ALCOA INC
Form 10-K/A
February 19, 2013

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K/A

(AMENDMENT NO. 1)

[x] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF

THE SECURITIES EXCHANGE ACT OF 1934

For The Fiscal Year Ended December 31, 2012

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 ü No __.

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 $9 billion. As of February 11, 2013, there were 1,069,326,205 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 2013 Annual Meeting of Shareholders to be filed pursuant to Regulation 14A (Proxy Statement).

EXPLANATORY NOTE

Alcoa Inc. (the Registrant) is filing this Amendment No. 1 on Form 10-K/A (Form 10-K/A) to its Annual Report on Form 10-K for the fiscal year ended December 31, 2012, filed with the Securities and Exchange Commission on February 15, 2013 (the Original Filing), for the sole purpose of inserting the conformed signature of one of the two applicable persons on the certifications filed as Exhibit 31 pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. Such conformed signature was inadvertently omitted from the electronic version of Exhibit 31 filed with the Original Filing, although the Registrant had a manually signed copy of the certification in its possession when the Original Filing was made. Additionally, the certifications pursuant to both Section 302 and 906 of the Sarbanes-Oxley Act of 2002 included in the Original Filing have been updated to reflect the filing date of this Form 10-K/A.

Except as described above, no other changes have been made to the Original Filing, and this Form 10-K/A does not modify, amend or update in any way any of the financial or other information contained in the Original Filing.

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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, targe 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 the world leader in the production and management of primary aluminum, fabricated aluminum, and alumina combined, through its active and growing 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 and alumina represent more than 80% of Alcoa s revenues, and the price of aluminum influences the operating results of Alcoa. Non-aluminum products include precision castings and aerospace and industrial fasteners. Alcoa s products are used worldwide in aircraft, automobiles, commercial transportation, packaging, building and construction, oil and gas, defense, consumer electronics, and industrial applications.

Alcoa is a global company operating in 30 countries. Based upon the country where the sale occurred, the U.S. and Europe generated 52% and 25%, respectively, of Alcoa s sales in 2012. In addition, Alcoa has investments and operating activities in, among others, Australia, Brazil, China, Guinea, Iceland, Russia, and the Kingdom of 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:

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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. In 2012, Alcoa consumed 45 million metric tons (mt) of bauxite from AWAC and its own resources, 7.1 million mt from related third parties and 1.1 million mt from unrelated third parties. 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.

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 (%) $RxSiO_2$	2012 Annual Production (million bdmt)
Australia	Darling Range Mines ML1SA	Alcoa of Australia Limited (AofA)[2] (100%)	2045	34.7	109.0	32.9	0.94	31.8
Brazil	Poços de Caldas	Alcoa Alumínio S.A. (Alumínio)[3] (100%)	2020[4]	0.5	1.1	39.5	4.3	0.8
	Juruti[4,5]	RN102, RN103, RN104 Alcoa World Alumina Brasil Ltda. (AWA Brasil)[2] (100%)	2100[4]	25.8	13.4	47.4	3.4	3.8
Jamaica	Harmon s Valley	Alcoa Minerals of Jamaica, L.L.C.[2] (55%)						
	South Manchester	Clarendon Alumina Production Ltd.[6] (45%)						
	North Manchester		2031	2.6	0.9	42.1	1.9	1.8
Suriname	Coermotibo	Suriname Aluminum Company, L.L.C. (Suralco)[2] (55%)						
	Onverdacht	N.V. Alcoa Minerals of Suriname (AMS)[7] (45%) Suralco (55%)	2033[8]	-	2.6	39.1	4.9	1.4
		AMS[7](45%)	2033[8]	3.1	0.7	51.8	4.5	1.6
Equity interests:								
Brazil	Trombetas	Mineração Rio do Norte S.A. (MRN)[9] (100%)	2046[4]	4.0	9.5	50.7	4.2	2.8
Guinea	Boké	Compagnie des Bauxites de Guinée (CBG)[10] (100%)	2038[11]	29.0	29.9	TAl_2O_3[12] 50.2	$TSiO_2$[12] 1.7	3.2
Kingdom of Saudi Arabia	Al Ba itha	Ma aden Bauxite & Alumina Company (100%)[13]	2037	33.9	21.3	TAA[14] 47.2	$TSiO_2$[14] 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] In September 2009, development of a new bauxite mine was completed in Juruti, state of Pará in northern Brazil. The mine is fully operational and produced 3.8 million bdmt in 2012.

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

[7] Alcoa World Alumina LLC (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] Mining rights expired for the Caramacca area. The mining rights in the Onverdacht and Coermotibo areas where Suralco has active mines extend until 2033. Bauxite within these areas will likely be exhausted in the next few years. Alcoa is actively exploring and evaluating alternative sources of bauxite in Suriname. A feasibility study relating to the development of a mine at the Nassau Plateau is in progress.

[9] 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.

[10] AWA LLC owns a 45% interest in Halco (Mining), Inc. 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.

[11] 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.

[12] Guinea Boké: CBG prices bauxite and plans the mine based on the bauxite qualities of total alumina (TA_2D_3) and total silica ($TSiO_2$).

[13] 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.

[14] 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 2045. The lease can be renewed beyond 2045. The declared reserves have been estimated to the end of December 2012. 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 the end of October 2012. Tonnage is total Alcoa share. Additional resources are being upgraded to reserves as needed.

Brazil Juruti RN102, RN103, RN104: Declared reserves are as of November 1, 2012. Declared reserves are total AWAC share. Declared reserve tonnages and the annual production tonnage (estimate to the end of 2012) are washed product tonnages. The Juruti mine s operating license is periodically renewed and the next renewal is in 2014.

Jamaica Jamalco: Declared reserves are as of October 2012. The declared reserve and annual production tonnages are AWAC share only (55%). Declared reserves are in the following areas: Harmon s Valley, South Manchester, North Manchester and Porus/Victoria. Current ore mining is in Harmon s Valley and South Manchester with a small amount of ore from a test stockpile in North Manchester. The location has scheduled probable reserves from North Manchester and Porus/Victoria within the 2013-2016 period. Additional resources are in the process of being upgraded to reserves.

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Suriname Suralco Caramacca: Caramacca has been removed from the reserves due to the expiration of the mining permits for this area. Some ore remains at Caramacca and the permit is awaiting renewal by the Government of Suriname so that the last ore can be recovered.

Suriname Suralco Coermotibo and Onverdacht: Declared reserves are as of October 1, 2012. AWAC owns 100%. Additional resources are being evaluated for upgrading to reserves.

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 May 31, 2012. Declared and annual production tonnages reflect the total for Aluminío and AWAC shares (18.2%). Declared tonnages are washed product tonnages.

Guinea Boké-CBG: Declared reserves are as of January 1, 2012. The declared reserves are based on export quality bauxite reserves. The AWAC share of CBG equates to 22.95%. 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 (TA_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.

