





This country profile is based on information provided by Ida Søndergaard and Mette Lise Jensen from the Danish EPA, Esben Tind from the Danish Nature Agency and Tove Madsen from the Danish Energy Agency. The information is current as of June 2011. The response should not be seen as an official ministerial priority and is not an exhaustive list of relevant Danish resource efficiency policies, objectives and activities.

This country profile was prepared as part of the EEA-ETC/SCP 2011 survey of resource efficiency policies, which aims to collect, analyze and disseminate information about national experience in the development and implementation of resource efficiency policies in EEA member and collaborating countries. The work resulted in the following outcomes:

- Short 'country profiles' (this document) self assessments prepared by countries, describing the current status of resource efficiency policies, including key strategies and action plans, policy objectives, instruments, targets and indicators used, institutional setup and information needs.
- **Summary report** prepared by the EEA and ETC/SCP, the report reflects on trends, similarities and differences in policy responses, showcases selected policy initiatives from member countries and identifies information needs and knowledge gaps.
- A session on resource efficiency policies during the 2011 EIONET workshop to discuss further needs and to facilitate information sharing and experience exchange among EIONET members.

More information about resource efficiency policies, including an analytical report "Resource efficiency in Europe" and thirty one country profiles, can be found at:

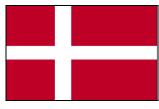
http://www.eea.europa.eu/resource-efficiency





1. Resource use in Denmark – facts and figures

1.1 General Facts and figures about the country



Population (projected inhabitants for 2010) [1]	5,534,738
Percent of total EEA-32	0.94%

Surface area (km²) [2] 43,094

➤ Percent of total EEA-32 0.76%

GDP at market prices – Purchasing Power Standard – Current 156,823

Prices (Million Euro, 2009) [3]

Percent of total EEA-32 (minus Liechtenstein)
 GDP per capita in Purchasing Power Standards (PPS) [4]
 121

EU27=100 (2009)

Urban population (rate of pop., 2009) [5] 86.9%

Main economic sectors and their share in total GDP (2009 est.) [2]

Agriculture 1.1%
Industry 22.8%

Services (2009 est.) 76.1%

EU accession date [6] 1.1.1973



Source: https://www.cia.gov/library/publi cations/the-worldfactbook/index.html

Additional relevant background information on Denmark (and on 37 other EEA member and cooperating countries) can be found at the SOER2010 website: http://www.eea.europa.eu/soer/countries/dk

Factsheet on national sustainable consumption and production policies for Denmark is available at:

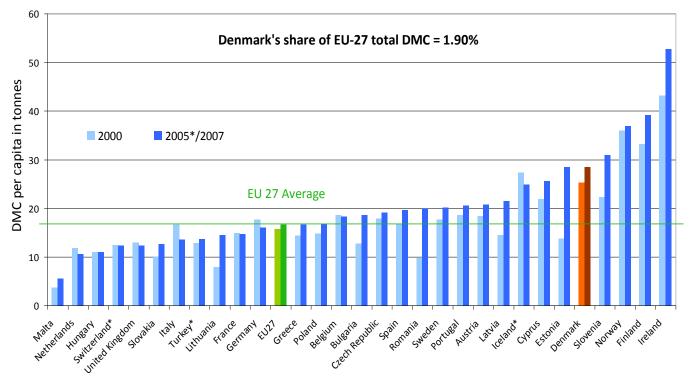
http://scp.eionet.europa.eu/facts/factsheets scp/denmark





1.2 Facts and figures on resource efficiency for Denmark

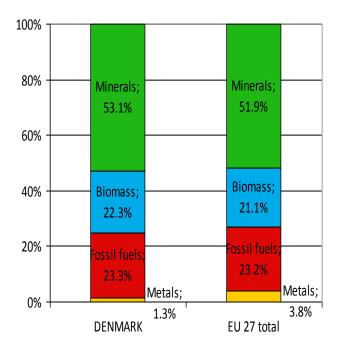
Use of resources per capita 2000 and 2007 [tonnes DMC/capita]



Source: Eurostat, OECD and Total Economy Database [7]

Domestic Material Consumption by category over time, Denmark

Breakdown of DMC by type of materials (2007)



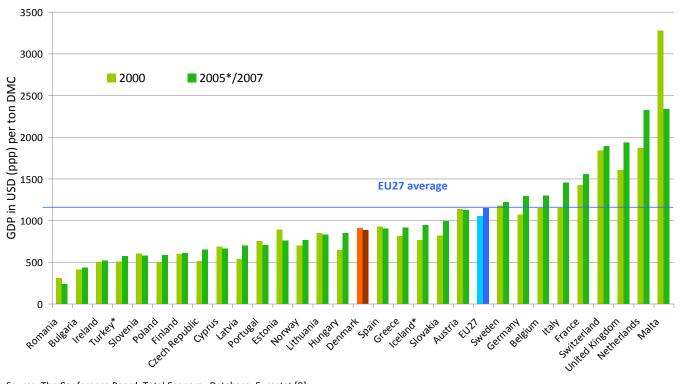
Source: Eurostat [8]

^{* =} For these countries data is for 2000 and 2005.



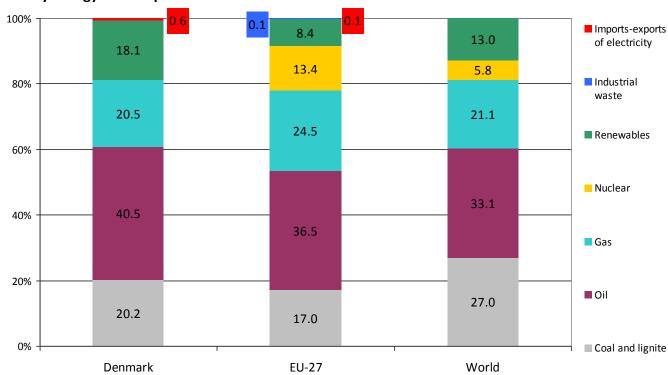


Material productivity 2000 and 2007 [USD ppp/ton DMC]



Source: The Conference Board, Total Economy Database, Eurostat [9]

Primary energy consumption



Source: Eurostat [10]

^{* =} For these countries data is for 2000 and 2005.





2. Evolution and main drivers for the development of resource efficiency policies

Evolution:

Danish environment policies have been characterized by the use of a wide variety of policy instruments. Traditionally, environment policy was mainly based on regulation, but in the last two decades this has been supplemented with an increasing use of economic instruments and a range of other instruments, including awareness raising campaigns and voluntary agreements. Awareness raising is targeted towards citizens in general and key actors, e.g. specific industries or companies.

The use of economic instruments was greatly increased by a tax reform in 1994. One of the aims of this tax reform was to explicitly introduce elements of green taxation in the Danish tax system. The reform has made it possible to reduce taxation on income and labour, whilst increasing fiscal incentives to protect the environment. Since then the use of green fiscal instruments have steadily increased and the most recent Danish tax reform from 2009 also included a relocation of taxes and duties from labour tax to increased green taxation.

In Denmark resource efficiency is mainly considered a cross-cutting theme under green growth initiatives and under the sustainable development agenda.

The resource efficiency approach in Denmark over the recent years has largely been based on the principle that all actors in society share the responsibility to tackle the environmental challenges of tomorrow. This approach is exemplified by the Green Responsibility campaign or the One Tonne Less campaign in which citizens are called into action and enabled to take action.

Current policy focus falls on market-based instruments along with dialogue and partnerships with stakeholders and information-based instruments such as campaigns.

Main drivers:

In Denmark the main driver for resource efficiency policies currently is the policy development within EU. Most recently the Europe 2020 strategy, the informal Council of Ministers Meeting (summer 2010), the Flagship Initiative on resource efficiency and EU Council conclusions on sustainable resource management has pointed the way forward for the member states, including Denmark.

