ALCOA INC
Form 10-K
February 13, 2014
Table of Contents

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

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

THE SECURITIES EXCHANGE ACT OF 1934

For The Fiscal Year Ended December 31, 2013

OR

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)

OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number 1-3610

ALCOA INC.

(Exact name of registrant as specified in its charter)

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

390 Park Avenue, New York, New York 10022-4608

(Address of principal executive offices) (Zip code)

Registrant s telephone numbers:

Investor Relations---------- (212) 836-2674

Office of the Secretary------- (212) 836-2732

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

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

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

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

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

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

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

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

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

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

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

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

Documents incorporated by reference.

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

Table of Contents

TABLE OF CONTENTS

Note on Incorporation by Reference

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

Table of Contents

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

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

Alcoa is a global company operating in 30 countries. Based upon the country where the point of sale occurred, the U.S. and Europe generated 51% and 26%, respectively, of Alcoa s sales in 2013. In addition, Alcoa has investments and

Table of Contents

operating activities in, among others, Australia, Brazil, China, Guinea, Iceland, Russia, and Saudi Arabia, all of which present opportunities for substantial growth. Governmental policies, laws and regulations, and other economic factors, including inflation and fluctuations in foreign currency exchange rates and interest rates, affect the results of operations in these countries.

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

Description of the Business

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

Item	Page(s)
Discussion of Recent Business Developments:	
Management s Discussion and Analysis of Financial Condition and Results of Operations:	
Overview Results of Operations (Earnings Summary)	50
Notes to Consolidated Financial Statements:	
Note D. Restructuring and Other Charges	103
Note F. Acquisitions and Divestitures	108
Note N. Contingencies and Commitments	116
Segment Information:	
Business Descriptions, Principal Products, Principal Markets, Methods of Distribution, Seasonality and Dependence Upon Customers:	
Alumina	60
Primary Metals	61
Global Rolled Products	64
Engineered Products and Solutions	65
Financial Information about Segments and Financial Information about Geographic Areas:	
Note Q. Segment and Geographic Area Information	129

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

Bauxite Interests

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

The Company has access to large bauxite deposit areas with mining rights that extend in most cases more than 20 years from today. For purposes of evaluating the amount of bauxite that will be available to supply as feedstock to its refineries, the Company considers both estimates of bauxite resources as well as calculated bauxite reserves. Bauxite

Table of Contents

resources represent deposits for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence based on the amount of exploration sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. Bauxite reserves represent the economically mineable part of resource deposits, and include diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out to define the reserves, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. Alcoa employs a conventional approach (including additional drilling with successive tightening of the drill grid) with customized techniques to define and characterize its various bauxite deposit types allowing Alcoa to confidently establish the extent of its bauxite resources and their ultimate conversion to reserves.

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

Bauxite Resource Development Guidelines

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

Table of Contents

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

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

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

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

3 Alumínio is owned 100% by Alcoa.

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

an earlier) date.

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

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

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

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

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

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

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

[11] Guinea Boké: CBG prices bauxite and plans the mine based on the bauxite qualities of total alumina (TA_2O_3) and total silica (TSiO2).

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

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

Qualifying statements relating to the table above:

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

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

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

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

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

reclassified as resources. Suralco intends to complete the mining of the Caramacca resources during 2014.

Table of Contents

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

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

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

Table of Contents

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

Mine & Location	Means of Access	Operator	Title, Lease or Options	History	Type of Mine Mineralization Style	Power Source	Facilities, Use & Condition
Australia Darling Range; Huntly and Willowdale.	Mine locations accessed by roads. Ore is transported to refineries by long distance conveyor and rail.	Alcoa	Mining Lease from the Western Australia Government. ML1SA. Expires in 2024.	Mining began in 1963.	Open-cut mines. Bauxite is derived from the weathering of Archean granites and gneisses and Precambrian dolerite.	Electrical energy from natural gas is supplied by the refinery.	Infrastructure includes buildings for administration and services; workshops; power distribution; water supply; crushers; long distance conveyors.
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.	Mines and facilities are operating. 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.
Brazil Juruti Closest town is Juruti located on the Amazon River.	The mine s port at Juruti is located on the Amazon River and accessed by ship. Ore is transported from the mine site to the port by Company owned rail.	Alcoa	Mining licenses from the Government of Brazil and Pará. Mining rights do not have a legal expiration date. See footnote 4 to the table above. The operating license s next renewal date is in 2014.	The Juruti deposit was systematically evaluated by Reynolds Metals Company beginning in 1974. Alcoa merged Reynolds into the Company in 2000. Alcoa then executed a due diligence program and expanded the exploration area.	Open-cut mines. Bauxite derived from weathering during the Tertiary of Cretaceous fine to medium grained feldspathic sandstones. The deposits are covered by the Belterra clays.	Electrical energy from fuel oil is generated at the mine site. Commercial grid power at the port.	Mines and facilities are operating. 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.

