

Mineral Industry Surveys

For information, contact:

E. Lee Bray, Aluminum Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4979, Fax: (703) 648-7757
E-mail: lbray@usgs.gov

Annie Hwang (Data)
Telephone: (703) 648-7952
Fax: (703) 648-7995
E-mail: ahwang@usgs.gov

Internet: <http://minerals.usgs.gov/minerals>

ALUMINUM IN NOVEMBER 2011

Domestic primary aluminum production in November 2011 was 171,000 metric tons (t). The average daily production was 5,710 t, slightly higher than that for the previous month and 19% higher than that for November 2010.

Total aluminum recovered from scrap in November 2011 was 238,000 t, 6% less than the amount recovered in the previous month but 5% more than the aluminum recovered in November 2010. Of this, 127,000 t of aluminum was recovered from new scrap, 7% less than the amount in the previous month and slightly less than that in November 2010. Aluminum recovered from old scrap in November 2011 totaled 112,000 t, 6% less than the amount in October but 14% more than the amount in November 2010.

Alcoa Inc. announced that the temporary closures of the 215,000-metric-ton-per-year (t/yr) Alcoa, TN, smelter and two of the six idled potlines (76,000 t/yr of capacity) at the 267,000-t/yr Rockdale, TX, smelter would be made permanent. The Rockdale smelter was shut down in 2008 owing to high electricity prices and declining aluminum prices, and the smelter in Tennessee was shut down in early 2009 owing to declining aluminum prices and demand. Subsequent efforts to obtain long-term power contracts for Rockdale at competitive prices were unsuccessful. Alcoa also announced that the 150,000-t/yr Portovesme, Italy, smelter would be permanently closed and the 93,000-t/yr Aviles and 87,000-t/yr La Coruna smelters in Spain would be temporarily shutdown. High costs for power and raw materials combined with falling aluminum prices were cited for the closures in Italy and Spain. The actions would be completed during the first half of 2012 (Alcoa Inc., 2012a, b).

Rio Tinto Alcan Inc. locked out employees and shut down two-thirds of capacity at its 438,000-t/yr Alma smelter at Saguenay-Lac-Saint-Jean, Quebec, Canada, after negotiators for Rio Tinto Alcan and the union representing 755 employees failed to reach an agreement for a contract to replace the contract which had expired December 31, 2011. Rio Tinto

Alcan planned to keep the remaining potlines operating for the duration of the labor disruption (Rio Tinto Alcan Inc., 2012).

Production at Rio Tinto Alcan's 100,000-t/yr smelter at Shawinigan, Quebec, Canada, was cut by one-half after a power failure on December 29, 2011. The smelter had previously been scheduled to be shut down permanently by December 2014 and a decision on restarting the two potlines had not been made (American Metal Market, 2012).

Zalco, a subsidiary of Klesch Group Ltd. (London, United Kingdom), shut down its 275,000-t/yr smelter in Vlissingen, Netherlands. Klesch had been searching for a buyer for the smelter but was unable to find interested investors and was not able to secure financing to continue operation of the smelter during bankruptcy proceedings (Platts Metals Week, 2011).

Update

The downward trend of the monthly average U.S. market price of primary aluminum ingot continued, with the monthly average price falling to \$1.026 per pound in November from \$1.059 per pound in October. The monthly average price in December dropped to \$0.982 per pound.

References Cited

- Alcoa Inc., 2012a, Alcoa plans to curtail smelters in Italy and Spain as part of global primary restructuring: New York, NY, Alcoa Inc. press release, January 9, 1 p.
- Alcoa Inc., 2012b, Alcoa to close or curtail 531,000 metric tons of smelting capacity: New York, NY, Alcoa Inc. press release, January 5, 1 p.
- American Metal Market, 2012, Rio Tinto slashes output at two Quebec smelters: American Metal Market, v. 120, no. 1-2, January 4, p. 1, 4.
- Platts Metals Week, 2011, Bankrupt Zalco begins smelter shutdown: Platts Metals Week, v. 82, no. 52, December 26, p. 8.
- Rio Tinto Alcan Inc., 2012, Rio Tinto Alcan continues to adjust production at its Alma smelter: Montreal, Quebec, Canada, Rio Tinto Alcan Inc. media release, January 2, 1 p.