Besides the influences from EU policy development the following areas can be seen as drivers for resource efficiency policies in Denmark:

Security of energy supply: In Denmark, the increasingly expensive oil and gas supplies and the expected decrease in oil production in the North Sea have led the Government to agree on ambitious EU targets to increase the share of renewable energy in energy consumption. In Denmark, the increase in the renewable energy share will happen especially through wind power and the use of biomass. See also section 4.





Competitiveness and creation of jobs: The agenda for improved resource efficiency and the agenda for creating competitiveness and jobs is seen as challenges that are connected. Therefore the government in Denmark has an aim to develop new Danish solutions that are competitive in a growing global market - and at the same time help protect our environment. In other words to explore and exploit synergies between resource efficiency, improvement of the environment, economic development, jobs and sustainable development in the future.

Global issues: The resource efficiency discussion in Denmark is also now to a higher degree beginning to encompass the global challenge, like the economic crisis, climate change and biodiversity loss, which are all strongly interlinked. There is in Denmark a growing accept of ecological sustainability being a condition for sustainable supply of resources and global issues is foreseen to play a larger role as a driver for resource efficiency policies in the future.

Besides these drivers, the **NGO pressure** on certain controversial resource aspects (e.g. wood, biodiversity) should also be mentioned as an important driver in relation to the development of resource efficiency policies.

3. Overall Policy Approach for Resource Efficiency

Denmark does not have an overall national resource efficiency strategy, but resource efficiency related policies and activities are currently part of a number of different policy frameworks, most importantly in the **Danish Strategy for Sustainable Development** [1]

The Danish Strategy for Sustainable Development, published in 2009, deals with resource efficiency in several of its chapters. The strategy has a dedicated chapter to production and consumption. As the title of the chapter indicates (Green innovation in production and consumption – environment technology solutions and development of green markets) focus is primarily on green technologies and the market. Resource efficiency is e.g. also touched upon in the chapters concerning globalisation and climate change, where focus is on Denmark's role globally with respect to increasing efficiency of resource use through foreign aid campaigns and hence on reducing resource use within the energy sector. Last but not least, the chapter "Nature for the future" deals with issues relevant to resource efficiency such as land use, fisheries, forests and biodiversity.

The National Energy Agreement [2008] sets an ambitious energy saving target. See section 4.

Currently under preparation is a comprehensive national analysis of the sustainable and effective use of biomass in Denmark up to 2050 (Danish Energy Agency) [60]

The Governments' new **Energy Strategy 2050** [60] contains several energy efficiency and energy saving initiatives. See section 4.





4. Strategies or action plans to improve resource efficiency for individual economic sectors, products or product groups

The following sector-specific and theme-specific strategies and action plans which have a resource efficiency focus have been adopted:

Energy sector

The National Energy Agreement 2008 – 2011 [20]: The national energy agreement establishes the target that in 2020, the primary energy consumption will be 4 % less than in 2006 [20].

Energy Strategy 2050 (February 2011) [60] outlines, that a cost-effective realisation of the goal of Danish fossil-fuel independence in 2050 requires considerable energy efficiency improvements in the various sectors. In many cases, energy efficiency improvements are cheaper than the otherwise required renewable energy expansion, both in the short, medium and long term.

The energy efficiency improvements of companies must be enhanced. Although many companies have already carried out large energy efficiency improvements, considerable cost-effective potential still exists for reducing energy consumption in the different business sectors through energy efficiency improvements.

The EU plays a key role in the promotion of energy efficiency improvements. Greater and cheaper efficiency improvements can be obtained through concerted efforts in a number of sectors. This applies not the least to appliances, because the Danish market is too small to efficiently push the development of more energy efficient products. Concerted efforts will also mean equal terms of competition for producers and consumers.

Energy consumption in the public sector is relatively limited compared with other sectors, but the public sector has a special obligation to also contribute its share, as ever stricter efficiency requirements are placed on the business community and private households.

Agreement on Energy Saving Initiatives, 2005

See more: [78]

Environmental sector

National Waste Strategy 2009-2012 – Part 1 [9] and National Waste Strategy '10 – Part 2 [9] The strategy is based on the waste hierarchy and presents a three pillar approach to Danish waste policies: resource policy, climate policies and protection of the environment and human health. The overall target is to retain high recycling of waste and to minimise landfilling as much as possible. Part 2 contains a special section on waste prevention with focus on prevention of food waste and packaging waste, and another section on further development of waste management technologies in order to increase recycling of waste.

The government's action plan for promoting eco-efficient technology 2010-2011 [65]

The goal of the plan is to promote eco-efficient technology. This action plan, in conjunction with Denmark's existing green initiatives, is intended to create an improved framework for Danish environmental technology companies – for the improvement of the environment, prosperity, and





employment. Amongst other issues, the action plan focuses on water resources and the connection between waste and resource scarcity.

Green Growth, 2009 [17]

The Danish Government's vision is to create a new green growth economy. An economy in which green solutions – within transport, buildings, agriculture, food production, etc. – contributes to solving environment, climate and nature challenges and at the same time creates new jobs in green growth industries. This strategy presents a plan for nature, environment and agriculture.

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Action plan for renewed energy-conservation - Energy conservation and the market, 2005 [5] In this action plan for renewed energy-conservation efforts, the Government presents a strategy for a forward-looking, market-based program. The energy conservation effort will support the long-term challenges that Denmark is facing. Increased robustness in energy supply, competitive advantages and export opportunities can contribute to Denmark being better able to benefit from globalization.

A visionary Danish Energy Policy 2025. Danish Energy Agency, 2008 [7]

This policy document presents the Danish Government's proposal for a visionary energy policy for 2025 and beyond.

An enhanced effort for green procurement in 2008-2009, 2007 [6]

Food production, the nature and the environment, 2004 [11]

Transport sector

A Green Transport Policy (Sustainable Transport – better infrastructure), 2009 [19]

This publication sets out the Danish Government's long-term green plan for the transport of the future:

A plan introducing green taxes which will make Danes think about CO2 and the environment when they buy a car; and intelligent road pricing and charges which will make us use our car when and where it causes the least congestion, noise and pollution.

More bicycles on safe road in the state – the Ministry of Transport and Energy bicycle strategy, 2007 [14]





5. Individual types of resources identified as priority for national or sector-specific resource efficiency policies

Energy:

See section 4.

Water:

The government's **Action plan for promoting eco-efficient technology 2010-2011** focuses at the water sector/aquatic environment and eco-technologies in the sector.

Raw materials

The Raw Materials Act (*Råstofloven*) [45] has the purpose of making sure that supply and production of raw materials takes place in a natural and environmentally safe way (for concrete objectives, see section 6). On-sea permits are given by the Nature Agency and on-land permits are given by the municipalities. Also the **Nature Protection Act** (*naturbeskyttelsesloven*) [66] and the **Planning Act** (*Planloven*) [58] are relevant laws.

Drinking Water

More than 99% of drinking water in Denmark comes from ground water. The drinking water is regulated by the Danish Water Supply Act (Vandforsyningsloven) [46], Environmental Protection Act (Miljøbeskyttelsesloven) [67], Act on Environmental Objectives (Miljømålsloven)[68], Contaminated Sites Act (Jordforureningsloven) [69] and by EU regulation.

Water sector Act (Vandsektorloven) [47]

The Act will help to ensure water supply and wastewater treatment of high hygienic and environmental quality, which are taking into account the security of supply and nature and that are operated in an efficient manner that is transparent to consumers. The goal of the act is also to separate authority and the operational level.

