

ALCOA INC  
Form 10-K  
February 17, 2011  
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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**WASHINGTON, D.C. 20549**  
**FORM 10-K**

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934  
**For The Fiscal Year Ended December 31, 2010**

**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  
(State of incorporation) 25-0317820  
(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 .

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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 .

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  No .

Indicate by checkmark 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. Yes  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.

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  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 .

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 \$10 billion. As of February 14, 2011, there were 1,062,689,340 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 2011 Annual Meeting of Shareholders to be filed pursuant to Regulation 14A (Proxy Statement).

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**Note on Incorporation by Reference**

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

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

**Overview**

Alcoa is the world leader in the production and management of primary aluminum, fabricated aluminum, and alumina combined, through its active and growing participation in all major aspects of the industry: technology, mining, refining, smelting, fabricating, and recycling. Aluminum is a commodity that is traded on the London Metal Exchange (LME) and priced daily based on market supply and demand. Aluminum and alumina represent more than 80% of Alcoa's revenues, and the price of aluminum influences the operating results of Alcoa. Nonaluminum products include precision castings and aerospace and industrial fasteners. Alcoa's products are used worldwide in aircraft, automobiles, commercial transportation, packaging, building and construction, oil and gas, defense, and industrial applications.

Alcoa is a global company operating in 31 countries. Based upon the country where the point of sale occurred, the United States and Europe generated 50% and 27%, respectively, of Alcoa's sales in 2010. In addition, Alcoa has investments and operating activities in Australia, Brazil, China, Guinea, Iceland, Russia, and Saudi Arabia, all of which present opportunities for substantial growth. Governmental policies, laws and regulations, and economic factors,

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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, Flat-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:

<b>Item</b>	<b>Page(s)</b>
Discussion of Recent Business Developments:	
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The following charts and related discussion of the company's Bauxite Interests, Alumina Refining and Primary Aluminum Facilities and Capacities, and Flat-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.	

**Table of Contents****Bauxite Interests**

Aluminum is one of the most plentiful elements in the earth's crust. Aluminum 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 chart below, as well as pursuant to both long-term and short-term contracts and mining leases. In 2010, Alcoa consumed 38.3 million metric tons (mt) of bauxite from AWAC and its own resources, 6.8 million mt from related third parties and 1.7 million mt from unrelated third parties. Alcoa's present sources of bauxite are sufficient to meet the forecasted requirements of its alumina refining operations for the foreseeable future. The following table provides information regarding the company's bauxite interests:

**Alcoa Active Bauxite Interests<sup>1</sup>**

<b>Country</b>	<b>Project</b>	<b>Owners</b>	<b>Mining Rights (% Entitlement)</b>	<b>Expiration Date of Mining Rights</b>
Australia	Darling Range Mines	Alcoa of Australia Limited (AofA) <sup>2</sup>	(100%)	2045
Brazil	Poços de Caldas	Alcoa Alumínio S.A. (Alumínio) <sup>3</sup>	(100%)	2020 <sup>4</sup>
	Trombetas	Mineração Rio do Norte S.A. (MRN) <sup>5</sup>	(100%)	2046 <sup>4</sup>
	Juruti <sup>6</sup>	Alcoa World Alumina Brasil Ltda. (AWA Brasil) <sup>2</sup>	(100%)	2100 <sup>4</sup>
Guinea	Boké	Compagnie des Bauxites de Guinée (CBG) <sup>7</sup>	(100%)	2038 <sup>8</sup>
Jamaica	Clarendon/Manchester	Alcoa Minerals of Jamaica, L.L.C. <sup>2</sup>	(55%)	
	Plateau	Clarendon Alumina Production Ltd. <sup>9</sup>	(45%)	2042
Suriname	Caramacca	Suriname Aluminum Company, L.L.C. (Suralco) <sup>2</sup>	(55%)	
	Coermotibo	N.V. Alcoa Minerals of Suriname (AMS) <sup>10</sup>	(45%)	2012 <sup>11</sup>
		Suralco	(55%)	
	Kaimangrasi	AMS <sup>10</sup>	(45%)	2033 <sup>11</sup>
		Suralco	(55%)	
	Klaverblad	AMS <sup>10</sup>	(45%)	2033 <sup>11</sup>
		Suralco	(55%)	
		AMS <sup>10</sup>	(45%)	2033 <sup>11</sup>

<sup>1</sup> Alcoa also has interests at the following locations that are bauxite resources which do not currently produce bauxite: Cape Bougainville and Mitchell Plateau in Australia, and Brownsberg, Coermotibo DS, Lely Mountains, and Nassau, all in eastern Suriname.

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

<sup>3</sup> Alumínio is owned 100% by Alcoa.

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- <sup>4</sup> 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 explored and government approval is obtained, the concessions may be extended to (or expire at) a later (or an earlier) date.
- <sup>5</sup> Alumínio holds an 8.125% interest, Alcoa World Alumina Brasil Ltda. (formerly Abalco S.A., which merged with Alcoa World Alumina Brasil Ltda. in December 2008) (AWA Brasil) holds a 4.375% interest and Alcoa World Alumina LLC (AWA LLC) holds a 5% interest in MRN. AWA Brasil and AWA LLC are both part of the AWAC group of companies and are owned 60% by Alcoa and 40% by Alumina Limited. 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.

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- <sup>6</sup> In September 2009, development of a new bauxite mine was completed in Juruti, state of Para in northern Brazil. The mine is fully operational and produced 2.6 million mt in 2010. In the future, it is expected to produce 3.3 million mt per year (mtpy) of bauxite.
- <sup>7</sup> AWA LLC owns a 45% interest in Halco (Mining), Inc. Halco owns 100% of Boké Investment Company, a Delaware company, which owns 51% of CBG. The Guinean Government owns 49% of CBG, which has the exclusive right through 2038 to develop and mine bauxite in certain areas within a 10,000 square-mile concession in northwestern Guinea.
- <sup>8</sup> AWA LLC has a bauxite purchase contract with CBG that will provide Alcoa with bauxite through 2026.
- <sup>9</sup> Clarendon Alumina Production Ltd. is wholly-owned by the Government of Jamaica.
- <sup>10</sup> In July 2009, AWA LLC acquired the BHP Billiton subsidiary that was a 45% joint venture partner in the Surinamese bauxite mining and alumina refining joint ventures. Prior to the AWA LLC buy out, BHP Billiton's subsidiary held a 45% interest to Suralco's 55% interest in the two joint ventures. After the acquisition of the BHP Billiton subsidiary, its name was changed to 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.
- <sup>11</sup> While mining rights at Caramacca currently extend until 2012 (subject to Suriname government approval of a pending five year extension request), and rights at the remaining Suriname locations extend until 2033, it is likely that all Suriname current bauxite resources will be exhausted within the next several years. Alcoa is actively exploring and evaluating alternative sources of bauxite, including resources from Suralco's concession in eastern Suriname such as the Nassau plateau. Approximately 800,000 mt of bauxite from Suralco's concession were added to current resources in 2010 as a result.

*Kingdom of Saudi Arabia Joint Venture*

In December 2009, Alcoa and Saudi Arabian Mining Company (Ma'aden) entered into an agreement setting forth the terms of a joint venture between them to develop a fully integrated aluminum complex in the Kingdom of Saudi Arabia. In its initial phases, the joint venture plans to develop a fully integrated industrial complex that will include a bauxite mine with an initial capacity of 4 million mtpy; an alumina refinery with an initial capacity of 1.8 million mtpy; an aluminum smelter with an initial capacity of ingot, slab and billet of 740,000 mtpy; and a rolling mill with initial capacity of 380,000 mtpy. The mill is expected to focus initially on the production of sheet, end and tab stock for the manufacture of aluminum cans, and potentially other products to serve the construction, automotive, and other industries.

The refinery, smelter and rolling mill will be established within the new industrial zone of Ras Az Zawr on the east coast of the Kingdom of Saudi Arabia. First production from the aluminum smelter and rolling mill is anticipated in 2013, and 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 having 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).



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

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

<sup>2</sup> 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.

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

<sup>4</sup> This entity is owned 100% by Alcoa.

<sup>5</sup> The named company or an affiliate holds this interest.

- <sup>6</sup> Clarendon Alumina Production Ltd. is wholly-owned by the Government of Jamaica.
- <sup>7</sup> In August 2007, Hurricane Dean substantially damaged the Rocky Point port from which Jamalco ships alumina. The facility is shipping alumina from temporary on-site port facilities constructed in 2007. Due to capital expenditure restrictions, permanent repairs to the Rocky Point Pier are expected to be completed in 2013, instead of 2011 as previously planned. The refinery is operating at approximately 95% of nameplate capacity.
- <sup>8</sup> In July 2009, AWA LLC acquired the BHP Billiton subsidiary that was a 45% joint venture partner in the Surinamese bauxite mining and alumina refining joint ventures. Prior to the AWA LLC buy out, BHP Billiton's subsidiary held a 45% interest to Suralco's 55% interest in the two joint ventures. After the acquisition of the BHP Billiton subsidiary, its name was changed to 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.
- <sup>9</sup> 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.
- <sup>10</sup> 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 amount, 800,000 mtpy remain curtailed.

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As noted above, Alcoa and Ma'aden entered into an agreement that involves the development of 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.

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

In November 2005, Alcoa World Alumina LLC (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 has been extended to November 2012. Pre-feasibility studies were completed in 2008. Further project activities are contemplated in 2011.

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 has a term of 5 years and included environmental conditions that must be satisfied before Alcoa can 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. Alcoa is therefore seeking an extension of the 2006 environmental approval for the expansion for a further 5 years.

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 Dak Nong Province in Vietnam's Central Highlands, with first stage capacity expected to be between 1.0 and 1.5 million mtpy. 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.

**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 <sup>1</sup> (000 MTPY)	Alcoa	
				Consolidated Capacity <sup>2</sup> (000 MTPY)	
Australia	Point Henry	AofA (100%)	190	190 <sup>3</sup>	
	Portland	AofA (55%)			
		CITIC <sup>4</sup> (22.5%)			
Brazil		Marubeni <sup>4</sup> (22.5%)	358 <sup>5</sup>	197 <sup>3</sup>	
	Poços de Caldas	Alumínio (100%)	96 <sup>6</sup>		
	São Luís (Alumar)	Alumínio (60%)			
Canada		BHP Billiton <sup>4</sup> (40%)	447	268	
	Baie Comeau, Que.	Alcoa (100%)	385 <sup>7</sup>		
	Bécancour, Que.	Alcoa (74.95%)			
		Rio Tinto Alcan Inc. <sup>8</sup> (25.05%)	413	310	
	Deschambault, Que.	Alcoa (100%)	260	260	
Iceland	Fjarðaál	Alcoa (100%)	344	344	
Italy	Fusina	Alcoa (100%)	44 <sup>9</sup>	44	
	Portovesme	Alcoa (100%)	150 <sup>9</sup>	150	
Norway	Lista	Alcoa (100%) <sup>10</sup>	94	94	
	Mosjøen	Alcoa (100%) <sup>10</sup>	188	188	
Spain	Avilés	Alcoa (100%)	93 <sup>11</sup>	93	
	La Coruña	Alcoa (100%)	87	87	
	San Ciprián	Alcoa (100%)	228	228	
United States	Evansville, IN (Warrick)	Alcoa (100%)	269 <sup>12</sup>	269	
	Frederick, MD (Eastalco)	Alcoa (100%)	0 <sup>13</sup>	0	
	Badin, NC	Alcoa (100%)	0 <sup>14</sup>	0	
	Massena East, NY	Alcoa (100%)	125 <sup>15</sup>	125	
	Massena West, NY	Alcoa (100%)	130	130	
	Mount Holly, SC	Alcoa (50.33%)			
		Century Aluminum Company <sup>4</sup> (49.67%)	229	115	
		Alcoa, TN	Alcoa (100%)	215 <sup>16</sup>	215
		Rockdale, TX	Alcoa (100%)	267 <sup>17</sup>	267
		Ferndale, WA (Intalco)	Alcoa (100%)	279 <sup>18</sup>	279
	Wenatchee, WA	Alcoa (100%)	184 <sup>19</sup>	184	
TOTAL			5,075	4,518	

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- <sup>1</sup> Nameplate Capacity is an estimate based on design capacity and normal operating efficiencies and does not necessarily represent maximum possible production.
- <sup>2</sup> The figures in this column reflect Alcoa's share of production from these facilities.

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- <sup>3</sup> 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.
- <sup>4</sup> The named company or an affiliate holds this interest.
- <sup>5</sup> 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.
- <sup>6</sup> In January 2009, approximately 32,000 mtpy annualized production was idled at the Poços de Caldas facility due to overall market conditions. Production levels have since returned to normal.
- <sup>7</sup> In November 2008, Baie Comeau permanently curtailed one potline (53,000 mtpy) in response to the economic downturn and as part of a modernization program, reducing nameplate capacity to 385,000 mtpy.
- <sup>8</sup> Owned through Rio Tinto Alcan Inc.'s interest in Pechiney Reynolds Québec, Inc., which is owned by Rio Tinto Alcan Inc. and Alcoa.
- <sup>9</sup> In November 2009, Alcoa announced the idling of smelting at Fusina and Portovesme due to uncertainty in obtaining competitively priced power and the financial impact of the European Commission decision regarding electricity tariffs, as described in Part I, Item 3. (Legal Proceedings) of this report. The Portovesme plant continues to operate with a new power agreement effective September 1, 2010 through December 31, 2012. As of June 30, 2010 the Fusina smelter was temporarily idled. For more information, see Energy Europe Electricity on page 18.
- <sup>10</sup> In March 2009, Alcoa and Orkla ASA exchanged respective stakes in the Sapa AB and Elkem Aluminium ANS companies. Alcoa now owns 100% of the Lista and Mosjøen smelters.
- <sup>11</sup> In June of 2010, Alcoa temporarily idled the smelter in Avilés as a result of torrential flooding in the region. Portions of the operations were gradually brought on-line as clean-up and repairs progressed, and the company announced in January 2011 that normal operations had been fully restored.
- <sup>12</sup> The Warrick facility has permanently idled one potline of approximately 40,000 mtpy. This capacity is no longer reflected in Alcoa's portfolio.
- <sup>13</sup> The Eastalco smelter located in Frederick, Maryland has been permanently idled. This capacity is no longer reflected in Alcoa's portfolio.
- <sup>14</sup> The Badin, North Carolina facility has been permanently idled. This capacity is no longer reflected in Alcoa's portfolio.
- <sup>15</sup> All production at the Massena East smelter was idled in June 2009 due to economic conditions, as well as the planned modernization of that facility. In January 2011, Alcoa announced that it is initiating a restart of the Massena East smelter, with a return to operation expected by mid-summer 2011.

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- <sup>16</sup> All production at the Tennessee smelter was idled in March 2009 due to economic conditions.
- <sup>17</sup> 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.
- <sup>18</sup> While approximately one of Intalco's three potlines, or approximately 93,000 mtpy, remained idle during 2010, Alcoa announced in January 2011 that 36,000 mtpy of capacity will be restarted and should be operating by mid-summer.
- <sup>19</sup> While two of Wenatchee's four potlines, or approximately 84,000 mtpy, remained idle during 2010, Alcoa announced in January 2011 that 43,000 mtpy of capacity will be restarted and should be operating by mid-summer. As of December 31, 2010, Alcoa had approximately 878,000 mtpy of idle capacity against total Alcoa Consolidated Capacity of 4,518,000 mtpy. Once Massena East, Intalco, and Wenatchee resume operation, as announced by Alcoa in January 2011, Alcoa will have approximately 674,000 mtpy of idle capacity.

As noted above, Alcoa and Ma'aden entered into an agreement that involves development of an aluminum smelter in the Kingdom of Saudi Arabia. The joint venture entity, Ma'aden Aluminium Company, has signed project financing for the smelter and broken ground on the construction of the smelter. The smelter is expected to have an initial capacity of ingot, slab and billet of 740,000 mtpy. First production is expected in 2013.

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Alcoa and the Government of Iceland began detailed feasibility studies for the development of a 250,000 mtpy aluminum smelter at Bakki near Húsavík in north Iceland in 2006. Alcoa, the National Power Company (Landsvirkjun) and the National Transmission Company (Landsnet) have completed an Environmental Impact Assessment (EIA) and a joint EIA for the necessary smelter and power projects in cooperation with the Municipality. The EIAs have been approved. Alcoa and Landsvirkjun continue to evaluate whether a smelter project can be economically feasible in North Iceland.

In December 2008, 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. The MOU extends a memorandum signed originally in 2003. Phase one of the feasibility study will determine scope and dimensions of the proposed facility, power-delivery strategy, location, as well as an associated port and infrastructure. At completion of phase one, the parties will determine whether a more detailed phase two study is warranted. If completed, it is expected that the smelter would have an initial operating capacity of 360,000 mtpy with the potential for future increase. In January 2010, the MOU was further extended to enable determination of feasibility to continue.

In 2007, Alcoa and Greenland Home Rule Government entered into an MOU regarding cooperation on a feasibility study for an aluminum smelter with a 360,000 mtpy capacity in Greenland. The MOU also encompasses a hydroelectric power system and related infrastructure improvements, including a port. In 2008, Greenland's parliament allocated funding to support the second phase of joint studies with Alcoa and endorsed that the smelter be located at Maniitsoq. In 2010, Alcoa and the Greenland Home Rule Government revised the completion dates for feasibility studies associated with development of the proposed integrated hydro system and aluminum smelter at Maniitsoq to enable more detailed consideration of aspects of the project related to construction and provision of energy and to allow the Greenland parliament sufficient time to deliberate and vote on critical aspects of national legislation concerning the project. The feasibility studies are now scheduled for completion towards the end of 2011.

## **Flat-Rolled Products Facilities**

The principal business of the company's Flat-Rolled Products segment is the production and sale of aluminum plate, sheet and foil. This segment includes rigid container sheet, which is sold directly to customers in the packaging and consumer market. This segment also includes sheet and plate used in the transportation, building and construction and distribution markets.

As noted above, Alcoa and Ma'aden entered into an agreement that involves development of a rolling mill in the Kingdom of Saudi Arabia. The joint venture entity, Ma'aden Rolling Company, has signed project financing for its rolling mill and broken ground on the construction of the mill. Initial capacity is approximately 380,000 mtpy. First production is expected in 2013.

Although the company completed the sale of its Global Foil Business in 2009, the company continues to manufacture foil in Itapissuma, Brazil and Alicante, Spain.



**Table of Contents****Flat-Rolled Products Principal Facilities****OWNERS<sup>1</sup>**

<b>COUNTRY</b>	<b>LOCATION</b>	<b>(% Of Ownership)</b>	<b>PRODUCTS</b>
Australia	Point Henry	Alcoa (100%)	Sheet and Plate
	Yennora	Alcoa (100%)	Can Reclamation/Sheet and Plate
Brazil	Itapissuma	Alcoa (100%)	Foil Products/Sheet and Plate
China	Kunshan	Alcoa (70%)	
		Shanxi Yuncheng Engraving Group (30%)	Sheet and Plate
	Qinhuangdao	Alcoa (100%)	Sheet and Plate <sup>2</sup>
France	Castelsarrasin	Alcoa (100%)	Sheet and Plate
Hungary	Székesfehérvár	Alcoa (100%)	Sheet and Plate/Slabs and Billets
Italy	Fusina	Alcoa (100%)	Sheet and Plate
Russia	Belaya Kalitva	Alcoa (100%)	Sheet and Plate
	Samara	Alcoa (100%)	Sheet and Plate
Spain	Alicante	Alcoa (100%)	Foil Products/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 and Plate
	Hutchinson, KS	Alcoa (100%)	Sheet and Plate
	Lancaster, PA	Alcoa (100%)	Sheet and Plate
	Alcoa, TN	Alcoa (100%)	Can Reclamation/Sheet and Plate
	Texarkana, TX	Alcoa (100%)	Sheet and Plate <sup>3</sup>

<sup>1</sup> Facilities with ownership described as Alcoa (100%) are either leased or owned by the company.

<sup>2</sup> Alcoa Bohai Aluminum Products Company Ltd. (Bohai), a wholly owned subsidiary of Alcoa, operates aluminum cold rolling facilities in Qinhuangdao and has undertaken a major expansion, which includes a hot rolling mill and related equipment. Production from the expansion began in 2008 and is expected to reach 55%-60% of capacity in 2011.

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

**Engineered Products and Solutions Facilities**

The principal business of the company's Engineered Products and Solutions segment is the production and sale of titanium, aluminum and super alloy investment castings, hard alloy extrusions, forgings and fasteners, aluminum wheels, integrated aluminum structural systems and architectural extrusions. These products serve the aerospace, automotive, building and construction, commercial transportation, power generation and defense markets.

In 2010, the company completed the sale of its Transportation Products Europe business (affecting the Modena, Italy, Soest, Germany, and Kofem, Hungary facilities). The Soest, Germany and Kofem, Hungary facilities were sold to BDW Leichtmetall Holding Soest GmbH, a privately-held German company, which is part of the BDW Technologies group. The Modena, Italy facility was sold to OMR Holding S.p.A., a privately-held Italian company, which is part of the OMR Group.

In 2010, Alcoa completed the acquisition of Three Rivers Aluminum Company d/b/a Traco, a Pennsylvania-based, privately-held company, and a premier maker of windows and doors for the commercial building and construction



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market. Traco, now Alcoa Commercial Windows LLC d/b/a Traco, is a part of Alcoa's Global Building and Construction Systems business, which is a global provider of architectural systems, services and building products to the construction market.

In January 2011, Alcoa announced its agreement to purchase the aerospace fastener business of TransDigm Group Inc. The transaction is valued at approximately \$240 million and is expected to be completed during the first quarter of 2011, subject to customary regulatory reviews and approvals. The new business will become part of Alcoa Fastening Systems, which is an Alcoa business unit specializing in the design and manufacture of specialty fastening systems, components, and installation tools for aerospace and industrial applications.

**Engineered Products and Solutions Principal Facilities****OWNERS<sup>1</sup>**

<b>COUNTRY</b>	<b>FACILITY</b>	<b>(% Of Ownership)</b>	<b>PRODUCTS<sup>2</sup></b>	
Australia	Brisbane	Alcoa (100%)	Automotive Components	
	Oakleigh	Alcoa (100%)	Fasteners	
Canada	Georgetown, Ontario	Alcoa (100%)	Aerospace Castings	
	Laval, Québec	Alcoa (100%)	Aerospace Castings	
	Lethbridge, Alberta	Alcoa (100%)	Architectural Products	
China	Suzhou	Alcoa (100%)	Fasteners	
France	Dives sur Mer	Alcoa (100%)	Aerospace Castings	
	Evron	Alcoa (100%)	Aerospace Castings	
	Gennenvilliers	Alcoa (100%)	Aerospace Castings	
	Guérande	Alcoa (100%)	Architectural Products	
	Lézat-Sur-Lèze	Alcoa (100%)	Architectural Products	
	Merxheim	Alcoa (100%)	Architectural Products	
	Montbrison	Alcoa (100%)	Fasteners	
	St. Cosme-en-Vairais	Alcoa (100%)	Fasteners	
	Toulouse	Alcoa (100%)	Fasteners	
	Us par Vigny	Alcoa (100%)	Fasteners	
	Vendargues	Alcoa (100%)	Architectural Products	
	Germany	Hannover	Alcoa (100%)	Extrusions
		Hildesheim-Bavenstedt	Alcoa (100%)	Fasteners
Iserlohn		Alcoa (100%)	Architectural Products	
Kelkheim		Alcoa (100%)	Fasteners	
Hungary	Székesfehérvár	Alcoa (100%)	Aerospace Castings	
	Nemesvámos	Alcoa (100%)	Fasteners	
Japan	Joetsu City	Alcoa (100%)	Automotive Components	
	Nomi	Alcoa (100%)	Aerospace and Investment Castings	
Netherlands	Harderwijk	Alcoa (100%)	Architectural Products	
Mexico	Ciudad Acuña	Alcoa (100%)	Aerospace Castings/Fasteners	
	Monterrey	Alcoa (100%)	Automotive Components	
Morocco	Casablanca	Alcoa (100%)	Fasteners	
Russia <sup>3</sup>	Belaya Kalitva	Alcoa (100%)	Automotive Components/Aerospace Components	
	Samara	Alcoa (100%)	Automotive Components/Aerospace Components	
South Korea	Kyoungnam	Alcoa (100%)	Extrusions	

**Table of Contents****OWNERS<sup>1</sup>**

<b>COUNTRY</b>	<b>FACILITY</b>	<b>(% Of Ownership)</b>	<b>PRODUCTS<sup>2</sup></b>
Spain	Iruzun	Alcoa (100%)	Architectural Products
United Kingdom	Exeter	Alcoa (100%)	Aerospace Castings and Alloys/Investment Castings
	Runcorn	Alcoa (100%)	Architectural Products
	Telford	Alcoa (100%)	Fasteners
United States	Springdale, AR	Alcoa (100%)	Architectural Products
	Chandler, AZ	Alcoa (100%)	Extrusions
	Tucson, AZ	Alcoa (100%)	Fasteners
	Carson, CA	Alcoa (100%)	Fasteners
	City of Industry, CA	Alcoa (100%)	Fasteners
	Fullerton, CA	Alcoa (100%)	Fasteners
	Newbury Park, CA	Alcoa (100%)	Fasteners
	Torrance, CA	Alcoa (100%)	Fasteners
	Visalia, CA	Alcoa (100%)	Architectural Products
	Branford, CT	Alcoa (100%)	Aerospace Castings/Coatings
	Winsted, CT	Alcoa (100%)	Aerospace Castings/Machining
	Eastman, GA	Alcoa (100%)	Architectural Products
	Auburn, IN	Alcoa (100%)	Automotive and Defense Components
	Lafayette, IN	Alcoa (100%)	Extrusions
	LaPorte, IN	Alcoa (100%)	Aerospace Castings
	Baltimore, MD	Alcoa (100%)	Extrusions
	Whitehall, MI	Alcoa (100%)	Aerospace Castings
	Dover, NJ	Alcoa (100%)	Aerospace Castings/Aerospace Alloys
	Kingston, NY	Alcoa (100%)	Fasteners
	Massena, NY	Alcoa (100%)	Extrusions
	Barberton, OH	Alcoa (100%)	Automotive Components
	Chillicothe, OH	Alcoa (100%)	Automotive Components
	Cleveland, OH	Alcoa (100%)	Aerospace Components/Automotive Components
	Bloomsburg, PA	Alcoa (100%)	Architectural Products
	Cranberry, PA	Alcoa (100%)	Architectural Products
	Morristown, TN	Alcoa (100%)	Aerospace Castings
	Waco, TX	Alcoa (100%)	Fasteners
	Wichita Falls, TX	Alcoa (100%)	Aerospace Castings
	Hampton, VA	Alcoa (100%)	Aerospace and Investment Castings

<sup>1</sup> Facilities with ownership described as Alcoa (100%) are either leased or owned by the company.

