

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 SEPTEMBER 2011

Domestic primary aluminum production in September 2011 was 169,000 metric tons (t). The average daily production was 5,620 t, slightly higher than that for the previous month and 18% higher than that for September 2010. Primary aluminum production for the first three quarters of 2011 was 14% higher than that for the same period in 2010.

Total aluminum recovered from scrap in September 2011 was 254,000 t, 5% less than the revised total aluminum recovered in the previous month but 12% higher than the aluminum recovered in September 2010. Of this, 135,000 t of aluminum was recovered from new scrap, 7% less than the revised amount in the previous month but 6% more than that in September 2010. Aluminum recovered from old scrap in September 2011 totaled 119,000 t, 3% less than the revised amount in August but 19% more than the amount in September 2010. Total aluminum recovered from scrap for January through September was 7% higher than the total for the same period of 2010. In January through September, aluminum recovered from new scrap was up by 5% and recovery from old scrap was up 8% from those in the same period of the previous year.

Update

Rio Tinto plc (London, United Kingdom) announced plans to streamline its aluminum product group by selling 13 assets at an appropriate time in the future. Rio Tinto's interests in six Australian and New Zealand assets will be transferred into a new business unit, to be called Pacific Aluminium, that will be managed and reported separately from the Rio Tinto Alcan product group prior to divestment. A second group of seven non-core assets, including the 196,000-metric-ton-per-year (t/yr) smelter at Sebrege, KY, will continue to be managed by Rio

Tinto Alcan while it further investigates divestment options. Other assets for sale that will continue to be managed by Rio Tinto Alcan include a 169,000-t/yr smelter with an associated powerplant at Lynemouth, United Kingdom; a 700,000-t/yr alumina refinery at Gardanne, France; and specialty alumina refineries at Beyreide and La Bathie, France, and Teutschenthal, Germany. The Pacific Aluminium group will include the 8-million-metric-ton-per-year (Mt/yr) bauxite mine and 3.8-Mt/yr alumina refinery at Gove, Australia; a powerplant at Gladstone, Australia; the Bell Bay (160,000 t/yr), Boyne (550,000 t/yr), and Tomago (525,000 t/yr) smelters in Australia; and the 350,000-t/yr Tiwai Point, New Zealand, smelter (Rio Tinto plc, 2011).

BHP Billiton Ltd., (Melbourne, Australia) shut down one half (two potlines) of the 180,000-t/yr Bayside smelter in South Africa owing to shortages of electricity. It was not certain when the power supply situation would improve and enable a restart of the potlines (Creamer, 2011).

In September, the monthly average U.S. market price of primary aluminum ingot fell to \$1.124 per pound from \$1.166 per pound in August. The downward trend continued in October, with the monthly average price falling to \$1.059 per pound.

References Cited

- Creamer, Martin, 2011, BHP Billiton aluminium gives 130 MW back to South Africa: Creamer Media Pty. Ltd., October 13, 1 p. (Accessed October 14, 2011, at <http://www.miningweekly.com/article/bhp-billitons-aluminium-business-has-volunteed-130-mw-back-to-south-africa-2011-10-13>.)
- Rio Tinto plc, 2011, Rio Tinto streamlines aluminium product group: Melbourne, Australia, Rio Tinto plc media release, October 17, 2 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–September	1,285 ^r	1,170 ^r	975 ^r	2,150 ^r	2,050	765	2,820	6,250	1,000
September	143	127	100	227	224	78	302	672	1,000
October	148	130	94	224	203	76	279	651	1,030
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	1,130
August	172	144 ^r	123 ^r	268 ^r	241	85	327	766	NA
September	169	135	119	254	NA	NA	NA	NA	NA
January–September	1,463	1,230	1,060	2,290	NA	NA	NA	NA	NA

^rRevised. 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	
	Con-sump-tion	Metal recovery	Con-sump-tion	Metal recovery	Con-sump-tion	Metal recovery	Con-sump-tion	Metal recovery	Con-sump-tion	Metal recovery
	2010	1,780	1,360	1,530	1,390	56	49	7	7	3,370
2010:										
January–September	1,300 ^r	1,010 ^r	1,210 ^r	1,100 ^r	41 ^r	35 ^r	5 ^r	5	2,560 ^r	2,150 ^r
September	159	115	117	107	5	4	1	1	282	227
October	163	117	111	101	5	4	1	1	280	224
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 ^r	145 ^r	129 ^r	117 ^r	5	4	1	1	328 ^r	268 ^r
September	189	141	119	107	5	4	1	1	313	254
January–September	1,660	1,240	1,110	1,010	46	40	6	6	2,820	2,290

