

Mineral Industry Surveys

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ALUMINUM IN NOVEMBER 2023

Domestic primary aluminum production in November 2023 was 61,000 metric tons (t). The average daily production in November 2023 was 2,040 t, 3% more than that in October 2023, essentially unchanged from that in November 2022, and 19% less than that in November 2021 (fig. 1, table 1).

Total aluminum recovered from scrap in November 2023 was 269,000 t, 6% less than that in October 2023, essentially unchanged from that in November 2022, and 3% less than that in November 2021. Of this, 148,000 t of aluminum was recovered from new scrap, and 121,000 t was recovered from old scrap (fig. 1, table 1).

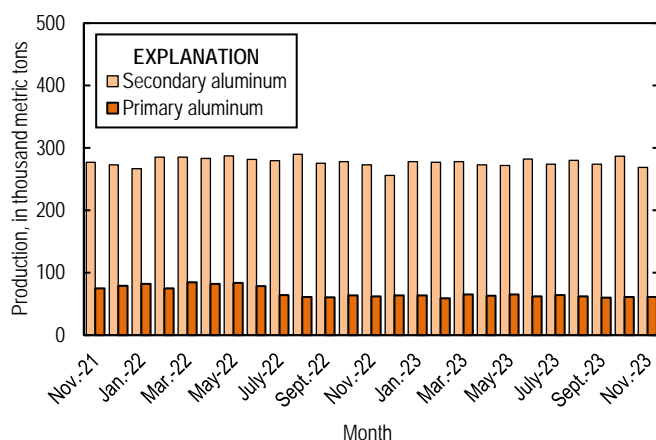


Figure 1. Monthly domestic primary and secondary aluminum production from November 2021 through November 2023.

Prices and Stocks

The November 2023 average U.S. spot market price of primary aluminum ingot was \$1.19 per pound, unchanged from that in October 2023, 6% less than that in November 2022, and 19% less than that in November 2021. The average cash price in November 2023 of primary aluminum ingot on the London Metal Exchange (LME) was \$1.00 per pound, unchanged from that in October 2023, 6% less than that in November 2022, and 17% less than that in November 2021 (fig. 2, table 6).

Inventories of primary aluminum in LME-approved warehouses, including off-warrant inventories, in the United States were 3,398 t at the end of November 2023, 66% less than

that at the end of October 2023. Inventories of secondary aluminum (North American Secondary Aluminum Alloy Contract) in LME-approved warehouses, including off-warrant inventories, in the United States were 679 t at the end of November 2023, 10% more than that at the end of October 2023 (London Metal Exchange Ltd., 2023a–c, 2024).

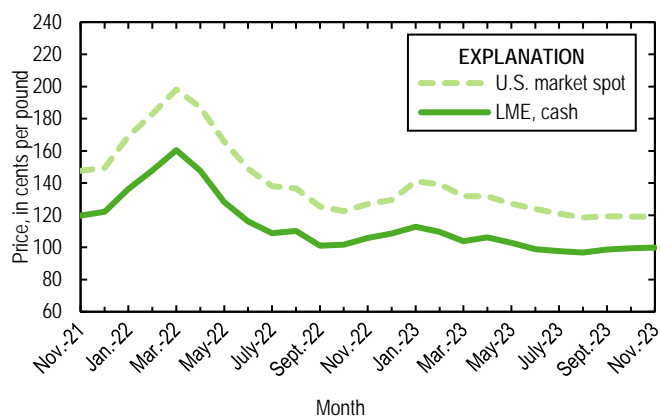


Figure 2. Average monthly prices for primary aluminum from November 2021 through November 2023. Source: S&P Global Platts Metals Week.

Updates

In the fourth quarter of 2023, Alcoa Corp. initiated closure of one potline and restarted another at its primary aluminum smelter in Warrick, IN. The closure was necessary for capital investments and casting improvements. The restarted potline had previously been curtailed in July 2022. Each potline has a production capacity of 54,000 metric tons per year (Alcoa Corp., 2024, p. 4).