<sup>2</sup> Automotive and Aerospace Components are intended to include a variety of products, a combination of which may be produced at a given facility. Such products may include castings, forgings, extrusions, tube, profiles, wire/rod/bar and aluminum structural systems.

<sup>3</sup> The operating results of these two facilities are reported in the Flat-Rolled Products segment.

**Corporate Facilities**

The Latin American extrusions business, previously a component of the former Extruded and End Products Segment, 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).

**Table of Contents****Latin American Extrusions Facilities****OWNERS<sup>1</sup>**

<b>COUNTRY</b>	<b>FACILITY</b>	<b>(% Of Ownership)</b>	<b>PRODUCTS</b>
Brazil	Itapissuma	Alcoa (100%)	Extrusions/Architectural Products
	Utinga	Alcoa (100%)	Extrusions/Architectural Products
	Sorocaba	Alcoa (100%)	Extrusions/Architectural Products/Dies
	Tubarão	Alcoa (100%)	Extrusions/Architectural Products

<sup>1</sup> Facilities with ownership described as Alcoa (100%) are owned by the company, except in the case of the Sorocaba facility, which is a facility leased by the company.

**Sources and Availability of Raw Materials**

The major purchased raw materials in 2010 for each of the company's reportable segments are listed below.

**Alumina**

Bauxite  
Caustic soda  
Electricity  
Fuel oil  
Natural gas

**Primary Metals**

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

**Flat-Rolled Products**

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

**Engineered Products and Solutions**

Alloying materials  
Cobalt  
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.

**Energy**

Employing the Bayer process, Alcoa refines alumina from bauxite ore. Alcoa then produces aluminum from the alumina by an electrolytic process requiring large amounts of electric power. Energy and electricity account for approximately 26% of the company's total alumina refining production costs. Electric power accounts for approximately 27% of the company's primary aluminum production costs. Alcoa generates approximately 23% 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.



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*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 on by long-term contracts with Hydro-Québec executed in December 2008 that expire in 2040, provided that Alcoa completes the modernization of the Baie Comeau smelter by the end of 2015. The smelter located in Baie Comeau, Québec has historically purchased approximately 65% of its power needs under the Hydro-Québec contract, receiving the remainder from a 40%-owned hydroelectric generating company, Manicouagan Power Limited Partnership (MPLP), whose ownership was restructured in 2009 with Hydro-Québec acquiring the 60% stake previously held by AbitibiBowater. Beginning in the first quarter of 2011, these percentages will change such that approximately 80% will be sourced from Hydro-Québec, with the remaining 20% from MPLP.

The company's wholly-owned subsidiary, Alcoa Power Generating Inc. (APGI), generates approximately 27% of the power requirements for Alcoa's smelters in the U.S. The company generally purchases the remainder under long-term contracts. APGI owns and operates two hydroelectric projects, Tapoco and Yadkin, consisting of eight dams, under Federal Energy Regulatory Commission (FERC) licenses. APGI hydroelectric facilities provide electric power, as needed, for the aluminum smelter at Alcoa, Tennessee, where smelting operations are presently curtailed. When operating, the Tennessee smelter may also purchase power from the Tennessee Valley Authority (TVA) under a contract that continues until June 20, 2011, under a one-year extension executed in 2010. Discussions for the supply of power by TVA to the smelter after the expiration of the current contract continue.

APGI received a renewed 40-year FERC license for the Tapoco project in 2005. The relicensing process continues for the Yadkin hydroelectric project license. In 2007, APGI filed with FERC a Relicensing Settlement Agreement with the majority of the interested stakeholders that broadly resolved open issues. The National Environmental Policy Act process is complete, with a final environmental impact statement having been issued in April 2008. The remaining requirement for the relicensing was the issuance by North Carolina of the required water quality certification under Section 401 of the Clean Water Act. The Section 401 water quality certification was issued on May 7, 2009, but was appealed, and has been stayed since late May 2009 pending substantive determination on the appeal. On December 1, 2010, APGI received notice from North Carolina of its revocation of the Section 401 water quality certification. APGI has appealed the revocation. APGI received a year-to-year license renewal from FERC in May 2008, and will continue to operate under annual licenses until a new Section 401 certification is issued and the FERC relicensing process is complete. With the announcement in the first quarter of 2010 that Alcoa will permanently close the Badin 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.

APGI generates substantially all of the power used at its Warrick smelter using nearby coal reserves. Since May 2005, Alcoa has owned the nearby Friendsville, Illinois coal reserves, which mine is being operated by Vigo Coal Company, Inc. The mine is producing approximately one million tons of coal per year, 45% of the Warrick power plant's requirements. The balance of the coal used is purchased principally from local Illinois Basin coal producers pursuant to term contracts of varying duration.

In the northwest, Alcoa has been operating under a contract with Chelan County Public Utility District (Chelan PUD) located in the State of Washington that is sufficient to supply about half of the capacity of the Wenatchee smelter through October 2011. In July 2008, Alcoa and Chelan PUD executed a new contract which will begin in November 2011 and run through October 2028 under which Alcoa will receive approximately 26% of the hydropower output of Chelan PUD's Rocky Reach and Rock Island dams, which will continue to supply about half of the capacity of the Wenatchee smelter.

Following the invalidation by the 9<sup>th</sup> Circuit Court of Appeals of the 2006-2011 contract with the Bonneville Power Administration (BPA) under which Alcoa was receiving financial benefits to reduce the cost of power purchased from the market to partially operate the Intalco smelter, Alcoa and BPA signed a new contract providing for the sale of physical power at the Northwest Power Act-mandated industrial firm power (IP) rate, for the period from December 22, 2009 – May 26, 2011 (17 months), with provision for a 5-year extension if certain financial tests can be met.

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Prior to 2007, power for the Rockdale smelter in Texas was historically supplied from company-owned generating units and units owned by Luminant Generation Company LLC (formerly TXU Generation Company LP) (Luminant), both of which used lignite supplied by the company's Sandow Mine. Upon completion of lignite mining in the Sandow Mine in 2005, lignite supply transitioned to the formerly Alcoa-owned Three Oaks Mine. The company retired its three wholly-owned generating units at Rockdale (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 adjacent to the existing Sandow Unit Four Power Plant and, in September 2007, on the sale of the Three Oaks Mine to Luminant. In June 2008, Alcoa temporarily idled half of the capacity at the Rockdale smelter due to the uneconomical price of the electricity supply from Luminant resulting from the unreliable operation of the Sandow Unit Four Power Plant, and in November 2008 curtailed the remainder of Rockdale's smelting capacity due to continued uneconomic power supply and overall market conditions. In August 2008, Alcoa filed suit in District Court in Cameron, Texas against Luminant and certain of its parents and affiliates seeking damages for Luminant's alleged wrongful conduct that resulted in the electricity supply issues to the smelter. The resolution of this proceeding is described in Part I, Item 3. (Legal Proceedings) on page 39.

In the northeast, the purchased power contracts for both the Massena East and Massena West smelters in New York expire not earlier than December 31, 2013. In December 2007, Alcoa and NYPA reached agreement in principle on a new energy contract to supply the Massena East and Massena West smelters for 30 years, beginning on January 1, 2014, following an amendment in January 2011. The definitive agreement implementing this arrangement became effective February 24, 2009. A subsequent amendment, providing Alcoa additional time to complete the design and engineering work for its Massena East modernization plan, and providing for the return of 256 megawatts of power to NYPA while Massena East is idled, was entered into effective April 16, 2009 and was superseded by the January 2011 amendment. Implementation of the Massena East modernization plan is subject to further approval of the Alcoa Board. In January 2011, Alcoa announced that it will re-start production at Massena East beginning in the first quarter of 2011.

The Mt. Holly smelter in South Carolina purchases electricity from Santee Cooper under a contract that was amended and restated in 2010, and expires December 31, 2015, subject to certain extension provisions.

At the end of 2005, all production was temporarily curtailed at the Eastalco smelter located in Frederick, Maryland. The curtailment coincided with the expiration of the smelter's power contract on December 31, 2005, as a competitively-priced replacement power supply could not be obtained. Alcoa announced in the first quarter of 2010 that it will permanently close the Eastalco smelter.

*Australia Electricity*

Power is generated from extensive brown coal deposits covered by a long-term mineral lease held by Alcoa of Australia Limited (AofA), and that power currently provides approximately 40% of the electricity for the company's smelter in Point Henry, Victoria. The State Electricity Commission of Victoria provides the remaining power for this smelter, and all power for the Portland smelter, under contracts with AofA and Eastern Aluminium (Portland) Pty Ltd, a wholly-owned subsidiary of AofA, in respect of its interest in Portland, that extend to 2014 and 2016, respectively. AofA and Eastern Aluminium (Portland) Pty Ltd (in respect of the Portland Smelter only) entered into new power contracts with Loy Yang Power in March 2010 to secure electricity supply to the Portland and Point Henry smelters from the expiry of the current contracts with the State Electricity Commission of Victoria until 2036.

*Brazil Electricity*

The Alumar smelter is supplied by Eletronorte (Centrais Elétricas do Norte do Brasil S.A.) under a long-term power purchase agreement expiring in December 2024. Eletronorte has supplied the Alumar smelter from the beginning of its operations in 1984. Since 2006, Alcoa Alumínio S.A.'s (Alumínio) remaining power needs for the smelter are supplied from the Barra Grande hydroelectric project. Beginning in 2012, the Eletronorte supply will be reduced by the amount of additional power to be supplied from Barra Grande.



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Alumínio owns a 30.99% stake in Maesa Machadinho Energética S.A., which is the owner of 83.06% of the Machadinho hydroelectric power plant located in southern Brazil. Alumínio's share of the plant's output is supplied to the Poços de Caldas smelter, and is sufficient to cover 55% of its operating needs.

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

Alumínio also has 34.97% share in Serra do Facão in the southeast of Brazil, which began commercial generation in August 2010. Alumínio's share of the Serra do Facão output is currently being sold in the market.

With Machadinho and Barra Grande, Alumínio's current power self-sufficiency is approximately 40%, to meet a total energy demand of approximately 690 megawatts from Brazilian primary plants.

Alumínio is also participating in the Estreito hydropower project in northern Brazil, holding a 25.49% share. This project is in the final stages of construction, and start-up is anticipated in the first quarter of 2011.

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

### *Europe Electricity*

Until December 31, 2005, the company purchased electricity for its smelters at Portovesme and Fusina, Italy under a power supply structure approved by the European Commission (EC) in 1996. That measure provided a competitive power supply to the primary aluminum industry and was not considered state aid from the Italian Government. In 2005, Italy granted an extension of the regulated electricity tariff that was in force until December 31, 2005 through November 19, 2009. (The extension was originally through 2010, but the date was changed by legislation adopted by the Italian Parliament effective on August 15, 2009.) In July 2006, the EC announced that it had opened an investigation to establish whether the extension of the regulated electricity tariff granted by Italy complied with European Union (EU) state aid rules. On November 19, 2009, the EC announced a decision in its investigation, stating that the extension of the tariff by Italy constituted unlawful state aid, in part, and ordered the Italian government to recover a portion of the benefit Alcoa received since January 2006 (including interest). On April 19, 2010, Alcoa filed an appeal against the decision of the EC with the European General Court. Additionally on May 22, 2010, Alcoa filed an application for interim measures (suspension of decision) in connection with the EC at the European General Court. On July 12, 2010, the European General Court dismissed the request for interim measures due to lack of urgency. Alcoa appealed this ruling on September 10, 2010. Additional details about this matter are in Part I, Item 3. (Legal Proceedings) of this report. On February 25, 2010, the Italian government issued a decree law (No.3 2010) implementing a request from the electrical transmission system operator to reinforce the level of system security on the islands of Sicily and Sardinia. The decree law provides the means for end-consumers to provide and be paid for interruptible services up to December 31, 2012. On May 26, 2010, the EC ruled that scheme introduced by the decree law to be a non-aid. Alcoa applied for and gained rights to sell this service in Sardinia from the Portovesme smelter. On July 29, 2010, Alcoa reached agreement with a power supplier to enter into a new contract expiring on December 31, 2012. This arrangement is expected to enable operation of the Portovesme smelter through December 31, 2012. The Fusina smelter was temporarily curtailed due to high energy costs in May 2010. As of June 30, 2010, the Fusina smelter was temporarily idled.

The company's smelters at San Ciprián, La Coruña and Avilés, Spain purchase electricity under bilateral power contracts that commenced in May 2009 and are due to expire on December 31, 2012. Prior to the establishment of power supply under the bilateral contracts, Alcoa was supplied under a regulated power tariff. On January 25, 2007, the EC announced that it has opened an investigation to establish whether the regulated electricity tariffs granted by Spain comply with EU state aid rules. Alcoa operated in Spain for more than ten years under a power supply structure

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approved by the Spanish Government in 1986, an equivalent tariff having been granted in 1983. The investigation is limited to the year 2005 and it is focused both on the energy-intensive consumers and the distribution companies. It is Alcoa's understanding that the Spanish tariff system for electricity is in conformity with all applicable laws and regulations, and therefore no state aid is present in that tariff system. A decision by the EC has not yet been made. If the EC's investigation concludes that the regulated electricity tariffs for industries are unlawful, Alcoa will have an opportunity to challenge the decision in the EU courts.

Pursuant to the exchange arrangement with Orkla described under *Primary Aluminum. Facilities and Capacity* Alcoa Worldwide Smelting Capacity above, Alcoa assumed 100% ownership of the two smelters in Norway, Lista and Mosjøen, at the end of the first quarter of 2009. These smelters have long-term power arrangements in place which continue until at least 2019.

### *Iceland Electricity*

Alcoa's Fjarðaál smelter in eastern Iceland began operation in 2007. Central to those operations is a 40-year power contract under which Landsvirkjun, the Icelandic national power company, built the Kárahnjúkar dam and hydro-power project, and supplies competitively priced electricity to the smelter. First power was supplied to the Fjarðaál smelter in April 2007, and with the completion of the Kárahnjúkar project in late 2007, the smelter achieved full production in April 2008. In late 2009, Iceland imposed two new taxes on power intensive industries, both for a period of 3 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.

### *North America Natural Gas*

In order to supply its refineries and smelters in the U.S. and Canada, the company 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 as well as interstate pipeline transportation is 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*

Alcoa of Australia (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 Alcoa's alumina refineries and other users in the Southwest of Western Australia. AofA uses gas to co-generate steam and electricity for its alumina refining processes at the Kwinana, Pinjarra and Wagerup refineries. Approximately 70% of AofA's gas supplies are under long-term contract out to 2020. AofA is progressing multiple supply options to replace expiring contracts, including investing directly in projects that have the potential to deliver cost based gas.

## **Patents, Trade Secrets and Trademarks**

The company believes that its domestic and international patent, trade secret and trademark assets provide it with a significant competitive advantage. The company's rights under its patents, as well as the products made and sold under them, are important to the company as a whole and, to varying degrees, important to each business segment. The patents owned by Alcoa generally concern particular products or manufacturing equipment or techniques. Alcoa's business as a whole is not, however, materially dependent on any single patent, trade secret or trademark.

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

The company also has a number of domestic and international registered trademarks that have significant recognition within the markets that are served. Examples include the name Alcoa and the Alcoa symbol for aluminum products,

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Howmet metal castings, Huck® fasteners, Kawneer building panels and Dura-Bright® wheels with easy-clean surface treatments. The company's rights under its trademarks are important to the company as a whole and, to varying degrees, important to each business segment.

## **Competitive Conditions**

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

## **Research and Development**

Alcoa, a technology leader in the aluminum industry, engages in research and development programs that include process and product development, and basic and applied research. Expenditures for Research and Development (R&D) activities were \$174 million in 2010, \$169 million in 2009, and \$246 million in 2008.

Most of the major process areas within the company have a Technology Management Review Board (TMRB) consisting of members from various worldwide locations. Each TMRB 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 2010, the company continued to work on new developments for a number of strategic projects in all business segments. In Primary Metals, progress was made on inert anode technology with tests carried out on a pilot scale. Progress has been successful in many respects as a result of full pot testing of anode assemblies, although there remain technical and cost targets to achieve. If the technology proves to be commercially feasible, the company believes that it would be able to convert its existing potlines to this new technology, resulting in significant operating cost savings. The new technology would also generate environmental benefits by reducing certain emissions and eliminating carbon dioxide. No timetable has been established for commercial use. The company is also continuing to develop the carbothermic aluminum process, which is in the research and development phase. The technology holds the potential to produce aluminum at a lower cost, driven by reduced conversion costs, lower energy requirements and lower emissions at a lower capital cost than traditional smelting.

The company continued its progress leveraging new technologies such as bio-mimicry, nanotechnology, and low-cost sensing in 2010. For example, riblets that reduce aerodynamic drag have been analyzed and produced on a test basis. Self-cleaning nano coatings have been demonstrated on building products. Energy saving sensing devices are being integrated in company manufacturing plants. Integrated thermal management products for consumer electronics have been developed and are being validated by our customers.

A number of products were commercialized in 2010 including aluminum tie downs for military ships, new fasteners, primary aluminum with Cradle to Cradle® Certification, and new armor plate alloy solutions. The company continues to develop its Micromill technology. Scale-up to full commercial width has been successful. Product development continues, and commercialization has commenced.

Alcoa's research and development focus is on product development to support sustainable, profitable growth; manufacturing technologies to improve efficiencies and reduce costs; and on environmental risk reductions.

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Environmental technologies continue to be an area of focus for the company, with projects underway that address induct scrubbing for sulfur dioxide, the reduction of spent pot lining, advanced recycling, and the beneficial use of alkaline clay.

The company currently has at least 65 new products in various development stages. 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 2010, the company's worldwide patent portfolio consisted of 890 pending patent applications and 1,792 granted patents.

## **Environmental Matters**

Information relating to environmental matters is included in Note N to the Consolidated Financial Statements under the caption "Environmental Matters" on pages 112-115.

## **Employees**

Total worldwide employment at year-end 2010 was approximately 59,000 employees in 31 countries. About 37,800 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 9,000 employees are represented by various labor unions. The master collective bargaining agreement between Alcoa and the United Steelworkers (USW), covering 10 locations and approximately 5,600 U.S. employees, expired on May 31, 2010. Alcoa and USW successfully negotiated a new four-year labor contract, which was ratified by the USW in June, 2010. There are 15 other collective bargaining agreements in the U.S. with varying expiration dates. Collective bargaining agreements with varying expiration dates also cover about 10,500 employees in Europe, 5,400 employees in Russia, 6,200 employees in Central and South America, 3,800 employees in Australia, 300 employees in China and 2,600 employees in Canada.

## **Executive Officers of the Registrant**

The names, ages, positions and areas of responsibility of the executive officers of the company as of February 17, 2011 are listed below.

**Nicholas J. Ashooh**, 56, Vice President, Corporate Affairs. Mr. Ashooh was elected to his current position upon joining Alcoa in January 2010. Before joining Alcoa, he was Senior Vice President - Communications of American International Group, Inc. (AIG), a leading international insurance organization, from September 2006 to January 2010. Prior to AIG, he held executive communication positions in the electric utility industry as Senior Vice President, Corporate Communications of American Electric Power Service Corporation (2000 to 2006); Vice President, Public Affairs and Corporate Communications of Niagara Mohawk Power Corporation (1992 to 2000); and Director, Corporate Communications of Public Service of New Hampshire (1978 to 1990). From 1990 to 1992, he was Vice President, Corporate Communications of Paramount Communications Inc., a global entertainment and publishing company.

**John D. Bergen**, 68, Vice President, Human Resources. Mr. Bergen was named to his current position effective February 1, 2010. He joined Alcoa in November 2008 as Vice President, Communications and from that time to his most recent appointment had responsibility for global external and internal communications, government affairs and e-business for Alcoa. Mr. Bergen was Senior Vice President, Corporate Affairs and Marketing, of Siemens Corporation, the U.S. arm of Siemens AG, from 2001 to 2008. Before that, he held senior communication positions for CBS Corporation and Westinghouse Electric Corporation (1996 to 1998). From 1991 to 1996, he was President and Chief Executive Officer of GCI Group, an international public relations and government affairs firm.

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**Graeme W. Bottger**, 52, Vice President and Controller. Mr. Bottger was elected to his current position effective August 1, 2010. He joined Alcoa in 1980 as a product accountant at Alcoa's Point Henry facility in Australia and from that time to his most recent appointment held a series of accounting and financial management positions in Alcoa's Australian smelting, rolling, extrusion, foil and alumina businesses and Alcoa's corporate office. Mr. Bottger was Chief Financial Officer of Alcoa's Engineered Products and Solutions business group from 2005 to August 2010. From 2003 to 2005, he was Vice President, Sales, for Alcoa Home Exteriors. From 2001 to 2003, Mr. Bottger was Vice President, Finance for Alcoa Home Exteriors. Before his move to the United States in 1999 to accept an assignment in Alcoa's financial analysis and planning department, Mr. Bottger held the position of Chief Financial Officer for Alcoa's joint venture with Kobe Steel, Ltd. in Australia (Kaal Australia Pty. Ltd.).

**William F. Christopher**, 56, Chairman's Counsel. Mr. Christopher was elected to his current position effective January 1, 2011. He was Executive Vice President - Alcoa and Group President, Engineered Products and Solutions (formerly called Aerospace, Automotive and Commercial Transportation) from January 2003 to January 1, 2011. From September 2002 to January 2003, he was Group President for Alcoa's Aerospace and Commercial Transportation Group and in January 2003 he assumed responsibility for Alcoa's global automotive market. In 2001, Mr. Christopher was elected an Alcoa Executive Vice President and assumed responsibility for the global deployment of the Alcoa Business System and the company's customer and quality initiatives. He was elected a Vice President of Alcoa in 1999. He was President of Alcoa Forged Products from 1996 to 2001.

**Nicholas J. DeRoma**, 64, Executive Vice President, Chief Legal and Compliance Officer. Mr. DeRoma was elected to his current position upon joining Alcoa in August 2009. He was Chief Legal Officer of Nortel Networks Corporation based in Canada from 2000 until his retirement in September 2005. Before joining Nortel in 1997, he was employed by International Business Machines Corporation (IBM) from 1972 to 1997, holding a series of increasingly challenging assignments in Europe, Asia and North America, including serving as Assistant General Counsel of IBM from 1993 to 1995 and as General Counsel of IBM North America, IBM's largest business unit, from 1995 to 1997.

**Olivier M. Jarrault**, 49, 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**, 53, Director, Chairman of the Board and Chief Executive Officer. Mr. Kleinfeld was elected to Alcoa's Board of Directors in November 2003 and became Chairman on April 23, 2010. He has been Chief Executive Officer of Alcoa since May 8, 2008. He was President and Chief Executive Officer from May 8, 2008 to April 23, 2010. He was President and Chief Operating Officer of Alcoa from October 1, 2007 to May 8, 2008. Mr. Kleinfeld was President and Chief Executive Officer of Siemens AG, the global electronics and industrial conglomerate, from January 2005 to June 2007. He served as Deputy Chairman of the Managing Board and Executive Vice President of Siemens AG from 2004 to January 2005. He was President and Chief Executive Officer of Siemens Corporation, the U.S. arm of Siemens AG, from 2002 to 2004.