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 2045.	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 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	Open-cut mines. Bauxite derived from weathering during the Tertiary of Cretaceous fine to medium grained feldspathic sandstones.	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.

			The operating license s next renewal date is in 2014.	and expanded the exploration area.	The deposits are covered by the Belterra clays.		Mine and port facilities are operating.
				Mining began in 2009.			
Jamaica Harmon s Valley South Manchester North Manchester 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.	Mining began in 1963.	Open-cut mines.	Commercial grid power.	Numerous small to large deposits are mined within the license areas by contract miners and delivered to stockpile areas.
			Expire 2031.		The karst landscape from the White Limestone Formation of Eocene to Miocene age host the quasi-funnel shaped bauxite deposits which are residual from the weathering of volcanic and terrestrial materials.		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.	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	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.

	Expires in 2033.	which are now saprolite. Bauxitization likely occurred during the middle to late Eocene Age.

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.	MRN	Mining rights and licenses from the Government of Brazil.	Mining began in 1979.	Open-cut mines.	MRN generates its own electricity from fuel oil.	Ore is mined from several plateaus crushed and transported to the washing plant by long distance conveyors.
	Washed ore is transported to Porto Trombetas by rail.		Concession rights expire in 2046.	Major expansion in 2003.	Bauxite derived from weathering during the Tertiary of Cretaceous fine to medium grained feldspathic sandstones.		The washing plant is located in the mining zone.
	Trombetas is accessed by river and by air at the airport.				The deposits are covered by the Belterra clays.		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; 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.
		CBG					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 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.	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	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; water supply. There will be a company village with supporting facilities. The mine is under construction. Mining operations are to commence in 2014.

	Currently the mine is in development.	sequence).
	Production is to begin 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. Rolling mill production is anticipated to start sometime in 2013. 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.
Juruti RN102, RN103, RN104		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.
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 893,000 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, 384,000 mtpy remain curtailed.

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).

The 2.1 million mtpy expansion of the Alumar consortium alumina refinery in São Luís, Maranhão, completed by the end of 2009, has increased the refinery s nameplate capacity to approximately 3.5 million mtpy, with Alcoa s share of such capacity more than doubling to 1.89 million mtpy based on its 54% ownership stake through Alumínio and AWAC.

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 are planned for 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 2006 environmental approval.

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.

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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
	São Luís (Alumar)	Alumínio (60%)		
		BHP Billiton[4] (40%)	447	268
Canada	Baie Comeau, Que.	Alcoa (100%)	385	385
	Bécancour, Que.	Alcoa (74.95%)		
		Rio Tinto Alcan Inc.[6] (25.05%)	413	310
	Deschambault, Que.	Alcoa (100%)	260	260
Iceland	Fjarðaál	Alcoa (100%)	344	344
Italy	Fusina	Alcoa (100%)	44[7]	44
	Portovesme	Alcoa (100%)	150[7]	150
Norway	Lista	Alcoa (100%)	94	94
	Mosjøen	Alcoa (100%)	188	188
Spain	Avilés	Alcoa (100%)	93[8]	93
	La Coruña	Alcoa (100%)	87[8]	87
	San Ciprián	Alcoa (100%)	228	228
United States	Evansville, IN (Warrick)	Alcoa (100%)	269	269
	Massena East, NY	Alcoa (100%)	125	125
	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[9]	191
	Ferndale, WA (Intalco)	Alcoa (100%)	279[10]	279
	Wenatchee, WA	Alcoa (100%)	184[11]	184
TOTAL			4,784	4,227

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

[7] In May 2010, Alcoa and the Italian Government agreed to a temporary curtailment of the Fusina smelter. As of June 30, 2010, the Fusina smelter was fully curtailed. Additionally, 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 smelter.

[8] In January 2012, Alcoa announced its intentions 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 currently in place in the Spanish power market, Alcoa has commenced the restart of a portion (25,000 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. See the Management Discussion and Analysis of Financial Condition and Results of Operations section for more information.

[9] 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.

[10] Approximately half of one potline at the Intalco smelter remains idled, approximately 45,200 mtpy.

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

As of December 31, 2012, Alcoa had approximately 591,000 mtpy of idle capacity against total Alcoa Consolidated Capacity of 4,227,000 mtpy.

All production at the Tennessee smelter was idled in March 2009 due to economic conditions. In January 2012, Alcoa announced that it would permanently shut down the 215,000 mtpy facility as part of a larger strategy to improve its cost position and competitiveness. Demolition and remediation are ongoing.

In January 2011, Alcoa and China Power Investment Corporation (CPI) signed a Memorandum of Understanding (MOU) to collaborate on a broad range of aluminum and energy projects in China and other locations. The projects under consideration may range from mining, refining, smelting, and aluminum fabrication to collaboration on energy projects. A new joint venture company, established in November 2012, is discussed below under the Global Rolled Products segment.

As noted above, Alcoa and Ma aden are developing 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.

In December 2008, Alcoa and the Brunei Economic Development Board agreed to further extend an existing MOU to enable more detailed studies into the feasibility of establishing a modern, gas-powered aluminum smelter in Brunei Darussalam. The MOU extends a memorandum signed originally in 2003. Phase one of the feasibility study will determine scope and dimensions of the proposed facility, power-delivery strategy, location, as well as an associated port and infrastructure. At completion of phase one, the parties will determine whether a more detailed phase two study is warranted. If completed, it is expected that the smelter would have an initial operating capacity of 360,000 mtpy with the potential for future increase. In 2012, the MOU was further extended to enable determination of feasibility.

In 2007, Alcoa and Greenland Home Rule Government entered into an MOU regarding cooperation on a feasibility study for an aluminum smelter with a 360,000 mtpy capacity in Greenland. The MOU also encompasses a

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hydroelectric power system and related infrastructure improvements, including a port. In 2008, Greenland s parliament allocated funding to support the second phase of joint studies with Alcoa and endorsed that the smelter be located at Maniitsoq. In 2010, Alcoa and the Greenland Home Rule Government revised the completion dates for feasibility studies associated with development of the proposed integrated hydro system and aluminum smelter at Maniitsoq to enable more detailed consideration of aspects of the project related to construction and provision of energy and to allow the Greenland parliament sufficient time to deliberate and vote on critical aspects of national legislation concerning the project. The feasibility studies were completed in the fourth quarter of 2011. In December 2012, the Greenland parliament enacted framework legislation encompassing particular requirements of large scale developmental projects. The parliament also approved continuation of feasibility studies as described in the MOU.

In the fourth quarter of 2011, Alcoa and the Government of Angola, through the ministries of Energy, Water & Geology, Mines and Industry, entered into an exclusive MOU regarding cooperation on a feasibility study for an aluminum smelter in Angola with a 720,000 mtpy capacity. The MOU also encompasses a hydroelectric power system and power transmission facilities to be built by the Government and a resulting long term power purchase agreement.

