INTRODUCTION - 2002 COUNTRY PROFILES SERIES

Agenda 21, adopted at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992, underscored the important role that States play in the implementation of the Agenda at the national level. It recommended that States consider preparing national reports and communicating the information therein to the Commission on Sustainable Development (CSD) including, activities they undertake to implement Agenda 21, the obstacles and challenges they confront, and other environment and development issues they find relevant.

As a result, in 1993 governments began preparing national reports for submission to the CSD. After two years of following this practice, the CSD decided that a summarized version of national reports submitted thus far would be useful. Subsequently, the CSD Secretariat published the first Country Profiles series in 1997 on the occasion of the five-year review of the Earth Summit (Rio + 5). The series summarized, on a country-by-country basis, all the national reports submitted between 1994 and 1996. Each Profile covered the status of all Agenda 21 chapters.

The purpose of Country Profiles is to:

- Help countries monitor their own progress;
- Share experiences and information with others; and,
- Serve as institutional memory to track and record national actions undertaken to implement Agenda 21.

A second series of Country Profiles is being published on the occasion of the World Summit on Sustainable Development being held in Johannesburg from August 26 to September 4, 2002. Each profile covers all 40 chapters of Agenda 21, as well as those issues that have been separately addressed by the CSD since 1997, including trade, energy, transport, sustainable tourism and industry.

The 2002 Country Profiles series provides the most comprehensive overview to date of the status of implementation of Agenda 21 at the national level. Each Country Profile is based on information updated from that contained in the national reports submitted annually by governments.

Preparing national reports is often a challenging exercise. It can also be a productive and rewarding one in terms of taking stock of what has been achieved and by increasing communication, coordination and cooperation among a range of national agencies, institutions and groups. Hopefully, the information contained in this series of Country Profiles will serve as a useful tool for learning from the experience and knowledge gained by each country in its pursuit of sustainable development.
NOTE TO READERS

The 2002 Country Profiles Series provides information on the implementation of Agenda 21 on a country-by-country and chapter-by-chapter basis (with the exception of chapters 1 and 23, which are preambles). Since Rio 1992, the Commission on Sustainable Development has specifically addressed other topics not included as separate chapters in Agenda 21. These issues of trade, industry, energy, transport and sustainable tourism are, therefore, treated as distinct sections in the Country Profiles. In instances where several Agenda 21 chapters are closely related, for example, chapters 20 to 22 which cover environmentally sound management of hazardous, solid and radioactive wastes, and chapters 24 to 32 which refer to strengthening of major groups, the information appears under a single heading in the Country Profile Series. Lastly, chapters 16 and 34, which deal with environmentally sound management of biotechnology, and transfer of environmentally sound technology, cooperation, capacity-building respectively, are presented together under one heading in those Country Profiles where information is relatively scarce.
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### LIST OF COMMONLY USED ACRONYMS

