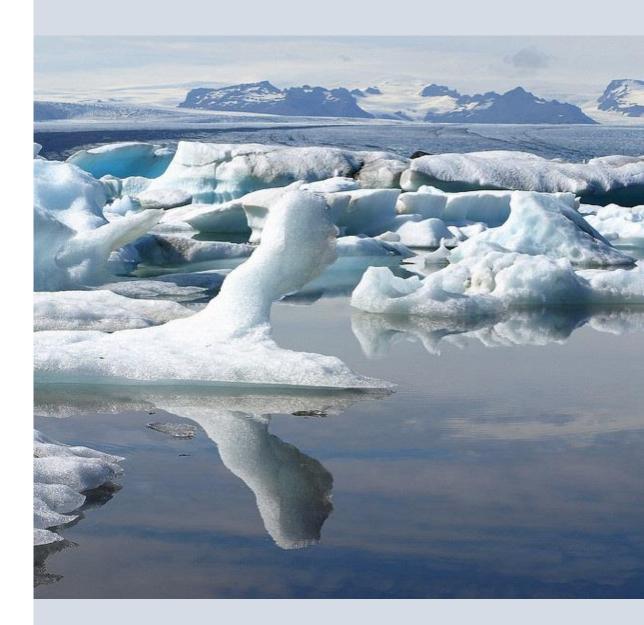


Iceland's Climate Action Plan for 2018-2030



Summary September 2018

Iceland's Climate Action Plan for 2018-2030 - Summary September 2018 Published by: Ministry for the Environment and Natural Resources Skuggasundi 1, 101 Reykjavík, Iceland Telephone: +354 545 8600 E-mail: uar@uar.is Veb-adress: www.government.is @ 2018 Ministry for the Environment and Natural Resources Cover photo: Hugi Ólafsson

Iceland's Climate Action Plan for 2018-2030

The Icelandic Government announced a new Climate Action Plan in September 2018, intended to boost efforts in cutting net emissions to meet its Paris Agreement targets for 2030 and reach the government's ambitious aim to make Iceland carbon neutral before 2040.

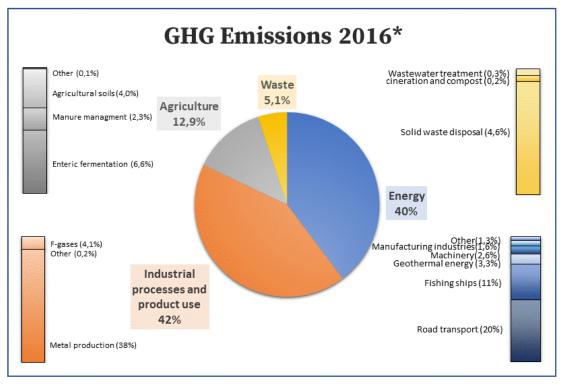
Climate change will have a big impact on Iceland and Icelandic waters, as on most other countries and regions. Almost all of Iceland's glaciers are receding. Glaciers cover some 11% of Iceland today, but scientists warn that they may largely vanish in the next 100-200 years if warming trends are not halted. Of special concern to Iceland is ocean acidification, which may have a profound impact on the marine ecosystem. Rapid acidification is observed in parts of Icelandic waters, changing the habitats and viability of bivalves and many other organisms.

National circumstances; Iceland's Mitigation Profile

Iceland has in many ways a unique profile among developed countries, when it comes to greenhouse gas (GHG) emissions and mitigation of climate change. Almost all electricity and heating is provided for by renewable energy, hydro and geothermal. In many countries, stationary energy production is the main source of emissions; in Iceland such emissions are negligible.

Iceland started using geothermal water to heat houses around 1930, replacing imported coal and oil. The transformation took several decades, supported by a push by the government to bring clean heating to areas outside the main geothermal areas. Electricity is mostly produced by hydro energy, but also by harnessing geothermal steam. Today Iceland enjoys virtually carbon-free electricity and heating. Fossil fuels are used in transport and fisheries, and now the aim is set to rapidly decarbonize those sectors, and to allocate increased government resources in this effort.

