

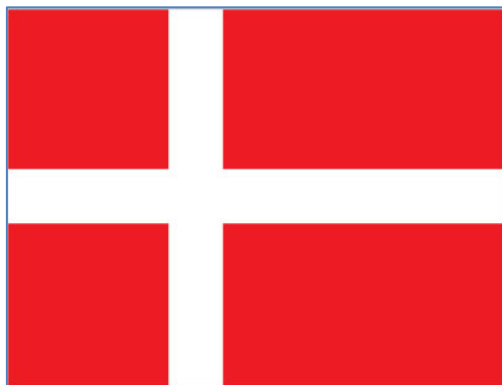
CLIMATE CHANGE LEGISLATION IN

Denmark

AN EXCERPT FROM

The 2015 Global Climate Legislation Study

A Review of Climate Change Legislation in 99 Countries



Michal Nachmany, Sam Fankhauser, Jana Davidová, Nick Kingsmill, Tucker Landesman, Hitomi Roppongi, Philip Schleifer, Joana Setzer, Amelia Sharman, C. Stolle Singleton, Jayaraj Sundaresan and Terry Townshend

www.lse.ac.uk/GranthamInstitute/legislation/



Grantham Research Institute on
Climate Change and
the Environment



GLOBE
The Global Legislators Organisation



Inter-Parliamentary Union
For democracy. For everyone.

Denmark

Legislative Process

In Denmark, legislative power rests with the parliament. MPs are elected for four years. There are 179 MPs, including two each for Greenland and the Faroe Islands. As a constitutional monarchy, the legislative branch, the executive branch and the judicial branch share power.

The Constitution attributes the ultimate authority of appointing and dismissing the Prime Minister and ministers to the Monarch. Responsibility for legislation is delegated to the respective ministers, who sign bills together with the Monarch. Consent of the Parliament and the Monarch is required for international treaties; obligations whose implementation requires sustained support of the Parliament or that are otherwise of 'great importance' to Denmark.

The last elections to the national parliament were held in 2011 and the next one is due on or before 14 September 2015.

Approach to Climate Change

Denmark's climate approach is focused on the integration of climate change mitigation measures into policy sectors alongside single-purpose climate policies. Domestic policy is closely linked to the implementation of international commitments under the UNFCCC, especially the Kyoto Protocol, and the fulfillment of burden-sharing commitments within European Union climate change policy.

The environment ministry followed an environmental policy integration approach throughout the 1990s and 2000s in response to the 1988 Brundtland report on sustainable development for the UN, focusing on the integration of environmental objectives into other sectoral policies via action plans.

As well as promoting a greener and more sustainable society, the government has a goal of achieving independence from fossil fuels. To help achieve this, the climate policy portfolios of the Ministry of the Environment and the energy policy portfolios of the Ministry of Transport and Energy were merged into the Ministry of Climate and Energy in 2007, reflecting the increasing importance of addressing climate change and intensifying the preparation of the 15th Conference of the Parties to the UNFCCC in Copenhagen in 2009.

Most climate change-related legislation relates to implementation of EU legislation or sector action plans that also address climate change mitigation (and to a lesser extent climate change adaptation). Sector action plans outline specific environmental objectives and measures to achieve the objectives and deadlines, which allow the evaluation of their effectiveness.

In 2011, the present government set a national GHG reduction target of 40% reduction by 2020 compared to 1990 levels – a target which in 2014 was endorsed in a political agreement struck by a majority in Parliament. The 40% reduction target goes beyond international and EU commitments, underlining Denmark's leadership approach on climate change. In particular, Denmark aspires to convert the energy and transportation sector to run on 100% renewable energy by 2050 and strongly improve energy efficiency. The 2012 Energy Agreement and the 2013 Climate Policy Plan was followed up in 2014 by a Climate Change Act. The Climate Change Act aims to establish an overall strategic framework for the National Climate Policy to achieve a low carbon society by 2050.

This Act further enabled the pathway to establish an independent Climate Council to promote an academically coherent approach to national climate policy, mandated the Minister in charge to publish a report on climate policy and present proposals for new national climate targets to Parliament at least every fifth year with a 10-year perspective.