**Charles D. McLane, Jr.**, 57, Executive Vice President and Chief Financial Officer. Mr. McLane was elected an Alcoa Executive Vice President in September 2007 and was elected Vice President and Chief Financial Officer of Alcoa in January 2007. He was elected Vice President and Corporate Controller in October 2002. He joined Alcoa in May 2000 as director of investor relations, following Alcoa's merger with Reynolds Metals Company. He became Assistant Treasurer of Reynolds in 1999 and Assistant Controller of that company in 1995.

**John G. Thuestad**, 50, Executive Vice President - Alcoa and Group President, Global Primary Products. Mr. Thuestad was elected to his current position effective March 1, 2010. He joined Alcoa in 2008 as President of Global Primary Products - United States, responsible for Alcoa's aluminum smelters in the U.S. and its alumina refinery in Pt. Comfort, Texas. In 2009, Mr. Thuestad assumed the new position of Chief Operating Officer for Global Primary

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Products worldwide and was elected a Vice President of Alcoa. Before joining Alcoa, he was President and Chief Executive Officer (2005 to 2008) of Elkem ASA of Norway, a metals and materials company; President (2000 to 2005) of Elkem Aluminium ANS, a Norwegian aluminum smelting partnership; and Chief Executive Officer and President (1997 to 2000) of Norzink, a zinc and aluminum fluoride producer.

**Helmut Wieser**, 57, Executive Vice President Alcoa and Group President, Global Rolled Products, Hard Alloy Extrusions & Asia. Mr. Wieser was elected an Alcoa Executive Vice President in November 2005 and was named Group President, Global Rolled Products, Hard Alloy Extrusions and Asia at that time. Mr. Wieser was named Group President, Mill Products Europe/North America in October 2004 and was elected a Vice President of Alcoa in November 2004. He joined Alcoa in October 2000 as Vice President of Operations in Europe and in 2004 he became President of Alcoa's flat rolled products business in Europe. Before joining Alcoa, Mr. Wieser worked for Austria Metall Group, where he was an executive member of the board and chief operating officer from 1997 to 2000.

### **Item 1A. Risk Factors.**

Alcoa's business, financial condition or results of operations may be impacted by a number of factors. In addition to the factors discussed separately in this report, the following are some factors that could cause Alcoa's actual results to differ materially from those projected in any forward-looking statements:

#### **The aluminum industry generally remains highly cyclical and is influenced by a number of factors including global economic conditions.**

The aluminum industry generally remains highly cyclical. Alcoa is subject to cyclical fluctuations in LME prices, economic conditions generally, and aluminum end-use markets. The global economic downturn that occurred in 2008 and 2009, coupled with the global financial and credit market disruptions, had a historic, negative impact on the aluminum industry and Alcoa. These events contributed to an unprecedented decline in LME-based aluminum prices, weak end markets, a sharp drop in demand, increased global inventories, and higher costs of borrowing and/or diminished credit availability. While the economy has recovered from the crisis of the economic downturn and Alcoa believes that the long-term prospects for aluminum remain bright, 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. The company implemented a number of operational and financial actions in 2009 and 2010 to improve its cost structure and liquidity, including curtailing production, halting non-critical capital expenditures, accelerating new sourcing strategies for raw materials, divesting non-core assets, reducing global headcount, suspending its share repurchase program, reducing its quarterly common stock dividend and making other liquidity enhancements. However, there is no assurance that these actions, or any others that the company has taken or may take, will be sufficient to counter any future economic or industry disruptions. In addition, there is no assurance that the measures taken by Alcoa or any benefits of these measures will be sustainable in a changing or improving business environment. Another global economic downturn, prolonged recovery period, or disruptions in the financial markets could have a material, adverse effect on Alcoa's business or financial condition or results of operations.

#### **Alcoa could be materially adversely affected by declines in aluminum prices.**

The price of aluminum is frequently volatile and changes in response to general economic conditions, expectations for supply and demand growth or contraction, and the level of global inventories. The influence of hedge funds and other financial investment funds participating in commodity markets has also increased in recent years, contributing to higher levels of price volatility. At the same time, there is often a lag effect for a reduction in LME-linked costs of production. For example, reduction of certain key smelting input costs (such as alumina and power) may lag declining average primary metal revenue by up to 90 days. Continued high LME inventories could lead to a reduction in the price of aluminum. Industry overcapacity, including decisions by Alcoa or its competitors to reactivate idle facilities or build new capacity, could contribute to a weak pricing environment. A sustained weak aluminum pricing environment or a deterioration in aluminum prices could have a material, adverse effect on Alcoa's business, financial condition, results of operations or cash flow.

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### **A reduction in demand (or a lack of increased demand) for aluminum by China or a combined number of other countries may negatively impact Alcoa's results.**

The Chinese market is a significant source of global demand for commodities, including aluminum. A sustained slowdown in China's economic and aluminum demand growth that is not offset by increased aluminum demand growth in other emerging economies such as India, Brazil, and several South East Asian countries, or the combined slowdown in other markets, could have an adverse effect on the global supply and demand for aluminum and aluminum prices. In addition, China's investments to increase its self-sufficiency in key commodities may impact future demand and supply balances and prices.

### **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, the following factors could affect Alcoa's results of operations:

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 due to equipment failure or other causes; or

curtailment of one or more refineries or smelters due to inability to extend energy contracts upon expiration or negotiate new arrangements on cost-effective terms or unavailability of energy at competitive rates.

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

Alcoa's results of operations will be affected by increases 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 offset fully the effects of higher raw material costs or energy costs through price increases, productivity improvements or cost reduction programs. Similarly, Alcoa's operating results will be affected by significant lag effects for declines in key costs of production that are commodity or LME-linked. For example, declines in 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.

### **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 Brazilian real, Canadian dollar, Euro and Australian dollar, may affect profitability as some important raw materials are purchased in other currencies, whereas products are generally sold in U.S. dollars.

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

As a result of the global economic downturn and as part of the company's initiative to conserve cash and preserve liquidity, Alcoa halted all non-critical capital investment in 2009, except for the now-completed São Luís refinery expansion and the greenfield Juruti bauxite mine, and the ongoing Estreito hydroelectric power project in Brazil and



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the China and Russia growth projects. Management believes that these projects will be beneficial to Alcoa, however, there is no assurance that these benefits will be realized, whether due to unfavorable global economic conditions, currency fluctuations, or other factors, or that the remaining construction, start-up activities and testing on the Estreito project will be completed as planned by the targeted completion date.

Alcoa has made and may continue to plan and execute acquisitions and divestitures and take other actions to streamline its portfolio. There can be no assurance that such actions will be undertaken or completed in their entirety as planned or beneficial to Alcoa or that targeted completion dates will be met. In addition, acquisitions present significant challenges and risks relating to the integration of the business into the company, and there can be no assurances that the company will manage acquisitions successfully. Alcoa may face barriers to exit from unprofitable businesses, including high exit costs or objections from various stakeholders.

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

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

over the next five years, driving the alumina business down into the first quartile of the industry cost curve and realizing profit levels (per mt) that are beyond its recent historic norms;

by 2015, driving the smelting business down into the second quartile of the industry cost curve and increasing profitability (per mt) beyond the company's past ten year average;

by 2013, increasing the revenues of the Flat-Rolled Products segment by \$2.5 billion by growing 50% faster than the market and achieving performance levels above its historic norms; and

by 2013, increasing the revenues of the Engineered Products and Solutions segment by \$1.6 billion, through market growth, new product introductions, and share gains.

There can be no assurance that all of these initiatives will be completed as anticipated or that Alcoa will be able to successfully realize these goals at the targeted levels or by the projected dates.

### **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 announced that it 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. Although the company has, in relation to that joint venture and its other existing joint ventures and strategic alliances, sought to protect its interests, joint ventures and strategic alliances necessarily 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

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as a result of financial or other difficulties, be unable or unwilling to fulfill their obligations under the joint venture, strategic alliance or other agreements, such as contributing capital to expansion or maintenance projects.

In addition, the joint venture with Ma'aden is subject to risks associated with large infrastructure construction projects, including the risk of potential, adverse changes in the financial markets that could affect the ability of the joint venture to fully implement its financing plans or to achieve financial close for the phases of the project and the consequences of

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non-compliance with the timeline and other requirements under the gas supply arrangements for the joint venture. Also, while financing is in place for the smelter and rolling mill, which are viable as standalone operations without the bauxite mine and alumina refinery, there can be no guaranteed assurance that the latter two portions of the project will be fully funded or that the project as a whole will be completed within budget or by the targeted completion date, 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, lack of financing, increases in construction costs, currency fluctuations, political risks, or other factors.

### **Alcoa faces significant competition.**

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. In addition, aluminum competes with other materials, such as steel, plastics, composites, and glass, among others, for various applications in Alcoa's key markets. The willingness of customers to accept substitutions for the products sold by Alcoa, the ability of large customers to exert leverage in the marketplace to affect the pricing for fabricated aluminum products, or other developments by or affecting Alcoa's competitors or customers could affect Alcoa's results of operations. In addition, Alcoa's competitive position depends, in part, on the company's access to an economical power supply to sustain its operations in various countries.

### **Further metals industry consolidation could impact Alcoa's business.**

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

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

Currently, Alcoa's long-term debt is rated BBB- with negative outlook by Standard and Poor's Ratings Services; Baa3 with negative outlook by Moody's Investors Services; and BBB- with negative outlook by Fitch Ratings. There can be no assurance that any rating assigned will remain in effect for any given period of time or that a rating will not be lowered, suspended or withdrawn entirely by a rating agency, if, in that rating agency's judgment, circumstances so warrant. Maintaining an investment-grade credit rating is an important element of Alcoa's financial strategy. A downgrade of Alcoa's credit ratings could adversely affect the market price of its securities, adversely affect existing financing, limit access to the capital or credit markets or otherwise adversely affect the availability of other new financing on favorable terms, if at all, result in more restrictive covenants in agreements governing the terms of any future indebtedness that the company incurs, increase the cost of borrowing, or impair its business, financial condition and results of operations. In addition, under the project financing for the joint venture project in Saudi Arabia, a downgrade of Alcoa's credit ratings below investment grade by at least two rating agencies would require Alcoa to provide a letter of credit or fund an escrow account for a portion or all of Alcoa's remaining equity commitment to the joint venture. For additional information regarding the project financing, see Note I to the Consolidated Financial Statements in Part II, Item 8 (Financial Statements and Supplementary Data) of this report.

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

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

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providing the committed credit facility were to default on its obligation to fund its commitment, the portion of the committed facility provided by such defaulting financial institution would not be available to the company.

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

Alcoa has announced its intention to move to a pricing mechanism for alumina based on an index of alumina prices rather than a percentage of the LME-based aluminum price. Alcoa believes that this change, expected to affect approximately 20% of annual contracts coming up for renewal each year, will more fairly reflect the fundamentals of alumina including raw materials and other input costs involved. There can be no assurance that such index pricing will be accepted or that such index pricing will result in consistently greater profitability from sales of alumina.

**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 outside the U.S. having varying degrees of political and economic risk, including China, Guinea, Russia, and Saudi Arabia, among others. Risks include those associated with 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.

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

Alcoa's results of operations or liquidity in a particular period could be affected by new or increasingly stringent laws, regulatory requirements or interpretations, or outcomes of significant legal proceedings or investigations adverse to Alcoa. The company may experience a change in effective tax rates or become subject to unexpected or rising costs associated with business operations or provision of health or welfare benefits to employees due to changes in laws, regulations or policies. The company is also subject to a variety of legal compliance risks. These risks include, among other things, potential claims relating to product liability, health and safety, environmental matters, intellectual property rights, government contracts, taxes, and compliance with U.S. and foreign export laws, anti-bribery laws, competition laws and sales and trading practices. Alcoa could be subject to fines, penalties, damages (in certain cases, treble damages), or suspension or debarment from government contracts. While Alcoa believes it has adopted appropriate risk management and compliance programs to address and reduce these risks, the global and diverse nature of its operations means that these risks will continue to exist and additional legal proceedings and contingencies may arise from time to time. In addition, various factors or developments can lead the company to change current estimates of liabilities or make such estimates for matters previously not susceptible of reasonable estimates, such as a significant judicial ruling or judgment, a significant settlement, significant regulatory developments or changes in applicable law. A future adverse ruling or settlement or unfavorable changes in laws, regulations or policies, or other contingencies that the company cannot predict with certainty could have a material adverse effect on the company's results of operations or cash flows in a particular period. For additional information regarding the legal proceedings involving the company, see the discussion in Part I, Item 3. (Legal Proceedings), of this report and in Note N to the Consolidated Financial Statements in Part II, Item 8. (Financial Statements and Supplementary Data).

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**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 matters for which we may be liable may arise in the future at our present sites, where no problem is currently known, at previously owned sites, sites previously operated by us, sites owned by our predecessors or sites that we may acquire in the future. Alcoa's results of operations or liquidity in a particular period could be affected by certain health, safety or environmental matters, including remediation costs and damages related to several 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. Alcoa will likely see changes in the margins of greenhouse gas-intensive assets and energy-intensive assets as a result of regulatory impacts in the countries in which the company operates. These regulatory mechanisms may be either voluntary or legislated and may impact Alcoa's operations directly or indirectly through customers or Alcoa's supply chain. Inconsistency of regulations may also change the attractiveness of the locations of some of the company's assets. Assessments of the potential impact of future climate change legislation, regulation and international treaties and accords are uncertain, given the wide scope of potential regulatory change in countries in which Alcoa operates. The company may realize increased capital expenditures resulting from required compliance with revised or new legislation or regulations, costs to purchase or profits from sales of, allowances or credits under a cap and trade system, increased insurance premiums and deductibles as new actuarial tables are developed to reshape coverage, a change in competitive position relative to industry peers and changes to profit or loss arising from increased or decreased demand for goods produced by the company and indirectly, from changes in costs of goods sold.

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

**Adverse changes in discount rates, lower-than-expected investment return on pension assets and other factors could affect Alcoa's results of operations or level of pension funding contributions in future periods.**

Alcoa's results of operations may be negatively affected by the amount of expense Alcoa records for its pension and other postretirement benefit plans. 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, the expected long-term rate of return on plan assets, and several assumptions relating to employee workforce (salary increases, medical costs, retirement age, and mortality). 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

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postretirement benefits accounting policies, see Part II, Item 7. (Management's Discussion and Analysis of Financial Condition and Results of Operations) under the caption Critical Accounting Policies and Estimates Pension and Other Postretirement Benefits, and Part II, Item 8. (Financial Statements and Supplementary Data) under Note W to the Consolidated Financial Statements Pension and Other Postretirement Benefits. Although GAAP expense and pension funding contributions are not directly related, the key economic factors that affect GAAP expense would also likely affect the amount of cash or securities Alcoa would contribute to the pension plans. Potential pension contributions include both mandatory amounts required under federal law and discretionary contributions to improve the plans' funded status.

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

A significant portion of Alcoa's employees are represented by labor unions in a number of countries under various collective bargaining agreements with varying durations and expiration dates. While Alcoa was successful in renegotiating the master collective bargaining agreement with the United Steelworkers in June 2010, Alcoa may not be able to satisfactorily renegotiate other collective bargaining agreements in the U.S. and other countries when they expire. In addition, existing collective bargaining agreements may not prevent a strike or work stoppage at Alcoa's facilities in the future. Alcoa may also be subject to general country strikes or work stoppages unrelated to its business or collective bargaining agreements. Any such work stoppages (or potential work stoppages) could have a material adverse effect on Alcoa's financial results.

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

Alcoa's existing operations and development projects require highly skilled executives, and staff with relevant industry and technical experience. The inability of the company and 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 may also impact activities. These shortages may adversely impact the cost and schedule of development projects and the cost and efficiency of existing operations.

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

Alcoa has undertaken, and may continue to undertake, productivity and cost-reduction initiatives to improve performance and conserve cash, including new procurement strategies for raw materials, such as backward integration and non-traditional sourcing from numerous geographies, and deployment of company-wide business process models, such as the Alcoa Business System and the Alcoa Enterprise Business Solution (an initiative designed to build a common global infrastructure across Alcoa for data, processes and supporting software). There is no assurance that these initiatives will all be completed or beneficial to Alcoa or that estimated cost savings from such activities will be realized.

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

Alcoa is working on developments in advanced smelting process technologies, including inert anode and carbothermic technology, in addition to multi-alloy casting processes. There can be no assurance that such technologies will be commercially feasible or beneficial to Alcoa.

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

In response to the global economic downturn and related disruptions in the financial markets, Alcoa changed its capital expenditures strategy in 2009 as follows: capital expenditure approval levels were lowered dramatically; growth projects were halted where it was deemed economically feasible; and all non-critical capital expenditures were stopped. Capital expenditures are deemed critical if they maintain Alcoa's compliance with the law, keep a facility operating, or satisfy customer requirements if the benefits outweigh the costs. Alcoa expects to increase its sustaining capital expenditures in 2011 (compared with 2009 and 2010 levels) to meet non-recurring needs, including remediation and rebuilding of certain properties and assets. Despite this increase in 2011, capital review processes and limiting overall capital spend will continue in 2011 and beyond.

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Alcoa requires substantial capital to invest in greenfield and brownfield projects and to maintain and prolong the life and capacity of its existing facilities. If demand for aluminum improves, Alcoa's ability to take advantage of that improvement 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.

### **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.

The above list of important factors is not all-inclusive or necessarily in order of importance.

### **Item 1B. Unresolved Staff Comments.**

None.

### **Item 2. Properties.**

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

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

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

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

#### **ALUMINA**

**Bauxite:** See the table and related text in the **Bauxite Interests** section on pages 5-6 of this report.

**Alumina:** See the table and related text in the **Alumina Refining Facilities and Capacity** section on pages 7-8 of this report.

#### **PRIMARY METALS**

See the table and related text in the **Primary Aluminum Facilities and Capacity** section on pages 9-11 of this report.

#### **FLAT-ROLLED PRODUCTS**

See the table and related text in the **Flat-Rolled Products Facilities** section on pages 11-12 of this report.

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**ENGINEERED PRODUCTS AND SOLUTIONS**

See the table and related text in the **Engineered Products and Solutions Facilities** section on pages 12-14 of this report.

**CORPORATE**

See the table and related text in the **Corporate Facilities** section on pages 14-15 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, including some that it has asserted against others. While the amounts claimed may be substantial, the ultimate liability cannot now be determined because of the considerable uncertainties that exist. It is possible that results of operations or liquidity in a particular period could be materially affected by certain contingencies. Management believes, however, that the disposition of matters that are pending or asserted will not have a material adverse effect on the financial position of the company.

**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 112-115.

As previously reported, representatives of various U.S. federal and state agencies and a Native American tribe, acting in their capacities as trustees for natural resources (Trustees), have asserted that Alcoa and Reynolds Metals Company (Reynolds) may be liable for loss or damage to such resources under federal and state law based on Alcoa's and Reynolds' operations at their Massena, New York and St. Lawrence, New York facilities. While formal proceedings have not been instituted, the company has continued to actively investigate these claims. Pursuant to an agreement entered into with the Trustees in 1991, Alcoa and Reynolds had been working cooperatively with General Motors Corporation, which is facing similar claims by the Trustees, to assess potential injuries to natural resources in the region. With the bankruptcy of General Motors in 2009, Motors Liquidation Company (MLC) took over General Motors' liability in this matter. In September 2009, MLC notified Alcoa and the Trustees that it would no longer participate in the cooperative process. Alcoa and the Trustees agreed to continue to work together cooperatively without MLC to resolve Alcoa's and Reynolds' natural resources damages liability in this matter. In January 2011, the Trustees, representing the United States, the State of New York and the Mohawk tribe, and Alcoa reached an agreement in principle to resolve the natural resource damage claims. The agreement is subject to final approval of the respective parties and will be subject to a federal court approved consent decree, including public notice and comment. Final entry of a settlement consent decree is not expected until the 2011 second quarter or later. Any upward adjustment in the remediation reserve would be taken upon the finalization of the settlement agreement, which at this time is not anticipated to be material.

As previously reported, in September 1998, Hurricane Georges struck the U.S. Virgin Islands, including the St. Croix Alumina, L.L.C. (SCA) facility on the island of St. Croix. The wind and rain associated with the hurricane caused material at the location to be blown into neighboring residential areas. Various cleanup and remediation efforts were undertaken by or on behalf of SCA. A Notice of Violation was issued by the Division of Environmental Protection (DEP), of the Department of Planning and Natural Resources (DPNR) of the Virgin Islands Government, and has been contested by Alcoa. A civil suit was commenced in the Territorial Court of the Virgin Islands by certain residents of St. Croix in February 1999 seeking compensatory and punitive damages and injunctive relief for alleged personal injuries



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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 is 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 moved to decertify the plaintiff class, and the assigned district judge adopted a recommendation that class certification be maintained for liability issues only, and that the class be decertified after liability issues have been resolved. Alcoa and SCA have turned over this matter to their insurance carriers who are 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 class of plaintiffs, and simultaneously granted in part and denied in part plaintiffs' motion for certification of a new class. Under the new certification order, there is no class as to the personal injury, property damage, or punitive damages claims. (The named plaintiffs had previously dropped their claims for medical monitoring during the course of the briefing of the certification motions.) The Court did certify 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 Court expressly denied certification of a class as to any claims for remediation or clean up 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. As of October 29, 2009, plaintiffs appealed the Court's summary judgment order dismissing the claim for injunctive relief and Alcoa and SCA filed a motion to dismiss that appeal at the U.S. Court of Appeals for the Third Circuit. A decision by the Third Circuit is pending. The company is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

On April 23, 2004, St. Croix Renaissance Group, L.L.P. (SCRG), Brownfield Recovery Corp., and Energy Answers Corporation of Puerto Rico (collectively, Plaintiffs) filed a suit against St. Croix Alumina L.L.C. and Alcoa World Alumina LLC (AWA) (collectively, Alcoa) in the Territorial Court of the Virgin Islands, Division of St. Croix for claims related to the sale of Alcoa's former St. Croix alumina refinery to Plaintiffs. Alcoa thereafter removed the case to federal court and after a several year period of discovery and motion practice, a jury trial on the matter took place in St. Croix from January 11, 2011 to January 20, 2011. The jury returned a verdict in favor of Plaintiffs and awarded damages as described: on a claim of breaches of warranty, the jury awarded \$12,617,867; on the same claim, the jury awarded punitive damages in the amount of \$6,142,856; and on a negligence claim for property damage, the jury awarded \$10,000,000. Alcoa believes the verdict is, in whole or in part, not supported by the evidence or otherwise results from errors of law committed during the trial. As a result, Alcoa will file motions due February 17, 2011, including for judgment notwithstanding the verdict and, to the extent such post-trial motions are not successful, it intends to pursue its rights of appeal. Notwithstanding the jury verdict, at this time, management is unable to reasonably predict the ultimate outcome or to estimate a range of reasonably possible loss.

