

How could a Danish climate law look like and what should it contain?

A concrete attempt to formulate an outline of a bill (without an accompanying explanatory memorandum).

The original sketch was prepared by Professor LL.D. Ellen Margrethe Basse, president of Climate Panel and director of the Climate Secretariat at the University of Aarhus and is subsequently processed by NOAH. The following proposal is NOAH's bid for a Danish climate bill.

The sketch was originally written by Ellen Margrethe Basse's for her presentation "How can a Danish climate law look like and what can it contain?" at NOAH's public meeting, "Must Denmark have a climate law?" held in Copenhagen 10 November 2009 with the participation of spokespersons from the Danish Parliament Per Clausen, Per Dalgaard, Anne Grete Holmsgaard, Ole Haekkerup, Per Oerum Jorgensen and Margrethe Vestager as well as Ellen Margrethe Basse. The sketch is inspired by the Climate Change Act adopted in UK in 2008, respectively the Climate Change (Scotland) Act adopted in Scotland in 2009. It has been drafted taking into account the Danish tradition, since there is no tradition in Denmark for the formulation of laws which - as those two - imposes specific obligations on the Government to achieve specific objectives, where the performance relates to a period of time much longer than a government's possible mandate.

Law No. by on Climate Change and Adaptation

Chapter 1

Purpose, scope and definitions

1.

The Act establishes an obligation for the Danish authorities, notably the Danish Government to ensure that the national greenhouse gas emissions are reduced in accordance with the provisions of this Act, its specified concrete objectives and established budgets therein.

(2). The Act must ensure a speedy withdrawal of Denmark's use of fossil fuels through energy conservation and the establishment of an energy supply system based entirely on renewables.

(3). The Act will ensure that Denmark's greenhouse gas emissions quickly are reduced to a level that is less than what is absorbed by plants, soils and sediments through natural processes and mechanisms.

(4). The Act will ensure that Denmark contributes to achieving the UN Climate Convention's purposes, principles and obligations and makes its fair contribution to keeping the global temperature rise as far below 2 degrees Celsius as possible compared to pre-industrial levels.

(5). The Act should help to ensure compliance with international and EU objectives set on a comprehensive quantitative reduction of greenhouse gases.

(6). The Act should help to ensure a comprehensive quantitative reduction in the proportion of greenhouse gas emissions from international aviation and international shipping, which can be attributed to Denmark.

(7). The Act should help to ensure a climate adaptation policy, which is integrated into the wider policy and legislation, and that contributes to the provision of common timely solutions.

2.

In this Act the following definitions apply:

1) *Greenhouse gases*: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and svovlhexafluorid (SF₆) and other gases that might be covered by the post-Kyoto regime.

2) *CO₂ equivalents*: Emissions of each gas are converted to an amount of CO₂ that would cause the same climate change impact and summed.

3) *The base year*: The year that is internationally defined as the reference year for the actual percentage of reduction of greenhouse gas emissions.

4) *Reduction Targets*: Targets for reducing greenhouse gas emissions from all sources covered by this Act, see § 3.

5) *Net emissions*: The total greenhouse gas emissions minus total removals of greenhouse gases.

6) *Greenhouse Budgets*: A budget for the total amount of greenhouse gas emissions in a given period.

7) *Annual budget*: The maximum net amount of greenhouse gases that can be emitted in a given year.

8) *Commitment Period*: The time period covered by an emissions budget.

3.

The Act applies to the land and sea territory and to the exclusive economic zone of Denmark, to flights going from or arriving at an airfield in Denmark and to the bunkering of ships in Denmark.

(2). Outside the scope of the Act falls the proportion of greenhouse gases within the commonwealth relating to Greenland and the Faroe Islands.

(3). In order to implement international agreements and EU legislation the Government can expand the scope of the Act to include additional emissions, Denmark might become responsible for.

4.

The Act must be applied with an emphasis on the principle that greenhouse gas reductions primarily must be met through own reductions (the supplementarity principle) is respected. For the non-ETS sector reductions must be made exclusively by domestic action. In the ETS sector, at least 90% of the reductions must be achieved through domestic actions.

Chapter 2

Emission Reduction Targets

5.