Decree on Drinking Water (*Drikkevandsbekendtgørelsen*) [48]

The decree provide proscriptions regarding:

- 1) quality requirements for drinking water and water used in food manufacturing, etc.
- 2) what analyses of the water to be carried out
- 3) how to control with the abstracted water quantities and
- 4) what inspections are to be conducted with water supply facilities.

Act on Payment Rules (act under revision)(Lov om betalingsregler) [49]

The Act aims to ensure consideration of the principle of cost recovery, including environmental and resource related costs, and pricing with the incentive effect. Additionally, taking into account that different water use sectors contributing adequately, and the polluter pays principle.

Water Supply Act (Vandforsyningsloven) [50]

The Act aims to ensure:

1) the utilization and the associated protection of water bodies are preceded by a comprehensive planning and following a comprehensive assessment of the grounds mentioned in § 2*,





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- 2) coordination of the existing water supply for a prudent use of water deposits,
- 3) a planned expansion and operation of an adequate and satisfactory quality water supply and
- 4) quality of drinking water to protect human health.

The Act aims to ensure consideration of the principle of cost recovery, including environmental and resource costs, and pricing with the incentive effect. In addition, take into account that different water use sectors contribute adequately, and to the principle that the polluter should pay.

* By administration of the Act focus must be on the extend of the body of water, on the population and business needs for an adequate and satisfactory quality water supply, on environmental protection and nature conservation, including conservation of the quality of the surroundings and the use of raw materials.

Drinking Water Action Plan (Handlingsplan til sikring af drikkevandskvaliteten) [51] The action plan provides an introduction to the Danish administrative model for water, and the most important challenges for drinking water quality. It presents the overall vision and seven areas of action. It presents the areas of focus in the strategy period 2010-2012.

Wood/forest

The purpose of the **Danish Forest Act** (Skovloven) [52] is to conserve and protect the Danish forests and to increase the forest as well as to promote sustainable forest management.

The main objective of the **Danish National Forest Programme** (Danmarks nationale skovprogram) [53] is full implementation of sustainable forest management, which incorporates economic, ecological as well as social considerations.

Action plan for near-to-natural forest management in state forests (Handlingsplan for naturnær skovdrift I statsskovene) [54]. The report describes how management will be practiced in state forests.

Strategy for Sustainable Forest Management, Ministry of the Environment, 1994 [55]

Strategy for Natural Forests and other Forest Types of High Conservation Value in Denmark, The Danish Forest and Nature Agency, 1994 [55]

Danish Forestry statistics (Skove og plantager 2006). The purpose of the report is to inform about national forestry statistics and report on the status and development of the Danish forests [12]

The Danish government has in its strategy for sustainable development declared that it will promote legal and sustainable forest management, both through initiatives in relation to trade in wood and through policy for public procurement of legal and sustainable timber. The goal is to eliminate illegally produced timber in the market and that public and private purchasers actively seek to buy legal and sustainable timber.

The Danish Nature Agency in 2010 published a new **Guidance for public procurement of legal and sustainable timber** (General vejledning om indkøb af træ) [69]. These guidelines aim to assist public purchasers in ensuring that the timber they buy is legally and sustainably produced.





Spatial planning/Land use

The spatial planning is regulated by several laws, e.g.: **The Planning Act** (*Planloven*) [58], **Environmental Protection Act** (*Miljøbeskyttelsesloven*) [67], **Nature protection Act** (*Naturbeskyttelsesloven*) [66], **Summer Cottages Act** (*Sommerhusloven*) [71], **Act on Environmental Objectives** (*Miljømålsloven*) [68] as well as a number of circulars and notices.

The Planning Act (Planloven) [58]

The main purpose is to ensure that the planning combines the societal interests in land use and contributes to protecting the country's nature and environment so that society can develop on a sustainable basis in respect for human living conditions and preservation of animal and plant life.

It is the municipalities that, within the overall national planning guidelines, plan for the development of the Danish cities and landscapes.

National planning is expressed through submissions, binding guidelines, guidance and intervention in local planning issues and projects that have international, national or regional interest.

National Planning Report 2010 (Landsplanredegørelse 2010) [59] presents the Government's expectations for local planning in relation to a number of topics: climate, nature, landscape, coast, towns and infrastructure.

All national planning proposals are in some way send out for consultation or public debate, and they are public accessible on The Danish Nature & Environment Portal.

Waste

Use of the potential resources in waste has a high priority through waste prevention and recycling (**National Waste Strategy 2009-2012 – Part 1**, Danish EPA, 2009 [9]. *National Waste Strategy '10 – Part 2*, Danish EPA, 2010 [9].)





6. Strategic objectives, targets and indicators on resource efficiency

Overall strategic objectives:

- > Denmark is to be among the three most energy-efficient OECD countries by 2020 [61]
- Resource-efficiency should be increased significantly towards 2050 among other things as part of the goal of becoming independent of fossil fuels by 2050 [60]
- Prevent loss of resources and reduce the environmental impact from waste [1]
- Businesses will be given a good framework and incentives to develop, market and use more environmentally friendly technologies and products and to take social responsibility [1]
- > Commit and encourage all actors to take responsibility for a sustainable development [1]
- Create innovative and environmentally friendly solutions in all sectors[1]
- Pay consideration to long-term global consequences [1]
- Expenditure on research and development should be increased to a level of about 3 per cent of GDP by 2010 [1]
- Create a green growth economy in which green solutions within transport, housing, agriculture and food manufacturing contribute to solving environment-, climate- and nature challenges while creating green jobs

Raw Materials

- Objectives:

- Exploration and extraction of raw materials must be conducted only in areas specifically designated for that purpose by authorities [45]
- On sea permits and amount of extracted materials are prized by the state [45]
- ➤ On land a permit for extraction must be accompanied by a number of conditions, among other things, environmental issues, including limits on noise and securing groundwater. Furthermore, a recovery plan for the area after extraction is required [45]
- In coastal waters of a depth of less than six meters there should generally not be extraction [45]
- At EC bird protection areas, the EC habitat areas and Ramsar sites it requires an environmental impact assessment before any extraction can take place. The assessment must demonstrate that any extraction does not harm the area's protected nature [45]
- On sea it is encouraged to reuse all dredged materials if possible. Reuse for construction of dredged materials from capital and maintenance dredging on the seabed is encouraged through administrative procedures according to the Raw Materials Act in order to reduce dumping at sea and exploitation of primary minerals [45]
- ➤ On sea permits are given for reuse of dredged materials. Permits to reuse dredged materials are required by the Raw Materials Act and tax exemption is given for the amount reused [45]
- Annual statistics are prepared in order to measure resource efficiency [45]





Wood/forest

- Objectives:

- All Danish state forests are FSC or PEFC certified http://www.naturstyrelsen.dk/Naturbeskyttelse/Skov/Statsskovene/Drift/Certificering/certificering.htm
- ➤ Long-term conversion to near-to-nature forest management principles and 10% of the national forest area having biodiversity as the most important management objective by 2040 [53]
- Development of sustainable economic framework conditions for the forest sector [53]
- ➤ Maintain and develop the forests as a benefit for public welfare through opportunities for outdoor recreation and nature experience in the forests [53]
- ➤ Effective information sharing access to updated and relevant knowledge as a basis for forest policy development and implementation through research, education, awareness raising and dissemination of information [53]
- > Promotion of sustainable forest management at global and regional levels [53]
- From 2005 all state forests is in the process of conversion to near-to-nature forest management principles, which among other things means that clear-cutting is avoided as much as possible and logging and cultivation practices that ensure varied forest structures and the possibility of natural regeneration [54]
- Ditches in state forests must no longer be dredged. Excluded are statutory obligations and stands where otherwise there would be a disproportionate loss of values [54]
- From 2006 any work in connection with the logging and extraction of wood is from permanent tracks [54]