				Mining began in 2009.			
Jamaica Harmon s Valley, South Manchester, Porus/Victoria Town. All located in the Parish of Manchester.	The mines are accessed by road. Ore is transported to the refinery by Company rail. The refinery is located near Halse Hall, Clarendon Parish.	Alcoa	Mining licenses from the Government of Jamaica. Expire 2031.	Mining began in 1963.	Open-cut mines. The karst landscape from the White Limestone Formation of Eocene to Miocene age hosts the quasi-funnel shaped bauxite deposits which are residual from the weathering of volcanic and terrestrial materials.	Commercial grid power.	Mine and port facilities are operating. Numerous small to large deposits are mined within the license areas by contract miners and delivered to stockpile areas. The main mine administrative offices and services are located near San Jago. Ore is delivered to San Jago by truck and by Ropecon conveyor. The train loadout area is at San Jago.
Suriname Coermotibo and Onverdacht. Mines are located in the districts of Para and Marowijne.	The mines are accessed by road. Ore is delivered to the refinery by road from the Onverdacht area and by river barge from the Coermotibo area.	Alcoa	Brokopondo Concession from the Government of Suriname. Concessions formerly owned by a BHP Billiton (BHP) subsidiary that was a 45% joint venture partner in the Surinamese bauxite mining and alumina refining joint ventures. AWA LLC acquired that subsidiary in 2009. After the acquisition of the subsidiary, its name was changed to N.V. Alcoa Minerals of Suriname. Expires in 2033.	Alcoa began mining in Suriname in 1916. The Brokopondo Agreement was signed in 1958. As noted, Suralco bought the bauxite and alumina interests of a BHP subsidiary from BHP in 2009.	Open-cut mines. For some mines the overburden is dredged and mining progresses with conventional open-cut methods.The protoliths of the bauxite have been completely weathered.The bauxite deposits are mostly derived from the weathering of Tertiary Paleogene arkosic sediments. In a few spots the bauxite overlies Precambrian granitic and gneissic rocks which are now saprolite. Bauxitization likely occurred during the middle to late Eocene Age.	Commercial grid power.	Mine, railroad and other facilities are operating. 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.

Table of Contents

Mine & Location	Means of Access	Operator	Title, Lease or Options	History	Type of Mine Mineralization Style	Power Source	Facilities, Use & Condition
Brazil MRN Closest town is Trombetas in the State of Pará, Brazil.	The mine and port areas are connected by sealed road and company owned rail. Washed ore is transported to Porto Trombetas by rail. Trombetas is accessed by river and by air at the airport.	MRN	Mining rights and licenses from the Government of Brazil. Concession rights expire in 2046.	Mining began in 1979. Major expansion in 2003.	Open-cut mines. Bauxite derived from weathering during the Tertiary of Cretaceous fine to medium grained feldspathic sandstones. The deposits are covered by the Belterra clays.	MRN generates its own electricity from fuel oil.	Ore mined from several plateaus is crushed and transported to the washing plant by long distance conveyors. The washing plant is located in the mining zone. Washed ore is transported to the port area by company owned and operated rail. At Porto Trombetas the ore is loaded onto customer ships berthed in the Trombetas River. Some ore is dried and the drying facilities are located in the port area. Mine planning and services and mining equipment workshops are located in the mine zone. The main administrative, rail and port control offices and various workshops are located in the port area. MRN s main housing facilities, the city , are located near the port.
Guinea CBG Closest town to the	The mine and port areas are	CBG	CBG Lease expires in 2038.The lease is	Construction began in 1973.	Open-cut mines.	The company generates its own electricity	The mines, port and all facilities are operating. Mine offices, workshops, power generation and water supply for

mine is Sangaredi. Closest town to the port is Kamsar. The CBG Lease is located within the Boké, Telimele and Gaoual administrative regions.	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.		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.	First export ore shipment was in 1973.	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.	from fuel oil at both Kamsar and Sangaredi.	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.
					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. Open-cut mine.		The mines, railroad, driers, port and other facilities are operating.
Kingdom of Saudi Arabia Al Ba itha Mine. Qibah is the closest regional centre to the mine, located in the Qassim province.	The mine and refinery are connected by road and rail. Ore will be transported to the refinery at Ras Al Khair by rail.	Ma aden Bauxite & Alumina Company	The current mining lease will expire in 2037.	The initial discovery and delineation of bauxite resources was carried out between 1979 and 1984. The southern zone of the Az Zabirah deposit was granted to Ma aden in 1999. Currently the mine is in development.	Bauxite occurs as a paleolaterite profile developed at an angular unconformity between underlying late Triassic to early Cretaceous sediments (parent rock sequence Biyadh Formation) and the overlying late Cretaceous Wasia Formation (overburden sequence).	The company will generate electricity at the mine site from fuel oil.	The mine will include fixed plants for crushing and train loading; workshops and ancillary services; power plant; and water supply. There will be a company village with supporting facilities. The mine is under construction. Mining operations are to commence in 2014.

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

Table of Contents

capacity of ingot, slab and billet of 740,000 mtpy; and a rolling mill with initial capacity of 380,000 mtpy. The mill will produce sheet, end and tab stock for the manufacture of aluminum cans, as well as other products to serve the automotive, construction, and other industries.

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

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

Glossary of Bauxite Mining Related Terms

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

Table of Contents

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

Alumina Refining Facilities and Capacity

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

Alcoa Worldwide Alumina Refining Capacity

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

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

10

Table of Contents

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

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

[4] This entity is owned 100% by Alcoa.

[5] The named company or an affiliate holds this interest.

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

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

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

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

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

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

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

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

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

11

Table of Contents

Primary Aluminum Facilities and Capacity

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

Alcoa Worldwide Smelting Capacity

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

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

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

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

[4] The named company or an affiliate holds this interest.

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

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

Table of Contents

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

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

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

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

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

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

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

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

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

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

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

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

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

Table of Contents

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

Global Rolled Products

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

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

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

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

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

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

Table of Contents

Global Rolled Products Principal Facilities

		Owners[1,2] (% 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[2]	Alcoa (100%)	Sheet and Plate
France	Castelsarrasin	Alcoa (100%)	Sheet and Plate
Hungary	Székesfehérvár	Alcoa (100%)	Sheet and Plate/Slabs
Italy	Fusina	Alcoa (100%)	Sheet and Plate
Russia	Belaya Kalitva	Alcoa (100%)	Sheet and Plate
	Samara	Alcoa (100%)	Sheet and Plate
Spain	Alicante	Alcoa (100%)	Sheet and Plate
	Amorebieta	Alcoa (100%)	Sheet and Plate
United Kingdom	Birmingham	Alcoa (100%)	Plate
United States	Davenport, IA	Alcoa (100%)	Sheet and Plate
	Danville, IL	Alcoa (100%)	Sheet and Plate
	Newburgh, IN	Alcoa (100%)	Sheet
	Hutchinson, KS	Alcoa (100%)	Sheet and Plate
	Lancaster, PA	Alcoa (100%)	Sheet and Plate
	Alcoa, TN	Alcoa (100%)	Sheet
	Texarkana, TX	Alcoa (100%)	Sheet and Plate[3]