As previously reported, in May 2005, AWA and SCA were among the defendants listed in a lawsuit brought by the Commissioner of the DPNR, Dean Plaskett, in his capacity as Trustee for Natural Resources of the Territory of the United States Virgin Islands in the District Court of the Virgin Islands, Division of St. Croix. The complaint seeks damages for alleged injuries to natural resources caused by alleged releases from an alumina refinery facility in St. Croix that was owned by SCA from 1995 to 2002. Also listed in the lawsuit are previous and subsequent owners of the alumina refinery and the owners of an adjacent oil refinery. Claims are brought under CERCLA, U.S. Virgin Islands

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law, and common law. The plaintiff has not specified in the complaint the amount it seeks in damages. The defendants filed motions to dismiss in 2005. In October 2007, in an effort to resolve the liability of SCRG in the lawsuit, as well as any other CERCLA liability SCRG may have with respect to the facility, DPNR filed a new lawsuit against SCRG seeking the recovery of response costs under CERCLA, and the plaintiff and SCRG filed a joint Agreement and Consent Decree. The remaining defendants each filed objections to the Agreement and Consent Decree, and in October 2008, the court denied entry of the Agreement and Consent Decree. The court also ruled on the motions to dismiss that were filed by all defendants in 2005. The court dismissed two counts from the complaint (common law trespass and V.I. Water Pollution Control Act), but denied the motions with regard to the other six counts (CERCLA, V.I. Oil Spill Prevention and Pollution Control Act, and common law strict liability, negligence, negligence per se and nuisance). The court also ruled that the Virgin Islands Government was the proper plaintiff for the territorial law claims and required re-filing of the complaint by the proper parties, which was done in November 2008. The plaintiffs subsequently moved to amend their complaint further, were granted leave by the court to do so, and filed an amended complaint on July 30, 2009. AWA and SCA filed an answer, counterclaim and cross-claim against SCRG in response to the amended complaint in August 2009. In response to the plaintiffs' amended complaint, the other former owners of the alumina refinery filed answers, counterclaims, and cross-claims against SCRG and certain agencies of the Virgin Islands Government. During July 2009, each defendant except SCRG filed a partial motion for summary judgment seeking dismissal of the CERCLA cause of action on statute of limitations grounds. In July 2010, the court granted in part and denied in part each defendant's motion for summary judgment. The court granted each defendant's motion as to alleged injury to off-site groundwater and downstream surface water resources but denied each motion as to alleged injury to on-site groundwater resources. 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 December 2006, SCA was sued by the Commissioner of DPNR, U.S. Virgin Islands, in the Superior Court of the Virgin Islands, Division of St. Croix. The plaintiff alleges violations of the Coastal Zone Management Act and a construction permit issued thereunder. The complaint seeks a civil fine of \$10,000 under the Coastal Zone Management Act, civil penalties of \$10,000 per day for alleged intentional and knowing violations of the Coastal Zone Management Act, exemplary damages, costs, interest and attorney's fees, and other such amounts as may be just and proper. SCA responded to the complaint on February 2, 2007 by filing an answer and motion to disqualify DPNR's private attorney. The parties fully briefed the motion and are awaiting a decision from the court. 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 December 2006, SCA, along with unaffiliated prior and subsequent owners, were sued by the Commissioner of the DPNR, U.S. Virgin Islands, in the Superior Court of the Virgin Islands, Division of St. Croix. This second suit alleges violations by the defendants of certain permits and environmental statutes said to apply to the facility. The complaint seeks the completion of certain actions regarding the facility, a civil fine from each defendant of \$10,000 under the Coastal Zone Management Act, civil penalties of \$50,000 per day for each alleged violation of the Water Pollution Control Act, \$10,000 per day for alleged intentional and knowing violations of the Coastal Zone Management Act, exemplary damages, costs, interest and attorney's fees, and other such amounts as may be just and proper. SCA responded to the complaint on February 2, 2007 by filing an answer and motion to disqualify DPNR's private attorney. The parties fully briefed the motion and are awaiting a decision from the court. In October 2007, plaintiff and defendant SCRG entered into a settlement agreement resolving claims against SCRG. Plaintiff filed a notice of dismissal with the court, and the court entered an order dismissing SCRG on November 2, 2007. SCA objected to the dismissal and requested that the court withdraw its order, and the parties have briefed SCA's objection and request. A decision from the court is pending. On November 10, 2007, SCA filed a motion for summary judgment seeking dismissal of all claims in the case. The parties completed briefing of the motion in January 2008. A decision from the court is pending. 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, and noted above, in October 2007, DPNR filed a CERCLA cost recovery suit against SCRG. After the court denied entry of the Agreement and Consent Decree in October 2008, the cost recovery case lay dormant until May 2009, when SCRG filed a third-party complaint for contribution and other relief against several third-party

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defendants, including AWA and SCA. SCRG filed an amended third-party complaint on August 31, 2009, and served it on third-party defendants in mid-September 2009. AWA and SCA filed their answer to the amended third-party complaint on October 30, 2009. On January 8, 2010, DPNR filed a motion to assert claims directly against certain third-party defendants, including AWA and SCA. On January 29, 2010, the court granted plaintiff's motion. On November 15, 2010, plaintiff and all defendants filed motions for summary judgment addressing various issues relating to liability, recoverability of costs, and divisibility of harm. The case is set for trial in March 2011. 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, 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 have filed a motion 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. The company is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

As previously reported, on September 26, 2003, Region VI of the U.S. Environmental Protection Agency (EPA) filed an Administrative Complaint, Compliance Order and Notice of Opportunity for Hearing against the Wichita Falls, Texas facility of Howmet Corporation (Howmet) for violations of hazardous waste regulations relating to shipments of used potassium hydroxide to a fertilizer manufacturer from 1997 until 2000. The Complaint proposed a penalty of \$265,128. In addition, EPA ordered Howmet to cease sending used potassium hydroxide to fertilizer manufacturers or employing used potassium hydroxide in any use constituting disposal and to certify compliance with hazardous waste regulations within 30 days. On October 22, 2003, EPA Region II issued an almost identical Complaint, Compliance Order and Notice of Opportunity for Hearing against Howmet's Dover, New Jersey facility, seeking \$180,021 in penalties. Howmet filed its Answers to EPA Region VI's and EPA Region II's Complaints. Howmet's Answers denied the substance of EPA's Complaints, requested that no penalties be imposed and requested Hearings on both the hazardous waste allegations and the Compliance Orders. In April 2005, the administrative Court granted EPA's motions for partial accelerated decision with respect to both cases, finding that Howmet violated the cited regulatory provisions alleged in the Complaints and moved the case to the penalty phase. In September 2005, EPA and Howmet stipulated to a penalty amount of \$309,091 for the consolidated matters should the finding of liability be upheld and Howmet appealed the administrative Court's decision to the Environmental Appeals Board. In May 2007, the Environmental Appeals Board upheld the administrative Court's liability finding against Howmet and assessed the parties' stipulated penalty of \$309,091. In July 2007, Howmet appealed the Environmental Appeals Board's decision to the United States Court of Appeals for the District of Columbia. In October 2010, Howmet paid to the EPA a penalty of \$309,091 following denial of Howmet's appeal by the United States Court of Appeals for the District of Columbia. There will be no further reporting of this matter.

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 Inc., 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

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money damages on behalf of all class members. In May 2007, the court authorized a class action suit to include only people who suffered property damage or personal injury damages caused by the emission of PAHs from the smelter. In September 2007, the plaintiff filed his claim against the original defendants, which the court had authorized in May. Alcoa has filed its Statement of Defense and plaintiff has filed an Answer to that Statement. Alcoa also filed a Motion for Particulars with respect to certain paragraphs of plaintiff's Answer and a Motion to Strike with respect to certain paragraphs of plaintiff's Answer. In late 2010, the Court denied these motions. 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 now proceeds as an individual claim. On April 8, 2010, the court set trial for April 11, 2011. Alcoa has filed a renewed motion to dismiss (arguing that the claims are barred by the Indiana Workers' Compensation Act) and a motion seeking to continue the trial date from April 11, 2011 to August 11, 2011.

Also as previously reported, in October 2006, in *Barnett, et al. v. Alcoa and Alcoa Fuels, Inc.*, Warrick Circuit Court, County of Warrick, Indiana; 87C01-0601-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. The parties have each requested that the court certify an interlocutory appeal from the court's rulings and the court indicated that it will grant the parties' request. Plaintiffs also filed a second amended complaint in response to the court's orders granting Alcoa's motions to dismiss. The trial court is likely to stay any further proceedings regarding the second amended complaint while the parties pursue an interlocutory appeal to the Indiana Court of Appeals. On July 7, 2010, the court granted the parties' joint motions for a general continuance of trial settings. Discovery in these cases is ongoing. The company is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

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

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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 have been granted by the Court of Rome, and the next hearing is fixed for November 2011. In the meantime, in December 2009, Alcoa Trasformazioni S.r.l. and Ligestra reached an initial agreement for settlement of the liabilities related to Fusina (negotiations related to Portovesme continue). The settlement would also allow Alcoa to settle the 2006 civil suit by the MOE and MOPW for the environmental damages pending before the Civil Court of Venice. The agreement outlines an allocation of payments to the MOE for emergency action and natural resource damages and the scope and costs for a proposed soil remediation. On February 7, 2011, a further and more detailed settlement relating to Fusina was reached. This settlement provides a more detailed cost allocation between the parties, allocating 80% and 20% of the remediation costs to Ligestra and Alcoa, respectively. The agreements are contingent upon final acceptance of the remediation project by the MOE. To provide time for settlement with Ligestra, the Minister of Environment and Alcoa jointly requested a postponement of the hearing in the Venice trial, assuming that the case will be closed. The Civil Court of Venice accepted the postponement and fixed the new hearing date for April 11, 2011. Alcoa believes that it has made adequate reserves for these matters.

As previously reported, on November 30, 2010, Alcoa Alumínio S.A. (Alumínio) received service of a lawsuit that had been filed by the public prosecutors of the State of Para in Brazil in November 2009. The suit names the company and the State of Para, 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 (originally issued in September 2009 and renewed for two years in September 2010) and ordering payment of compensation. On April 14, 2010, the court denied plaintiffs' request. The company believes that the suit is meritless and intends to defend it vigorously. The State of Para also intends to defend the licensing of the project. This proceeding is in its preliminary stage and the company is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

**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 operations, cash flows, and financial condition of the company.

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

On November 19, 2009, the EC announced a decision in this matter stating that the extension of the tariff by Italy constituted unlawful state aid, in part, and, therefore, the Italian Government is to recover a portion of the benefit

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Alcoa received since January 2006 (including interest). The amount of this recovery will be based on a calculation that is being prepared by the Italian Government. Pending formal notification from the Italian Government, Alcoa estimates that a payment in the range of \$300 to \$500 million will be required during 2011. 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, including \$20 million to write-off a receivable from the Italian Government for amounts due under the now expired tariff structure. On April 19, 2010, Alcoa filed an appeal of this decision with the General Court of the EU. Alcoa will pursue all substantive and procedural legal steps available to annul the EC's decision. On May 22, 2010, Alcoa also filed with the General Court a request for injunctive relief to suspend the effectiveness of the decision, but, on July 12, 2010, the General Court denied such request. On September 10, 2010, Alcoa appealed the July 12, 2010 decision to the European Court of Justice; a judgment by that Court is expected in early 2011.

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

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 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 allege these changes to their retiree health care plans violate their rights to vested health care benefits. Plaintiffs additionally allege that Alcoa has breached its fiduciary duty to plaintiffs under ERISA by misrepresenting to them that their health benefits would never change. Plaintiffs seek injunctive and declaratory relief, back payment of benefits, and attorneys' fees. Alcoa has consented to treatment of plaintiffs' claims as a class action. During the fourth quarter of 2007, following briefing and argument, the court ordered consolidation of the plaintiffs' motion for preliminary injunction with trial, certified a plaintiff class, bifurcated and stayed the plaintiffs' breach of fiduciary duty claims, struck the plaintiffs' jury demand, but indicated it would use an advisory jury, and set a trial date of September 17, 2008. In August 2008, the court set a new trial date of March 24, 2009 and, subsequently, the trial date was moved to September 22, 2009. In June 2009, the court indicated that it would not use an advisory jury at trial. Trial in the matter was held over eight days commencing September 22, 2009 and ending on October 1, 2009 in federal court in Knoxville, TN before the Honorable Thomas Phillips, U.S. District Court Judge. At the conclusion of evidence, the court set a post-hearing briefing schedule for submission of proposed findings of fact and conclusions of law by the parties and for replies to the same. Post trial briefing was submitted on December 4, 2009; however, no schedule was set for handing down a decision. Alcoa believes that it presented substantial evidence in support of its defenses at trial. However, at this stage of the proceeding, the Company is unable to reasonably predict the outcome. Alcoa estimates that, in the event of an unfavorable outcome, the maximum exposure would be an additional postretirement benefit liability of approximately \$300 million.

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.

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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 in the range of \$50 to \$100 million ( 40 to 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. A decision by the EC is expected in 2011. 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.

As previously reported, on February 27, 2008, Alcoa Inc. received notice that Aluminium Bahrain B.S.C. (Alba) had filed suit against Alcoa Inc. and AWA (collectively, Alcoa), and others, in the U.S. District Court for the Western District of Pennsylvania (the Court), Civil Action number 08-299, styled Aluminium Bahrain B.S.C. v. Alcoa Inc., Alcoa World Alumina LLC, William Rice, and Victor Phillip Dahdaleh. The complaint alleges that certain Alcoa entities and their agents, including Victor Phillip Dahdaleh, have engaged in a conspiracy over a period of 15 years to defraud Alba. The complaint further alleges 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 alleges that Alcoa and the other defendants violated the Racketeer Influenced and Corrupt Organizations Act (RICO) and committed fraud. Alba's complaint seeks compensatory, consequential, exemplary, and punitive damages, rescission of the 2005 alumina supply contract, and attorneys' fees and costs. Alba seeks treble damages with respect to its RICO claims.

On February 26, 2008, Alcoa Inc. had advised the U.S. Department of Justice (DOJ) and the Securities and Exchange Commission (SEC) that it had recently become aware of these claims, had already begun an internal investigation, and intended to cooperate fully in any investigation that the DOJ or the SEC may commence. On March 17, 2008, the DOJ notified Alcoa that it had opened a formal investigation and Alcoa has been cooperating with the government.

In response to a motion filed by the DOJ on March 27, 2008, the Court ordered the suit filed by Alba to be administratively closed and that all discovery be stayed to allow the DOJ to fully conduct an investigation without the interference and distraction of ongoing civil litigation. The Court further ordered that the case will be reopened at the close of the DOJ's investigation. The Company is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

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

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August 7, 2009, the director and officer defendants filed an unopposed motion to coordinate the case with the Teamsters Local #500 suit, described immediately above, in the Allegheny County Common Pleas Court. The Allegheny County court issued its order consolidating the case on September 18, 2009. Thereafter, on October 31, 2009, the court assigned this action to the Commerce and Complex Litigation division of the Allegheny Court of Common Pleas and on November 20, 2009, the court granted defendants' motion to stay all proceedings in the Philadelphia Gas action until the earlier of the court lifting the stay in the Teamsters derivative action or further order of the court in this action. This derivative action is in its preliminary stages and the company is unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

As previously reported, on July 29, 2008 as a result of electricity supply issues at Alcoa's Rockdale, Texas smelter, Alcoa filed a lawsuit in the 20<sup>th</sup> Judicial District Court of Milam County, Texas, against Luminant Generation Company LLC (Luminant) and certain of its affiliates and parents (collectively, the defendants). The lawsuit sought remedies, including actual damages, for improper actions alleged in the lawsuit to have been caused by the defendants, including the excess electricity supply costs that led to smelter curtailment, excess costs charged to Alcoa to install certain environmental control upgrades at the power plant, excess costs charged to Alcoa due to improperly conducting mining operations at the Three Oaks Mine and alleging that the defendants had refused to permit Alcoa to exercise its audit rights regarding power plant and mining operations. In response to Alcoa's lawsuit, the Luminant defendants filed counterclaims against Alcoa for alleged non-payment of shared costs for the upgrade at the power plant and for mining operations. The claims related to the power plant and electricity supply costs were tried before a jury; the claims related to the mining operations were tried before the court.

The trials in the case commenced on May 17, 2010 with the jury rendering a verdict on June 2nd and the court issuing its ruling from the bench on June 9th. The jury found that (i) Luminant had not breached the contract between the parties by charging Alcoa for electricity supply and to install certain environmental control upgrades at the power plant; (ii) Luminant had breached the contract by not permitting Alcoa to exercise its audit rights relating to the power plant, and (iii) Alcoa had breached the contract by failing to pay its entire share of the environmental control upgrade costs. Alcoa was ordered to pay to Luminant approximately \$10 million for the environmental control upgrades. The court found that (i) there was no credible evidence that Luminant had breached the contracts between the parties with regard to its mining operations, (ii) Alcoa has to pay the amount that it owes for the mine services that Luminant has billed to Alcoa (approximately \$1.7 million) but Alcoa may contest the invoice in accordance with the dispute resolution provisions in the contract, (iii) Luminant is entitled to have the mine permit transferred to it, (iv) Alcoa may submit certain disputed amounts that it believes that it is owed by Luminant to an accounting arbitrator (approximately \$4 million), and (v) Alcoa is entitled to exercise its right to review the books and records of Luminant associated with its mining operations. Alcoa has not appealed the verdicts. Alcoa has initiated an audit of Luminant's power plant operations and an accounting arbitration of certain amounts that Alcoa believes that it is owed associated with the sale of the Three Oaks Mine to Luminant (approximately \$4 million). There will be no further reporting of this matter.

**Mine Safety.**

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 is included in Exhibit 99 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, Inc. (symbol AA). The company's quarterly high and low trading stock prices and dividends per common share for 2010 and 2009 are shown below.

Quarter	2010			2009		
	High	Low	Dividend	High	Low	Dividend
First	\$ 17.60	\$ 12.26	\$ 0.03	\$ 12.44	\$ 4.97	\$ 0.17
Second	15.15	10.01	0.03	12.38	7.03	0.03
Third	12.25	9.81	0.03	14.84	8.96	0.03
Fourth	15.63	11.81	0.03	16.51	11.89	0.03
Year	17.60	9.81	\$ 0.12	16.51	4.97	\$ 0.26

The number of holders of common stock was approximately 325,000 as of February 11, 2011.

**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 27 companies categorized by Standard & Poor's as active in the materials market sector. Such information shall not be deemed to be filed.

As of December 31,	2005	2006	2007	2008	2009	2010
<b>Alcoa Inc.</b>	\$ 100	\$ 103	\$ 128	\$ 41	\$ 60	\$ 58
<b>S&amp;P 500® Index</b>	100	116	122	77	97	112
<b>S&amp;P 500® Materials Index</b>	100	119	145	79	117	143

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

**Table of Contents****Issuer Purchases of Equity Securities**

<b>Period</b>		<b>Total Number of Shares Purchased (a)</b>	<b>Average Price Paid Per Share</b>	<b>Total Number of Shares Purchased as Part of Publicly Announced Repurchase Plans or Programs (b)</b>	<b>Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs (b)</b>
January 1	January 31, 2010	-	-	-	115,800,571
February 1	February 28, 2010	-	-	-	115,800,571
March 1	March 31, 2010	-	-	-	115,800,571
Total for quarter ended March 31, 2010		-	-	-	115,800,571
April 1	April 30, 2010	-	-	-	115,800,571
May 1	May 31, 2010	-	-	-	115,800,571
June 1	June 30, 2010	-	-	-	115,800,571
Total for quarter ended June 30, 2010		-	-	-	115,800,571
July 1	July 31, 2010	-	-	-	115,800,571
August 1	August 31, 2010	-	-	-	115,800,571
September 1	September 30, 2010	-	-	-	115,800,571
Total for quarter ended September 30, 2010		-	-	-	115,800,571
October 1	October 31, 2010	-	-	-	115,800,571
November 1	November 30, 2010	-	-	-	115,800,571
December 1	December 31, 2010	-	-	-	115,800,571
Total for quarter ended December 31, 2010		-	-	-	115,800,571

(a) This column includes (i) purchases under Alcoa's publicly announced share repurchase program described in (b) below and (ii) the deemed surrender to the company by plan participants of shares of common stock to satisfy the exercise price related to the exercise of employee stock options, in each case to the extent applicable during the period indicated. The shares used to satisfy the exercise price related to stock options are not considered part of the publicly announced share repurchase program approved by Alcoa's Board of Directors as described in (b) below.

(b) On October 8, 2007, Alcoa's Board of Directors approved a new share repurchase program, which was publicly announced by Alcoa on October 9, 2007. The new program authorized the purchase of up to 25% (or approximately 217 million shares) of the outstanding common stock of Alcoa at December 31, 2006, in the open market or through privately negotiated transactions, directly or through brokers or agents, and expired on December 31, 2010. In October 2008, Alcoa elected to suspend share repurchases under this program to preserve liquidity in light of the then global economic downturn.

**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,	2010	2009	2008	2007	2006
Sales	\$ 21,013	\$ 18,439	\$ 26,901	\$ 29,280	\$ 28,950
Amounts attributable to Alcoa common shareholders:					
Income (loss) from continuing operations	\$ 262	\$ (985)	\$ 229	\$ 2,814	\$ 2,226
(Loss) income from discontinued operations	(8)	(166)	(303)	(250)	22
Net income (loss)	\$ 254	\$ (1,151)	\$ (74)	\$ 2,564	\$ 2,248
Earnings per share attributable to Alcoa common shareholders:					
Basic:					
Income (loss) from continuing operations	\$ 0.25	\$ (1.06)	\$ 0.27	\$ 3.24	\$ 2.56
(Loss) income from discontinued operations	-	(0.17)	(0.37)	(0.29)	0.03
Net income (loss)	\$ 0.25	\$ (1.23)	\$ (0.10)	\$ 2.95	\$ 2.59
Diluted:					
Income (loss) from continuing operations	\$ 0.25	\$ (1.06)	\$ 0.27	\$ 3.22	\$ 2.54
(Loss) income from discontinued operations	(0.01)	(0.17)	(0.37)	(0.28)	0.03
Net income (loss)	\$ 0.24	\$ (1.23)	\$ (0.10)	\$ 2.94	\$ 2.57
Shipments of alumina (kmt)	9,246	8,655	8,041	7,834	8,420
Shipments of aluminum products (kmt)	4,757	5,097	5,481	5,393	5,545
Alcoa's average realized price per metric ton of aluminum	\$ 2,356	\$ 1,856	\$ 2,714	\$ 2,784	\$ 2,665
Cash dividends declared per common share	\$ 0.12	\$ 0.26	\$ 0.68	\$ 0.68	\$ 0.60
Total assets	39,254	38,472	37,822	38,803	37,149
Short-term borrowings	92	176	478	563	460
Commercial paper	-	-	1,535	856	1,472
Long-term debt, including amounts due within one year	9,073	9,643	8,565	6,573	5,287

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 the world leader in the production and management of primary aluminum, fabricated aluminum, and alumina combined, through its active and growing participation in all major aspects of the industry: technology, mining, refining, smelting, fabricating, and recycling. Aluminum is a commodity that is traded on the London Metal Exchange (LME) and priced daily based on market supply and demand. Aluminum and alumina represent more than 80% of Alcoa's revenues, and the price of aluminum influences the operating results of Alcoa. Nonaluminum products include precision castings and aerospace and industrial fasteners. Alcoa's products are used worldwide in aircraft, automobiles, commercial transportation, packaging, building and construction, oil and gas, defense, and industrial applications.

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Alcoa is a global company operating in 31 countries. Based upon the country where the point of sale occurred, the U.S. and Europe generated 50% and 27%, respectively, of Alcoa's sales in 2010. In addition, Alcoa has investments and operating activities in 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 2010 and Outlook for the Future**

In 2009, management was faced with the challenge of preserving Alcoa's future while navigating the Company through a global economic downturn that coupled an unprecedented decline in LME pricing levels (began in the second half of 2008) with a collapse in demand from aluminum product end markets. Management adopted a holistic response to this situation by initiating various actions, including: curtailing additional refinery and smelter capacity (necessitating further layoffs); reducing the quarterly common stock dividend; issuing new equity and debt instruments; optimizing Alcoa's business and investment portfolio; and instituting a two-year program to achieve targets related to procurement efficiencies, overhead rationalization, and working capital improvements. All of these actions were aimed at reducing costs, improving cash levels, and preserving liquidity. Upon achieving the established performance targets in year one of this program, management continued to steer the Company through the downturn during 2010, by seeking to increase procurement efficiencies, overhead rationalization, and working capital improvements above and beyond levels that had been achieved in 2009. In addition, management set out to reduce debt and refinance long-term debt set to mature over the next three years. The following financial information reflects the results of management's achievements in 2010:

Sales of \$21,013, a 14% increase over 2009;

Selling, general administrative, and other expenses of less than \$1,000, the lowest level since 1999;

Income from continuing operations of \$262, or \$0.25 per diluted share, an improvement of \$1,247 compared to 2009;

Cash from operations of \$2,261, highest since 2007;

Capital expenditures of \$1,015, a reduction of more than \$600 from 2009;

Cash on hand at the end of the year of \$1,543, in excess of \$1,000 for the second consecutive year;

Reduction in total debt of \$654, and \$1,413 over the past two years; and

Debt-to-capital ratio of 34.9%, a 380 basis point improvement for the second consecutive year.

Management is projecting a 12% increase in the global consumption of primary aluminum in 2011, similar to the improvement in 2010. China, India, Brazil, and Russia are all expected to have double-digit increases in aluminum demand. Management also anticipates market conditions for aluminum products in all global end markets to improve, particularly in aerospace, automotive, and industrial gas turbine. On the cost side, energy prices and currency movements are expected to continue to be a challenge. Management has established and is committed to achieving the following specific goals in 2011:

sustaining the savings realized in 2010 and 2009 from procurement, overhead, and working capital programs;

generating positive cash flow from operations that will exceed capital spending; and

maintaining a debt-to-capital ratio between 30% and 35%.

Looking ahead over the next three-to-five years, the Company has established aggressive goals, focusing on cost reductions for the upstream operations and significant profitable growth in the midstream and downstream operations.

