent, or stockholder makes use of the mails or any means or instrumentality of interstate commerce in furtherance of such offer, gift, payment, promise, or authorization.

F. This Order contains no findings that an officer, director or employee of Alcoa knowingly engaged in the bribe scheme. As described above, Alcoa violated Section 30A of the Exchange Act by reason of its agents, including subsidiaries AWA and AofA, indirectly paying bribes to foreign officials in Bahrain in order to obtain or retain business. AWA, AofA, and their employees all acted as "agents" of Alcoa during the relevant time, and were acting within the scope of their authority when participating in the bribe scheme. As described above, Alcoa exercised control over the Alumina Segment, including the AWAC Subsidiaries. Alcoa appointed the majority of seats on the AWAC Strategic Council, and the head of the Global Primary Products group served as its chair. Alcoa and AofA transferred personnel between them, including alumina sales staff; Alcoa set the business and financial goals for AWAC and coordinated the legal, audit, and compliance functions of AWAC; and the AWAC Subsidiaries' employees managing the Alba alumina business reported functionally to the global head of the Alumina Segment. Alba was a significant alumina customer for Alcoa's Alumina Segment and during the relevant period, members of Alcoa senior management met both with Alba officials and Consultant A to discuss matters related to the Alba relationship, including a proposed joint venture between Alcoa and Alba. During this time, Alcoa was aware that Consultant A was an agent and distributor with respect to AofA's sales of alumina to Alba and that terms of related contracts were reviewed and approved by senior managers of Alcoa's Alumina Segment in the United States.

G. Under Section 13(b)(2)(A) of the Exchange Act issuers are required to make and keep books, records, and accounts, which, in reasonable detail, accurately and fairly reflect the transactions and disposition of the assets of the issuer. [15 U.S.C. § 78m(b)(2)(A)].

H. Under Section 13(b)(2)(B) of the Exchange Act issuers are required to devise and maintain a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary (I) to permit preparation of financial statements in conformity with generally accepted accounting principles or any other criteria applicable to such statements, and (II) to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. [15 U.S.C. § 78m(b)(2)(B)].

I. As described above, Alcoa violated Section 13(b)(2)(A) of the Exchange Act by improperly recording the payments, to Consultant A, as agent commissions when the true purpose of these payments was to make corrupt payments to Bahraini officials. Alcoa violated Section 13(b)(2)(A) when Alcoa recorded the sales to Consultant A as a distributor. The false entries were initially recorded by the AWAC Subsidiaries which were then consolidated and reported by Alcoa in its consolidated financial statements. Alcoa also violated Section 13(b)(2)(B) by failing to devise and maintain sufficient accounting controls to detect and prevent the making of improper payments to foreign officials.

Alcoa's Remedial Efforts

J. Alcoa made an initial voluntary disclosure of certain of these issues to the Commission and Department of Justice in February 2008, and thereafter Alcoa's Board of Directors appointed a Special Committee of the Board of Directors to oversee an internal investigation by independent counsel. Alcoa's counsel regularly reported on the results of the investigation and fully cooperated with the staff of the Commission.

K. Alcoa also undertook extensive remedial actions including: a comprehensive compliance review of anti-corruption policies and procedures, including its relationship with intermediaries; enhancing its internal controls and compliance functions; developing and implementing enhanced FCPA compliance procedures, including the development and implementation of policies and procedures such as the due diligence and contracting procedure for intermediaries; and conducting comprehensive anti-corruption training throughout the organization.

Criminal Plea Agreement

Respondent's subsidiary AWA has agreed, with the United States Department of Justice, Criminal Division, Fraud Section, to plead guilty for criminal conduct relating to certain of the findings in the Order.

IV.

In view of the foregoing, the Commission deems it appropriate to impose the sanctions agreed to in Respondent Alcoa's Offer.

