Mineral Industry Surveys

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ALUMINUM IN JUNE 2024

Domestic primary aluminum production in June 2024 was 55,000 metric tons (t). The average daily production in June 2024 was 1,830 t, compared with 1,840 t in May 2024, 12% less than that in June 2023, and 30% less than that in June 2022 (fig. 1, table 1).

Total aluminum recovered from scrap in June 2024 was 295,000 t, compared with 299,000 t in May 2024 and 293,000 t in June 2023, while 5% more than that in June 2022. Of this, 163,000 t of aluminum was recovered from new scrap, and 133,000 t was recovered from old scrap (due to rounding, does not equal total) (fig. 1, table 1).

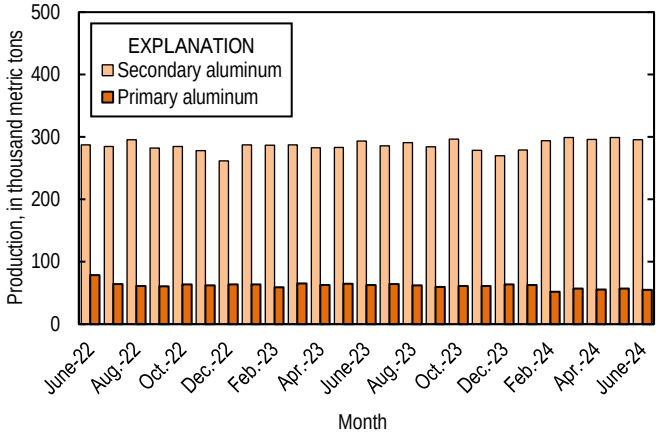

Figure 1. Monthly domestic primary and secondary aluminum production from June 2022 through June 2024.

Prices and Stocks

The June 2024 average U.S. spot market price of primary aluminum ingot was $1.34 per pound, compared with $1.37 per pound in May 2024, 8% more than that in June 2023, and 10% less than that in June 2022. The average cash price in June 2024 of primary aluminum ingot on the London Metal Exchange (LME) was $1.13 per pound, 3% less than that in May 2024, 14% more than that in June 2023, and 3% less than that in June 2022 (fig. 2, table 6).

Inventories of primary aluminum in LME-approved warehouses, including off-warrant inventories, in the United States were 11,051 t at the end of June 2024, 10% less than that at the end of May 2024. Inventories of aluminum alloy (North American Special Aluminum Alloy Contract) in LME-approved warehouses, including off-warrant inventories, in the United States were 131 t at the end of June 2024, unchanged from that at the end of May 2024 (London Metal Exchange Ltd., 2024a, b).

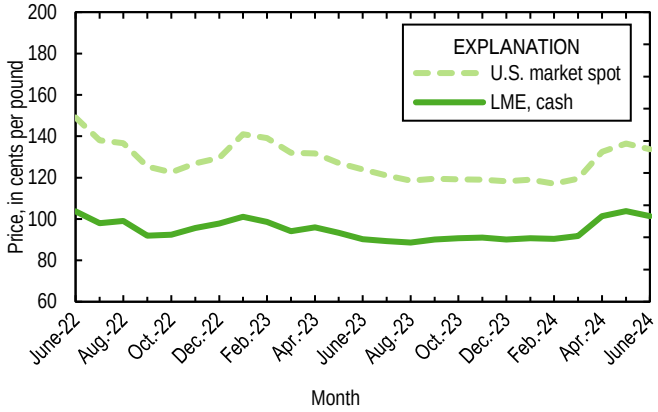

Figure 2. Average monthly prices for primary aluminum from June 2022 through June 2024. Source: S&P Global Platts Metals Week.

U.S. Trade

Total imports of aluminum for consumption in the first half of 2024 were 2.81 million metric tons (Mt) compared with 2.87 Mt in the first half of 2023. Imports of crude metal and alloys, and scrap decreased by 7% each, while imports of semi-fabricated products increased by 20%. The leading sources of total aluminum imports in the first half of 2024 were Canada (61%), United Arab Emirates (6%), and Mexico (5%). For crude metal and alloy imports, the leading sources were Canada (76%), the United Arab Emirates (10%), and Argentina (5%). For semi-fabricated products, the leading sources were Canada (18%), China, including Hong Kong (14%) and the Republic of Korea (12%). For scrap, the leading sources were Canada (60%) and Mexico (30%) (table 8).