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<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACS</td>
<td>Association of Caribbean States</td>
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<tr>
<td>AMCEN</td>
<td>Africa Ministerial Conference on the Environment</td>
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<tr>
<td>AMU</td>
<td>Arab Maghreb Union</td>
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<tr>
<td>APEC</td>
<td>Asia-Pacific Economic Cooperation</td>
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<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
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<tr>
<td>CARICOM</td>
<td>The Caribbean Community and Common Market</td>
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<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
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<tr>
<td>CIS</td>
<td>Commonwealth of Independent States</td>
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<tr>
<td>CGIAR</td>
<td>Consultative Group on International Agricultural Research</td>
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<tr>
<td>CILSS</td>
<td>Permanent Inter-State Committee for Drought Control in the Sahel</td>
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<tr>
<td>CITES</td>
<td>Convention on International Trade in Endangered Species of Wild Fauna and Flora</td>
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<tr>
<td>COMESA</td>
<td>Common Market for Eastern and Southern Africa</td>
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<td>CSD</td>
<td>Commission on Sustainable Development of the United Nations</td>
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<td>DESA</td>
<td>Department for Economic and Social Affairs</td>
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<tr>
<td>ECA</td>
<td>Economic Commission for Africa</td>
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<td>ECCAS</td>
<td>Economic Community for Central African States</td>
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<tr>
<td>ECE</td>
<td>Economic Commission for Europe</td>
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<tr>
<td>ECLAC</td>
<td>Economic Commission for Latin America and the Caribbean</td>
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<tr>
<td>ECOWAS</td>
<td>Economic Community of West African States</td>
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<td>EEZ</td>
<td>Exclusive Economic Zone</td>
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<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<td>ESCAP</td>
<td>Economic and Social Commission for Asia and the Pacific</td>
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<td>ESCWA</td>
<td>Economic and Social Commission for Western Asia</td>
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<td>EU</td>
<td>European Union</td>
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<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>FIDA</td>
<td>Foundation for International Development Assistance</td>
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<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
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<td>GAW</td>
<td>Global Atmosphere Watch (WMO)</td>
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<td>GEF</td>
<td>Global Environment Facility</td>
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<td>GEMS</td>
<td>Global Environmental Monitoring System (UNEP)</td>
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<td>GESAMP</td>
<td>Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection</td>
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<td>GHG</td>
<td>Greenhouse Gas</td>
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<td>GIS</td>
<td>Geographical Information Systems</td>
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<td>GLOBE</td>
<td>Global Legislators Organisation for a Balanced Environment</td>
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<td>GOS</td>
<td>Global Observing System (WMO/WWW)</td>
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<td>GRID</td>
<td>Global Resource Information Database</td>
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<tr>
<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome</td>
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<td>IAEA</td>
<td>International Atomic Energy Agency</td>
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<td>ICSC</td>
<td>International Civil Service Commission</td>
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<td>ICSU</td>
<td>International Council of Scientific Unions</td>
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<td>ICT</td>
<td>Information and Communication Technology</td>
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<td>ICTSD</td>
<td>International Centre for Trade and Sustainable Development</td>
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<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<td>UNFF</td>
<td>United Nations Forum on Forests</td>
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<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
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<td>UNICEF</td>
<td>United Nations Children's Fund</td>
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<td>UNIDO</td>
<td>United Nations Industrial Development Organization</td>
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<td>UNIFEM</td>
<td>United Nations Development Fund for Women</td>
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<td>UNU</td>
<td>United Nations University</td>
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<td>WFC</td>
<td>World Food Council</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<tr>
<td>WMO</td>
<td>World Meteorological Organization</td>
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<td>WSSD</td>
<td>World Summit on Sustainable Development</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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<tr>
<td>WWF</td>
<td>World Wildlife Fund</td>
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<td>WWW</td>
<td>World Weather Watch (WMO)</td>
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CHAPTER 2: INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES

Decision-Making: Denmark’s official development assistance and environmental assistance to the developing countries is administered by the Ministry of Foreign Affairs (Danida). The Danish Parliament gave its consent to a new Strategy for Development Co-operation, called “Partnership 2000”, in October 2000. Following a change of Government in November 2001, a thorough review of Danish development assistance and environmental assistance to developing countries has been undertaken with a view to achieving more focus and efficiency. Alleviation of poverty through the promotion of economic growth and social development remains the overriding objective of Danish development assistance.

Programmes and Projects: Danish development co-operation is concentrated on a limited number of developing countries (at present 15 programme countries). In the future, assistance – including environmental assistance – will be further concentrated on promoting sustainable development in recipient countries through poverty-oriented economic growth based on long-term national strategies for poverty reduction. Critical investments in education, health, and infrastructure will be given priority, and there will be an increased emphasis on promoting the role of women and furthering human rights and democratisation. An emphasis will also be put on the development and promotion of the private sector as an engine for growth. Strengthening the private sector and the framework conditions for its activities is decisive for attracting the necessary investments to ensure sustainable economic growth. This includes increased participation in international trade on the part of the developing countries. Denmark will support the trade policy interests and capacity of the developing countries in order to ensure that the poorer countries can be better and more quickly integrated into the global economy. Danish assistance for these purposes will be strengthened in both bilateral and multilateral co-operation.