- Targets:

- ➤ In 2012, the near-to-nature management principles are implemented in the vast majority of state forest land, and hence significantly more land than the 25% that is assumed in the National Forest Programme [54]
- During a tree generation (80 100 years), state forests consist of structurally diverse mixed stands with a deciduous share of minimum 20% in all stands [54]
- ➤ Forest landscapes should cover 20-25% of Denmark after one tree generation (80 100 years) and the scope and potential for natural habitats and processes should be strengthened in this effort [53]
- > 3-5 trees per hectare is left for natural death and decay, both deciduous and coniferous [54]

Drinking water

- Objectives:

- The Danish groundwater should be protected to prevent drinking water problems [51]
- A permit is required for the abstraction of both ground and surface water as well as for the renovation or alternation of a construction serving this purpose [51]
- ➤ The main groundwater resources for drinking water supply is designated as "areas of special drinking water interests, " also known as OSD areas. In these areas there should be additional efforts to protect groundwater [51]
- ➤ The vision is pure and good drinking water. In 2010-2012 focus will specifically be on increased security, greater resource awareness and better technology [51]





European Environment Agenc

- ➤ Danes must know why it makes sense to conserve water, and the Danes should have access to more information about the quality of drinking water [51]
- Consciousness about resources in relation to energy consumption must be a natural approach to water supplies [51]
- ➤ There is a need for new technologies to be used faster and in larger scale by water companies also the smaller water utilities [51]
- ➤ Thoughtful water planning [51]
- Safer drinking water supply [51]
- Systematic municipal control [51]
- ➤ More citizen involvement in water sector [51]
- Development of Water Technologies [51]
- ➤ Offensive regulation [51]

Spatial planning/Land Use

- Objectives:

- Planning should contribute to reducing energy consumption [59]
- ➤ Planning must accommodate the expected climate change [59]
- Planning must ensure more coherent nature and aquatic environments [59]
- The landscape and nature must be made more accessible for the public [59]
- ➤ Planning must ensure landscapes which are rich in experiences [59]
- > A clear boundary between town and country [59]
- Contribute to ensure the right balance between tourism and nature- and landscape values [59]

- Targets:

> By 2020 Denmark's area for nature should increase by minimum 100,000 hectares

Energy:

- Objectives:

- Denmark will be independent of fossil fuels by 2050 [60]
- ➤ Increase the use of renewable energy and considerably intensify our energy saving efforts [60]
- ➤ Denmark is to be among the three countries in the world to raise its renewable energy share most by 2020 [61]
- ➤ Denmark is to be among the three most energy-efficient countries in the OECD by 2020 [61]

- Targets:

Danish targets arising from the Kyoto Protocol and EU Climate and Energy Package

- ➤ Greenhouse gas emissions will be reduced by 21 per cent in 2008-12 compared to 1990 levels
- Emissions in the non-ETS sectors will be reduced gradually in 2013-2020 and by 20 % by 2020 relative to 2005 as a part of the overall EU target to reduce emissions by 20 % by 2020 relative to 1990.





- ➤ The share of renewable energy will be increased to 30 % of final energy consumption by 2020 as part of an overall EU target of 20 % renewable energy by 2020.
- The share of renewable energy in the transport sector will be 10 % by 2020

Danish targets arising from the national energy agreement for the period 2008-2011

In 2020, primary energy consumption will be 4 % less than in 2006

Other

Double financial support for research, development and demonstration of energy technology to DKK 1 billion per year [7]

Energy efficiency initiatives in Energy Strategy 2050:

- ➤ Target the saving obligations of energy companies towards companies in general. These efforts must cover energy efficiency improvement as well as conversion away from oil and natural gas. The obligations of energy companies will be raised by 50% from 2013 and by 75% in 2017-2020. Efforts will be financed over the net tariffs
- Push for the EU to achieve at least 20% improvement in energy efficiency by 2020 by means of instruments and policies at EU level and at national level. This will take place through e.g.: 1) more requirements, and more ambitious requirements, for the energy efficiency of appliances and products; and tightening of the requirements for efficiency and labelling of appliances and products in connection with upcoming revisions of the Ecodesign and Energy Labelling Directives, 2) push for the future framework directive on energy efficiency to be ambitious and action-based, 3) push for a further tightening of the Energy Performance of Buildings Directive, 4) push for a higher level of ambition among businesses in the EU with regard to energy efficiency
- ➤ Enhance public sector energy savings efforts from 2012: 1) before the end of 2011, a proposal will be presented to replace the existing requirements for a 10% reduction in energy consumption by the state, relative to 2006, and 2) in 2012, when the current agreement on energy savings with Local Government Denmark and Danish Regions elapses, the government's budget agreements with municipalities and regions will include voluntary agreements on energy consumption in buildings
- Continue the efforts by the Knowledge Centre for Energy Savings in Buildings.

Waste:

- Objectives:

- We shall prevent loss of resources and reduce the environmental impact from waste [1], [9]
- We shall prevent waste generation, both the amount and harmfulness [9]
- ➤ We shall reduce emissions of greenhouse gasses from management of waste [9]
- ➤ We shall increase quality in the waste management and ensure an effective waste sector[9]

- Targets:

- Recycle minimum 65% of total waste amounts by 2012 [9]
- Reduce landfilled waste amounts to maximum 6 % by 2012 [9]
- Collect 45% of batteries by 2012 [9]





Consumers:

- Objectives:

- Consumers' awareness of eco-labels shall be improved [1]
- To limit the negative impacts on the environment and human health from consumer products, food, housing and other factors [18]
- To reduce the environmental impact from public consumption, including energy consumption [21]

- Targets:

Public procurement: Commitment to the 50% target for green public procurement in 2010 covering 10 product groups

Environmental technologies:

- Objectives:

- Strengthen, renew and focus efforts to develop and apply eco-efficient technologies so that Denmark and Danish enterprises can continue their central role in solving the world's most pressing environmental problems through technological innovation [4]
- Businesses shall be given a good framework and incentives to develop, market and use more environmentally friendly technologies and products and to take social responsibility [1]
- Continued growth in our exports of energy technology [7]
- ➤ Create a green growth economy in which green solutions within transport, housing, agriculture and food manufacturing contribute to solving environment- climate- and nature challenges while creating green jobs [17]
- ➤ To promote the market for more environmentally friendly products, services and technologies [21]

- Targets:

- ➤ To establish at least five partnerships and with these a number of new business concepts for the development and marketing of Danish eco-efficient technology by enterprises before 2010 [4]
- ➤ To distribute grants to at least 30 enterprise-based projects from the Environmental Billion fund for eco-efficient technology before 2010 [4]

Food production:

- Objectives:

- Reduce greenhouse gas emissions from agriculture [17]
- An agriculture sector supplying green energy [17]
- ➤ The Danish agricultural sector shall be a "green technology lab" [17]
- ➤ Green growth shall ensure increased protection of the environment, nature and the climate [17]
- Reduce the release of ammonia [17]
- > Stop the decrease in biodiversity [17]
- Legal and sustainable foresting shall be promoted [1]





- Targets:

- Reduce the release of nitrogen from agriculture by 19,000 tonnes by 2015 [17] and reduce it further by 2020 [61]
- > Reduce the release of phosphorous from agriculture by 210 tonnes by 2015 [17]
- Reduce the impact from pesticide from 2.1 to 1.4 by end of 2013 corresponding to a frequency in use of pesticides of 1.7 [17]
- ➤ Use of 40% of animal manure for green energy by 2020 [17]
- ➤ A doubling of the organic farming area by 2020 [17]
- ➤ A reduction in the agricultural emissions of greenhouse gases by 700,000 tonnes and a further reduction in 2020 [17]