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

2 Leased property or partially leased property.

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

Engineered Products and Solutions

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

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

Alcoa and VSMPO-AVISMA Corporation signed a cooperation agreement in October 2013, which will allow the companies to meet growing demand for high-end titanium and aluminum products for aircraft manufacturers

15

Table of Contents

worldwide. Once formed, the new joint venture will focus on manufacturing high-end aerospace products, such as landing gear and forged wing components, at Alcoa s plant in Samara, Russia. The joint venture is expected to be operational in 2016.

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

Engineered Products and Solutions Principal Facilities

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

Table of Contents

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

Table of Contents

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

[2] Leased property or partially leased property.

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

Corporate Facilities

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

Latin American Extrusions Facilities

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

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

Sources and Availability of Raw Materials

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

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

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.

18

Table of Contents

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

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

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

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

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

Energy

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

North America Electricity

The Deschambault, Baie Comeau, and Bécancour smelters in Québec purchase electricity under existing contracts that run through 2015, which will be followed by long-term contracts with Hydro-Québec first executed in December 2008, revised twice, in 2012 and 2013, and expiring in 2040, provided that Alcoa completes the modernization of the Baie Comeau smelter by September 2019. The smelter located in Baie Comeau, Québec completed the permanent closure of its two remaining Soderberg potlines in September 2013, consequently reducing its annual production by 105,000 metric tons. Following this curtailment, the Baie-Comeau smelter now purchases approximately 74% of its power needs under the Hydro-Québec contract, and the remainder from a 40% owned hydroelectric generating company, Manicougan Power Limited Partnership. Furthermore, in October 2013, Alcoa provided Hydro-Québec with advanced

Table of Contents

notification to reduce to close to zero its purchasing obligation under the power contracts for the three smelters effective at the end of 2014. Alcoa s provision of such advanced notification to Hydro-Québec does not require Alcoa to reduce its electricity consumption accordingly. However, providing such notification ensures that Alcoa would have the right to do so if it deems such an action to be necessary.

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

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

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

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

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

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

Prior to 2007, power for the Rockdale smelter in Texas was historically supplied from Company-owned generating units and units owned by Luminant Generation Company LLC (formerly TXU Generation Company LP) (Luminant),

Table of Contents

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

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

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

Australia Electricity

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

Brazil Electricity

The Alumar smelter is partially supplied by Centrais Elétricas do Norte do Brasil S.A. (Eletronorte) under a long-term power purchase agreement originally expiring in December 2024. Eletronorte has supplied the Alumar smelter from the beginning of its operations in 1984. Since 2006, Alumínio s power needs of the Poços de Caldas smelter have been

Table of Contents

supplied from self-generated energy. In March 26, 2012, the Eletronorte contract supply was reduced from 423 MW to 263 MW. In March 2012, Alumínio declared that the Eletronorte contract will be terminated by March 31, 2014 and alternatives for supplying the remaining power needs of both smelters are being analyzed.

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

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

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

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

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

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

Europe Electricity

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

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

Table of Contents

Iceland Electricity

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

Spain Natural Gas

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

North America Natural Gas

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

Australia Natural Gas

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

Energy Facilities

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

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

Table of Contents

Patents, Trade Secrets and Trademarks

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

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

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

Competitive Conditions

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

Research and Development

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

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

During 2013, the Company continued to work on new developments for a number of strategic projects in all business segments. In Primary Metals, progress was made on inert anode technology with tests carried out on a pilot scale. Progress has been successful in many respects as a result of full pot testing of anode assemblies, although technical and cost targets remain to be achieved. If the technology proves to be commercially feasible, the Company believes that it would result in significant operating cost savings, and generate environmental benefits by reducing certain emissions and eliminating carbon dioxide. No timetable has been established for commercial use. The Company is also

Table of Contents

continuing to develop the carbothermic aluminum process, which is in the research and development phase. The technology holds the potential to produce aluminum at a lower cost, driven by reduced conversion costs, lower energy requirements and lower emissions at a lower capital cost than traditional smelting.

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

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

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

Environmental Matters

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

Employees

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

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

Executive Officers of the Registrant

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

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

Table of Contents

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

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

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

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

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

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

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

Table of Contents

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

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

Item 1A. Risk Factors.

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

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

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

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

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

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

The aluminum industry s demand is highly correlated to economic growth. For example, the European sovereign debt crisis had an adverse effect on European supply and demand for aluminum and aluminum products. The Chinese

Table of Contents

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

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

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

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

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

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

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

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

Alcoa s results of operations are affected by changes in the cost of raw materials, including energy, carbon products, caustic soda and other key inputs, as well as freight costs associated with transportation of raw materials to refining and smelting locations. Alcoa may not be able to fully offset the effects of higher raw material costs or energy costs

Table of Contents

through price increases, productivity improvements or cost reduction programs. Similarly, Alcoa s operating results are affected by significant lag effects of declines in key costs of production that are commodity or LME-linked. For example, declines in the LME-linked costs of alumina and power during a particular period may not be adequate to offset sharp declines in metal price in that period. Increases in the cost of raw materials or decreases in input costs that are disproportionate to concurrent sharper decreases in the price of aluminum could have a material adverse effect on Alcoa s operating results.

