

# Mineral Industry Surveys

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## ALUMINUM IN NOVEMBER 2021

Domestic primary aluminum production in November 2021 was 75,000 metric tons (t). The average daily production in November 2021 was 2,510 t, slightly more than that in October 2021, slightly more than that in November 2020, but 16% less than that in November 2019 (fig. 1, table 1).

Total aluminum recovered from scrap in November 2021 was 265,000 t, unchanged from the revised amount in October 2021, 5% more than that in November 2020, but 5% less than that in November 2019. Of this, 144,000 t of aluminum was recovered from new scrap, and 121,000 t was recovered from old scrap (fig. 1, table 1).

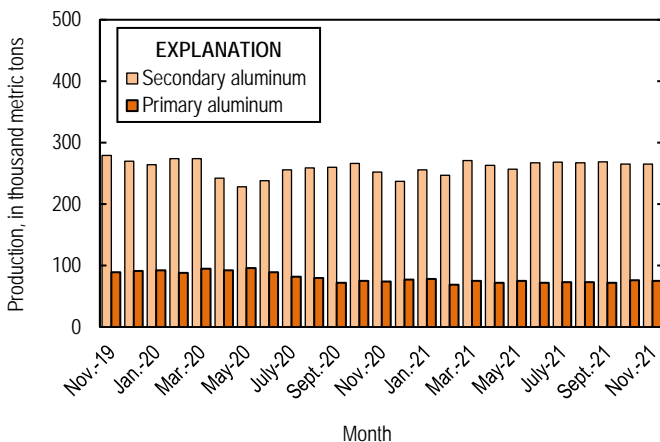


Figure 1. Monthly domestic primary and secondary aluminum production from November 2019 through November 2021.

**Prices and Stocks**

The November 2021 average U.S. spot market price of primary aluminum ingot was \$1.48 per pound, 12% less than that in October 2021, but 46% more than that in November 2020, and 53% more than that in November 2019. The average cash price in November 2021 of primary aluminum ingot on the London Metal Exchange (LME) was \$1.20 per pound, 11% less than that in October 2021, but 37% more than that in November 2020, and 49% more than that in November 2019 (fig. 2, table 6).

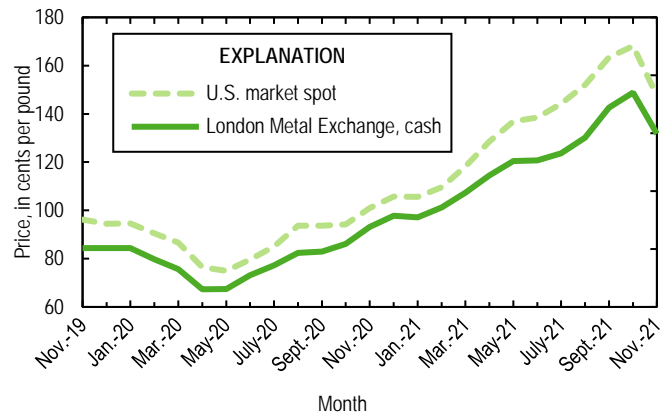


Figure 2. Average monthly prices for primary aluminum from November 2019 through November 2021. Source: S&P Global Platts Metals Week.

Inventories of primary aluminum in LME-approved warehouses, including off-warrant inventories, in the United States decreased to 65,217 t at the end of November 2021 from 70,971 t at the end of October 2021. Inventories of secondary aluminum (North American Secondary Aluminum Alloy Contract) in LME-approved warehouses, including off-warrant inventories, in the United States decreased to 9,114 t at the end of November 2021 from 9,413 t at the end of October 2021 (London Metal Exchange Ltd., 2021a, b, c; 2022).

**Update**

On December 29, 2021, Alcoa Corp. and employees at the smelter in San Ciprian, Spain reached an agreement to end a strike that started September 27, 2021. (See Aluminum in August 2021.) Production continued at the smelter but shipments of aluminum were blocked during the strike. Terms of the agreement included the shutdown of production of primary aluminum from the 228,000-metric-ton-per-year smelter on January 1, 2022, for a period of 2 years and a commitment by Alcoa to restart production in January 2024. Alcoa would pay employee salaries during the temporary shutdown. The casthouse would continue to operate using

remelted aluminum from other sources during the shutdown of the smelter and the adjacent alumina refinery would continue to produce. Alcoa would seek a long-term power contract at a competitive rate for the smelter to restart in 2024. Alcoa cited high power prices in Spain for the shutdown (Alcoa Corp., 2021).

