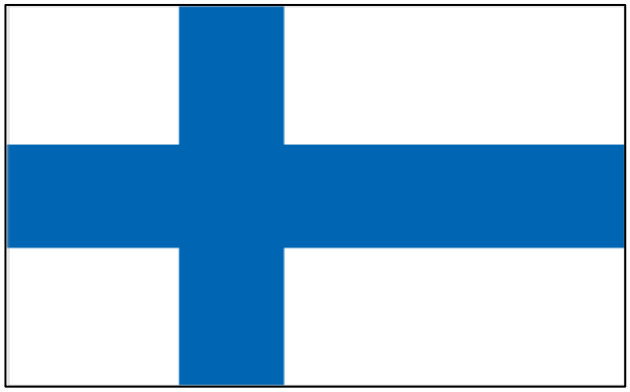
CLIMATE CHANGE LEGISLATION IN

Finland

AN EXCERPT FROM

The 2015 Global Climate Legislation Study

A Review of Climate Change Legislation in 99 Countries



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Finland

Legislative process

Finland is a parliamentary democracy where executive power is exercised by the president and the council of state (the Cabinet headed by the Prime Minister) which must enjoy the confidence of the Parliament. The President of the Republic is elected for a six-year term. The Prime Minister is elected by the members of the parliament and appointed by the President. Independent courts, the Supreme Court and the Supreme Administrative Court exercise judicial powers.

The Parliament is unicameral and consists of two hundred Members of Parliament (MPs). MPs are elected in direct, proportional and secret ballot for a term of four years. Parliament enacts all legislation, approves the state budget, ratifies international treaties and oversees the Government. Legislation is enacted according to the Constitution and the procedure of the Parliament.

Government bills or Members' initiatives begin with a preliminary debate in the plenary session, after which the bill is submitted to a committee. Following the committee process, a bill returns to the plenary session where it is dealt with in two readings. In the first reading the content of the bill is decided section by section. In the second reading the bill is either approved or rejected. Once the President ratifies it, an Act is published in the Statutes of Finland.

Approach to Climate Change

Finland signed the UNFCCC in 1992 and respective legislation was adopted in 1994. It ratified the Kyoto Protocol in 2002 and it came into force in 2005. EU-wide legislative arrangements (e.g. burden sharing agreement, the ETS, the climate and energy package and monitoring mechanisms) are being implemented. In 2014, Finland submitted its sixth national communication to the UNFCCC.

The Ministry of Environment acts as the national focal point for the UNFCCC and for administration of climate change-related negotiations, participation and policy implementation by co-ordinating the operations of other Ministries (Ministry of Forestry and Agriculture, Transport, Energy, Foreign Affairs, Employment etc.), industry organisations, research institutes, labour unions and so on. The Ministry of Foreign Affairs authorises and approves CDM projects. ‘Statistics Finland’ is responsible for compiling and monitoring the GHG inventory and the Energy Market Authority is the registry administrator for the ETS. A National Climate Panel was established in 2011, bringing together experts from natural sciences, economics and other social sciences, engineering and international politics to support political decision-making. Municipal authorities have competence in land use and transport planning and in taking measures to reduce emissions from their own energy consumption while delivering services.

A joint ministerial working group was set up in 2003 to co-ordinate the government’s long-term climate and energy strategy; a new ministerial working group replaced it in 2008 to update the strategy. This updated strategy was released in 2013. The prime minister’s office in 2009 released the “Government Foresight Report on Long term Climate and Energy Policy: Towards a low carbon Finland”. The Parliamentary Committee’s report - Energy and Climate Roadmap 2050 - was published in October 2014. In June 2014 the government

adopted proposal for a flagship National Climate Change Act, and in early 2015 the law was passed in Parliament[1] – committing to an 80% emissions reduction by 2050 compared with a 1990 baseline, and allowing an increase in the target based on latest climate science. The law creates a legal framework for bottom-up, long-term, consistent and cost-effective climate policy planning and implementation of a low-carbon society. The plans under the law address transport, agriculture and housing and exempt sectors covered by the EU ETS directive (electricity production, energy-intensive industry, a large share of district heat production and aviation).

The government foresight report further proposes to cut the energy intensity of the economy by at least 50% by 2050 through "radical improvement of energy efficiency", to source at least 60% of energy from renewable sources and to gradually "phase out the use of fossil fuels in energy production" by 2050. In some sectors, for example in transport, Finland's target for the use of renewable energy is double (20%) the EU's. Approximately half of emissions are covered by the EU ETS framework. Even though the main instrument for reducing emissions is the EU ETS, Finland also uses the flexible mechanisms of the Kyoto Protocol, the joint implementation and the CDM to increase the cost-efficiency of climate policies. As a result of the domestic targets and measures, Finland will reach its targets under EU's legislation for 2020. The plan for adaptation stipulates a risk and vulnerability review and to be approved once every 10 years. The Act also provides for the constitution of a multidisciplinary expert body to support planning of climate policy.

