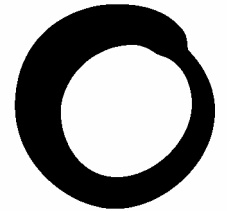


January 2004



**Friends of
the Earth**

Briefing

Barclays and the Karahnjukar project

Exposing the Equator Principles

Barclays bank are helping to arrange a \$400 million loan to an Icelandic power company ('Landsvirkjun') to construct the countries biggest hydropower project ('Karahnjukar') in the Iceland Central Highlands, the second largest remaining wilderness area in Europe, in apparent breach of the banks own green project finance principles the Equator Principles and for the primary purpose of providing cheap electricity for a new aluminium smelter ('Fjarðaál') for the aluminium producer Alcoa.

What is the Karahnjukar project?

The Karahnjukar project is a massive hydropower scheme based in the Icelandic highlands. It is to be made up of nine dams, three reservoirs, seven channels and 16 tunnels that will divert several glacial rivers in the Highlands to provide water to run a 630 megawatt hydropower plant to be run by the Landsvirkjun power company. The power generated from the Karahnjukar hydropower station will be used to provide cheap electricity for a aluminium smelter (Fjarðaál) to be built by Alcoa and based on the coast in East Iceland.

All planning consents have been given despite concerns raised by the Iceland's Planning agency over adequate consideration of alternatives. In fact the Planning Authority had rejected the Environmental Impact Assessment (EIA) but this was overruled by the Environment Minister. Work began on the project in early 2003.

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The Equator Principles – Green wash or green guidelines?

In June 2003 Barclays along with 10 other major banks launched the Equator Principles in Washington. These are a set of environmental and social guidelines for project finance based on World Bank guidelines used by the Banks private finance arm the International Finance Corporation (IFC) - www.equator-principles.com.

By signing the Equator Principles the private sector banks are finally acknowledging that they need to consider the social and environmental impacts of the companies and projects they finance. They can no longer hide behind the claim that they can only act if their client requests they do so.

Under World Bank guidelines projects are rated from high risk (category A) to low risk (category C). High to medium risk projects require an environmental assessment to be carried out while low risk projects don't. All projects funded by the World Bank or through the IFC must meet social and environmental guidelines as specific safeguard polices (eg. resettlement, indigenous peoples, natural habitats etc) as well as industry sector guidelines.

All World Bank and IFC social and environmental policies are published and available to the community. Communities affected by World Bank or IFC funded projects can make complaints when they believe any of the banks policies have been breached or not adhered to through the IFC Compliance Advisor/Ombudsman.

But how effective will the Principles be? Those banks signed up have already refused to disclose how they will comply with the Principles. So banks will not disclose which projects have been refused funding or how they have changed their own risk assessment process or what conditions they are likely to place on any funding. Further, unlike the World Bank or IFC there will be no opportunity for affected stakeholders like local communities or environmental organisations to challenge any breaches of the Principles.

Icelandic wilderness under threat

The Icelandic highlands

The highlands of East Iceland are one of the largest remaining wilderness areas in Europe. The area that will be affected by the Karahnjukar project is a dramatic system of glacial rivers, plateaus, lakes, waterfalls and canyons that covers nearly 3000km² (this includes indirect effects). Among areas affected includes the massive Dimmugljufur canyon which would be lost as well as many waterfalls including the stunning Saudarfoss waterfall.

The impacted area includes the catchments of two major glacial river systems flowing north from the Vatnajökull glacier, which itself is the largest glacier in Europe. These watercourses contain a wide array of freshwater fish, including char, trout and salmon and the coastal waters fed by these rivers are highly productive with important harbour seal populations.

Other affected areas in the highlands include the internationally recognised Utherad Important Bird Area which provide important habitat for migratory species such as the pink footed geese and is protected under the *Ramsar Convention* on Wetlands. The Icelandic Planning Agency considered "that the value of the natural features in the impact area of the project is high, and that the impact of the project would in many cases be substantial and irreversible".

Icelandic reindeer under threat

The population of around 1500 Icelandic reindeer are likely to be severely affected as the planned Halslon reservoir is centred in their main breeding and grazing area, which will be heavily impacted by infrastructure, human activity, and dust blown from the reservoir basin. Glacial silt blown from the Halslon reservoir will be deposited over large areas of the highlands as a result of harsh winds leading to the likely unprecedented destruction of vegetation and soil erosion

Normally each year reindeer swim the glacial Joekulsa river to reach the Kringilsarrani nature reserve which is an important grazing area. Instead as a consequence of Karahnjukar parts of the Kringilsarrani nature reserve, protected for reindeer conservation, will be flooded and reserve will become inaccessible for reindeer because of the Halslon reservoir. Precedents in Iceland and Norway show that the project is likely to lead to local extinction.