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**Table of Contents****Results of Operations****Earnings Summary**

Income from continuing operations attributable to Alcoa for 2010 was \$262, or \$0.25 per diluted share, compared with a loss from continuing operations of \$985, or \$1.06 per share, in 2009. The improvement of \$1,247 in continuing operations was primarily due to the following: continued increases in realized prices for alumina and aluminum; ongoing net costs savings and productivity improvements across all segments; and the absence of both a charge associated with a European Commission electricity pricing matter in Italy and a loss on the sale of an equity investment; partially offset by net unfavorable foreign currency movements; higher energy costs; unfavorable changes in LIFO (last in, first out) inventories; additional depreciation charges and operating costs for growth projects; and the absence of gains on the exchange of equity interests and on the acquisition of bauxite and refinery interests.

Loss from continuing operations attributable to Alcoa for 2009 was \$985, or \$1.06 per share, compared with income from continuing operations of \$229, or \$0.27 per share, in 2008. The decline of \$1,214 in continuing operations was primarily due to the following: significant declines in realized prices for alumina and aluminum; large volume decreases in the midstream and downstream operations; a charge associated with a European Commission electricity pricing matter in Italy; a loss on the sale of an equity investment; charges related to 2009 restructuring programs; and higher depreciation and interest charges; all of which was partially offset by procurement and overhead cost savings across all businesses; the absence of the charges associated with 2008 restructuring programs; net favorable foreign currency movements due to a stronger U.S. dollar; favorable LIFO inventory adjustments; various discrete income tax benefits and a significant fluctuation in income taxes due to a change in the results of operations from pretax income to a pretax loss; a gain on the exchange of equity interests; a gain on the acquisition of an entity in the Republic of Suriname; and net income of various other nonoperating items.

Net income attributable to Alcoa for 2010 was \$254, or \$0.24 per share, compared with a net loss of \$1,151, or \$1.23 per share, in 2009, and a net loss of \$74, or \$0.10 per share, in 2008. In 2010, the net income of \$254 included a loss from discontinued operations of \$8, and in 2009 and 2008, the net loss of \$1,151 and \$74 included a loss from discontinued operations of \$166, and \$303, respectively.

In March 2009, Alcoa announced a series of operational and financial actions, which were in addition to those announced at the end of 2008, to significantly improve Alcoa's cost structure and liquidity. Operational actions included procurement efficiencies and overhead rationalization to reduce costs and working capital initiatives to yield significant cash improvements. Financial actions included a reduction in the quarterly common stock dividend from \$0.17 per share to \$0.03 per share, which began with the dividend paid on May 25, 2009, and the issuance of 172.5 million shares of common stock and \$575 in convertible notes that collectively yielded \$1,438 in net proceeds. In January 2010, Alcoa announced further operational actions to not only maintain the procurement and overhead savings and working capital improvements achieved in 2009, but to improve on them throughout 2010. Also, a further reduction in capital expenditures was planned in order to achieve the level necessary to sustain operations without sacrificing the quality of Alcoa's alumina and aluminum products.

In late 2008, management made the decision to reduce Alcoa's aluminum and alumina production in response to the then significant economic downturn. As a result of this decision, reductions of 750 kmt, or 18%, of annualized output from Alcoa's global smelting system were implemented (includes previous curtailment at Rockdale, TX in June 2008). Accordingly, reductions in alumina output were also initiated with a plan to reduce production by 1,500 kmt-per-year across the global refining system. The aluminum and alumina production curtailments were completed in early 2009 as planned. Smelters in Rockdale (267 kmt-per-year) and Tennessee (215 kmt-per-year) were fully curtailed while another 268 kmt-per-year was partially curtailed at various other locations. The refinery in Point Comfort, TX was partially curtailed by approximately 1,500 kmt-per-year between the end of 2008 and the beginning of 2009 (384 kmt-per-year remains curtailed as of December 31, 2010). In mid-2009, further action became necessary resulting in the decision to fully curtail the Massena East, NY smelter (125 kmt-per-year) and partially curtail the Suralco (Suriname) refinery (480 kmt-per-year - represented Alcoa World Alumina and Chemicals (AWAC) previous 55% ownership interest at the time of curtailment - total curtailed is approximately 870 kmt).

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In the first half of 2011, Alcoa plans to restart certain idled potlines at three smelters located in the U.S.: Massena East, NY (three potlines or 125 kmt-per-year); Wenatchee, WA (one potline or 43 kmt-per-year); and Ferndale, WA (Intalco: 36 kmt-per-year). These restarts are expected to increase Alcoa's aluminum production by 137 kmt during 2011 and by 204 kmt on an annual basis thereafter and are occurring to help meet anticipated growth in aluminum demand and to meet obligations outlined in power agreements with energy providers.

In June 2008, Alcoa temporarily idled half of the aluminum production (three of six operating potlines or 120 kmt) at its Rockdale smelter due to ongoing power supply issues with Rockdale's onsite supplier and the uneconomical power that Alcoa was forced to purchase in the open market as a result of such issues. In September 2008, Alcoa announced it was temporarily idling the remaining three potlines, or 147 kmt, as a result of the cumulative effect of operating only half of the smelter, well-known issues regarding the cost and long-term reliability of the power supply, and overall market conditions. In 2008, the earnings impact of the idled potlines was \$55 (\$90 pretax). Alcoa sought damages and other relief from its power supplier through litigation (in 2010, a trial was held and the verdict resulted in no award of monetary damages to Alcoa although the Company may submit certain disputed amounts (up to \$4) to accounting arbitration and may audit the books and record of its power supplier). Additionally, in conjunction with the idling of all six potlines, Alcoa recorded restructuring charges in 2008 of \$31 (\$48 pretax) mostly for the layoff of approximately 870 employees (see Restructuring and Other Charges below for additional information).

Also in June 2008, a major gas supplier to Alcoa's Western Australia refining operations (part of Alcoa of Australia) suffered a pipeline rupture and fire, which resulted in a complete shutdown of the supplier's gas production operations at a certain hub and a declaration of force majeure by the supplier to all customers. The disruption in gas supply caused an immediate reduction in Alcoa of Australia's production capacity and required the purchase of alternative fuel at a much higher cost than the natural gas displaced resulting in a significant negative impact on operations. As a result, shortly thereafter, Alcoa of Australia notified its own customers that it was declaring force majeure under its alumina supply contracts. During the second half of 2008, the supplier partially restored the gas supply to Alcoa of Australia (full restoration occurred in the first half of 2009). In addition, insurance recoveries of \$52 were received in the second half of 2008. Net of insurance benefits, Alcoa's earnings impact of the disruption in gas supply was \$49 (\$102 before tax and noncontrolling interest) in 2008. The Alumina segment was impacted by \$33 (\$47 before tax) and the remaining impact of \$29 (\$55 before tax) was reflected in Corporate due to Alcoa's captive insurance program. In 2009, additional insurance recoveries of \$24 were received, which benefited the results of Alcoa by \$10 (\$24 before tax and noncontrolling interest) and the Alumina segment by \$17 (\$24 before tax). Alcoa of Australia is part of AWAC, which is 60% owned by Alcoa and 40% owned by Alumina Limited.

**Sales** Sales for 2010 were \$21,013 compared with sales of \$18,439 in 2009, an improvement of \$2,574, or 14%. The increase was mainly driven by a continued rise in realized prices for alumina and aluminum, as a result of significantly higher London Metal Exchange (LME) prices, favorable pricing in the midstream operations, and sales from the smelters in Norway (acquired on March 31, 2009: increase of \$332), slightly offset by the absence of sales from divested businesses (Transportation Products Europe and most of Global Foil: decrease of \$175) and unfavorable mix in the downstream operations.

Sales for 2009 were \$18,439 compared with sales of \$26,901 in 2008, a decline of \$8,462, or 31%. The decrease was primarily due to a drop in realized prices for alumina and aluminum, driven by significantly lower LME prices; volume declines in the midstream and downstream operations due to continued weak end markets; unfavorable foreign currency movements, mostly the result of a weaker euro and Australian dollar; and the absence of sales from the businesses within the former Packaging and Consumer segment (\$516 in 2008); all of which was slightly offset by sales from the acquired smelters in Norway (increase of \$452).

**Cost of Goods Sold** COGS as a percentage of Sales was 81.7% in 2010 compared with 91.7% in 2009. The percentage was positively impacted by the continued significant rise in realized prices for alumina and aluminum; net cost savings and productivity improvements across all segments; and the absence of a charge related to a European Commission's decision on electricity pricing for smelters in Italy (\$250); somewhat offset by net unfavorable foreign currency movements due to a weaker U.S. dollar; unfavorable LIFO adjustments, as a result of the considerable rise in



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LME prices, and a significantly smaller reduction in LIFO inventory quantities; increases in energy costs; and higher operating costs for Brazil growth projects placed in service.

COGS as a percentage of Sales was 91.7% in 2009 compared with 82.4% in 2008. The percentage was negatively impacted by significant declines in realized prices for alumina and aluminum, lower demand in the midstream and downstream operations, and a charge related to a European Commission's decision on electricity pricing for smelters in Italy (\$250). These items were somewhat offset by procurement and overhead cost savings across all businesses, net favorable foreign currency movements due to a stronger U.S. dollar, and positive LIFO adjustments. In 2009, Alcoa recognized \$361 (\$235 after-tax) in income due to the reductions in LIFO inventory quantities and the considerable drop in LME prices. Of this amount, 71% occurred in the second half of the year.

**Selling, General Administrative, and Other Expenses** SG&A expenses were \$961, or 4.6% of Sales, in 2010 compared with \$1,009, or 5.5% of Sales, in 2009. The decline of \$48 was mostly due to continued reductions in expenses for contractors and consultants; lower deferred compensation, as a result of a decline in plan performance; and decreases in bad debt expense and information technology expenditures. An increase in labor costs, principally due to higher annual incentive and performance compensation and employee benefits costs (employer matching savings plan contributions for U.S. salaried participants were suspended during 2009) somewhat offset the aforementioned expense reductions.

SG&A expenses were \$1,009, or 5.5% of Sales, in 2009 compared with \$1,167, or 4.3% of Sales, in 2008. The decline of \$158 was primarily due to reductions in labor costs, mainly as a result of implemented severance programs; decreases in expenses for travel, contractors and consultants, information technology, selling and marketing, and various other administrative items as part of Alcoa's cost reduction initiatives; the absence of the businesses within the former Packaging and Consumer segment (\$37 in 2008); and a decrease in bad debt expense; all of which was partially offset by an increase in deferred compensation, mostly the result of the plans' improved performance, and an increase due to SG&A of the acquired smelters in Norway.

**Research and Development Expenses** R&D expenses were \$174 in 2010 compared with \$169 in 2009 and \$246 in 2008. The increase in 2010 as compared to 2009 was mainly driven by incremental increases across varying expenses necessary to support R&D activities. The decline in 2009 as compared to 2008 was principally due to the implementation of Alcoa's cost reduction initiatives and the absence of the businesses within the former Packaging and Consumer segment (\$3 in 2008).

**Provision for Depreciation, Depletion, and Amortization** The provision for DD&A was \$1,450 in 2010 compared with \$1,311 in 2009. The increase of \$139, or 11%, was principally the result of the assets placed into service during the second half of 2009 related to the Juruti bauxite mine development and São Luís refinery expansion in Brazil, the smelters in Norway (acquired on March 31, 2009), the new Bohai (China) flat-rolled product facility, and a high-quality coated sheet line at the Samara (Russia) facility, slightly offset by the cessation in DD&A due to the decision to permanently shutdown and demolish two U.S. smelters in early 2010 (see Restructuring and Other Charges below).

The provision for DD&A was \$1,311 in 2009 compared with \$1,234 in 2008. The increase of \$77, or 6%, was mostly due to the acquired smelters in Norway and assets placed into service during 2009, including the Juruti bauxite mine and São Luis refinery in Brazil, the new Bohai flat-rolled product facility, and a high-quality coated sheet line at the Samara facility. These increases were slightly offset as a result of the cessation of DD&A, which began in January 2009, related to the Global Foil and Transportation Products Europe businesses due to the classification of these businesses as held for sale and a reduction in DD&A as a result of the extension of depreciable lives for the majority of rolled products and hard alloy extrusions locations based upon a review, which was completed in mid-2008, of estimated useful lives (\$11).

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**Restructuring and Other Charges** Restructuring and other charges for each year in the three-year period ended December 31, 2010 were comprised of the following:

	2010	2009	2008
Asset impairments	\$ 139	\$ 54	\$ 670
Layoff costs	43	186	183
Other exit costs	58	37	109
Reversals of previously recorded layoff and other exit costs	(33)	(40)	(23)
Restructuring and other charges	\$ 207	\$ 237	\$ 939

**2010 Actions** In 2010, Alcoa recorded Restructuring and other charges of \$207 (\$130 after-tax and noncontrolling interests), which were comprised of the following components: \$127 (\$80 after-tax and noncontrolling interests) in asset impairments and \$46 (\$29 after-tax and noncontrolling interests) in other exit costs related to the permanent shutdown and planned demolition of certain idled structures at five U.S. locations (see below); \$43 (\$29 after-tax and noncontrolling interests) for the layoff of approximately 830 employees (625 in the Engineered Products and Solutions segment; 75 in the Primary Metals segment; 25 in the Flat-Rolled Products segment; 15 in the Alumina segment; and 90 in Corporate); \$22 (\$14 after-tax) in net charges (including \$12 (\$8 after-tax) for asset impairments) related to divested and to be divested businesses (Automotive Castings, Global Foil, Transportation Products Europe, and Packaging and Consumer) for, among other items, the settlement of a contract with a former customer, foreign currency movements, working capital adjustments, and a tax indemnification; \$2 (\$2 after-tax and noncontrolling interests) for various other exit costs; and \$33 (\$24 after-tax and noncontrolling interests) for the reversal of prior periods' layoff reserves, including a portion of those related to the Portovesme smelter in Italy due to the execution of a new power agreement.

In early 2010, management approved the permanent shutdown and demolition of the following structures, each of which was previously temporarily idled for different reasons: the Eastalco smelter located in Frederick, MD (capacity of 195 kmt-per-year); the smelter located in Badin, NC (capacity of 60 kmt-per-year); an aluminum fluoride plant in Point Comfort, TX; a paste plant and cast house in Massena, NY; and one potline at the smelter in Warrick, IN (capacity of 40 kmt-per-year). 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 included current market fundamentals, cost competitiveness, other existing idle capacity, required future capital investment, and restart costs, as well as the elimination of ongoing holding 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 \$8 (\$5 after-tax and noncontrolling interests), which was recorded in COGS. The other exit costs of \$46 represent \$30 (\$19 after-tax and noncontrolling interests) in asset retirement obligations and \$14 (\$9 after-tax) in environmental remediation, both triggered by the decision to permanently shutdown and demolish these structures, and \$2 (\$1 after-tax and noncontrolling interests) in other related costs.

As of December 31, 2010, approximately 630 of the 830 employees were terminated. The remaining terminations are expected to be completed by the end of 2011. In 2010, cash payments of \$21 were made against layoff reserves related to 2010 restructuring programs.

**2009 Actions** In 2009, Alcoa recorded Restructuring and other charges of \$237 (\$151 after-tax and noncontrolling interests), which were comprised of the following components: \$177 (\$121 after-tax and noncontrolling interests) for the layoff of approximately 6,600 employees (2,980 in the Engineered Products and Solutions segment; 2,190 in the Flat-Rolled Products segment; 1,080 in the Primary Metals segment; 180 in the Alumina segment; and 170 in Corporate) to address the impact of the global economic downturn on Alcoa's businesses and a \$9 (\$6 after-tax) curtailment charge due to the remeasurement of pension plans as a result of the workforce reductions; \$41 (\$20 after-tax) in adjustments to the Global Foil and Transportation Products Europe businesses held for sale due to unfavorable foreign currency movements for both businesses and a change in the estimated fair value for the Global Foil business

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and \$13 (\$11 after-tax) in other asset impairments; \$18 (\$12 after-tax) for the write-off of previously capitalized third-party costs related to potential business acquisitions due to the adoption of changes to accounting for business combinations and net charges of \$19 (\$10 after-tax and noncontrolling interests) for various other items, such as accelerated depreciation and lease termination costs for shutdown facilities; and \$40 (\$29 after-tax and noncontrolling interests) for reversals of previously recorded layoff and other exit costs due to normal attrition and changes in facts and circumstances.

As of December 31, 2010, approximately 5,500 of the 6,000 employees were terminated. The total number of employees associated with 2009 restructuring programs was updated to reflect changes in plans (e.g., the previously mentioned new power agreement at the Portovesme smelter in Italy see 2010 Activity above), natural attrition, and other factors. The remaining terminations are expected to be completed by the end of 2011. In 2010 and 2009, cash payments of \$60 and \$62, respectively, were made against layoff reserves related to 2009 restructuring programs.

**2008 Actions** In late 2008, Alcoa took specific actions to reduce costs and strengthen its portfolio, partly due to the economic downturn. Such actions included targeted reductions, curtailments, and plant closures and consolidations, which will reduce headcount by approximately 5,300, resulting in layoff charges of \$138 (\$98 after-tax and noncontrolling interests), asset impairments of \$156 (\$88 after-tax and noncontrolling interests), and other exit costs of \$58 (\$57 after-tax). The significant components of these actions were as follows:

As a result of market conditions, the Primary Metals segment reduced production by 483 thousand metric tons (kmt) and the Alumina segment reduced production by a total of 1,500 kmt (fully implemented in early 2009; further reductions occurred later in 2009). These production curtailments as well as targeted reductions will result in the elimination of approximately 1,110 positions totaling \$23 in layoff costs. Asset impairments of \$116 related to these two segments were also recognized, including the write off of \$84 in engineering costs related to a 1,500 kmt planned expansion of Jamalco's Clarendon, Jamaica refinery.

The Flat-Rolled Products segment was restructured through the following actions:

Restructuring and downsizing of the Mill Products businesses in Europe and North America, resulting in severance charges of \$53 for the reduction of approximately 850 positions;

Alignment of production with demand at operations in Russia, through the elimination of approximately 1,400 positions resulting in severance charges of \$7;

The shutdown of the Foil business in Bohai, resulting in severance charges of \$6 for the reduction of approximately 400 positions, asset impairments of \$24, and other exits costs of \$54, primarily related to lease termination costs.

The Engineered Products and Solutions segment was restructured through the following actions:

Exiting of the Auto Cast Wheel business, through the closure of the only remaining facility, which employed approximately 270, by June 2009 for severance costs of \$2;

Consolidation of operations in the Building and Construction Systems business to maximize operating efficiencies and align capacity with the decline in the commercial building and construction markets, resulting in severance charges of \$6 for the elimination of approximately 400 positions;

Alignment of production with demand across the Power and Propulsion business, resulting in the reduction of approximately 250 positions for a cost of \$6;

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Optimization of the Global Hard Alloy Extrusion operations, resulting in severance charges of \$13 for a headcount reduction of approximately 240 and asset impairments of \$3;

Other severance charges of \$8 for the elimination of approximately 250 positions, asset impairments of \$13, and other exit costs of \$1.

In order to reduce overhead serving various businesses, approximately 130 positions were eliminated at Corporate, resulting in severance charges of \$14 and other exits costs of \$3.

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In addition to the above actions, Alcoa intends to sell its Global Foil (the Sabiñánigo, Spain and Shanghai, China plants were sold in late 2009) and Transportation Products Europe (sold in 2010) businesses in order to streamline its portfolio. As a result of this decision, the assets and related liabilities of the Global Foil and Transportation Products Europe businesses were classified as held for sale. Asset impairments of \$129 (\$100 after-tax) and \$52 (\$49 after-tax) were recognized to reflect the estimated fair values of the Global Foil and Transportation Products Europe businesses, respectively. Also, Alcoa and Orkla ASA agreed to exchange their stakes in the Sapa AB and Elkem Aluminium ANS joint ventures. This portfolio action resulted in an impairment charge of \$333 (\$223 after-tax) to reflect the estimated fair value of Alcoa's investment in Sapa AB.

Earlier in 2008, Alcoa recorded \$48 (\$31 after-tax) in charges, which consisted of \$44 (\$29 after-tax) for the layoff of approximately 870 employees and related curtailment of postretirement benefits and \$4 (\$2 after-tax) for other exit costs, associated with the complete production curtailment of the Rockdale, TX smelter (267 kmt) due to ongoing power supply issues with Rockdale's onsite supplier and the uneconomical power that Alcoa was forced to purchase in the open market as a result of such issues. Also during 2008, Alcoa recorded a loss of \$43 (\$32 after-tax) on the sale of its Packaging and Consumer businesses. The remaining net charges in 2008 were comprised of \$1 (\$1 after-tax and noncontrolling interests) for layoff related to a reduction in headcount of approximately 30, \$4 for other exit costs (\$6 after-tax), and \$23 (\$15 after-tax and noncontrolling interests) for reversals of previously recorded costs, slightly more than half of which related to the reversal of a reserve related to a shutdown facility.

As of December 31, 2010, the terminations associated with 2008 restructuring programs were essentially complete. The total number of employees associated with 2008 restructuring programs was updated during 2010 to reflect changes in plans, natural attrition, and other factors resulting in terminations of approximately 6,000 (previously 6,200). In 2010 and 2009, cash payments of \$12 and \$112, respectively, were made against layoff reserves related to 2008 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:

	2010	2009	2008
Alumina	\$ 12	\$ 5	\$ 89
Primary Metals	145	30	94
Flat-Rolled Products	(11)	65	273
Engineered Products and Solutions	18	64	104
Packaging and Consumer	-	-	45
Segment total	164	164	605
Corporate	43	73	334
Total restructuring and other charges	\$ 207	\$ 237	\$ 939

**Interest Expense** Interest expense was \$494 in 2010 compared with \$470 in 2009, resulting in an increase of \$24, or 5%. The increase was principally caused by a \$69 decline in interest capitalized, mainly the result of placing the Juruti and São Luís growth projects in service during the second half of 2009; and a \$14 net charge related to the early retirement of various outstanding notes (\$42 in purchase premiums paid partially offset by a \$28 gain for in-the-money interest rate swaps); mostly offset by a 7% lower average debt level, primarily due to the absence of commercial paper resulting from Alcoa's improved liquidity position; and lower amortization expense of financing costs, principally related to the fees paid (fully amortized in October 2009) for the former \$1,900 364-day senior unsecured revolving credit facility.

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Interest expense was \$470 in 2009 compared with \$407 in 2008, resulting in an increase of \$63, or 15%. The increase was primarily due to a 10% higher average debt level, mostly the result of \$575 in convertible notes issued in March 2009 and increased borrowings on loans in Brazil (began in April 2008) related to the Juruti, São Luís, and Estreito growth projects; and a significant increase in the amortization of debt costs, mainly due to a \$66 beneficial conversion option related to the convertible notes and \$43 in fees paid for the \$1,900 364-day senior unsecured revolving credit facility (entered into in October 2008 and expired in October 2009); both of which were slightly offset by a decrease in the weighted average interest rate of Alcoa's debt portfolio.

**Other Expenses (Income), net** Other expenses, net was \$5 in 2010 compared with Other income, net of \$161 in 2009. The change of \$166 was mostly due to the absence of a \$188 gain on the Elkem/Sapa AB exchange transaction, a \$92 gain related to the acquisition of a BHP Billiton subsidiary in the Republic of Suriname, and a \$22 gain on the sale of property in Vancouver, WA; net foreign currency losses; and a smaller improvement in the cash surrender value of company-owned life insurance; partially offset by the absence of both a \$182 realized loss on the sale of the Shining Prospect investment and an equity loss related to Alcoa's former 50% equity stake in Elkem; and a net favorable change of \$25 in mark-to-market derivative contracts.

Other income, net was \$161 in 2009 compared with \$59 in 2008. The increase of \$102 was mainly the result of a \$188 gain on the Elkem/Sapa AB exchange transaction; net foreign currency gains due to a stronger U.S. dollar; net gains related to the improvement in the cash surrender value of company-owned life insurance; a \$92 gain related to the acquisition of a BHP Billiton subsidiary in the Republic of Suriname; and a \$22 gain on the sale of property in Vancouver, WA. These positive impacts were partially offset by a \$182 realized loss on the sale of the Shining Prospect investment; a decline in the value of mark-to-market derivative contracts; a decrease in equity income related to Alcoa's share of the results of Elkem, Sapa AB, and Shining Prospect prior to the exchange and sale of these investments; the absence of a 2008 negotiated partial refund of an indemnification payment (\$39); and an estimated loss on excess power at the Ferndale, WA smelter (\$30).

**Income Taxes** Alcoa's effective tax rate was 26.9% (provision on income) in 2010 compared with the U.S. federal statutory rate of 35%. The effective tax rate differs from the U.S. federal statutory rate primarily due to foreign income taxed in lower rate jurisdictions, a \$57 discrete income tax benefit for the reversal of a valuation allowance as a result of previously restricted net operating losses of a foreign subsidiary now available, a \$24 discrete income tax benefit related to a Canadian provincial tax law change permitting a tax return to be filed in U.S. dollars, and a \$13 net discrete income tax benefit for various other items, partially offset by a \$79 discrete income tax charge as a result of a change in the tax treatment of federal subsidies received related to prescription drug benefits provided under certain retiree health care benefit plans that were determined to be actuarially equivalent to Medicare Part D and a \$19 discrete income tax charge based on settlement discussions of several matters with international taxing authorities (this amount represents a decrease to Alcoa's unrecognized tax benefits).

