

Box IV-2

Plans for more aluminium smelters

Ideas for further development of Iceland's aluminium industry have recently been given a boost. The plans currently being examined by the Icelandic authorities, aluminium producers and power companies involve expanding the Alcan Corp. smelter in Straumsvík by 280 thousand tonnes per year (tpy) to 460 thousand tpy; a new smelter for Alcoa near Húsavík (northeast Iceland) and a new smelter for Century Aluminium's subsidiary Norðurál in Helguvík (southwest Iceland), both with an installed capacity of 250 thousand tpy. All these plans are still at the discussion or exploratory stage. Accordingly, all assumptions underlying them are fraught with uncertainties concerning, for example, feasibility, timetabling, profitability, power rates, environmental impact assessment, negotiations with the authorities and power supplies.

A great deal of work obviously lies ahead on studies of their feasibility and economic and environmental impact, and on energy research and negotiations on the power rate and with central and local government, before it becomes clear whether the projects will actually go ahead or not. These three projects differ in such respects as timetabling, construction time, power supply, prospective electricity producer and government involvement.

Details of possible projects

Representatives of Reykjanesbær municipality, Invest in Iceland Agency and Norðurál have signed a joint action plan to evaluate further the possible construction of a new aluminium smelter in the vicinity of Helguvík. With a probable capacity of 250 thousand tpy, the smelter would be built in two phases over 2008-2015. The regional power producer Suðurnes Heating (Hitaveita Suðurnesja) would supply power generated from geothermal steam.

Ideas for expanding the Straumsvík smelter have been aired for many years. The mooted expansion would have a capacity of 280 thousand tpy and be aimed for completion by 2010. This implies that work on the expansion would have to be launched at the beginning of 2008 at the latest. The possibility has been discussed that Reykjavík Energy (Orkuveita Reykjavíkur) would supply 40% of the power requirements using geothermal generation, and the national power company Landsvirkjun the remainder from hydro-power stations in the River Þjórsá basin.

At the beginning of March, Alcoa Corp. and the Minister of Industry signed an agreement to begin detailed feasibility studies for the development of a 250 thousand tpy aluminium smelter near Húsavík. There has been talk of Landsvirkjun providing power by developing geothermal stations in the region. If the project is given the go-ahead, construction will not commence until 2010.

Cost, size and development time

Since preparations are still at the earliest stage, it is very uncertain when construction might begin and end. The timetables presented

Tafla 1 New aluminium industry projects under consideration

	<i>Production capacity tpy</i>	<i>Investment cost – power</i>	<i>Investment cost – plant</i>	<i>Investment cost – power and plant</i>	<i>Time</i>
Extension, Alcan smelter at Straumsvík	280 thous.	80 b.kr.	80 b.kr.	160 b.kr.	2007-2010
Alcoa NE Iceland	250 thous.	60 b.kr.	75 b.kr.	130 b.kr.	2010-2015
Century SW Iceland	250 thous.	60 b.kr.	75 b.kr.	135 b.kr.	2008-2015
Increased capacity tpy	780 thous.				
Total cost		200 b.kr.	230 b.kr.	430 b.kr.	

Source: Central Bank of Iceland.

here are almost entirely based on requests put forward by the aluminium producers. It is not sure that all these requests can be met. For example, extensive research must be conducted in high-temperature geothermal fields before prospecting and drilling for steam can begin. An environmental impact assessment is also needed. The first power prospecting will have to begin next year if the Helguvík smelter and Straumsvík expansion are to go on stream in 2010. The construction period for the three projects would therefore probably be spread over a relatively long period – nine years – from 2007 to 2015. At a rough estimate, the total cost of the smelters and power facilities for them could amount to as much as 430 b.kr., divided between 200 b.kr. on power supply and 230 b.kr. on the smelters. These projects are therefore greater in scope than those currently in progress in east Iceland which will cost an estimated 300 b.kr. spread over the period 2001-2007. Because the new projects would probably be distributed over a longer period, the major peaks in activity witnessed this year and last year could conceivably be avoided. However, too much uncertainty still surrounds all these projects for them to be incorporated into assessments of the economic outlook.