It is the Government's commitment to ensure that net emissions of greenhouse gases in Denmark

- by 2020 is reduced by at least 50% compared to 1990/1995-base year,
- by 2030 is reduced by at least 90% compared to 1990/1995- base year,
- by 2050 is reduced by at least 100% compared to 1990/1995- base year.

(2). The base year for CO₂ and CH₄ is 1990. The base year for N₂O, HFCs, PFCs and SF₆ is 1995.

(3). The 1990/1995- base year means the total net amount of emissions in 1990 respectively 1995 for the greenhouse gases mentioned in section 3.

(4). Reduction objectives for the years 2020, 2030 and 2050 are calculated as the average annual emissions for the corresponding 3-yearly budget periods (see section 8).

6.

The Government can change the percentages referred to in the section 5, subsection 1 and the specified base year in section 5, subsection 3, if justified in

- Significant new scientific understanding about climate change and its consequences etc., that is internationally recognized, or
- Significant changes in international and / or in EU law and policy.

If international agreements and EU law, which Denmark is obliged to follow involves changes in base years, the specifications in accordance with this Act must then be based on the international obligations and obligations towards the EU.

(2). The Government must, as soon as practicable, consult the Climate Commission (cf. section 25) for advice regarding possible changes under consideration because of the conditions mentioned in subsection 1.

(3). The Climate Commission must give a written outline of the international scientific knowledge that is relevant for the Government's decisions and explain the recommendations it will provide in relation to the contemplated changes. The Commission must send the material to the Government no later than ... months after receipt of the request. To the extent that commission members are not in agreement, it must be clearly stated in the material submitted to the Government.

(4). The Climate Commission shall simultaneously with the transmission of material to the Government send a copy to the relevant national authorities. The Commission's report and recommendations should be published as soon as possible.

(5). The Government's decisions that are covered by subsection 1, must be based on advice from the Climate Commission, and the views received from other national authorities.

7.

The Government must no later than ... ask the Climate Commission for advice as to whether the 2020 reduction target (in section 5, subsection 1) can be regarded as the highest attainable standard or whether it is possible to set more ambitious targets for 2020.

(2). The Government's decisions regarding a possible tightening of the objective of the reductions to be achieved by 2020 will be based on the advice it receives from the Climate Commission, and the views received from other national authorities. Deviations from this advice must be justified.

(3). The Commission's advice, given after a request received from the Government, shall be based on the following criteria:

(a) international scientific knowledge on matters relating to climate change, impacts of climate change, etc.

(b) currently available technology and available technology that is so developed that it is close to being applied, including possibly assuming the introduction of new incentives

(c) the energy policy, especially the energy situation, import and export of energy, the share of renewables in the energy supply, as well as the carbon and energy intensity in the Danish economy

(d) environmental issues, especially biodiversity issues, land use and sustainable use of biomass (cf. section 11);

(e) economic conditions, particularly the Danish economy, conditions for small and medium enterprises and the labour market situation, including the current employment situation,

(f) financial matters, particularly tax revenue, public expenditure and public debt,

(g) social conditions, especially the situation of the economically disadvantaged and particularly vulnerable,

(h) special circumstances affecting the business and the living conditions also in the open country and / or on the islands (except Funen and Zealand), and

(i) the European and international legislation and policy.

(4). The Climate Commission must give a written outline of the international scientific insights relevant to Government's decision and explain the recommendations the Commission will give in relation to a possible tightening of the target for 2020. The Commission must respond to the Government within ... months after receipt of the request. To the extent that the Commission's members are not in agreement, it must be clearly stated.

(5). The Commission shall simultaneously with the transmission of its observations to the Government, send a copy to other national authorities. The Commission's considerations should be published as soon as possible.

Chapter 3

Emission Budgets

8

The Government must prepare a **budget for the period 2012 to 2050**, which indicates the maximum amount of greenhouse gases that can be derived from the territory included by this Act, see section 3

(2). The Government must for the entire period from 2010 to 2050 split the GHG budget into 3-yearly budget periods with fixed annual budgets.

