

## Denmark Case Study

### Analysis of National Strategies for Sustainable Development

This document is one of 19 country case studies that form the knowledge base for a synthesis report entitled “National Strategies for Sustainable Development: Challenges, Approaches, and Innovations Based on a 19-country Analysis.” The synthesis report and country case studies are available electronically at:

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#### Notice to Reader

Information in the country case studies was obtained primarily from publicly available sources (e.g., Internet and literature sources) and, where possible, was supplemented through interviews with government officials. The information was up-to-date as of May 2004. Every effort was made to ensure that official national sustainable development focal point contacts had the opportunity to provide feedback on the research, but such contacts were not successful in all cases. **This case study is in an unedited, working paper format.**

These case studies are made publicly available to add to the national sustainable development strategy knowledge base. The project’s research partners accept responsibility for any inaccuracies or omissions. The views expressed in this working paper do not necessarily represent the views of the funding partners.

The research partners welcome your comments on this country case study. Please e-mail comments to Darren Swanson at [dswanson@iisd.ca](mailto:dswanson@iisd.ca).

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## 1 Introduction: Country Description

The constitutional monarchy Denmark, the smallest of the Scandinavian countries, is located in Northern Europe, bordering Baltic Sea and North Sea, on a peninsula north of Germany (Jutland). It also consists of two major islands (Sjælland and Fyn) and several smaller islands in the Baltic Sea. The 43,096 sqkm of the country are almost entirely low-lying, and more than 65 % of the land area are cultivated. The North Atlantic Drift usually ensures a relatively mild climate, but occasionally ice closes the Baltic Sea, thus cutting off warmer waters and making the winter quite severe. About 25 % of the 5.38 million inhabitants live in greater Copenhagen. (CIA 2003)

### *Economy*

After the Second World War, Denmark developed from an agricultural into a modern industrial economy with a vast variety of products and a prominent service sector. In addition to the traditional sectors with large companies in the shipping, meat, trade and brewery sectors mergers led to bigger companies in engineering, pharmaceutical, agricultural machinery, and tourism and food industries. The financial market grew just as much in recent years. At the same time, the basic structure of the economy, dominated by small and medium-sized enterprise, has remained largely intact. Denmark ranks very high among European countries in terms of the main economic indicators, and was among the world's ten richest countries in 2002 based on per-capita GDP. The GDP approx. \$ 155,3 billion (2002) is composed of agriculture 3 %, industry 26 % and services 71 %. Denmark is a net exporter of food and energy. (CIA 2003, FFOG 2003)

Since the beginning of the '90s, Denmark's GDP has grown faster than the EU average. Despite the harsh global economic climate, Denmark managed to achieve approx. 2.1 % growth in 2002. The unemployment rate has estimated at 5.1 %. There is a shortage of qualified labour in certain parts of the country and in certain professions, including engineers and medical staff. At 1.9 %, inflation is slightly higher than the average for the Euro zone. (CIA 2003, FFOG 2003)

In the beginning of 1998, Denmark was successful in meeting the Maastricht criteria and thus fulfilled the conditions for the introduction of the Euro. But the Danes decided not to join the 12 other EU members with the single currency in September 2000. The Danish Krone continues to exist.

### *Society*

Denmark is a unified state divided into 14 counties and two boroughs (Fredericksberg and Copenhagen). Faroe Islands and Greenland are part of the Kingdom of Denmark but are self-governing overseas administrative divisions.

Legislative power is held by the unicameral Parliament or Folketing (179 seats, including two from Greenland and two from the Faroe Islands). The members are elected by popular vote to serve four-year terms. Executive power is exercised by the reigning monarch Queen Margrethe II, whose reign began in 1972, through her ministers, led by the prime minister, who is the head of Government. The cabinet of ministers is responsible to the Folketing and must have the support of the majority of that body. The last Parliamentary election in 2001 resulted in a liberal-conservative coali-

tion. Prime Minister Anders Fogh Rasmussen heads the minority Government. The next election is to be held by November 2005. Christian Mejdahl of the liberal Party has been President of the Folketing since March 2003. The judicial power is held by the Supreme Court. Its judges are appointed for life by the monarch. (CIA 2003, FFOG 2003)

The national language is Danish. The life expectancy of total population is 77.1 years (male: 74.48 years, female: 79.87 years) (2003 est.). (CIA 2003) With a Human development index (HDI) of 0.93 in 2001, Denmark is ranked 11<sup>th</sup> out 175 countries classified (UNDP 2003, p. 237).