Concern for the environment is of crucial importance for poverty reduction and, at the same time, is a discrete goal for the Danish development policy. As concerns assistance directly related to the environment, Denmark in 1993, as a follow-up to the Rio Conference, established an additional grant facility for disaster relief and environmental assistance to: Central and Eastern Europe; the developing countries; and the Arctic area. In accordance with a framework strategy for the environmental facility approved in 1996, the assistance is concentrated on Southern Africa and South East Asia. The aim is to: promote sustainable utilisation of natural resources and conservation of the nature; prevent and limit air, water, and soil pollution; and promote sustainable use of energy. Specific environmental programmes and projects aim at meeting the needs of recipient countries and supporting their own efforts to develop and implement environmental policies. In recent years focus has increasingly been on supporting the implementation of international environmental conventions and agreements. Support for the multilateral development institutions, including: the UN system; international financials institutions; and the European Union development programme, forms a central element of Danish development policy. Each organisation is evaluated on a regular basis to see if it measures up in focus and efficiency and in attaining its stated goals. The Danish voluntary contributions to the organisations reflect this evaluation. The UN further plays a central role in the global coalition against terrorism, and Denmark actively supports this role.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: Denmark is among the very foremost countries in the world with respect to assistance to developing countries’ efforts to reduce poverty and ensure sustainable development. With official development assistance of
approximately 1 percent of Gross National Product (GDP) in 2001, Denmark lies well above the UN goal of 0.7 percent of GDP. Denmark actively supports efforts to increase assistance from other donor countries – including EU Member States – that are currently providing development assistance of less than 0.7 percent of GDP. A first significant step towards this end was achieved when the EU, following a decision by the European Council in Barcelona, at the UN Financing for Development Conference in Monterrey in March 2002, committed itself to collectively reaching an average of 0.39 percent by 2006.

**Cooperation:** See under **Programmes and Projects**.

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CHAPTER 2: INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES - TRADE

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

* * *
CHAPTER 3: COMBATING POVERTY

Decision-Making: The Ministry of Social Affairs and Ministry of Gender Equality is the main coordinating unit in Denmark in the National Strategy to combat poverty and social marginalisation. The Ministry of Foreign Affairs administers issues concerning global poverty.

Programmes and Projects: The national strategy to combat poverty and social marginalisation called “NAPincl 2001/2003” (June 2001) was developed according to the European Council’s decisions in Nice, December 2000. Most important are the social and employment components, but important also are: the trade and industry; health; education; housing; and urban affairs components. The strategy supports a very high participation and employment rate for both men and women, and the overall aim is to ensure that everyone is able to support his or her own family. The main objectives of the strategy are: to increase the employment rate; to enhance financial self-sufficiency and prevent social marginalisation; and to maintain economic security for the individual and ensure the motivation to work.

Status: Absolute poverty does not exist in Denmark. All inhabitants in Denmark are ensured an adequate standard of living by law, and generally there is an equal distribution of income. According to the latest analysis made by the Government, low-income families in Denmark were numerated as families with an available income of less than half the median income. In 1998, 162,100 persons were in the low-income group, which is equivalent to 3.1 percent of the population. However it is generally not the same persons who constitute the group of low-income each year, as there is also a high level of mobility in this group. The Government has appointed a Committee, consisting also of NGO members, to monitor the development and the measures taken for the most vulnerable persons such as homeless and drug addicts and to make proposals for improvements. The Committee shall submit a yearly report to Parliament.

On the global level combating poverty is an issue of high priority as described in Chapters 2 and 37.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

* * *
CHAPTER 4: CHANGING CONSUMPTION PATTERNS

Decision-Making: Government ministries and departments; Parliament; academia; and local authorities are involved in discussions on consumption and production patterns with: industry; consumer groups; NGO’s at large; and the media. Consumer goods are gradually becoming “greener” as consumer organizations have been lobbying to improve their impact. NGO’s have played an extremely important role in including the concept of sustainability in consumption. In June 2001 the former Government published its final National Strategy for Sustainable Development after a public hearing process. This strategy has been revised following the change of Government and published in April 2002. It will be complemented by a set of indicators of sustainability. The strategy will form part of Denmark's contribution to the World Summit on Sustainable Development in South Africa in September 2002. Reductions in energy consumption are given special attention in this strategy. At the national level, a new energy saving act was passed by Parliament in 2000 and new measures to promote energy savings in households and in the public and private sector have been implemented. Different campaigns based on the energy labeling schemes have been conducted and energy subsidies and consulting schemes have been implemented to increase the sale of energy efficient equipment and to reduce electricity consumption. Denmark also applies the EU environmental labeling scheme “the Flower” as well as the Nordic environmental scheme “the Nordic Swan”.

Programmes and Projects: No information available.

Status: Public procurement is gradually being reoriented to account for environmental concerns. This is especially important in Denmark, where the public sector accounts for almost one-third of total consumption. In order to reduce the discharge of sewage, a tax on wastewater was introduced in 1997.