The 3-yearly budget periods are:

1. period 2012-2014, the budget shall be determined by 1st January 2012
2. period 2015-2017, the budget shall be determined by 1st January 2012
3. period 2018-2020, the budget shall be determined by 1st January 2012
4. period 2021-2023, the budget shall be determined by 1st January 2012
5. period 2024-2026, the budget shall be determined by 1st January 2012
6. period 2027-2029, the budget shall be determined by 1st January 2015
7. period 2030-2032, the budget shall be determined by 1st January 2018
8. period 2033-2035, the budget shall be determined by 1st January 2021
9. period 2036-2038, the budget shall be determined by 1st January 2024
10. period 2039-2041, the budget shall be determined by 1st January 2027
11. period 2042-2044, the budget shall be determined by 1st January 2030
12. period 2045-2047, the budget shall be determined by 1st January 2033
13. period 2048-2050, the budget shall be determined by 1st January 2036

(3). The Government may, in exceptional circumstances modify the subsection (2), the budgets and budget periods.

(4). The Government's decision covered by subsections (1)-(3) will be based on advice from the Climate Commission, and the advice received from other national authorities.

(5). The Commission's advice following subsection (1) must be based on the following criteria:

- (a) international scientific knowledge on matters relating to climate change, impacts of climate change, etc.
- (b) currently available technology and available technology that is so developed that it is close to being applied, including possibly assuming the introduction of new incentives
- (c) the energy policy, especially the energy situation, import and export of energy, the share of renewables in the energy supply, as well as the carbon and energy intensity in the Danish economy

(d) environmental issues, especially biodiversity issues, land use and sustainable use of biomass (cf. section 11);

(e) economic conditions, particularly the Danish economy, conditions for small and medium enterprises and the labour market situation, including the current employment situation,

(f) financial matters, particularly tax revenue, public expenditure and public debt,

(g) social conditions, especially the situation of the economically disadvantaged and particularly vulnerable,

(h) special circumstances affecting the business and the living conditions also in the open country and / or on the islands (except Funen and Zealand), and

(i) the European and international legislation and policy.

(6). The Climate Commission must give a written outline of the international scientific insights relevant to the decisions regarding budgetary periods, which the Government is considering or might consider, and explain the recommendations that can be given in relation to the choice of concrete commitment periods. The Commission must send the material to the Government within ... months after receipt of the request. To the extent that commission members are not in agreement, it must be clearly stated.

(7). The Commission shall, while it forwards the material to the Government send a copy to other national authorities. The Commission's material should be published as soon as possible.

(8). The Government is obliged to ensure that the fixed annual budget is in compliance. Any excess must be disclosed and accompanied by a detailed justification, see section 22.

Chapter 4

Emissions Reduction Program

9

The Government is committed to no later than ... to develop a coherent **emissions reduction program** that is appropriate to ensure compliance with the 2050-term reduction targets and reduction objectives for the years 2020 and 2030 as well as meeting the emission budgets established by this Act or pursuant to this Act.

(2). The program shall explain how the main structure of a future energy system based entirely on renewable energy should look like and what the funding needs are. Specifically, the program will explain the need for the establishment of a climate fund and a climate innovation fund, which together must ensure integrity of the future energy supply system by ensuring that the necessary funding can be provided at the right times. Funds shall be provided in the extent that the development of the system subcomponents can not be expected to be established through the market mechanism and a new incentive structure.

The program will further explain how the Government's various sectoral action plans, relevant government strategies and the political agreements concerning policy in the sectors: energy, transport, agriculture and forestry, waste, nature and environment, etc., can be seen as effective instruments (sub-elements) to the realization of the overall emissions reduction program mentioned in subsection (1).

Similarly the programme shall outline how tax agreements and strategies etc. specifically contribute to the achievement of the overall emissions reduction program mentioned in subsection (1).

(3). The emissions reduction program must also explain how existing legislation can help achieve the reduction targets. There must be an identification of barriers in existing legislation and administrative practices, and an outline of new measures the Government will undertake.

(4). The program must be submitted to parliament no later than ... and published simultaneously with the presentation.

(5). The Parliament decides on when and how the program would be evaluated, and when a new overall emissions reduction program will be submitted.

Chapter 5

Climate Change Adaptation Program

10

The Government is required to present to the Parliament **an integrated climate change adaptation program** no later than ...