Global Rolled Products

The principal business of the Company s Global Rolled Products segment is the production and sale of aluminum plate, sheet and foil. This segment includes rigid container sheet, which is sold directly to customers in the packaging and consumer market. This segment also includes sheet and plate used in the aerospace, automotive, 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 is anticipated to start sometime in 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 metric tons of a wide range of products suitable for further downstream manufacturing in the complex s product lines. They include automotive heat-treated and non-heat-treated sheet, building and construction sheet and foil stock sheet. The line is expected to start production at the end of 2014.

As discussed above, in 2011, Alcoa and 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., was established in November 2012 and will be majority owned and managed by Alcoa and based in Shanghai.

In March 2012, the Company broke ground on a $300 million expansion of its Davenport Works plant to meet rising demand for aluminum from the automotive market. The expansion will create an additional 150 full time jobs in Davenport once completed. The planned expansion was announced in September 2011 and is expected to be completed by the end of 2013. An economic development incentive package from the Iowa Department of Economic Development helped secure the selection of Davenport for the expansion.

On August 31, 2012, Alcoa assumed full control and ownership of Evermore Recycling LLC (Evermore). Evermore had previously been a joint venture between Alcoa and Novelis Corporation, created for the purpose of used beverage can procurement.

Global Rolled Products Principal Facilities

		Owners[1] (% Of Ownership)	
Country	**Location**		**Products**
Australia	Point Henry	Alcoa (100%)	Sheet
	Yennora	Alcoa (100%)	Sheet
Brazil	Itapissuma	Alcoa (100%)	Foil Products/Sheet and Plate
China	Kunshan	Alcoa (70%)	Sheet and Plate
		Shanxi Yuncheng Engraving Group (30%)	
	Qinhuangdao	Alcoa (100%)	Sheet and Plate
France	Castelsarrasin	Alcoa (100%)	Sheet and Plate
Hungary	Székesfehérvár	Alcoa (100%)	Sheet and Plate/Slabs and Billets
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[2]

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

[2] 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; forgings and fasteners; aluminum wheels; integrated aluminum structural systems; and architectural extrusions used in the aerospace, automotive, building and construction, commercial transportation, and power generation markets. These products are sold directly to customers and through distributors. Additionally, hard alloy extrusions products, which are also sold directly to customers and through distributors, serve the aerospace, automotive, commercial transportation, and industrial products markets.

In 2012, Alcoa announced that it will expand its aluminum lithium capacity and capabilities and began construction of a greenfield state-of-the-art facility adjacent to Alcoa s Lafayette, Indiana plant. When completed the facility will produce more than 20,000 metric tons 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 ingots by the end of 2014. Alcoa is also expanding production at Alcoa s Technical Center in Alcoa Center, PA and Alcoa s Kitts Green plant in the United Kingdom where upgrades undertaken in 2012 will create additional aluminum lithium casting capacity.

Engineered Products and Solutions Principal Facilities

Country	Facility	Owners[1] (% Of Ownership)	Products
Australia	Oakleigh	Alcoa (100%)	Fasteners
Canada	Georgetown, Ontario	Alcoa (100%)	Aerospace Castings
	Laval, Québec	Alcoa (100%)	Aerospace Castings
	Lethbridge, Alberta	Alcoa (100%)	Architectural Products
	Pointe Claire, Quebec	Alcoa (100%)	Architectural Products
	Vaughan, Ontario	Alcoa (100%)	Architectural Products
China	Suzhou	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	Alcoa (100%)	Architectural Products
	Lézat-Sur-Lèze	Alcoa (100%)	Architectural Products
	Merxheim	Alcoa (100%)	Architectural Products
	Montbrison	Alcoa (100%)	Fasteners
	St. Cosme-en-Vairais	Alcoa (100%)	Fasteners
	Toulouse	Alcoa (100%)	Fasteners
	Us par Vigny	Alcoa (100%)	Fasteners
	Vendargues	Alcoa (100%)	Architectural Products
Germany	Hannover	Alcoa (100%)	Extrusions
	Hildesheim-Bavenstedt	Alcoa (100%)	Fasteners
	Iserlohn	Alcoa (100%)	Architectural Products
	Kelkheim	Alcoa (100%)	Fasteners
Hungary	Nemesvámos	Alcoa (100%)	Fasteners
	Székesfehérvár	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings/Forgings
Japan	Joetsu City	Alcoa (100%)	Forgings
	Nomi	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings
Netherlands	Harderwijk	Alcoa (100%)	Architectural Products
Mexico	Ciudad Acuña	Alcoa (100%)	Aerospace Castings/Fasteners
	Monterrey	Alcoa (100%)	Forgings
Morocco	Casablanca	Alcoa (100%)	Fasteners
Russia	Belaya Kalitva[2]	Alcoa (100%)	Extrusions and Forgings
	Samara[2]	Alcoa (100%)	Extrusions and Forgings
South Korea	Kyoungnam	Alcoa (100%)	Extrusions
Spain	Irutzun	Alcoa (100%)	Architectural Products
United Kingdom	Exeter	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings/Alloy
	Leicester	Alcoa (100%)	Fasteners
	Redditch	Alcoa (100%)	Fasteners
	Runcorn	Alcoa (100%)	Architectural Products
	Telford	Alcoa (100%)	Fasteners

Country	Facility	Owners[1] (% Of Ownership)	Products
United States	Springdale, AR	Alcoa (100%)	Architectural Products
	Chandler, AZ	Alcoa (100%)	Extrusions
	Tucson, AZ	Alcoa (100%)	Fasteners
	Carson, CA	Alcoa (100%)	Fasteners
	City of Industry, CA	Alcoa (100%)	Fasteners
	Fullerton, CA	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
	Auburn, IN	Alcoa (100%)	Extrusions
	Lafayette, IN	Alcoa (100%)	Extrusions
	LaPorte, IN	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings
	Baltimore, MD	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	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	Alcoa (100%)	Aerospace and Industrial Gas Turbine Ceramic Products
	Waco, TX	Alcoa (100%)	Fasteners
	Wichita Falls, TX	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings
	Hampton, VA	Alcoa (100%)	Aerospace and Industrial Gas Turbine Castings

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

[2] 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 2012 for each of the Company s reportable segments are listed below.

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

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

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

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	2.5 3.8
Caustic soda	kg	50 100
Electricity	kWh	192 273 (global average of 234)
Fuel oil and natural gas	GJ	7 12
Lime (CaO)	kg	11 50

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	0.36 ±0.02
Cathode blocks	mt	0.006 ±0.002
Electricity	kWh	12.9 17.0
Liquid pitch	mt	0.10 ±0.03
Natural gas	mcf	2.0±1.0

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 alloy aluminum products, 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 in 2012 and expiring in 2040, provided that Alcoa completes the modernization of the Baie Comeau smelter by September 2016. The smelter located in Baie Comeau, Québec has historically purchased approximately 65% of its power needs under the Hydro-Québec contract, receiving the remainder from a 40% owned hydroelectric generating company, Manicouagan Power Limited Partnership (MPLP). Beginning on January 1, 2011, these percentages changed such that approximately 80% is sourced from Hydro-Québec, with the remaining 20% from MPLP.