Important harbour seal nursery threatened

Icelandic harbour seal numbers have decreased sharply, from 40,000 in 1980 to fewer than 20,000 in the late 1990s. An important rookery is at the mouth of the Jokulsa a Dal river, where they breed and rear their young. The reservoirs will collect most of the glacial sediment previously carried down the river that would normally deposit along the coast. This in turn will lead to the erosion of the seal rookery as the influx of sediment to the mouth of the river is greatly reduced. The reservoirs themselves will also suffer as they will gradually fill with sediment.

Pink-footed geese habitat destroyed

Huge flocks of pink footed geese travel between the highlands of Iceland and the wetlands of the Norfolk broads in the East of England every year. During the summer Iceland is home to the world's largest concentration of pink footed geese with up to 90 per cent of the global population. The geese provide the UK with one of its greatest wildlife spectacles, and birdwatchers give a much-welcomed tourism boost, particularly along the north Norfolk coast¹. The Karahnjukar project would result in the loss of up to 500 nesting sites for the pink footed geese. According to BirdLife International thousands of pairs of nesting geese, which winter in the UK are at risk. Up to one in seven of these geese could be affected by this project.

What about the potential socio economic impacts

There are questionable social benefits especially in terms of jobs. East Iceland, where the hydropower project is based has relatively low unemployment. Most of the construction jobs are being taken by foreign workers and there will be very few permanent jobs at the hydro power plant after it is built. Similarly it seems there are likely to be few jobs available for local people at the smelter which was supposedly one of the reasons it was located in East Iceland in the first place.

Longer term there is also the concern that the hydropower plant will be relying largely on one customer, the aluminium smelter, and that Landsvirkjun have been ambitious in terms of estimating what the future price will be for aluminium. If the price for aluminium does not rise considerably and stay high then Icelanders will end up subsidising Alcoa's electricity. An economic assessment commissioned by the Iceland Nature Conservation Association (INCA) showed that using only slightly different parameters based on historical industry trends and market rates Karahnjukar will most likely result in annual losses of \$36 million.

Barclays and the Karahnjukar project

Financing the destruction of Iceland's Highland Wilderness

The Karahnjukar project is estimated to cost around US\$1.1 billion and the Icelandic authorities have planned to fund the project from both public and private financial sources. The Government, as a major shareholder in Landsvirkjun, guarantees the project which in turn ensures that Landsvirkjun can borrow money at interest rates below the market level and in effect means the Government is subsidising the project.

The Landsvirkjun power company has essentially three potential sources of finance to fund the Karahnjukar hydro scheme. Barclays as can be seen below have played a key role in arranging finance to help ensure the project goes ahead. Even more incredible is that Barclays may earn money from the deal and not even have to lend any money.

Landsvirkjun have been using a \$1 billion European Medium Term Note (EMTN) programme which was arranged by Merrill Lynch in 1998 to fund their investments. Under this programme Landsvirkjun has so far issued notes up to \$670 million out of a potential \$1 billion. Landsvirkjun has also issued corporate bonds worth \$240 million since 1998.

Another source for companies who are financing potentially controversial projects is the multilateral public banks. The two most likely sources of public finance for this project are the European Investment Bank (EIB) and the Nordic Investment Bank (NIB). However the EIB has had discussions regarding the Karahnjukar project and will not be providing any finance.

A key source of finance that private banks can provide is known as multi currency revolving credit which would give Landsvirkjun more flexibility to borrow and repay money. Barclays Capital (part of Barclays Bank) along with 3 other banks was appointed by Landsvirkjun to arrange \$400 million in loans under such a financing arrangement. The key advantage for the company of this sort of financial arrangement is that it can look for cheaper ways to seek finance while knowing that they can always use this revolving credit arrangement as a guarantee if they are short of funds.

So regardless Barclays and the banks in the syndicate will earn money regardless of whether Landsvirkjun use any of the loans as they have to be paid for providing the service.

Broken principles – Karahnjukar Hydropower project

Background

Barclays as a signatory have committed themselves to ensure all projects they finance in excess of \$50 million will be developed in a way "*that is socially responsible and reflects sound environmental practice*". Although the finance being arranged for Karahnjukar is not strictly project finance Barclays have already acknowledged in correspondence with Friends of the Earth that they will apply the Equator Principles to this project.

As one of the founders of the Equator Principles it is very disappointing that Barclays are the only signatory that has signed up to financing this project. The project is mainly being financed by environmental laggards such as Sumitomo Mitsui, BNP Paribas and JP Morgan that have not even signed the UNEP Financial Institutions Statement on the Environment.