Housing:

- Objectives:

- Promote heat savings in existing buildings [5], [24]
- Maintain and extend ambitious energy labelling of buildings [5]
- ➤ The number of heat pumps for households should increase [7]

- Targets:

- ➤ Reduce energy consumption requirements for new buildings by 2020 by 75% compared to the current requirement 25% reduction by 2010, 25% reduction by 2015 and 25% by 2020 [1], [7], [24]
- ➤ In Energy Strategy 2050 [60] the Government sets the target of incorporating a low energy rating 2020 in the building regulations with a view to promoting the establishment of new buildings with very low energy consumption
- Also, the government wants to target the savings obligations of energy companies towards renovation of buildings and conversion of oil and natural gas heating. Obligations will moreover be increased by 50 % from 2013 and by 75 % in 2017-2020 (This initiative has not been through Parliament yet) [60]

See [63] for more and updated information on this subject

Mobility:

- Objectives:

- The CO2 emissions from the transport sector must be reduced [19], [1]
- The public transport system shall be expanded and improved to ensure that the majority of the traffic growth in the future is in public transport [19], [1]
- The road capacity must be expanded where the demand is greatest [19]
- ➤ Bicycling must be promoted [19]
- Denmark shall be a green technology laboratory for transportation [19]
- Bridges, roads and railways may not destroy irreplaceable nature [19]
- Noise and air pollution from traffic in the cities must be reduced [19]
- To unite economic growth and high mobility with a better environment, more and better nature, less traffic noise and an effort towards combating climate change [19]
- > Denmark should continue to be among the best nations for bicycling [14]





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- > Before 2010 full-scale trial facilities for second generation bio-fuels for transport can be set up in Denmark [7]
- Targets: Renewable energy shall account for 10 per cent of the total energy use in the transport sector by 2020 [1]

Indicators:

The following applied indicators address improvements in resource efficiency:

- Direct Material Input (DMI)
- Environmental impacts compared to economic growth (for 7 factors: GHGs, NH3, NMVOC, NOx, SO2, N, P)
- Number of EMAS registered and ISO 14001 certified Danish organizations
- > Danish citizens awareness about the Nordic Swan and the European Flower eco-labels
- Number of eco-labelled products
- Amount of waste generated divided into waste management approach.
- Private consumption (measured in monetary terms) [3]
- Energy consumption in households [3]
- Water consumption and water price [3]
- Danish citizens awareness of the Nordic Swan and the European Flower eco-labels [1]

Agriculture:

Release of nitrogen and phosphorous to the sea [1]

Housing:

- Energy consumption for heating in buildings as a whole [1], [2]
- Proportion of buildings having district heating / central heating [1]
- Number of energy-labelled white goods (for different types of white goods) [3]

Waste:

Amounts of waste and treatment of waste by recycling, incineration and landfilling from different sectors [in the annual Waste Statistics]





7. The institutional setup for the development and implementation of resource efficiency policies

Overall national institutional setup:

Resource efficiency is an overall policy objective of the Danish Government with many crosscutting linkages to various policy fields. Therefore, resource efficiency policies are formulated and introduced by several ministries, covering different issues and aspects of the resource efficiency agenda, like:

- Ministry of the Environment
- Ministry of Food, Agriculture and Fisheries
- Ministry of Transport
- Ministry of Climate and Energy
- Ministry of Economic and Business Affairs
- Ministry of Finance
- Ministry of Foreign Affairs

Other major and innovative institutions with resource efficiency related responsibility: The Danish Commission on Climate Change Policy http://www.klimakommissionen.dk/en-us/Sider/Forside2.aspx [72]

In March 2008, The Danish Government appointed a Commission on Climate Change, which consists of ten scientists, each possessing special knowledge in the fields of climate, agriculture, transportation and economics. The overall goal of the Climate Commission was to present suggestions as to how Denmark in the future can phase out fossil fuels, as is the vision of the Government of Denmark.

Eco-labelling Denmark, http://www.ecolabel.dk/inenglish [25]

Ecolabelling Denmark is responsible for the administration of the only two officially approved ecolabels in Denmark: The Nordic Eco-label and the EU Eco-label.

Panel for professional green procurement, http://www.indkoebspanel.dk [26]

Partnership for green public procurement, 2006. [36]

http://www.mst.dk/Erhverv/Groenne+indkoeb/Indsats den offentlige sektor/Partnerskab offentlige groenne indkoeb.htm

Key2Green, 2003. [37] http://www.key2green.dk/

Product panels, 1998-present. [38]

http://www.mst.dk/Virksomhed og myndighed/Industri/Groenne+indkoeb/Indsatsen overfor private sektor/Produktpaneler/06030000.htm





Forum for sustainable procurement [73]

A multistakeholder forum working for promoting sustainable procurement in private and public organisations. The forum was launched in May 2011 and will address specific issues in relation to procurement of building, transport and food. Experts groups are initiated. http://www.ansvarligeindkob.dk/

LCA Center Denmark, http://www.lca-center.dk [27]

Partnership for eco-efficient agricultural technologies, Partnership for water, Partnership for mega windmills, Partnership for bio fuels, Partnership for hydrogen and fuel cells and Partnership for cleaner shipping, 2007.

http://www.ecoinnovation.dk/English/Topics/Public private partnerships/ [29]

Business Panel on Climate Change [31]

In September 2007, the Government appointed a Business Panel on Climate Change with the aim of advising the Government in terms of; business activities and branding in connection with COP15, exploiting growth opportunities within the field of climate related solutions, the competitiveness of the business community in relation to a new treaty on climate change, and the roles and responsibilities of the business community and knowledge institutions in terms of handling the challenges of climate change.

The Business Panel on Climate Change was composed of representatives from 12 trade- and interest organizations, 5 educational and research institutions, as well as 20 personally appointed company representatives. The Business Panel on Climate Change held six meetings from October 2007 to March 2009. The result of the panel's work was a "business strategy on climate change", which was published November 2009.

http://www.oem.dk/publikationer/2009/~/media/oem/pdf/2009/2009/SingleTheDanishBusinessStrtegyonClimateChange-low-pdf.ashx

The Danish Energy Saving Trust, March 1st 2010 - (previously the Electricity Savings Trust, 1997-February 2010) [33]

The Danish Energy Saving Trust (Go' Energi) is expanding the activities of the former Danish Electricity Saving Trust with the remit to promote energy efficiency in households, the public sector, and the commercial and industrial sectors for all forms of energy use, other than transport. This should be done through different kinds of market activities including campaigns, dissemination of knowledge, market introductions, etc. An important aspect of the Trust's purpose is that it should coordinate its activities with other actors' actions to promote energy efficiency and energy savings in order to achieve a larger degree of coherence in the Danish energy savings efforts. http://www.savingtrust.dk/

Energy Service Denmark, 2005

Energy Service Denmark is an independent energy advice service run by citizens' based organisations. The aim of the service is to promote behaviour and decision making that result in energy savings and a transition to renewable energy sources. http://www.energitjenesten.dk/index.php?id=1955

Centre for Green Transport, 2009

http://www.fstyr.dk/EN/Vehicle-inspection-and-vehicles/Environmentally-friendly-road-transport.aspx





Partnership for green public procurement, 2006.

http://www.mst.dk/Erhverv/Groenne+indkoeb/Indsats den offentlige sektor/Partnerskab offentlige groenne indkoeb.htm

8. Selected policy instruments or initiatives on resource efficiency presented in more detail

Voluntary agreements with industry

The agreement system has two main objectives. One is to encourage energy-intensive companies to improve their energy efficiency. The other is to ensure that the international competitiveness of energy-intensive companies is retained.