Capacity-Building, Education, Training and Awareness-Raising: Since 1990, a major campaign has been launched as part of the national follow-up to the World Commission's Report on Sustainable Development. It has financed a wide variety of popular activities to promote sustainable consumption patterns, including: local experiments; awareness raising activities; and environmental education. As of the early 1990’s the environmental labeling schemes “the Flower” and “the Nordic Swan” was implemented and a large number of manufacturing companies have been entering environmental management systems as EU’s Eco-Management and Audit Scheme (EMAS) and International Organization for Standardization, ISO 14001. There is also an ongoing policy discussion on consumption and production patterns in Denmark, which has resulted in amendments to national legislation.

Information: The Ministry of Economic and Business Affairs is establishing a consumer database that will give businesses an opportunity to voluntarily inform about themselves and their products or services on the Internet. They may, for instance: inform consumers about how the products have been produced; how the packaging and the product affect the environment; whether the products contain genetically modified ingredients; and etc. Businesses registering may then mark their products or service offers – for instance with a red dot. This will inform consumers that further information about the product or the service is available on the Internet. The Consumer Information has launched a new website on cleaning and the environment with information about tested cleaning and sanitary agents. On this website, the consumers can obtain information about the best, cheapest and most environmentally friendly products. In addition, information and guidance about the environmental impact of various consumption related issues is given in pamphlets and on the Consumer Information homepages on the Internet.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: Together with the EU, Denmark is striving to reach agreement on a ten-year work programme on sustainable production and consumption at the WSSD. Denmark is also within the EU working on the follow up to the sustainable development strategy.

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CHAPTER 4: CHANGING CONSUMPTION PATTERNS - ENERGY

**Decision-Making:** No information available.

**Programmes and Projects:** No information available.

**Status:** From 1988 to 2000 real GDP grew by 27 percent, while gross energy consumption grew by 2 percent. Thus, overall energy efficiency improved almost 20 percent. The increased energy efficiency has mainly been achieved by a remarkable increase in combined production of heat and power and through energy savings. In 2000 more than 54 percent of domestic power supply was co-generated with district heating. The share of total energy demand supplied by renewable energy has grown by 0.5 percentage points in recent years: from 3 percent in 1980 and 6.5 percent in 1990 to 11 percent in 2000. Together with substitution of coal and oil by natural gas this contributed to curbing CO₂-emissions. CO₂-emissions declined by 11 percent from 1988 to 2000. In 2000, 11 percent of the primary energy consumption in Denmark was provided by means of renewable energy (wind, bio-mass and sun). The total primary energy consumption has been almost constant over the last decade. The consumption of electricity has increased.

**Capacity-Building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** Sustainable energy is given special attention within international cooperation. The Minister of Foreign Affairs forwarded the Danish Strategy on Sustainable Energy to Parliament in December 1999. This strategy was prepared in a broad inter-ministerial process in which private organizations also participated. In 1998 alone, Danida granted approximately DKK 650 million towards sustainable energy assistance to developing countries. In the bilateral development assistance, sustainable energy supply has until now been selected as a priority sector in five out of the 15 countries in which Danish support is concentrated. These are: Nepal; Mozambique; Burkina Faso; and Egypt. In the special programme for mixed credits and in the private sector programme sustainable energy plays an important role. The Danish development assistance revolves around environmentally friendly energy technologies. These include: hydro power stations; solar power; wind power; and sustainable firewood. The activities are adjusted to the individual needs and priorities of the developing countries and are implemented through funds that support the commencement of a programme or grants that support national initiatives. Besides the financial assistance, Denmark provides technical assistance based on the know-how that has been achieved within biomass, wind, and solar power at the national level.

Sustainable energy is also given high priority in the Environment, Peace and Stability Facility (EPSF). This facility was established in 1992 as a direct follow-up to the Rio Conference. The good perspectives for giving priority to energy savings is generally stressed in the dialogue with developing countries, inter alia based on the Danish national experiences with for example tariff systems. Sustainable energy supply also has high priority in Denmark’s multilateral development assistance channeled through: the World Bank; UNDP; UNEP; and the Global Environment Facility (GEF). In all these organizations Denmark has actively contributed to place sustainable energy supply and consumption high on the agenda. The objective is to promote sustainable energy policies in the UN-system as well as in the lending policy of the World Bank group with increased focus on renewable energy sources and energy efficiency. In 2000, Denmark exported products and consulting services to a total value of DKK 22 billion within the energy sector. This is a rise of 34 percent over of that it was in 1998.