Through the Kyoto Protocol and other channels, Finland implements its Bonn declaration commitment to provide additional climate change funding to developing and least developed countries. This contribution in 2008 amounted to EUR255m (USD320m) in addition to the sector specific co-operation programmes in energy, forestry and technology. Through 'Finnpartnership Innovative', Finland promotes business-to-business partnership in environmentally-sound technologies.

Climate change has become one of the main priority areas for research funding through the Ministry of Education. The Academy of Finland co-ordinates many research programmes on the science and natural and socio-economic impacts of climate change, as well as on adaptation and innovative technology. Public-private partnership initiatives (for example CLEEN Ltd, co-ordinated by the strategic Centre for Science Technology and Innovation group of the Finnish Energy and Environment Cluster) focus on research into topics such as carbon-neutral energy production, energy systems, sustainable fuels, energy efficient technology and recycling.

Energy supply

Even though Finland uses a range of energy sources, (In 2012 the mix was electricity imports (5%), Hydro power (5%), peat (5%) Natural Gas (8%) Coal (9%), Nuclear (18%), Oil (24%), Wood fuels (24%) others (3%)), about 70% of the total energy used is imported (oil, gas and coal). In the past two decades, energy supply has shifted from coal and oil towards wood-based fuels, peat, natural gas and nuclear energy. To achieve self-sufficiency in energy supply and to have a control on its emissions, an expansion in nuclear power capacity is planned.

[1] The National Climate Change Act is not included in the detailed Legislative Portfolio for Finland, as it was passed in March 2015, and this Study's scope is limited to legislation passed up to January 1st 2015.

Energy policy emphasises energy security at competitive prices as well as low environmental impacts. The 5th UNFCCC communication claims that, though electricity markets and GHG emissions fluctuate in response to procurement conditions influenced by the hydrological conditions in the Nordic countries, on the whole economic instruments and deregulation of the market have led to a reduction in emissions. It further notes that the voluntary scheme has proved an efficient measure next to taxation and subsidies – with total effect estimated to exceed 4m tonnes of CO_2 equivalent in 2010.

In 2010 Finland adopted a national renewable energy action plan to use a higher proportion of forest-based biomass. The national target for use of energy from renewable sources is 38% by 2020. Finland aims to create large-scale wind farms – EUR20m (USD25.1m) was allocated in 2012 to build an offshore wind farm demonstration project by 2015.

Energy demand

The economy is energy-intensive and has relatively high per-capita emissions due to industrial needs and domestic consumption. In 2013, even though the use of hard coal increased, the use of peat, oil and natural gas declined, resulting in total emissions remaining unchanged compared to the 2012 level at 60m tonnes of CO_2-e. In 2013, total emissions outside the EU ETS were 6% below the target set by the EU.

Rather than direct governmental intervention to guide the choice of energy sources, Finland uses a range of economic instruments, i.e., taxation, subsidies and voluntary agreements (industry and municipal agencies) to promote energy efficiency. An energy efficiency committee was set up in 2008 and identified 127 energy-saving measures, mainly in the housing, construction and transport sectors. Measures included new vehicle technology, renewing the existing car stock, introduction of electric cars, reducing consumption for new buildings and making household appliances more efficient.

The Ministry of Employment and Economy is co-ordinating the preparation of a national energy efficiency act (the bill of which is currently being debated in the Parliament), to implement the EU Energy Efficiency Directive. The act also aims to influence domestic energy use by making clean technology and green energy obligatory in public procurement. Through the clean energy programme, the government aims to promote investment in the domestic production of clean energy such as biofuels in order to replace imports and meet the EU 2050 target as early as 2025. There are measures to promote new motor technology for low emission cars, replacing 10% of natural gas with biomass-based solutions and cutting the use of mineral oil in road transport and oil-based heating by 20%.

Finland adopted a regulation in 2008 to implement the EU Directive on the Energy Performance in Buildings. Measures include an act on energy certification of buildings, a Ministry of Environment decree on energy certification of buildings, an act on energy efficiency inspections of air conditioning systems in buildings, amendments to the land use and building act, which was expanded to cover energy efficiency requirements and details of how energy efficacy should be calculated. Subsidies were introduced to improve the energy efficiency of buildings, such as supporting renovation and introduction of low-carbon heating systems.