## References Cited

- Alcoa Corp., 2021, Alcoa reaches agreement on future of San Ciprian smelter: Pittsburgh, PA, Alcoa Corp. press release, December 29, 2 p. (Accessed January 18, 2022, at [https://s29.q4cdn.com/844074237/files/doc\\_news/2021/12/20211229\\_SanCiprianAgreementReached-VF.pdf](https://s29.q4cdn.com/844074237/files/doc_news/2021/12/20211229_SanCiprianAgreementReached-VF.pdf).)
- London Metal Exchange Ltd., 2021a, Aluminium stocks: London, United Kingdom, London Metal Exchange Ltd., October 29, 3 p.
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TABLE 1  
COMPONENTS OF ALUMINUM SUPPLY<sup>1</sup>

(Thousand metric tons)

Period	Primary production	Secondary recovery <sup>2</sup>			Imports for consumption			Total new supply <sup>3</sup>	Stocks, end of period <sup>4</sup>
		New	Old	Total	Metals and alloys, crude	Plates, sheets, bars, etc.	Total		
2020	1,012	1,630	1,420	3,050	3,270	1,050	4,320	8,380	1,490
2020:									
November	74	134	119	252	241	80	321	647	1,430
December	77	124	113	237	229	78	307	621	1,490
January–November	935	1,510 <sup>r</sup>	1,300 <sup>r</sup>	2,810 <sup>r</sup>	3,040	969	4,010	7,760 <sup>r</sup>	1,490
2021:									
January	78	134	123	256	250	84	334	668	1,470
February	69	131	116	247	243	81	324	640	1,480
March	75	154	117	271	308	121	429	775	1,470
April	72	144	118	263	324	109	433	768	1,660
May	75	138	119	257	313	114	427	759	1,680
June	72	141	127	267	294	113	407	746	1,680
July	73	141	127	268	298	105	403	744	1,730
August	73	142	125	267	319	126	445	785	1,710
September	72	145 <sup>r</sup>	124 <sup>r</sup>	269 <sup>r</sup>	285	106	391	732 <sup>r</sup>	1,710
October	76	142 <sup>r</sup>	123 <sup>r</sup>	265 <sup>r</sup>	339	107	446	787 <sup>r</sup>	1,760
November	75	144	121	265	338	119	457	798	NA
January–November	810	1,560	1,340	2,890	3,310	1,180	4,500	8,200	NA

<sup>r</sup>Revised. NA Not available.

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

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

<sup>3</sup>Primary production, secondary recovery, and imports for consumption.

<sup>4</sup>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 RECOVERY FROM  
PURCHASED NEW AND OLD ALUMINUM SCRAP<sup>1</sup>

(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
2020	2,010	1,550	1,540	1,410	91	84	4	4	3,650	3,050
2020:										
November	169	129	126	115	8	8	(2)	(2)	303	252
December	168	129	111	101	8	8	(2)	(2)	288	237
January–November	1,840 <sup>r</sup>	1,420 <sup>r</sup>	1,430	1,310	83 <sup>r</sup>	76	4	4	3,360 <sup>r</sup>	2,810 <sup>r</sup>
2021:										
January	173	132	128	117	8	8	(2)	(2)	310	256
February	166	129	120	110	8	8	(2)	(2)	295	247
March	176	134	141	129	8	8	(2)	(2)	325	272
April	175	135	131	120	8	8	(2)	(2)	315	263
May	172	133	127	116	8	8	(2)	(2)	308	257
June	175	135	137	124	8	8	(2)	(2)	320	267
July	172	133	139	127	8	8	(2)	(2)	321	268
August	176	135	136	124	8	8	(2)	(2)	321	267
September	174 <sup>r</sup>	134 <sup>r</sup>	139 <sup>r</sup>	127 <sup>r</sup>	8	8	(2)	(2)	321 <sup>r</sup>	269 <sup>r</sup>
October	175 <sup>r</sup>	134 <sup>r</sup>	134 <sup>r</sup>	123 <sup>r</sup>	8	8	(2)	(2)	318 <sup>r</sup>	265 <sup>r</sup>
November	176	135	133	122	8	8	(2)	(2)	319	265
January–November	1,910	1,470	1,470	1,340	93	85	4	4	3,470	2,900

<sup>r</sup>Revised.