* * *
CHAPTER 4: CHANGING CONSUMPTION PATTERNS - TRANSPORT

Decision-Making: The Ministry for Transport is overall responsible while the Road; the Railroad; and the Transport and Traffic Safety Agencies are in turn in charge of numerous transport projects, laws and departmental orders. In addition, the Agencies provide the ministry with a sound knowledge base. The Ministry for Transport participates in cross-ministerial working groups on issues regarding: handicapped persons; environmental management and competitiveness in the haulage industry; noise management; and etc. Furthermore, reports on transport issues and proposals for legislation are submitted two relevant Ministries, in particular the Ministries of environment, finance, and taxation for comments. Before adoption proposals for legislation or regulation must go through the cross-ministerial Finance Committee. In addition all new legislation must be evaluated for its environmental and socio-economic impact. The views of a wide range of parties are heard in connection with all legislative initiatives. The EU directive on environmental impact assessment has introduced a more formal procedure for public participation in decision-making concerning a number of transport projects. On a more general policy level, the Ministry of Transport receives input from the Transport Council, which is set up by Parliament to improve transport policy making. As a key-rule, national authorities make decisions on national transport, and the regional and local authorities make decisions on the regional and local transport. The regional and local authorities can set their transport policies within the parameters of national legislation.

Generally, the environmental aspects of the transport sector are regulated by EU legislation. Denmark has implemented the EU legislation in Danish legislation and thus made it part of Danish law. As for tax measures, Denmark introduced in 1997 an annual ownership tax on passenger cars referring to the fuel consumption of the car. This measure will have an impact on the sale of small, fuel-efficient car. The municipalities organize local Agenda 21 activities pertaining to green transport locally. The private sector has no direct influence on: decision-making; planning; or management of transport related issues.

In May 1997, the Government presented a new strategy for support for Eastern Europe. The new strategy includes the setting up of a regional environmental effort integrated across sectors in the Baltic region, where the development of for instance the: energy; industry; agricultural; forestry; and transport sectors must take place on an environmentally sustainable basis.

Programmes and Projects: The Ministry of Transport supports greater inter-modality in the transport system through concrete projects. In co-operation with municipalities “park and ride” and “kiss and drive” facilities are established around the major Danish cities. Similarly, efforts are made to ensure inter-modality in freight transport. The sector programme for the transport area springs from the Agenda 21 recommendations and is part of the implementation of the Baltic Agenda 21 action plan for sustainable transport. Emphasis has been placed on ensuring a long-term effort through the programme. The Ministry of Transport funds projects to establish car sharing and car-pooling. Non-motorized transport has received considerable attention in the 1990s. Currently, a large-scale project to find ways to increase bicycling is going on in the city of Odense.

Status: In 1996, an action plan for traffic safety called “Every Accident is One Too Many” was initiated. The target was to reduce the annual number of fatalities by 75 persons and the number of injured by 960 persons each year up till 2000. This target has largely been met thanks to a number of factors including improved road design, traffic calming measures, and safer cars. Denmark has a uniquely well-developed bicycle infrastructure; bicycling is promoted with bicycle lanes covering the entire country and a well-established tradition for using the bicycle. However, there is a need for constant improvements if bicycling is to remain an attractive alternative to motorized transport. By 2002, the new Copenhagen Metro system will begin to operate, providing a high-classed public transport system for the most traffic-intensive region in the country.

In 2000 the transport sector accounted for 27 percent of the Danish CO$_2$-emission. Leaded gasoline has not been marketed in Denmark since 1994, largely due to taxes on leaded gasoline that advanced the phasing out in relation to the January 1 2000, deadline set by the European Council of environmental ministers for the prohibition of leaded gasoline in the EU. Since 1988, emissions of: NOx have fallen by 34 percent; CO by 25 percent; HC by 29 percent; Particles by 9 percent; and SO$_2$ by 82 percent. CO$_2$-emissions have increased by 22 percent. Emissions from road transport account for more than 90 percent of total emissions from the transport sector. Consequently, the Government concentrates most of its efforts on improving transport efficiency and
reducing damages to the ecosystem in this sector. For passenger cars, emissions have fallen steadily during the period. This trend is mainly due to the introduction in 1990 of catalytic converters for passenger cars. Vans running on gasoline have experienced the same trend since 1994 when catalytic converters became mandatory for these vehicles too. For diesel cars and vans, the reduction in emissions has been more modest. In terms of human health, emissions from diesel vehicles create greater problems than gasoline vehicles. Consequently, stricter emission norms have been adopted by the EU and will be phased in before 2006. Denmark is considering a faster phasing in through the use of filter technology.