References Cited

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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		
2022 ^p	861	1,890	1,450	3,330	4,150	1,460	5,610	9,810	2,050
2022:									
November	62	154	119	273	279	115	394	729	2,050
December	64	143	113	256	388	96	484	804	2,050
January–November	797	1,740 ^r	1,330 ^r	3,080 ^r	3,760	1,370	5,130	9,000 ^r	1,910
2023:									
January	64	159	118	278	307	99	406	748	1,950
February	59	147	130	277	238	73	311	647	2,000
March	65	149	129	278	316	89	405	748	1,960
April	63	147	126	273	375	90	465	801	1,990
May	65	148	125	272	407	86	493	830	1,930
June	62	150	131	282	345	87	432	776	1,910
July	64	143	131	274	331	79	410	748	1,860
August	62	147	132	280	283	87	370	712	1,860
September	60	151	123	274	309	74	383	717	1,890
October	61	161 ^r	127	287	313	78	391	739	1,830
November	61	148	121	269	277	74	351	681	NA
January–November	686	1,650	1,390	3,040	3,500	916	4,420	8,150	NA

^pPreliminary. ^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 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
2022 ^p	2,330	1,730	1,650	1,500	101	93	4	4	4,090	3,330
2022:										
November	197	147	130	118	8	8	(2)	(2)	336	273
December	192	141	118	107	8	8	(2)	(2)	318	256
January–November	2,140 ^r	1,590 ^r	1,530	1,400	93	85	4	4	3,770 ^r	3,080 ^r
2023:										
January	201	151	130	119	8	8	(2)	(2)	340	278
February	196	146	135	123	8	8	(2)	(2)	339	277
March	199	147	134	122	8	8	(2)	(2)	342	278
April	194	144	133	121	8	8	(2)	(2)	335	273
May	199	148	129	118	8	8	(2)	(2)	337	273
June	197	148	141	128	8	8	(2)	(2)	347	284
July	197	148	133	120	8	8	(2)	(2)	339	276
August	199	150	137	124	8	8	(2)	(2)	345	281
September	195	147	131	120	8	8	(2)	(2)	335	274
October	198	148	143	131 ^r	8	8	(2)	(2)	350 ^r	287
November	197	148	124	113	8	8	(2)	(2)	330	269
January–November	2,170	1,630	1,470	1,340	88	88	3	3	3,740	3,050

^pPreliminary. ^rRevised.

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 NOVEMBER 2023¹

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	164,000	197,000	123,000	148,000
Independent mill fabricators	112,000	124,000	102,000	113,000
Foundries	7,040	8,450	6,440	7,730
Other consumers	242	290	242	290
Total	284,000	330,000	232,000	269,000

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 IN NOVEMBER 2023¹

(Metric tons)

	November				January–November	
	Stocks, opening ²	Net receipts ³	Melted or consumed	Stocks, closing	Net receipts ³	Melted or consumed
New scrap:						
Extrusion	61,900	40,600	40,600	61,800	433,000	433,000
Can stock clippings	10,600	25,600	25,600	10,600	310,000	310,000
Other wrought sheet/clippings	11,400	37,400	37,400	11,400	410,000	408,000
Casting	3,740	4,890	4,890	3,740	58,600	58,600
Borings and turnings	5,620	12,500	12,500	5,620	139,000	139,000
Dross and skimmings ⁴	18,400	43,900	43,900	18,400	488,000	488,000
Total new scrap	112,000	165,000	165,000	112,000	1,840,000	1,840,000
Old scrap:						
Used castings	8,690	26,500	26,500	8,690	292,000	292,000
Used extrusion	8,210	12,700	12,700	8,210	140,000	140,000
Used cans (shredded, loose, baled)	5,890	46,300	46,300	5,890	545,000	545,000
Other wrought products	20,500	22,000	22,000	20,500	270,000	270,000
Fragmentized shredder (auto shredder)	5,150	11,300	11,300	5,150	126,000	126,000
Total old scrap	48,400	119,000	119,000	48,400	1,370,000	1,370,000
Total all classes	160,000	284,000	284,000	160,000	3,210,000	3,210,000

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.

⁴Gross volume of dross and skimmings. Recoverable aluminum content ranges from 15% to 50% of gross weight.