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

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

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

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

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

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

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

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

Alcoa has made, and may continue to plan and execute, acquisitions and divestitures and take other actions to grow or streamline its portfolio. Alcoa may face barriers to exit from unprofitable businesses or operations, including high exit costs or objections from various stakeholders. In addition, Alcoa may retain unforeseen liabilities for divested entities

Table of Contents

if the buyer fails to honor all commitments. Acquisitions also present significant challenges and risks, including the effective integration of the business into the Company and unanticipated costs and liabilities, and the Company may be unable to manage acquisitions successfully. There can be no assurance that acquisitions and divestitures will be undertaken or completed in their entirety as planned or that they will be beneficial to Alcoa.

Joint ventures and other strategic alliances may not be successful.

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

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

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

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

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

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

Alcoa s long-term debt is currently rated BBB- by Standard and Poor s Ratings Services and BBB- by Fitch Ratings; BBB- is the lowest level of investment grade rating. In April 2013, both Standard and Poor s and Fitch lowered Alcoa s ratings outlook to negative. In May 2013, Moody s Investors Service downgraded Alcoa s long-term debt rating from Baa3 to Ba1, which is below investment grade, and changed the outlook from rating under review to stable. There can be no assurance that one or more of these or other rating agencies will not take further negative actions with

30

Table of Contents

respect to Alcoa s ratings. Increased debt levels, adverse aluminum market or macroeconomic conditions, a deterioration in the Company s debt protection metrics, a contraction in the Company s liquidity, or other factors could potentially trigger such actions. A rating agency may lower, suspend or withdraw entirely a rating or place it on negative outlook or watch if, in that rating agency s judgment, circumstances so warrant.

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

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

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

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

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

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

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

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

Alcoa has operations or activities in numerous countries and regions outside the U.S. that have varying degrees of political and economic risk, including Brazil, China, Europe, Guinea, Russia, and the Kingdom of Saudi Arabia. Risks

Table of Contents

include those associated with sovereign and private debt default, political instability, civil unrest, expropriation, nationalization, renegotiation or nullification of existing agreements, mining leases and permits, commercial instability caused by corruption, and changes in local government laws, regulations and policies, including those related to tariffs and trade barriers, taxation, exchange controls, employment regulations and repatriation of earnings. While the impact of these factors is difficult to predict, any one or more of them could adversely affect Alcoa s business, financial condition or operating results.

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

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

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

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

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

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

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

Table of Contents

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

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

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

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

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

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

Table of Contents

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

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

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

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

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

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

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

Table of Contents

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

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

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

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

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

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

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

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

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

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

Item 1B. Unresolved Staff Comments.

None.

Table of Contents

Item 2. Properties.

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

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

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

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

ALUMINA

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

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

PRIMARY METALS

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

GLOBAL ROLLED PRODUCTS

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

ENGINEERED PRODUCTS AND SOLUTIONS

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

CORPORATE

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

Item 3. Legal Proceedings.

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

Litigation

Alba and Related Matters

Alba Civil Suit

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

36

Table of Contents

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

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

Government Investigations

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

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

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

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

Agreement with Alumina Limited

In October 2012, Alcoa and Alumina Limited entered into an agreement to allocate the costs of the Alba civil settlement and all legal fees associated with this matter (including the government investigations discussed above)

Table of Contents

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

Derivative Actions

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

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

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

Table of Contents

Italian Energy Matter

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

European Commission Matters

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

On November 19, 2009, the EC announced a decision in this matter stating that the extension of the tariff by Italy constituted unlawful state aid, in part, and, therefore, the Italian Government is to recover a portion of the benefit Alcoa received since January 2006 (including interest). The amount of this recovery was to be based on a calculation prepared by the Italian Government (see below). In late 2009, after discussions with legal counsel and reviewing the bases on which the EC decided, including the different considerations cited in the EC decision regarding Alcoa s two smelters in Italy, Alcoa recorded a charge of $250 million (173 million), which included $20 million (14 million) to

Table of Contents

write off a receivable from the Italian Government for amounts due under the now expired tariff structure and $230 million (159 million) to establish a reserve. On April 19, 2010, Alcoa filed an appeal of this decision with the General Court of the EU. Alcoa will pursue all substantive and procedural legal steps available to annul the EC s decision. Prior to 2012, Alcoa was involved in other legal proceedings related to this matter that sought the annulment of the EC s July 2006 decision to open an investigation alleging that such decision did not follow the applicable procedural rules and requested injunctive relief to suspend the effectiveness of the EC s November 19, 2009 decision. However, the decisions by the General Court, and subsequent appeals to the European Court of Justice, resulted in the denial of these remedies.

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

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

Environmental Matters

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

Table of Contents

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

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

Also as previously reported, in October 2006, in Barnett, et al. v. Alcoa and Alcoa Fuels, Inc., Warrick Circuit Court, County of Warrick, Indiana; 87-C01-0601-PL-499, forty-one plaintiffs sued Alcoa Inc. and a subsidiary, asserting claims similar to the Musgrave matter, discussed above. In November 2007, Alcoa Inc. and its subsidiary filed motions to dismiss both the Musgrave and Barnett cases. In October 2008, the Warrick County Circuit Court granted Alcoa s motions to dismiss, dismissing all claims arising out of alleged occupational exposure to wastes at the Squaw Creek Mine, but in November 2008, the trial court clarified its ruling, indicating that the order does not dispose of plaintiffs personal injury claims based upon alleged recreational or non-occupational exposure. Plaintiffs also filed a second amended complaint in response to the court s orders granting Alcoa s motions to dismiss. On July 7, 2010, the court granted the parties joint motions for a general continuance of trial settings. Discovery in this matter is stayed pending

Table of Contents

the outcome of the Musgrave matter. The Company is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss because plaintiffs have merely alleged that their medical condition is attributable to exposure to materials at the Squaw Creek Mine but no further information is available due to the discovery stay.