Total aluminum exports in the first half of 2024 were 1.77 Mt, 8% more than those in the first half of 2023. Exports of crude metal were 336,000 t, 66% more than those during the

same period of 2023. Exports of alloys and semi-fabricated products totaled 393,000 t compared with 397,000 t in the first half of 2023. Scrap exports were unchanged at 1.04 Mt. The leading destinations for total aluminum exports during the first half of 2024 were Malaysia (22%), Mexico (18%), Canada (15%), India (12%), and Thailand (9%). For scrap, the leading destinations were India (21%), Malaysia (18%), Thailand (15%), the Republic of Korea (13%), China, including Hong Kong (9%), and Canada (7%). Scrap accounted for 59% of all aluminum exports in the first half of 2024 (table 9).

Updates

United States.—The U.S. Department of Defense has selected Constellium SE (France) to receive $23 million for increasing aluminum casting capacity at its facility in Muscle Shoals, AL. The funding is authorized under Title III of the Defense Production Act and awarded by the Defense Production Act Investments Program, a Government program within the purview of the Office of the Assistant Secretary of Defense for Industrial Base Policy. With this investment, Constellium will install state-of-the-art casting equipment at its currently dismantled Direct Chill aluminum casting center, increasing the facility's annual casting capacity by up to 136,000 t (reported as 300 million pounds). Aluminum castings are essential to multiple defense applications, including flight critical structural components; rocket and space systems; and light-weight armor for ground vehicles. The award aims to address challenges facing the aluminum casting industry (Constellium SE, 2024b; Light Metal Age, 2024; U.S. Department of Defense, 2024).

Global.—New Zealand Aluminium Smelters Ltd. (NZAS), a subsidiary of Rio Tinto Group (United Kingdom), announced a reduction of 205 megawatts (MW) of electricity at its Tiwai Smelter, which is expected to decrease total production capacity by one-third. Meridian Energy Ltd., the smelter's primary power supplier, requested the reduction in response to electricity shortages in New Zealand. Located in the Southland region, the Tiwai Smelter consists of three potlines with a total annual capacity of 373,000 t of primary aluminum (New Zealand Aluminium Smelters Ltd., 2024a, b; Rio Tinto Group, 2024, p. 339).

In June, unprecedented rainfall in Sierre, Switzerland, flooded aluminum production facilities operated by Constellium and Novelis Inc. (Atlanta, GA). Both companies reported suspending operations while damages were assessed, while Novelis estimated total net cash damages after insurance to be $80 million (Constellium SE, 2024a; Novelis, Inc., 2024).

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A worksheet has been added to the Excel table files that includes a button to remove text and numerical footnotes from data cells. This will allow users to only have numbers in data cells. Please see the worksheet titled "RemoveTextButton" for instructions on how to use the tool. Note: you must download the excel file to use the tool.

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Table 1. Components of aluminum supply.

[Data are rounded to no more than three significant digits, except “Primary production”; may not add to totals shown. Data are in thousand metric tons. Revised data are marked with a superscript "r". NA, not available.]

Period	Primary production	Secondary recovery[1]			Imports for consumption			Total new supply[2]	Stocks, end of period[3]
		New	Old	Total	Metals and alloys, crude	Plates, sheets, bars, etc.	Total		
2023									
Total	750	1,860	1,560	3,430	3,810	1,040	4,850 [r]	9,020 [r]	1,820
June	62	156	137	293	345	94	439	795 [r]	1,910
July	64	149	137	286	331	86	417	767	1,860
August	62	153	138	291	283	94	377	730	1,860
September	60	157	127	284	309	80	389	733	1,890
October	61	166	130	297	313	85	398	756	1,830
November	61	154	125	278	277	81	358	698 [r]	1,780
December	64	150	119	270	311	86	397	730 [r]	1,820
January–June	378 [r]	935 [r]	785 [r]	1,720 [r]	1,990	524	2,510	4,610 [r]	1,820 [r]
2024									
January	63	158	121	279	297	98	395	737	1,780
February	52	162	132	294	344	98	442	788	1,770
March	57	165	134	299	270	96	366	722	1,730
April	55	163	133	296	330	113	443	795	1,720
May	57	167	132	299	270	120	390	746	1,800
June	55	163	133	295	340	106	446	796	NA
January–June	339	978	785	1,760	1,850	631	2,480	4,580	NA

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

[2]Primary production, secondary recovery, and imports for consumption.

[3]Inventory levels reflect total for U.S. and Canadian producers; data from the Aluminum Association Inc.

Table 2. Estimated full coverage consumption of and metallic recover from purchased new and old aluminum scrap.
[Data are rounded to no more than three significant digits; may not add to totals shown. Data are in thousand metric tons. Revised data are marked with a superscript "r"].