The energy intensive companies get a substantial tax rebate, if they comply with the requirements in the agreement scheme. The companies must be certified in Energy Management (under the DS/EN 16001 standard), make special investigation focusing on improving energy efficiency in the primary production and implement all investments improving its energy efficiency with a simple economic payback time of less than four years.

The agreement scheme today covers the electricity consumption in about 100 energy intensive companies. Read more [77]

Energy efficiency:

The Governments' new Energy Strategy 2050 (February 2011) outlines the specific policy instruments and initiatives. See [60]

Sustainable consumption:

Denmark focuses on sustainable consumption and empowerment of consumers through a number of activities. In 2010, two specific projects were undertaken: a *Nordic expert workshop on sustainable consumption and green lifestyles* [74] was held and a website was developed on *the role of Nordic retailers in sustainable consumption and production* [75].

Website about green initiatives in the Nordic retail sector: http://www.mst.dk/English/SustainableConsumptionandProductionintheNordicRetailSector/

A new political agreement has reserved economic resources for campaigns targeting the citizen and consumers (18 mill. Danish Kroner project).

Plan for new campaigns targeting the citizens/consumers in 2010-2013 is initiated by the Danish EPA.





Green Public Procurement

GPP as a part of a policy for sustainable consumption are supported. Green and sustainable public procurement builds on a voluntary approach in Denmark. Stakeholder dialogue is crucial. Green procurement is seen as a key driver for environmental improvements and cleaner products. The intention is to promote businesses' social and environmental responsibility through Government activities by targeting procurement – covering procurement in public and private business. The target audience is those responsible for procurement in the public sector in addition to professional buyers in the private sector.

Three key areas in which green procurement in Denmark is highly embedded are:

- Partnerships between the Ministry of the Environment and the cities of Copenhagen,
 Aarhus and Odense with outreach to the municipalities (www.gronneindkob.dk)
- ➤ A Forum for sustainable professional procurement, consisting of a partnership of 12 public and private sector organisations, facilitated by the Ministry of the Environment. The Forum are assisting the EPA with implementing a variety of GPP actions, such as conferences, tools, competitions, newsletters, cases, dissemination material to other procurers, network meeting etc. More information here http://www.ansvarligeindkob.dk/
- Inclusion of environmental requirements in common procurement agreements for central government.

GPP will also be implemented through other relevant sector action plans, such as action plans for eco-innovation, green transport, green IT, chemicals, and corporate social responsibility (CSR). The latter is particularly important for the inclusion of ethical/social aspects.

Monitoring and Levels of Uptake of GPP in Denmark

Denmark does not undertake detailed monitoring on the level of uptake of GPP procurement, but uses the EU research study, which showed that 69% of the Danish purchasers know and use the Danish guidance documents for procurement (Miljovejledninger), while if the number of contracts is used as an indicator, the level for GPP is at 46%.

Economic instruments:

Economic instrument and green taxes are used extensively in Denmark. The green taxes in Denmark (de grønne afgifter) is today about 4% of GDP, the highest in the EU. Danish green taxes are not collated in one ecological tax "package" but cover a variety of tax areas. All in all there are 27 different taxes aimed at environmental protection. These can be categorized into environment (15), energy (6), transport (4) and resources (2). Of the total environmental tax revenue, the vast majority is derived from the energy and the transport sectors and the rest is from water, waste, packaging and wastewater, various chemicals and other items.

Energy related taxes include duties on fossil fuels (coal, gas, oil and gasoline), an electricity duty and a CO_2 duty. In addition, a subsidy on production of renewable energy has been in place for many years. Transport related taxes include a green ownership duty, registration duty, insurance duty and a road use duty. In addition to these, the Danish Government aims to introduce road pricing by 2013 for trucks on major state roads.





Information-based instruments:

Denmark uses a wide variety of information-based instruments relevant to resource-efficiency, including campaigns, guidelines, portals, labels, etc.

Denmark would like to highlight the Danish *Waste Prevention Campaign* [76] directed towards citizens and the broad initiative on reduction of food waste which included a mapping of food waste in different sectors and the establishment of an action group with the aim of reducing food waste in the entire food value chain.

Food, mobility and housing are focus sectors in the effort to promote green public procurement in Denmark, which have been implemented through partnerships with six local governments:

http://www.mst.dk/Virksomhed_og_myndighed/Miljoeindsats_paa_tvaers/baeredygtige_indkoeb/

/partnerskab for offentlige groenne indkoeb/

and in a new forum for sustainable procurement:

http://www.mst.dk/Virksomhed og myndighed/Miljoeindsats paa tvaers/baeredygtige indkoeb/.

Since 1996, the Danish Ministry of the Environment has launched more than 50 purchasing guidelines for numerous products and different aspects of procurement. The guidelines are important voluntary tools for implementing green procurement policies in Denmark.

Partnerships and local involvement

There is a tradition in Denmark for local involvement and engagement in environmental and climate actions. The local work on municipal level is important to obtain the measures for a resource efficient and sustainable society – through practical implementation and action.

Denmark also has a strong tradition for cooperation and partnerships between cities - as a way to get commitment and momentum to reach the goals for sustainable and resource efficient cities, e.g. green cities, partnership for green public procurement, 'kurveknækkeraftale', klimakommuner (cities for a better climate).

http://www.gronneindkob.dk/

http://www.dogme2000.dk/

http://www.dn.dk/klimakommuner

http://www.goenergi.dk/offentlig/vaerktoejer-og-beregnere/kurveknaekker

Planning and land use

The *Planning Act (Planloven)* [58] contributes to manage the society's resources through regulation of dense cities, through strict rules on the location of retail and jobs close to public transport, through the planning of transport systems, defines areas for land use, etc. The Planning Act is contributing to the framework for the link between our land management and use of natural resources.

The main purpose is to ensure that planning combines the societal interests in land use and contributes to protecting the country's nature and environment so that society can develop on a sustainable basis in respect for human living conditions and preservation of animal and plant life

It is the municipalities that, within the overall national planning guidelines, plan for the development of the Danish cities and landscapes.





National planning is expressed through submissions, binding guidelines, guidance and intervention in local planning issues and projects that have international, national or regional interest.

The National Planning Report 2010 (Landsplanredegørelse 2010) [59] presents the Government's expectations for local planning in relation to a number of topics: climate, nature, landscape, coast, towns and infrastructure. All national planning proposals are in some way send out for consultation or public debate, and they are public accessible on The Danish Nature & Environment Portal.

9. Topics of interest and information needs for follow up work

Relevant strategic topics:

- The potential for a 7 Environmental Action Programme with key focus on resource efficiency and green economy.
- Discussion of and best practise for framing national resource efficiency programmes including assessment of policy effectiveness.
- Strategic objectives, targets and indicators on resource efficiency within national programmes, including frame for a common structure for monitoring, reporting and knowledge base on resource efficiency policies in Europe.
- Integration of resource efficiency into existing environmental policy frameworks, programmes and policy instruments

More specific topics:

- How to link biodiversity and ecosystem services (in accordance with the EU Council Conclusions on Convention on Biodiversity and decisions on COP10 in particular the strategic plan for biodiversity 2011-2020) to resource efficiency and green economy?
- The potentials of addressing food waste as a mean to optimise resource efficiency with regards to energy use, food production, water usages etc.