Alcoa's effective tax rate was 38.3% (benefit on a loss) in 2009 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 a \$12 income tax benefit related to the noncontrolling interests' share of the gain associated with the acquisition of a BHP Billiton subsidiary in the Republic of Suriname and the following discrete tax items: a \$71 benefit for the reorganization of an equity investment; a \$34 benefit for the reversal of a valuation allowance on foreign deferred tax assets; a \$31 benefit for a tax rate change (from 15% to 18%) in Iceland; a \$31 benefit related to a Canadian tax law change allowing a tax return to be filed in U.S. dollars; a \$10 benefit related to a change in the sale structure of two locations included in the Global Foil business than originally anticipated; and a \$7 benefit related to the Elkem/Sapa AB exchange transaction. Partially offsetting these benefits were items related to smelter operations in Italy, which included a \$41 valuation allowance placed on existing deferred tax assets and charges not tax benefitted as follows: \$250 related to a recent decision by the European Commission on electricity pricing, \$15 for environmental remediation, and \$15 for layoffs.

Alcoa's effective tax rate was 43.2% (provision on income) in 2008 compared with the U.S. federal statutory rate of 35%. The effective tax rate differs from the U.S. federal statutory rate primarily due to the following income tax charges: \$73 for the asset impairments included in the 2008 restructuring program; \$28 due to a decrease in deferred

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tax assets of the Iceland operations as a result of an applicable tax rate change (from 18% to 15%); a net \$19 associated with the sale of the Packaging and Consumer businesses, mainly due to the allocation of sale proceeds to higher tax rate jurisdictions as opposed to the allocation previously contemplated, somewhat offset by changes in tax assumptions surrounding transaction costs and the finalization of the divestiture of certain foreign locations. These charges were partially offset by foreign income taxed in lower rate jurisdictions and a \$20 discrete income tax benefit related to the filing of the 2007 U.S. income tax return.

Management anticipates that the effective tax rate in 2011 will be approximately 30%. However, changes in the current economic environment, tax legislation, currency fluctuations, and the results of operations in certain taxing jurisdictions may cause this estimated rate to fluctuate.

**Noncontrolling Interests** Net income attributable to noncontrolling interests was \$138 in 2010 compared with \$61 in 2009. The increase of \$77 was mostly due to higher earnings at AWAC, which is owned 60% by Alcoa and 40% by Alumina Limited. The improved earnings at AWAC were attributed primarily to a continued rise in realized prices, partially offset by net unfavorable foreign currency movements due to a weaker U.S. dollar, higher depreciation expense and operating costs related to the Juruti and São Luís growth projects placed into service in the second half of 2009, and the absence of a gain recognized on the acquisition of a BHP Billiton subsidiary in the Republic of Suriname.

Net income attributable to noncontrolling interests was \$61 in 2009 compared with \$221 in 2008. The decline of \$160 was principally due to lower earnings at AWAC, mainly driven by a significant drop in realized prices, somewhat offset by the gain related to the acquisition of a BHP Billiton subsidiary in the Republic of Suriname and the absence of the impact of the 2008 gas outage in Western Australia.

**Loss From Discontinued Operations** Loss from discontinued operations in 2010 was \$8 comprised of an additional loss of \$6 (\$9 pretax) related to the wire harness and electrical portion of the EES business as a result of a contract settlement with a former customer of this business and an additional loss of \$2 (\$4 pretax) related to the electronics portion of the EES business for the settling of working capital, which was not included in the divestiture transaction.

Loss from discontinued operations in 2009 was \$166 comprised of a \$129 (\$168 pretax) loss on the divestiture of the wire harness and electrical portion of the EES business, a \$9 (\$13 pretax) loss on the divestiture of the electronics portion of the EES business, and the remainder was for the operational results of the EES business prior to the divestitures.

Loss from discontinued operations in 2008 was \$303 comprised of asset impairments of \$162 (\$225 pretax) to reflect the estimated fair value of the EES business and a net operating loss of \$141 (\$199 pretax), which included restructuring charges of \$39 (\$53 pretax) for headcount reductions of approximately 6,200 and a charge of \$16 (\$25 pretax) for obsolete inventory.

In late 2008, Alcoa reclassified the EES business to discontinued operations based on the decision to divest the business. The divestiture of the wire harness and electrical portion of the EES business was completed in June 2009 and the divestiture of the electronics portion of the EES business was completed in December 2009. The results of the Engineered Products and Solutions segment were reclassified to reflect the movement of the EES business into discontinued operations.

**Segment Information**

Alcoa's operations consist of four worldwide reportable segments: Alumina, Primary Metals, Flat-Rolled Products, and Engineered Products and Solutions (the Packaging and Consumer segment no longer contains any operations as the businesses within this segment were divested during 2008). 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;

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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 and other metal adjustments, 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.

ATOI for all reportable segments totaled \$1,424 in 2010, \$(234) in 2009, and \$2,199 in 2008. 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, 2010.

**Alumina**

	2010	2009	2008
Alumina production (kmt)	15,922	14,265	15,256
Third-party alumina shipments (kmt)	9,246	8,655	8,041
Third-party sales	\$ 2,815	\$ 2,161	\$ 2,924
Intersegment sales	2,212	1,534	2,803
Total sales	\$ 5,027	\$ 3,695	\$ 5,727
ATOI	\$ 301	\$ 112	\$ 727

This segment (known as upstream operations) consists of Alcoa's worldwide alumina 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.

In 2010, alumina production increased by 1,657 kmt compared to 2009. The increase was mainly driven by the Point Comfort, TX refinery as most of the 1,500 kmt-per-year curtailment initiated between the fourth quarter of 2008 and the first quarter of 2009 has been restored. In addition, production included the continued ramp-up of the São Luís, Brazil refinery expansion, which began in late 2009 (the Alumina segment's share is approximately 1,100 kmt-per-year) and the 45% interest in the Suralco (Suriname) refinery acquired in mid-2009.

In 2009, alumina production decreased by 991 kmt compared to 2008. The reduction was mostly the result of the effects of curtailments initiated in late 2008 through early 2009, which included approximately 1,500 kmt-per-year at the Point Comfort refinery and approximately 480 kmt-per-year at the Suralco refinery (represented AWAC's previous 55% ownership interest at the time of curtailment - total curtailed is approximately 870 kmt). Partially offsetting the curtailments was increased production at the following refineries (all set production records in 2009): Jamalco (Jamaica), Pinjarra and Wagerup (Australia), and São Luis, where ramp-up of the 2,100 kmt expansion began in late 2009. Production also increased due to additional capacity of approximately 600 kmt from the acquisition (total acquired was approximately 990 kmt 390 was curtailed) of BHP Billiton's 45% interest in Suralco on July 31, 2009 (100% of the Suralco refinery's operations were reflected in this segment beginning August 1, 2009).

Third-party sales for the Alumina segment rose 30% in 2010 compared with 2009, primarily related to a 29% increase in realized prices, driven by significantly higher LME prices, coupled with a 7% increase in volumes. Third-party sales for this segment declined 26% in 2009 compared with 2008, principally due to a 35% drop in realized prices, driven by significantly lower LME prices, and unfavorable foreign currency movements due to a weaker Australian dollar, both of which were somewhat offset by an increase in volumes.



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Intersegment sales for the Alumina segment climbed 44% in 2010 compared with 2009, mainly as a result of higher realized prices and an increase in demand from the Primary Metals segment. Intersegment sales for this segment dropped 45% in 2009 compared with 2008, mostly due to a drop in realized prices and a reduction in demand from the Primary Metals segment.

ATOI for the Alumina segment improved \$189 in 2010 compared with 2009, mostly due to the significant increase in realized prices and continued benefits of cost savings initiatives, particularly lower caustic costs. These positive impacts were partially offset by net unfavorable foreign currency movements due to a weaker U.S. dollar, particularly against the Australian dollar; higher depreciation expense and operating costs (includes the impact of a failure of a ship unloader) associated with the start-up of the Juruti bauxite mine and the São Luís refinery expansion, both of which began in the second half of 2009; the absence of a \$60 gain recognized on the acquisition of BHP Billiton's interest in Suralco; and continued higher fuel oil costs.

ATOI for this segment declined 85% in 2009 compared with 2008, principally due to the significant drop in realized prices; a tax settlement related to an equity investment in Brazil (\$30); and an increase in depreciation expense as a result of growth projects placed into service mid-to-late 2009 in Brazil (Juruti bauxite mine and São Luis refinery); all of which was partially offset by net procurement and overhead cost savings across most regions, net favorable foreign currency movements due to a stronger U.S. dollar, a \$60 gain recognized on the acquisition of BHP Billiton's interest in Suralco, and a positive impact related to the 2008 gas outage in Western Australia (absence of \$69 in costs partially offset by \$19 less in insurance recoveries).

In 2011, productivity improvements will continue to be a focus but higher maintenance costs due to scheduled outages in Australia and Brazil are expected. Also, it is anticipated that the ramp-up of São Luís will stabilize without additional significant, non-recurring operating costs.

**Primary Metals**

	2010	2009	2008
Aluminum production (kmt)	3,586	3,564	4,007
Third-party aluminum shipments (kmt)	2,845	3,038	2,926
Alcoa's average realized price per metric ton of aluminum	\$ 2,356	\$ 1,856	\$ 2,714
Third-party sales	\$ 7,070	\$ 5,252	\$ 8,021
Intersegment sales	2,597	1,836	3,927
Total sales	\$ 9,667	\$ 7,088	\$ 11,948
ATOI	\$ 488	\$ (612)	\$ 931

This segment (known as upstream operations) consists of Alcoa'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, aluminum traders, and commodity markets. Results from the sale of aluminum powder, scrap, and excess power are also included in this segment, as well as the results of aluminum derivative contracts and buy/resell activity. Primary aluminum produced by Alcoa and used internally is transferred to other segments at prevailing market prices. The sale of primary aluminum represents more than 90% of this segment's third-party sales. Buy/resell activity refers to when this segment purchases metal from external or internal sources and resells such metal to external customers or the midstream and downstream segments in order to maximize smelting system efficiency and to meet customer requirements.

At December 31, 2010, Alcoa had 878 kmt of idle capacity on a base capacity of 4,518 kmt. In 2010, idle capacity decreased 356 kmt compared to 2009 due to the restart of 32 kmt of previously curtailed production capacity at a smelter in Brazil, the decision to permanently curtail the smelters located in Frederick, MD (195 kmt-per-year) and Badin, NC (60 kmt-per-year) and one potline (40 kmt-per-year) at the smelter in Warrick, IN, and the restart of 61 kmt of previously curtailed production capacity at various smelters, slightly offset by the full curtailment of the Fusina

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smelter (44 kmt-per-year) in Italy as a result of uneconomical power prices. In June 2010, Alcoa halted production at the Avilés smelter (93 kmt-per-year) in Spain due to torrential flooding. Production was restarted a few months after the flood and the smelter was at full operating rate by the end of 2010. Base capacity dropped 295 kmt between December 31, 2010 and 2009 due to the previously mentioned permanent curtailments. The decision to permanently curtail these facilities was made after a comprehensive strategic analysis was performed to determine the best course of action for each facility. Factors leading to this decision included current market fundamentals, cost competitiveness, other existing idle capacity, required future capital investment, and restart costs, as well as the elimination of ongoing holding costs.

At December 31, 2009, Alcoa had 1,234 kmt of idle capacity on a base capacity of 4,813 kmt. In 2009, idle capacity increased by 480 kmt compared to 2008 due to the completion of targeted curtailment reductions, including the Tennessee smelter (215 kmt-per-year), the Massena East, NY smelter (125 kmt-per-year), and 140 kmt at various other smelters, in response to the significant decline in LME prices and aluminum demand both as a result of the then global economic downturn. Base capacity rose by 282 kmt at December 31, 2009 as compared to December 31, 2008 due to the March 31, 2009 acquisition of two smelters in Norway, in which Alcoa previously held a 50% equity interest.

In 2010, aluminum production increased by 22 kmt, mostly due to the smelters located in Norway, as well as a number of small increases at other smelters, but was virtually offset by the smelter curtailments in Tennessee, Massena East, and Fusina and the halted production at the Avilés smelter. In 2009, aluminum production declined 443 kmt, mainly the result of the effects of smelter curtailments that began mid-2008, including the smelters in Rockdale (267 kmt-per-year), Tennessee, and Massena East, all of which was partially offset by an increase in production at the Iceland smelter (344 kmt-per-year), as this smelter was not at full capacity until April 2008, and the acquisition of the Lista (94 kmt-per-year) and Mosjøen (188 kmt-per-year) smelters in Norway.

Third-party sales for the Primary Metals segment climbed 35% in 2010 compared with 2009, mainly due to a 27% rise in average realized prices, driven by 31% higher average LME prices, and the acquisition of the smelters located in Norway (increase of \$332), slightly offset by a decline in both buy/resell activity and volumes. Third-party sales for this segment decreased 35% in 2009 compared with 2008, mostly the result of a 32% drop in realized prices, driven by a 35% decline in LME prices, slightly offset by sales from the acquired smelters in Norway (increase of \$452).

Intersegment sales for the Primary Metals segment rose 41% in 2010 compared with 2009, mainly as a result of an increase in realized prices, driven by the higher LME, and an increase in buy/resell activity. Intersegment sales for this segment declined 53% in 2009 compared with 2008, mostly due to a drop in realized prices and a decline in volume due to lower demand from the midstream and downstream operations.

ATOI for the Primary Metals segment improved \$1,100 in 2010 compared with 2009, principally related to the significant increase in realized prices; the absence of a charge related to a European Commission's decision on electricity pricing for smelters in Italy (\$250); and continued benefits from cost savings initiatives, particularly coke and pitch; somewhat offset by much higher alumina and energy prices; the absence of a gain related to Alcoa's acquisition of the other 50% of the smelters in Norway (\$112); and net unfavorable foreign currency movements due to a weaker U.S. dollar.

ATOI for this segment declined \$1,543 in 2009 compared with 2008, primarily due to the significant drop in realized prices; a charge related to a European Commission's decision on electricity pricing for smelters in Italy (\$250); a decline in intersegment sales volume; the impact of curtailing operations; and additional power costs related to smelters in Italy as a result of the termination of the then existing power tariff structure under legislative authority of the Italian Parliament (\$15); all of which was partially offset by procurement and overhead cost savings across all regions; lower costs for alumina; net favorable foreign currency movements due to a stronger U.S. dollar; and a gain related to the acquisition of two smelters in Norway (\$112).

In 2011, the following trends are expected to continue: pricing will follow a 15-day lag on the LME, higher energy and raw material costs, and productivity improvements. Also, Alcoa plans to restart certain idled potlines at three smelters located in the U.S.: Massena East (three potlines or 125 kmt-per-year); Wenatchee, WA (one potline or 43 kmt-per-year); and Ferndale, WA (Intalco: 36 kmt-per-year). These restarts are expected to increase Alcoa's aluminum production by 137 kmt during 2011 and by 204 kmt on an annual basis thereafter and are occurring to help meet anticipated growth in aluminum demand and to meet obligations outlined in power agreements with energy providers.

**Table of Contents****Flat-Rolled Products**

	2010	2009	2008
Third-party aluminum shipments (kmt)	1,658	1,831	2,221
Third-party sales	\$ 6,277	\$ 6,069	\$ 8,966
Intersegment sales	180	113	218
Total sales	\$ 6,457	\$ 6,182	\$ 9,184
ATOI	\$ 220	\$ (49)	\$ (3)

This segment's (known as midstream operations) principal business is the production and sale of aluminum plate and sheet. A small portion of this segment's operations still relate to foil (most of this business was exited during 2009 and 2010 through shutdown actions and divestitures) produced from 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. This segment also includes sheet and plate used in the aerospace, commercial transportation, building and construction, and distribution markets (mainly used in the production of machinery and equipment and consumer durables), which is sold directly to customers and through distributors. Approximately one-half of the third-party sales in this segment consist of RCS, while the other one-half of third-party sales are derived from sheet and plate and foil used in industrial markets. 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 Flat-Rolled Products segment increased 3% in 2010 compared with 2009, principally due to better pricing and higher volumes in most key end markets, partially offset by lower volumes in the segment's can sheet business, largely due to a decision in early 2010 to curtail sales to a North American customer and the absence of sales (\$125 in 2009) from two foil plants (Spain and China), which were divested in late 2009. Third-party sales for this segment declined 32% in 2009 compared with 2008, primarily due to a drop in prices, attributable to unfavorable changes in the variable components of certain customer contracts, and a reduction in volumes across most businesses, both of which were mostly the result of weak end markets in Europe and North America, and unfavorable foreign currency movements due to a weaker euro and Australian dollar.

ATOI for the Flat-Rolled Products segment improved \$269 in 2010 compared with 2009, mainly the result of both favorable pricing and increased productivity across all businesses due to cost savings initiatives, including the operations in Russia as results turned profitable. ATOI for this segment fell \$46 in 2009 compared with 2008, primarily as a result of reduced volumes across most businesses; the previously mentioned drop in prices; and an increase in depreciation expense as a result of the new coating line commissioned in Samara (Russia) and the new flat-rolled product facility in Bohai (China); all of which were mostly offset by procurement and overhead cost savings and net favorable foreign currency movements due to a stronger U.S. dollar.

In 2011, the following trends are expected to continue: strengthening demand in most regions around the globe, higher energy costs, and productivity improvements. Also, improvements in product mix are anticipated as a result of the optimization of this segment's portfolio.

**Engineered Products and Solutions**

	2010	2009	2008
Third-party aluminum shipments (kmt)	197	180	257
Third-party sales	\$ 4,584	\$ 4,689	\$ 6,199
ATOI	\$ 415	\$ 315	\$ 533

This segment (known as downstream operations) includes titanium, aluminum, and super alloy investment castings; forgings and fasteners; aluminum wheels; integrated aluminum structural systems; and architectural extrusions used in the aerospace, automotive, building and construction, commercial transportation, and power generation markets. These products are sold directly to customers and through distributors. Additionally, hard alloy extrusions products, which are also sold directly to customers and through distributors, serve the distribution, aerospace, automotive, and commercial transportation markets. In 2008, the Electrical and Electronic Solutions business was classified as discontinued operations; therefore, all periods presented exclude the results of this business (this business was sold during 2009).



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In July 2010, Alcoa completed an acquisition of the commercial building and construction business of a privately-held company, Traco, for \$77. This business, located in Cranberry, Pennsylvania, employing 650 people, is a premier manufacturer of windows and doors for the commercial building and construction market and generated sales of approximately \$100 in 2009. The assets and liabilities of this business were included in the Engineered Products and Solutions segment as of the end of July 2010 and this business' results of operations were included in this segment since the beginning of August 2010.

Third-party sales for the Engineered Products and Solutions segment decreased 2% in 2010 compared with 2009, primarily due to unfavorable pricing and mix across all businesses; lower volumes for the fasteners, power and propulsion, and building and construction businesses; the absence of sales related to the divestiture of the Transportation Products Europe business in April 2010 (decrease of \$50); and unfavorable foreign currency movements due to a weaker euro. These negative impacts were mostly offset by higher volumes in the wheels and forgings businesses and sales from the newly acquired business mentioned above (\$37). Third-party sales for this segment declined 24% in 2009 compared with 2008, mostly due to lower volumes (aluminum and nonaluminum) across all businesses because of weak end markets, lower pricing in the building and construction sector, and unfavorable foreign currency movements due to a weaker euro.

ATOI for the Engineered Products and Solutions segment climbed 32% in 2010 compared with 2009, mainly due to productivity improvements and cost reduction initiatives across all businesses, partially offset by unfavorable pricing and mix. ATOI for this segment fell 41% in 2009 compared with 2008, principally the result of lower volumes across all businesses and lower pricing, partially offset by procurement and overhead cost savings realized in all businesses.

In 2011, improvements in key end markets, such as aerospace and commercial transportation, are anticipated, while productivity improvements are expected to continue.

**Packaging and Consumer**

	2010	2009	2008
Third-party aluminum shipments (kmt)	-	-	19
Third-party sales	\$ -	\$ -	\$ 516
ATOI	\$ -	\$ -	\$ 11

The businesses within this segment were sold to Rank Group Limited in 2008; therefore, this segment no longer contains any operations. Prior to the sale of these businesses, this segment included consumer, foodservice, and flexible packaging products; food and beverage closures; and plastic sheet and film for the packaging industry. The principal products in this segment included aluminum foil; plastic wraps and bags; plastic beverage and food closures; flexible packaging products; thermoformed plastic containers; and extruded plastic sheet and film. Consumer products were marketed under brands including Reynolds Wrap®, Diamond®, Baco®, and Cut-Rite®. Seasonal increases generally occurred in the second and fourth quarters of the year for such products as consumer foil and plastic wraps and bags, while seasonal slowdowns for closures generally occurred in the fourth quarter of the year. Products were generally sold directly to customers, consisting of supermarkets, beverage companies, food processors, retail chains, and commercial foodservice distributors.

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

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

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

	2010	2009	2008
Total segment ATOI	\$ 1,424	\$ (234)	\$ 2,199
Unallocated amounts (net of tax):			
Impact of LIFO	(16)	235	(7)
Interest expense	(321)	(306)	(265)
Noncontrolling interests	(138)	(61)	(221)
Corporate expense	(291)	(304)	(328)
Restructuring and other charges	(134)	(155)	(693)
Discontinued operations	(8)	(166)	(303)
Other	(262)	(160)	(456)
Consolidated net income (loss) attributable to Alcoa	\$ 254	\$ (1,151)	\$ (74)

The significant changes in the reconciling items between total segment ATOI and consolidated net income (loss) attributable to Alcoa for 2010 compared with 2009 consisted of:

a change in the Impact of LIFO due to higher prices for alumina and metal, both of which were driven by a significant rise in LME prices, and a significantly smaller reduction in LIFO inventory quantities;

an increase in Interest expense, primarily due to a decline in interest capitalized (mainly the result of placing the Juruti and São Luís growth projects in service during the second half of 2009) and a \$9 net charge related to the early retirement of various outstanding notes (\$27 in purchase premiums paid partially offset by an \$18 gain for in-the-money interest rate swaps), mostly offset by a 7% lower average debt level (primarily due to the absence of commercial paper resulting from Alcoa's improved liquidity position) and lower amortization expense of financing costs (principally related to the fees paid (fully amortized in October 2009) for the former \$1,900 364-day senior unsecured revolving credit facility);

an increase in Noncontrolling interests, mainly due to higher earnings at AWAC, primarily driven by a continued rise in realized prices, partially offset by net unfavorable foreign currency movements due to a weaker U.S. dollar, higher depreciation and operating costs related to the Juruti and São Luís growth projects placed into service in the second half of 2009, and the absence of a gain recognized on the acquisition of a BHP Billiton subsidiary in the Republic of Suriname;

a decline in Corporate expense, primarily due to continued reductions in expenses for contractors and consultants, lower deferred compensation (as a result of a decline in plan performance), a decrease in bad debt expense, and a decrease in information technology expenditures, somewhat offset by an increase in labor costs (principally due to higher annual incentive and performance compensation and employee benefits costs (employer matching savings plan contributions for U.S. salaried participants were suspended during 2009));

a decrease in Restructuring and other charges, mainly due to lower layoff charges, somewhat offset by higher asset impairments and other exit costs, primarily related to the permanent shutdown and planned demolition of certain idled structures at five U.S. locations;

a change in Discontinued operations, mostly the result of the absence of both a \$129 loss (an additional \$6 loss was recognized in 2010) on the divestiture of the wire harness and electrical portion of the EES business (June 2009) and a \$9 loss on the divestiture of the electronics portion of the EES business (December 2009); and

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a change in Other, mainly due to a net income tax charge (includes discrete tax items) related to the difference in the consolidated effective tax rate and the estimated tax rates applicable to the segments, net foreign currency losses, the absence of a \$21 favorable adjustment for the finalization of the estimated fair value of the former Sapa AB joint venture, and a smaller improvement in the cash surrender value of company-owned life insurance; partially offset by the absence of a \$118 realized loss on the sale of the former Shining Prospect investment and favorable changes in mark-to-market derivative contracts.