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

<sup>2</sup>Less than ½ unit.

TABLE 3  
 CONSUMPTION OF AND RECOVERY FROM PURCHASED  
 NEW AND OLD ALUMINUM SCRAP IN NOVEMBER 2021<sup>1</sup>

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	147,000	176,000	113,000	135,000
Independent mill fabricators	120,000	133,000	110,000	122,000
Foundries	7,040	8,450	6,440	7,730
Other consumers	273	328	273	328
Total	275,000	319,000	229,000	265,000

<sup>1</sup>Data 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 2021<sup>1</sup>

(Metric tons)

	November			January–November <sup>2</sup>		
	Stocks, opening <sup>2</sup>	Net receipts <sup>3</sup>	Melted or consumed	Stocks, closing	Net receipts <sup>3</sup>	Melted or consumed
<b>New scrap:</b>						
Extrusion	19,800	43,200	43,700	19,300	438,000	438,000
Can stock clippings	6,900	26,500	26,500	6,900	308,000	307,000
Other wrought sheet/clippings	9,250	30,600	30,900	8,950	348,000	353,000
Casting	4,490	8,010	8,010	4,490	79,900	79,900
Borings and turnings	4,390	12,400	12,400	4,390	129,000	131,000
Dross and skimmings	13,300	35,300	35,300	13,300	376,000	376,000
<b>Total new scrap</b>	<b>58,200</b>	<b>156,000</b>	<b>157,000</b>	<b>57,300</b>	<b>1,680,000</b>	<b>1,690,000</b>
<b>Old scrap:</b>						
Used castings	8,150	27,100	27,100	8,150	298,000	298,000
Used extrusion	7,680	16,700	16,700	7,680	182,000	183,000
Used cans (shredded, loose, baled)	8,700	39,500	39,500	8,700	446,000	445,000
Other wrought products	16,300	23,400	23,400	16,300	253,000	250,000
Fragmentized shredder (auto shredder)	5,310	11,000	11,000	5,310	126,000	125,000
<b>Total old scrap</b>	<b>46,100</b>	<b>118,000</b>	<b>118,000</b>	<b>46,100</b>	<b>1,300,000</b>	<b>1,300,000</b>
<b>Total all classes</b>	<b>104,000</b>	<b>274,000</b>	<b>275,000</b>	<b>103,000</b>	<b>2,980,000</b>	<b>2,990,000</b>

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

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Includes data on imported aluminum-base scrap.

TABLE 5  
ALUMINUM ALLOYS PRODUCED AT SECONDARY SMELTERS IN THE UNITED  
STATES IN NOVEMBER 2021<sup>1,2</sup>

(Metric tons)

	November				January–November	
	Stocks, opening <sup>3</sup>	Production	Net shipments	Stocks, closing	Production	Net shipments
<b>Die-cast alloys:</b>						
13% Si, 360, etc. (0.6% Cu, max.)	2,760	2,600	2,600	2,760	28,600	28,600
380 and variations	6,350	18,300	18,300	6,350	202,000	202,000
<b>Sand and permanent mold:</b>						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	2,120	2,850	2,850	2,120	31,400	31,400
No. 319 and variations	2,110	2,210	2,210	2,110	24,300	24,300
F-132 alloy and variations	128	198	198	128	2,180	2,180
Al-Zn alloys	37	29	29	37	315	315
Al-Si alloys (0.6% to 2.0% Cu)	143	186	186	143	2,050	2,050
Al-Cu alloys (1.5% Si, max.)	423	297	297	423	3,270	3,270
Other <sup>4</sup>	7,630	7,870	7,870	7,630	86,500	86,500
Wrought alloys, extrusion billets	10,100	53,100	53,100	10,100	584,000	584,000
<b>Total all alloys</b>	<b>31,900</b>	<b>87,700</b>	<b>87,700</b>	<b>31,900</b>	<b>965,000</b>	<b>965,000</b>
<b>Less:</b>						
Primary aluminum consumed	XX	15,600	XX	XX	171,000	XX
Primary silicon consumed	XX	1,630	XX	XX	18,000	XX
Other alloying ingredients consumed	XX	733	XX	XX	8,060	XX
<b>Net metallic recovery from aluminum scrap consumed in production of secondary aluminum ingot<sup>5</sup></b>						
	XX	69,700	XX	XX	767,000	XX

XX Not applicable.