^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 SEPTEMBER 2011¹

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
	Secondary smelters	157,000	189,000	118,000
Independent mill fabricators	108,000	119,000	97,800	107,000
Foundries	4,220	5,070	3,690	4,420
Other consumers	524	629	524	629
Total	270,000	313,000	220,000	254,000

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 SEPTEMBER 2011¹

(Metric tons)

	September			January–September ²		
	Stocks, opening ²	Net receipts ³	Melted or consumed	Stocks, closing	Net receipts ³	Melted or consumed
New scrap:						
Extrusion	18,900	33,900	33,400	19,400	386,000	388,000
Can stock clippings	11,200	22,600	17,600	16,300	196,000	185,000
Other wrought sheet/clippings	9,650	39,900	41,000	8,490	287,000	284,000
Casting	1,880	6,030	6,210	1,690	49,500	48,800
Borings and turnings	2,910	9,480	9,480	2,910	84,700	84,800
Dross and skimmings	7,450	42,600	42,600	7,450	382,000	382,000
Total new scrap	52,000	155,000	150,000	56,200	1,380,000	1,370,000
Old scrap:						
Used castings	8,140	25,900	25,300	8,770	225,000	224,000
Used extrusion	6,130	10,500	10,200	6,410	82,700	80,900
Used cans (shredded, loose, baled)	9,300	61,300	57,600	13,000	506,000	516,000
Other wrought products	4,460	20,400	20,400	4,460	185,000	188,000
Fragmentized shredder (auto shredder)	1,030	6,090	5,960	1,170	57,300	57,300
Total old scrap	29,100	124,000	120,000	33,800	1,060,000	1,070,000
Sweated pig	89	147	147	89	1,310	1,330
Total all classes	81,100	279,000	270,000	90,100	2,440,000	2,440,000

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)

	September			January–September ³		
	Stocks, opening ³	Production	Net shipments	Stocks, closing	Production	Net shipments
Die-cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	1,690	2,190	2,330	1,560	25,900	26,100
380 and variations	2,400	23,900	23,900	2,400	214,000	215,000
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	2,570	1,710	1,710	2,570	20,400	20,500
No. 319 and variations	2,300	5,280	5,310	2,270	50,300	51,100
F-132 alloy and variations	939	596	596	939	5,830	5,340
Al-Zn alloys	278	130	130	278	1,170	1,170
Al-Si alloys (0.6% to 2.0% Cu)	391	175	175	391	1,950	1,950
Al-Cu alloys (1.5% Si, max.)	48	34	34	48	306	306
Other ⁴	8,270	10,600	9,770	9,100	92,600	97,300
Wrought alloys, extrusion billets	16,400	37,700	37,600	16,500	368,000	367,000
Total all alloys	35,300	82,300	81,600	36,000	781,000	786,000
Less:						
Primary aluminum consumed	XX	8,700	XX	XX	99,400	XX
Primary silicon consumed	XX	1,380	XX	XX	13,400	XX
Other alloying ingredients consumed	XX	904	XX	XX	9,400	XX
Net metallic recovery from aluminum scrap and sweated pig consumed in production of secondary aluminum ingot ⁵	XX	71,300	XX	XX	658,000	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:		
September	103.550	98.067
October	112.438	106.418
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
January–September	120.763	113.441

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:				
September	74.76	73.60	66.98	65.83
October	82.57	76.86	70.74	68.38
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
January–September	90.25	84.61	79.17	78.05

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 AUGUST 2011¹

(Metric tons)