It must state

- (a) the relation to international agreements on climate adaptation and EU legislation on climate adaptation, including the White Paper on adaptation to climate change,
- (b) national objectives which determine the action, the specific vulnerability in Denmark, if any "hot spots" have to be assessed and analyzed in detail, and specific laws and policies which are relevant vs. the program
- (c) the consistency with other objectives, budgets and programs covered by this Act, and possible conflicts between them must be analyzed,
- (d) draft plans, initiatives, tools and mechanisms that will contribute to an integrated and timely effort,
- (e) estimates over the resulting costs and proposals for funding
- (f) proposals for procedures to ensure a broad public involvement in and responsibility for timely and appropriate solutions
- (g) proposals for procedures to ensure the involvement of interest organizations, corporations, institutions and authorities in the effort and responsibility for timely and appropriate solutions;
- (h) the period of the climate change adaptation program.

(2). The Climate Change Adaptation Program specifies criteria and timetables for the evaluation and reporting conducted during the implementation.

(3). The Climate Commission shall assist the Government in the work with the program, building on the latest scientific impact assessments of climate change impact in Denmark, for example in terms of sea-level rise, temperature, precipitation and wind, and the expected impact on the landscape, nature and the environment must be evaluated. The Climate Commission shall simultaneously with the transmission of its observations to the Government send a copy of the material to other national authorities. The Commission's considerations should be published as soon as possible hereafter.

(4). The Climate Change Adaptation Program shall be submitted to Parliament. The Parliament will state, in connection with its position of the program whether the specified period of validity may be accepted, and when proposals for a new climate change adaptation program should be forwarded.

Chapter 6

Land use, energy conservation and energy efficiency, promoting renewable energy, waste management, transport, etc.

11

The Government is required within ... to develop **a program for an ecological and sustainable land use**. The program that has to be presented before Parliament is linked to the objectives, budgets and programs covered by this Act.

It must indicate

- (a) the specific objectives and instruments to be used to increase removals of greenhouse gases (sinks) and reduce the emission of greenhouse gases,
- (b) the consistency with the action plans, strategies and political agreements reached on agriculture and forestry, including possible conflicts of interest that justifies a specific priority,
- (c) the consistency with the plans, strategies and political agreements reached on natural and environmental conditions, including potential conflicts of interest that justifies a specific priority,
- (d) the context and possible conflicts with existing international agreements, EU legislation and Danish legislation,
- (e) proposals for initiatives, instruments and mechanisms that will contribute to the objectives and removal of barriers and
- (f) the period covered by the program.

(2). The program must identify criteria and a timetable for reporting and evaluation during the implementation of the program.

(3). Before the program is submitted to Parliament, a public hearing must take place.

(4). The Parliament makes decisions about the program, including the specified period for the program.

(5). The Government must within one year before the expiry of the duration of the program present a new program to succeed.

12

The Government is required within ... to develop a **program for energy conservation and energy efficiency**. The program that must be presented before the parliament is linked to the objectives, budgets and programs covered by this Act.

It must state

- (a) specific objectives and instruments to be used to increase the direct energy savings and energy efficiency in all sectors, including tools and mechanisms to contribute to the objectives and removal of barriers
- (b) the consistency with the research and development, which is carried out regarding energy efficiency,
- (c) the function as role models of public authorities,
- (d) the consistency with action plans, strategies, and policy agreements reached concerning buildings, land use, transportation and waste management,
- (e) the consistency with existing international agreements, EU legislation and Danish legislation,
- (f) the consistency with policy agreements on taxation and the specific relevant tax laws and practices in this area, including an assessment of the efficiency vs. the objectives of reducing the emission of greenhouse gases and promoting energy conservation and energy efficiency,
- (g) the period of the Action Plan.

(2). The program must identify criteria and a timetable for reporting and evaluation during the implementation of the program.

(3). Before the program is submitted to the parliament, a public hearing must take place.

(4). The parliament makes decisions about the program, including the specified period for the program.

(5). The Government must within one year before the expiry of the duration of the program present a new program to succeed.