TABLE 5
ESTIMATED ALUMINUM ALLOYS PRODUCED AT SECONDARY SMELTERS IN THE UNITED
STATES IN NOVEMBER 2023^{1,2}

(Metric tons)

	November				January–November	
	Stocks, opening ³	Production	Net shipments	Stocks, closing	Production	Net shipments
Die-cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	2,830	2,700	2,700	2,830	29,700	29,700
380 and variations	7,310	20,300	20,300	7,310	217,000	214,000
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,940	3,100	3,100	1,940	34,000	34,000
No. 319 and variations	1,420	1,390	1,390	1,420	15,300	15,300
F-132 alloy and variations	89	233	233	89	2,560	2,560
Al-Zn alloys	339	71	71	339	780	780
Al-Si alloys (0.6% to 2.0% Cu)	230	195	195	230	2,140	2,140
Al-Cu alloys (1.5% Si, max.)	139	724	724	139	7,970	7,970
Other ⁴	3,380	4,900	4,900	3,380	60,300	63,100
Wrought alloys, extrusion billets	16,000	61,200	61,200	16,000	674,000	674,000
Total all alloys	33,600	94,800	94,800	33,600	1,040,000	1,040,000
Less:						
Primary aluminum consumed	XX	14,400	XX	XX	158,000	XX
Primary silicon consumed	XX	1,750	XX	XX	19,200	XX
Other alloying ingredients consumed	XX	851	XX	XX	9,370	XX
Net metallic recovery from aluminum scrap consumed in production of secondary aluminum ingot ⁵	XX	77,800	XX	XX	856,000	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-Zn, Al-Cu, 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
2022:		
November	126.830	105.909
December	129.488	108.612
January–December	152.572	122.767
2023:		
January	141.000	112.881
February	139.175	109.624
March	131.935	103.858
April	131.764	106.168
May	127.088	102.837
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
January–November	126.555	102.432

Source: S&P Global 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)
2022:					
November	72.38	66.00	62.00	61.75	48.00
December	79.30	66.80	64.50	64.40	48.80
January–December	92.88	74.05	70.83	70.33	63.28
2023:					
January	83.25	68.75	68.25	67.63	51.88
February	88.50	69.38	70.00	70.25	57.38
March	83.30	69.50	70.90	72.30	59.40
April	77.25	70.75	70.75	74.25	62.25
May	73.13	69.50	69.88	73.63	64.00
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
January–November	74.15	68.36	69.04	70.43	59.37

Source: Fastmarkets–AMM.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN NOVEMBER 2023¹

(Metric tons)

Country or locality	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	November	January– November	November	January– November	November	January– November	November	January– November
Argentina	--	128,000	3	93	--	--	3	129,000
Australia	4,870	204,000	4	146	--	(2)	4,880	204,000
Austria	--	(2)	2,020	26,700	5	109	2,030	26,800
Bahrain	10,600	90,000	2,550	17,900	--	--	13,200	108,000
Belgium	20	1,130	964	14,600	--	--	983	15,800
Brazil	--	--	2,080	17,400	229	4,740	2,310	22,200
Canada	209,000	2,410,000	11,800	187,000	30,200	372,000	252,000	2,970,000
Chile	--	--	--	--	--	1,140	--	1,140
China ³	50	711	6,280	111,000	37	322	6,370	112,000
Colombia	--	--	314	2,590	519	6,740	833	9,320
Costa Rica	--	--	27	323	56	1,770	82	2,090
France	668	6,740	226	5,470	15	130	909	12,300
Germany	125	1,360	1,870	23,500	853	6,480	2,840	31,300
Greece	--	--	2,940	27,100	14	119	2,960	27,200
Guatemala	--	--	15	15	870	9,150	885	9,160
Honduras	--	--	250	2,220	51	1,430	301	3,650
India	6,570	41,300	1,510	13,200	--	16	8,070	54,500
Indonesia	--	119	674	8,650	--	--	674	8,770
Italy	36	2,170	1,290	11,000	4	7	1,330	13,200
Japan	--	22	831	23,500	21	128	851	23,600
Korea, Republic of	547	17,300	11,700	87,500	--	741	12,200	106,000
Malaysia	--	1,090	1,230	6,070	--	95	1,230	7,250
Mexico	1,170	13,700	4,310	53,800	14,900	205,000	20,400	272,000
Netherlands	39	1,020	67	1,470	--	503	106	2,990
New Zealand	1,330	11,300	--	1	--	--	1,330	11,300
Norway	298	4,740	752	5,290	--	--	1,050	10,000
Oman	--	325	3,090	59,600	--	--	3,090	59,900
Qatar	5,760	77,500	(2)	123	--	--	5,760	77,600
Romania	--	--	9	255	--	111	9	366
Russia	--	7,960	--	26	--	--	--	7,990
Saudi Arabia	--	2,090	876	9,860	--	--	876	11,900
South Africa	14	917	1,360	35,400	--	6,530	1,370	42,900
Spain	129	3,890	993	8,980	--	620	1,120	13,500
Sweden	--	2,500	1,080	11,300	--	--	1,080	13,700
Switzerland	--	56	780	7,740	--	--	780	7,800
Taiwan	94	1,290	254	3,660	--	(2)	348	4,950
Thailand	70	868	1,150	30,500	8	217	1,230	31,500
Turkey	178	2,000	2,900	34,000	--	852	3,080	36,800
United Arab Emirates	35,400	469,000	136	1,890	--	627	35,500	472,000
United Kingdom	(2)	165	880	6,800	162	831	1,040	7,800
Vietnam	--	--	2,350	21,500	--	--	2,350	21,500
Other	3	274	4,360	38,200	1,020	15,000	5,380	53,400
Total	277,000	3,500,000	74,000	916,000	49,000	635,000	400,000	5,050,000