10. References

10.1 Facts and figures about the country

[1] Eurostat, 2011 [demo pjan]

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_pjan&lang=en

[2] CIA World Factbook (2009 est.)

https://www.cia.gov/library/publications/the-world-factbook/index.html

[3] Eurostat, 2011 [nama_gdp_c]

http://appsso.eurostat.ec.europa.eu/nui/show.do

[4] Eurostat 2011 [tsieb010]

http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tsieb010 &plugin=0

[5] World Bank, Migration and Remittances Factbook 2011

http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:21352 016~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html

[6] European Commission 2008

http://europa.eu/abc/12lessons/key_dates/index_en.htm visited December 15, 2008

[7] Eurostat, OECD and Total Economy Database

DMC data from Eurostat Database, Material Flow Accounts, and OECD, Population data from Eurostat Database, Population, and The Conference Board — Total Economy Database, September 2010. www.conference-board.org/data/economydatabase/

[8] Eurostat

Material flow accounts, env_ac_mfa, uploaded June 2010

[9] The Conference Board, Total Economy Database, Eurostat

GDP data from The Conference Board — Total Economy Database, September 2010, www.conference-board.org/data/economydatabase/; DMC data from Eurostat Database on Environmental Accounts, and OECD.

[10] Eurostat

Energy statistics, uploaded Oct 2010

http://epp.eurostat.ec.europa.eu/portal/page/portal/energy/data/database





10.2 Resource Efficiency Policy References

[1] Growth with forethought – The Governments Strategy for Sustainable Development. The Danish Ministry of the Environment, 2009. Available in Danish only.

http://www.mim.dk/NR/rdonlyres/BA3FDA05-5C48-462A-9F0E-

7E4F410CC782/0/StrategiforbæredygtigudviklingVækstmedomtanke.pdf

[2] Indicators of Sustainable Development. (The Government's latest updated set of indicators for sustainable development). Danish EPA, 2008. Available in Danish only.

 $\frac{http://www2.mst.dk/databaser/Indikator/BU/2008/Indikatorer%20for%20Bæredygtig%20Udvikling300908.pdf}{}$

[3] Nature and Environment 2002 – Selected Indicators – Sustainable Production and Consumption Patterns. The Danish Ministry of the Environment, 2002. Available in Danish only.

http://www2.mst.dk/common/Udgivramme/Frame.asp?http://www2.mst.dk/udgiv/publikationer/2003/87-7972-875-8/html/kap02.htm

[4] Danish solutions to global environmental challenges -The government's action plan for promoting eco-efficient technology. Danish EPA, 2007. Available in Danish and English. http://www2.mst.dk/Udgiv/publications/2007/978-87-7052-602-9/pdf/978-87-7052-603-6.pdf

[5] Action plan for renewed energy-conservation - Energy conservation and the market. The Danish Ministry of Transport and Energy, 2005. Available in Danish and English. http://ec.europa.eu/energy/demand/legislation/doc/neeap/denmark_en.pdf

[6] An enhanced effort for green procurement in 2008-2009. Danish EPA, 2007. Available in Danish only.

http://www.mst.dk/Erhverv/Groenne+indkoeb/Indsats den offentlige sektor/Indsatsen overfor den offentlige sektor.htm

[7] A visionary Danish Energy Policy 2025. Danish Energy Agency, 2007. Available in Danish and English.

http://www.ens.dk/graphics/Publikationer/Energipolitik UK/Engelsk endelig udgave visionaer e nergipolitikA4.pdf

[8] Green Market Economy. Danish EPA, 2003. Available in Danish only.

http://www2.mst.dk/common/Udgivramme/Frame.asp?http://www2.mst.dk/udgiv/publikationer/2003/87-7972-565-1/html/default.htm

[9] National Waste Strategy 2009-2012 - Part 1. Danish EPA, 2009. Available in Danish only.

http://www.mst.dk/NR/rdonlyres/747FBCE2-A3D4-444F-BF60-

D1747C36516D/0/Endelig1delafAffaldsstrategi200912.pdf

National Waste Strategy '10 - Part 2. Danish EPA, 2010. Available in Danish only.

http://www.mst.dk/NR/rdonlyres/5944D6BF-C455-4A94-A7D1-

9062ED0173A0/0/Affaldsstrategi10.pdf

[10] Strategy for Education for Sustainable Development 2005-2014. Danish Ministry of Education, 2009. Available in Danish and English.





http://www.uvm.dk/~/media/Publikationer/2009/Tvaergaaende/Baeredygtig%20-%20eng/uvm_publ.ashx

[11] Food production, the nature and the environment. Ministry of Food, Agriculture and Fisheries, 2004. Available in Danish only.

http://www.fvm.dk/Admin/Public/DWSDownload.aspx?File=Files%2FFiler%2FPublikationer%2FPjecer0405%2Ffvm_natur_miljoepol.pdf

[12] Pesticide Action Plan 2004-2009. Danish EPA 2003. Available in Danish only.

http://www.mim.dk/NR/rdonlyres/4C4044D9-A25C-476F-A1BE-

332F148B9A31/0/pesticidplan.htm

[13] Action plan on Corporate Social Responsibility. Danish Commerce and Companies Agency, 2008. Available in Danish and English.

http://www.eogs.dk/graphics/Samfundsansvar.dk/Dokumenter/Action_plan_CSR.pdf

[14] More bicycles on safe road in the state – the bicycle strategy. Ministry of Transport and Energy, 2007. Available in Danish only.

http://www.trm.dk/graphics/Synkron-

Library/trafikministeriet/Publikationer/2007/Cykelstrategi.pdf

[15] Law on environmentally friendly design of energy using products. The Danish Ministry of Climate and Energy, 2008. Available in Danish only.

https://www.retsinformation.dk/Forms/R0710.aspx?id=116811

[16] Action plan on green IT in Denmark. Ministry for Science, Technology and Development, 2008. Available in Danish only.

http://www.itst.dk/filer/Publikationer/Handlingsplan-for-groen-it-i-

Danmark/pdf/Handlingsplan for groen it i Danmark.pdf

[17] Green Growth. The Danish Ministry of the Environment 2009. Available in Danish only.

http://www.mim.dk/NR/rdonlyres/D5E4FC9A-B3AC-4C9A-B819-

C42300F23CCA/0/GROENVAEKST 2904rapporten.pdf

[18] Environment and Health are Interconnected - Strategy and Action Plan to protect the health of the population against environmental factors. Danish EPA, 2003. Available in Danish only. http://www2.mst.dk/udgiv/publikationer/2003/87%2D7972%2D755%2D7/pdf/87-7972-756-5.pdf

[19] A Green Transport Policy. Ministry of Transport, 2009. Available in Danish only.

http://www.trm.dk/graphics/Synkron-

Library/trafikministeriet/Publikationer/2009/En groen %20transportpolitik.pdf

[20] A Danish Energy Deal 2008-2011 (Energiaftale 2008-2011). Danish Energy Agency, 2008. Available in Danish only.

http://193.88.185.141/Graphics/ENS Energipolitik/Energiaftalen/energiaftale-21022008 final.pdf

[21] The purpose of green public procurement. On the Danish EPA website. Available in Danish only.





http://www.mst.dk/Erhverv/Groenne+indkoeb/Indsats den offentlige sektor/Formålet+med+off .+grønne+indkøb/05010000.htm

2011 survey of resource efficiency policies in EEA member and cooperating countries - DENMARK

[22] Environmental guidelines for public buyers. Website in Danish only. http://www.gronindkobsportal.dk

[23] Guide to environmentally friendly purchasing. Website in Danish only. www.miljoevejledninger.dk

[24] Strategy for reduction of energy consumption in buildings. Danish Enterprise and Construction Authority, 2009.

http://www.ebst.dk/file/43439/reduktion-af-energiforbruget-i-bygninger.pdf

[25] Eco-labelling Denmark, 1998 http://www.ecolabel.dk

[26] Panel for professional green procurement, 2004 http://www.indkoebspanel.dk

[27] LCA Center Denmark, 2002 http://www.lca-center.dk

[28] Information Centre for Environment & Health, 2003 http://www.miljoeogsundhed.dk