Accordingly, it is hereby ORDERED that**:**

A. Pursuant to Section 21C of the Exchange Act, Respondent Alcoa cease and desist from committing or causing any violations and any future violations of Sections 30A, 13(b)(2)(A) and 13(b)(2)(B) of the Exchange Act;

B. Respondent shall pay disgorgement of $175,000,000. A portion of Respondent's disgorgement obligation in the amount of $14,000,000 shall be deemed satisfied by Respondent's payment of $14,000,000 in forfeiture as part of Respondent's resolution with the United States Department of Justice ("DOJ") filed in the Western District of Pennsylvania. In the event that Respondent's resolution with DOJ requires a forfeiture payment less than $14,000,000, the Respondent acknowledges that its disgorgement obligation will be credited up to the amount of the payment required by Respondent's resolution with DOJ, with the remaining balance due and payable to the Securities and Exchange Commission within 14 days of payment pursuant to Respondent's resolution with DOJ. In light of the impact of the disgorgement payment upon Respondent's financial condition and its potential to substantially jeopardize Alcoa's ability to fund its sustaining and improving capital expenditures, its ability to invest in research and development, its ability to fund its pension obligations, and its ability to maintain necessary cash reserves to fund its operations and meet its liabilities, Respondent shall pay the disgorgement in five equal payments based upon the following schedule:

Amount	Date Due
$32,200,000	January 9, 2014
$32,200,000	January 9, 2015
$32,200,000	January 9, 2016
$32,200,000	January 9, 2017
$32,200,000	January 9, 2018

If timely payment of disgorgement is not made within 14 days of when due, additional interest shall accrue pursuant to SEC Rule of Practice 600. Payment must be made in one of the following ways:

(1) Respondent may transmit payment electronically to the Commission, which will provide detailed ACH transfer/Fedwire instructions upon request;

(2) Respondent may make direct payment from a bank account via Pay.gov through the SEC website at http://www.sec.gov/about/offices/ofm.htm; or

(3) Respondent may pay by certified check, bank cashier's check, or United States postal money order, made payable to the Securities and Exchange Commission and hand- delivered or mailed to:

Enterprise Services Center
Accounts Receivable Branch
HQ Bldg., Room 181, AMZ-341
6500 South MacArthur Boulevard
Oklahoma City, OK 73169

Payments by check or money order must be accompanied by a cover letter identifying Alcoa Inc. as a Respondent in these proceedings, and the file number of these proceedings; a copy of the cover letter and check or money order must be sent to Charles Cain, Deputy Unit Chief, FCPA Unit, Division of Enforcement, Securities and Exchange Commission, 100 F St., NE, Washington, DC 20549.

By the Commission.

Elizabeth M. Murphy
Secretary

Alcoa Inc.

390 Park Avenue
New York NY 10022 – 4608 USA
Tel: 1 212 836 2600
Fax: 1 212 836 2809

October 4, 2013

PERSONAL & CONFIDENTIAL
Graeme Bottger
Hand Delivered

Dear Graeme,

As a follow up to our discussions concerning your employment, and in light of your role as a valued member of our management team, I am writing to offer you a special retention arrangement.

We mutually agree that in exchange for your continued employment through December 31, 2014, and your agreement to enter into the attached Non-Competition Agreement, the Company will make the following payments in respect of your Australian pension plan tax liability:

1. Before October 30, 2013, Alcoa will reimburse you for the tax liability for non-expatriate plan accruals for tax years 2009 through 2012. We estimate this tax liability to be approximately $310,000, which grossed up to avoid any additional tax liability is approximately $520,000.

2. Each year, beginning with your 2013 US tax filings, Alcoa will take into account the increase in your non-expatriate plan accruals and will reimburse you for this additional tax liability (including gross up) when due.

3. At the time you repatriate to Australia, an exit tax will be payable to the U.S. for your plan accruals for the period from 1999 through 2008. Alcoa will reimburse you for this tax liability estimated to be $380,000, which grossed up to avoid any adverse tax consequences to you is approximately $700,000.

The Company will provide the foregoing payments, upon you providing the Company with evidence of your payment (gross up will be calculated based on actual tax payments). To the extent you terminate your employment prior to December 31, 2014, except as provided in this agreement, the Company will not provide further payments described above, and you will be obligated to reimburse the Company for any previous payments made on your behalf.

As part of this agreement, and specifically in consideration of the foregoing payments, your continued employment and retention period, you agree to the terms contained within the attached Non-Competition Agreement.

The foregoing payments will not be treated as compensation for any purpose under any compensation or benefit plan or program of the Company.

The terms of this agreement can be revised in writing by mutual agreement between you and Alcoa.

We are very pleased to be able to make this offer to you and we hope you will give it favorable consideration. Please indicate your acceptance by signing on the space indicated below and returning one original to me.

Sincerely,

Alcoa Inc.