<sup>1</sup>Excludes integrated aluminum companies.

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

<sup>3</sup>May include revisions to previously published data.

<sup>4</sup>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.

<sup>5</sup>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

(Cents per pound)

Period	Midwest U.S. market price	LME cash price Grade A
2020:		
November	100.921	87.639
December	105.798	91.531
January–December	89.666	77.187
2021:		
January	105.638	90.891
February	109.548	94.329
March	118.185	99.409
April	128.563	105.404
May	136.947	110.397
June	138.489	110.635
July	144.205	113.033
August	152.055	118.417
September	163.420	128.794
October	168.110	134.028
November	147.557	119.796
January–November	137.520	111.376

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)
2020:					
November	56.55	51.45	51.42	51.76	46.06
December	62.82	58.86	58.02	57.50	50.41
January–December	49.90	43.57	41.19	41.39	35.73
2021:					
January	65.00	64.50	61.50	63.00	59.00
February	67.50	65.63	64.50	65.50	64.00
March	73.00	68.50	66.50	68.50	68.75
April	75.50	72.10	68.90	70.50	69.20
May	74.13	74.50	70.50	71.00	69.50
June	70.88	73.75	68.75	68.75	68.00
July	71.40	73.90	67.20	67.40	67.60
August	77.10	73.50	66.10	66.70	66.40
September	NA	NA	NA	NA	NA
October	NA	NA	NA	NA	NA
November	NA	NA	NA	NA	NA
January–November <sup>1</sup>	71.81	70.80	66.74	67.67	66.56

NA Not available.

<sup>1</sup>September–November 2021 data are not available. January–August YTD average.

Source: Fastmarket-AMM.

TABLE 8  
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN NOVEMBER 2021<sup>1</sup>

(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	14,100	109,000	--	175	--	--	14,100	109,000
Australia	7,470	98,300	89	472	--	39	7,560	98,800
Austria	--	1,500	2,850	28,000	--	51	2,850	29,500
Bahrain	24,300	125,000	3,360	22,500	--	--	27,700	148,000
Belgium	80	323	921	11,000	--	--	1,000	11,400
Brazil	--	(2)	19	306	36	10,600	55	10,900
Canada	235,000	2,330,000	20,100	219,000	30,600	374,000	286,000	2,920,000
Chile	--	--	--	(2)	121	2,260	121	2,260
China <sup>3</sup>	78	1,610	17,400	141,000	9	256	17,500	143,000
Colombia	--	--	657	6,880	424	5,130	1,080	12,000
Costa Rica	--	--	20	200	175	2,180	195	2,380
France	155	2,150	412	7,430	13	229	580	9,810
Germany	250	2,540	3,810	36,200	319	2,840	4,380	41,600
Greece	--	--	2,930	19,800	--	50	2,930	19,900
Guatemala	--	--	--	14	697	9,930	697	9,950
Honduras	--	--	516	5,260	56	251	572	5,520
India	5,630	52,400	1,760	13,800	--	(2)	7,390	66,200
Indonesia	--	--	1,590	19,200	3	8	1,600	19,200
Italy	13	339	1,060	14,700	--	(2)	1,080	15,000
Japan	--	9	2,850	41,700	--	2,250	2,850	44,000
Korea, Republic of	1,460	12,800	1,370	30,300	--	118	2,820	43,200
Malaysia	58	300	1,190	12,000	--	--	1,250	12,300
Mexico	566	13,200	5,920	56,000	15,400	190,000	21,800	259,000
Netherlands	62	520	846	3,420	399	2,430	1,310	6,370
New Zealand	--	817	--	9	--	--	--	826
Norway	20	163	836	9,590	--	--	856	9,750
Oman	--	3,460	5,260	79,300	--	--	5,260	82,700
Qatar	4,450	61,200	--	(2)	--	--	4,450	61,200
Romania	--	--	440	4,940	--	--	440	4,940
Russia	8,630	170,000	912	13,100	--	--	9,540	183,000
Saudi Arabia	--	--	6,280	58,200	--	726	6,280	58,900
South Africa	--	2,040	6,460	38,300	--	--	6,460	40,300
Spain	1	945	1,090	21,300	42	3,340	1,130	25,600
Sweden	--	--	678	8,620	--	--	678	8,620
Switzerland	1	78	773	8,650	--	2	774	8,730
Taiwan	--	91	249	5,370	--	23	249	5,490
Thailand	94	1,100	7,190	63,400	--	297	7,290	64,800
Turkey	2,440	3,360	4,650	56,200	--	--	7,090	59,500
United Arab Emirates	32,600	317,000	885	4,050	40	110	33,500	321,000
United Kingdom	2	126	482	5,030	--	3,510	484	8,660
Vietnam	--	1	4,230	37,500	15	20	4,240	37,500
Other	--	336	8,650	81,000	1,800	20,900	10,400	102,000
Total	338,000	3,310,000	119,000	1,180,000	50,100	631,000	507,000	5,130,000