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
2023										
Total	2,520	1,880	1,590	1,450	101	93	3	3	4,210	3,430
June	210	158	141	128	8	8	(1)	(1)	360	293
July	210	157	133	120	8	8	(1)	(1)	352	286
August	212	159	137	124	8	8	(1)	(1)	357	291
September	207	156	131	120	8	8	(1)	(1)	347	284
October	210	158	143	131	8	8	(1)	(1)	362	297
November	210	157	124	113	8	8	(1)	(1)	343	278
December	206	154	119	108	8	8	(1)	(1)	333	270
January–June	1,260 r	942 r	803	730	51	46	2	2	2,120 r	1,720 r
2024										
January	206	155	127	116	8	8	(1)	(1)	342	279
February	209	158	141	128	8	8	(1)	(1)	359	294
March	213	159	145	132	8	8	(1)	(1)	367	299
April	214	160	141	128	8	8	(1)	(1)	364	296
May	209	156	148	135	8	8	(1)	(1)	366	299
June	208	156	144	131	8	8	(1)	(1)	361	295
January–June	1,260	944	847	772	51	46	2	2	2,160	1,760

[1]Less than ½ unit.

Table 3. Consumption of and recovery from purchased new and old aluminum scrap in June 2024.
[Data are rounded to no more than three significant digits; may not add to totals shown.]

Aluminum scrap	Consumption (metric tons)		Calculated metallic recovery (metric tons)	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	173,000	208,000	130,000	156,000
Independent mill fabricators	131,000	144,000	120,000	131,000
Foundries	7,040	8,450	6,440	7,730
Other consumers	242	290	242	290
Total	312,000	361,000	256,000	295,000

Table 4. Purchased and toll-treated aluminum-base scrap in June 2024.
[Data are rounded to no more than three significant digits; may not add to totals shown. Data are in metric tons.]

Aluminum-base scrap	June				January–June	
	Stocks, opening[1]	Net receipts[2]	Melted or consumed	Stocks, closing	Net receipts[2]	Melted or consumed
New scrap						
Extrusions	18,600	46,800	46,800	18,600	272,000	272,000
Can stock clippings	96,400	30,700	30,700	96,400	187,000	187,000
Other wrought sheet/clippings	157,000	40,500	41,100	156,000	246,000	247,000
Castings	20,100	4,390	4,390	20,100	27,800	27,800
Borings and turnings	41,500	11,100	11,100	41,500	69,200	69,200
Dross and skimmings[3]	340,000	46,700	46,700	340,000	284,000	284,000
Total new scrap	674,000	180,000	181,000	673,000	1,090,000	1,090,000
Old scrap						
Used castings	24,700	27,100	27,100	24,700	165,000	165,000
Used extrusions	15,600	13,200	13,200	15,600	79,200	79,200
Used cans (shredded, loose, baled)	73,600	52,500	52,500	73,600	295,000	295,000
Other wrought products	36,700	25,300	25,300	36,700	159,000	159,000
Fragmentized shredder (auto shredder)	3,500	12,800	12,800	3,500	74,600	74,600
Total old scrap	154,000	131,000	131,000	154,000	772,000	772,000
Grand total, all classes	828,000	311,000	312,000	827,000	1,860,000	1,860,000

[1]May include revisions to previously published data.
[2]Includes data on imported aluminum-base scrap.
[3]Gross volume of dross and skimmings. Recoverable aluminum content ranges from 15% to 50% of gross weight.

Table 5. Aluminum alloys produced at secondary smelters in the United States in June 2024.

[Data are rounded to no more than three significant digits; may not add to totals shown. Excludes integrated aluminum companies. Data are in metric tons. —, not applicable.]

Aluminum alloys	June				January–June	
	Stocks, opening[1]	Production	Net shipments	Stocks, closing	Production	Net shipments
Die-cast alloys						
13% Si, 360, etc. (0.6% Cu, max.)	4,370	2,700	2,700	4,370	16,200	13,800
380 and variations	7,750	17,600	17,600	7,750	106,000	103,000
Sand and permanent mold						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,940	2,130	2,130	1,940	12,800	12,800
No. 319 and variations	1,200	1,390	1,390	1,200	8,330	8,330
F-132 alloy and variations	89	233	233	89	1,400	1,400
Al-Zn alloys	339	71	71	339	425	425
Al-Si alloys (0.6% to 2.0% Cu)	230	195	195	230	1,170	1,170
Al-Cu alloys (1.5% Si, max.)	139	724	724	139	4,350	4,350
Other[2]	3,730	4,450	4,450	3,730	26,700	26,700
Other						
Wrought alloys, extrusion billets	14,200	60,600	60,600	14,200	364,000	364,000
Total all alloys	34,000	90,100	90,100	34,000	541,000	536,000
Less						
Primary aluminum consumed	—	15,200	—	—	91,100	—
Primary silicon consumed	—	1,600	—	—	9,580	—
Other alloying ingredients consumed	—	839	—	—	5,040	—
Other						
Net metallic recovery from aluminum scrap consumed in production of secondary aluminum ingot[3]	—	72,500	—	—	435,000	—

[1]May include revisions to previously published data.