By /s/ William F. Oplinger
William F. Oplinger, Executive Vice President & Chief Financial Officer

Agreed to and accepted this 8th day of OCTOBER, 2013

By /s/ Graeme Bottger
Graeme Bottger

Cc: Mike Barriere, Executive Vice President Human Resources

Exhibit 12

COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES
(in millions, except ratios)

For the year ended December 31,	2013	2012	2011	2010	2009
Earnings:					
(Loss) income from continuing operations before income taxes	$(1,816)	$324	$1,063	$ 548	$(1,498)
Noncontrolling interests' share of earnings of majority-owned subsidiaries without fixed charges	-	-	-	-	-
Equity income	(12)	(99)	(127)	(54)	(17)
Fixed charges added to earnings	493	533	568	532	508
Distributed income of less than 50 percent-owned persons	89	101	100	33	56
Amortization of capitalized interest:					
Consolidated	46	44	43	39	30
Proportionate share of 50 percent-owned persons	-	-	-	-	-
Total earnings	$(1,200)	$903	$1,647	$1,098	$ (921)
Fixed Charges:					
Interest expense:					
Consolidated	$ 453	$490	$ 524	$ 494	$ 470
Proportionate share of 50 percent-owned persons	-	-	-	-	-
	453	490	524	494	470
Amount representative of the interest factor in rents:					
Consolidated	40	43	44	38	38
Proportionate share of 50 percent-owned persons	-	-	-	-	-
	40	43	44	38	38
Fixed charges added to earnings	493	533	568	532	508
Interest capitalized:					
Consolidated	99	93	102	96	165
Proportionate share of 50 percent-owned persons	-	-	-	-	-
	99	93	102	96	165
Preferred stock dividend requirements of majority-owned subsidiaries	-	-	-	-	-
Total fixed charges	$ 592	$626	$ 670	$ 628	$ 673
Ratio of earnings to fixed charges	(A)	1.4	2.5	1.7	(B)

(A) For the year ended December 31, 2013, there was a deficiency of earnings to cover the fixed charges of $1,792.

(B) For the year ended December 31, 2009, there was a deficiency of earnings to cover the fixed charges of $1,594.

Exhibit 21

SUBSIDIARIES OF THE REGISTRANT
(As of December 31, 2013)

Name	State or Country of Organization
Alcoa Domestic LLC	Delaware
Alcoa Securities Corporation	Delaware
Howmet International Inc.	Delaware
Howmet Holdings Corporation	Delaware
Howmet Corporation	Delaware
Howmet Castings & Services, Inc.	Delaware
Alcoa International Holdings Company	Delaware
Alcoa Australian Holdings Pty. Ltd.	Australia
Alcoa of Australia Limited[1]	Australia
Alcoa of Australia Rolled Products Pty. Ltd.	Australia
Alcoa (China) Investment Company Ltd.	China
Alcoa Luxembourg S.à r.l.	Luxembourg
Alcoa à Íslandi ehf	Iceland
Alcoa Fjarðaál sf	Iceland
Alcoa Inversiones España S.L.	Spain
Alcoa Alumínio S.A.	Brazil
Alcoa World Alumina Brasil Ltda.[1]	Brazil
Estreito Energia S.A.	Brazil
Alcoa Holding GmbH	Germany
Alcoa Inespal, S.A.	Spain
Alúmina Española, S.A.[1]	Spain
Alumínio Español, S.A.	Spain
Alcoa Inversiones Internacionales S.L.	Spain
Alcoa-Köfém Kft	Hungary
Alcoa Rus Investment Holdings LLC	Russia
ZAO Alcoa Metallurg Rus	Russia
ZAO Alcoa SMZ	Russia
Alcoa Servizi S.r.L.	Italy
Alcoa Trasformazioni S.r.L.	Italy
Alcoa Transformación de Productos, S.L.	Spain
Alcoa Nederland B.V.	Netherlands
Howmet SAS	France
Alcoa Holding France SAS	France
Norsk Alcoa Holdings AS	Norway
Norsk Alcoa AS	Norway
ACC-Norway, LLC	Michigan
Alcoa Norway ANS	Norway
Alcoa UK Holdings Limited	United Kingdom
Alcoa Manufacturing (G.B.) Limited	United Kingdom
Alcoa Power Generating Inc.[2]	Tennessee
Alcoa World Alumina LLC[1,3]	Delaware
Alcoa Minerals of Jamaica, L.L.C.[1]	Delaware
Alumax Inc.	Delaware
Alumax Mill Products, Inc.	Delaware
Aluminerie Lauralco, Inc.	Delaware
Alcoa-Lauralco Management Company	Nova Scotia
Laqmar Québec G.P.	Québec
Alcoa-Aluminerie de Deschambault L.P.	Québec
Cordant Technologies Holding Company	Delaware
Alcoa Global Fasteners, Inc.	Delaware
Huck International, Inc.	Delaware
Reynolds Metals Company	Delaware
Alcoa Aluminium Deutschland Inc.	Delaware
Alcoa GmbH	Germany
Reynolds Bécancour, Inc.	Delaware
Reynolds International, Inc.	Delaware
RMCC Company	Delaware
Alcoa Canada Ltd.	Québec
Alcoa Ltd.	Québec