The main sources of GHG emissions (not counting land use) are fossil fuels for cars and ships, industrial processes and agriculture. Road transport accounts for about 20%, fisheries for 11%, heavy industrial processes and chemicals for 42%, agriculture for 13% and waste management for 5%. The share of main sources of emissions in 2016 can be seen below (not counting emissions in land use, land use change and forestry (LULUCF)).



* without LULUCF

Iceland has significant mitigation potential in land use and forestry. Iceland has lost much of its woodlands and soil since settlement some 1100 years ago. Reforestation, revegetation efforts and afforestation aim to reverse this historical decline, resulting in uptake of carbon from the atmosphere. Scientists have also discovered that wetlands drained in the 20th Century are a large source of carbon dioxide emissions. Wetland restoration is a part of the government efforts to halt emissions and mitigate climate change.

International commitments

Iceland has adopted numerical targets for its emissions under the Kyoto Protocol since 2008. Iceland has ratified the Doha Amendments to the Kyoto Protocol and submitted a Nationally Determined Contribution (NDC) under the Paris Agreement. According to its NDC, Iceland aims to be part of a joint fulfilment of a -40% emissions target for 2030 (compared to 1990 emissions), with the European Union and its Member States, and Norway. Iceland is part of the EU Emissions Trading Scheme, through its commitments under the European Economic Area agreement. The EU-ETS applies primarily to heavy industry and aviation. Discussions are under way between Iceland and Norway and the EU on joint fulfilment of a Paris Agreement target for 2030, by the way of the two countries adopting relevant EU climate regulation for 2020-2030.

New Climate Action Plan, 2018-2030

A new Climate Action Plan was launched by Prime Minister Katrín Jakobsdóttir at a press conference on 10 September 2018, flanked by 6 other Ministers in her Government. The Action Plan consists of 34 Government measures, ranging from an increase in reforestation to a ban on new registration of fossil fuel cars by 2030. "Climate change is the most important challenge of humankind, and demands cooperation and action by all: Government, industry and the general public. We present here today concrete actions, increased resources and a clear political will for success. We now look forward to taking this agenda ahead in partnership with others," said Prime Minister Jakobsdóttir.

The new action plan marks a turning point in combatting climate change in Iceland. Never before has the government allocated funding at the level now reached. There is also broad political support for the action plan, as was demonstrated by the fact that it was introduced by seven ministers.

The main emphasis of the new plan is on two measures: 1) to phase out fossil fuels in transport, and 2) to increase carbon sequestration in land use, by restoration of woodlands and wetlands, revegetation and afforestation. Climate mitigation measures will get a substantial increase in funding – almost 7 billion Icelandic krónur in the period 2019-2023. A general carbon tax, already in place, will be gradually increased.

Among the measures to provide clean transportation are: Increase in government support for charging stations and other infrastructure for electrical transport and other clean fuels; support for biofuel production; a strengthening of already generous subsidies for electrical cars and other clean vehicles; and support for public transport and bicycling. Iceland has seen a considerable increase in the purchase of electrical cars recently, and the new measures are intended to ensure that this trend will go up in the coming years.

Following examples from neighboring countries Iceland will according to the new Climate Action Plan ban new registrations of fossil fuel cars after 2030. An announcement of this policy is seen as important inter alia as a signal to producers and importers of cars.

Reforestation, revegetation and afforestation will receive increased government funding, as well as efforts to reclaim drained wetlands. Efforts in land use should result in greatly increased uptake of carbon from the atmosphere, which is essential for Iceland's aims to achieve carbon neutrality by 2040.

In preparing the carbon sequestration strategy, Iceland also emphasizes to achieving other environmental goals than those related to climate. Namely, combating soil erosion and revegetating denuded lands, and restoring and adhering to principles of biological diversity – thus aiming its actions towards tackling three major global environmental challenges simultaneously.

The package of actions in the Climate Action Plan also includes such measures as: The launching of a new fund to support low-carbon technology; a phase-out for landfilling organic waste; a phase-out programme for climate-warming chemicals known as HFCs; participation in emissions trading for industry and aviation and other sectors; public education campaigns, and other measures. The Action Plan is put forward for public consultation for two months and will be updated as early as next year.