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The significant changes in the reconciling items between total segment ATOI and consolidated net loss attributable to Alcoa for 2009 compared with 2008 consisted of:

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

an increase in Interest expense, primarily due to a 10% higher average debt level (mostly the result of \$575 in convertible notes issued in March 2009 and increased borrowings on loans in Brazil (began in April 2008) related to the Juruti, São Luís, and Estreito growth projects) and a significant increase in the amortization of debt costs (mainly due to a \$66 beneficial conversion option related to the convertible notes and \$43 in fees paid for the \$1,900 364-day senior unsecured revolving credit facility (entered into in October 2008 and expired in October 2009)), both of which were slightly offset by a decrease in the weighted average interest rate of Alcoa's debt portfolio;

a decrease in Noncontrolling interests, principally due to lower earnings at AWAC, mainly driven by a significant drop in realized prices, somewhat offset by the gain related to the acquisition of a BHP Billiton subsidiary in the Republic of Suriname and the absence of the impact of the 2008 gas outage in Western Australia;

a decline in Corporate expense, primarily due to reductions in labor costs (mainly as a result of implemented severance programs) and decreases in expenses for travel, contractors and consultants, information technology, and various other administrative items as part of Alcoa's cost reduction initiatives, all of which was partially offset by an increase in deferred compensation, mostly the result of the plans' improved performance;

a change in Restructuring and other charges, reflecting, in 2009, \$20 in adjustments to the Global Foil and Transportation Products Europe businesses held for sale due to unfavorable foreign currency movements for both businesses and a change in the estimated fair value for the Global Foil business; \$12 for the write-off of previously capitalized third-party costs related to potential business acquisitions due to the adoption of changes to accounting for business combinations; and the remainder for the layoff of approximately 6,600 employees to address the impact of the global economic downturn on Alcoa's businesses and a related curtailment charge due to the remeasurement of pension plans as a result of the workforce reductions, asset impairments, accelerated depreciation and lease termination costs for shutdown facilities, and reversals of previously recorded layoff and other exit costs due to normal attrition and changes in facts and circumstances; compared with, in 2008, \$372 in asset impairments to reflect the estimated fair values of Alcoa's investment in Sapa AB and the Global Foil and Transportation Products Europe businesses, as a result of management's decision to divest these assets; a \$32 loss on the sale of the Packaging and Consumer businesses; and the remainder for the layoff of approximately 6,200 employees, additional asset impairments, and other exit costs due to the global economic downturn and curtailed operations, and the reversal of previously recorded costs, slightly more than half of which related to a shutdown facility;

a change in Discontinued operations, reflecting a \$129 loss on the divestiture of the wire harness and electrical portion of the EES business, a \$9 loss on the divestiture of the electronics portion of the EES business, and the remainder was for the operational results of the EES business prior to the divestitures in 2009, compared with asset impairments of \$162 to reflect the estimated fair value of the EES business and a net operating loss of \$141, which included restructuring charges of \$39 for headcount reductions of approximately 6,200 and a charge of \$16 for obsolete inventory, for EES in 2008; and

a change in Other, mainly due to income tax benefits related to the difference in the consolidated effective tax rate and tax rates applicable to the segments, including various discrete income tax items, net foreign currency gains due to a stronger U.S. dollar, and a \$21 adjustment for the finalization of the estimated fair value of the Sapa AB joint venture, all of which was partially offset by a \$118 realized loss on the sale of the Shining Prospect investment and the absence of a 2008 negotiated partial refund of an indemnification payment (\$24).





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### **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 takes a very disciplined approach to cash management and strengthening of its balance sheet. In 2010, management continued to face the significant challenge of maintaining this approach while providing the Company with the necessary liquidity to operate effectively as the global economy continues to recover from the economic downturn that began in 2008.

In response to changes in the economic markets across the globe in the second half of 2008, management initiated the following actions to conserve cash and preserve liquidity: greater scrutiny over the daily management of Alcoa's cash position; higher risk tolerance on raw materials with lower minimum order quantities and lower carrying levels; targeted headcount reductions across the globe; a global salary and hiring freeze (lifted at the beginning of 2010); suspension of the existing share repurchase program (expired in December 2010); and the addition of a new 364-day \$1,900 revolving credit facility (expired in October 2009). A number of changes were also made to Alcoa's capital expenditures strategy as follows: capital expenditure approval levels were lowered dramatically; growth projects were halted where it was deemed economically feasible; and all non-critical capital expenditures were stopped. Capital expenditures are deemed critical if they maintain Alcoa's compliance with the law, keep a facility operating, or satisfy customer requirements if the benefits outweigh the costs. The planned sale or shutdown of various businesses contributed positively to Alcoa's liquidity position in 2009.

In March 2009, Alcoa announced an additional series of operational and financial actions to significantly improve the Company's cost structure and liquidity. Operational actions included procurement efficiencies and overhead rationalization to reduce costs and working capital initiatives to yield significant cash improvements. Financial actions included a reduction in the quarterly common stock dividend from \$0.17 per share to \$0.03 per share, which began with the dividend paid on May 25, 2009, and the issuance of 172.5 million shares of common stock and \$575 in convertible notes that collectively yielded \$1,438 in net proceeds.

In January 2010, Alcoa announced further operational actions to not only maintain the procurement and overhead savings and working capital improvements achieved in 2009, but to improve on them throughout 2010. Also, a further reduction in capital expenditures was planned in order to achieve the level necessary to sustain operations without sacrificing the quality of Alcoa's alumina and aluminum products.

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 a discussion of long-term liquidity, see Contractual Obligations and Off-Balance Sheet Arrangements.

### **Cash from Operations**

Cash from operations in 2010 was \$2,261 compared with \$1,365 in 2009, resulting in an increase of \$896, or 66%. The improvement of \$896 was primarily due to significantly better operating results, partially offset by a \$870 cash outflow associated with working capital. The major components of the change in working capital were as follows: a \$770 increase in receivables, primarily as a result of higher sales in three of the four reportable segments and a significant rise in LME prices; a \$1,473 increase in inventories, mostly due to a build-up of levels to meet anticipated demand and higher input costs; a \$960 increase in accounts payable, trade, principally the result of higher purchasing needs and timing of vendor payments; and a \$649 increase in taxes, including income taxes, mainly due to a \$310 receivable recorded in 2009 and the receipt of \$347 in 2010, both related to a federal income tax refund for the carryback of Alcoa's 2009 net loss to prior tax years.

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Cash from operations in 2009 was \$1,365 compared with \$1,234 in 2008, resulting in an increase of \$131, or 11%. The improvement of \$131 was principally related to a \$1,639 cash inflow associated with working capital, \$395 in lower pension contributions, and a positive change of \$103 in noncurrent assets and noncurrent liabilities, all of which was mostly offset by significantly lower earnings (including the effects of non-cash income and expenses) and \$147 in cash used for discontinued operations. The components of the change in working capital were as follows: a \$443 decrease in receivables, primarily as a result of lower sales across all businesses and heightened collection efforts; a \$1,611 reduction in inventories, mostly due to lower levels of inventory on-hand in response to a significant drop in demand, curtailed production at Alcoa's refineries and smelters, and reduced costs for certain raw materials; a \$223 decline in prepaid expenses and other current assets; a \$653 decrease in accounts payable, trade, principally the result of fewer purchasing needs and declining commodity prices; a \$187 increase in accrued expenses, mainly driven by a charge related to a European Commission decision on electricity pricing for smelters; and a decline of \$172 in taxes, including income taxes, mostly due to the change from an operating income position to an operating loss position.

### **Financing Activities**

Cash used for financing activities was \$952 in 2010 compared with cash provided from financing activities of \$37 in 2009 and \$1,478 in 2008.

The use of cash in 2010 was primarily due to \$1,757 in payments on long-term debt, mostly related to \$511 for the repayment of 7.375% Notes due 2010 as scheduled, \$825 for the early retirement of all of the 6.50% Notes due 2011 and a portion of the 6.00% Notes due 2012 and 5.375% Notes due 2013, and \$287 related to previous borrowings on the loans supporting the São Luís refinery expansion and Juruti bauxite mine development in Brazil; \$125 in dividends paid to shareholders; net cash paid to noncontrolling interests of \$94, all of which relates to Alumina Limited's share of AWAC; \$66 in acquisitions of noncontrolling interests, mainly the result of the \$60 paid to redeem the convertible securities of a subsidiary that were held by Alcoa's former partner related to the joint venture in Saudi Arabia; and a change of \$44 in short-term borrowings; partially offset by \$1,126 in additions to long-term debt, \$998 for the issuance of 6.150% Notes due 2020 and \$76 related to borrowings under the loans that support the Estreito hydroelectric power project in Brazil.

The source of cash in 2009 was principally the result of \$1,049 in additions to long-term debt, mainly driven by net proceeds of \$562 from the issuance of \$575 in convertible notes and \$394 in borrowings under loans that support the São Luís refinery expansion, Juruti bauxite mine development, and Estreito hydroelectric power project in Brazil; net proceeds of \$876 from the issuance of 172.5 million shares of common stock; and net cash received from noncontrolling interests of \$340, principally related to Alumina Limited's share of AWAC; all of which was mostly offset by a \$1,535 decrease in outstanding commercial paper, partly due to tightening in the credit markets and a reduction in market availability as a result of the change in Alcoa's credit ratings in early 2009; \$228 in dividends paid to shareholders; a \$292 net change in short-term borrowings (\$1,300 was borrowed and repaid under Alcoa's \$1,900 364-day senior unsecured revolving credit facility in early 2009 and \$255 in new loans to support Alcoa Alumínio's export operations was borrowed and repaid during 2009), mostly the result of repayments of working capital loans in Spain and Asia and a \$155 decrease in accounts payable settlement arrangements; and payments on long-term debt of \$156, including \$97 related to the loans in Brazil for growth projects.

The source of cash in 2008 was primarily due to \$2,253 in additions to long-term debt, mainly driven by net proceeds of \$1,489 from the July 2008 public debt offering and \$721 in borrowings under the loans in Brazil for growth projects; a \$679 increase in outstanding commercial paper to support operations and capital spending; net cash received from noncontrolling interests of \$348, principally related to Alumina Limited's share of AWAC; and \$177 in proceeds from employees exercising their stock options; all of which was partially offset by \$1,082 for the repurchase of common stock; \$556 in dividends paid to shareholders; payments on long-term debt of \$204, mainly due to a repayment of \$150 for 6.625% Notes due March 2008; and a \$96 net change in short-term borrowings, mostly the result of a \$78 decrease in accounts payable settlement arrangements.

Alcoa maintains a Five-Year Revolving Credit Agreement, dated as of October 2, 2007 (the "Credit Agreement"), with a syndicate of lenders and issuers named therein. The Credit Agreement provides for a senior unsecured revolving

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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, including support of Alcoa's commercial paper program. Subject to the terms and conditions of the Credit Agreement, Alcoa may from time to time request increases in lender commitments under the Credit Facility, not to exceed \$500 in aggregate principal amount, and may also request the issuance of letters of credit, subject to a letter of credit sub-limit of \$500 under the Credit Facility. At December 31, 2010, the capacity of the Credit Facility was \$3,425 (original amount was \$3,250). In October 2008, Lehman Commercial Paper Inc. (LCPI), a lender under the Credit Agreement with \$150 in commitments, filed for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code. It is not certain if LCPI will honor its obligations under the Credit Agreement. The total capacity of the Credit Facility, excluding LCPI's commitment, is \$3,275.

The Credit Facility matures on October 2, 2012, unless extended or earlier terminated in accordance with the provisions of the Credit Agreement. Alcoa may make two one-year extension requests during the term of the Credit Facility, with any extension being subject to the lender consent requirements set forth in the Credit Agreement. In order to maintain the Credit Facility, Alcoa pays a fee of 0.125% per annum, based on Alcoa's long-term debt ratings as of December 31, 2010, of the total commitment.

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 (i) a base rate or (ii) a rate equal to LIBOR plus an applicable margin based on the credit ratings of Alcoa's outstanding senior unsecured long-term debt. The applicable margin on LIBOR loans will be 0.475% per annum based on Alcoa's long-term debt ratings as of December 31, 2010. 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.

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 under the Credit Facility at December 31, 2010 and 2009. Also, no amounts were borrowed under the Credit Facility during 2010 and 2009.

On October 14, 2008, Alcoa entered into a Revolving Credit Agreement (RCA-3) with a syndicate of lenders. RCA-3 provided a \$1,150 senior unsecured revolving credit facility (RCF-3), which matured on October 12, 2009. In October and November 2008, Alcoa increased the capacity of RCF-3 by \$500 and \$250, respectively, as provided for under RCA-3. Alcoa paid a total of \$43 in financing costs, which were deferred and amortized to interest expense over the term of the facility, for the initial capacity under RCF-3 and for the \$750 in increased capacity. In early 2009, Alcoa borrowed \$1,300 under RCF-3 to support its operations during the then global economic downturn. The \$1,300 was repaid on March 24, 2009 with the net proceeds from the issuance of convertible notes and common stock.

In March 2008, 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. As of December 31, 2010 and 2009, \$3,075 and \$2,075, respectively, 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.

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On May 7, 2010, 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. S&P did not change the current outlook from negative.

On March 30, 2010, Moody's Investors Service (Moody's) confirmed the following ratings for Alcoa: long-term debt at Baa3 and short-term debt at Prime-3. Moody's removed all ratings from credit watch and the current outlook was changed from stable to negative.

On February 22, 2010, Fitch Ratings (Fitch) affirmed the following ratings for Alcoa: long-term debt at BBB- and short-term debt at F3. Fitch did not change the current outlook from negative.

## **Investing Activities**

Cash used for investing activities was \$1,272 in 2010 compared with \$721 in 2009 and \$2,410 in 2008.

The use of cash in 2010 was primarily due to \$1,015 in capital expenditures (includes costs related to environmental control in new and expanded facilities of \$87), 44% of which related to growth projects, including the Estreito hydroelectric power project, Juruti bauxite mine development, and São Luís refinery expansion; \$352 in additions to investments, mostly for the contributions of \$197 related to the joint venture in Saudi Arabia and purchase of \$126 in available-for-sale securities held by Alcoa's captive insurance company; and \$72 for acquisitions, principally related to the purchase of a new building and construction systems business; slightly offset by \$141 in sales of investments, virtually all of which related to the sale of available-for-sale securities held by Alcoa's captive insurance company.

The use of cash in 2009 was mainly due to \$1,622 in capital expenditures (includes costs related to environmental control in new and expanded facilities of \$59), 68% of which related to growth projects, including the São Luís refinery expansion, Juruti bauxite mine development, and Estreito hydroelectric power project; \$181 in additions to investments, mostly for \$83 in available-for-sale securities held by Alcoa's captive insurance company and an \$80 interest in a new joint venture in Saudi Arabia; and a net cash outflow of \$65 for the divestiture of assets and businesses, including a cash outflow of \$204 for the EES business, cash inflows of \$111 for the collection of a note related to the 2007 sale of the Three Oaks mine and the sale of property in Vancouver, WA, and a cash inflow of \$20 for the sale of the Shanghai (China) foil plant; all of which was partially offset by \$1,031 from sales of investments, mostly related to the receipt of \$1,021 for the sale of the Shining Prospect investment; and a net cash inflow of \$112 from acquisitions, mainly due to \$97 from the acquisition of a BHP Billiton subsidiary in the Republic of Suriname and \$18 from the Elkem/Sapa AB exchange transaction.

The use of cash in 2008 was principally due to \$3,438 in capital expenditures (includes costs related to environmental control in new and expanded facilities of \$241), 58% of which related to growth projects, including the São Luís refinery expansion, Juruti bauxite mine development, Estreito hydroelectric power project, and flat-rolled products projects in Bohai (China) and Russia; \$1,303 in additions to investments, mostly related to the \$1,200 investment made in Shining Prospect Pte. Ltd. to acquire common stock of Rio Tinto plc; and \$417 in acquisitions for the purchase of two aerospace fastener manufacturing businesses (\$276), the buyout of outstanding noncontrolling interests in Bohai (\$79) and Russia (\$15), and a contingent payment made to Camargo Corrêa Group related to the 2003 acquisition of 40.9% of Alcoa Alumínio S.A. (\$47); all of which was partially offset by \$2,710 in proceeds from the sale of assets and businesses, mostly due to the \$2,651 in net proceeds from the sale of the businesses within the former Packaging and Consumer segment.

**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, debt agreements, and lease agreements. Alcoa also has commitments to fund its pension plans, provide payments for other postretirement benefit plans, and finance capital projects. As of December 31, 2010, 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	2011	2012-2013	2014-2015	Thereafter
<b>Operating activities:</b>					
Energy-related purchase obligations	\$ 20,165	\$ 1,442	\$ 2,354	\$ 2,219	\$ 14,150
Raw material purchase obligations	3,243	1,572	902	249	520
Other purchase obligations	1,076	180	352	291	253
Operating leases	948	244	326	179	199
Interest related to total debt	4,966	473	930	758	2,805
Estimated minimum required pension funding	2,215	445	1,030	740	-
Other postretirement benefit payments	2,585	275	555	540	1,215
Layoff and other restructuring payments	116	55	30	31	-
Deferred revenue arrangements	133	8	16	16	93
Uncertain tax positions	59	-	-	-	59
<b>Financing activities:</b>					
Total debt	9,139	323	1,954	819	6,043
Dividends to shareholders	-	-	-	-	-
<b>Investing activities:</b>					
Capital projects	1,301	645	563	93	-
Equity contributions	940	407	533	-	-
Payments related to acquisitions	-	-	-	-	-
Totals	\$ 46,886	\$ 6,069	\$ 9,545	\$ 5,935	\$ 25,337

**Obligations for Operating Activities**

Energy-related purchase obligations consist primarily of electricity and natural gas contracts with expiration dates ranging from less than 1 year to 40 years. The majority of raw material and other purchase obligations have expiration dates of 24 months or less. Certain 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 computer equipment, plant equipment, vehicles, and buildings.

Interest related to total debt is based on interest rates in effect as of December 31, 2010 and is calculated on debt with maturities that extend to 2037. The effect of outstanding interest rate swaps, which are accounted for as fair value hedges, are included in interest related to total debt. As of December 31, 2010, these hedges effectively convert the interest rate from fixed to floating on \$1,065 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. The minimum required contributions for pension funding are estimated to be \$445 for 2011 and \$530 for 2012. The funding estimate is \$500 for 2013, \$410 for 2014 and \$330 for 2015. The expected pension contributions in 2011 and later reflect the impacts of the Pension Protection Act of 2006 and the Worker, Retiree, and Employer Recovery Act of 2008. Pension contributions are expected to continue to decline if all actuarial assumptions are realized and remain the same in the future. In January 2011, Alcoa contributed 36,518,563 newly issued shares of its common stock (valued at \$600) to a master trust that holds the assets of certain U.S. defined benefit

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pension plans in a private placement transaction. Additionally, Alcoa estimates that it will contribute an additional \$200 in cash to its U.S. pension plans during 2011. Together, these contributions satisfy the minimum required and provide additional funding for Alcoa to maintain an approximately 80% funded status of its U.S. pension plans (the preceding table only reflects the minimum contributions required by law). Other postretirement benefit payments are expected to approximate \$275 annually, net of the estimated subsidy receipts related to Medicare Part D, and are reflected in the preceding table through 2020. Alcoa has determined that it is not practicable to present pension funding and other postretirement benefit payments beyond 2015 and 2020, respectively.

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

Deferred revenue arrangements require Alcoa to deliver alumina over the specified contract period through 2027. 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, 2010. 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 2037.

Alcoa has historically paid quarterly dividends on its preferred and common stock. Including dividends on preferred stock, Alcoa paid \$125 in dividends to shareholders during 2010. Because all dividends are subject to approval by Alcoa's Board of Directors, amounts are not included in the preceding table until such authorization has occurred. As of December 31, 2010, there were 1,022,025,965 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.

### **Obligations for Investing Activities**

Capital projects in the preceding table only include amounts approved by management as of December 31, 2010. 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 \$1,500 in 2011.

Equity contributions represent Alcoa's committed investment related to a joint venture in Saudi Arabia. In December 2009, Alcoa signed an agreement to enter into 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 over a four-year period (2010 through 2013). As of December 31, 2010, Alcoa has made equity contributions of \$160. The timing of the amounts included in the preceding table may vary based on changes in anticipated construction schedules of the project.

Payments related to acquisitions are based on provisions in certain acquisition agreements that state additional funds are due to the seller from Alcoa if the businesses acquired achieve stated financial and operational thresholds. Amounts are only presented in the preceding table if it has been determined that payment is more likely than not to occur. In

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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.** As of December 31, 2010, Alcoa has maximum potential future payments for guarantees issued on behalf of certain third parties of \$553. These guarantees expire in 2015 through 2027 and relate to project financing for hydroelectric power projects in Brazil and the aluminum complex in Saudi Arabia. Alcoa also has outstanding bank guarantees related to legal, customs duties, and leasing obligations, among others, which expire at various dates, that total \$425 at December 31, 2010.

Alcoa has outstanding letters of credit in the amount of \$350 as of December 31, 2010. These letters of credit relate primarily to workers compensation, derivative contracts, and leasing obligations, and expire at various dates, mostly in 2011. Alcoa also has outstanding surety bonds primarily related to customs duties, self-insurance, and legal obligations. The total amount committed under these bonds, which automatically renew or expire at various dates, mostly in 2011, was \$154 at December 31, 2010.

Alcoa had a program to sell a senior undivided interest in certain customer receivables, without recourse, on a continuous basis to a third-party for cash (up to \$250). This program was renewed on October 29, 2009 and was due to expire on October 28, 2010. On March 26, 2010, Alcoa terminated this program and repaid the \$250 originally received in 2009. In light of the adoption of accounting changes related to the transfer of financial assets, had the securitization program not been terminated, it would have resulted in a \$250 increase in both Receivables from customers and Short-term borrowings on Alcoa's Consolidated Balance Sheet. As of December 31, 2009, Alcoa derecognized \$250 in Receivables from customers on its Consolidated Balance Sheet under this program. Alcoa serviced the customer receivables for the third-party at market rates; therefore, no servicing asset or liability was recorded.

Also on March 26, 2010, Alcoa entered into two arrangements with third parties to sell certain customer receivables outright without recourse. In December 2010, Alcoa sold \$192 in customer receivables under these arrangements. As of December 31, 2010, \$150 of the sold receivables remain uncollected. Alcoa is servicing the customer receivables for the third parties at market rates; therefore, no servicing asset or liability was recorded.

**Critical Accounting Policies and Estimates**

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

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

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



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**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 are recorded in other income or expense.

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

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

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

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

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

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

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**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 a retirement obligation 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, 2010 ranges from less than \$1 to \$52 per structure (129 structures) in today's dollars.

**Goodwill.** Goodwill is not amortized; instead, it is tested for impairment annually (in the fourth quarter) or more frequently if indicators of impairment exist or if a decision is made to sell a business. A significant amount of judgment is involved in determining if an indicator of impairment has occurred. Such indicators may include a decline in expected cash flows, a significant adverse change in legal factors or in the business climate, unanticipated competition, or slower growth rates, among others. It is important to note that fair values that could be realized in an actual transaction may differ from those 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 Flat-Rolled Products segment, and the soft alloy extrusions business in Brazil, which is included in Corporate. Almost 90% of Alcoa's total goodwill is allocated to three reporting units as follows: Alcoa Fastening Systems (AFS) (\$1,009) and Alcoa Power and Propulsion (APP) (\$1,623) businesses, both of which are included in the Engineered Products and Solutions segment, and Primary Metals (\$1,851). These amounts include an allocation of Corporate goodwill. In 2010, the estimated fair values of all nine reporting units were substantially in excess of their carrying values, resulting in no impairment.

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 model (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, costs to produce, 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' weighted average cost of capital (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

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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.

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

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

**Discontinued Operations and Assets Held For Sale.** The fair values of all businesses to be divested are estimated using accepted valuation techniques such as a DCF model, valuations performed by third parties, earnings multiples, or indicative bids, when available. A number of significant estimates and assumptions are involved in the application of these techniques, including the forecasting of markets and market share, sales volumes and prices, costs and expenses, and multiple other factors. Management considers historical experience and all available information at the time the estimates are made; however, the fair values that are ultimately realized upon the sale of the businesses to be divested may differ from the estimated fair values 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, medical costs, 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, manufacturing, transportation, insurance, and pharmaceutical, among others. The yield curve model parallels the plans' projected cash flows, which have an average duration of 10 years, and the underlying cash flows of the bonds included in the model exceed the cash flows needed to satisfy the Company's plans' obligations multiple times. The impact on the liabilities of a change in the discount rate of 1/4 of 1% would be approximately \$355 and either a charge or credit of \$12 to after-tax earnings in the following year.

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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 has expanded from one that relied primarily on historical asset return information to one that also incorporates forward-looking returns by asset class, as described below.

Prior to developing the expected long-term rate of return for calendar year 2009, management focused on historical actual returns (annual, 10-year moving, and 20-year moving averages) when developing this assumption. Based on that process, management utilized 9% for the expected long-term rate of return for several years through 2008. For calendar year 2009, the expected long-term rate of return was reduced to 8.75% due to lower future expected market returns as a result of the then global economic downturn. This was supported by the fact that, in 2008, the 10-year moving average of actual performance fell below 9% for the first time in 20 years, although the 20-year moving average continued to exceed 9%.