Local authorities and municipalities implement state-level framework legislation by deciding on and planning appropriate initiatives. Local involvement and public participation in environmental and climate change aspects was also strengthened in response to the implementation of the Agenda 21 (adopted at the 1992 UNCED Rio conference) and the Aarhus Convention. Hosting the 2009 climate change summit of the UNFCCC (COP-15) motivated several municipalities and sub-national actors to set their own climate targets. It also coincided with initiatives to raise awareness among the business community, cities and the population.

There is a long list of institutions, programmes and initiatives that receive support for research and development activities on climate change mitigation and adaptation. This includes basic climate change-focused research such as climate modelling and applied research on how to achieve emission reductions in different sectors, including demonstration projects. Funds are distributed on a competitive basis and include tenders on specific problems and defined projects as well as grants supporting research, particularly at universities. Concrete development projects delivered energy savings, improved efficiency in energy conversion and cost-effective renewable energy technologies that benefit Danish companies.

Energy supply

Energy production and supply accounts for approximately 46% of GHG emissions (2013). Parliament has passed an energy agreement supporting the uptake of renewable energy and improving energy efficiency, whereby Denmark is expected to overfulfil the obligation to increase the share of renewable energy in final energy consumption to 30% by 2020. The focus is on wind energy, biomass and solar energy. Laws have also been passed in the areas of electricity (a further development from the Renewable Electricity Directive), heating/cooling and renewable energies in transportation (a further development from the Biofuels Directive). The energy sector is deregulated, making emissions trading and flexible mechanisms central measures in reducing emissions.

Energy demand

The observed energy consumption in 2013 was 759PJ, of which oil accounted for 40%, natural gas 18%, coal 18% and other sources 24% (mainly renewable energy). The net export of electricity in 2013 was 3.9PJ. The distribution of final energy consumption in 2013 was as follows: industry and agriculture 21%, domestic 30%, transportation 33% and commerce and services 14%. Non-energy uses accounted for the remaining 2%. Energy consumption in the household sector primarily comprises heating and electricity. Since 2000 the final energy consumption for heating per m² in households has decreased and was in 2013 approximately 15% below the 1990 level. From 1990-2013 total household electricity consumption increased by 3.8% while electricity consumption for appliances and lighting etc. increased by 17.1%. This big difference is due to a significant fall in electricity consumption for heating.

As much as 30-40% of total energy consumption is used for heating, ventilation and lighting in building. Denmark has introduced regulations to reduce energy consumption in buildings, including regulations on energy labelling of buildings and regular revisions of building regulations to ensure that construction of new buildings and renovation of existing buildings prevent unnecessary energy consumption. There is also political focus on reducing energy consumption in buildings. In May 2014 the government published its Energy Renovation Strategy of Buildings. The strategy presents 21

concrete initiatives which are expected to reduce energy consumption for heating in existing buildings by 35 per cent by 2050. In November 2014 the Building Policy Strategy was published. The strategy includes a theme on sustainable building to promote not only energy efficiency in buildings but sustainability in the construction sector and in buildings in general.

Carbon pricing

Denmark implemented the EU ETS which has been in operation since 2005 setting a price on carbon for the sectors covered under the EU ETS phases I–III, i.e. predominantly energy producers and some of the energy-intensive industry. This means that installations covered can either reduce their emissions where they regard it as most cost-effective, or they can buy allowances to cover their emissions.

Energy taxes are a further pricing mechanism contributing to reducing demand for fossil energy. These date back to the 1970s, when energy taxes aimed to promote energy efficiency. Since 1992 there have been carbon taxes for gas/diesel oil, fuel oil, electricity, lignite, natural/ town gas, petrol and coal taxes also cover industrial GHGs (HFCs, PFCs, SF₆, i.e. F-gases) since 2001.

Transportation

The transportation sector accounted for 23% of GHG emissions in 2011. Key measures are the implementation of the European Renewable Energy Directive, which includes a target of 10% of renewable energy in transportation and is primarily met by first generation biofuels. Furthermore, taxes are differentiated according to the CO₂ intensity of fuels to encourage improvements in fuel efficiency. The annual tax on motor vehicles is based on energy consumption, which is also known as the 'green owner tax' and ranges from DKK620 to DKK21,660 (USD104-USD3,652) per year for petrol-based vehicles and DKK240 to DKK32,040 (USD40-USD5,402) per year for diesel-based vehicles and is measured in accordance with EU directive 93/116/EC. Denmark has a number of action plans and political agreements to support emission reductions in the transportation sector such as tax incentives and funding for specific programmes such as those supporting the uptake of electric and fuel cell vehicles. However, the legislation predominantly aims at sectoral objectives that integrate climate aspects as a side-aspect or the implementation of EU-level directives. Notable transportation-related government initiatives include the action plan to reduce the transportation sector's CO₂ emissions (1996), the action plan on the reduction of the transportation sector's CO₂ emissions (2001), and the political agreement on a Green Transport Vision for Denmark (2009).