A brief description of the 34 actions contained in the government's new plan is contained in the table below. The actions are grouped into four categories. Under A and C are actions supporting the government priorities of rapid introduction of clean energy in road transport and increased climate mitigation in land use. Under B are actions involving conversion to clean energy in sectors other than road transport, and under D are all other actions.

Action	Brief description
A. CLEAN ENERGY TRANSFER IN	I TRANSPORT
1. Tax incentives for clean cars and fuels	Iceland already has in place generous temporary tax incentives for the purchase of electric cars and other clean vehicles. These incentives are due to expire under current regulation, but the government intends to replace them with a better calibrated longer-term system, that will increase incentives to buy clean vehicles.
2. Carbon tax – increase in rate	Iceland has a general tax on carbon in place, which covers all fossil fuels. This tax was increased by 50% in the beginning of 2018, and will be increased by 10% in 2019, and by 10% again in 2020.
3. Support for infrastructure for electric cars and other clean vehicles	The government has allocated 210 million ISK in the years 2016- 2018 to support the build-up of charging-stations for electric cars. It is planned that government support will be increased, and also extended to infrastructure for other types of clean energy and fuels, such as hydrogen and methane. The support will be based on a needs analysis, by identifying bottlenecks and opportunities in consultation with local governments, rental car operators etc.
4. Building and spatial planning rules – changes to support electric cars	Regulations will be reviewed to ensure that new buildings will be designed allowing for infrastructure for charging electric cars.
5. Ban on new registration of diesel and gasoline cars after 2030	New registration of diesel and gasoline cars will be unlawful after 2030. Exceptions, such as for remote areas, will be considered. The purpose of this government proclamation is inter alia to send a signal to car manufacturers and importers.
6. Rebate system for older polluting cars	As new clean cars are gradually added to the vehicle fleet, the share of older high-polluting cars of emissions will grow. A system of rebates for decommissioning high-polluting cars may speed up their phase-out. A first step will be an economical study of the feasibility of such a system, taking into account experiences in other countries, to see if this action is effective in comparison with other measures.
7. Improved use of methane from landfills	Methane is collected from gas emissions from two landfills in Iceland, and part of it is sold as fuel for vehicles. Opportunities to increase landfill gas collection and the use of methane will be charted.

8. Improved infrastructure for electric and regular bicycles	A plan on bicycle paths in urban areas will be developed, as prescribed in the government transport plan. The plan will also consider charging stations for electric bikes.	
9. Domestic fuel production from biomass and waste	A thorough analysis will be made on the possibilities of producing fuel from biomass and waste in Iceland. Such possibilities include rapeseed oil production, using plastic waste and waste from slaughterhouses. Pilot projects in all these fields have been conducted, but a comprehensive study is lacking. Current regulations may also be a bottleneck for fuel production from waste, and will be reviewed.	
10. Support for public transport and shared services in transport	The government will promote public transport, including by supporting infrastructure development (transport hubs, priority lanes etc.) and reviewing regulation that might support shared services in transport and other innovative solutions.	
11. Clean cars in government and state enterprises	Government offices and state enterprises will be in the forefront of cleaning up transport, by buying electric cars or other non-emitting vehicles for their own use and providing charging stations and other infrastructure for them.	
B. CLEAN ENERGY TRANSFORMATION IN OTHER SECTORS		
12. Clean energies for ferries	A new ferry between the Westman Islands and the mainland of Iceland will be powered by electricity. Future replacements of ferries will take into consideration the need to move towards clean energy and minimizing emissions.	
13. Increased share of renewable energy for ships	Economic instruments will be employed to increase the use of renewable energy for ships. A <i>Roadmap for decreased emissions in fisheries</i> will be produced and implemented, including pilot projects for innovative solutions.	
14. Electrical infrastructure in harbours	Some efforts have been made in recent years to bring electricity for ships in harbours, so that they do not have to run engines when docked for lighting etc., but these will be stepped up so that most ships can use electricity by 2025. High voltage charging stations for cruise ships etc. will also be considered, while they are not as cost- effective. A blueprint for this effort should be ready by the end of 2018.	
15. Electrical connection for airplanes	Electrical connection for stationary airplanes will be made mandatory.	