Verification vacuum As they don't have the in house environmental expertise Barclays have commissioned consultants to undertake an assessment of the project and existing EIA to help assess if they meeting their commitments under the Equator Principles. The consultants, Stone & Webster, have already been criticised for their involvement in other controversial projects including the OCP pipeline in Ecuador. As it was they only produced a brief desk top study of the project without any 'site visit' or consultation with local NGO's.

Friends of the Earth research had previously discovered that Barclays had been helping finance the Asia Pulp and Paper Company which were responsible for the destruction of hundreds of thousands of hectares of Indonesian rainforest. Barclays say they have since changed their environmental risk assessment process but they refused to disclose this to Friends of the Earth claiming it's commercially confidential.

In terms of the Karahnjukar project and the related Fjardaal smelter the \$400 million loan from Barclays appears to clearly breach the Equator Principles in a number of areas (see below). Friends of the Earth, the International Rivers Network and the Iceland Nature Conservation Agency have written to Barclays seeking a response to these apparent breaches of the Equator Principles. Friends of the Earth have also since met with Barclays to discuss our concerns.

Broken principles – breaches of the Equator Principles

(1) Significantly impacting on sensitive high conservation ecosystems - The Karahnjukar project will have substantial and irreversible impacts on wildlife habitats of a high conservation value, including two internationally important bird areas, according to the projects Environmental Impact Assessment (EIA). The project would therefore violate the IFC's natural habitats policy and the Equator Principles' commitment to protecting sensitive ecosystems.

Barclays Response: Barclays claim the project has complied with an Environmental Impact Statement (EIA) but this has already been criticised by conservation and wildlife experts.

Although up to 600 nests of the pink footed geese are likely to be lost as result of flooding from the reservoir Barclays say only 1-2% of the geese would lose their nesting sites so the impact will be small. Barclays also say that the Icelandic Government requires some 20 conditions are to be met as part of the approval of the project.

Friends of the Earth's response: The decision by the Environment Minister is still being challenged in the Icelandic courts and in the EFTA Surveillance Authority (ESA). In terms of disturbance of the pink footed geese the figures used by Barclays are misleading as the 1-2% refers to the global population however the local impacts will be quite high. Secondly and critically the Ramsar Convention which covers migratory birds and their habitats consider that even a 1% disturbance of global populations is significant. In terms of the 20 conditions mentioned by Barclays these are focused on monitoring rather than providing useful mitigation measures such as the restoration or replacement of threatened critical habitats.

(2) Breaching best practice pollution levels - Although the smelter is not part of the project under the IFC Operational Policy on Environmental Assessment all ancillary aspects, which would include the smelter, should be considered. The aluminium smelter being built in East Iceland that will be the major user of power from Karahnjukar will be allowed to emit sulphur dioxide emissions up to 12 times higher than best practice as defined by the World Bank's Pollution Prevention and Abatement Handbook.

Barclays and the Karahnjukar project

Barclay's response: Barclays had two levels of response. Firstly Iceland was '*not a Third World*' country so they were confident in the licences given and conditions set for the operation of the smelter. Secondly that supplying the wet scrubber system to meet best practice pollution guidance would lead to waste water discharges to sea which could affect Iceland's reputation as a supplier of quality seafood. Instead they suggested the installation of tall stacks would help disperse sulphur dioxide to meet strict limits.

Friends of the Earth's response: Firstly, regardless of how Barclays view Iceland in terms of its status as a country this is no excuse for not applying best practice as defined by the World Bank handbook. Secondly building tall stacks to disperse noxious sulphur dioxide emissions does not eliminate pollution from the smelter entering the environment it only spreads it further. Sulphur dioxide could be discharged to the sea with minimum impact providing there are good exchange rates, and it is certainly likely to be less damaging than releasing it to the atmosphere, although it may be necessary for additional measures to reduce other pollutants. In any case a large area surrounding the smelter will in effect become unsuitable for food production.

(3) Ignoring the cumulative impacts of other projects – According to the Equator Principles any environmental assessment should include the cumulative impacts of existing projects, the proposed project and anticipated future projects. Landsvirkjun has plans to develop additional dams that would allow the country's smelting capacity to increase more than fivefold.

Barclay's response: Barclays say they consider this clause under the Equator Principles is to prevent banks breaking up an existing project so that it fell below the \$50 million threshold. They also added that as '*Iceland is a relatively underdeveloped*' country compared to Norway or Sweden then there was more scope to expand their electrical energy resources.

Friends of the Earth's response: It appears that Barclays have misinterpreted the Principles on cumulative impacts so they refer only to the actual project they are helping to finance as opposed to considering existing and anticipated projects which has been standard practice with EIA's for some time. The second comment from Barclays illustrates a 'business as usual' approach to development as opposed to any serious consideration of sustainable development. They also fail to acknowledge that Karahnjukar was one of the most environmentally damaging options and that there were numerous alternatives.