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 the remainder under long-term contracts. APGI owns and operates the Yadkin hydroelectric project, consisting of four dams in North Carolina. In November 2012, APGI finalized the sale of its Tapoco Hydroelectric Project to Brookfield Renewable Energy Partners.

The relicensing process continues for Yadkin. In 2007, APGI filed with the Federal Energy Regulatory Commission (FERC) a Relicensing Settlement Agreement with the majority of the 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 the relicensing was the issuance by North Carolina of the required water quality certification under Section 401 of the Clean Water Act. The Section 401 water quality certification was issued on May 7, 2009, but was appealed, and has been stayed since late May 2009 pending substantive determination on the appeal. On December 1,

2010, APGI received notice from North Carolina of its revocation of the Section 401 water quality certification, and APGI appealed the revocation. In September 2012, the North Carolina administrative law judge dismissed without prejudice the revocation appeal, and APGI filed a new application for a 401 certificate. This enables APGI to have a fresh start to the 401 application process, and the state is required to act on the application within one year, or it is deemed granted. APGI received a year-to-year license renewal from FERC 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 smelter using nearby coal reserves. Since May 2005, Alcoa has owned the nearby Friendsville, Illinois coal reserves, with the mine being operated by Vigo Coal Company, Inc. The 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. In 2012, the two owned mines provided approximately 85% of the Warrick power plant s requirements. The balance of the coal used is purchased principally from local Illinois Basin coal producers pursuant to term contracts of varying duration. Red Brush West Mine will halt production in the first quarter of 2013. Liberty Mine, owned by Alcoa and operated by Vigo Coal, will begin producing coal in the second quarter of 2013 and will be a one million ton per year mine. Friendsville and Liberty Mines will combine to supply 95% of the power plant s future needs.

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.

For the period from December 22, 2009 to December 31, 2012, Alcoa and the Bonneville Power Administration (BPA) operated under a contract providing for the sale of physical power to the Intalco smelter at the Northwest Power Act mandated industrial firm power (IP) rate. On January 1, 2013, a new contract executed between Alcoa and BPA became effective, under which Alcoa receives physical power at the 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 are expected to be completed in 2013. In August 2012, Alcoa and the Lower Colorado River Authority (LCRA) announced that they had entered into an agreement whereby Alcoa will 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. LCRA is currently conducting due diligence associated with the proposed transaction. If consummated, closing is expected to occur prior to September 2013.

In the northeast, the purchased power contracts for both the Massena East and Massena West smelters in New York expire December 31, 2013, subject to their terms and conditions. In December 2007, Alcoa and The New York Power Authority (NYPA) reached agreement in principle on a new energy contract to supply the Massena East and Massena West smelters for 30 years, beginning on January 1, 2014, following an amendment in January 2011. The definitive agreement implementing this arrangement became effective February 24, 2009. A subsequent amendment, providing Alcoa additional time to complete the design and engineering work for its Massena East modernization plan, and providing for the return of 256 megawatts (MW) of power to NYPA while Massena East was idled, was entered into effective April 16, 2009 and was superseded by the January 2011 amendment. Implementation of the Massena East modernization plan is subject to further approval of the Alcoa Board of Directors. Alcoa restarted production at Massena East in the first quarter of 2011.

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 the 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 AofA and Eastern Aluminium (Portland) 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 contracts commence from the date of expiration of the current contracts with the SECV and are in place until December 2036.

Brazil Electricity

The Alumar smelter is partially supplied by Eletronorte (Centrais Elétricas do Norte do Brasil S.A.) 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, Alcoa Alumínio S.A. s (Alumínio) remaining power needs for the smelter are supplied from self-generated energy. In March 2012, the Eletronorte contract supply was reduced from 423 MW to 263 MW and will be further reduced to 200 MW in January 2014. In March 2012, Aluminio declared that the Electronorte contract will be terminated by March 2014 and alternatives for supplying the remaining power needs of both smelters are being analyzed.

Alumínio owns a 30.99% stake in Maesa Machadinho Energética S.A., which is the owner of 83.06% 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.

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, as noted above, 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 August 2010. Alumínio s share of the Serra do Facão output is currently being sold in the market. Power from Serra do Facao will replace Electronorte starting January 1, 2014 when the existing contract will be further reduced by 60 MW. Until then, power from Serra do Facao will be sold externally to the market.

Alumínio is also participating in the Estreito hydropower project in northern Brazil, holding a 25.49% share. Four out of its eight generation units began commercial operation in 2011. Three additional units began operation in 2012, and the remaining unit is expected to begin commercial operation by March 2013. Aluminio s share of the plant s output is supplied to the Alumar smelter which replaced the 160 MW Electronorte power contract reduction on March 26, 2012.

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

Consortia in which Alumínio participates have received concessions for the Pai Querê hydropower project in southern Brazil (Alumínio s share is 35%) and the Santa Isabel hydropower project in northern Brazil (Alumínio s share is 20%). Development of these concessions has not yet begun.

Europe Electricity

Until December 31, 2005, the Company purchased electricity for its smelters at Portovesme and Fusina, Italy under a power supply structure approved by the European Commission (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. In 2005, Italy granted an extension of the regulated electricity tariff that was in force until December 31, 2005 through November 19, 2009. (The extension was originally through 2010, but the date was changed by legislation adopted by the Italian Parliament effective on August 15, 2009). In July 2006, the EC announced that it had opened an investigation to establish whether the extension of the regulated electricity tariff granted by Italy complied with European Union (EU) state aid rules. On November 19, 2009, the EC announced a decision in its investigation, stating that the extension of the tariff by Italy constituted unlawful state aid, in part, and ordered the Italian government to recover a portion of the benefit Alcoa received since January 2006 (including interest). On April 19, 2010, Alcoa filed an appeal against the decision of the EC with the European General Court. Additionally on May 22, 2010, Alcoa filed an application for interim measures (suspension of decision) in connection with the EC at the European General Court. On July 12, 2010, the European General Court dismissed the request for interim measures due to lack of urgency. Alcoa appealed this ruling on September 10, 2010. This appeal was dismissed by the European Court of Justice on December 16, 2011. On February 25, 2010, the Italian government issued a decree law (No.3 2010) implementing a request from the electrical transmission system operator to reinforce the level of system security on the islands of Sicily and Sardinia. The decree law provides the means for end-consumers to provide and, be paid for, interruptible services up to December 31, 2012. On May 26, 2010, the EC ruled that the scheme introduced by the decree law to be a non-aid. Alcoa applied for and gained rights to sell this service in Sardinia from the Portovesme smelter. Additional details about this matter are in Part I, Item 3 (Legal Proceedings) of this report. On July 29, 2010, Alcoa reached agreement with a power supplier to enter into a new contract expiring on December 31, 2012. This arrangement would have enabled operation of the Portovesme smelter through December 31, 2012. In January 2012, Alcoa announced that it decided to curtail operations at its Portovesme smelter. This curtailment was completed in November 2012. This curtailment may lead to the permanent closure of the facility. Additionally, in 2010, the Fusina smelter was temporarily curtailed due to high energy costs. As of June 30, 2010, the Fusina smelter was fully curtailed.