Carbon pricing

Finland introduced a carbon tax of EUR1.12 (USD1.41) per tonne of CO2 in 1990, based on the carbon content of the fossil fuel, becoming the first country to use a carbon tax as an instrument for climate change mitigation. Peat and natural gas were granted exemptions

and the wood industry was exempt from the tax to maintain international comparative advantage in export markets. Fuels used as raw material or inputs for manufacturing were also exempt, leading many to argue that the measures were of limited value. However, through successive reforms (1997, 2007 and 2011), Finland increased the rates and combined the carbon tax and the energy tax. In 2013, the tax had evolved into a combined tax of carbon and energy at EUR18.05 (USD22.65) per tonne of CO2 and EUR66.2 (USD83.1) per tonne of carbon.

LULUCF

The LULUCF sector acts as a net carbon sink. Forest policy aims at sustainable forest management through measures such as legislation, the National Forest Programme 2015 (NFP 2015), financial support and extensive public forestry organisations. NFP 2015 links the climate change and energy strategy with forest management to increase energy procurement and climate benefits from forests. It intends to maintain the sink at a level of at least 10-20m tonnes of CO_2e up to 2015. Measures include improved forest management practices, a permanent bio-energy advisory service, training for forestry professionals, management techniques to improve vitality, impact as carbon sinks and measures promoting sustainable harvesting, stimulate increased sequestration of forest carbon, wood energy production through subsidies etc. The measures rely on labelling economic incentives and research promotion more than regulation and legislation. In 2006, the government elected forest management activity as part of its commitments under the Kyoto protocol during the first commitment period to compensate for net emissions 3 and to receive a total of 2.95m tonnes worth of RMU units (0.59m tonnes/year).

The national climate and energy strategy envisions minimising GHG emissions by adopting a more dense and compact urban structure and regional land use distribution to reduce urban sprawl. There are also proposals to encourage cycling and walking, reduce transportation and promote use of more energy efficient heating systems, all of which is viable in a dense urban structure.

The 5th National Communication to UNFCCC claims that changes in agricultural policies and farming subsidies led to reduced reliance on cultivation in organic soils, fewer livestock and less nitrogen fertiliser use cut annual CH_4 and N_2O emissions from agriculture by 22% since 1990. New agricultural policies aim to reduce GHG emissions and energy use by promoting environmentally friendly manure, energy crops and emission reductions from organic soils and animal husbandry. A government decree restricts discharge of nitrates from agriculture into waters to deal with N_2O. Changes in this sector rely on measures based on better information, economic incentives and promotion of research rather than legislation.

Transportation

Finland has adopted measures to reduce emissions from the transport sector at least by 15% by 2020. Based on the EU climate and energy package, Finland must increase the share of renewable energy sources in transport energy consumption at least by 10% by 2020, with biofuels in petrol and diesel to make up 5.75% of consumption by 2010. In addition Finland has a national target for a 20% share of biofuel use in the transport sector by 2020. Measures under implementation include voluntary agreements in goods, logistics and public transport to improve efficiency by 9% by 2016, regulations to improve CO2 performance standards for new cars, taxing vehicles according to emissions, a vehicle energy labelling scheme, regulation to increase non-motorised transport by 20%, fuel taxation and road user charges.

Adaptation

Due to climate change, temperature increase is expected to be about 1.5 times higher than the global average temperature rise, leading to a substantial increase in precipitation, and to a decrease in ground frost, ice cover and snow seasons. These are expected to contribute to longer periods of weak soil stability, risk of soil erosion, higher winter runoff and reduction in spring floods. It is anticipated that the forest and agricultural sector could gain from climate change and that demand for heating will fall. The tourism sector is anticipated to benefit from warmer summers but energy-intensive industries are expected to face higher costs of production and the subsequent risk of unemployment. The Ministry of Agriculture published the National Strategy for Adaptation to Climate Change in 2005 and is preparing its revision in the form of a National Plan for Adaptation to Climate Change to 2022 (expected in 2015).

The plan for adaptation under the new Climate Change Act stipulates a risk and vulnerability review to be approved once every 10 years.

A co-ordination group has been set up to monitor the implementation of the adaptation strategy with specific measures in water, fisheries, agriculture and forestry. The Ministry of Environment launched in 2008 the environmental administrations action plan on climate change adaptation, defining adaptation measures in biodiversity, land use and construction, environmental protection and water resources and in land use planning with respect to flood risks.

Many measures are information-based (labelling), administrative, economic and technical related to biodiversity, land use conservation, peat lands and forests. Most of the measures are related to administrative co-ordination, research and information, technical innovation and support such as guidance on storm water, a working group to investigate the responsibilities of authorities involved in flood risk management and flood prevention, a programme for plant and animal health monitoring, research projects on new technologies and cultivation methods, survey of temporary flood prevention structures, revising the insurance regimes, monitoring and warning systems for transport etc.