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

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

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

Table of Contents

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

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

St. Croix Proceedings

Josephat Henry. As previously reported, in September 1998, Hurricane Georges struck the U.S. Virgin Islands, including the St. Croix Alumina, L.L.C. (SCA) facility on the island of St. Croix. The wind and rain associated with the hurricane

Table of Contents

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

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

Table of Contents

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

Other Matters

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

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

On March 9, 2011, the court issued a judgment order dismissing plaintiffs lawsuit in its entirety with prejudice for the reasons stated in its Findings of Fact and Conclusions of Law. On March 23, 2011, plaintiffs filed a motion for clarification and/or amendment of the judgment order, which sought, among other things, a declaration that plaintiffs retiree benefits are vested subject to an annual cap and an injunction preventing Alcoa, prior to 2017, from modifying the plan design to which plaintiffs are subject or changing the premiums and deductibles that plaintiffs must pay. Also on March 23, 2011, plaintiffs filed a motion for award of attorneys fees and expenses. On June 11, 2012, the court issued its memorandum and order denying plaintiffs motion for clarification and/or amendment to the original judgment order. On July 6, 2012, plaintiffs filed a notice of appeal of the court s March 9, 2011 judgment. On July 12, 2012, the trial court stayed Alcoa s motion for assessment of costs pending resolution of plaintiffs appeal. The appeal was docketed in the United States Court of Appeals for the Sixth Circuit as case number 12-5801. On August 29, 2012, the trial court dismissed plaintiffs motion for attorneys fees without prejudice to refiling the motion following the resolution of the appeal at the Sixth Circuit Court of Appeals. On May 9, 2013, the Sixth Circuit Court of Appeals issued an opinion affirming the trial court s denial of plaintiffs claims for lifetime, uncapped retiree healthcare benefits. Plaintiffs filed a petition for rehearing on May 22, 2013, to which Alcoa filed a response on June 7, 2013. On September 12, 2013, the Sixth Circuit Court of Appeals denied plaintiffs petition for rehearing. The trial court is now considering Alcoa s request for an award of costs, which had been stayed pending resolution of the appeal, and the plaintiffs request for attorneys fees, which had been dismissed without prejudice to refiling following

Table of Contents

resolution of the appeal. On December 17, 2013 the United States Supreme Court docketed the plaintiffs petition for writ of certiorari to the Sixth Circuit Court of Appeals as Charles Curtis, et al., Individually and on Behalf of All Others Similarly Situated, Petitioners v. Alcoa Inc., et al., Docket No.13-728. Alcoa s opposition to the Petition was filed on January 16, 2014 and Petitioners filed their reply on January 29, 2014.

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

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

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

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

Between 2000 and 2002, Alumínio sold approximately 2,000 metric tons of metal per month from its Poços de Caldas facility, located in the State of Minas Gerais (the State), to Alfio, a customer also located in the State. Sales in the State were exempted from value-added tax (VAT) requirements. Alfio subsequently sold metal to customers outside of the State, but did not pay the required VAT on those transactions. In July 2002, Alumínio received an assessment from State auditors on the theory that Alumínio should be jointly and severally liable with Alfio for the unpaid VAT. In June 2003, the administrative tribunal found Alumínio liable, and Alumínio filed a judicial case in the State in February 2004 contesting the finding. In May 2005, the Court of First Instance found Alumínio solely liable, and a panel of a State appeals court confirmed this finding in April 2006. Alumínio filed a special appeal to the Superior Tribunal of Justice (STJ) in Brasilia (the federal capital of Brazil) later in 2006. In 2011, the STJ (through one of its judges) reversed the judgment of the lower courts, finding that Alumínio should neither be solely nor jointly and severally liable with Alfio for the VAT, which ruling was then appealed by the State. In June 2012, the STJ agreed to have the

Table of Contents

case reheard before a five-judge panel. A decision from this panel is pending, but additional appeals are likely. At December 31, 2013, the assessment totaled $53 million (R$125 million), including penalties and interest. While the Company believes it has meritorious defenses, the Company is unable to reasonably predict an outcome.

Other Contingencies

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

Item 4. Mine Safety Disclosures.

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

Table of Contents

PART II

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

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

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

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

Table of Contents

Stock Performance Graph

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

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

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

Table of Contents

Item 6. Selected Financial Data.
(dollars in millions, except per-share amounts and ingot prices; shipments in thousands of metric tons [kmt])

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

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

Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations.
(dollars in millions, except per-share amounts and ingot prices; production and shipments in thousands of metric tons [kmt])

Overview

Our Business

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

Table of Contents

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

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

Management Review of 2013 and Outlook for the Future

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

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

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

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

Management also anticipates improved market conditions for value-add products in the aerospace, building and construction, packaging, and automotive global end markets, despite declines in certain regions. Aerospace is expected to be driven by large commercial aircraft, as well as strength in regional and business jets. As it relates to building and

Table of Contents

construction, awarded nonresidential contracts are up in North America while the decline in Europe is slowing down. The packaging market continues to see a conversion from steel cans to aluminum cans for existing products and the emergence of new products is increasing. For automotive, growth continues in both the U.S., as automakers strive to meet stricter emissions regulations, and China, due to a higher percentage of the population driving automobiles. Conversely, management expects a decline in the industrial gas turbine global end market due to pressure from low price coal in Europe and rising gas prices in the U.S. In the commercial transportation global end market, growth in the U.S., as orders and backlog have increased significantly, is expected to be offset by declines in Europe, due to regulatory change in emissions requirements.

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

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

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

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

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

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

Table of Contents

Results of Operations

Earnings Summary

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

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

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

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

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

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

COGS as a percentage of Sales was 86.1% in 2012 compared with 82.1% in 2011. The percentage was negatively impacted by the previously mentioned lower realized prices in the upstream and midstream segments, higher input costs, and a net charge for five environmental remediation matters ($194). These items were somewhat offset by net

Table of Contents

productivity improvements, net favorable foreign currency movements due to a stronger U.S. dollar, and a change in LIFO adjustments from unfavorable to favorable, primarily due to lower prices for alumina and metal and lower costs for calcined coke.