-- Zero.

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

<sup>2</sup>Less than ½ unit.

<sup>3</sup>Includes Hong Kong.

Source: U.S. Census Bureau.

TABLE 9  
U.S. EXPORTS OF ALUMINUM IN NOVEMBER 2021<sup>1</sup>

(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	40	920	54	958	--	235	94	2,110
Belgium	--	1	4	240	1,240	4,430	1,250	4,670
Brazil	1	33	139	1,200	398	4,510	538	5,750
Canada	5,440	61,600	26,200	277,000	12,400	89,800	44,000	428,000
China <sup>2</sup>	89	1,990	429	8,230	8,110	208,000	8,630	218,000
Colombia	14	377	20	552	80	391	114	1,320
Dominican Republic	54	113	35	319	87	1,660	176	2,090
France	42	177	371	3,760	67	740	480	4,680
Germany	(3)	72	118	2,740	219	3,800	337	6,620
Guatemala	--	1	21	93	--	--	21	94
India	1	560	42	915	48,900	400,000	49,000	401,000
Indonesia	(3)	(3)	3	17	5,850	67,300	5,860	67,300
Ireland	(3)	14	5	382	--	116	5	512
Israel	(3)	38	934	9,880	--	--	934	9,910
Italy	(3)	15	52	603	488	2,920	540	3,540
Jamaica	12	17	6	50	--	1	18	68
Japan	48	448	175	2,490	3,960	26,000	4,180	28,900
Korea, Republic of	314	793	190	8,050	32,600	254,000	33,100	263,000
Malaysia	276	786	13	2,400	53,100	481,000	53,400	485,000
Mexico	7,690	100,000	20,800	245,000	15,200	156,000	43,600	501,000
Netherlands	(3)	84	35	505	230	2,580	265	3,170
New Zealand	(3)	16	22	424	--	--	22	440
Norway	--	--	(3)	42	--	--	(3)	42
Pakistan	--	2	--	19	2,430	15,500	2,430	15,500
Panama	--	5	1	74	--	--	1	79
Philippines	--	17	16	111	248	4,390	264	4,520
Poland	--	53	51	419	--	(3)	51	472
Romania	10	101	31	477	--	--	41	578
Russia	--	(3)	10	71	4,530	50,400	4,540	50,500
Saudi Arabia	--	1	1	191	--	232	1	424
Singapore	3	94	112	2,240	17	969	132	3,300
Spain	3	41	16	200	480	2,880	499	3,120
Taiwan	46	1,330	149	3,620	4,000	29,700	4,190	34,600
Thailand	4	27	33	794	9,610	65,600	9,650	66,400
Turkey	--	1	47	1,140	941	7,570	988	8,700
United Arab Emirates	--	119	155	2,500	873	9,900	1,030	12,500
United Kingdom	16	105	413	4,610	157	3,110	586	7,830
Vietnam	--	1	47	620	932	11,000	979	11,600
Other	308	2,770	272	3,140	1,230	14,200	1,810	20,100
Total	14,400	173,000	50,900	586,000	208,000	1,920,000	274,000	2,680,000

-- Zero.

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

<sup>2</sup>Includes Hong Kong.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.