In April 2001 the Government published a new Action Plan for reducing CO\textsubscript{2}-emissions in the transport sector. The Action Plan announces new objectives and measures for reducing CO\textsubscript{2}-emissions. The Government’s new objectives is to reduce CO\textsubscript{2}-emissions from the transport sector by 7 percent in 2010 compared to the general growth projections for 2010. This means that the upward trend in the CO\textsubscript{2}-curve will break in 2003 and that CO\textsubscript{2}-emissions in 2010 will be 22 percent above 1988-level or approximately 12.2 mill. Tonnes. The Action Plan introduces measures and pilot projects relating to each part of the transport chain. Not all measures and pilot projects will have a quantifiable effect in 2005 or 2010. The implementation of the action plan is an ongoing process. Expectations of the development in traffic volumes and the energy consumption, as well as expectations of the effect of the individual means and instruments of action may change. It is therefore important that the action plan is continuously reviewed, so as to maintain the aim of the plan. The Danish Ministry of Transport, in co-operation with the Danish Ministry for the Environment, will ensure that such continuous reviews are carried out.

**Capacity-Building, Education, Training and Awareness-Raising:** In connection with the Government’s 2001 CO\textsubscript{2} Action Plan, great care has been taken to involve the public in a preliminary debate about the means and aims of the Government’s policy. A report outlining the basic problems involved in CO\textsubscript{2} reduction in the transport sector and possible scenarios for the future was laid out for debate in 1998. Information and awareness campaigns are usually conducted through the mass media. One example is the education of small children and their parents through activities organized in a special “Traffic club for children”. Danish primary and secondary education curricula include material on traffic safety. In addition, the curricula include a general subject called Nature and Technology, which covers the relation between transport and the environment.

**Information:** In 1997, Denmark introduced a consumer information diagram with information about the fuel consumption of new cars. Display of the diagram is compulsory for all passenger car outlets. In addition, consumers can get information about green transport habits in a booklet published by the Road Safety and Transport Agency and on the web-address [www.hvorlangtpaaliteren.dk](http://www.hvorlangtpaaliteren.dk). Minute to minute data and longer data series on congestion, delays, and traffic pressure in general can be found on the websites of the Road Directorate and the Rail Directorate. Environmentally related data can be found, often in year on year data series on the websites: of the Transport and Traffic Safety Agency; of the Danish Environmental Research Institute; and of the Energy Agency.

Statistics Denmark ([www.dst.dk](http://www.dst.dk)) is the primary gatherer of data on transport and traffic systems in Denmark. Among other activities it conducts the annual Transport Habit Survey based on approximately 16,000 interviews. The Ministry for Transport has a close formalized co-operation with Statistics Denmark and conducts a continuous dialogue with researchers and organizations on the improvement of data quality. Furthermore, the Ministry for Transport co-operates with its agencies and institutions like the Danish National Railway Company (DSB) on collecting relevant data. When new methods for calculating or collecting specific data are needed, the Ministry of Transport often commissions consultancies to develop these methods, as has been the case with the transport-planning tool TEMA 2000. Information regarding traffic conditions and particular levels of pollutants like ozone and smog are collected through e.g. the TRIM programme and communicated to the public through: Traffic Radio by the Danish Broadcasting Corporation; private radio stations; and newspapers.

**Research and Technologies:** Denmark has undertaken thorough studies of the viability of bio-fuels. The conclusion is that bio-fuels provide a very expensive way to solve the pollution problems in the transport sector. As a consequence the Government has chosen to stimulate the development of cleaner fuels through a tax regime that favors cleaner fuels. This has provided an efficient way to phase out e.g. leaded fuels and fuels with a high content of sulphur. The tax regime also helps to hold traffic demand within more sustainable limits. For particles, the aim is a 50 percent reduction by 2010. Thanks primarily to catalytic converters and cleaner fuels, the Government is well underway to reach these aims. To speed up progress on particle-reduction, Denmark.
carries out in-use tests of particulate traps in the city of Odense. During a two-year period in-use performance, filtration rate and urban air quality will be monitored. Initial results are promising and initiatives to further particle-reduction are currently under consideration.