13

The Government is required within ... to develop a program to promote **renewable energy**. The program that must be presented before Parliament is linked to the objectives, budgets and programs covered by this Act.

It must indicate

- (a) the specific objectives and instruments to be used to increase the share of renewable energy and reduce the emission of greenhouse gases
- (b) proposals for initiatives to help eliminate or reduce the technical, economic and legal barriers
- (c) the consistency with the research and development, which will be carried out to promote technology development, integration of renewable energy in the network, etc.
- (d) the consistency with policy agreements on tax areas as well as the specific relevant tax laws and practices in this area, including an assessment of the efficiency vs. the objectives of reducing greenhouse gases and promoting renewable energy,
- (e) the consistency with the plans, strategies, policy agreements reached concerning waste as regards recycling of biodegradable waste from industry, households and agriculture as bio energy supply,
- (f) the consistency with specific international agreements in force, EU legislation and Danish legislation in this area including conflicts of interest that justifies a specific priority
- (g) the consistency with the plans, strategies and political agreements reached on natural and environmental conditions, including potential conflicts of interest that justifies a specific priority and
- (h) the period of the program.

(2). These programs must identify criteria and a timetable for reporting and evaluation during implementation of the program.

(3). Before the program is submitted to the parliament, a public hearing must take place.

(4). The Parliament makes decisions about the program, including the specified period for the program.

(5). The Government must within one year before the expiry of the duration of the program present a new program to succeed.

14

The Government is committed to no later than ... to develop **a program for a waste policy** and legislation to ensure a sustainable recovery of waste and limiting greenhouse gas emissions from waste management. The program that will be presented to the parliament is linked to the objectives, budgets and programs covered by this Act.

The program must specify

- (a) specific objectives and instruments to be used to minimize waste and greenhouse gas emissions from waste management
- (b) the consistency with policy agreements on tax matters and the importance of the current tax law as a means to achieving the goal of reducing greenhouse gases and increasing renewable energy
- (c) the consistency with existing EU legislation, especially with the climate relevant waste regulations in the Waste Framework Directive and the RES Directive and the Danish compliance with such provisions,
- (d) the consistency with the Danish legislation, including possible conflicts of interest that justify a specific priority
- (e) the period of the program

(2). The program must identify criteria and a timetable for reporting and evaluation during the implementation of the program.

(3). Before the program is submitted to the parliament, a public hearing must take place.

(4). The parliament makes decisions about the program, including the specified period for the program.

(5). The Government must within one year before the expiry of the duration of the program present a new program to succeed.

15

The Government is committed to no later than ... to develop a **program for development of the transport infrastructure and a transport policy**, moreover, to ensure a sustainable development with a phasing out of the sector's greenhouse gas emissions. The program that will be presented before Parliament is linked to the objectives, budgets and programs covered by this Act.

The program must indicate

- (a) concrete actions in relation to the improvement of infrastructure of importance for meeting the established commitments regarding reducing greenhouse gases
- (b) specific objectives and instruments that are also used to increase public transport, reduce fuel consumption and promotion of transportation based on renewable energy,
- (c) the consistency with policy agreements on tax matters including the applicable tax law
- (d) the consistency with specific current EU legislation and Danish legislation in this area including concrete conflicts of interest that justifies a specific priority and
- (e) the period of the program.

- (2). The program must identify criteria and a timetable for reporting and evaluation during the implementation of the program.
- (3). Before the program is submitted to the parliament, a public hearing must take place.
- (4). The Parliament makes decisions about the program, including the specified period for the program.
- (5). The Government must within one year before the expiry of the duration of the program present a new program to succeed.

Chapter 7

Involvement of the public and the sectors

16

The Government and the Danish authorities are obliged to ensure transparency in the decisions taken and coordination of the efforts is to meet the goals of reduction and compliance with budgets.

- (2). The Government must develop a strategy that contributes to secure that the investments made by the relevant sectors can be based on well-known policy strategies, including the need for a shift towards the use of climate-friendly technology that manufacturers are investing in.
- (3). The strategy must be based on an involvement of the relevant interest groups and other stakeholders.

17

The Government must work with Local Government Denmark and Danish Regions to devise a **strategy for how the public are actively involved in the fulfilment of the Act's objectives**. The strategy must be presented to parliament.

