

Mineral Industry Surveys

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ALUMINUM IN APRIL 2016

Following recent smelter shutdowns, only two companies reported domestic production of primary aluminum. Consequently, beginning in February 2016, monthly production data were withheld to avoid the release of proprietary data. At the end of April, approximately 750,000 metric tons per year of capacity was operating at primary aluminum smelters in the United States according to public statements by the two companies that own the smelters.

Total aluminum recovered from scrap in April 2016 was 292,000 metric tons (t), 3% less than that recovered in March but the same as that in April 2015 (fig. 1, table 1). Of this, 164,000 t of aluminum was recovered from new scrap, 3% less than the amount in the preceding month but 4% more than the amount recovered in April 2015. The amount of aluminum recovered from old scrap was 129,000 t, 3% less than the amount recovered in the preceding month and 4% less than that in April 2015.

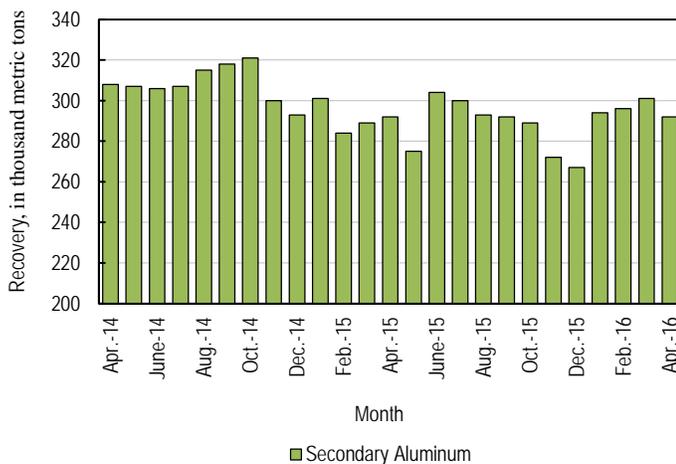


Figure 1. Monthly domestic secondary aluminum recovery from April 2014 through April 2016. Source: U.S. Geological Survey.

Prices and Stocks

The monthly average U.S. market price of primary aluminum ingot increased to \$0.793 per pound in April from \$0.773 per pound in March (fig. 2). The monthly average price decreased to \$0.786 per pound in May.

Inventories of primary aluminum in London Metal Exchange Ltd. approved warehouses in the United States continued their downward trend, decreasing to 299,000 t at the end of April, and 280,000 t at the end of May, their lowest level since September 2007.

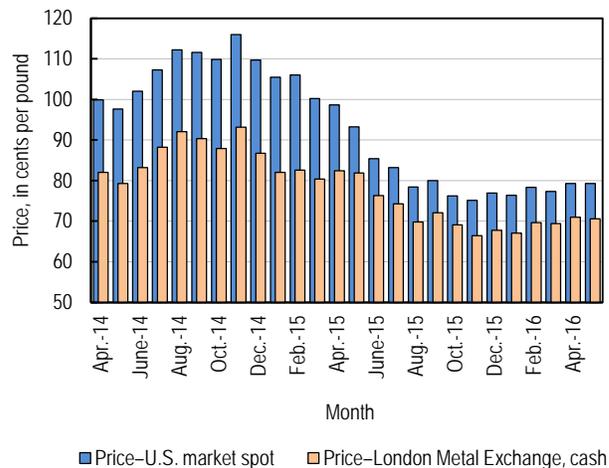


Figure 2. Average monthly prices for primary aluminum from April 2014 through May 2016. Source: Platts Metals Week.

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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		
2015 ^P	1,587	1,870	1,590	3,460	3,380	1,180	4,560	9,610	1,350
2015:									
April	138	158	134	292	322	103	425	855	1,360
May	142	147	127	275	299	118	417	833	1,370
June	133	171	133	304	301	100	401	839	1,350
July	134	159	140	300	301	100	401	835	1,380
August	135	158	136	293	251	89	339	767	1,320
September	128	158	134	292	283	87	370	790	1,310
October	128	154	135	289	270	88	358	776	1,320
November	121	150	122	272	267	85	353	746	1,350
December	113	148	118	267	259	87	346	726	1,350
January–April	552	625	542	1,170	1,150	425	1,580	3,300	1,400
2016:									
January	106	169	125	294	362	91	453	854	1,340
February	W	166	130	296	270	89	359	655 ⁵	1,370 ^r
March	W	169	133	301	385	96	481	782 ⁵	1,330
April	W	164	129	292	350	97	447	739 ⁵	NA
January–April	W	668	516	1,180	1,370	373	1,740	2,920 ⁵	NA

^PPreliminary. ^rRevised. NA Not available. W Withheld to avoid disclosing company proprietary data.