### *Environment*

Current environmental issues are air pollution, mainly from vehicle and power plant emissions, nitrogen and phosphorus pollution of the North Sea, drinking and surface water becoming polluted from animal waste and pesticides. The use of fertilizers and pesticides in intensive conventional agriculture is causing problems for Denmark due to nutrients being washed into ground water and Baltic Sea. (CIA 2003)

In 1992, Denmark was the first country in the EU to introduce a tax on CO<sub>2</sub>, and it now generates almost 20 % of its electricity needs from wind power. Denmark is also one of the world's leading countries in the use of combined heat and power generation as well as in harnessing energy from biomass. Following the ratification of the Kyoto Protocol, the Government is confident to achieve the required reduction in CO<sub>2</sub> emissions (21 % compared to 1990) by 2008-2012. (CIA 2003, FFOG 2003) But there are doubts. A report from the Commission of the European communities concerning the monitoring mechanism of community greenhouse gas emissions (November 2003) says that Denmark would miss the reduction target with the existing policies and measures by a wide margin, achieving +38 % instead of -21 % in GHG emissions in 2010. (EC 2003:12) The final situation in 2012 will depend on new measures set up in the adjusted strategy "Denmark's Greenhouse Gas Inventories 1990-2001 and Projections 2002-2017" published in November 2003. (EPA 2003)

The Danish Government's environmental policy is characterized by its pragmatic approach to the challenges of a modern industrial society. The present liberal-conservative Government's Programs focuses on growth, welfare, renewal. In order to save the existing model of the welfare state the new priorities include impeding the growing tax burden, reforming the health system, pensions and maternity benefits and even financing additional expenditure in these areas through cuts in development aid and in environmental programs. (CIA 2003, FFOG 2003)

After the new Government came into power replacing the social democratic one, the Danish Environmental Protection Agency announced at its homepage fundamental changes: "In the future, the Government will let market-based instruments and the principle of improved cost-effectiveness guides its environmental policy." Whereas Svend Auken the former Minister, wanted Denmark to be an environmental pioneer, and was less concerned about the costs, the new Minister for the Environment Hans Christian Schmidt stresses cost-efficiency. Among the most important policy changes were the cancellation of several large offshore wind farms, and large cuts in economic support for environmental projects in Eastern Europe. Instead, the new government wants to support so-called joint implementation projects in that area, whereby the

Danish government or Danish companies pay to reduce emission of greenhouse gases abroad, and the reduction goes towards meeting the Danish Kyoto target.

Denmark belongs to all major international economic bodies such as OECD, WTO, IMF and the World Bank.

*Note on sources*

This study is based on the analysis of Government reports, a research result supported by the German Government and NGO statements.

**Table 1: Profile by Selected Indicators**

<b>Indicator</b>	<b>Value</b>
Human Development Index (and ranking)	0.93 (11th)
Human Poverty Index (and ranking)	9.1 (5 <sup>th</sup> )
Environmental Sustainability Index (and ranking)	56.2 (31st)
GHG Emissions	67 mill. tonnes in CO <sub>2</sub> equivalents (2 % decrease in 1990-2000), 12.45 per capita
GDP and GDP per capita	\$ 155,3 billion, \$ 28.900 per capita

Source: CIA 2003, UNDP 2003, Yale University and Columbia University 2002, Zittel and Treber 2003

## **2 Content of the National Sustainable Development Strategy**

Denmark's point of view on sustainable development is characterized by the World Commission on Environment and Development (better known as the Brundtland Commission). Sustainable development is a "*Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*" It further reads: "*In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations.*" (Brundtland-Report 1987, chapter I.3, p. 26)

The Government presented its National Strategy for Sustainable Development (NSSD) in April 2002. In August 2002, "Denmark's national Strategy for sustainable Development: A shared Future – balanced development" and the first "Indicator Report" were published before the World Summit on Sustainable Development in Johannesburg (WSSD) in 2002. The Strategy is comprehensively sectoral, cross-sectoral and shows a multi-dimensional approach, whereas the national poverty is of secondary importance referring to an affluent society. The Strategy seems to be an integrated approach for all appropriate policy areas.

The Denmark's Sustainable Development Strategy is based on eight core objectives or principles.

**Box 1: Denmark's Core Objectives for Sustainable Development**

1. The welfare society must be developed and economic growth must be decoupled from environmental impacts.
2. There must be a safe and healthy environment for everyone, and we must maintain a high level of protection.
3. We must secure a high degree of bio-diversity and protect ecosystems.
4. Resources must be used more efficiently.
5. We must take action at an international level.
6. Environmental considerations must be taken into account in all sectors.
7. The market must support sustainable development.
8. Sustainable development is a shared responsibility and we must measure progress.

Source: DG 2002

The main part of the Strategy is divided into three sections - Cross-cutting Activities, Sectors, and Measures and Knowledge.