16. Electricity for fishmeal production	Fishmeal production traditionally relies on heavy fuel oil, and was once responsible for up to 5% of Iceland's emissions. The industry has largely switched to clean electricity in recent years. These gains need to be preserved, and ways found to finalize the switch to electricity before 2030, which will inter alia call for upgrading electrical distribution infrastructure.
17. Phase-out of heavy fuel oil	Heavy fuel oil is still used to a substantial extent in the fishing fleet and in other ships. The aim is to phase out its use and eventually abandon it altogether. A total ban of HFO in Icelandic waters requires international approvement through the MARPOL- convention, but more limited restrictions can be applied by the Icelandic government; options for this will be considered and employed.
C. CLIMATE MITIGATION IN LA	ND USE AND FORESTRY
18. Reforestation and afforestation for carbon uptake	Reforestation and afforestation will be strengthened by a substantial increase in government funding to increase carbon uptake from the atmosphere, as well as for meeting other objectives. A special reforestation and afforestation plan will be made to allocate the increased resources.
19. Revegetation for carbon uptake	Revegetation efforts will be increased by a substantial increase in government funding. A special plan will be made to ensure the effective allocation of new funds. Emphasis will be put on halting land degradation and reduce emissions from soil and vegetation.
20. Strengthened protection of wetlands	Efforts will be made to ensure the protection of wetlands, as drained wetlands are a source of carbon dioxide emissions. Monitoring of wetland drainage will be improved, and regulations reviewed, inter alia to look into setting requirements of wetland rehabilitation to compensate for draining activities.
21. Restoration of drained wetlands	A plan for wetland restoration will be made and funded, in order to reduce emissions from drained wetlands, as well as restoring natural habitats.
22. Cooperation with sheep farmers on climate mitigation measures	The government will launch a cooperative project with sheep farmers to ensure reduced emissions and increased carbon sequestration from farming and land use activities.
D. OTHER MEASURES	
23. Climate Fund – support for clean innovation and public education	A special Climate Fund was established by law in 2012, but has not been funded or operationalized to date. The Fund will start working in 2019, and will primarily support projects in the field of green technology innovation and public education.

24. Climate policy for government offices	A climate policy and action plan for government offices will be made; work on this commenced in May 2018. The plan will contain statistics on emissions, such as from transport and waste, and aim for the carbon neutrality of government offices, which can be an example for other actors.
25. Carbon trading: Participation in EU-ETS and CORSIA	Iceland will adopt a revised legislation for the EU Emissions Trading Scheme for the period 2021-2030, which primarily covers heavy industry and aviation. Iceland will also take part in a voluntary carbon trading scheme in international aviation (CORSIA), when it commences in 2020.
26. Climate education in schools	A plan will be made for education on climate issues in kindergartens, primary and secondary schools, in cooperation with schools and non-governmental organizations.
27. Public education on climate change	A public information campaign on climate change will be planned, with emphasis on information on how individuals can decrease their carbon footprint.
28. Taxation and eventual ban on the landfilling of organic waste	A landfill tax will be designed and employed, with the aim to decrease the landfilling of organic waste. A total ban on the landfilling of organic waste is planned when feasible.
29. Phase-out of HFCs	The use of hydrofluorocarbons (HFCs), especially for cooling, has increased markedly in recent years. Regulations and/or economic instruments will be employed to reduce emissions of HFCs, so that they will be substantially reduced by 2030.
30. Actions against food waste	Increased resources will be allocated to programmes intended to minimize food waste.
31. Green accounting	A regulation on green accounting will be strengthened, to cover the carbon footprint of companies.
32. Reduction in use of fertilizers	Efforts will be made to reduce the importation and use of synthetic fertilizers, inter alia by greater use of domestic organic waste for fertilizing.
33. Tackling emissions from manure	A study will be made to examine possibilities of better management of manure, to reduce methane emissions and replace synthetic fertilizers.
34. Climate policy guidelines in spatial planning	A revised National Planning Strategy will include a policy and guidelines to municipalities on how spatial planning can be employed to support climate mitigation actions, such as by reducing commuting, supporting public transport and other climate-friendly transport, and actions in land use.