TABLE 1
COMPONENTS OF ALUMINUM SUPPLY¹

(Thousand metric tons)

Period	Primary production	Secondary recovery ²			Imports for consumption			Total new supply ³	Stocks, end of period ⁴
		New	Old	Total	Metals and alloys, crude	Plates, sheets, bars, etc.	Total		
2010	1,726	1,550	1,250	2,800	2,650	967	3,610	8,140	1,010
2010:									
January–November	1,578	1,430	1,170	2,600	2,470	908	3,380	7,550	998
November	144	130	98	227	209	68	277	649	998
December	148	120	85	204	179	59	238	591	1,010
2011:									
January	152	141	104	245	211	64	276	672	1,050
February	140	132	107	239	212	63	275	653	1,060
March	162	138	122	260	232	75	307	728	1,070
April	162	135	117	252	220	68	288	702	1,110
May	170	137	123	260	285	73	358	787	1,100
June	167	137	122	259	263	74	337	763	1,090
July	171	136	121	257	220	70	290	719	1,100
August	172	144	123	268	241	85	327	766	1,090
September	169	135	119	254	263	86	349	771	1,080
October	175	136	118	254	243	78	321	751	1,060
November	171	127	112	238	NA	NA	NA	NA	NA
January–November	1,809	1,500	1,290	2,790	NA	NA	NA	NA	NA

NA Not available.

¹Data are rounded to no more than three significant digits, except "Primary production"; may not add to totals shown.

²Metallic recovery from purchased, tolled, or imported scrap, expanded for full coverage of industry.

³Primary production, secondary recovery, and imports for consumption.

⁴Inventory levels reflect total for both U.S. and Canadian producers; data from the Aluminum Association Inc.

TABLE 2
ESTIMATED FULL COVERAGE CONSUMPTION OF AND METALLIC RECOVERY FROM
PURCHASED NEW AND OLD ALUMINUM SCRAP¹

(Thousand metric tons)

Period	Secondary smelters		Independent mill fabricators		Foundries		Other consumers		Total	
	Consumption	Metal recovery	Consumption	Metal recovery	Consumption	Metal recovery	Consumption	Metal recovery	Consumption	Metal recovery
2010	1,780	1,360	1,530	1,390	56	49	7	7	3,370	2,800
2010:										
January–November	1,630	1,250	1,430	1,300	51	45	6	6	3,120	2,600
November	161	117	116	106	5	4	1	1	283	227
December	152	109	99	90	5	4	1	1	257	204
2011:										
January	176	131	119	109	5	4	1	1	301	245
February	175	131	113	103	5	4	1	1	294	239
March	187	140	126	115	5	4	1	1	319	260
April	179	132	127	115	5	4	1	1	311	252
May	187	138	128	116	5	4	1	1	321	260
June	187	140	126	114	5	4	1	1	319	259
July	187	139	125	113	5	4	1	1	317	257
August	193	145	129	117	5	4	1	1	328	268
September	189	141	119	107	5	4	1	1	313	254
October	193	144	117	106	5 ^r	4 ^r	1	1	316 ^r	256 ^r
November	187	140	104	94	5	4	1	1	296	238
January–November	2,040	1,520	1,330	1,210	56	49	7	7	3,440	2,790

^rRevised.