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. The contract for the La Coruña smelter is for a single year. Prior to the establishment of power supply under the bilateral contracts, Alcoa was supplied under a regulated power tariff. On January 25, 2007, the EC announced that it has opened an investigation to establish whether the regulated electricity tariffs granted by Spain comply with 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. A decision by the EC has not yet been made. 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. 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, Alcoa has commenced the restart of 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.

In March 2009, Alcoa and Orkla ASA exchanged respective stakes in the Sapa AB and Elkem Aluminium ANS companies. Pursuant to the exchange, Alcoa assumed 100% ownership of the two smelters in Norway, Lista and Mosjøen, at the end of the first quarter of 2009. These smelters have long-term power arrangements in place which continue until at least 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 hydro-power 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.

North America Natural Gas

In order to supply its refineries 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. Approximately 85% of AofA s gas supplies are under long-term contract out to 2020. AofA is progressing 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 2012 generation of Company-owned facilities:

Country	Facility	Alcoa Consolidated Capacity (MW)	2012 Generation (MWh)
Australia	Anglesea	150	1,253,000
Brazil	Barra Grande	161	785,000
	Estreito	159	1,063,000
	Machadinho	119	756,000
	Serro do Facão	64	385,000
Canada	Manicouagan	132	1,161,000
Suriname	Afobaka	156	1,114,000
United States	Warrick	524	4,364,000
	Yadkin	215	595,000
TOTAL		1,680	11,477,000

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.

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 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 technology leader in the aluminum industry, 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 $197 million in 2012, $184 million in 2011, and $174 million in 2010.

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 2012, 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 there remain technical and cost targets to achieve. 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 2012. For example, riblets that reduce aerodynamic drag have been analyzed and produced on a test basis. Self-cleaning nano coatings have been demonstrated on building products (an example of such was commercialized in 2011 as EcoClean, which is the world s first coil-coated aluminum architectural panel that helps clean itself and the air around it). Energy saving sensing devices are being integrated in Company manufacturing plants. Integrated thermal management products for consumer electronics have been developed and are being validated by our customers.

A number of products were commercialized in 2012 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. The Company continues to develop its Micromill™ technology and ran numerous customer trials in the rigid container sheet (RCS) and packaging markets. There has been considerable progress in the development of next generation commercial truck wheels. The Company has also continued to externally license technology including the A951 pretreatment technology, shaping technology, and Colorkast™ products for the consumer electronics segment.

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.

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 2012, the Company s worldwide patent portfolio consisted of 870 pending patent applications and 1,895 granted patents.

Environmental Matters

Information relating to environmental matters is included in Note N to the Consolidated Financial Statements under the caption Environmental Matters on pages 119-122.

Employees

Total worldwide employment at the end of 2012 was approximately 61,000 employees in 30 countries. About 34,000 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 9,600 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 6,200 U.S. employees. It expires on May 15, 2014. There are 17 other collective bargaining agreements in the U.S. with varying expiration dates. Collective bargaining agreements with varying expiration dates also cover approximately 6,300 employees in Europe, 4,300 employees in Russia, 6,750 employees in Central and South America, 3,900 employees in Australia, 1,200 employees in China and 2,200 employees in Canada.

Executive Officers of the Registrant

The names, ages, positions and areas of responsibility of the executive officers of the Company as of February 15, 2013 are listed below.

Nicholas J. Ashooh, 58, Vice President, Corporate Affairs. Mr. Ashooh was elected to his current position upon joining Alcoa in January 2010. Before joining Alcoa, he was Senior Vice President Communications of American International Group, Inc. (AIG), a leading international insurance organization, from September 2006 to January 2010. Prior to AIG, he held executive communication positions in the electric utility industry as Senior Vice President, Corporate Communications of American Electric Power Service Corporation (2000 to 2006); Vice President, Public Affairs and Corporate Communications of Niagara Mohawk Power Corporation (1992 to 2000); and Director, Corporate Communications of Public Service of New Hampshire (1978 to 1990). From 1990 to 1992, he was Vice President, Corporate Communications of Paramount Communications Inc., a global entertainment and publishing company.

Chris L. Ayers, 46, Executive Vice President Alcoa and Group President, Global Primary Products. Mr. Ayers was elected an Alcoa Executive Vice President in August 2010 and was named Group President, Global Primary Products effective May 18, 2011. He served as Chief Operating Officer of Global Primary Products from August 2010 to May 18, 2011. He was elected a Vice President of Alcoa in April 2010. Mr. Ayers joined Alcoa in February 2010 as Chief Operating Officer, Alcoa Cast, Forged and Extruded Products. Before joining Alcoa, from 1999 through December 2008, Mr. Ayers served in various management roles at Precision Castparts Corp., including as Executive Vice President from May 2006 to July 2008, President PCC Forgings Division from December 2006 to July 2008, President Wyman Gordon Forgings from 2004 to December 2006, and Vice President/General Manager from 2003 to 2004.

Michael T. Barriere, 50, Vice President, Human Resources. Mr. Barriere was elected to his current position in May 2012. He joined Alcoa in 2011 as Chief Talent Officer. Before coming to 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.

Graeme W. Bottger, 54, Vice President and Controller. Mr. Bottger was elected to his current position effective August 1, 2010. He joined Alcoa in 1980 as a product accountant trainee at Alcoa s Point Henry facility in Australia and from that time to his most recent appointment held a series of accounting and financial management positions in Alcoa s Australian smelting, rolling, extrusion, foil and alumina businesses and Alcoa s corporate office. Mr. Bottger was Chief Financial Officer of Alcoa s Engineered Products and Solutions business group from 2005 to August 2010. From 2003 to 2005, he was Vice President, Sales, for Alcoa Home Exteriors. From 2001 to 2003, Mr. Bottger was Vice President, Finance for Alcoa Home Exteriors. Before his move to the United States in 1999 to accept an assignment in Alcoa s financial analysis and planning department, Mr. Bottger held the position of Chief Financial Officer for Alcoa s joint venture with Kobe Steel, Ltd. in Australia (Kaal Australia Pty. Ltd.).

Olivier M. Jarrault, 51, 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, 55, 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.