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.

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

⁵Excludes primary production.

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
	2015 ^p	2,180	1,680	1,840	1,670	117	103	3	3	4,130
2015:										
April	183	141	157	143	10	9	(2)	(2)	349	292
May	183	141	137	125	10	9	(2)	(2)	330	275
June	182	140	170	155	10	9	(2)	(2)	362	304
July	183	141	165	150	10	9	(2)	(2)	358	300
August	182	140	158	144	10	9	(2)	(2)	350	293
September	183	141	156	142	10	9	(2)	(2)	349	292
October	182	140	155	140	10	9	(2)	(2)	346	289
November	181	139	136	124	10	9	(2)	(2)	327	272
December	178	138	132	120	10	9	(2)	(2)	320	267
January–April	723	559	628	572	39	34	1	1	1,390	1,170
2016:										
January	193	149	149	137	8	8	(2)	(2)	352	294
February	192	149	152	139	8	8	(2)	(2)	354	296
March	197	151	155	142	8	8	(2)	(2)	362	301
April	195	151	146	133	8	8	(2)	(2)	350	292
January–April	779	600	603	551	34	31	1	1	1,420	1,180

^pPreliminary.

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

²Less than ½ unit.

TABLE 3
CONSUMPTION OF AND RECOVERY FROM PURCHASED
NEW AND OLD ALUMINUM SCRAP IN APRIL 2016¹

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
	Secondary smelters	163,000	195,000	126,000
Independent mill fabricators	132,000	146,000	121,000	133,000
Foundries	7,040	8,450	6,440	7,730
Other consumers	301	361	301	361
Total	302,000	350,000	253,000	292,000

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 APRIL 2016¹

(Metric tons)

	April			January–April ²		
	Stocks, opening ²	Net receipts ³	Melted or consumed	Stocks, closing	Net receipts ³	Melted or consumed
New scrap:						
Extrusion	13,700	51,100	51,600	13,200	216,000	218,000
Can stock clippings	7,100	20,200	20,400	6,970	82,200	82,400
Other wrought sheet/clippings	7,080	48,600	48,300	7,410	187,000	194,000
Casting	2,070	6,800	6,660	2,200	25,400	25,600
Borings and turnings	2,830	9,150	9,280	2,710	37,400	37,500
Dross and skimmings	7,910	38,500	38,500	7,910	156,000	156,000
Total new scrap	40,700	174,000	175,000	40,400	704,000	713,000
Old scrap:						
Used castings	6,890	21,800	22,000	6,780	87,700	88,000
Used extrusion	8,460	13,300	14,300	7,440	57,200	59,700
Used cans (shredded, loose, baled)	5,500	54,700	54,700	5,480	219,000	219,000
Other wrought products	19,600	29,100	30,000	18,700	116,000	120,000
Fragmentized shredder (auto shredder)	2,450	6,240	6,490	2,200	24,500	25,200
Total old scrap	42,900	125,000	128,000	40,600	504,000	512,000
Sweated pig	183	151	151	183	605	605
Total all classes	83,800	300,000	302,000	81,200	1,210,000	1,230,000

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 IN APRIL 2016^{1,2}

(Metric tons)

