



2005 Minerals Yearbook

ICELAND

THE MINERAL INDUSTRY OF ICELAND

By Chin S. Kuo

Iceland's economy, which was heavily dependent on its export sectors, grew by 5.5% in 2005. The country exported aluminum, equipment and electronic machinery for fishing and fish processing, ferrosilicon alloys, marine products, and pharmaceuticals. The per capita gross domestic product based on purchasing power parity was high at \$35,586. Inflation was moderate at 4% (International Monetary Fund, 2006^{§1}). Iceland has abundant geothermal and hydroelectric power sources and few proven mineral resources. In recent years, the country has actively sought to expand its power-intensive industries, which include aluminum smelting and ferrosilicon production. The Ministry of Industry and Commerce seeks to improve the competitiveness of Icelandic industry by increasing its variety and productivity.

Solios Thermal Co. was awarded a contract for the Nordural Aluminum hf expansion project in Iceland. The project involved the expansion of the Nordural aluminum smelter to 212,000 metric tons per year (t/yr) from 90,000 t/yr by 2006 and to 260,000 t/yr by 2008. The contract was for the construction of two 60-metric-ton-capacity electric arc furnaces with the associated launders. Both furnaces would be commissioned by April 2006. The smelter, which has access to relatively cheap and plentiful power, started production in 1998 and was bought by Century Aluminum Co. of the United States in April 2004 (Solios Group, 2005).

Century Aluminum was looking at building a greenfield aluminum smelter in Iceland. Its wholly owned subsidiary Nordural signed a joint action plan with the local and Icelandic national Governments to evaluate the project in the vicinity of Helguvik, which is located 48 kilometers (km) from Reykjavik. The project would focus on developing an industrial site, securing power generation and transmission, satisfying environmental regulations, and meeting other regulatory and administrative requirements. Evaluation of the project was scheduled for completion no later than July 2006 (Century Aluminum Co., 2005).

During 2005, Alcoa Inc. of the United States was constructing a \$2 billion 322,000-t/yr smelter in eastern Iceland. Aluminum production was expected to begin in 2007. Construction of a hydroelectric powerplant in connection with the smelter also began. Meanwhile, Alcan Aluminium Inc. of Canada was considering expanding its 176,000-t/yr smelter near Reykjavik (JPMorgan, 2005).

Iceland's hydroelectric power generation projects included the Burfell, with a capacity of 270 megawatts (MW); the Hrauneyjarfoss, 210 MW; and the Blanda and the Sigalda, 150 MW each. The country's road system connected most of the population centers in the coastal areas and consisted of 13,000 km of roads, of which 4,330 km was paved. The infrastructure was adequate to attract foreign investment in Icelandic industries (U.S. Department of State, 2005).

References Cited

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- JPMorgan, 2005, Century Aluminum reducing estimates given unexpected 3Q costs: New York, New York, JPMorgan note, September 26, 1 p.
- Solios Group, 2005, First contract signed with Nordural (Iceland): Saint-Germain-en-Laye, France, Solios Group news release, June, 1 p.
- U.S. Department of State, 2005, Iceland, Background Note: U.S. Department of State, May, p. 5.

Internet Reference Cited

- International Monetary Fund, 2006 (April), Iceland, World Economic Outlook Database, accessed May 31, 2006, via URL <http://www.imf.org/external/pubs/ft/weo/2006/01/data/index.htm>.

Major Source of Information

Ministry of Industry and Commerce
Arnarhvoli
Reykjavik, Iceland 2000

¹A reference that includes a section mark (§) is found in the Internet Reference Cited section.

TABLE 1
ICELAND: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity	2001	2002	2003	2004	2005 ^c
Aluminum metal, primary ²	245,135	285,394	286,022	284,700 ^r	273,318 ³
Cement, hydraulic ⁴	125,169	82,636	89,798	100,287 ^r	132,438 ³
Diatomite	30,434	26,494	27,513	19,332 ^r	3,236 ³
Ferrosilicon	111,948	120,624	117,171	119,389 ^r	114,844 ³
Nitrogen, N content of ammonia	3,300	--	--	--	-- ³
Pumice and related volcanic material: ^c					
Pumice	70,751 ³	56,478 ³	50,193 ³	36,045 ^{r, 3}	105,454 ³
Scoria	1,000	1,000	1,000	1,000	1,000
Salt ^e	4,500	4,500	4,500	4,600	4,600
Sand: ^c					
Basaltic cubic meters	1,100	1,200	1,200	1,300	1,300
Calcareous, shell do.	80,000	80,000	80,000	80,000	80,000
Sand and gravel thousand cubic meters	4,000	4,200	4,200	4,200	4,300
Silica dust ⁵	20,192 ³	22,579 ³	23,830 ³	22,533 ^{r, 3}	22,992 ³
Stone, crushed: ^c					
Basaltic	95,000	95,000	96,000	96,000	97,000
Rhyolite cubic meters	17,000	18,000	18,000	19,000	19,000

^cEstimated; estimated data are rounded to no more than three significant digits. ^rRevised. -- Zero.

¹Table includes data available through June 28, 2006.

²Ingot and rolling billet production.

³Reported figure.

⁴Sales.

⁵Byproduct of ferrosilicon.