Charles D. McLane, **Jr.**, 59, Executive Vice President and Chief Financial Officer. Mr. McLane was elected an Alcoa Executive Vice President in September 2007 and was elected Vice President and Chief Financial Officer of Alcoa in January 2007. He was elected Vice President and Corporate Controller in October 2002. He joined Alcoa in May 2000 as director of investor relations, following Alcoa s merger with Reynolds Metals Company. He became Assistant Treasurer of Reynolds in 1999 and Assistant Controller of that company in 1995.

Kay H. Meggers, 48, 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.

Audrey Strauss, 65, Executive Vice President, Chief Legal and Compliance 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.

On January 4, 2013, Mr. McLane informed the Company that he had decided to retire effective August 1, 2013 after a 40-year career with the Company. On January 8, 2013, the Company announced that William F. Oplinger, 45, will become Chief Financial Officer of the Company effective April 1, 2013, succeeding Mr. McLane. Mr. Oplinger has been chief operating officer of the Company s Global Primary Products business since December 2011. He also serves on the Company s Executive Council, the senior leadership team that sets strategic direction for the Company. Since joining the Company in 2000, Mr. Oplinger has held key corporate positions in financial analysis and planning and as director of investor relations. He also has had major assignments in the Company s largest business, Global Primary Products, including controller, operational excellence director, chief financial officer, and his most recent position as chief operating officer.

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 generally remains highly cyclical and is 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. For example, 2012 was a turbulent year in the world economy, characterized by an uneven recovery in many regions and prolonged volatility and crisis in others, namely Europe, and demand for aluminum was impacted by this turbulence. 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 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 ongoing European sovereign debt crisis has had, and may continue to have, 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.

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. The influence of hedge funds and other financial institutions participating in commodity markets has also increased in recent years, contributing to higher levels of price volatility. In 2012, the LME price of aluminum reached a high of approximately $2,300 per metric ton and a low of approximately $1,800 per metric ton. Declines in the LME price have had a negative impact on Alcoa s results of operations. Continued high LME inventories could lead to a reduction in the price of aluminum. A sustained weak aluminum pricing environment or a deterioration in aluminum prices 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.

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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 2015, driving the alumina business down into the first quartile of the industry cost curve and realizing profit levels (per mt) that are beyond its recent historic norms;
- by 2015, driving the smelting business down into the second quartile of the industry cost curve and increasing profitability (per mt) beyond the Company s past ten-year average;
- by 2013, increasing the revenues of the Global Rolled Products segment by $2.5 billion by growing 50% faster than the market and achieving performance levels above its historic norms; and
- by 2013, increasing the revenues of the Engineered Products and Solutions segment by $1.6 billion, through market growth, new product introductions, and share gains.

There can be no assurance that any of these initiatives 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 completed São Luís refinery expansion, the Juruti bauxite mine and the ongoing Estreito hydroelectric power project in Brazil, the automotive expansion at the Davenport, Iowa fabrication plant 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;

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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, including the consequences of non-compliance with the timeline and other requirements under the gas supply arrangements for the joint venture. 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 substitutions 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.

Failure to maintain investment grade credit ratings could limit Alcoa s ability to obtain future financing, increase its borrowing costs, adversely affect the market price of its existing securities, or otherwise impair its business, financial condition and results of operations.

Alcoa s long-term debt is currently rated BBB- with stable outlook by Standard and Poor s Ratings Services and BBB- with stable outlook by Fitch Ratings. Moody s Investors Services rates Alcoa s long-term debt at Baa3 but announced in December 2012 that it has placed Alcoa s credit ratings on review for possible downgrade. There can be no assurance that any rating assigned by a rating agency will remain in effect for any given period of time or that a rating will not be lowered, suspended or withdrawn entirely by a rating agency, if, in that rating agency s judgment, circumstances so warrant.

Maintaining an investment-grade credit rating is an important element of Alcoa s financial strategy. A downgrade of Alcoa s credit ratings could adversely affect the market price of its securities, adversely affect existing financing, limit access to the capital 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 impair its business, financial condition and results of operations. In addition, 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 rating 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. For additional information regarding the project financings, see Note I to the Consolidated Financial Statements in Part II, Item 8 (Financial Statements and Supplementary Data) of this report.

Alcoa could be adversely affected by the failure of financial institutions to fulfill their commitments under committed credit facilities.

As discussed in Part II, Item 7. (Management s Discussion and Analysis of Financial Condition and Results of Operations Liquidity and Capital Resources) of this report, Alcoa has a committed revolving credit facility with financial institutions available for its use, for which the Company pays commitment fees. The facility is provided by a syndicate of several financial institutions, with each institution agreeing severally (and not jointly) to make revolving

credit loans to Alcoa in accordance with the terms of the credit agreement. If one or more of the financial institutions providing the committed credit facility were to default on its obligation to fund its commitment, the portion of the committed facility provided by such defaulting financial institution would not be available to the Company.

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, expected to affect approximately 20% of annual contracts coming up for renewal each year, will more fairly reflect 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 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 2013, Alcoa s target is to generate positive cash flow from operations that will exceed capital spending. 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 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 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 trade secrets, intellectual property and other sensitive information, disrupt our business operations, and result in reputational harm and other negative consequences.

Alcoa faces cybersecurity threats, including threats to its information technology infrastructure and attempts to misappropriate or compromise its confidential information or that of third parties or create system disruptions. The

Company has experienced cybersecurity attacks in the past that attempted to gain unauthorized access to its information systems to export company-sensitive data, and may experience them in the future, potentially with more frequency or sophistication. Although its technology security measures have been able to prevent the majority of these attempts from being successful, the Company is aware of breaches of its systems in which information from its servers has been taken. The Company continues to investigate these incidents and, based on the information known to date, the Company does not believe that the theft of the information is material to the Company. However, the impact of these and other such attacks and the resulting damage may only be clear over time and after more intensive analysis. In addition, due to the evolving nature of cybersecurity threats, the impact of any future incident cannot be predicted. While we continually work to implement additional steps to safeguard our systems, there is no assurance that we can prevent future breaches. If Alcoa is unable to detect or ward off attacks on its information systems or if an attack results in the theft of material company-sensitive information, such as intellectual property, trade secrets, product development data and other business development data, or if an attack results in a material disruption of its systems, Alcoa s business, financial condition and reputation may be materially adversely affected. Additionally, the Company has been subject to attempts to disrupt its website through denial of service attacks. Although such attempts did not have a material negative impact on the Company, no assurance can be given that future attempts will not impact the Company.

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. 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, Quebec s transition to a cap and trade system with compliance required in 2013 and European direct emission regulations expected by 2013. 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, and its 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, including 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 and negative, on Alcoa s effective tax rate, cash tax expenditures, and deferred tax assets and liabilities.