The names of particular subsidiaries have been omitted because, considered in the aggregate as a single subsidiary, they would not constitute, as of the end of the year covered by this report, a "significant subsidiary" as that term is defined in Regulation S-X under the Securities Exchange Act of 1934.

1 Owned directly or indirectly 60% by the registrant and 40% by Alumina Limited.

2 Registered to do business in Tennessee under the name APG Trading, in Indiana under the name of AGC, in North Carolina under the name of Yadkin, in New York under the name of Long Sault and in Washington under the name of Colockum.

3 Registered to do business in Alabama, Arkansas, California, Florida, Georgia, Louisiana, North Carolina, Pennsylvania and Texas under the name of Alcoa World Chemicals.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (333-172327) and Form S-8 (Nos. 33-60305, 333-27903, 333-62663, 333-79575, 333-32516, 333-36208, 333-37740, 333-39708, 333-106411, 333-128445, 333-146330, 333-153369, 333-155668, 333-159123, 333-168428, 333-170801, 333-182899, and 333-189882) of Alcoa Inc. and its subsidiaries of our report dated February 13, 2014 relating to the Alcoa Inc. consolidated financial statements and the effectiveness of internal control over financing reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 13, 2014

Exhibit 24

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS that each of the undersigned Directors of Alcoa Inc. (the "Company") hereby constitutes and appoints WILLIAM F. OPLINGER, ROBERT S. COLLINS, PETER HONG and AUDREY STRAUSS, or any of them, his or her true and lawful attorneys-in-fact and agents, with full power of substitution, to do any and all acts and things and to execute any and all instruments that said attorneys-in-fact and agents, or any of them, may deem necessary or advisable or may be required:

(1) To enable the Company to comply with the Securities Exchange Act of 1934, as amended (the "1934 Act"), and any rules, regulations or requirements of the Securities and Exchange Commission (the "Commission") in respect thereof, in connection with the filing under the 1934 Act of the Company's Annual Report on Form 10-K for the year ended December 31, 2013 (the "2013 Annual Report"), including specifically, but without limiting the generality of the foregoing, power and authority to sign the name of each of the undersigned in the capacity of Director of the Company to the 2013 Annual Report to be filed with the Commission and to any instruments or documents filed as part of or in connection with the 2013 Annual Report, including any amendments or supplements thereto;

(2) To enable the Company to comply with the Securities Act of 1933, as amended (the "1933 Act"), and any rules, regulations or requirements of the Commission in respect thereof, in connection with the registration under the 1933 Act during 2014 of the offer and sale or delivery of shares of common stock of the Company to be issued under the 2013 Alcoa Stock Incentive Plan (the "2013 Plan"), the 2009 Alcoa Stock Incentive Plan (the "2009 Plan"), the 2004 Alcoa Stock Incentive Plan (the "2004 Plan"), the Alcoa Stock Incentive Plan (the "Stock Incentive Plan") or the Long Term Stock Incentive Plan of Aluminum Company of America (the "Long Term Stock Incentive Plan"), including specifically, but without limiting the generality of the foregoing, power and authority to sign the name of each of the undersigned in the capacity of Director of the Company to any registration statement on Form S-8, or on such other form as may be appropriate, to be filed with the Commission in respect of said shares and the 2013 Plan, the 2009 Plan, the 2004 Plan, the Stock Incentive Plan or the Long Term Stock Incentive Plan, or any of them, to any and all pre-effective amendments, post-effective amendments and supplements to any such registration statement, and to any instruments or documents filed as part of or in connection with any such registration statement or any such amendments or supplements thereto; and

