

# ICELAND

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Iceland's economy was prone to inflation but remained rather broad-based and highly export driven. Inflation was moderate at 3% with slightly negative gross domestic product (GDP) growth (-0.5%) in 2002. The country had few identified mineral resources, although deposits of diatomite were mined. Abundant natural resources included hydroelectric and geothermal power. Iceland actively sought to expand its power-intensive industries, such as aluminum smelters and ferrosilicon plants.

Exports accounted for one-fourth of the GDP, and imports accounted for one-third. Iceland's exports included, in order of importance, marine products, aluminum, ferrosilicon, equipment and machinery for fishing and fish processing, pharmaceuticals, and woolen goods. Most exports went to the European Union and the European Free Trade Agreement countries, the United States, and Japan. The country's imports were, also in order of importance, industrial supplies, parts and accessories, consumer goods, transport equipment, food and beverages, and fuels and lubricants. They were imported from about the same trading partners (U.S. Department of State, 2002§<sup>1</sup>).

Iceland was attractive to aluminum producers owing to its abundance of cheap hydrothermal energy and hydroelectric power. Norsk Hydro A/S of Norway postponed its decision to participate in the proposed 280,000-metric-ton-per-year (t/yr) Noral Icelandic aluminum smelter at Reydarfjörður, east Iceland, until September 2002. The delay in deciding was due to the company's acquisition of VAW AG in Germany. The smelter was slated to start

up in 2006. The partners involved were the Ministry of Industry and Commerce, Hydro Aluminium, Reydaral HF (jointly owned by Norsk Hydro and Haefi), Landsvirkjun, and a group of Icelandic investors (Metal Bulletin, 2002b).

Alcoa Inc. of the United States performed a feasibility study on the possibility of building a 295,000-t/yr aluminum smelter also Reydarfjörður. The company and the Government signed plans in April and started gathering information on the environmental, power, and technical issues. Plans called for Alcoa to own and operate the smelter, which would receive its energy requirements from a 500-megawatt hydroelectric powerplant to be constructed and operated by Landsvirkjun. First electricity from the project was expected in 2007. Alcoa was to cover 75% of the costs of the roads and bridges that will lead to the new powerplant. Additional infrastructure would include new port facilities at Mjoevri (Mining Journal, 2002). Landsvirkjun opened bids for the new powerplant in December; Impregilo of Italy was one of the bidders.

Alcoa acquired Reydaral, which compiled environmental studies for its aluminum smelter project, from Icelandic

investors and Norsk Hydro. Reydaral was founded to do much of the groundwork on the project. Iceland's existing aluminum smelting capacity included Nordural, which was a 90,000-t/yr plant owned by Columbia Ventures of the United States, and a 168,000-t/yr Icelandic Aluminium Co. plant owned by Alcan Aluminium Inc. of Canada; Alcan was considering expanding its smelter to 460,000 t/yr (Metal Bulletin, 2002a). Atlantsal, which was a Russian-Icelandic joint venture, also was considering building a 300,000-t/yr aluminum smelter of its own.

One of Iceland's two scrap companies, Hringras, was to invest in new machinery that would effectively double the amount of steel scrap processed. The company bought a 500 Series shredder from Belgian maker Lefort SA and was considering a larger 600 Series model. It produced 25,000 t/yr of steel scrap and from 3,000 to 4,000 t/yr of nonferrous materials such as aluminum, copper, and stainless steel. The other company, Fura, processed 29,000 t/yr of steel scrap and 3,000 t/yr of nonferrous scrap. All metal scrap generated in Iceland was sold to either Spain or the United Kingdom (Metal Bulletin, 2002c). Iceland exported from 50,000 to 60,000 t/yr of ferrous scrap.

In 2001, the import operating terminal set up by Aalborg Portland in Helguvík, which was commissioned in 2000, imported 30,000 metric tons (t) of cement from Denmark; this captured a 20% share of the domestic market, which was rated at 150,000 t in 2001 (the latest year for which data are available). The state-run sole cement producer Icelandic Cement Works felt threatened by dumping competition. An appeal to the European Commission was underway (Cement Industry International News Updates, 2002§).

Iceland used only 15% of its hydroelectric and hydrothermal energy, and 93% of all houses were heated by geothermal energy. The country planned to discontinue use of fossil fuels entirely in the future.

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<sup>1</sup>References that include a section mark (§) are found in the Internet References Cited section.

TABLE 1  
ICELAND: ESTIMATED PRODUCTION OF MINERAL COMMODITIES<sup>1,2</sup>

(Metric tons unless otherwise specified)

Commodity	1998	1999	2000	2001	2002
Aluminum metal, primary <sup>3</sup>	173,400 <sup>4</sup>	219,509 <sup>4</sup>	224,439 <sup>4</sup>	245,135 <sup>r,4</sup>	263,700 <sup>4</sup>
Cement, hydraulic <sup>5</sup>	117,684 <sup>4</sup>	131,292 <sup>4</sup>	143,734 <sup>4</sup>	125,169 <sup>r,4</sup>	130,000
Diatomite	26,000	28,299 <sup>4</sup>	27,614 <sup>4</sup>	30,434 <sup>r,4</sup>	31,000
Ferrosilicon	68,000	70,933 <sup>4</sup>	70,000	111,948 <sup>r,4</sup>	112,000
Nitrogen, N content of ammonia	5,900	6,500	6,500	3,300 <sup>4</sup>	-- <sup>4</sup>
Pumice and related volcanic material:					
Pumice	25,000	25,000	25,000	25,000	25,000
Scoria	500	500	500	500	500
Salt	4,000	4,000	4,000	4,500	4,500
Sand:					
Basaltic                      cubic meters	1,000	1,000	1,000	1,100	1,200
Calcareous, shell              do.	80,000	80,000	80,000	80,000	80,000
Sand and gravel              thousand cubic meters	3,600	3,600	4,000	4,000	4,200
Silica dust <sup>6</sup>	12,000	11,628 <sup>4</sup>	12,000	20,192 <sup>r,4</sup>	20,000
Stone, crushed:					
Basaltic	90,000	90,000	95,000	95,000	95,000
Rhyolite                      cubic meters	16,500	16,500	17,000	17,000	18,000

<sup>1</sup>Revised. -- Zero.

<sup>1</sup>Table includes data available through June 17, 2003.

<sup>2</sup>Estimated data are rounded to no more than three significant digits.

<sup>3</sup>Ingot and rolling billet production.

<sup>4</sup>Reported figure.

<sup>5</sup>Sales.

<sup>6</sup>Byproduct of ferrosilicon.