Adverse changes in discount rates, lower-than-expected investment return on pension assets and other factors could affect Alcoa s results of operations or level 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 and the expected long-term rate of return on plan assets. The large decline in our funded status in 2008 due to the financial crisis generated significant unrecognized actuarial losses. We anticipate that expense in future years will continue to be affected as the unrecognized losses are recognized in earnings. 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 Part II, Item 7. (Management s Discussion and Analysis of Financial Condition and Results of Operations) under the caption Critical Accounting Policies and Estimates Pension and Other Postretirement Benefits, and Part II, Item 8. (Financial Statements and Supplementary Data) under Note W to the Consolidated Financial Statements Pension and Other Postretirement Benefits.

Although GAAP expense and pension funding contributions are not directly related, 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 recently enacted Moving Ahead for Progress in the 21st Century Act 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 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, 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 additional 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. While Alcoa was successful in renegotiating the master collective bargaining agreement with the United Steelworkers in June 2010, Alcoa may not be able to satisfactorily renegotiate 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, and deployment of company-wide business process models,

such as the Alcoa Business System and the Alcoa Enterprise Business Solution (an initiative designed to build a common global infrastructure across Alcoa for data, processes and supporting software). There is no assurance that these initiatives will all be completed 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 developments in advanced smelting process technologies, including inert anode and carbothermic technology, in addition to multi-alloy casting processes. There can be no assurance that such 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.

Further metals industry consolidation could impact Alcoa s business.

The metals industry has experienced consolidation over the past several years, and there may be further industry consolidation in the future. Although current industry consolidation has not negatively impacted Alcoa s business, further consolidation in the aluminum industry could possibly have negative impacts that we cannot reliably predict.

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 6-10 of this report.

Alumina: See the table and related text in the **Alumina Refining Facilities and Capacity** section on pages 12-13 of this report.

PRIMARY METALS

See the table and related text in the **Primary Aluminum Facilities and Capacity** section on pages 14-15 of this report.

GLOBAL ROLLED PRODUCTS

See the table and related text in the **Global Rolled Products Facilities** section on page 17 of this report.

ENGINEERED PRODUCTS AND SOLUTIONS

See the table and related text in the **Engineered Products and Solutions Facilities** section on pages 18-19 of this report.

CORPORATE

See the table and related text in the **Corporate Facilities** section on page 20 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

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. 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, bifurcated and stayed the plaintiffs breach of fiduciary duty claims, struck the plaintiffs jury demand, but indicated it would use an advisory jury, and set a trial date of September 17, 2008. In August 2008, the court set a new trial date of March 24, 2009 and, subsequently, the trial date was moved to September 22, 2009. In June 2009, the court indicated that it would not use an advisory jury at trial. 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. At the conclusion of evidence, the court set a post-hearing briefing schedule for submission of proposed findings of fact and conclusions of law by the parties and for replies to the same. Post trial briefing was submitted on December 4, 2009.

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 seeks, 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. Alcoa filed its opposition to both motions on April 11, 2011. 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 is 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. Briefing on the appeal is complete and oral argument is scheduled for March 6, 2013.

Alba Civil Suit

As previously reported, on February 27, 2008, Alcoa Inc. (Alcoa) received notice that Aluminium Bahrain B.S.C. (Alba) had filed suit against Alcoa, 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.

In response to a motion filed by the U.S. Department of Justice (DOJ) on March 27, 2008 (see Government Investigations below), the Court ordered the Alba civil suit administratively closed and stayed all discovery to allow the DOJ to fully conduct an investigation. On November 8, 2011, at Alcoa s request, the Court removed the case from administrative stay and ordered Alba to file an Amended Complaint by November 28, 2011, and a RICO Case Statement 30 days thereafter for the limited purpose of allowing Alcoa to move to dismiss Alba s lawsuit. Alcoa filed a motion to dismiss, which was denied on June 11, 2012.

During the second quarter of 2012, Alcoa proposed to settle the suit by offering Alba a cash payment of $45 million. Alcoa also offered Alba a long-term alumina supply contract. Based on the cash offer, Alcoa recorded a $45 million ($18 million after-tax and noncontrolling interest) charge in the 2012 second quarter representing Alcoa s estimate of the minimum end of the range probable to settle the case, and estimated an additional reasonably possible charge of up to $75 million to settle the suit.

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. Under the agreement, AWA is obligated to pay an additional $42.5 million, without interest or contingency, on October 9, 2013. Based on the settlement agreement, in the 2012 third quarter, Alcoa recorded a $40 million ($15 million after-tax and noncontrolling interest) charge in addition to the $45 million ($18 million after-tax and noncontrolling interest) charge it recorded in the 2012 second quarter in respect of the suit. In addition, based on an agreement between Alcoa and Alumina Limited (which holds a 40% equity interest in AWA), Alcoa estimates an additional reasonably possible after-tax charge of between $25 million to $30 million to reallocate a portion of the

costs (including legal fees) of the Alba civil settlement from AWA to Alcoa, but this would occur only if a settlement is reached with the DOJ and the Securities and Exchange Commission (the SEC) regarding their investigations (see Government Investigations below).

Government Investigations

As previously reported, on February 26, 2008, Alcoa Inc. advised the DOJ and the 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 and Alcoa has been cooperating with the government since that time.

Alcoa is actively negotiating with the DOJ and the SEC to reach a resolution of their investigations of the Alba matter; however, Alcoa has not reached any agreement with either agency. Given the uncertainty regarding whether a settlement can be reached and, if reached, on what terms, Alcoa is not able to estimate a range of reasonably possible loss with regard to any such settlement. If a settlement of the government investigations is reached, Alcoa believes that the settlement amount would be material to Alcoa s results of operations for the relevant fiscal period. If a settlement cannot be reached, Alcoa will proceed to trial with the DOJ and the SEC and under those circumstances is unable to predict an outcome or to estimate its reasonably possible loss. There can be no assurance that the final outcome of the government s investigations will not have a material adverse effect on Alcoa.

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 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, and that appeal remains pending. 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 and that appeal remains pending, 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. Alcoa believes that under 44/2012 its range of reasonably possible loss is from $0 to $50 million (39 million). Following the effectiveness of 44/2012, Alcoa has received no further demands from CCSE. 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 complies 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 has been incurring higher power costs at its smelters in Italy subsequent to the tariff end date). 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 will be based on a calculation that

is being 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. On May 22, 2010, Alcoa also filed with the General Court a request for injunctive relief to suspend the effectiveness of the decision, but, on July 12, 2010, the General Court denied such request. On September 10, 2010, Alcoa appealed the July 12, 2010 decision to the European Court of Justice (ECJ); this appeal was dismissed on December 16, 2011.

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) of 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. On September 27, 2012, Alcoa received a request for payment in full of the $310 million (250 million) by October 31, 2012. Since then, Alcoa has been in discussions with the Italian Government regarding the timing of such payment. Alcoa commenced payment of the requested amount in five quarterly installments of $66 million (50 million), paying the first installment on October 31, 2012. It is possible that Alcoa may be required to accelerate payment or pay in a lump sum. Notwithstanding the payment request or the timing of such payments, 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 $209 million (159 million) to $375 million (303 million), remains the $209 million (159 million) (the U.S. dollar amount reflects the effects of foreign currency movements since 2009) recorded in November 2009. At December 31, 2012, Alcoa s reserve for this matter stands at $143 million (109 million), reflecting the payment made in October 2012. The full extent of the loss will not be known until the final judicial determination, which could be a period of several years.