(3) To enable the Company to comply with the 1933 Act, and any rules, regulations or requirements of the Commission in respect thereof, in connection with the registration under the 1933 Act during 2014 of the offer and sale or delivery of shares of common stock of the Company to be issued under the Company's employee retirement savings plans (together with interests in such plans), including, without limitation, the Alcoa Retirement Savings Plan for Bargaining Employees, the Alcoa Retirement Savings Plan for Salaried Employees, the Alcoa Retirement Savings Plan for Hourly Non-Bargaining Employees, the Alcoa Retirement Savings Plan for Fastener Systems Employees, and employee retirement or other savings plans sponsored by the Company or its subsidiaries or entities acquired by the Company from time to time (the "Plans"), including specifically, but without limiting the generality of the foregoing, power and authority to sign the name of each of the undersigned in the capacity of Director of the Company to any registration statement on Form S-8, or on such other form as may be appropriate, to be filed with the Commission in respect of said shares and the Plans (or interests in such Plans), or any of them, to any and all pre-effective amendments, post-effective amendments and supplements to any such registration statement, and to any instruments or documents filed as part of or in connection with any such registration statement or any such amendments or supplements thereto; and

granting unto each of said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as the undersigned might or could do in person, and each of the undersigned hereby ratifies and confirms all that said attorneys-in-fact and agents, or any of them, shall do or cause to be done by virtue hereof.

This power of attorney will be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania. The execution of this power of attorney is not intended to, and does not, revoke any prior powers of attorney.

IN WITNESS WHEREOF, each of the undersigned has subscribed these presents this 17th day of January 2014.

/s/ Arthur D. Collins, Jr. Arthur D. Collins, Jr.	/s/ James W. Owens James W. Owens
/s/ Kathryn S. Fuller Kathryn S. Fuller	/s/ Patricia F. Russo Patricia F. Russo
/s/ Judith M. Gueron Judith M. Gueron	/s/ Sir Martin Sorrell Sir Martin Sorrell
/s/ Michael G. Morris Michael G. Morris	/s/ Ratan N. Tata Ratan N. Tata
/s/ E. Stanley O’Neal E. Stanley O’Neal	/s/ Ernesto Zedillo Ernesto Zedillo

Certifications

I, Klaus Kleinfeld, certify that:

1. I have reviewed this annual report on Form 10-K of Alcoa Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 13, 2014

/s/ Klaus Kleinfeld

Name: Klaus Kleinfeld
Title: Chairman and Chief Executive Officer

Certifications

I, William F. Oplinger, certify that:

1. I have reviewed this annual report on Form 10-K of Alcoa Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 13, 2014

/s/ William F. Oplinger

Name: William F. Oplinger
Title: Executive Vice President and Chief Financial Officer

Certification
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code), each of the undersigned officers of Alcoa Inc., a Pennsylvania corporation (the "Company"), does hereby certify that:

The Annual Report on Form 10-K for the year ended December 31, 2013 (the "Form 10-K") of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: February 13, 2014	/s/ Klaus Kleinfeld
	Name: Klaus Kleinfeld
	Title: Chairman and Chief Executive Officer
Dated: February 13, 2014	/s/ William F. Oplinger
	Name: William F. Oplinger
	Title: Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished to the Securities and Exchange Commission as an exhibit to the Form 10-K and shall not be considered filed as part of the Form 10-K.

Mine Safety

At Alcoa, management strives to work safely in a manner that protects and promotes the health and well-being of the company's employees, contractors, and the communities in which Alcoa operates because it is fundamentally the right thing to do. Despite uncertainties and economic challenges, Alcoa remains committed to living its values and managing risks accordingly. In 2013, 42.4% of Alcoa's global locations reported no recordable injuries, and 84.2 % reported zero lost workdays. In Alcoa's 2013 Employee Global Voices Survey, "If I see a situation that is unsafe, I can stop work." received the highest overall rating (at 91% favorable) by employees participating in the survey.

Alcoa's health and safety systems are anchored by committed people who are actively engaged and effectively support a safe work environment, safe work methods, and overall production system stability. Each day, people at all levels proactively monitor and intervene to defend against weaknesses that develop in Alcoa's safety systems by identifying potential hazards and error-likely situations and responding to eliminate or control them.

In the table below there are disclosures involving Point Comfort, TX alumina refinery. All citations have been or are being addressed. None constituted an imminent danger.