It should indicate

- (a) the action that must be taken in terms of concrete information etc. to contribute to the practical understanding by citizens, businesses and authorities of the factors that determine the climate change and climate adaptation,
- (b) which means that may be used to ensure an active involvement of the public, including specific examples of how the public can contribute to reductions in greenhouse gas emissions and climate change adaptation,
- (c) educational measures to be taken at all levels,
- (d) removal or reduction of barriers affecting the performance of an active public involvement and
- (e) the period which the strategy is assumed be concerned with.

- (2). The program must identify criteria and a timetable for reporting and evaluation during the implementation of the program.
- (3). Before the program is submitted to Parliament, a public hearing must take place.
- (4). The Parliament makes decisions about the program, including the specified period for the program.
- (5). The Government must within one year before the expiry of the duration of the program present a new program to succeed.

Chapter 8

Coordination with other laws etc.

18

The Government must ensure that other national laws are designed and applied in a manner that is consistent with this Act's targets and budgets.

- (2). The Government makes provisions and other measures to be promoted loyally by the relevant sectoral ministers in order to effectively ensure the fulfilment of this Act's binding targets and the compliance with the specified budgets of this Act.
- (3). The Government shall make provisions to implement or apply international conventions and EU regulations on matters covered by this Act.

19

When a minister is preparing the presentation of a bill for a new sector or for changes in current laws that are relevant under this Act, the design of the bill and the accompanying comments must specifically address the obligations imposed by this Act. It should be apparent from the comments, if there are specific interests to be taken into account when coordinating the power utilization according to the relevant sectoral law with the fulfilment of this Act.

20

The Prime Minister shall establish rules and guidelines for public authorities to comply with obligations under this Act.

- (2). The powers, including the exercise of authority, that are relevant under this Act, which specifically is carried out through other legislation, must contribute positively to the compliance of this Act.

21

The Government, in cooperation with Local Government Denmark and Danish Regions must prepare a strategy on how the practice in the municipalities and regions can contribute to the achievement of the objectives defined in this Act and ensure compliance with the specified budgets of this Act.

(2). Criteria must be defined and a timetable laid out for evaluation and reporting during implementation of the strategy.

Chapter 9

Monitoring and reporting obligations expenses etc.

22

With reference to the fulfilment of the purpose of this Act the emissions of greenhouse gases, the reductions in emissions and the removal of greenhouse gases from the atmosphere must be monitored or calculated in CO₂ equivalents (CO₂e) in accordance with the requirements and criteria set internationally and by the EU.

(2). The parliament shall appoint an independent body to carry out monitoring, verification and reporting of greenhouse gas emissions under this Act, see §

23

The Government and national authorities are responsible for annually and no later than 31 March to report verified greenhouse gas emissions for the previous year from the areas for which they are responsible. Greenhouse gas inventories shall be submitted to the Climate and Energy Ministry.

(2). The reporting must state whether the limit vs. the annual budget is respected. If the budget is not respected the report must explain the causes for this and what new measures the excess gives occasion for.

(3). The reporting will be presented before Parliament by 31 October in the period following the relevant commitment period. The reporting is published simultaneously with the presentation.

24

The Prime Minister shall issue detailed rules for the content of reporting.

(2). The Prime Minister shall issue rules for the national authorities' monitoring and reporting of verified greenhouse gas emissions in accordance with the rules and guidelines set by the UN and the EU.

Chapter 10

Climate Commission

25

The Government establishes an independent body to advise the Government and other national authorities under this Act. The advisory body is called the Climate Commission.

(2). The Climate Commission shall consist of ... members.

(3). The Chair of the Climate Commission and other members must be recognized researchers or professionals well-informed about the relevant science, representing a total understanding of the factors affecting climate, changes in the climate, socio-economic and other climate relevant factors.

(4). The members of the Climate Commission are appointed for ... years by the Prime Minister on the recommendation of the Research Policy Council. The members may be reappointed.

(5). The Climate Commission shall establish rules of procedure for its activities.

(6). The Climate Commission shall prepare an annual report to be published.

Chapter 11

Entry into force

26

This Act shall come into force on ...