[29] Partnership for eco-efficient agricultural technologies, Partnership for water, Partnership for mega windmills, Partnership for bio fuels, Partnership for hydrogen and fuel cells and Partnership for cleaner shipping, 2007

http://www.ecoinnovation.dk/English/Topics/Public private partnerships/

[30] Council for Social Responsibility, 2009

[31] Business Panel on Climate Change, 2007

[32] Centre for Green Transport, 2009

[33] The Danish Energy Saving Trust, 2010 – present (previously the Danish Electricity Saving Trust, 1997 – 2010) http://www.savingtrust.dk/about-the-trust

[34] Energy Service Denmark, 2005 http://www.energitjenesten.dk

[35] Danish Portal for Education for Sustainable Development, 2009 http://www.ubuportalen.dk

[36] Partnership for green public procurement, 2006

http://www.mst.dk/Erhverv/Groenne+indkoeb/Indsats den offentlige sektor/Partnerskab offentlige groenne indkoeb.htm





[37] Key2Green, 2003

http://www.key2green.dk/

[38] Product panels, 1998-present

http://www.mst.dk/Virksomhed og myndighed/Industri/Groenne+indkoeb/Indsatsen overfor private sektor/Produktpaneler/06030000.htm

[39] The Danish Government Centre for CSR, 2007-present http://www.samfundsansvar.dk/sw37003.asp

[40] "One tonne less" (The CO2 campaign), 2007 (ended in 2009) http://www.1tonmindre.dk

[41] Green Responsibility – Make a difference, 2005 (ended in 2007) http://www.groentansvar.dk

[42] Greenbiz09 campaign, 2009 http://www.greenbiz09.dk

[43] Employee campaign, 2007 – present http://www.elsparefonden.dk/offentlig-og-erhverv/vaerktoejer-og-beregnere/medarbejderkampagne

[44] People and Profit (Overskud med Omtanke), 2005-2008 http://www.csrgov.dk/graphics/publikationer/CSR/Final%200m0%20in%20WB%20edition-ny.pdf

[45] The Raw Materials Act. Råstofloven, Lovbekendtgørelse nr. 950 af 24. september 2009 om råstoffer. www.retsinfo.dk. in Danish.

[46] Danish Water Supply Act. Vandforsyningsloven, LBK nr 635 af 07/06/2010. www.retsinfo.dk. in Danish.

[47] Water sector Act. Vandsektorloven, LOV nr 469 af 12/06/2009. www.retsinfo.dk. in Danish

[48] Decree on Drinking Water. Drikkevandsbekendtgørelsen, BEK nr 1449 af 11/12/2007 www.retsinfo.dk. in Danish

[49] Act on Payment Rules (act under revision). Lov om betalingsregler, LBK nr 633 af 07/06/2010 www.retsinfo.dk. in Danish

[50] Water Supply Act. Vandforsyningsloven, LBK nr 635 af 07/06/2010 www.retsinfo.dk. in Danish

[51] Drinking Water Action Plan. Handlingsplan til sikring af drikkevandskvaliteten http://www.naturstyrelsen.dk/NR/rdonlyres/1C117203-985E-4A5C-8FFC-A91C65D31D8A/0/Drikkevandshandlingsplan.pdf. in Danish.

[52] Danish Forest Act. Skovloven. LBK nr 945 af 24/09/2009 www.retsinfo.dk. in Danish





[53] The Danish National Forest Programme. Danmarks nationale skovprogram http://www2.sns.dk/udgivelser/2002/87-7279-452-6/danmarks nationale skovprogram.pdf (Danish)

2011 survey of resource efficiency policies in EEA member and cooperating countries - DENMARK

http://www.naturstyrelsen.dk/NR/rdonlyres/6BA78078-1188-494B-841E-EF89ECF0C064/13461/dnf eng.pdf (english)

[54] Action plan for near- to- natural forest management in state forests. Handlingsplan for naturnær skovdrift I statsskovene

http://www2.sns.dk/Udgivelser/2005/87-7279-603-0/pdf/87-7279-602-2.pdf . in Danish

[55] Strategy for Sustainable Forest Management, Ministry of the Environment, 1994

[56] Strategy for Natural Forests and other Forest Types of High Conservation Value in Denmark, The Danish Forest and Nature Agency, 1994 Danish Forestry statistics (Skove og plantager 2006) http://www.sl.kvl.dk/upload/sp2006.pdf. in Danish.

[57] Danish Forestry statistics (Skove og plantager 2006) http://www.sl.kvl.dk/upload/sp2006.pdf. in Danish.

[58] The Planning Act. Planloven. LBK nr 937 af 24/09/2009 www.retsinfo.dk. in Danish

[59] National Planning Report 2010. Landsplanredegørelse 2010 http://www.naturstyrelsen.dk/NR/rdonlyres/5E513CC8-318A-4992-AB22-4C22AD55F659/0/Landsplan2010endelig.pdf. in Danish

[60] Energy Strategy 2050, 2011. Available in English.

http://www.kemin.dk/en-

US/climateandenergypolicy/dkpolicy/EnergyStrategy2050/Sider/Forside.aspx

[61] Governments' Work Plan: Denmark 2020, 2010. Available in English. http://www.stm.dk/ a 2821.html

[62] Sustainable Transport

http://www.trm.dk/en/publications/2008/sustainable+transport/~/media/Files/Publication/Englis h/Sustainable%20transport%20TRM.ashx

[63] Energy saving efforts in buildings

http://www.ens.dk/en-US/ConsumptionAndSavings/Buildings/Sider/Forside.aspx

[64] Energy savings efforts in the public sector

http://www.ens.dk/en-US/ConsumptionAndSavings/Public Sector/Sider/Forside.aspx

[65] The government's action plan for promoting eco-efficient technology 2010-2011

[66] Nature Protection Act

[67] Environmental Protection Act (Miljøbeskyttelsesloven)





[68] Act on Environmental Objectives (Miljømålsloven)

[69] Contaminated Sites Act (Jordforureningsloven)

[70] Guidance for public procurement of legal and sustainable timber (Generel vejledning om indkøb af træ)

2011 survey of resource efficiency policies in EEA member and cooperating countries - DENMARK

[71] Summer Cottages Act (Sommerhusloven)

[72] The Danish Commission on Climate Change Policy http://www.klimakommissionen.dk/en-US/Sider/Forside2.aspx

[73] Forum for sustainable procurement http://www.ansvarligeindkob.dk/

[74] Nordic expert workshop on sustainable consumption and green lifestyles, 2011 http://www.mst.dk/Virksomhed og myndighed/Miljoeindsats paa tvaers/baeredygtige indkoeb /The role of Nordic countries.htm

[75] The role of Nordic retailers in sustainable consumption and production, 2011 http://www.mst.dk/English/SustainableConsumptionandProductionintheNordicRetailSector/

[76] Waste Prevention Campaign, 2010 http://www.brugmerespildmindre.dk/

[77] Energy efficiency efforts in industry:

http://www.ens.dk/en-US/ConsumptionAndSavings/Industry/Sider/Industry.aspx

[78] Agreement on Energy Saving Initiatives, 2005

http://www.ens.dk/en-

US/ConsumptionAndSavings/Energy Saving Policies/2005 Energy Agreement%20and Action Pl an/Sider/Forside.aspx







Resource efficiency in Europe

Policies and approaches in 31 EEA member and cooperating countries

Further information about resource efficiency policies, including the analytical report and thirty-one detailed country profiles, are available on the EEA website:

http://www.eea.europa.eu/resource-efficiency

Selected examples of resource efficiency policies, instruments or targets presented in the thirty one detailed country profiles

