



Land that will be destroyed by the Kárahnjúkar Project, Jóhann Ísberg



Photo: Jóhann Ísberg

damming iceland's wilderness

how large dams and their funders threaten iceland's natural heritage | may 2003

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iceland's natural heritage at risk

Iceland's Central Highlands are the second-largest remaining wilderness area in Europe, and perhaps its most dramatic. "Here, nature is still at its rawest and most archetypal, with glaciers deserts of black sand, barren glacial moraine, steaming hot springs, active and spent volcanoes and strange oases of vegetation", the Icelandic Tourist Board says. "Much of Iceland is still taking shape before your very eyes — raw, dramatic landscapes born from volcanic eruptions and carved out by glaciers."

This pristine wilderness is now being threatened by a series of large dam projects that are planned to power heavy industries in Iceland. The first in line is the Kárahnjúkar Hydropower Project. If built, this ambitious scheme of large dams, reservoirs and tunnels will have massive impacts on Iceland's fragile environment.

The Kárahnjúkar Project will cost more than US\$1 billion. Private banks and public financial institutions around the world will soon decide whether or not they will fund this gargantuan undertaking. This leaflet provides some information and answers the most important questions on the Kárahnjúkar Project.

Photo: Jóhann Ísberg



what is the kárahnjúkar project?

The Kárahnjúkar Hydropower Project is the largest dam project in Iceland. It will be located near Vatnajökull, Europe's largest glacier, and will dam and divert several glacial rivers. If built, it will consist of nine dams, three reservoirs, seven channels and 16 tunnels. The largest dam will have a height of 190 meters, and its reservoir will cover 57 square kilometers. The power plant will have a capacity of 630 megawatts.

what is the purpose of this project?

Alcoa, the world's largest aluminum producer, plans to build a smelter on the Icelandic coast. Bauxite will be mined in different parts of the world, turned into alumina, and shipped to Iceland. The smelter could produce up to 322,000 tons of aluminum per year. Producing aluminum is extremely energy-intensive, and almost all the electricity generated by the Kárahnjúkar Project will be used to power this smelter.

how will the kárahnjúkar project affect the environment?

The reservoirs and the river diversions will affect an area of almost 3,000 square kilometers, or about 3% of Iceland's land mass. The project will drown or spoil Iceland's most dramatic canyon, the Dimmugljufur, about 60 waterfalls and invaluable geological landmarks.

The Ministry for the Environment says that vegetation in the project area has a "high conservation value". The project will add to the pressure on the habitats of reindeer, harbor seals, the pink-footed geese, salmon, and other fish species, and may cause local extinction of various species. The Icelandic authorities are presently preparing a Master Plan for Hydro and Geothermal Energy Resources. The interim report of this plan found that the Kárahnjúkar Project had the third-most unacceptable environmental impacts of the 15 projects considered.

is it safe to build a dam in an active volcano zone?

With Hawaii, Iceland is the volcanically most productive area on Earth. The ground underneath the project area is very different from that underneath any reservoir on a continent. The project authorities do not know whether a volcano near the dam site is still active or not.

Gudmundur E. Sigvaldason, a long-time past director of the Nordic Volcanological Institute, has warned that the geological conditions in the project area remain "a serious matter of concern", and that "any prudent political authority would never consider to stake huge amounts of taxpayers money on a project built on such dubious grounds".

does it not make sense to use hydropower, rather than coal, for producing aluminum?

If the world indeed needed the aluminum produced by new smelters, this argument could be made. Yet there is an oversupply of aluminum already, and Alcoa is moving to Iceland not to expand production, but to cut costs.

A lot of aluminum is also wasted today. Alcoa produces aluminum for 100 billion beverage cans every year. In the USA, recycling rates have dropped to less than 50%, and so the company uses two smelters the size of the new Iceland plant only to produce cans. Rather than destroying a unique wilderness area, aluminum should be recycled more effectively.



Photo: Jóhann Ísberg

does the project make economic sense?

