ALUMINUM[1]

(Data in thousand metric tons unless otherwise noted)

Domestic Production and Use: In 2020, three companies operated seven primary aluminum smelters in six States. Two smelters operated at full capacity and four smelters operated at reduced capacity throughout the year. One smelter operated at reduced capacity until it was idled in July. One other smelter remained on standby throughout the year. Domestic smelters were operating at about 49% of capacity of 1.79 million tons per year at yearend 2020. Production decreased by 8% after increasing in 2019. Based on published prices, the value of primary aluminum production was about $1.98 billion, 17% less than the value in 2019. The average annual U.S. market price declined by about 11% from that in 2019. Transportation applications accounted for 40% of domestic consumption; in descending order of consumption, the remainder was used in packaging, 21%; building, 14%; electrical, 8%; consumer durables, 7%; machinery, 7%; and other, 3%.

Salient Statistics—United States:	**2016**	**2017**	**2018**	**2019**	**2020[e]**
Production:					
Primary	818	741	891	1,093	1,000
Secondary (from old scrap)	1,570	1,590	1,570	1,540	1,500
Secondary (from new scrap)	2,010	2,050	2,140	1,920	1,700
Imports for consumption:					
Crude and semimanufactures	5,410	6,220	5,550	5,210	3,200
Scrap	609	700	695	596	530
Exports:					
Crude and semimanufactures	1,470	1,330	1,310	1,090	880
Scrap	1,350	1,570	1,760	1,860	2,000
Consumption, apparent[2]	5,090	5,680	4,900	4,940	2,870
Supply, apparent[3]	7,100	7,730	7,040	6,860	4,570
Price, ingot, average U.S. market (spot), cents per pound	80.4	98.3	114.7	99.5	89
Stocks, yearend:					
Aluminum industry	1,400	1,470	1,570	1,600	1,400
London Metal Exchange (LME), U.S. warehouses[4]	362	254	186	120	250
Employment, number[5]	31,900	31,700	31,600	32,900	31,900
Net import reliance[6] as a percentage of apparent consumption	53	59	50	47	13

Recycling: In 2020, aluminum recovered from purchased scrap in the United States was about 3.2 million tons, of which about 53% came from new (manufacturing) scrap and 47% from old scrap (discarded aluminum products). Aluminum recovered from old scrap was equivalent to about 51% of apparent consumption.

Import Sources (2016–19): Canada, 50%; the United Arab Emirates, 10%; Russia 9%; China, 5%; and other, 26%.

Tariff: Item	**Number**	**Normal Trade Relations 12–31–20**
Aluminum, not alloyed:		
Unwrought (in coils)	7601.10.3000	2.6% ad val.
Unwrought (other than aluminum alloys)	7601.10.6000	Free.
Aluminum alloys, unwrought (billet)	7601.20.9045	Free.
Aluminum scrap:		
Used beverage container scrap	7602.00.0030	Free.
Industrial process scrap	7602.00.0091	Free.

Depletion Allowance: Not applicable.[1]

Government Stockpile: None.

Events, Trends, and Issues: Starting in March, many aluminum consumers shut down or reduced production in response to the COVID-19 pandemic. Several manufacturers in the aerospace and automotive industries shut down production facilities citing local government orders, agreements negotiated between the companies and the unions representing employees, or decreased demand by retail consumers. Several extruders, rolling mills, and secondary smelters decreased output or shut down in response to the COVID-19 pandemic. By July, most of the shutdowns ended as safety measures were implemented. Consumption of aluminum for containers and packaging remained steady as bars and restaurants were ordered closed by many local authorities, resulting in increased demand for beverages in aluminum cans. Rolling mills and secondary smelters that produce can sheet increased imports of

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used beverage cans to make up for decreased supply from domestic can redemption centers that were closed in most States. Primary aluminum smelters were exempted from the lockdown orders.

In March, a 252,000-ton-per-year smelter in Hawesville, KY, completed restarting one potline with 50,000 tons per year of capacity after scheduled maintenance work. The restart of another 50,000-ton-per-year potline at the Hawesville smelter was delayed because of economic conditions after maintenance work was completed. In July, a 279,000-ton-per-year smelter in Ferndale, WA, shut down four of its five potlines, citing high power prices and low aluminum prices. The rest of its capacity was shut down previously.

On January 24, the President of the United States imposed a 10% tariff on imported products made with aluminum. In March 2018, a 10% tariff was imposed on imports of aluminum but concerns had been raised that domestic manufacturers were having to pay more for aluminum and that competitors were able to import finished products without having to pay a tariff on the aluminum contained in finished products. Aluminum imports from all countries except Argentina, Australia, Canada, and Mexico remained subject to the 10% ad valorem tariff as of early December. The 10% tariffs were imposed under authority of section 232 of the Trade Expansion Act of 1962.

In March, the U.S. Department of Commerce initiated a countervailing duty investigation of imports of common alloy aluminum sheet from 18 countries. The U.S. International Trade Commission initiated an antidumping investigation on the same products from four countries. On August 10, the U.S. Department of Commerce issued its preliminary determination of the countervailing duty investigation and set preliminary subsidy rates, with a final determination expected by early 2021. The U.S. International Trade Commission was expected to issue its final determination in February 2021. In June, the U.S. Department of Commerce issued its preliminary determination of the countervailing duty investigation of foil imports from China and set preliminary subsidy rates.

World Smelter Production and Capacity: Capacity data for China and Russia were revised based on Government and company data.

	Production		Yearend capacity	
	2019	2020[e]	2019	2020[e]
United States	1,093	1,000	1,790	1,790
Australia	1,570	1,600	1,720	1,720
Bahrain	1,370	1,500	1,540	1,540
Canada	2,850	3,100	3,270	3,270
China	35,000	37,000	41,300	43,000
Iceland	845	840	890	890
India	3,640	3,600	4,060	4,060
Norway	1,400	1,400	1,430	1,430
Russia	3,640	3,600	4,020	4,020
United Arab Emirates	2,600	2,600	2,700	2,700
Other countries	9,200	9,000	12,200	12,300
World total (rounded)	63,200	65,200	74,900	76,700

World Resources:[7] Global resources of bauxite are estimated to be between 55 billion and 75 billion tons and are sufficient to meet world demand for metal well into the future.[1]

Substitutes: Composites can substitute for aluminum in aircraft fuselages and wings. Glass, paper, plastics, and steel can substitute for aluminum in packaging. Composites, magnesium, steel, and titanium can substitute for aluminum in ground transportation uses. Composites, steel, vinyl, and wood can substitute for aluminum in construction. Copper can replace aluminum in electrical and heat-exchange applications.

[e]Estimated.

[1]See also Bauxite and Alumina.

[2]Defined as domestic primary metal production + recovery from old aluminum scrap + net import reliance; excludes imported scrap.

[3]Defined as domestic primary metal production + recovery from all aluminum scrap + net import reliance; excludes imported scrap.

[4]Includes aluminum alloy. Starting with 2019, also includes off-warrant stocks of primary and alloyed aluminum; estimated for 2019.

[5]Alumina and aluminum production workers (North American Industry Classification System—3313). Source: U.S. Department of Labor, Bureau of Labor Statistics.

[6]Defined as imports – exports + adjustments for industry stock changes; excludes imported scrap.

[7]See Appendix C for resource and reserve definitions and information concerning data sources.