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

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

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

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

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

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

Table of Contents

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

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

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

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

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

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

In 2013, exit costs related to these actions included $114 for the layoff of approximately 550 employees (Primary Metals segment), including $83 in pension costs; accelerated depreciation of $58 (Baie Comeau) and asset impairments

Table of Contents

of $18 (Fusina and Massena East) representing the write-off of the remaining book value of all related properties, plants, and equipment; and $55 in other exit costs. Additionally in 2013, remaining inventories, mostly operating supplies and raw materials, were written down to their net realizable value resulting in a charge of $9 ($6 after-tax), which was recorded in Cost of goods sold on the Statement of Consolidated Operations. The other exit costs of $55 represent $48 in asset retirement obligations and $5 in environmental remediation, both triggered by the decisions to permanently shut down and demolish these structures, and $2 in other related costs.

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

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

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

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

In late 2011, management approved the permanent shutdown and demolition of certain facilities at two U.S. locations, each of which was previously temporarily idled for various reasons. The identified facilities are the smelter located in Alcoa, TN (capacity of 215 kmt-per-year) and two potlines (capacity of 76 kmt-per-year) at the smelter located in Rockdale, TX (remaining capacity of 191 kmt-per-year composed of four potlines). Demolition and remediation activities related to these actions began in 2012 and are expected to be completed in 2015 for the Tennessee smelter

Table of Contents

and in 2013 for the two potlines at the Rockdale smelter (essentially complete at December 31, 2013). This decision was made after a comprehensive strategic analysis was performed to determine the best course of action for each facility. Factors leading to this decision were in general focused on achieving sustained competitiveness and included, among others: lack of an economically viable, long-term power solution; changed market fundamentals; cost competitiveness; required future capital investment; and restart costs. The asset impairments of $127 represent the write off of the remaining book value of properties, plants, and equipment related to these facilities. Additionally, remaining inventories, mostly operating supplies, were written down to their net realizable value resulting in a charge of $6 ($4 after-tax), which was recorded in Cost of goods sold on the Statement of Consolidated Operations. The other exit costs of $36 represent $18 ($11 after-tax) in environmental remediation and $17 ($11 after-tax) in asset retirement obligations, both triggered by the decision to permanently shut down and demolish these structures, and $1 ($1 after-tax) in other related costs.

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

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

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

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

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

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

Other Income, net Other income, net was $25 in 2013 compared with $341 in 2012. The change of $316 was mainly the result of the absence of a $320 gain on the sale of U.S. hydroelectric power assets (see below). Also, a higher

Table of Contents

equity loss ($40) related to Alcoa s share of the joint venture in Saudi Arabia due to start-up costs and a shutdown of one of the two smelter potlines due to a period of instability was partially offset by net favorable foreign currency movements ($28).

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

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

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

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

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

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

In December 2011, one of the Company s subsidiaries in Brazil applied for a tax holiday related to its expanded mining and refining operations. During 2013, the application was amended and re-filed and, separately, a similar application was filed for another one of the Company s subsidiaries in Brazil. If approved, the tax rate for these subsidiaries will decrease significantly, resulting in future cash tax savings over the 10-year holiday period (would be retroactively effective as of January 1, 2013). Additionally, the net deferred tax asset of one of the subsidiaries would be remeasured

Table of Contents

at the lower rate in the period the holiday is approved (the net deferred tax asset of the other subsidiary would not be remeasured since it could still be utilized against future earnings of the subsidiary not subject to the tax holiday). This remeasurement would result in a decrease to that subsidiary s net deferred tax asset and a noncash charge to earnings of approximately $50. As of December 31, 2013, Alcoa s subsidiaries applications are still pending.

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

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

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

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

Segment Information

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

Table of Contents

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

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

Alumina

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

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

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

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

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

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

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

Table of Contents

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

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

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

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

Primary Metals

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

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

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

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

Table of Contents

primarily consumed by Alcoa s smelter in Tennessee, which was temporarily idled in 2009 and permanently shut down in 2011. Since 2009, the power generated from Tapoco was sold into the open market.

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

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

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

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

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

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

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

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

Table of Contents

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

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

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

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

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

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

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

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

ATOI for this segment dropped $172 in 2012 compared with 2011, principally related to the previously mentioned decrease in realized prices, higher costs, particularly labor and other raw materials, and an unfavorable impact as a

Table of Contents

result of business interruption and repair costs related to a fire in March 2012 at the Massena West cast house ($21). These negative impacts were partially offset by a gain on the sale of Tapoco (see above), lower costs for alumina and energy, net favorable foreign currency movements due to a stronger U.S. dollar, particularly against the euro and Brazilian real, and net productivity improvements.

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

Global Rolled Products

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

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

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

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

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

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

Table of Contents

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

Engineered Products and Solutions

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

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

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

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

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

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

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

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

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

Items required to reconcile total segment ATOI to consolidated net (loss) income attributable to Alcoa include: the impact of LIFO inventory accounting; interest expense; noncontrolling interests; corporate expense (general administrative and selling expenses of operating the corporate headquarters and other global administrative facilities, along with depreciation and amortization on corporate-owned assets); restructuring and other charges; discontinued

Table of Contents

operations; and other items, including intersegment profit eliminations, differences between tax rates applicable to the segments and the consolidated effective tax rate, the results of the soft alloy extrusions business in Brazil, and other nonoperating items such as foreign currency transaction gains/losses and interest income.