The chapter on Sectors focuses on the efforts to integrate environmental considerations into seven selected sectors - agriculture and fisheries (under the heading of "food production"), forestry, industry, trade and services, transport, energy, and urban and housing development. The chapter on Cross-cutting Activities deals with important social challenges such as the threat from man-made climate changes, the correlation between the environment and health, more efficient resource consumption and the protection of biodiversity as well as with Denmark's general international activities. This is an obvious reference to the EU's Sixth Environment Action Program. The last chapter Measures and Implementation includes general essential elements as knowledge base, public participation and monitoring. The about 90 Indicators follow the same system (see 3.3). (DG 2002, DG 2002a)

The Danish Government introduced the move towards sustainable development as a long-term process with corresponding objectives and benchmarks within a 20-year time frame. General objectives will be followed up by concrete programs, action plans and initiatives with timely and financially determinations during the time. Therefore, the introduced Strategy does not specify expenditure for the individual areas. After verifying the relationship between benefits and costs of a given initiative decisions will be made in the ongoing macroeconomic prioritisation continuously. (DG 2002, p. 12)

*Strategy Content*

Every chapter contains a paragraph on objectives and activities in the future with partly measurable goals, general statements and declarations of intent or announcements of action plans. All ministries are involved in their particular field. Even already appropriate existing programs etc. were integrated into the Strategy e.g. the reduction of the total emission of greenhouse gases by 21 % from the 1990 level in the years 2008 to 2012 or active steps against hazardous chemicals. In 2020, it will not be allowed to market or use any products containing chemicals that entail particularly undesirable effects on health or the environment. (DG 2002, p. 16, 25)

*Coordination and Linkages with Other Strategies or Planning Processes*

A strong linkage exists e.g. between the NSSD and the recently published “Strategy and Action Plan to protect public health against environmental factors”. The including environment and health initiatives are preventive and have been considered to contribute to the NSSD. The developments will be carried out to follow up on the indicators for the relationship between environment and health, in the NSSD. (DG 2003a, p. 11, 63)

Another example is the strategy “A World of Difference - The Government’s Vision for New Priorities in Danish Development Assistance 2004-2008” which translates NSSD chapter “Denmark’s international activities” into concrete planning since June 2003. (Danida 2003)

Two other related examples are: “Denmark’s Greenhouse Gas Inventories 1990-2001 and Projections 2002-2017” was set up to provide measures to reach to Kyoto targets since November 2003. (EPA 2003) In “The Danish Growth Strategy” (August 2002) the Government put forward a goal for consumer policy initiatives in Denmark: information about goods and services and consumer complaints procedures. Denmark’s New Consumer Policy is in power since April 2003. (DG 2003b:9)

*Integration of Sustainable Development Principles*

The NSSD includes economic, environmental and social in a cross-linked way. The main idea is to face economic, environmental and social challenges simultaneously. Future generation should have as favourable opportunities for a good life as people have today. In order to ensure intergenerational equity the following themes were especially pointed out: saving a clean environment, safeguarding resources, enhancing the quality of nature and increase the forest area, halving of CO<sub>2</sub> emissions in Denmark within one generation, and regulating agricultural environmental impacts from nutrients to secure a clean environment for future generations. Also the Strategy included the accessibility and efficient mobility as welfare benefits that must also be secured and developed for future generations through Denmark’s transport policy.

### **3 Institutional and Procedural Aspects of the National Sustainable Development Strategy**

#### **3.1 *Development and Institutional Aspects***

Since 1984 a green majority within the Government took into account the environmental preferences within society. But the election campaign in 2001 was dominated by topics immigration and welfare state. The election resulted in a liberal-conservative majority. The new Government continues the sustainable development strategy, although with less determination and lower ambition. It has emphasized to consider policies for SD more from a cost-benefit perspective and has restructured the institutions for policies for SD by splitting the former Ministry for Energy and Environment and letting the part of energy become part of the new, large Ministry for Economy and Business and introducing a new research institute that shall consider policies explicitly from a cost-benefits perspective.

In the '70s and '80s the Danish environmental policy was mainly oriented on pollution issues and end-of-the-pipe strategies. In the '80s and '90s it changed to clean technologies and product design approaches. The Government pursued a comprehensive sustainable development policy, which considers social and global aspects more strongly. At the end of 1998 plans to provide a national sustainable development strategy were made in the Ministry for Environment and Energy, the formal decision was made in 2000. The schedule was tight heading towards the WSSD coming up in 2002. The former Government published its final National Strategy for Sustainable Development in 2001. (GB 2003) Due to the change of Government this Strategy was revised with a focus on economic growth and the cost-effectiveness of environmental protection. It was presented in an abridged version in June 2002. The full text of this Strategy was published in August 2002. It was complemented with a set of Indicators of sustainability. A first update of Denmark's Indicators for sustainable development was published in November 2003. (CSD 2002)

No new institutions were introduced for the initiation of the sustainable development process. It is mainly run by the already existing institutions. The Danish Environmental Protection Agency (EPA) is part of the Danish Ministry of the Environment and has approx. 300 employees in 7 divisions (restructured on 1 Jan. 2004). In 2000 the EPA was assigned to develop a sustainable development strategy and an Indicator system. It also coordinates the social consultation process. Generally, the sphere of operation of EPA is targeting on preventing and combating water, soil and air pollution as well as regulating waste and chemicals.

