

Mineral Industry Surveys

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BAUXITE AND ALUMINA IN THE FOURTH QUARTER 2011

Imports of crude and dried bauxite in the fourth quarter of 2011 were 2.6 million metric tons (Mt), 9% higher than those in the third quarter of 2011 and 31% higher than those in the fourth quarter of 2010. Jamaica (49%), Brazil (25%), and Guinea (23%) were the leading sources of crude dry bauxite imports in the fourth quarter of 2011. Imports of crude and dried bauxite during the fourth quarter of 2011 from Brazil and Guinea increased by 51% and 13%, respectively, from those in the third quarter. These increases were partially offset by a 7% decline in imports of crude and dried bauxite from Jamaica. Imports of crude and dried bauxite in 2011 were 18% higher than those in 2010.

Imports of alumina during the fourth quarter of 2011 were 478,000 metric tons (t), 21% lower than those in the third quarter but 5% higher than those in the fourth quarter of 2010. The leading sources of imported alumina during the fourth quarter of 2011 were Suriname (35%), Australia (29%), Brazil (16%), and Jamaica (10%). Decreased alumina imports from Jamaica of 61,300 t, Australia of 44,600 t, and Suriname of 43,200 t accounted for most of the decrease in alumina imports during the fourth quarter of 2011. These decreases were partially offset by an increase in alumina imports from Brazil of 21,700 t. Alumina imports in 2011 were 28% higher than those in 2010.

Exports of alumina during the fourth quarter of 2011 were 386,000 t, 8% less than those in the third quarter of 2011 but 14% higher than those in the fourth quarter of 2010. The leading destinations of alumina exported during the fourth quarter of 2011 were Canada (48%) and Iceland (30%). Decreased alumina exports to Canada of 48,900 t (-21%), and Georgia of 25,900 t (Georgia received only nominal U.S. alumina exports during the fourth quarter), accounted for most of the decrease in alumina exports during the fourth quarter of 2011 compared with those in the third quarter. These decreases were partially offset by increases in alumina exports to France of 26,500 t (France received only nominal U.S. alumina exports during the third quarter) and Iceland of 23,700 t (26%). Alumina exports in 2011 were 14% higher than those in 2010.

Maintenance issues and equipment failures reduced production during the fourth quarter of 2011 at Noranda

Aluminum Holding Corp.'s (Franklin, TN) 1.25-million-metric-ton-per-year (Mt/yr) alumina refinery in Gramercy, LA. Noranda also reported that a conveyor belt failed during the fourth quarter of 2011 at its St. Ann Mine in Jamaica. The impact on production of these events was not disclosed, and the issues at both the mine and refinery were reported to be corrected by yearend (Noranda Aluminum Holding Corp., 2012, p. 2).

Update

Ormet Corp. (Hannibal, OH) stated that its 540,000-metric-ton-per-year (t/yr) alumina refinery in Burnside, LA, was producing at approximately 90% of capacity in mid-March 2012 (Ormet Corp., 2012). The refinery had reopened in November 2011 after having closed at the end of 2006 because of the prevailing low alumina price and high natural gas price. (See Bauxite and Alumina in the Third Quarter 2011.)

The first concrete was poured in early February 2012 at the Ras al Khair alumina refinery in Saudi Arabia. The refinery would have a capacity of 1.8 Mt/yr of alumina when completed in 2014 and would process bauxite from a nearby deposit. The alumina produced would supply the 740,000-t/yr Raz as Zawr smelter, to be completed in 2013. The project was a joint venture between Saudi Arabian Mining Co. (74.9%) and Alcoa Inc. (25.1%) (Alcoa Inc., 2012).

Norsk Hydro ASA (Oslo, Norway) and Dubai Aluminium Co. Ltd. (Dubai) postponed construction of the 1.86-Mt/yr Companhia de Alumina do Para (CAP) refinery in Barcarena, Brazil, citing uncertainty of alumina and aluminum markets during the next few years. Declining aluminum demand in Europe and other markets served by Norsk Hydro were specifically noted. The CAP refinery, a joint venture between Norsk Hydro (81%) and Dubai (19%), was to have been completed by yearend 2015 (Norsk Hydro ASA, 2012).

References Cited

Alcoa Inc., 2012, Ma'aden Alcoa aluminum joint venture pours first concrete for Middle East's first alumina refinery at Ras al Khair: Riyadh, Saudi Arabia, Alcoa Inc. news release, February 3, 2 p.

Noranda Aluminum Holding Corp., 2012, Noranda reports results for fourth quarter and full-year 2011: Franklin, TN, Noranda Aluminum Holding Corp. press release, March 15, 19 p.

Norsk Hydro ASA, 2012, CAP alumina project postponed: Oslo, Norway, Norsk Hydro ASA news release, March 14, 1 p.

Ormet Corp., 2012, Ormet releases 2011 results: Hannibal, OH, Ormet Corp. press release, March 19, 9 p.