	April				January–April ³	
	Stocks, opening ³	Production	Net shipments	Stocks, closing	Production	Net shipments
Die-cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	3,680	2,880	3,000	3,560	11,500	12,100
380 and variations	7,890	12,900	12,900	7,890	51,400	51,400
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,690	4,160	4,160	1,690	16,600	16,600
No. 319 and variations	3,260	6,880	6,880	3,260	27,500	27,500
F-132 alloy and variations	714	352	352	714	1,410	1,410
Al-Zn alloys	477	178	178	477	713	713
Al-Si alloys (0.6% to 2.0% Cu)	150	233	233	150	934	934
Al-Cu alloys (1.5% Si, max.)	148	72	72	148	287	287
Other ⁴	6,000	6,160	5,370	6,790	24,600	21,300
Wrought alloys, extrusion billets	21,700	62,600	62,300	22,000	250,000	250,000
Total all alloys	45,700	96,300	95,400	46,700	385,000	382,000
Less:						
Primary aluminum consumed	XX	18,100	XX	XX	71,300	XX
Primary silicon consumed	XX	2,110	XX	XX	8,360	XX
Other alloying ingredients consumed	XX	1,250	XX	XX	5,030	XX
Net metallic recovery from aluminum scrap and sweated pig consumed in production of secondary aluminum ingot ⁵	XX	74,900	XX	XX	301,000	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
2015:		
April	98.650	82.409
May	93.250	81.865
June	85.420	76.348
July	83.217	74.287
August	78.388	69.828
September	79.989	72.053
October	76.227	69.112
November	75.155	66.469
December	76.905	67.762
January–December	88.244	75.426
2016:		
January	76.350	67.090
February	78.345	69.637
March	77.345	69.409
April	79.274	70.940
January–April	77.829	69.269

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	Old cast	Turnings (clean and dry)
2015:					
April	71.00	69.64	64.16	65.80	62.36
May	61.70	65.45	61.70	63.70	58.00
June	56.14	60.14	57.59	60.14	59.14
July	57.86	58.50	55.91	59.45	51.91
August	58.00	56.10	52.33	56.33	49.57
September	60.24	54.52	50.62	54.42	49.33
October	59.30	52.39	49.00	53.00	47.91
November	56.84	51.00	47.74	52.08	47.00
December	59.89	51.59	47.36	52.36	47.36
January–December	65.09	61.04	57.20	60.12	55.94
2016:					
January	60.63	54.00	49.74	54.32	49.74
February	61.60	54.85	50.90	55.00	51.10
March	59.87	56.00	52.91	55.91	52.91
April	60.71	57.00	53.14	56.48	53.57
January–April	60.70	55.46	51.67	55.43	51.83

Source: American Metal Market.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN APRIL 2016¹

(Metric tons)

Country or territory	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	April	January– April	April	January– April	April	January– April	April	January– April
Argentina	9,550	48,100	--	--	--	15	9,550	48,100
Australia	3,890	4,350	4	76	256	396	4,150	4,820
Austria	--	7	2,770	10,800	183	606	2,950	11,400
Bahamas, The	--	--	--	--	36	652	36	652
Bahrain	18,000	44,300	6,370	15,500	--	--	24,400	59,800
Belgium	142	473	357	2,040	--	--	499	2,510
Brazil	25	13,800	1,210	4,310	1,960	3,520	3,190	21,700
Canada	174,000	744,000	21,400	87,500	29,200	115,000	225,000	946,000
Chile	--	--	--	--	312	918	312	918
China	134	371	25,900	109,000	38	366	26,100	109,000
Colombia	--	--	535	1,880	20	168	555	2,050
Costa Rica	--	--	(2)	(2)	383	1,080	383	1,080
El Salvador	--	--	44	82	185	918	229	1,000
France	764	3,700	1,390	5,250	253	945	2,400	9,890
Germany	75	355	5,510	22,200	7	301	5,600	22,900
Greece	--	--	1,450	5,570	--	20	1,450	5,590
Guatemala	--	--	--	--	717	2,440	717	2,440
Honduras	--	--	--	--	6	35	6	35
Hong Kong	--	--	377	1,190	--	--	377	1,190
India	1,650	13,000	3,460	10,100	--	51	5,120	23,100
Indonesia	--	--	2,990	12,000	--	--	2,990	12,000
Italy	232	546	1,510	3,750	--	51	1,740	4,350
Japan	--	--	2,140	8,500	90	271	2,230	8,770
Korea, Republic of	--	5,110	1,400	6,230	985	1,110	2,390	12,400
Malaysia	--	1,060	482	1,940	40	64	522	3,070
Mexico	684	3,550	4,120	15,300	10,300	38,000	15,100	56,800
New Zealand	1,290	6,080	--	(2)	--	(2)	1,290	6,080
Norway	108	6,520	2	10	--	--	110	6,530
Qatar	8,940	31,100	--	--	--	--	8,940	31,100
Romania	--	2	299	1,580	--	--	299	1,580
Russia	76,100	226,000	1,120	4,260	--	--	77,200	230,000
Saudi Arabia	2,910	16,400	--	--	19	142	2,930	16,600
South Africa	--	--	5,860	20,200	--	35	5,860	20,300
Sweden	--	--	484	2,250	--	--	484	2,250
Switzerland	--	--	41	326	--	40	41	366
Taiwan	--	81	667	1,930	399	1,330	1,070	3,340
United Arab Emirates	50,000	185,000	--	--	265	792	50,200	186,000
United Kingdom	67	384	1,100	4,000	511	1,910	1,680	6,290
Venezuela	1,000	12,400	--	466	1,170	1,950	2,170	14,900
Other	182	1,080	4,070	14,900	3,100	11,200	7,350	27,200
Total	350,000	1,370,000	97,100	373,000	50,500	185,000	497,000	1,920,000