The Danish Parliament and its parliamentary commissions play a relatively important role because of the tradition of minority governments and the lasting integration of sustainable development topics in the public debate. Additionally close co-operation and co-ordination between members of different committees and parties and international networking improves the integrative treatment of the sustainable development question in the parliament. On the other hand, sustainable development itself is rarely the main issue in co-operations. Also there is no formally institutionalized procedure. Therefore, the sustainable development performance depends on the commitment of individuals. Nevertheless the committees of the parliament played an active role in the run-up of the Johannesburg summit e.g. by public hearings. (GB 2003)

In February 2002, the Government established an Environmental Assessment Institute for four years at least.

#### **The Environmental Assessment Institute (EAI)**

The EAI is an independent institution (of both Denmark's Government and Denmark's parliament) within the Danish Ministry of the Environment employing 15 researchers with a yearly budget of € 1.3 million. Its Strategy maps out the guidelines for how Denmark can fulfil its visions, plans, principles and goals for a sustainable development. The Institute concentrates on achieving a general view of the current and long-term environment situation, both in Denmark and globally. Results, knowledge and insight have been disseminating to the public and to political decision-makers improving the decision basis for environmental policies. (DG 2003)

The new emphasis on the cost-benefit controversy in Denmark came upon with the appointment of Lomborg as head of the new Environmental Assessment Institute (EAI) in February 2002. Lomborg is the author of the book *The Skeptical Environmentalist* published 2001. He accused the environmental movement of making false claims about the state of the world, which he calls the 'litany'. Lomborg, who is Associate Professor of Statistics at the University of Aarhus in Denmark, has been in the focus of discussion since the publication of an earlier version of the book in Danish in 1998. Critics blame him for using controversial data and statistical methods for cost-benefit analysis and scenario-calculations in order to underpin the Governments downturn of environmental policies. One of the shortened conclusions in the book is if the world focuses primarily on the economy and, if only we get rich enough, all problems will automatically be solved. Most of the models that Lomborg accepted uncritically make no attempt to quantify the benefits of responding to climate change, they only calculate the costs.

Concerning civil society there is one outstanding group to introduce.

#### **The Danish 92 Group**

In 1991 the Danish 92 Group, a coalition of 20 Danish NGO's related to environmental issues, was established in order to co-ordinate NGO's preparations of UNCED in Rio de Janeiro, 1992. Continuing its common activities the Danish 92 Group is contributing to the political process on sustainable development, e.g. Agenda 21, UNCSD, WSSD, UNFF. Other areas are multilateral environmental conventions, e.g. climate change, biodiversity etc., linkages between trade, environment and development, e.g. the activities of WTO. The Government supports the Danish 92 Group partly financially.

On the local level, people are involved in sustainable development movements. There is the ambitious plan that most municipalities in Denmark shall develop a local strategy for sustainable development and a local set of indicators within one year. These strategies promoted the spreading of the idea of sustainable development in the general public. Local Agenda activities are of great importance as well. About 70 % of the Danish municipalities are working on a LA21 or similar initiatives. Some regional co-operations between municipalities developed in the last few years solving important sustainable development problems, e.g. public transport, water supply and waste management. (DG 2002, GB 2003, CSD 2002)

### **3.2 Participation Aspects**

At the end of 1998 in the Ministry for Environment and Energy made plans to provide a national sustainable development strategy, the formal decision was taken in 2000. The former Government published its final NSSD after a public hearing process in June 2001. The hearing process itself lasted at least four months. "All interested parties" were invited to make constructive suggestions. Within this time, a rather ineffective internet consultation took place and about 180 activists participated by mail. Due to the comprehensive issues the time frame has to be estimated as too short for an ap-



propriate discussion. The set of Indicators was a result of a public hearing involving more than 250 major Danish and international NGOs. (GB2003, CSD 2002)

The consultation process is characterized by the tradition of a complex communication culture. The Minister of the Environment supports the organization of meetings and hearings by different groups of participants financially. Prominent political personalities attend these meetings. Since the mid '90s, a more formalized "horizontal communications regimen" exists including all groups and levels of society. The Government runs several programs for the debate on sustainability. 150 so called "green guides" help to develop the Strategy on the local level. The funding program for the green guides and most of the local environmental and sustainability initiatives was reduced by the new government two years ago. (DG 2002, GB 2003, CSD 2002)

NGOs participate occasionally in the design of national sustainable development policies occasionally. "Danmarks Deklarationen", a result of several public meetings and a wide co-operation between several Danish NGOs including the major driving force, the Danish 92 Group, was of special importance. The declaration points out objectives to inspire the Danish Government to strengthen public participation. The Danish 92 Group was actively involved in the national preparations for the WSSD. NGOs participate regularly in local environmental impact assessment projects and occasionally in national environmental impact assessment projects. The Danish Government provides financial and technical assistance to support individuals, groups and institutions contributing to sustainable development. (CSD 2002)