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

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

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

a change in the Impact of LIFO, mostly due to lower prices for aluminum, driven by lower LME prices, and significant reductions in LIFO inventory quantities, which caused a partial liquidation of the lower cost LIFO inventory base;

a decrease in Interest expense, principally caused by a 7% lower average debt level, which was mostly attributable to lower outstanding long-term debt due to the June 2013 repayment of $422 in 6.00% Notes and payments associated with the loans supporting growth projects in Brazil;

a change in Noncontrolling interests, mainly due to improved operating results of AWAC, principally driven by net favorable foreign currency movements and net productivity improvements, somewhat offset by an increase in input costs, and a favorable change in charges allocated to Noncontrolling interest related to a legal matter (see Noncontrolling Interests in Earnings Summary above);

an Impairment of goodwill related to the annual impairment review of the Primary Metals segment (see Goodwill in Critical Accounting Policies and Estimates below);

an increase in Restructuring and other charges, mostly due to a charge for a legal matter ($322) and exit costs related to the permanent shutdown and demolition of certain structures at three smelter locations ($183), slightly offset by the absence of a charge for the civil portion of a legal matter ($67); and

a change in Other, primarily due to a $372 discrete income tax charge for valuation allowances on certain deferred tax assets in Spain and the U.S., partially offset by the absence of both a net charge for five environmental remediation matters ($129) and a charge for the write-off of goodwill and capitalized interest related to the 2012 sale of U.S. hydroelectric power assets that were not included in the assets of the Primary Metals segment ($102).

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

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

Table of Contents

a decrease in Interest expense, primarily due to the absence of a $27 net charge related to the early retirement of various outstanding notes ($48 in purchase premiums paid partially offset by a $21 gain for in-the-money interest rate swaps), somewhat offset by lower capitalized interest ($6);

a change in Noncontrolling interests, mainly the result of lower earnings of AWAC, principally driven by lower realized prices, due to a decrease in contractual LME-based pricing, higher input costs, particularly caustic and fuel oil, and a charge for the civil portion of a legal matter ($34 is noncontrolling interest s share), somewhat offset by net productivity improvements and net favorable foreign currency movements due to a stronger U.S. dollar;

a decrease in Restructuring and other charges, principally caused by fewer asset impairments and a lower number of employee separations, partially offset by a charge for the civil portion of a legal matter ($67); and

a change in Other, largely attributable to a net charge for five environmental remediation matters ($129), a charge for the write-off of goodwill and capitalized interest related to the sale of U.S. hydroelectric power assets that were not included in the assets of the Primary Metals segment ($102), and a net unfavorable change in mark-to-market derivative contracts ($24).

Environmental Matters

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

Liquidity and Capital Resources

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

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

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

Cash from Operations

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

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

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

Table of Contents

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

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

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

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

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

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

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

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

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

Table of Contents

a reduction of $130 in minimum required pension funding. In 2013, this relief resulted in a reduction of $250 in minimum required pension funding.

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

Financing Activities

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

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

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

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

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

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

Alcoa maintains a Five-Year Revolving Credit Agreement, dated July 25, 2011, (the Credit Agreement) with a syndicate of lenders and issuers named therein. The Credit Agreement provides a $3,750 senior unsecured revolving credit facility (the Credit Facility), the proceeds of which are to be used to provide working capital or for other general corporate purposes of Alcoa. Subject to the terms and conditions of the Credit Agreement, Alcoa may from

Table of Contents

time to time request increases in lender commitments under the Credit Facility, not to exceed $500 in aggregate principal amount, and may also request the issuance of letters of credit, subject to a letter of credit sublimit of $1,000 under the Credit Facility.

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

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

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

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

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

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

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

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

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

Table of Contents

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

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

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

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

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

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

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

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

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

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

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

Investing Activities

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

The use of cash in 2013 was primarily due to $1,193 in capital expenditures (includes costs related to environmental control in new and expanded facilities of $143), 34% of which related to growth projects, including the automotive expansion at the Davenport, IA fabrication plant, the aluminum-lithium capacity expansion at the Lafayette, IN plant, and the automotive sheet expansion at the Alcoa, TN plant; and $293 in additions to investments, including equity

Table of Contents

contributions of $171 related to the aluminum complex joint venture in Saudi Arabia and the purchase of $54 in equities and fixed income securities held by Alcoa s captive insurance company. These items were slightly offset by a net change in restricted cash of $170, mostly related to the release of funds to be used for capital expenditures of the automotive expansion at the Davenport, IA fabrication plant (see Noncash Financing and Investing Activities below).

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

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

Noncash Financing and Investing Activities

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

Table of Contents

Contractual Obligations and Off-Balance Sheet Arrangements

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

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

Obligations for Operating Activities

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

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

Estimated minimum required pension funding and postretirement benefit payments are based on actuarial estimates using current assumptions for discount rates, long-term rate of return on plan assets, rate of compensation increases, and health care cost trend rates, among others. The minimum required contributions for pension funding are estimated

Table of Contents

to be $625 for 2014, $625 for 2015, $550 for 2016, $440 for 2017, and $330 for 2018. These expected pension contributions reflect the impacts of the Pension Protection Act of 2006, the Worker, Retiree, and Employer Recovery Act of 2008, and the Moving Ahead for Progress in the 21st Century Act. The expected decline in pension contributions assumes that all actuarial assumptions are realized and remain the same in the future. Other postretirement benefit payments are expected to approximate $255 to $260 annually for years 2014 through 2018 and $240 annually for years 2019 through 2023. Such payments will be slightly offset by subsidy receipts related to Medicare Part D, which are estimated to be approximately $25 to $30 annually for years 2014 through 2023. Alcoa has determined that it is not practicable to present pension funding and other postretirement benefit payments beyond 2018 and 2023, respectively.