Alcoa will consume most of the electricity generated by the new project. The price will be linked to the future price level of aluminum on the world market. The Icelandic government believes that this will be sufficient to pay for the cost of the project. Using less optimistic forecasts, Thorsteinn Siglaugsson, an independent economist, has calculated that Kárahnjúkar will produce average deficits of \$36 million per year. Other electricity consumers, and ultimately Iceland's taxpayers, will have to pay for these losses.

but iceland surely needs the jobs created by the project?

The new aluminum smelter will create about 450 jobs directly, and another 300 jobs indirectly. Supporting the economy of East Iceland is the main justification for the project. Yet unemployment in the region is low, and Iceland will need to rely on immigrant workers to take up some

of the jobs. The subsidies spent for the project could also be used to support activities that are better adapted to the needs of East Iceland: higher education facilities and expanded infrastructure for eco-tourism.

who will fund the kárahnjúkar project?

The Kárahnjúkar Project will cost about US \$1.1 billion. Iceland will need to turn to foreign funding sources for the bulk of this. The Icelandic authorities plan to raise funds from international financial institutions – the European Investment Bank (an institution of the EU) and the Nordic Investment Bank – and from private banks. 120 environmental organizations from around the world recently urged these financial institutions not to fund the Kárahnjúkar Project.

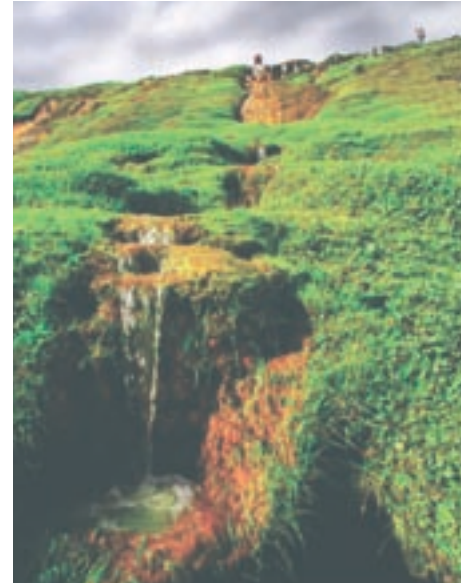


Photo: Jóhann Ísberg

is the kárahnjúkar project a done deal?

In March 2003, the Icelandic government signed a contract with Alcoa in order to develop the Kárahnjúkar Project. An Icelandic court recently confirmed the approval of the project. Icelandic citizens and institutions consider challenging this decision in the country's High Court. They have also challenged the project before institutions linked to the EU.

Iceland cannot fund this project from its own resources. Many financial institutions have accepted that they share a responsibility for the environmental impacts of the projects they finance, and have created environmental guidelines and standards. If they take their responsibility seriously, they will not fund the Kárahnjúkar Project.

Photo: Jóhann Ísberg



what can I do?

You can write to the following institutions to express your concerns about the Karahnjúkar project, and to encourage alternatives that better respect Iceland's natural heritage:

Mr. David Oddsson, Prime Minister of Iceland, postur@for.stjr.is.
Mr. Alain Belda, Chairman of Alcoa Inc., Alain.Belda@alcoa.com.
Mr. Philippe Maystadt, President of the European Investment Bank, p.maystadt@eib.org.



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where can I find further information about the karahnjúkar project?

A detailed briefing paper on the karahnjúkar project is available at www.irn.org.

Also see www.inca.is, the website of the Iceland Nature Conservation Association.



Photo: Jóhann Ísberg

friends of the earth international (www.foei.org) is a federation of environmental organizations from 68 countries all over the world, and campaigns on the most urgent environmental and social issues of our day.

the cee bankwatch network (www.bankwatch.org) monitors activities of international financial institutions in Central and Eastern Europe, and proposes constructive alternatives to their policies and projects.

international river network (www.irn.org) supports local communities in their efforts to protect their rivers, halt destructive projects, and promote sustainable alternatives.

the iceland nature conservation association (www.inca.is) advocates the conservation of nature through public education, the monitoring of government agencies, and improved legislation.

A briefing paper by friends of the earth international, the cee bankwatch network and international rivers network, in cooperation with the iceland nature conservation association

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