Private enterprises are considered to be key actors in achieving sustainable development in Denmark. Therefore it is essential that companies take an active part in the efforts to improve the environment and contribute to green industrial development (see Working Group on Green Industrial Strategy on: [www.em.dk](http://www.em.dk) prepared for the WSSD) not without having vested interests on promising new business fields and on keeping up with environmental and social issues in LA21 initiatives. Another initiative preparing for WSSD is the "Nordic Partnership" that gathers a network of 15 large Nordic businesses in working together to develop a fundamentally new business model for sustainable development. Also the trade unions are present. Initially articulating sceptically (fearing job destruction by an integrative process) meanwhile trade unions follow the idea of increasing the enterprise's ecological competences together with employee's qualifications. (CSD 2002, GB 2003)

Special emphasis should be given to Consensus Conferences in general organised by the Danish Board of Technology (DBT) and Product Panels (goal-oriented debates between lobby groups for the several industries) prepared by the Danish Ministry of the Environment. All these panels will lose their support next year and no new panels will be put into action. The next Consensus Conference is scheduled for 24-28 May 2004 in Copenhagen. The conference is an initiative of the Environmental Assessment Institute. Nine leading economists will gather to discuss a list of ten most pressing global problems: rating climate change, infectious diseases, global conflicts, education, financial instability, government and corruption, hunger and malnutrition, sanitation and water as well as state subsidies and trade barriers. The conference this year is different from those in previous years. Usually, there was a broad representation of opinions, not only a couple of hand picked experts. There will be also an "anti conference" organised by the Ecological Council this year. (German Bundestag 2003)

### 3.3 *Monitoring Aspects*

The key actor for building and transporting the NSSD is the Danish Environmental Protection Agency, see chapter 3.1. A set of Indicators was discussed in the public in May 2002 and were reviewed and adjusted in November 2003 by the EPA.

In order to make correct decisions, the Government will use the best available knowledge, so that objectives are reached in the most cost-effective way. It will continuously monitor and report on the progress of implementing the Strategy and achieving its goals. A set of Indicators for each section (Core Objectives, Cross-cutting Activities, Sectors and Measures and Implementation) were established to illustrate progress towards the goals and success of the initiatives. The Indicators will be updated annually and made accessible to the public via Internet. Since November 2003 the revised and updated Indicators have been made available on the Homepage of EPA. The Strategy will be adjusted as required.

The Indicators fall into two parts: a) An overall set of Key Indicators which describe developments and results in relation to the Strategy's 8 overall objectives and principles. This set comprises 14 Indicators and b) a detailed, specific set of Indicators which address individual action areas, describing developments and results in relation to some of the Strategy's targets and activities. This set comprises 90 Indicators.

**Table 2: The Table shows 14 Key Indicators of the Core Objectives.**

Main Objectives and principles	Key Indicators
1. The welfare society must be developed and economic growth decoupled from environmental impacts	N1. GDP per capita N2: Decoupling illustrated by environmental impacts for 4 factors (greenhouse gases, runoffs of nutrients into the sea, emissions of acidifying compounds and emissions to air) in relation to GDP N3. Genuine Savings N4. Employment analysed by age group
2. There must be a safe and healthy environment for everyone, and we must maintain a high level of protection.	N5. Average life expectancy (analysed between men and women) N6. Gross emissions in mill. tonnes CO2 equivalents analysed between industry, transport, households, agriculture, and waste N7. Number of chemicals which have been classified
3. We must secure a high degree of biodiversity and protect ecosystems.	N8. Area of natural habitats (deciduous forest, original forest, meadow, dry grassland, moor, and marshland)
4. Resources must be used more efficiently	N9. Resource flows for 3 factors (energy consumption, drinking water consumption, and total waste volume) in relation to GDP
5. We must take action at international level	N10. Assistance funds as a percentage of GNI, in total and analysed between development and environmental assistance, and assistance to neighbouring countries
6. Environmental considerations must be taken into account in all sectors.	N11. and N12. Each year, a number of sectors are singled out and their environmental profiles are illustrated by an index for three selected environmental impacts in relation to developments in the sector in question

7. The market must support sustainable development	N13. Number of eco-labelled products, analysed as the number of trade names
8. Sustainable development is a shared responsibility, and we must measure progress.	N14. Number of EMAS and ISO registered enterprises

Source: DG 2002

The sustainable development process in Denmark profits from the above mentioned communication culture. The Government launches studies, provides financial support to NGOs, local initiatives, Local Agenda 21 activities and organises Consensus Conferences and product panels. Since February 2000 the municipalities have to report about their LA 21 activities at least every four years. The number of counties and local authorities working on Local Agenda 21 is the Indicator for “Public participation and Local Agenda 21” under Chapter “Measures and Implementation”. (DG 2002, GB 2003, CSD 2002)

Monitoring or reporting is highly institutionalised, although there is a lack of exact deadlines for reports on the Strategy. The updates of Indicator’s are announced annually. Anyway, quite a number of steps have been taken. Environmental Impact Assessments (EIA) have been required in projects since 1989. They are already included as a routine part of legislative work in connection with bills and other governmental proposals. EIA rules cover all projects that could effect the environment significantly. The rules are updated regularly, most recently in 1999. In 2004, the Government will present a bill on introducing EIA in connection with preparations of plans and programmes at all authority levels. The EIA rules will be revised in 2005 as a result of the Århus Convention and the consequential changes in the EIA Directive. (DG 2003, chapter 12)

The Indicators for participation and knowledge will provide a base for measuring the success of spreading the ideas of sustainable development in civil society. At the same time the Indicator “Environmental impact assessments of Bills” provides an overview of the number of legislative proposals, which include comments on environmental impacts.