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

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

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

Obligations for Financing Activities

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

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

Obligations for Investing Activities

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

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

Payments related to acquisitions are based on provisions in certain acquisition agreements that state additional funds are due to the seller from Alcoa if the businesses acquired achieve stated financial and operational thresholds. Amounts

Table of Contents

are only presented in the preceding table if it is has been determined that payment is more likely than not to occur. In connection with the 2005 acquisition of two fabricating facilities in Russia, Alcoa could be required to make contingent payments of approximately $50 through 2015, but are not included in the preceding table as they have not met such standard.

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

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

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

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

Critical Accounting Policies and Estimates

The preparation of the Consolidated Financial Statements in accordance with accounting principles generally accepted in the United States of America requires management to make certain judgments, estimates, and assumptions regarding uncertainties that affect the amounts reported in the Consolidated Financial Statements and disclosed in the accompanying Notes. Areas that require significant judgments, estimates, and assumptions include accounting for derivatives and hedging activities; environmental and litigation matters; asset retirement obligations; the testing of

Table of Contents

goodwill, equity investments, and properties, plants, and equipment for impairment; estimating fair value of businesses to be divested; pension plans and other postretirement benefits obligations; stock-based compensation; and income taxes.

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

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

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

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

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

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

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

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

Table of Contents

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

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

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

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

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

Table of Contents

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

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

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

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

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

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

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

Table of Contents

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

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

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

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

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

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

Properties, Plants, and Equipment. Properties, plants, and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets (asset group) may not be recoverable. Recoverability of assets is determined by comparing the estimated undiscounted net cash flows of the operations related to the assets (asset group) to their carrying amount. An impairment loss would be recognized when the carrying amount of the assets (asset group) exceeds the estimated undiscounted net cash flows. The amount of the impairment loss to be recorded is calculated as the excess of the carrying value of the assets (asset group) over their fair value, with

Table of Contents

fair value determined using the best information available, which generally is a DCF model. The determination of what constitutes an asset group, the associated estimated undiscounted net cash flows, and the estimated useful lives of assets also require significant judgments.

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

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

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

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

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

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

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

Table of Contents

decrease in the discount rate, which was slightly offset by the favorable performance of the plan assets and the amortization of actuarial losses.

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

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

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

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

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

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

Table of Contents

group. The need for this valuation allowance will be assessed on a continuous basis in future periods and, as a result, a portion or all of the allowance may be reversed based on changes in facts and circumstances.

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

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

Related Party Transactions

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

Recently Adopted Accounting Guidance

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

Recently Issued Accounting Guidance

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

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

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

Table of Contents

Item 8. Financial Statements and Supplementary Data.

Management s Reports to Alcoa Shareholders

Management s Report on Financial Statements and Practices

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

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

Management s Report on Internal Control over Financial Reporting

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

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

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

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

/s/ Klaus Kleinfeld
Klaus Kleinfeld

Chairman and

Chief Executive Officer

/s/ William F. Oplinger
William F. Oplinger

Executive Vice President and

Chief Financial Officer

Table of Contents

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Alcoa Inc.

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

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

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

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania

February 13, 2014

Table of Contents

Alcoa and subsidiaries

Statement of Consolidated Operations

(in millions, except per-share amounts)

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

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

Table of Contents

Alcoa and subsidiaries

Statement of Consolidated Comprehensive Loss

(in millions)

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

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

Table of Contents

Alcoa and subsidiaries

Consolidated Balance Sheet

(in millions)

December 31,	2013	2012
Assets		
Current assets:		
Cash and cash equivalents (X)	$ 1,437	$ 1,861
Receivables from customers, less allowances of $20 in 2013 and $39 in 2012 (U)	1,221	1,399
Other receivables (U)	597	340
Inventories (G)	2,705	2,825
Prepaid expenses and other current assets	1,009	1,275
Total current assets	6,969	7,700
Properties, plants, and equipment, net (H)	17,639	18,947
Goodwill (A & E)	3,415	5,170
Investments (I)	1,907	1,860
Deferred income taxes (T)	3,184	3,790
Other noncurrent assets (J)	2,628	2,712
Total Assets	$ 35,742	$ 40,179
Liabilities		
Current liabilities:		
Short-term borrowings (K & X)	$ 57	$ 53
Accounts payable, trade	2,960	2,702
Accrued compensation and retirement costs	1,013	1,058
Taxes, including income taxes	376	366
Other current liabilities	1,044	1,298
Long-term debt due within one year (K & X)	655	465
Total current liabilities	6,105	5,942
Long-term debt, less amount due within one year (K & X)	7,607	8,311
Accrued pension benefits (W)	3,183	3,722
Accrued other postretirement benefits (W)	2,354	2,603
Other noncurrent liabilities and deferred credits (L)	2,971	3,078
Total liabilities	22,220	23,656
Contingencies and commitments (N)		
Equity		
Alcoa shareholders equity:		
Preferred stock (R)	55	55
Common stock (R)	1,178	1,178
Additional capital	7,509	7,560
Retained earnings	9,272	11,689
Treasury stock, at cost	(3,762)	(3,881)
Accumulated other comprehensive loss (B)	(3,659)	(3,402)
Total Alcoa shareholders equity	10,593	13,199
Noncontrolling interests (M)	2,929	3,324
Total equity	13,522	16,523
Total Liabilities and Equity	$ 35,742	$ 40,179

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

Table of Contents

Alcoa and subsidiaries

Statement of Consolidated Cash Flows

(in millions)

For the year ended December 31,	2013	2012	2011
Cash from Operations			
Net (loss) income	$ (2,244)	$ 162	$ 805
Adjustments to reconcile net (loss) income to cash from operations:			
Depreciation, depletion, and amortization	1,422	1,462	1,481
Deferred income taxes (T)	178	(99)	(181)
Equity income, net of dividends	77	2	(26)
Impairment of goodwill (A & E)	1,731	-	-
Restructuring and other charges (D)	782	172	281
Net gain from investing activities asset sales (O)	(10)	(321)	(41)
Loss from discontinued operations	-		