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

[3]No 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.
[Data are in cents per pound. Source: S&P Global Platts Metals Week.]

Period	Midwest U.S. market price	LME cash price Grade A
2023		
June	124.000	98.917
July	121.012	97.614
August	118.557	96.787
September	119.429	98.756
October	119.136	99.433
November	119.011	99.877
December	118.250	98.610
January–December	125.863	102.113
2024		
January	118.966	99.514
February	117.083	98.984
March	119.438	100.791
April	132.536	113.285
May	136.524	116.334
June	133.738	113.154
January–June	126.381	107.010

Table 7. Average buying prices for aluminum scrap.
[Data are in cents per pound. Source: Fastmarkets–AMM.]

Period	Used beverage cans	Mixed low copper clips	Old sheet	Old cast	Turnings (clean and dry)
		2023			
June	69.20	67.30	68.70	70.60	60.30
July	68.00	68.38	68.50	70.00	57.88
August	67.80	67.40	67.00	69.40	59.60
September	67.75	66.50	67.25	68.50	59.25
October	68.00	66.50	68.75	68.75	59.50
November	69.50	68.00	69.50	69.40	61.60
December	70.38	68.25	68.88	69.75	65.50
January–December	73.84	68.35	69.03	70.37	59.88
		2024			
January	74.13	69.13	70.25	72.13	68.63
February	76.00	69.90	71.80	73.80	71.40
March	78.00	71.13	73.00	78.00	72.50
April	87.88	73.00	76.25	79.50	74.63
May	92.60	78.60	82.60	82.00	80.20
June	94.50	79.50	82.25	82.00	82.00
January–June	83.85	73.54	76.03	77.91	74.89

Table 8. U.S. imports for consumption of aluminum in June 2024.
[Data are rounded to no more than three significant digits; may not add to totals shown. Data are in metric tons. Source: U.S. Census Bureau].

Country or locality	Metals and alloys, crude		Plates, sheets, bars[1]		Scrap		Total	
	June	January–June	June	January–June	June	January–June	June	January–June
Argentina	35,300	91,700	0	17	0	0	35,300	91,800
Australia	5,400	38,000	10	81	0	0	5,410	38,100
Austria	0	4	2,770	12,500	2	30	2,770	12,500
Bahrain	9,540	47,400	3,550	23,600	0	0	13,100	71,000
Belgium	(2)	63	1,330	11,000	0	0	1,330	11,100
Brazil	0	5	4,080	20,700	1,630	3,290	5,710	24,000
Canada	232,000	1,400,000	17,800	116,000	34,500	198,000	285,000	1,710,000
Chile	0	0	0	19	141	1,390	141	1,400
China[3]	71	319	13,300	90,200	37	120	13,400	90,600
Colombia	0	0	487	2,930	595	3,180	1,080	6,110
Costa Rica	0	0	99	356	101	625	200	981
France	675	4,580	1,180	4,220	56	108	1,910	8,910
Germany	0	388	1,030	8,450	890	3,670	1,920	12,500
Greece	0	0	1,990	20,800	2	62	1,990	20,800
Guatemala	0	0	0	18	1,250	6,240	1,250	6,250
Honduras	0	0	676	4,270	149	652	825	4,930
India	18,500	46,400	3,570	16,900	0	(2)	22,000	63,300
Indonesia	93	511	714	7,820	0	0	808	8,340
Italy	195	1,500	1,040	6,960	1	21	1,230	8,480
Japan	0	4	1,430	9,190	65	92	1,490	9,290
Korea, Republic of	853	4,220	18,600	78,100	0	27	19,500	82,400
Malaysia	0	0	945	6,630	0	2	945	6,630
Mexico	310	2,510	3,940	27,800	17,100	99,100	21,300	129,000
Netherlands	197	763	149	501	38	52	384	1,320
New Zealand	158	3,430	0	2	0	0	158	3,430
Norway	271	2,160	976	4,900	0	0	1,250	7,050
Oman	0	0	4,150	26,300	0	0	4,150	26,300
Qatar	2,860	24,400	(2)	5	0	0	2,860	24,400
Romania	0	0	23	165	18	38	42	203
Russia	0	0	(2)	26	0	0	0	26
Saudi Arabia	0	0	1,210	5,030	0	0	1,210	5,030
South Africa	0	121	327	5,020	0	101	327	5,240
Spain	438	1,190	1,020	6,310	143	143	1,600	7,640
Sweden	0	0	925	5,190	0	0	925	5,190
Switzerland	0	0	765	3,270	0	0	765	3,270
Taiwan	4	154	268	1,800	(2)	18	273	1,970
Thailand	226	1,040	4,670	12,100	0	11	4,890	13,100
Turkey	1	193	1,560	16,700	0	0	1,560	16,800
United Arab Emirates	32,600	181,000	138	1,110	0	0	32,800	182,000
United Kingdom	0	48	491	5,380	25	377	516	5,800
Vietnam	0	0	2,260	26,400	0	5	2,260	26,400
Other	0	80	8,380	42,500	2,130	10,800	10,500	53,400
Total	340,000	1,850,000	106,000	631,000	58,900	328,000	505,000	2,810,000