**Table 3: (15.) Instruments and knowledge base**

Objectives and activities	Indicators
Decisions at all levels should be assessed in relation to the environment.	15.1. Environmental impact assessments of bills
The public sector wants to take the lead by, amongst other things, including environmental considerations in procurement policy.	15.2. Proportion of government institutions which have reported a green procurement policy
Training and education will contribute to disseminating knowledge about sustainable development	15.3. Number of schools with Green Flags 15.4. Number of nature guides
We need a solid knowledge base for making the right decisions and prioritising activities. Expenditure on research and development should be increased to a level of about 3 per cent of GDP by 2010.	15.5. Total funds for research and development

**Table 4: (16.) Public participation and Local Agenda 21**

Objectives and activities	Indicators
Local Agenda 21 activities should be further promoted.	16.1. Number of counties and municipalities which have started working with Local Agenda 21

Source: DG 2002; Table 3 and 4.

Concerning a regular participation, the NSSD emphasizes Denmark's ratification of the Aarhus Convention in 2000. That means that all citizens and environmental organisations must have easy access to information, the opportunity to participate in decisions on environmental matters, and to make environmental appeals. This applies to citizens, green organisations, trade associations, and other interest groups. (DG 2002)

The NSSD promised also Action Plans, Programs, and specific initiatives within individual sectors and areas such as the Action Plan on the Aquatic Environment III, an Action Plan for Biological Diversity, a Strategy on Environment and Health, and a report on Green Market Economy. Most of them have already been published or are in the process of development. Information is constantly accessible on a special "Action Program" - Homepage of Danish Environmental Protection Agency.

### **3.4 Implementation Aspects and Specific Initiatives**

The responsibilities for implementation are widely spread within the Government. Sustainable development has profited from the commitment of the political leadership; the Ministry of the Environment, especially from the Minister himself, and the Government in general in the past. Moreover, an influence emerges from the fact that the Ministry of the Environment holds a kind of supervision function (institutionalized oversight) in relation to other Ministries in questions of the sustainable development. It is common consensus that these issues will have an impact on all policies as the Strategy describes.

Local authorities play an important role because of their political weight and relative independence. Therefore, Local Agenda 21 initiatives belong to the key multipliers for sustainable development issues and their implementation. After the WSSD the government published "The World Summit in Johannesburg and Denmark's National Strategy for Sustainable Development" in 2003 – a publication follows up Denmark's National Strategy for Sustainable Development in the context of the Johannesburg World Summit. Accordingly, the Government emphasized that all municipalities and

counties in Denmark will have adopted a Local Agenda 21 Strategy by the end of 2003. In connection with Denmark's Strategy for Sustainable Development, a set up of indicators has been set in order to monitor developments in relation to the initiative areas. (DG 2003, chapter 11)

Denmark is participating in Agenda 21 for the Baltic Sea Region. The Baltic 21 Agenda was adopted by the Ministers of Foreign Affairs in June, 1998 and last revised in 2002. The emphasis of Baltic 21 is on regional co-operation and on the environment and its influence on economic and social aspects of sustainable development. The seven sectors and their leaders are: Agriculture (HELCOM and Sweden), Energy (Denmark and Estonia), Fisheries (IBSFC), Forests (Finland and Lithuania), Industry (Russia and Sweden), Tourism (Estonia, Finland Baltic Sea Tourism Commission) and Transports (Germany and Latvia).

The Government has introduced a wide range of initiatives and measures towards sustainable development. The most recent see below (see Table 4).

However, NGO's within the Danish 92 Group consider that the drawn up NSSD contains indeed a number of good intentions, but far too few concrete ways and means. Agreeing Denmark worked particularly hard to reduce CO<sub>2</sub> emissions coming close to be on track to comply with its Kyoto commitment. But there has been a shift in the climate policy in 2002, since the liberal-conservative Government has taken office. It has carried out massive cutbacks in the subsidies to the development of renewable energy as well as the development of and conversion to cleaner forms of energy systems has slipped down the list of priorities. Now, the focus on global, flexible mechanisms is increasing. (Danish 92 Group 2002)

**Table 5: Selected Sustainable Development Initiatives**

Initiative	Outline
Proposal for a Climate Strategy, February 2003	<p>Process led by Danish Ministry of Finance: Aiming at fulfilling the Danish reduction commitments in the Kyoto Protocol: GHG reduction by 21 % in 2008-2012 compared to 1990 with a strong advice to exploitation of GHG emission trading.</p> <p>Considering flexible mechanisms, i.e. trading in the so-called credits from CO<sub>2</sub> reduction projects in developing countries and in Central and Eastern Europe as well as trading in CO<sub>2</sub> quotas.</p> <p>The costs for society of eliminating excess emissions will be between EUR 135-269 million and EUR 538-673 million per year in the five-year period 2008-2012 – dependent upon the choice of measures. The most expensive initiative would be using domestic measures in the form of extending the use of renewable energy. The most cost-effective initiative would be significant utilisation of flexible mechanisms.</p>

