

# ENVIRONMENTAL PERFORMANCE REVIEW OF ICELAND

## EXECUTIVE SUMMARY

After sluggish growth in the early 1990s, Iceland's economic growth since 1994 has averaged 4.5% in real terms and brought Icelandic GDP per capita above the OECD average. This report examines progress made by Iceland since the previous OECD environmental performance review in 1993, and the extent to which Iceland's domestic objectives and international commitments are being met, based on environmental effectiveness and economic efficiency criteria; 43 recommendations\* are put forward that could contribute to strengthening the country's environmental performance.

### *Implementing environmental policies.*

Since the early 1990s and the first OECD environmental performance review of Iceland, the Ministry for the Environment has extended the scope of its responsibilities, among which are now: pollution prevention and control, nature protection, physical planning and meteorology. Staffing of the ministry and of the agencies operating under its auspices has increased. Regional public health inspectorates have been created to facilitate implementation of environmental policies. Legislation has been substantially enhanced: both environmental legislation, largely as a result of Iceland's participation in the European Economic Area (EEA), and land-related legislation, providing a framework for managing land resources and the central highlands. Significant progress has also been made in environmental impact assessment (EIA) and physical planning.

This has proved difficult in many respects. Licensing and enforcement, which are shared between the Environment and Food Agency (EFA) for big firms and municipalities' health inspectorates for smaller ones, are lagging. Transposing EU environmental legislation has absorbed many resources at national level, while the small size of many local communities has complicated enforcement at municipal level, due to limited resources and possible conflicts of interests. Industry has only started using voluntary agreements, environmental management and eco-auditing. Economic instruments have been introduced (e.g. in fisheries and in hazardous waste management), but there is scope to increase their use (e.g. pollution charges, user fees for environmental services). There is a need for quantified environmental policy objectives.

### *Towards sustainable development.*

Iceland's economy relies heavily on natural resources; the fishing industry depends on marine resources, industry on hydropower, and tourism on nature and related resources. Iceland has achieved a high rate of economic growth in recent years. Some weak decoupling of economic growth from environmental pressure is occurring; for example, energy intensity has fallen since 1990, and SO<sub>x</sub> and NO<sub>x</sub> emissions are growing more slowly than GDP. There has also been a degree of progress on pollution management. Some environmentally favourable changes in consumption patterns have been induced, notably the switch from oil to geothermal energy for domestic heating. Iceland has also made progress towards sustainable management of natural resources. Framework conditions (e.g. regarding land ownership rights, municipality boundaries, procedures for planning and building infrastructure, and regional long-term planning) have been established to assure better use and protection of the natural resources of the central highlands. The fishery management system (individual transferable quotas coupled with better regulations) has enabled fish stocks to recover and produce good economic returns. The National Environmental Strategy, "Towards Sustainable Development", was published in 1993, followed by the National Sustainable Development Action Plan in 1997. The Ministry for the Environment has begun regular co-ordination meetings with several other ministries, local authorities and other stakeholders.

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\* See Annex.

## T H E O E C D E N V I R O N M E N T P R O G R A M M E

However, implementation of the sustainable development strategy and action plan has been patchy. Most ministries and local governments continue to give much more attention to economic considerations, and integration of environmental factors in sectoral and economic policies is limited. In some sectors, such as transport and tourism, environmental pressures are increasing and more coherent strategies are needed to address them. Iceland would benefit from improvements in sustainable natural resource management, further strengthening of the fishery management system and further reduction of farm support. The environmental management industry remains weak. The government is not promoting reduced energy and material intensity in industry, and the implementation of its "green government" policy is patchy. Taxation policy has been developed without taking full account of environmental issues, and use of economic instruments for environmental policy is limited. While EEA membership and EU environmental directives constitute a major driver for environmental policy improvements in Iceland, their translation and adoption into Icelandic legislation has dominated administrative attention, and their implementation has just started. Environmental expenditure remains low.

### ***International co-operation: achievements...***

Iceland is closely associated with European countries as a member of the Nordic Council and the EEA, and it has close ties with North American trading partners. Its economy is highly dependent on exports of fish and development of tourism, two sectors that require a high-quality environment and a positive, "green" image. Iceland developed its environmental policy at a fairly late stage but made significant progress in the 1990s, in particular by transposing many EU directives into its legal system and giving legal status to its international commitments. It has ratified and implemented many international agreements, and it hosts the secretariats of two working groups under the Arctic Environment Protection Strategy.