The Danish universities contribute significantly to the national research for better transport systems. At the University of Aalborg and the Danish Technical University in Lyngby faculties are devoted to transport-research covering subjects from road pricing to estimations of traffic demand. In 2000 the Ministry for Transport to focus the efforts in transport research set up a new institution called the Danish Transport Research Institute (DTRI). The task of the DTRI is to strengthen transport research in Denmark so as to create a better foundation for sound policy decisions. The endeavor is to achieve this partly through improved coordination of existing research and partly through expansion of the research efforts and closer links to research and teaching at the universities. A number of other Government institutions such as the National Environmental Research Institute of Denmark are involved in work covering specific aspects of the transport sector.

**Financing:** Since 1997, the Government has funded a large number of municipal projects related to the improvement of bicycling facilities. In turn, many municipalities have increased their investments in bicycling infrastructure. Public transport is encouraged through investment in high-class public transport like: the new Metro for Copenhagen; new trains and train connections for the railways; and fast and reliable bus services. In addition, Parliament voted in 1997 to give DKK 300 million for reductions in fares for public transport. In the preparations for and execution of the “Green Transport Week” local and national NGOs were involved. Generally, green organizations like: the Danish Society for the Conservation of Nature; Greenpeace; and NOAH (Naturvidenskablige OnsdagsAFtener), many of them focusing on transport and the environment, receive a significant part of their funding from the state.

In 1998, investments in transport infrastructure were at approx. DKK 13 billion, which amounted to approx. 1 percent of GDP and 2 percent of the national budget. In approx. 60 percent of public investment in the building of transport infrastructure was outsourced. In questions of public transport and transport infrastructure the Government is seeking a higher share of private investment and contracting. The EU supported the Great Belt and the Øresund Link financially. Research and development of alternative fuels and transport efficiency is partly financed by the Government through the Danish Environmental Agency’s programme for cleaner technology and the Ministry of Transport’s Traffic Fund. Transport research in general received DKK 80 million, of which 10 percent were EU funds and 5 percent came from private financing. The Government does not subsidize supply of fuel. Enforcement of regulations and standards is publicly funded and implemented.

**Cooperation:** In 1998, the European Commission entered an agreement with the European car manufacturing industry (ACEA) on voluntary improvements in the fuel efficiency of new cars. The agreement has been extended to the Japanese and the Korean car manufacturing industry. Denmark supports the ACEA agreement. To facilitate the impact of the ACEA agreement the Government has chosen to favor fuel-efficient cars through a differentiated vehicle tax. Denmark also participates in a wide range of bilateral, regional and international forums and agreements concerning the transportation sector. Regarding aviation, Denmark participates in the work of: the International Civil Aviation Organization (ICAO); the European Union; and the Nordic fora, which aim at reducing the environmental impact of civil aviation. As to carriage by rail, Denmark participates in the work of: the Intergovernmental Organization for International Carriage by Rail (OTIF), the European Union: and the Nordic fora. Finally with regard to road transport issues, Denmark enters into bilateral agreements on a regular basis; participates in the work of the European Union; and the European Conference of Ministers of Transport (ECMT).
CHAPTER 5: DEMOGRAPHIC DYNAMICS AND SUSTAINABILITY

**Decision-Making:** The Ministry of the Interior and Health is the authority that is most directly concerned with demographic issues in Denmark.

**Programmes and Projects:** No information available.

**Status:** The Danish population is 5.3 million. Almost one fifth of the population is under the age of 16 years. Approximately 15 percent of the population is more than 65 years and the number of people within this age group will increase by approximately 30 percent in the coming 15 years. Average life expectancy was in 1999 74.0 years for men and for 78.8 years for women.