Initiative	Outline
A World of Difference - The Government's Vision for New Priorities in Danish Development Assistance 2004-2008, June 2003	<p>Government presents its vision for political priorities and a long-term framework in Danish development policy and thus the activities during the period 2004-2008, a project of The Royal Danish Ministry of Foreign Affairs (DANIDA), referring to UN Millennium Development Goals adopted in September 2000, addressing five key challenges for the next five years:</p> <p>(1) Human Rights, Democratisation and Good Governance</p> <p>(2) Stability, Security and the Fight Against Terrorism (will support an increasing amount of money: EUR 57.38 million in total. Added is EUR 5.4 million for Iraq, EUR 6.75 million for Sri Lanka and EUR 8.1 million for Gaza/the West Bank appropriated under the bilateral country Programmes; a total increase of EUR 77.62 million.)</p> <p>(3) Refugees, Humanitarian Assistance and Regions of Origin,</p> <p>(4) Environment, (support will be increased by EUR 56.02 million in total, and at the same time EUR 67.5 million of the special environmental assistance will be prioritised for the acquisition of greenhouse gas credits from Clean Development Mechanism Projects (CDM) projects in developing countries.)</p> <p>(5) Social and Economic Development (will reduce the appropriations to the large, professional Danish NGOs by approximately 5% in 2004, increasing to approximately 10% in 2006. The funding thus made available will be re-prioritised to a broader spectrum of NGOs and other new forms of cooperation with NGOs in accordance with the Civil Society Strategy from October 2000.)</p>
Strategy for Health and the Environment, June 2003	<p>Fulfilling the goal: by 2020 no products or goods should be on the market that contains chemicals having particularly problematic effects on health and the environment.</p> <p>One of the objectives is to reduce the negative effects of chemicals.</p> <p>Industry must be made responsible for showing that the production and use of chemicals takes place without harming the environment and human health. Denmark will strive to ensure that chemical substances cannot be marketed if basic knowledge has not been provided by the manufacturers within a certain time limit.</p>
Waste Strategy for 2005-08, 2003	<p>Targeting on recycling of a total of 65 per cent of all waste in 2004, no more than 26 per cent should be incinerated, and no more than 9 per cent should be placed at landfills - based on three fundamental elements: (1) Preventing loss of resources and harm to the environment caused by waste. (2) Decoupling waste generation from economic growth. (3) Achieving cost-effective solutions in its environmental activities through better waste treatment and an efficient waste sector. (led by the Danish Ministry for the Environment)</p>
Pesticide Plan, October 2003	<p>Focussing on significant areas such as food safety and groundwater pollution, including the goal of further reductions in treatment frequency to 1.7 by 2009, Denmark's long-term goal is to develop cultivation strategies that reduce the agricultural sector's dependency on pesticides. (led by the Danish Ministry for the Environment)</p>
Action Plan for biodiversity, 2003	<p>Targeting efforts and contribute to meeting the objective of stopping the loss of biodiversity by 2010. (led by the Danish Ministry for the Environment)</p>
Danish national Forest Program, 2002	<p>Aiming on sustainable forestry, based on near-to-nature-forest management principles, including new forest legislation.</p>

<b>Initiative</b>	<b>Outline</b>
A Nordic Set of Indicators, 2003 for the Nordic Strategy for Sustainable Development, 2001	This project has been carried out by the Danish Environment Protection Agency. The Strategy applies to the sustainability plan for the Baltic Sea Region, "Baltic 21", the Arctic Council, the Baltic Sea Council, the Barents Council, the international finance institutions, and the activities under the EU Northern Dimension.
New initiatives in the energy saving report 2003	Placing priority on cost-effective initiatives for renewable energy and energy savings, on setting the framework conditions for liberalised energy market
Strategic research Programs, 2003	Supporting prioritised initiatives in the Johannesburg Plan. Over the next three to four years, EUR 14.85 million has been allocated to research into renewable energy, EUR 13.5 million to genome research and the relationship between the environment and health, and EUR 7.22 million to endocrine disrupters
Guidelines for public procurement of tropical wood, June 2003	Combating illegal felling of timber and stop Danish imports of illegal timber.
Partnership for the Environment and Industry, 2003	Enhancing market-oriented environmental efforts by Danish business, and through greater dialogue between the authorities and enterprises, transforming sustainability work into competitive advantages. (led by the Danish Ministry of Economic and Business Affairs)
Action Plan for reducing CO <sub>2</sub> -emissions in the transport sector, April 2001	Announcing new objectives and measures for reducing CO <sub>2</sub> -emissions: Reducing CO <sub>2</sub> -emissions from the transport sector by 7 % in 2010 compared to the general growth projections for 2010. This means that the upward trend in the CO <sub>2</sub> -curve will break in 2003 and that CO <sub>2</sub> -emissions in 2010 will be 22 % above 1988-level or approximately 12.2 mill. Tonnes.  Introducing measures and pilot projects relating to each part of the transport chain. But it says as well that not all measures and pilot projects will have a quantifiable effect in 2005 or 2010.  (led by Danish Ministry of Transport in co-operation with the Danish Ministry for the Environment)
Agreements with the automobile industry to improve fuel consumption by vehicles 2003	Aiming to bring down emissions by 60 per cent in 2010 compared to the 1988 level and to reduce the content of particles in the air (estimated 50 % over the next five years).  The Government has earmarked EUR 2.02 million each year for 2004 and 2005 to reduce emissions of particles from heavy vehicles. Other important initiatives include environmental zones, stricter requirements for inspection, and information regarding particle filters for lorry drivers and providers of transport.
Action Plan for "education on sustainable development" 2003	Committing itself to including the concept of sustainable development in all adjustments to education Programs. Sustainable development is thus included in subject development and goals in the Danish Primary and Lower Secondary School, and it will be included as part of the reform of upper-secondary education.