TABLE 1
U.S. IMPORTS AND EXPORTS OF CRUDE AND DRIED BAUXITE¹

(Metric tons)

Country	2010	2011				
		First quarter	Second quarter	Third quarter	Fourth quarter	First-fourth quarter
Imports (for consumption):						
Brazil	1,640,000	354,000	324,000	430,000	651,000	1,760,000
Guinea	2,130,000	667,000	537,000	533,000	601,000	2,340,000
India	--	--	161,000	--	--	161,000
Jamaica	4,300,000	1,280,000	1,230,000	1,370,000	1,270,000	5,140,000
Venezuela	--	--	--	37,000	72,600	110,000
Other	45,100	2,520	10,800	16,000	114	29,500
Total	8,120,000	2,300,000	2,260,000	2,390,000	2,600,000	9,540,000
Exports:						
Canada	15,100	4,050	5,170	2,310	1,240	12,800
Colombia	3,120	4	15	175	42	236
Korea, Republic of	--	2,200	--	--	--	2,200
Mexico	217	7	765	2,130	3,130	6,020
South Africa	797	--	--	--	--	--
Venezuela	566	37	41	--	82	160
Other	1,210	208	361	254	155	978
Total	21,000	6,500	6,350	4,870	4,640	22,400

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau; data adjusted by the U.S. Geological Survey.

TABLE 2
U.S. IMPORTS AND EXPORTS OF CALCINED BAUXITE, BY COUNTRY¹

(Metric tons)

Country	2010		2011									
			First quarter		Second quarter		Third quarter		Fourth quarter		First–fourth quarter	
	Refrac- tory	Other	Refrac- tory	Other	Refrac- tory	Other	Refrac- tory	Other	Refrac- tory	Other	Refrac- tory	Other
Imports (for consumption):												
Australia	--	84,800	--	--	--	44,800	--	--	--	42,700	--	87,500
Brazil	167,000	69,700	1,320	2,940	--	784	--	378	--	1,470	1,320	5,570
China	74,200	2,950	10,600	321	4,450	217	11,200	7,730	14,700	8,870	41,000	17,100
Greece	104,000	--	--	--	26,000	--	--	--	--	--	26,000	--
Guyana	37,300	148,000	12,700	42,800	10,300	15,500	14,200	45,000	11,600	17,900	48,800	121,000
Jamaica	--	--	--	--	--	401,000	--	833,000	--	693,000	--	1,930,000
Other	610	1,700	30	215	2	795	--	1,660	140	1,810	172	4,480
Total	384,000	307,000	24,700	46,300	40,800	463,000	25,400	887,000	26,400	766,000	117,000	2,160,000
Exports:												
Argentina	--	--	--	--	--	--	--	1,880	--	--	--	1,880
Canada	7,550	527	1,410	--	1,010	--	3,280	--	3,370	826	9,070	826
China	--	--	--	--	--	--	--	--	9,920	--	9,920	--
India	25	601	--	--	--	--	--	80	--	1,200	--	1,280
Malaysia	--	500	--	59	--	100	--	--	--	--	--	159
Mexico	652	8,070	88	2,780	149	656	164	160	121	114	522	3,710
United Arab Emirates	--	--	--	--	--	2,740	--	--	--	--	--	2,740
Other	219	80	108	317	207	12	127	--	474	--	916	329
Total	8,450	9,780	1,610	3,150	1,360	3,510	3,570	2,120	13,900	2,140	20,400	10,900

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau; data adjusted by the U.S. Geological Survey.

TABLE 3
U.S. IMPORTS AND EXPORTS OF ALUMINA¹

(Metric tons, calcined equivalent)

Country	2010	2011				
		First quarter	Second quarter	Third quarter	Fourth quarter	First-fourth quarter
Imports (for consumption):²						
Australia	572,000	144,000	192,000	185,000	141,000	662,000
Brazil	233,000	86,200	54,900	52,500	74,300	268,000
Jamaica	83,900	95,800	80,700	109,000	47,800	333,000
Suriname	488,000	167,000	191,000	211,000	167,000	736,000
Other	342,000	46,800	53,900	47,900 ^r	47,800	196,000
Total	1,720,000	539,000	572,000	606,000^r	478,000	2,200,000
Exports:³						
Canada	719,000	204,000	221,000	236,000	187,000	848,000
France	57,700	31,800	528	242	26,700	59,200
Georgia	77,500	30,900	(4)	25,900	(4)	56,800
Iceland	217,000	121,000	173,000	91,500	115,000	500,000
Mexico	83,200	19,900	19,400	19,600	21,700	80,700
Netherlands	182,000	974	28,800	27,200	18,900	75,800
Norway	221	75	29,400	41	93	29,600
Ukraine	86,800	272	99	74	100	545
Other	100,000	24,400	21,400	19,600	16,700	82,100
Total	1,520,000	433,000	493,000	420,000	386,000	1,730,000

^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes imports of aluminum hydroxide reported in calcined equivalent. As shipped, aluminum hydroxide: 211,800 metric tons (t) in 2010; 46,300 t in the first quarter of 2011; 54,600 t in the second quarter of 2011; 45,200 t in the third quarter of 2011; 48,800 t in the fourth quarter of 2011.

³Includes exports of aluminum hydroxide reported in calcined equivalent. As shipped, aluminum hydroxide: 108,900 t in 2010; 26,600 t in the first quarter of 2011; 27,200 t in the second quarter of 2011; 24,900 t in the third quarter of 2011; 29,100 t in the fourth quarter of 2011.

⁴Less than ½ unit.

Source: U.S. Census Bureau; data adjusted by the U.S. Geological Survey.