Iceland has consistently acted to ensure greater protection of the seas. In particular, it has promoted the adoption of a regional convention on persistent organic pollutants and is seeking the adoption of a worldwide convention on the topic. Its main aim is to ensure that consumers continue to see fish products as healthy and attractive and that the sustainability of the oceans, in particular the coastal zone, remains intact. At national level, Iceland has undertaken a wide-ranging study of invertebrates in its exclusive economic zone and measured the (very low) level of pollution of its waters. It has strengthened its response capability in case of an oil spill and has become a party to international agreements on oil spill prevention and preparedness.

The country's unique natural parks and protected areas are great tourist attractions. Iceland has stepped up protection of wetlands under the Ramsar Convention and announced its intention to protect a larger part of its territory. Its carbon sequestration programme through revegetalisation has made considerable progress, and significant reduction in industrial greenhouse gas (GHG) emissions has been achieved.

### ***...and areas for progress.***

While Iceland's international obligations and responsibilities are considerable, its population is small. In addition, public environmental awareness is fairly recent. Thus there are significant gaps in its international co-operation programme caused by insufficient staffing and financial means. Its commendable transposition of EU directives needs to be followed up by greater effort at local level to implement the resulting legislation and carry out related data collection. The significant steps taken to inform the Icelandic public need to be supplemented by similar efforts geared towards the international community in order to publicise Iceland's achievements in fulfilment of environmental policies, its goals and objectives for future action, the state of its environment and the measures taken to implement new policies.

# T H E O E C D E N V I R O N M E N T P R O G R A M M E

As Iceland seeks international support for its creative policies aimed at sustainable use of its own natural resources, it will need to give wider publicity to its efforts to protect its natural environment and to its special contribution to climate change policies, in particular through carbon sequestration. So far, Iceland has not taken extensive or far-reaching measures to reduce GHG emissions from transport or the fishing industry. Excluding new and expanded energy-intensive industry (using renewable forms of energy), it may be assumed that net CO<sub>2</sub> emissions will have been stabilised in 2000 at the 1990 level, in line with the national commitment. So far, Iceland has not agreed to become a party to the Kyoto Protocol. Its gross GHG emissions in 2010 are likely to be well above the 1990 level. Measures taken so far to reduce CO<sub>2</sub> emissions from transport and fisheries have been rather limited and could be strengthened, especially if Iceland wants to carry out a climate change policy with ambitious goals. Participation of all societal members and stakeholders in implementing such a climate change policy would be needed.

Iceland's per capita NO<sub>x</sub> emissions are considerably higher than the OECD average, the main reason being the large fishing fleet. They were supposed to be stabilised at the 1990 level, but are at present higher. On the other hand, they have been slowly decreasing in recent years, mainly because of the use of catalytic converters, despite the car fleet growth.

Although Iceland is well aware of the global dimension of environmental problems and of the need to help developing nations play a part in their solution, its contribution to development aid is, in relative terms, among the lowest for all industrialised countries and about four times below the level that the Icelandic Government said in 1993 was to be reached by 2000. Thus Iceland's bilateral aid is quite limited. Concerning multilateral aid, Iceland is not contributing to the Global Environment Facility, though it supports environmental projects in line with its foreign policy.

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**Annex: 43 Recommendations\***