Source: DG 2003

### 3.5 *Summary of National SD Strategy*

The table below summarizes Country's sustainable development strategic initiatives.

**Table 6: Summary of Denmark's National Sustainable Development Strategy**

Aspects	Summary
<b>Content of SDS</b>	
- Typology	- The Strategy is comprehensively sectoral, cross-sectoral and shows a multi-dimensional approach, whereas the national poverty is of secondary importance referring to an affluent society.
- Content	Eight Core Objectives, seven selected sectors and five cross-cutting activities, three overall issues, every objective is linked with one Indicator at least and shows quantified long-term goals.
- Linkages with other strategies and planning processes	High integration status especially referring to environmental policy.
<b>Development Aspects</b>	
- legal basis, state of process	The parliament gave the task of developing a NSSD and an Indicator System to the Danish Environmental Protection Agency (EPA) in 2000, which still coordinates the consultation process; Strategy and Indicators were published in 2002, no law.
- Institutions, responsible agencies	Danish Environmental Protection Agency (EPA) (related to Danish Ministry of the Environment), Department "Staff & Strategy" is responsible for cross-disciplinary functions and strategies.
- Decisions and negotiation	Led by the EPA and the new Government the change in 2001; nevertheless a public consultation process within the parliament, Local Agenda 21, NGO's.
- External Support	No external support.
<b>Participation</b>	
- Coordination	By the EPA
- Inter-governmental actors	EPA, Danish Ministry of the Environment, Environmental Assessment Institute (EAI), Danish Ministry of Economic and Business Affairs, Royal Danish Ministry of Foreign Affairs, inter-ministerial under the led of the Minister of Environment.
- Civil society, NGOs actors	Danish 92 Group, a coalition of 20 Danish NGO's dealing with environmental issues, was established because of UNCED. Local Agenda 21 initiatives, Consensus Conferences. Private economy and trade unions participate, limited consultation time in the Internet in 2001; strong tradition of political participation.
<b>Monitoring, Reporting and Adaptation Aspects</b>	
- Responsibilities & Mechanisms	No (external) independent monitoring and qualified checks; highly institutionalised process; internal monitoring by Danish EPA Legislation & Supervision; core Indicators will be updated annually, most of the other indicators as well. A report will be published and information about other Action Plans or Programs will be available via internet. The first complete update was published in November 2003.
- Compliance mechanisms	No identifiable compliance mechanisms or measures in the case of non-compliance to comply.
- Learning and Adaptation	There is no formal process to respond to the information of the indicators.
- Application of Strategic Environmental Assessment	Bill on introducing environmental impact assessment in connection with preparation of Plans and Programs planned in 2004.
<b>Implementation Aspects</b>	
- Responsibility and coordination	EPA, Danish Ministry of the Environment, Environmental Assessment Institute (EAI), Danish Ministry of Economic and Business Affairs, Royal Danish Ministry of Foreign Affairs; Inter-ministerial coordination led by Minister of Environment.
- Financing and capacity	NSSD will be put in concrete terms as programs, action plans and initiatives with timely and financially determinations during the time. Therefore, the introduced Strategy does not specify expenditure for the individual areas. Decisions will be made in the ongoing macroeconomic prioritisation continuously.
- Communication	Mainly via internet and media, there are always printed versions of reports (1500-



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3000 thousand).

***Specific SD Initiatives***

Strong focus on inventing or finding cost-efficient initiatives. Main focus on Climate Strategy, Waste Strategy, Danish National Forest Program, Pesticide Plan, Action Plan for Biodiversity, Strategy for Health and the Environment and New Priorities in Danish Development Assistance, Action Plan for "Education on Sustainable Development" as well as agreements/partnerships with the private sector.

Introducing Guidelines for Public Procurement concerning tropical wood and Strategic Research Programs.

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