Country	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	August	January–	August	January–	August	January–	August	January–
		August		August		August		August
Argentina	17,500	80,000	6	13	--	--	17,500	80,000
Australia	5,340	21,700	8	41	--	20	5,340	21,800
Austria	--	14	2,040	11,600	--	--	2,040	11,600
Bahamas, The	--	--	--	--	52	2,800	52	2,800
Bahrain	--	20	1,150	11,000	--	--	1,150	11,000
Belgium	--	273	136	808	19	189	155	1,270
Brazil	2,920	23,900	1,180	10,300	4	74	4,110	34,300
Canada	160,000	1,260,000	30,000	217,000	32,600	231,000	223,000	1,710,000
Chile	--	--	--	--	178	1,850	178	1,850
China	290	1,230	22,100	89,700	26	72	22,400	91,000
Colombia	--	162	263	2,570	19	40	282	2,770
Costa Rica	--	2	(2)	24	424	2,860	424	2,890
Egypt	--	--	736	3,900	--	--	736	3,900
El Salvador	--	--	8	16	443	3,010	451	3,030
France	509	2,220	453	3,370	--	--	962	5,590
Germany	38	716	6,880	53,500	17	135	6,930	54,300
Greece	--	--	1,570	10,100	--	42	1,570	10,200
Guatemala	39	80	--	--	1,190	8,760	1,230	8,840
Honduras	--	--	--	--	334	2,330	334	2,330
Hong Kong	--	(2)	408	3,040	--	--	408	3,040
India	234	397	998	9,660	--	1	1,230	10,100
Indonesia	--	--	4,540	45,100	--	18	4,540	45,100
Italy	(2)	(2)	449	3,530	30	241	479	3,780
Japan	28	460	520	6,030	11	377	559	6,870
Korea, Republic of	341	7,010	264	2,040	37	170	642	9,220
Malaysia	--	--	1,100	5,560	137	553	1,240	6,110
Mexico	1,590	12,900	2,780	19,900	11,400	91,500	15,800	124,000
New Zealand	506	16,500	16	94	41	101	563	16,700
Qatar	12,000	39,500	--	--	--	--	12,000	39,500
Romania	29	61	229	1,590	240	811	499	2,460
Russia	8,580	139,000	1,200	9,180	--	--	9,780	148,000
Saudi Arabia	--	45	--	1	1,290	10,700	1,290	10,800
South Africa	1,020	12,100	3,880	30,900	--	--	4,900	43,000
Sweden	2	6	275	2,120	--	--	277	2,120
Switzerland	--	10	215	1,470	--	(2)	215	1,480
Taiwan	35	600	741	4,970	67	105	844	5,680
Tajikistan	--	4,450	--	--	--	--	--	4,450
United Arab Emirates	27,300	164,000	(2)	2	98	240	27,400	164,000
United Kingdom	67	389	192	2,940	640	7,650	899	11,000
Venezuela	2,700	95,500	--	918	69	1,100	2,770	97,500
Other	344	2,580	1,090	9,250	2,500	11,100	3,930	23,000
Total	241,000	1,880,000	85,500	572,000	51,900	378,000	379,000	2,830,000

-- 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 AUGUST 2011¹

(Metric tons)

Country or territory	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	August	January– August	August	January– August	August	January– August	August	January– August
Australia	1	479	176	1,420	--	11	176	1,910
Belgium	8	110	381	1,880	--	41	388	2,040
Brazil	(2)	15	760	6,120	238	3,310	998	9,450
Canada	6,070	54,700	34,500	250,000	12,200	96,200	52,700	401,000
Chile	20	3,220	17	1,500	--	--	37	4,720
China	491	3,290	2,510	22,300	134,000	943,000	137,000	968,000
Colombia	14	17	85	1,340	28	91	127	1,440
France	287	1,080	2,140	10,900	15	34	2,440	12,000
Germany	396	2,710	1,050	7,320	91	427	1,540	10,500
Guatemala	--	41	1,390	11,500	--	1	1,390	11,500
Hong Kong	1	25	140	2,700	2,850	24,800	2,990	27,600
India	20	111	73	1,260	4,990	33,300	5,080	34,700
Indonesia	(2)	16	38	399	432	3,220	470	3,640
Ireland	4	14	420	5,840	--	--	425	5,850
Israel	126	630	765	6,020	--	--	891	6,650
Italy	--	33	310	2,400	21	143	331	2,580
Japan	222	1,550	1,620	10,900	1,810	8,480	3,660	21,000
Jordan	--	(2)	99	2,050	--	--	99	2,050
Korea, Republic of	50	345	1,370	11,600	16,100	133,000	17,500	145,000
Kuwait	--	--	1,150	7,890	--	--	1,150	7,890
Malaysia	--	28	543	1,500	642	3,110	1,190	4,640
Mexico	14,900	139,000	25,900	194,000	8,310	93,100	49,100	426,000
Netherlands	--	133	103	665	41	642	143	1,440
New Zealand	(2)	25	150	1,510	--	21	150	1,560
Norway	--	7	4	14	38	18,200	42	18,200
Pakistan	--	(2)	(2)	6	964	3,900	964	3,910
Panama	--	(2)	327	3,370	1	61	328	3,430
Romania	123	895	6	80	--	--	129	975
Saudi Arabia	--	(2)	4,360	30,300	--	--	4,360	30,300
Singapore	61	534	230	2,700	130	267	420	3,500
Spain	--	22	185	1,290	19	403	205	1,720
Taiwan	294	1,520	691	6,990	7,110	37,900	8,100	46,400
Thailand	(2)	57	81	743	783	4,200	864	5,000
Tunisia	--	--	--	1,140	--	--	--	1,140
Turkey	1	42	200	1,720	--	36	201	1,790
United Arab Emirates	--	5	180	5,550	148	410	328	5,960
United Kingdom	115	1,450	1,450	10,500	33	538	1,590	12,500
Vietnam	16	29	5	176	436	3,130	456	3,330
Other	45	666	1,740	9,100	1,430	3,560	3,220	13,300
Total	23,200	213,000	85,100	637,000	193,000	1,420,000	302,000	2,260,000

-- 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.