(4) The inadequate consideration of alternatives - We are, in principle, supportive of Iceland's development of renewable energy to underpin a future energy system based on hydrogen. We are not opposed to hydropower projects in principle but we are opposed to large dams which impact severely on local communities and the environment. Instead we support small scale hydropower (10MW or less) that is compliant with World Commission on Dams guidelines as part of a mix of renewable sources of energy. Iceland also has reserves of geothermal energy and the scope to develop wind power which could be utilised for hydrogen production. However, according to the Equator Principles the Environmental Impact Assessment should include the consideration of feasible environmentally and socially responsible alternatives. The interim report of Iceland's Master Energy Plan for Energy Resources found that Karahnjukar was the 2nd worst option out of 15 sites considered in terms of environmental impacts. These conclusions were not seriously considered in the Karahnjukar EIA even though the interim Master Energy Plan was ready when the EIA was being developed.

Barclay's response: Barclay's say the Minister of the Environment ruled that the alternatives were adequately addressed in the EIA but were rejected. This was as they would require power being supplied from a number of different locations spreading the environmental impact over a larger area, would require the construction of high voltage power lines to supply consumers and that there were declining work opportunities in East Iceland.

Friends of the Earth's response: What is clear is that the Karahnjukar EIA report deals with alternative sources of electricity very cursorily. The Icelandic Government had prepared an interim Master Plan for hydro and geothermal energy resources which identified the environmental concerns about Karahnjukar but before the report was published the Icelandic Parliament passed legislation supporting the Karahnjukar project. This was despite the preliminary findings of the report which were critical of Karahnjukar being available to the Parliament. The alternatives had not been properly evaluated in the EIA which is one of the reasons why the Planning Authority had rejected it. Despite this the Environment Minister overturned their decision despite Karahnjukar being one of the worst environmental options. However there are clear alternatives to Karahnjukar including expanding existing hydropower plants and adding new geothermal power generation. By making use of less damaging options in South Iceland to supply power and basing additional smelting capacity there could have provided a cheaper and less environmentally destructive alternative.

We need to recycle more aluminium not build more smelters

Aluminium smelters even powered by hydropower can, in the wrong location, bring massive damage to environmental systems and disrupt the livelihoods of local communities. In Suriname Suralco, a subsidiary of Alcoa, constructed the Afobaka dam to provide power for its smelter at Paranam. This dam inundated some 1500 square kilometres of tropical forest and forced the relocation of approximately 6000 Saramacca and Aucaner Maroons from their ancestral territories.

Aluminium smelters themselves can also be very polluting and they consume enormous amounts of power. In terms of pollution a key pollutant from aluminium smelters is sulphur dioxide which is a severe respiratory irritant and can aggravate other respiratory illnesses. The World Bank Pollution handbook upon which the Equator Principles are partly based states modern smelters should be able to reduce SO₂ to levels of 1 kg per tonne of aluminium produced but the Fjardeel smelter will exceed this by 12 times.

Recycling aluminium can bring energy savings of up to 95 per cent and produce 95 per cent less greenhouse gas emissions than when it is produced from raw materials. Aluminium also has the highest value of any recyclable packaging material, as it can be recycled time and time again without loss of quality. We use 145,000 aluminium cans every day in the UK (European Aluminium Association) but recycle well under half of them (42% in 2001). We pack or wrap foods in 35,000 tonnes of aluminium foil each year (Alupro) of which just 12% is recycled.

Aluminium is also used in industry where it can replace other heavier metals such as steel. To maximise the environmental benefit of this substitution, aluminium used in this context should also be recycled to reduce the need for additional smelting capacity.

To collect more aluminium cans and foil for recycling we need good quality kerbside recycling schemes that reach every household in the UK. By providing local authorities with funding and advice about kerbside recycling, the Government could help avert the massive world-wide impact caused by bauxite mining and aluminium production.

Barclays and the Karahnjukar project

What can you do?

Write to Barclays

- 1) Demand that they withdraw from financing the Karahnjukar project
- 2) Demand they disclose how they implementing the Equator Principles including:
 - what conditions have been placed on any finance (eg. loan covenants)
 - what changes have been made in terms of polices and procedures (eg. risk assessment policies and operating manuals, training of staff)
 - what measures are used to verify compliance (eg. consultants, bank tribunal)
 - how can people formally challenge suspected breaches (eg. disputes panels, ombudsmen)

Contact details

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This briefing was compiled with the assistance of International Rivers Network (www.irn.org) and the Iceland Nature Conservation Association (www.inca.is).

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