-- 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 APRIL 2016¹

(Metric tons)

Country or territory	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	April	January–	April	January–	April	January–	April	January–
		April		April		April		April
Australia	6	53	35	410	--	--	41	463
Belgium	14	14	51	399	373	901	438	1,310
Brazil	4	21	459	1,720	--	35	463	1,770
Canada	8,170	34,100	37,700	151,000	9,790	38,700	55,600	224,000
Chile	--	5	65	107	21	42	86	154
China	22	90	2,350	10,500	53,900	218,000	56,200	229,000
Colombia	1	6	418	828	3	28	422	862
France	327	1,680	733	3,380	--	950	1,060	6,010
Germany	77	491	599	2,620	549	1,470	1,230	4,590
Guatemala	--	1	1,560	6,120	7	7	1,570	6,120
Hong Kong	1	1	64	627	3,210	12,400	3,280	13,100
India	--	16	122	429	4,000	14,200	4,120	14,600
Indonesia	(2)	2	94	163	1,810	8,050	1,900	8,210
Ireland	4	4	86	356	--	--	90	360
Israel	1	25	668	3,180	--	--	669	3,210
Italy	1	15	161	788	4	23	166	826
Japan	116	497	2,370	8,820	1,280	5,930	3,760	15,300
Jordan	(2)	(2)	--	562	--	--	(2)	562
Korea, Republic of	24	300	2,910	11,500	11,700	41,000	14,600	52,800
Kuwait	--	--	255	1,550	--	--	255	1,550
Malaysia	11	14	236	1,070	2,440	13,000	2,690	14,100
Mexico	12,700	58,600	41,700	152,000	10,500	42,800	65,000	253,000
Netherlands	(2)	14	293	1,060	19	120	312	1,190
New Zealand	--	(2)	105	350	--	1	105	351
Norway	--	30	7	20	--	--	7	50
Pakistan	--	--	1	6	579	3,200	580	3,210
Panama	--	(2)	601	2,290	--	4	601	2,290
Romania	4	14	7	141	--	--	11	155
Saudi Arabia	6	6	272	2,770	--	--	278	2,770
Singapore	6	38	230	987	--	--	236	1,030
Spain	--	2	137	941	--	78	137	1,020
Taiwan	395	932	329	1,480	2,740	9,960	3,460	12,400
Thailand	--	--	575	2,280	188	953	763	3,230
Tunisia	--	--	148	151	--	--	148	151
Turkey	2	3	174	1,080	--	(2)	176	1,080
United Arab Emirates	2	4	741	2,240	81	123	824	2,370
United Kingdom	46	216	1,100	5,380	94	336	1,240	5,930
Vietnam	20	83	310	803	1,450	2,250	1,780	3,130
Other	125	308	993	3,950	629	2,370	1,750	6,620
Total	22,100	97,600	98,700	384,000	105,000	417,000	226,000	899,000

-- 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.