[1]Includes castings, forgings, and unclassified semifabricated forms.
[2]Less than ½ unit.
[3]Includes Hong Kong.

Table 9. U.S. exports of aluminum in June 2024.

[Data are rounded to no more than three significant digits; may not add to totals shown. Data are in metric tons. Source: U.S. Census Bureau].

Country or locality	Metals and alloys, crude		Plates, sheets, bars[1]		Scrap		Total	
	June	January–June	June	January–June	June	January–June	June	January–June
Australia	63	241	155	1,040	0	0	218	1,280
Belgium	(2)	2	146	1,290	988	3,370	1,130	4,660
Brazil	0	1	253	1,420	376	3,030	629	4,460
Canada	4,070	34,300	24,500	169,000	10,900	67,900	39,500	271,000
China[3]	144	2,170	1,050	6,990	15,100	96,200	16,300	105,000
Colombia	0	100	51	270	84	408	134	777
Dominican Republic	0	0	34	193	418	2,310	452	2,510
France	393	3,560	778	6,470	121	1,120	1,290	11,200
Germany	344	2,230	566	2,660	118	847	1,030	5,740
Guatemala	0	1	7	75	0	0	7	75
India	116	514	437	2,410	41,100	214,000	41,700	217,000
Indonesia	0	36	20	35	4,790	22,200	4,810	22,300
Ireland	0	0	62	177	0	806	62	983
Israel	1	4	462	3,850	0	0	463	3,850
Italy	5	143	128	1,190	1,510	3,510	1,650	4,840
Jamaica	1	5	10	53	0	0	10	58
Japan	300	892	1,060	6,740	2,640	14,900	4,000	22,500
Korea, Republic of	304	1,910	2,290	13,200	19,100	132,000	21,700	147,000
Malaysia	29,700	190,000	373	2,450	31,500	191,000	61,500	384,000
Mexico	15,300	91,600	24,600	157,000	12,500	66,800	52,400	315,000
Netherlands	9	257	44	265	422	3,850	475	4,380
New Zealand	0	2	77	340	0	0	77	341
Norway	(2)	91	3	11	0	621	3	723
Pakistan	20	695	(2)	8	1,260	8,500	1,280	9,210
Panama	0	6	2	15	0	0	2	21
Philippines	88	142	27	156	137	557	252	854
Poland	3	15	61	646	0	20	65	681
Romania	(2)	(2)	101	744	0	0	101	745
Saudi Arabia	0	0	8	144	0	0	8	144
Singapore	35	1,340	59	713	17	115	111	2,170
Spain	0	12	144	1,190	1,040	3,480	1,180	4,680
Taiwan	1	82	267	2,060	2,470	23,400	2,740	25,600
Thailand	714	3,960	93	597	22,800	156,000	23,700	161,000
Turkey	0	(2)	229	2,330	38	402	267	2,730
United Arab Emirates	(2)	1	17	402	493	1,570	509	1,980
United Kingdom	1	34	669	4,630	21	663	690	5,320
Vietnam	18	830	18	630	952	10,600	988	12,100
Other	21	1,320	303	2,230	1,530	8,350	1,860	11,900
Total	51,700	336,000	59,100	393,000	172,000	1,040,000	283,000	1,770,000

[1]Includes castings, forgings, and unclassified semifabricated forms.

[2]Less than ½ unit.

[3]Includes Hong Kong.