LULUCF

Denmark actively manages its forests based on the strategy for sustainable forest management (1994) and the national forest programme (2002) and provides funds for REDD+ projects in developing countries. LULUCF-effects from forests and cropland are part of the Danish effort to reach its Kyoto target, and are taken into consideration in general planning (spatial, environmental).

Emissions from agriculture account for a relatively large proportion of total emissions in Denmark primarily due to the large and intensive farming sector in Denmark. Methane and nitrous oxide emissions from agriculture are about 9m tonnes CO₂e per year, or about 15% of total emissions. More than 3m tonnes CO₂e are emitted from soil and pastures. Climate impacts from agriculture are primarily regulated through national implementation of EU directives and through subsidy schemes as part of the European Agricultural Fund for Rural Development. In the period 1990 -2010 the government has implemented three action plans for the aquatic environment that have resulted in reducing the amount of nitrogen used in agriculture with 40%-50%, thus contributing to reducing emissions of nitrous oxide from fields by 30% in the same period. This has so far been the largest contribution from agriculture in reducing emissions of GHGs. In general, experience shows

that agricultural and forestry policies can simultaneously contribute to meeting nature, environment and greenhouse reduction goals.

Adaptation

Following the adoption of the strategy for adaptation to a changing climate in 2008, the government released in 2012 a new adaptation action plan including a task force that works around the country with municipalities and other stakeholders to develop local action plans.

Denmark: Legislative Portfolio

Name of law	Climate Change Act 2014
Date	11 June 2014
Summary	The Act aims to establish an overarching strategic framework to implement Denmark's Climate Policy and the transition to a low emission society. This also aims to establish transparency and public access to the status, direction and progress of Denmark's Climate Policy. In order to achieve that, the Act provided the platform and resources to establish an independent academic climate council, mandated the minister in charge to submit annual climate policy report to the parliament and a process for setting up of a 10-year national targets every 5 years.

Name of law	Energy Agreement 2012-2020
Date	22 March 2012
Summary	<p>Comprehensive agreement passed by a majority in the parliament that aims at reducing emissions via energy efficiency and increasing the share of renewable energies towards a green socio-economic transition. The overall objective is to shift energy supply to have a share of 35% renewable energy in final energy consumption by 2020 and 100% renewable energy by 2050 expected to reduce GHG emissions by approximately 34% by 2020 over 1990. It proposes a 7.6% reduction of gross energy consumption in 2020 in comparison to 2010.</p> <p>It contains a number of key elements that contribute to the overall target. Energy companies must realise specific energy savings beyond current standards. It also includes development of a comprehensive strategy to improve energy efficiency standards in buildings, expansion of wind power from 25% (2012) to 50% (2020), demonstration and use of new renewable energy technologies (wave, solar, geothermal), amendment to the Heating Supply Act to increase attractiveness of shifting from coal to biomass, phasing-out of oil-fired boilers via encouraging shifts to natural gas boilers and electrical heat pumps using ambient heat in existing buildings and subsidies to promote investment in energy efficient use of renewable energy in industrial production processes, calls to draw up strategy on establishing smart grids, improving opportunities for using biogas (provision, financial support), facilitating a shift in transport sector from fossil fuels to electricity and biofuels via subsidies for car recharging stations as well as the implementation of the 10% target for renewable energies in transportation by 2020 and the implementation of efficiency improvements in the energy sector.</p>

Name of law	The Forest Act No. 945
Date	1 October 2009
Summary	<p>The Danish Forest Act aims at sustainable use of natural resources, the conservation of biodiversity, climate change mitigation and adaptation. To enforce sustainability in forest management, it provided the basis for the implementation of national plans on the further development of the forest timber industry, information, guidance and research as well as overall sustainable forest management.</p> <p>More recently, it was amended by the Act amending the Law on Natural and Environmental Appeal Board and various other Acts (2012). The text of the act was consolidated as the Forest Act (2013).</p> <p>It also implements EU environmental legislation.</p>