-- Zero.

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

²Less than ½ unit.

³Includes Hong Kong.

Source: U.S. Census Bureau.

TABLE 9
U.S. EXPORTS OF ALUMINUM IN NOVEMBER 2023¹

(Metric tons)

Country or locality	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	November	January– November	November	January– November	November	January– November	November	January– November
Australia	78	314	70	1,480	--	--	148	1,790
Belgium	--	136	179	2,180	465	6,410	644	8,730
Brazil	--	47	144	4,040	1,340	6,940	1,490	11,000
Canada	4,570	61,800	23,400	315,000	8,630	110,000	36,600	487,000
China ²	95	1,430	1,140	10,600	12,900	193,000	14,200	205,000
Colombia	--	12	50	419	41	862	90	1,290
Dominican Republic	--	18	5	317	454	2,270	459	2,600
France	198	3,850	626	8,640	366	1,920	1,190	14,400
Germany	351	3,810	371	5,510	251	3,270	974	12,600
Guatemala	--	--	2	101	--	--	2	101
India	748	1,410	263	4,360	30,700	428,000	31,700	434,000
Indonesia	--	(3)	2	213	6,310	41,000	6,310	41,200
Ireland	--	15	20	868	--	510	20	1,390
Israel	2	34	762	6,880	--	--	764	6,910
Italy	7	100	163	2,120	147	13,000	317	15,200
Jamaica	--	36	1	57	--	--	1	93
Japan	83	978	1,010	10,600	3,650	33,800	4,740	45,500
Korea, Republic of	3	386	2,080	22,700	20,400	255,000	22,500	278,000
Malaysia	24,500	176,000	518	4,740	34,400	336,000	59,400	517,000
Mexico	14,100	157,000	25,000	276,000	12,100	154,000	51,200	588,000
Netherlands	21	693	52	482	350	6,790	423	7,960
New Zealand	--	20	54	695	--	--	54	715
Norway	22	23	(3)	12	231	1,690	253	1,730
Pakistan	--	120	1	229	1,860	17,000	1,860	17,400
Panama	--	8	5	71	--	(3)	5	79
Philippines	36	132	17	257	96	3,230	149	3,610
Poland	(3)	12	114	1,170	--	21	115	1,210
Romania	--	(3)	180	1,370	--	--	180	1,370
Saudi Arabia	--	4	10	106	21	187	30	298
Singapore	(3)	61	85	1,640	240	1,740	325	3,450
Spain	--	19	73	1,620	584	4,280	658	5,930
Taiwan	--	425	293	3,910	3,120	42,700	3,410	47,100
Thailand	300	2,020	101	2,330	20,900	203,000	21,300	208,000
Turkey	(3)	1	304	6,570	150	1,890	454	8,460
United Arab Emirates	18	55	16	1,380	396	5,140	430	6,580
United Kingdom	15	180	793	9,750	95	2,550	903	12,500
Vietnam	19	109	429	1,690	1,430	18,800	1,870	20,600
Other	116	1,660	285	4,310	1,300	8,470	1,700	14,400
Total	45,200	413,000	58,600	715,000	163,000	1,900,000	267,000	3,030,000

-- Zero.

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

²Includes Hong Kong.

³Less than ½ unit.

Source: U.S. Census Bureau.