Finland: Legislative portfolio

Name of law	**Act on the Supervision of the electricity and gas market (590/2013)**
Date	1 September 2013
Summary	The act establishes an institutional system and legal context in supervising and controlling the energy market through the Energy Market Authority. It aims to supervise and control the electricity and gas market to promote efficient, safe and environmentally sustainable activities at the national and regional levels as well as to influence the European Union's internal market for to ensure energy consumers good delivery of services, competitive prices and equitable principles. The act enable powers for the Energy Market Authority to promote: efficient, cost-effective, secure and environmentally sustainable and customer friendly national markets; competitive and well-functioning regional markets in the European Economic Area; influence the removal of restrictions on electricity and natural gas trade between EEA Member States; enforcement; co-operation between other agencies and regulators; adequate transmission capacity and efficiency of networks; integrate renewable; remove any barriers to new market entrants; ensure appropriate incentives to increase system efficiency and foster market integration; promote effective competition as well as consumer protection including protection of vulnerable customers.

Name of law	**Act on State guarantees and export guarantees granted to industry for investments promoting environmental protection (609/1973)**
Date	01 April 2011
Summary	The act (amending many existing acts) proposes to provide state guarantees (not exceeding EUR100m, USD125m) for investments and credit for Finnish industries (regardless of size of the company size) that carry out investments (inside Finland or abroad) on environmental protection that include renewable energy products, energy recover and energy efficiency projects. The criteria specifies appropriateness, effectiveness and through risk assessments (especially for the investments abroad). The act aims to promote the reduction of carbon dioxide emissions in the aviation sector in a cost-effective and economical way.

Name of law	**Act on Aviation Emissions Trading (34/2010)**
Date	01 February 2010
Summary	The act aims to promote the reduction of carbon dioxide emissions in the aviation sector in a cost-effective and economical way. The act stipulates that aircraft operators should monitor their emissions and submit a report to the transport safety authority regularly during the emissions trading periods. It stipulates emission allowances and that 3% of total aviation emission allowances be set aside during each emissions trading period starting in 2012. Implementation of this act is further strengthened by the Decree of the Ministry of Transport and Communications on the monitoring and verification of carbon dioxide emissions and tonne-kilometre data, and on the approval of verifiers (63/2010).

Name of law	**Flood Risk Management Act (No. 620/2010)**
Date	30 June 2010
Summary	This Act forms part of the adaptation strategy and concerns the organisation of flood risk management. The purpose of the Act is to reduce flood risks, prevent and mitigate the adverse consequences caused by floods and promote the preparedness for floods. The purpose of the Act is also to co-ordinate flood risk management and other management of river basins, with due account for the needs relating to sustainable use and protection of water resources. The principal administrative authority for purposes of this Act is the Ministry of Agriculture and Forestry. Executive tasks are assigned to the Centre for Economic Development, Transport and the Environment. The act is also accompanied by a Government Decree on Flood Risk Management to implement the provisions through preliminary flood risk assessment, preparation of flood hazard maps and flood risk maps, preparing flood risk management plans for river basins and coastal areas.

Name of law	**National Adaptation Strategy 2005 and Action Plan for the Adaptation to Climate Change of the Ministry of Agriculture and Forestry 2011-2015**
Date	2005; 2011
Summary	The National Strategy for Adaptation to Climate Change was adopted in 2005 and after a series of evaluations (2009, 2013), it is expected to be revised in the form of a National Adaptation Plan for Climate Change 2022, expected in 2015. The Ministry of Agriculture and Forestry is responsible for the co-ordination of climate change adaptation at the national level and the development of the Action Plan for the Adaptation to Climate Change 2011-2015, which proposes concrete measures based on the National and Sectoral strategies. The National Strategy describes the impacts of climate change and potential adaptation measures for 15 sectors for the short, medium and long term, extending until 2080. The most important measures to be taken over 2005-2015 included (text adapted directly from the Strategy document): integration of climate change adaptation into routine planning, implementation and development processes; preparations for extreme events and assessments of the impacts of climate change incorporated into the planning of long-term investments; improvement and establishment of existing and new observation and warning systems; implementation of the Climate Change Adaptation Research Programme 2006-2010 (ISTO); and preparations for forthcoming changes in the international operating environment.

Name of law	**Act on Verification and Notification of Origin of Electricity (1129/2003)**
Date	01 January 2004
Summary	The act provides procedures by which a power point operator can verify and an electricity vendor's minimum obligations to notify the origin of the electricity. Among its wide ranging provisions, the act requires an electricity vendor to inform through electricity bills or promotions materials the proportion of energy sources and details of CO2 emissions and radioactive waste generated.

Name of law	**Land use and Building Decree enacted under the Land use and Building Act (132/1999)**
Date	10 September 1999
Summary	Among its wide ranging provisions, the act also aims to empower the authority of the municipal and regional councils to regulate buildings, developments and plans in their jurisdiction to be environment friendly and energy efficient along with other wide ranging criteria.

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