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

TABLE 3
CONSUMPTION OF AND RECOVERY FROM PURCHASED
NEW AND OLD ALUMINUM SCRAP IN NOVEMBER 2011¹

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	156,000	187,000	116,000	140,000
Independent mill fabricators	95,000	104,000	86,500	93,700
Foundries	4,220	5,070	3,690	4,420
Other consumers	524	629	524	629
Total	255,000	296,000	207,000	238,000

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

TABLE 4
PURCHASED AND TOLL-TREATED ALUMINUM-BASE SCRAP AND SWEATED PIG IN NOVEMBER 2011¹

(Metric tons)

	November			January–November ²		
	Stocks, opening ²	Net receipts ³	Melted or consumed	Stocks, closing	Net receipts ³	Melted or consumed
New scrap:						
Extrusion	19,100	31,800	31,600	19,400	449,000	451,000
Can stock clippings	18,600	22,900	18,800	22,700	242,000	224,000
Other wrought sheet/clippings	7,930	35,700	35,300	8,330	364,000	361,000
Casting	1,700	4,810	4,900	1,600	59,200	58,600
Borings and turnings	2,950	9,420	9,660	2,720	104,000	105,000
Dross and skimmings	7,450	42,900	42,900	7,450	468,000	469,000
Total new scrap	57,700	148,000	143,000	62,100	1,690,000	1,670,000
Old scrap:						
Used castings	8,300	21,600	21,200	8,770	270,000	270,000
Used extrusion	6,380	11,000	10,500	6,840	104,000	102,000
Used cans (shredded, loose, baled)	20,100	61,900	56,400	25,600	632,000	629,000
Other wrought products	4,460	18,500	18,400	4,470	224,000	227,000
Fragmentized shredder (auto shredder)	1,040	5,400	5,500	939	69,300	69,600
Total old scrap	40,300	118,000	112,000	46,600	1,300,000	1,300,000
Sweated pig	89	147	147	89	1,600	1,620
Total all classes	98,100	266,000	255,000	109,000	2,990,000	2,970,000

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

²May include revisions to previously published data.

³Includes data on imported aluminum-base scrap.

TABLE 5
ALUMINUM ALLOYS PRODUCED AT SECONDARY SMELTERS IN THE UNITED STATES FOR 2011^{1,2}

(Metric tons)

	November				January–November ³	
	Stocks, opening ³	Production	Net shipments	Stocks, closing	Production	Net shipments
Die-cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	1,290	2,190	2,330	1,150	30,300	30,900
380 and variations	2,400	23,900	23,500	2,810	262,000	262,000
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	2,570	1,710	1,710	2,570	23,800	23,900
No. 319 and variations	2,260	5,280	5,320	2,210	60,800	61,700
F-132 alloy and variations	939	596	596	939	7,020	6,530
Al-Zn alloys	278	130	130	278	1,430	1,430
Al-Si alloys (0.6% to 2.0% Cu)	391	175	175	391	2,300	2,310
Al-Cu alloys (1.5% Si, max.)	48	34	34	48	374	374
Other ⁴	8,750	10,700	15,200	4,220	115,000	124,000
Wrought alloys, extrusion billets	16,300	38,200	37,800	16,700	445,000	444,000
Total all alloys	35,200	82,900	86,800	31,300	947,000	957,000
Less:						
Primary aluminum consumed	XX	8,720	XX	XX	117,000	XX
Primary silicon consumed	XX	1,480	XX	XX	16,400	XX
Other alloying ingredients consumed	XX	806	XX	XX	11,100	XX
Net metallic recovery from aluminum scrap and sweated pig consumed in production of secondary aluminum ingot ⁵						
	XX	71,900	XX	XX	803,000	XX

XX Not applicable.

¹Excludes integrated aluminum companies.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³May include revisions to previously published data.

⁴Includes alloys No. 12, Al-Mg, Al-Si-Cu-Ni, aluminum-base hardeners, variations of these alloys, plus other aluminum alloys.

⁵No allowance made for melt-loss of primary aluminum and alloying ingredients.