<b>Implementing Environmental Policies</b>	<ul style="list-style-type: none"> <li>▪ pursue efforts towards revising and <i>implementing environmental legislation</i>, taking account of Iceland's EEA membership;</li> <li>▪ strengthen <i>environmental licensing and enforcement</i>, e.g. by strengthening government inspection and environmental management by companies, and by ensuring that inspection fees cover inspection costs;</li> <li>▪ define quantified environmental policy objectives;</li> <li>▪ increase the use of <i>economic instruments</i> in pollution prevention and control and in nature conservation;</li> <li>▪ stimulate environmental management initiatives by <i>industry</i>;</li> <li>▪ assure timely implementation of the <i>physical planning</i> functions of municipalities.</li> </ul>
<b>Water and Waste</b>	<ul style="list-style-type: none"> <li>▪ continue investing in <i>waste water infrastructure</i>;</li> <li>▪ apply the user pays principle in <i>pricing for waste water services</i> to households and industry, e.g. through volumetric pricing;</li> <li>▪ introduce nutrient management plans at farm level for <i>intensive pig and poultry production</i>;</li> <li>▪ adopt, as soon as possible, comprehensive <i>waste management legislation</i>;</li> <li>▪ extend <i>producer responsibility</i> to packaging waste, end-of-life vehicles and old tyres;</li> <li>▪ complete licensing of all landfills and incinerators as soon as possible, charge for <i>landfill waste disposal</i> and continue to develop modern municipal waste treatment.</li> </ul>
<b>Land management and the central highlands</b>	<ul style="list-style-type: none"> <li>▪ streamline soil conservation policy objectives by defining <i>quantitative targets for sustainable land use, soil reclamation and vegetation cover</i>;</li> <li>▪ regulate <i>livestock density</i> based on the carrying capacity of soils, as defined by the Soil Conservation Service, for both sheep and horses;</li> <li>▪ follow up on the 1997 survey of <i>soil erosion</i> by identifying the various pressures and potential policy responses;</li> <li>▪ continue to implement the new legal framework and regional plan for the <i>central highlands</i> and increase the responsibility of local stakeholders in land reclamation by clarifying communal and individual <i>land ownership and user rights</i> in the highlands;</li> <li>▪ extend <i>protected areas</i> significantly as regards wilderness and landscape protection (e.g. in the central highlands and coastal areas); prepare and implement <i>management plans</i> in all national parks, and extend red lists to cover all relevant species in Iceland;</li> <li>▪ increase ranger staff and funding for <i>nature conservation</i>, e.g. by applying the user pays principle to the tourism sector, inter alia, through fees and levies on visitors to protected areas;</li> <li>▪ diversify farm income by promoting <i>agro-tourism</i> and farm forestry.</li> </ul>
<b>Towards sustainable development</b>	<ul style="list-style-type: none"> <li>▪ translate national sustainable development commitments into <i>integrated policies and programmes</i> in key economic sectors (e.g. fisheries, agriculture, energy, transport and tourism), with targets and timetables;</li> <li>▪ further implement mechanisms to encourage <i>better interministerial co-ordination and co-operation</i> related to sustainable development;</li> <li>▪ review the environmental effects of the <i>tax system</i>, integrate environmental concerns in fiscal policies and expand the use of economic instruments for environmental management;</li> <li>▪ further increase public and private <i>environmental expenditure</i> so as to expand environmental infrastructure, implement national laws and translate international commitments into reality;</li> <li>▪ encourage private companies to improve <i>environmental management standards</i>, and implement "Environment Policy in Government Operations".</li> </ul>
<b>Environmental/social interface</b>	<ul style="list-style-type: none"> <li>▪ improve public <i>access to environmental information</i> by publishing periodic <i>state of the environment reports</i>, environmental data and indicators showing the progress made towards goals and targets;</li> <li>▪ regularly carry out national surveys of public <i>environmental awareness</i>, and build consensus about environmental policies and their implementation;</li> <li>▪ develop the use of environmental information and economic instruments to provide appropriate <i>signals to consumers</i>;</li> <li>▪ further research the <i>social consequences of the fishery management system</i> and develop the decision making process so as to achieve the social objectives of sustainable fishery management;</li> <li>▪ adopt a new <i>national plan for sustainable development</i>, with economic, environmental, social and regional dimensions, a long-term perspective and appropriate objectives and targets, based on extensive consultation;</li> <li>▪ adopt a <i>national spatial plan on land use</i>, co-ordinated with the sustainable development plan.</li> </ul>

\* These Recommendations were formally approved by the OECD Working Party on Environmental Performance.

***Sectoral integration:  
Fisheries***

- continue the more stringent approach to TAC setting adopted with the introduction of the *cod catch rule* in 1995, as well as associated technical regulations (e.g. closure of fishing grounds, net size regulations);
- adopt and implement catch rules similar to the cod catch rule for *other species* as appropriate, taking into account their biology and their value for the future of Icelandic fisheries;
- undertake further analysis of the economic, social and environmental implications of the *ITQ system* in the light of the latest evidence and experience;
- fully incorporate *small vessels* into the ITQ system;
- integrate *environmental concerns* in fishery policies and practices, including improved management of marine ecosystems, control of CO<sub>2</sub> emissions from the fishing fleet and reduction of effluents from fish processing;
- further develop and implement the *strategy for sustainable fishery management*, ensuring the coherence of environmental, social and economic objectives.

***International co-operation***

- develop and implement a meaningful programme of measures, in consultation with all stakeholders, to *reduce GHG emissions from transport and fisheries*, while seeking international support for the greater use of industrial processes based on clean and renewable energy sources;
- develop knowledge and promote understanding for a policy of *sustainable utilisation of all marine resources* without compromising the future of any marine species;
- implement the newly transposed EU directives and *collect necessary environmental data* to meet international commitments;
- develop policy to protect *Ramsar sites* and natural parks of outstanding interest, with a view to maintaining the integrity of the Icelandic wilderness;
- *combat* soil erosion and land degradation and *create carbon sinks* through revegetalisation;
- increase *official development assistance*, to reach the OECD-DAC average;
- complete the *national report on biodiversity*.