Dodd-Frank Act Disclosure of Mine Safety and Health Administration Safety Data

Certain of Alcoa's U.S. facilities are subject to regulation by the Mine Safety and Health Administration (MSHA) under the U.S. Federal Mine Safety and Health Act of 1977 (the "Mine Act"). The MSHA inspects these facilities on a regular basis and issues various citations and orders when it believes a violation has occurred under the Mine Act. Whenever the MSHA issues a citation or order, it also generally proposes a civil penalty, or fine, related to the alleged violation. Citations or orders can be contested and appealed, and as part of that process, are often reduced in severity and amount, and are sometimes dismissed.

Management believes the following mine safety disclosures meet the requirements of section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act").

Mine Safety Data. The table and other data below present mine safety information related to Alcoa's U.S. facilities subject to MSHA regulation, as required by section 1503(a)(1) of the Dodd-Frank Act. The following data reflects citations and orders received from the MSHA during the year ended December 31, 2013, as reflected in the MSHA system on December 31, 2013, and the proposed penalties received from the MSHA during such period.

Mine or Operating Name/ MSHA Identification Number[1]	Section 104 S&S Citations[3] (#)	Section 104(b) Orders[4] (#)	Section 104(d) Citations and Orders[5] (#)	Section 110(b)(2) Violations[6] (#)	Section 107(a) Orders[7] (#)	Total Dollar Value of MSHA Assessments Pro-posed[8] ($)	Total Number of Mining Related Fatalities (#)	Received Notice of Pattern of Violations Under Section 104(e) (yes/no)	Received Notice of Potential to Have Pattern Under Section 104(e) (yes/no)	Legal Actions Pending as of Last Day of Period (#)	Legal Actions Initiated During Period (#)	Legal Actions Resolved During Period (#)
Point Comfort, TX Alumina Refinery[2]	83	0	11	0	1	$ 579,536	0	No	No	6	6	3

(1) The MSHA assigns an identification number to each mine or operation and may or may not assign separate identification numbers to related facilities. The information provided in this table is presented by mine or operation rather than the MSHA identification number because that is how Alcoa manages and operates its business, and management believes that this presentation is more useful to investors.

(2) Under the Interagency Agreement dated March 29, 1979 between the MSHA, the U.S. Department of Labor, and The Occupational Safety and Health Administration, alumina refineries (such as Alcoa's Point Comfort facility) are subject to MSHA jurisdiction.

(3) Represents the total number of citations issued under section 104 of the Mine Act, for violations of mandatory health or safety standards that could significantly and substantially contribute to a serious injury if left unabated. This includes the citations listed under the column headed §104(d).

(4) Represents the total number of orders issued under section 104(b) of the Mine Act, which represents a failure to abate a citation under section 104(a) within the period prescribed by the MSHA. This results in an order of immediate withdrawal from the area of the mine affected by the condition until the MSHA determines that the violation has been abated.

(5) Represents the total number of citations and orders issued under section 104(d) of the Mine Act for unwarrantable failure to comply with mandatory health or safety standards.

(6) Represents the total number of flagrant violations identified under section 110(b)(2) of the Mine Act.
(7) Represents the total number of imminent danger orders issued under section 107(a) of the Mine Act.
(8) Amounts represent the total dollar value of proposed assessments received.

During the year ended December 31, 2013, Alcoa had no mining related fatalities, and none of the company's mining operations received written notice from the MSHA of a pattern of, or the potential to have a pattern of, violations of mandatory health or safety standards that are of such nature as could have significantly and substantially contributed to the cause and effect of mine health or safety hazards under section 104(e) of the Mine Act.

The Federal Mine Safety and Health Review Commission (the "Commission") is an independent adjudicative agency that provides administrative trial and appellate review of legal disputes arising under the Mine Act. As of December 31, 2013, Alcoa has a total of six matters pending before the Commission. All of these matters concern contests of citations or orders issued under the Mine Act, along with the contests of the proposed penalties for each of these. All of these matters concern citations, orders or proposed assessments issued by the MSHA during 2013. No concerns, citations, orders or proposed assessments issued prior to 2013.

February 13, 2014

United States Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: Alcoa Inc.
2013 Form 10-K

Ladies and Gentlemen:

In accordance with General Instruction D(3) to Form 10-K, I wish to inform you that the Consolidated Financial Statements in the Form 10-K do not reflect a change from the preceding year in any accounting principles or practices or in the method of applying any such principles or practices.

Very truly yours,

/s/ Robert S. Collins

Robert S. Collins
Vice President and Controller

Attachment

cc: NYSE Euronext, Inc.
11 Wall Street
New York, NY 10005

NYSE MKT LLC
11 Wall Street
New York, NY 10005