Separately, on November 29, 2006, Alcoa filed an appeal before the General Court (formerly the European Court of First Instance) seeking the annulment of the EC s decision to open an investigation alleging that such decision did not follow the applicable procedural rules. On March 25, 2009, the General Court denied Alcoa s appeal. On May 29, 2009, Alcoa appealed the March 25, 2009 ruling before the ECJ. The hearing of the May 29, 2009 appeal was held on June 24, 2010. On July 21, 2011, the ECJ denied Alcoa s appeal.

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 $90 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.

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 119-120.

As previously reported, representatives of various U.S. federal and state agencies and a Native American tribe, acting in their capacities as trustees for natural resources (Trustees), have asserted that Alcoa and Reynolds Metals Company (Reynolds) may be liable for loss or damage to such resources under federal and state law based on Alcoa s and Reynolds operations at their Massena, New York and St. Lawrence, New York facilities. While formal proceedings have not been instituted, the Company has continued to actively investigate these claims. Pursuant to an agreement entered into with the Trustees in 1991, Alcoa and Reynolds had been working cooperatively with General Motors Corporation, which is facing similar claims by the Trustees, to assess potential injuries to natural resources in the region. With the bankruptcy of General Motors in 2009, Motors Liquidation Company (MLC) took over General Motors liability in this matter. In September 2009, MLC notified Alcoa and the Trustees that it would no longer participate in the cooperative process. Alcoa and the Trustees agreed to continue to work together cooperatively without MLC to resolve Alcoa s and Reynolds natural resources damages liability in this matter. In January 2011, the Trustees, representing the United States, the State of New York and the Mohawk tribe, and Alcoa reached an agreement in principle to resolve the natural resource damage claims. The parties have now finalized a consent decree which is in the process of being executed. Once fully executed, the consent decree will need to be approved by the federal court following a minimum 30-day public comment period.

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, the plaintiff filed his claim against the original defendants, which the court had authorized in May. Alcoa has filed its Statement of Defense and plaintiff has filed an Answer to that Statement. Alcoa also filed a Motion for Particulars with respect to certain paragraphs of plaintiff s Answer and a Motion to Strike with respect to certain paragraphs of plaintiff s Answer. In late 2010, the Court denied these motions. While no further formal proceedings have occurred, Alcoa has reviewed technical data provided by the plaintiffs and is preparing to provide its own analysis to the plaintiffs. The action continues in the discovery phase. 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. Plaintiffs brief was filed on January 25, 2013; Alcoa s response is due by March 29. All subsequent briefing replies are to be completed by April 2, 2013.

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 was fixed for November 2011. The trial was then suspended under the joint request of the parties, and was to be restarted in 2012. The parties applied for a new postponement, that was granted by the Court, and a new hearing was fixed for

December 3, 2013. In the meantime, in December 2009, Alcoa Trasformazioni S.r.l. and Ligestra reached an initial agreement for settlement of the liabilities related to Fusina. The settlement would also allow Alcoa to settle the 2006 civil suit by the MOE and MOPW for the environmental damages pending before the Civil Court of Venice. 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. In February 2011, a further and more detailed settlement relating to Fusina was reached, allocating 80% and 20% of the remediation costs to Ligestra and Alcoa, respectively. Later in 2011, Alcoa and Ligestra signed a similar agreement relating to the Portovesme site. The agreements are contingent upon final acceptance of the remediation project by the MOE. A proposed soil remediation project for Portovesme was formally presented to the MOE in June 2012. To provide time for settlement with Ligestra, the Minister of Environment 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 last hearing was fixed for March 25, 2013. Alcoa is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss beyond what is described in Footnote N for several reasons. First, the MOE has not yet approved the remediation plans. 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 plans remain uncertain. Secondly, in the case in which the plan is not approved and the settlement with Ligestra becomes void, Alcoa should be held responsible only for its share of pollution, but 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, Alcoa Alumínio S.A. (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 JurutíThe 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. A hearing is scheduled on February 28, 2013. A final decision

will be announced thereafter. 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. Alcoa believes that it is not responsible for any contamination as alleged in the complaint or that if any liability were to be established, its liability would be insignificant. While the court has issued a tentative decision on the statutory claims, it is not possible at this time to reasonably predict the court s final determination as to this stage of the proceedings, nor any claims presented to a jury in the future nor the impact of claims presented against third party defendants and it is therefore not possible to estimate a range of reasonably possible loss for this matter. A similar matter, Orange County Water District v. Sabic, et al, civil action 30-2008-00078246 (Superior Court of California, County of Orange) was filed against Alcoa Global Fasteners, Inc. on June 23, 2008. This matter also alleges contamination or threatened contamination of a drinking water aquifer by Alcoa and others. A trial has been set for 2013. Alcoa believes that it is not responsible for any contamination as alleged in the complaint or that if any liability were to be established, its liability would be insignificant. Plaintiff Orange County Water District has made a statutory settlement demand to Alcoa and other similar demands to certain other defendants. The demand to Alcoa is $2.5 million and is being evaluated.

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 3rd 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 3rd 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.

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.

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 2012 and 2011 are shown below.

	2012			2011		
Quarter	**High**	**Low**	**Dividend**	**High**	**Low**	**Dividend**
First	$ 10.92	$ 10.61	$ 0.03	$ 17.75	$ 15.42	$ 0.03
Second	10.24	9.97	0.03	18.47	14.56	0.03
Third	9.93	9.78	0.03	16.60	9.56	0.03
Fourth	9.34	7.98	0.03	11.66	8.45	0.03
Year	10.92	7.98	$ 0.12	18.47	8.45	$ 0.12

The number of holders of common stock was approximately 318,000 as of February 4, 2013.

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 27 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,	2007	2008	2009	2010	2011	2012
Alcoa Inc.	$ 100	$ 32	$ 47	$ 45	$ 26	$ 26
S&P 500® Index	100	63	80	92	94	109
S&P 500® Materials Index	100	54	81	99	89	102

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

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,	2012	2011	2010	2009	2008
Sales	$ 23,700	$ 24,951	$ 21,013	$ 18,439	$ 26,901
Amounts attributable to Alcoa common shareholders:					
Income (loss) from continuing operations	$ 191	$ 614	$ 262	$ (985)	$ 229
Loss from discontinued operations	-	(3)	(8)	(166)	(303)
Net income (loss)	$ 191	$ 611	$ 254	$ (1,151)	$ (74)
Earnings per share attributable to Alcoa common shareholders:					