For calendar year 2010, management expanded its process by incorporating expected future returns on current and planned asset allocations using information from various external investment managers and management's own judgment. Management considered this forward-looking analysis as well as the historical return information, and concluded the expected rate of return for calendar 2010 would remain at 8.75%, which was between the 20-year moving average actual return performance and the estimated future return developed by asset class.

For calendar year 2011, management again incorporated both actual historical return information and expected future returns into its analysis. Based on strategic asset allocations and current estimates of future returns by asset class, management will be using 8.50% as its expected long-term rate of return for 2011. This rate again falls within the range of the 20-year moving average of actual performance and the expected future return developed by asset class.

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 \$16 for 2011.

In 2010, a net charge of \$216 (\$138 after-tax) was recorded in other comprehensive income, primarily due to a 40 basis point decrease in the discount rate, which was somewhat offset by the favorable performance of the plan assets and the recognition of actuarial losses and prior service costs. In 2009, a net charge of \$182 (\$102 after-tax) was recorded in other comprehensive loss, primarily due to a 25 basis point decrease in the discount rate, which was somewhat offset by the favorable performance of the plan assets and the recognition of actuarial losses and prior service costs. Additionally, in 2010 and 2009, a charge of \$2 and \$8, respectively, was recorded in accumulated other comprehensive loss due to the reclassification of deferred taxes related to the Medicare Part D prescription drug subsidy.

**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.

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. Equity grants are issued in January each year. 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 2010, 2009, and 2008 was \$84 (\$57 after-tax), \$87 (\$58 after-tax), and \$94 (\$63 after-tax), respectively. Of this amount, \$19, \$21, and \$19 in 2010, 2009, and 2008, respectively, pertains to the acceleration of expense related to retirement-eligible employees.

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.

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**Income Taxes.** The provision for income taxes is determined using the asset and liability approach of accounting for income taxes. Under this approach, the provision for income taxes represents income taxes paid or payable (or received or receivable) for the current year plus the change in deferred taxes during the year. Deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid, and result from differences between the financial and tax bases of Alcoa's assets and liabilities and are adjusted for changes in tax rates and tax laws when enacted. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. In evaluating the need for a valuation allowance, management considers all potential sources of taxable income, including income available in carryback periods, future reversals of taxable temporary differences, projections of taxable income, and income from tax planning strategies, as well as all 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 the Company'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. Tax benefits related to uncertain tax positions taken or expected to be taken on a tax return are recorded when such benefits meet a more likely than not threshold. Otherwise, these tax benefits are recorded when a tax position has been effectively settled, which means that the statute of limitation has expired or the appropriate taxing authority has completed their examination even though the statute of limitations remains open. Interest and penalties related to uncertain tax positions are recognized as part of the provision for income taxes and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law until such time that the related tax benefits are recognized.

**Related Party Transactions**

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

**Recently Adopted Accounting Guidance**

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

**Recently Issued Accounting Guidance**

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

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

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

**Item 8. Financial Statements and Supplementary Data.**

**Management's Reports to Alcoa Shareholders**

**Management's Report on Financial Statements and Practices**

The accompanying Consolidated Financial Statements of Alcoa Inc. and its subsidiaries (the Company) were prepared by management, which is responsible for their integrity and objectivity. The statements were prepared in accordance with generally accepted accounting principles 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.

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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*, 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, 2010, based on criteria in *Internal Control - Integrated Framework* issued by the COSO.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2010 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/ Charles D. McLane, Jr.  
Charles D. McLane, Jr.

Executive Vice President and

Chief Financial Officer

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**Report of Independent Registered Public Accounting Firm**

To the Shareholders and Board of Directors of Alcoa Inc.

In our opinion, the accompanying consolidated balance sheets and the related statements of consolidated operations, changes in consolidated equity, consolidated comprehensive income (loss), and consolidated cash flows present fairly, in all material respects, the financial position of Alcoa Inc. and its subsidiaries (the Company) at December 31, 2010 and 2009, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2010 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, 2010, based on criteria established in *Internal Control - Integrated Framework* 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.

As discussed in Note A to the accompanying consolidated financial statements, effective January 1, 2009, the Company changed its accounting and reporting for business combinations.

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

Pittsburgh, Pennsylvania

February 17, 2011

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

<b>For the year ended December 31,</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>
Sales (Q)	\$ 21,013	\$ 18,439	\$ 26,901
Cost of goods sold (exclusive of expenses below)	17,174	16,902	22,175
Selling, general administrative, and other expenses	961	1,009	1,167
Research and development expenses	174	169	246
Provision for depreciation, depletion, and amortization	1,450	1,311	1,234
Restructuring and other charges (D)	207	237	939
Interest expense (V)	494	470	407
Other expenses (income), net (O)	5	(161)	(59)
<b>Total costs and expenses</b>	<b>20,465</b>	<b>19,937</b>	<b>26,109</b>
Income (loss) from continuing operations before income taxes	548	(1,498)	792
Provision (benefit) for income taxes (T)	148	(574)	342
Income (loss) from continuing operations	400	(924)	450
Loss from discontinued operations (B)	(8)	(166)	(303)
Net income (loss)	392	(1,090)	147
Less: Net income attributable to noncontrolling interests	138	61	221
<b>Net Income (Loss) Attributable to Alcoa</b>	<b>\$ 254</b>	<b>\$ (1,151)</b>	<b>\$ (74)</b>
<b>Amounts Attributable to Alcoa Common Shareholders:</b>			
Income (loss) from continuing operations	\$ 262	\$ (985)	\$ 229
Loss from discontinued operations	(8)	(166)	(303)
Net income (loss)	\$ 254	\$ (1,151)	\$ (74)
<b>Earnings per Share Attributable to Alcoa Common Shareholders (S):</b>			
Basic:			
Income (loss) from continuing operations	\$ 0.25	\$ (1.06)	\$ 0.27
Loss from discontinued operations	-	(0.17)	(0.37)
Net income (loss)	\$ 0.25	\$ (1.23)	\$ (0.10)
Diluted:			
Income (loss) from continuing operations	\$ 0.25	\$ (1.06)	\$ 0.27
Loss from discontinued operations	(0.01)	(0.17)	(0.37)
Net income (loss)	\$ 0.24	\$ (1.23)	\$ (0.10)

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



**Table of Contents****Alcoa and subsidiaries****Consolidated Balance Sheet**

(in millions)

<b>December 31,</b>	<b>2010</b>	<b>2009</b>
<b>Assets</b>		
Current assets:		
Cash and cash equivalents (X)	\$ 1,543	\$ 1,481
Receivables from customers, less allowances of \$45 in 2010 and \$70 in 2009 (U)	1,565	1,529
Other receivables	326	653
Inventories (G)	2,562	2,328
Prepaid expenses and other current assets	873	1,031
Total current assets	6,869	7,022
Properties, plants, and equipment, net (H)	20,161	19,828
Goodwill (E)	5,119	5,051
Investments (I)	1,340	1,061
Deferred income taxes (T)	3,184	2,958
Other noncurrent assets (J)	2,521	2,419
Assets held for sale (B)	99	133
<b>Total Assets</b>	<b>\$ 39,293</b>	<b>\$ 38,472</b>
<b>Liabilities</b>		
Current liabilities:		
Short-term borrowings (K & X)	\$ 92	\$ 176
Accounts payable, trade	2,322	1,954
Accrued compensation and retirement costs	929	925
Taxes, including income taxes	461	345
Other current liabilities	1,201	1,345
Long-term debt due within one year (K & X)	231	669
Total current liabilities	5,236	5,414
Long-term debt, less amount due within one year (K & X)	8,842	8,974
Accrued pension benefits (W)	2,923	3,163
Accrued other postretirement benefits (W)	2,615	2,696
Other noncurrent liabilities and deferred credits (L)	2,560	2,605
Liabilities of operations held for sale (B)	31	60
Total liabilities	22,207	22,912
Commitments and contingencies (N)		
Convertible securities of subsidiary (I)	-	40
<b>Equity</b>		
Alcoa shareholders' equity:		
Preferred stock (R)	55	55
Common stock (R)	1,141	1,097
Additional capital	7,087	6,608
Retained earnings	11,149	11,020
Treasury stock, at cost	(4,146)	(4,268)
Accumulated other comprehensive loss	(1,675)	(2,092)
Total Alcoa shareholders' equity	13,611	12,420
Noncontrolling interests (M)	3,475	3,100
Total equity	17,086	15,520
<b>Total Liabilities and Equity</b>	<b>\$ 39,293</b>	<b>\$ 38,472</b>

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)

<b>For the year ended December 31,</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>
<b>Cash from Operations</b>			
Net income (loss)	\$ 392	\$ (1,090)	\$ 147
Adjustments to reconcile net income (loss) to cash from operations:			
Depreciation, depletion, and amortization	1,451	1,311	1,234
Deferred income taxes (T)	(287)	(596)	(261)
Equity (income) loss, net of dividends	(22)	39	(48)
Restructuring and other charges (D)	207	237	939
Net gain from investing activities asset sales (O)	(9)	(106)	(50)
Loss from discontinued operations (B)	8	166	303
Stock-based compensation (R)	84	87	94
Excess tax benefits from stock-based payment arrangements	(1)	-	(15)
Other	151	219	(206)
Changes in assets and liabilities, excluding effects of acquisitions, divestitures, and foreign currency translation adjustments:			
(Increase) decrease in receivables	(94)	676	233
(Increase) decrease in inventories	(215)	1,258	(353)
Decrease (increase) in prepaid expenses and other current assets	26	126	(97)
Increase (decrease) in accounts payable, trade	328	(632)	21
(Decrease) in accrued expenses	(237)	(101)	(288)
Increase (decrease) in taxes, including income taxes	505	(144)	28
Pension contributions (W)	(113)	(128)	(523)
(Increase) in noncurrent assets	(85)	(203)	(242)
Increase in noncurrent liabilities	183	233	169
(Increase) decrease in net assets held for sale	(18)	27	16
<b>Cash provided from continuing operations</b>	<b>2,254</b>	<b>1,379</b>	<b>1,101</b>
<b>Cash provided from (used for) discontinued operations</b>	<b>7</b>	<b>(14)</b>	<b>133</b>
<b>Cash provided from operations</b>	<b>2,261</b>	<b>1,365</b>	<b>1,234</b>
<b>Financing Activities</b>			
Net change in short-term borrowings (K)	(44)	(292)	(96)
Net change in commercial paper (K)	-	(1,535)	679
Additions to long-term debt (K)	1,126	1,049	2,253
Debt issuance costs (K)	(6)	(17)	(56)
Payments on long-term debt (K)	(1,757)	(156)	(204)
Proceeds from exercise of employee stock options (R)	13	-	177
Excess tax benefits from stock-based payment arrangements	1	-	15
Issuance of common stock (R)	-	876	-
Repurchase of common stock	-	-	(1,082)
Dividends paid to shareholders	(125)	(228)	(556)
Distributions to noncontrolling interests	(256)	(140)	(295)
Contributions from noncontrolling interests (I & M)	162	480	643
Acquisitions of noncontrolling interests (I)	(66)	-	-
<b>Cash (used for) provided from financing activities</b>	<b>(952)</b>	<b>37</b>	<b>1,478</b>
<b>Investing Activities</b>			
Capital expenditures	(1,015)	(1,617)	(3,413)
Capital expenditures of discontinued operations	-	(5)	(25)
Acquisitions, net of cash acquired (F & P)	(72)	112	(276)
Acquisitions of noncontrolling interests (F & P)	-	-	(141)
Proceeds from the sale of assets and businesses (F)	4	(65)	2,710

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Additions to investments	(352)	(181)	(1,303)
Sales of investments (I)	141	1,031	72
Other	22	4	(34)
<b>Cash used for investing activities</b>	<b>(1,272)</b>	<b>(721)</b>	<b>(2,410)</b>
<b>Effect of exchange rate changes on cash and cash equivalents</b>	<b>25</b>	<b>38</b>	<b>(23)</b>
Net change in cash and cash equivalents	62	719	279
Cash and cash equivalents at beginning of year	1,481	762	483
<b>Cash and cash equivalents at end of year</b>	<b>\$ 1,543</b>	<b>\$ 1,481</b>	<b>\$ 762</b>

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

**Table of Contents****Alcoa and subsidiaries****Statement of Changes in Consolidated Equity**

(in millions, except per-share amounts)

	Alcoa Inc. Shareholders					Accumulated other compre- hensive loss	Noncontrolling interests	Total equity
	Preferred stock	Common stock	Additional capital	Retained earnings	Treasury stock			
<b>Balance at December 31, 2007</b>	\$ 55	\$ 925	\$ 5,774	\$ 13,039	\$ (3,440)	\$ (337)	\$ 2,460	\$ 18,476
Net (loss) income	-	-	-	(74)	-	-	221	147
Other comprehensive loss	-	-	-	-	-	(2,832)	(362)	(3,194)
Cash dividends declared:								
Preferred @ \$3.75 per share	-	-	-	(2)	-	-	-	(2)
Common @ \$0.68 per share	-	-	-	(554)	-	-	-	(554)
Stock-based compensation (R)	-	-	94	-	-	-	-	94
Common stock issued: compensation plans (R)	-	-	(18)	-	196	-	-	178
Repurchase of common stock (R)	-	-	-	-	(1,082)	-	-	(1,082)
Distributions	-	-	-	-	-	-	(295)	(295)
Contributions (M)	-	-	-	-	-	-	643	643
Purchase of equity from noncontrolling interest (F)	-	-	-	-	-	-	(69)	(69)
Cumulative effect adjustment due to the adoption of accounting changes related to the measurement date of benefit plans, net of tax (W)	-	-	-	(9)	-	-	-	(9)
Other	-	-	-	-	-	-	(1)	(1)
<b>Balance at December 31, 2008</b>	55	925	5,850	12,400	(4,326)	(3,169)	2,597	14,332
Net (loss) income	-	-	-	(1,151)	-	-	61	(1,090)
Other comprehensive income	-	-	-	-	-	1,077	323	1,400
Cash dividends declared:								
Preferred @ \$3.75 per share	-	-	-	(2)	-	-	-	(2)
Common @ \$0.26 per share	-	-	-	(227)	-	-	-	(227)
Beneficial conversion option on convertible notes, net of tax (K)	-	-	43	-	-	-	-	43
Stock-based compensation (R)	-	-	87	-	-	-	-	87
Common stock issued: compensation plans (R)	-	-	(76)	-	58	-	-	(18)
Issuance of common stock (R)	-	172	704	-	-	-	-	876
Distributions	-	-	-	-	-	-	(140)	(140)
Contributions (M)	-	-	-	-	-	-	440	440
Purchase of equity from noncontrolling interest (F)	-	-	-	-	-	-	(179)	(179)
Other	-	-	-	-	-	-	(2)	(2)
<b>Balance at December 31, 2009</b>	55	1,097	6,608	11,020	(4,268)	(2,092)	3,100	15,520
Net income	-	-	-	254	-	-	138	392
Other comprehensive income	-	-	-	-	-	417	334	751
Cash dividends declared:								
Preferred @ \$3.75 per share	-	-	-	(2)	-	-	-	(2)
Common @ \$0.12 per share	-	-	-	(123)	-	-	-	(123)
Stock-based compensation (R)	-	-	84	-	-	-	-	84
Common stock issued: compensation plans (R)	-	-	(139)	-	122	-	-	(17)
Issuance of common stock (R)	-	44	556	-	-	-	-	600
Distributions	-	-	-	-	-	-	(256)	(256)
Contributions (M)	-	-	-	-	-	-	162	162
Purchase of equity from noncontrolling interest (F)	-	-	(2)	-	-	-	(4)	(6)
Other (I)	-	-	(20)	-	-	-	1	(19)

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<b>Balance at December 31, 2010</b>	\$ 55	\$ 1,141	\$ 7,087	\$ 11,149	\$ (4,146)	\$ (1,675)	\$ 3,475	\$ 17,086
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The accompanying notes are an integral part of the consolidated financial statements.

**Table of Contents****Alcoa and subsidiaries****Statement of Consolidated Comprehensive Income (Loss)**

(in millions)

For the year ended December 31,	Alcoa Inc.			Noncontrolling Interests			Total		
	2010	2009	2008	2010	2009	2008	2010	2009	2008
Net income (loss)	\$ 254	\$ (1,151)	\$ (74)	\$ 138	\$ 61	\$ 221	\$ 392	\$ (1,090)	\$ 147
Other comprehensive income (loss), net of tax:									
Change in unrecognized net actuarial loss and prior service cost/benefit related to pension and other postretirement benefit plans (W)	(140)	(110)	(1,382)	(4)	8	(52)	(144)	(102)	(1,434)
Foreign currency translation adjustments (A)	441	1,377	(1,457)	334	320	(311)	775	1,697	(1,768)
Unrealized (losses) gains on available-for-sale securities (I):									
Unrealized holding (losses) gains	(5)	49	(432)	-	-	-	(5)	49	(432)
Net amount reclassified to earnings	4	381	-	-	-	-	4	381	-
Net change in unrealized (losses) gains on available-for-sale securities	(1)	430	(432)	-	-	-	(1)	430	(432)
Unrecognized gains (losses) on derivatives (X):									
Net change from periodic revaluations	(21)	(609)	282	4	(5)	3	(17)	(614)	285
Net amount reclassified to earnings	138	(11)	157	-	-	(2)	138	(11)	155
Net unrecognized gains (losses) on derivatives	117	(620)	439	4	(5)	1	121	(625)	440
Total Other comprehensive income (loss), net of tax	417	1,077	(2,832)	334	323	(362)	751	1,400	(3,194)
<b>Comprehensive income (loss)</b>	<b>\$ 671</b>	<b>\$ (74)</b>	<b>\$ (2,906)</b>	<b>\$ 472</b>	<b>\$ 384</b>	<b>\$ (141)</b>	<b>\$ 1,143</b>	<b>\$ 310</b>	<b>\$ (3,047)</b>

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

**Table of Contents****Alcoa and subsidiaries****Notes to the Consolidated Financial Statements****(dollars in millions, except per-share amounts)****A. Summary of Significant Accounting Policies**

**Basis of Presentation.** The Consolidated Financial Statements of Alcoa Inc. and subsidiaries ( Alcoa or the Company ) are prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) and require management to make certain judgments, estimates, and assumptions. These may affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements. They also may affect the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates upon subsequent resolution of identified matters. Certain amounts in previously issued financial statements were reclassified to conform to the 2010 presentation.

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

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

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

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

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

**Properties, Plants, and Equipment.** Properties, plants, and equipment are recorded at cost. Depreciation is recorded principally on the straight-line method at rates based on the estimated useful lives of the assets. For greenfield smelters and mines, the units of production method is used to record depreciation. The following table details the weighted-average useful lives of structures and machinery and equipment by reporting segment (numbers in years):

<b>Segment</b>	<b>Structures</b>	<b>Machinery and equipment</b>
Alumina	30	24
Primary Metals	34	22
Flat-Rolled Products	32	20
Engineered Products and Solutions	25	18

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



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During 2008, Alcoa completed a review of the estimated useful lives of its alumina refining and aluminum smelting facilities. Such a review was performed because considerable engineering data and other information (readily available due to the construction of the Iceland smelter as well as various expansions and other growth projects in-process or completed over the two years prior to 2009) indicated that the useful lives of many of the assets in these businesses were no longer appropriate. As a result of this review, for the majority of its refining and smelting locations, Alcoa extended the useful lives of structures to an average of 26 and 32 years (previously 23 and 29 years), respectively, and machinery and equipment to an average of 27 and 20 years (previously 17 and 19 years), respectively.

Also during 2008, Alcoa completed a review of the estimated useful lives of its flat-rolled products and engineered products and solutions facilities. As a result of this review, for a portion of its flat-rolled products locations, Alcoa extended the useful lives of structures to an average of 33 years (previously 29 years) and machinery and equipment to an average of 18 years (previously 16 years). No change was made to the useful lives related to the engineered products and solutions locations as the study determined that the average useful lives of structures (26 years) and machinery and equipment (17 years) were appropriate.

The extension of depreciable lives qualifies as a change in accounting estimate and was made on a prospective basis effective January 1, 2008 for the alumina refining and aluminum smelting facilities and July 1, 2008 for the flat-rolled products facilities. In 2008, Depreciation, depletion, and amortization expense was \$35 (after-tax and noncontrolling interests) less than it would have been had the depreciable lives not been extended. The effect of this change on both basic and diluted earnings per share was \$0.04.

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

**Goodwill and Other Intangible Assets.** Goodwill is not amortized; instead, it is tested for impairment annually (in the fourth quarter) or more frequently if indicators of impairment exist or if a decision is made to sell a business. A significant amount of judgment is involved in determining if an indicator of impairment has occurred. Such indicators may include a decline in expected cash flows, a significant adverse change in legal factors or in the business climate, unanticipated competition, or slower growth rates, among others. It is important to note that fair values that could be realized in an actual transaction may differ from those 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 Flat-Rolled Products segment, and the soft alloy extrusions business in Brazil, which is included in Corporate. Almost 90% of Alcoa's total goodwill is allocated to three reporting units as follows: Alcoa Fastening Systems (AFS) (\$1,009) and Alcoa Power and Propulsion (APP) (\$1,623) businesses, both of which are included in the Engineered Products and Solutions segment, and Primary Metals (\$1,851). These amounts include an allocation of Corporate goodwill. In 2010, the estimated fair values of all nine reporting units were substantially in excess of their carrying values, resulting in no impairment.

The evaluation of impairment involves comparing the current fair value of each reporting unit to its carrying value, including goodwill. Alcoa uses a DCF model to estimate the current fair value of its reporting units when testing for impairment, as management believes forecasted cash flows are the best indicator of such fair value. A number of significant assumptions and estimates are involved in the application of the DCF model to forecast operating cash flows, including markets and market share, sales volumes and prices, costs to produce, tax rates, capital spending,

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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' weighted average cost of capital (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.

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

Segment	Software	Other intangible assets
Alumina	10	-
Primary Metals	10	40
Flat-Rolled Products	10	9
Engineered Products and Solutions	10	16

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

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

Alcoa periodically enters into long-term supply contracts with alumina and aluminum customers and receives advance payments for product to be delivered in future periods. These advance payments are recorded as deferred revenue, and revenue is recognized as shipments are made and title, ownership, and risk of loss pass to the customer during the term of the contracts.

**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

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recognized as agreements are reached with third parties. The estimates also include costs related to other potentially responsible parties to the extent that Alcoa has reason to believe such parties will not fully pay their proportionate share. The liability is continuously reviewed and adjusted to reflect current remediation progress, prospective estimates of required activity, and other factors that may be relevant, including changes in technology or regulations.

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

**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 a retirement obligation for the removal, treatment, transportation, storage, and (or) disposal of various regulated assets and hazardous materials such as asbestos, underground and aboveground storage tanks, polychlorinated biphenyls (PCBs), various process residuals, solid wastes, electronic equipment waste, and various other materials. Such amounts may be material to the Consolidated Financial Statements in the period in which they are recorded.

**Income Taxes.** The provision for income taxes is determined using the asset and liability approach of accounting for income taxes. Under this approach, the provision for income taxes represents income taxes paid or payable (or received or receivable) for the current year plus the change in deferred taxes during the year. Deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid, and result from differences between the financial and tax bases of Alcoa's assets and liabilities and are adjusted for changes in tax rates and tax laws when enacted. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. In evaluating the need for a valuation allowance, management considers all potential sources of taxable income, including income available in carryback periods, future reversals of taxable temporary differences, projections of taxable income, and income from tax planning strategies, as well as all available positive and negative evidence. Positive evidence includes factors such as a history of profitable operations, projections of future profitability within the carryforward period, including from tax planning strategies, and the Company's experience with similar operations. Existing favorable contracts and the ability to sell products into established markets are additional positive evidence.

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

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

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

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

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

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

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

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

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

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Effective January 1, 2010, the functional currency of a subsidiary located in Brazil (that is part of Alcoa World Alumina and Chemicals, which is 60% owned by Alcoa and 40% owned by Alumina Limited) was changed from the U.S. dollar to the Brazilian real (BRL). This change was made as a result of changes in the operations of the business following the completion of the São Luís refinery expansion and Juruti bauxite mine development. In connection with this change, on January 1, 2010, an adjustment of \$309 was recorded as an increase to the net nonmonetary assets of this subsidiary (primarily properties, plants, and equipment) with a corresponding adjustment to the foreign currency translation component of Accumulated other comprehensive loss. The functional currency of all of Alcoa's Brazilian operations is now BRL.

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

**Discontinued Operations and Assets Held For Sale.** For those businesses where management has committed to a plan to divest, each business is valued at the lower of its carrying amount or estimated fair value less cost to sell. If the carrying amount of the business exceeds its estimated fair value