Name of law	Planning Act (No. 937 of 2009; consolidated No. 587 of 2013)
Date	1 October 2009
Summary	<p>Consolidated and updated act on land use planning to ensure a sustainable land use that supports multiple purposes such as environmental protection, adaptation to climate change, habitats for wild life and protection of biodiversity. The act requires local authorities and municipalities to provide plans and strategies on how this overall objective of sustainable development and land use can be achieved in their specific circumstances to sustainably manage human living conditions.</p> <p>It implements the European Council Directive on the assessment of the effects of certain public and private projects on the environment (1985 and 1997) and was implemented in 2011. It was further amended by the Act on the assessment and management of flood risk from rivers and lakes (2009), the act amending the Planning Act (2013), the act amending the Planning Law (2011), the act amending the Nature Protection Act, Planning Act, Act on watercourses and various other laws (2011), the act amending the Environmental Protection Act, the Planning Act and various other Acts (2011) and the act amending Nature and Environmental Act and others (2012).</p>

Name of law	Law on the Promotion of Renewable Energy - No. 1392/2008
Date	1 January 2009
Summary	<p>The RES law is the legal basis for achieving emission reductions via increasing the share and uptake of renewable energies (40% by 2020), particularly in the electricity sector. It is amended several times per year to reflect new developments on the European level and adjustments to the most recent state of technology (e.g., in 2012 the tariffs for biogas were changed via amendments).</p> <p>Key elements are a premium tariff system based on net metering and bonus payments (since 2008), a bonus for renewable energy plant operators on top of market price, not exceeding a statutory maximum per kWh and adjustment of the tariff structure for photovoltaic subsidies in response to the high costs of the rapid uptake of solar panel and PV installations, motivated by falling solar/ PV panel costs.</p>

Name of law	Environment Protection Act, no. 1757 of 22 December 2006 (updated: No. 879 of 2010).
Date	1 January 2007
Summary	<p>The Framework Act that serves the purpose of safeguarding the sustainable management of environmental resources including controls on air-, water, soil and noise pollution in various sectors such as transport, agriculture, waste disposal and energy via appropriate institutional arrangements.</p> <p>This act implements a multitude of European Directives and Regulations.</p>

Name of law	Carbon Dioxide Tax on Certain Energy Products - Act 321/2011
Date	1991; last revised in 2011
Summary	<p>Tax on certain energy products to discourage their extensive consumption, used in conjunction with the energy tax. Includes fuels for transportation and energy generation as well as products with high carbon intensity.</p>

Name of law	Act on the Energy Tax on Mineral Oil Products - Act 313/2011
Date	1992; last revised in 2011
Summary	<p>Obligations for companies that produce, process, receive or dispatch energy products to pay pre-defined, annually varying taxes on these energy products.</p> <p>A tax reduction is available if the mineral oil product is blended with biofuels.</p>

Denmark: Executive Portfolio

Name of policy	The Danish Climate Policy Plan
Date	August 2013
Summary	The Climate Policy Plan set a target of 40% reduction in emissions by 2020 compared to the 1990 levels and outlined the government's proposal for a Climate Change Act. Oil for heating purposes and coal are to be phased out by 2030, and electricity and heating supply is to be 100% covered by renewable energy by 2035. Further non-ETS reductions for the period of 2013-2020, is set to 20% by 2020 compared with 2005.

Name of policy	Green Transport Policy Agreement
Date	2009
Summary	<p>The policy's objective is to implement international commitments of emission reductions, predominantly in the transportation sector and non-ETS covered sectors. In these sectors, emissions are to be reduced by 20% by 2020 (of 1990 levels).</p> <p>Key initiatives are aimed at encouraging the use of public transportation (buses, railway) and cycling in cities to reduce emissions and create synergies such as reducing congestion and maintaining mobility. They include the "Drive Green" campaign, energy labelling of vans, green taxis, trials for energy efficiency in transport, certification schemes for municipal and corporate green transport, recommendations for green procurement and investment in expanding the railway system.</p>