TABLE 6
AVERAGE PRICE OF ALUMINUM IN THE UNITED STATES
AND ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	Midwest U.S. market price	LME cash price Grade A
2010:		
November	111.938	105.807
December	111.950	106.600
January–December	104.382	98.553
2011:		
January	116.313	110.638
February	119.438	113.752
March	121.800	115.767
April	128.313	120.762
May	126.063	117.558
June	124.350	115.896
July	121.625	113.926
August	116.563	108.508
September	112.400	104.160
October	105.875	98.515
November	102.563	94.038
January–November	117.755	110.320

Source: Platts Metals Week.

TABLE 7
AVERAGE BUYING PRICES FOR ALUMINUM SCRAP

(Cents per pound)

Month	Used beverage cans	Mixed low copper clips	Old sheet and cast	Turnings (clean and dry)
2010:				
November	79.38	76.90	71.35	68.93
December	82.26	77.68	72.47	70.05
January–December	74.16	72.63	67.81	65.97
2011:				
January	86.78	82.23	76.53	73.53
February	89.11	85.34	79.95	78.08
March	90.96	87.07	81.96	81.00
April	96.07	87.19	82.83 ¹	81.93
May	94.71	86.10	80.69 ¹	79.31
June	94.05	84.50	79.30 ¹	79.11
July	90.95	84.55	79.43 ¹	79.00
August	86.54	83.91	77.56 ¹	76.87
September	83.07	80.64	74.27 ¹	73.64
October	78.07	74.88	70.13 ¹	68.90
November	76.63	73.85	69.10 ¹	68.60
January–November	87.90	82.75	77.43	76.36

¹Beginning in April 2011, old sheet and old cast were reported separately. The average of the two prices is presented in this table.

Source: American Metal Market.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN OCTOBER 2011¹

(Metric tons)

Country	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	October	January– October	October	January– October	October	January– October	October	January– October
Argentina	15,000	95,000	--	14	--	--	15,000	95,000
Australia	2,760	24,600	2	70	18	38	2,780	24,700
Austria	--	14	1,890	15,400	--	--	1,890	15,400
Bahamas, The	--	--	--	--	188	3,050	188	3,050
Bahrain	--	40	1,770	14,900	--	--	1,770	14,900
Belgium	29	311	194	1,100	19	227	242	1,640
Brazil	8,730	34,200	2,920	15,400	--	74	11,600	49,700
Canada	138,000	1,580,000	26,300	268,000	35,400	295,000	200,000	2,150,000
Chile	--	--	--	--	185	2,240	185	2,240
China	145	1,420	11,000	127,000	5	83	11,200	128,000
Colombia	--	162	194	3,010	--	40	194	3,210
Costa Rica	--	22	(2)	27	315	3,560	315	3,610
Egypt	--	--	305	4,350	--	--	305	4,350
El Salvador	--	--	--	16	259	3,630	259	3,650
France	600	3,330	482	4,200	--	--	1,080	7,540
Germany	406	1,130	6,740	66,200	205	1,200	7,360	68,500
Greece	--	--	1,910	12,800	--	48	1,910	12,800
Guatemala	--	80	--	--	691	10,400	691	10,500
Honduras	--	--	--	--	225	2,790	225	2,790
Hong Kong	--	(2)	326	3,840	43	43	369	3,880
India	225	679	1,470	12,400	--	1	1,690	13,000
Indonesia	--	--	7,670	59,300	--	18	7,670	59,400
Italy	393	393	454	4,400	22	294	869	5,090
Japan	70	584	397	6,750	69	466	536	7,800
Korea, Republic of	303	7,540	296	2,770	--	170	599	10,500
Malaysia	--	--	669	7,070	--	612	669	7,680
Mexico	1,660	15,400	2,350	24,700	12,800	116,000	16,900	156,000
New Zealand	1,580	20,000	1	96	37	175	1,610	20,300
Qatar	3,060	47,500	--	--	--	--	3,060	47,500
Romania	82	301	338	2,500	--	878	420	3,680
Russia	23,200	188,000	1,130	11,500	--	--	24,400	200,000
Saudi Arabia	--	45	--	1	726	13,600	726	13,600
South Africa	1,010	13,100	5,960	40,400	--	--	6,970	53,500
Sweden	--	6	247	2,530	--	137	247	2,670
Switzerland	--	10	146	1,970	--	(2)	146	1,980
Taiwan	52	669	530	6,140	253	438	835	7,250
Tajikistan	--	4,450	--	--	--	--	--	4,450
United Arab Emirates	19,900	205,000	--	2	132	618	20,100	205,000
United Kingdom	15,100	15,500	791	4,090	477	8,860	16,300	28,400
Venezuela	10,400	125,000	19	957	45	1,400	10,500	127,000
Other	495	3,410	1,280	11,500	4,900	19,300	6,670	34,200
Total	243,000	2,390,000	77,800	736,000	57,000	486,000	378,000	3,610,000

-- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 9
U.S. EXPORTS OF ALUMINUM IN OCTOBER 2011¹

(Metric tons)

Country or territory	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	October	January– October	October	January– October	October	January– October	October	January– October
Australia	59	595	284	1,820	--	11	343	2,430
Belgium	8	120	325	2,600	18	66	351	2,780
Brazil	4	38	604	7,420	118	3,840	726	11,300
Canada	8,050	69,800	31,600	316,000	12,600	120,000	52,300	506,000
Chile	--	3,590	665	3,730	--	--	665	7,330
China	300	3,820	2,530	27,600	128,000	1,200,000	131,000	1,240,000
Colombia	6	40	203	1,640	59	150	268	1,830
France	183	1,360	1,210	13,500	14	48	1,410	14,900
Germany	378	3,410	1,130	9,410	36	556	1,550	13,400
Guatemala	--	41	1,460	14,400	--	1	1,460	14,400
Hong Kong	--	25	68	2,840	1,930	29,600	2,000	32,500
India	1	140	184	1,540	4,620	42,600	4,810	44,300
Indonesia	--	16	17	521	841	5,000	858	5,540
Ireland	--	20	580	7,170	--	--	580	7,190
Israel	51	739	904	7,650	--	--	955	8,390
Italy	1	34	268	2,920	--	163	269	3,120
Japan	84	2,010	1,800	14,000	1,980	12,400	3,860	28,400
Jordan	--	(2)	630	3,080	--	--	630	3,080
Korea, Republic of	142	636	1,990	15,200	15,300	163,000	17,400	179,000
Kuwait	--	--	1,130	10,100	--	--	1,130	10,100
Malaysia	2	31	119	1,810	349	3,630	470	5,470
Mexico	14,200	167,000	25,100	245,000	9,480	110,000	48,900	522,000
Netherlands	--	134	111	848	38	756	150	1,740
New Zealand	(2)	26	280	1,980	1	22	281	2,030
Norway	--	7	(2)	17	57	18,300	57	18,300
Pakistan	--	(2)	--	6	1,050	5,470	1,050	5,480
Panama	20	21	392	4,060	--	61	412	4,140
Romania	203	1,260	10	100	--	--	213	1,360
Saudi Arabia	3	3	4,970	40,300	(2)	(2)	4,970	40,300
Singapore	56	678	257	3,280	57	391	370	4,350
Spain	1	24	283	1,780	74	477	358	2,280
Taiwan	241	1,950	959	8,780	5,420	48,200	6,620	58,900
Thailand	(2)	57	134	959	385	4,970	519	5,980
Tunisia	--	--	6	1,440	--	--	6	1,440
Turkey	--	42	316	2,220	--	36	316	2,300
United Arab Emirates	--	5	1,300	8,620	65	582	1,360	9,200
United Kingdom	162	1,690	1,570	13,900	122	688	1,850	16,200
Vietnam	--	38	4	196	1,160	4,660	1,170	4,900
Other	67	1,020	1,360	12,100	130	4,650	1,550	17,800
Total	24,300	260,000	84,800	811,000	184,000	1,790,000	293,000	2,860,000

-- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.