Name of policy	Danish strategy for adaptation to a changing climate (2008) and the Action Plan for a climate-proof Denmark (2012)
Date	2008
Summary	<p>The Danish strategy for adaptation to a changing climate aims to assist authorities, enterprises and individuals in "reacting to the consequences of climate change in good time on their own initiative". The Strategy thus calls for development and implementation of information campaigns (including a web portal for climate change adaptation) and measures to facilitate the consideration of climate change issues in planning and development. In addition, the strategy provides a broad vulnerability assessment of specific sectors, in particular coastal management, construction, energy supply, water supply, agriculture and forestry, fisheries, nature management, land use planning, human health, rescue preparedness, and insurance related aspects.</p> <p>The Action Plan for a Climate-Proof Denmark (2012) then provides an overview of initiatives planned or already launched by the government. The main focus areas of the plan (following text adapted directly from the Action Plan document): an improved framework for climate change adaptation; more consultancy and a new knowledge base; strengthened collaboration and coordination; green transition; international climate change adaptation.</p>

Sources

- Climate Action in Denmark: Climate change act: available from (accessed on 09 December 2014), <http://www.kebmin.dk/en/climate-energy-and-building-policy/denmark/greenhouse-gas-mitigation>
- Danish government (2011). Our future energy. November 2011. Retrieved on 3.7.2013 from http://www.cphcleantech.com/media/1465822/our_future_energy.pdf
- Danish Ministry of Climate, Energy and Building (2012). DK Energy Agreement, 22 March 2012. Retrieved on 3.7.2012 from <http://www.stateofgreen.com/CMSPages/GetAzureFile.aspx?path=~%5Ccache%5Cstateofgreen%5Cde%5Cde820d42-73df-4d5f-9b10-f28cac7ee68f.pdf&hash=029267c277189299f4856f41fa317791fd73875627265f8a20b243c054cca413>
- Danish Ministry of Climate, Energy and Building (2013). The Danish Climate Policy Plan. Towards a low carbon society. Copenhagen: The Danish Government. August 2013. Retrieved on 25.9. 2013 from <http://www.kebmin.dk/sites/kebmin.dk/files/climate-energy-and-building-policy/denmark/Climate-policy-plan/danishclimatepolicyplan.pdf>.
- Dreblow, Eike; Duwe Matthias; Wawer, Tim; Donat, Lena; Zelljadt, Elizabeth; Ayres, Andrew; Poblocka, Anna (2013). Assessment of climate change policies in the context of the European Semester. Country Report: Denmark. Berlin: Ecologic Institute. February 2013. Retrieved on 3.7.2013 from http://ec.europa.eu/clima/policies/gas/progress/docs/dk_2013_en.pdf.
- Denmark (2009). Denmark's Fifth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change and the Kyoto Protocol. UNFCCC. http://unfccc.int/resource/docs/natc/dnk_nc5rev.pdf.
- <http://www.ens.dk/en/info/facts-figures/energy-statistics-indicators-energy-efficiency/annual-energy-statistics>
- Faolex (2013a). Denmark: Environment Protection Act (No. 879 of 2010). FAOLEX – legislative database of FAO Legal Office. Retrieved from http://faolex.fao.org/cgi-bin/faolex.exe?rec_id=082909&database=faolex&search_type=link&table=result&lang=eng&format_name=@ERALL.
- Faolex (2013b). Denmark: Act on the eco-design of energy-related products (No. 1068 of 2010). FAOLEX – legislative database of FAO Legal Office. Retrieved from http://faolex.fao.org/cgi-bin/faolex.exe?rec_id=084461&database=faolex&search_type=link&table=result&lang=eng&format_name=@ERALL.
- Faolex (2013c). Denmark: Forest Act (No. 945 of 2009). FAOLEX – legislative database of FAO Legal Office. Retrieved from http://faolex.fao.org/cgi-bin/faolex.exe?rec_id=082613&database=faolex&search_type=link&table=result&lang=eng&format_name=@ERALL.
- Faolex (2013d). Denmark: Planning Act (No. 937 of 2009). FAOLEX – legislative database of FAO Legal Office. Retrieved from http://faolex.fao.org/cgi-bin/faolex.exe?rec_id=084524&database=faolex&search_type=link&table=result&lang=eng&format_name=@ERALL.
- <http://www.kebmin.dk/en/news/broad-agreement-on-climate-bill-and-ambitious-climate-goals>
- Your Europe (2012). Environmental rules – Denmark. Europe.eu. Retrieved on 29.6.2013 from http://europa.eu/youreurope/business/doing-business-responsibly/keeping-to-environmental-rules/denmark/index_en.htm.