**Capacity-Building, Education, Training and Awareness-Raising:** No information available.

**Information:** No information available.

**Research and Technologies:** No information available.

**Financing:** No information available.

**Cooperation:** No information available.

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CHAPTER 6: PROTECTING AND PROMOTING HUMAN HEALTH

Decision-Making: The political and administrative responsibilities for the running of the Danish health care system are highly decentralized. Health care policy in Denmark is based on cooperation among a wide range of authorities. Under the guidance provided by law and by the administrative rulings of the national health authorities, the county councils are in charge of hospitals and specialized medical services, while municipal councils are responsible for primary health care. In the field of environmentally related health issues Denmark has a strong tradition for co-operation between central authorities. This co-operation includes research and for example toxicological and health evaluation of chemical substances. There is a strong co-operation in areas relating to: classification of chemical substances; risk assessments; and elaboration of health based quality criteria for soil, air and water. In the field of sound and healthy indoor climate Denmark has a strong tradition for co-operation between central authorities. The relevant legislation is the building act under the National Agency for Enterprise and Housing.

Programmes and Projects: As a part of Denmark’s strategy on sustainable development it has been decided to develop a strategy on environmental factors and health. The purpose of such a strategy is to maintain and further improve the level of protection of human health against environmental factors, such as chemical, physical and microbiological factors.

Status: Health care is considered a public responsibility. Any resident of Denmark has the right to free hospital treatment, including specialized treatment. The health care system is highly decentralized, and primary health care services, comprising general practitioners and specialists, dentists and home nurses, are available throughout the country. Both the urban and rural population has access to conveniently located health care facilities. The health care system covers a wide range of tasks in various sectors such as: securing access to safe drinking water; safe sanitation; food safety; sound housing and working conditions; and traffic safety. The health requirements for clean water and sanitation have been met. Among communicable diseases: measles; mumps; rubella; tuberculosis; and AIDS exist in Denmark. The health care sector is highly dynamic and continuous updating and adjustment (according to economic possibilities and to technological development) is undertaken in order to meet the changing needs. Overall, it is assessed that Denmark has a high level of protection of human health from environmental factors. This includes: drinking water; sanitation; soil; waste; and wastewater. In other areas such as: outdoor air; noise; and chemical substances and products minimising the effects on human health still constitute a challenge.

Due to requirements in two Building Regulations it is overall assessed that Denmark has a high level of protection of human health in the indoor climate in dwellings and other buildings.

Capacity-Building, Education, Training and Awareness-Raising: An educational website on environment that contains a wide range of information on the state of the environment and impacts on nature and health has been created. The general public also has access to environmental data on the website of the Danish Environmental Protection Agency (http://www.mst.dk). This also includes environment and health related data, e.g. the quality of bathing water. In 2001 the Ministry for the Environment published a report on Environmental Factors and Health. The report describes the relationship between environment and health, encompassing the areas: air; soil; drinking water; bathing water; swimming pools; chemicals; waste; wastewater; and noise. For each area, the environmental factors that affect man’s health are described together with: their sources; effects on health; how the area is regulated; and the central actors. In each area the current level of protection is evaluated in relation to existing goals and strategies. The report shows that health aspects are included in much of Danish environmental legislation and that human health is well protected in many areas.

The report has been prepared to assist Eastern and Central European Countries in developing environmental policy tools to reduce threats to health. The report is available in English and Russian on http://www.mst.dk.

Information: The Ministry of Food Agriculture and Fisheries; the Ministry for the Environment; and the Ministry of Internal affairs and Health have established a website containing information on food and diet, environmentally related health issues, and leisure time.

Research and Technologies: Technological developments within the health care sector have made it possible to introduce a number of new treatments. A four-year research-programme concerning the problems from microbiel growths in buildings will run until summer 2002 and the results will be published.
**Financing:** Almost all health care services are financed, planned and run by public authorities. Financing is derived mainly from general taxation. During the last two decades, total expenditure for health care has remained at 6 to 7 percent of GNP.

**Cooperation:** See under **Capacity-Building, Education, Training and Awareness-Raising**.

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CHAPTER 7: PROMOTING SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT

Decision-Making: The Ministry for Economic and Business Affairs; the Ministry of Refugee, Immigration and Integration Affairs; the Ministry for Social Affairs and Gender Equality; and the Ministry for the Environment share the political and administrative responsibility for housing and settlement. The National Agency for Enterprise and Housing (under the auspices of the Ministry for Economic and Business Affairs) is responsible for: housing provision; the housing market, including urban renewal; and growth-oriented urban development. The Ministry of Refugee, Immigration and Integration Affairs is responsible for urban policy and social urban strategies related to social cohesion and integration in urban areas. Furthermore, the report on Denmark’s Nature and Environment Policy (1995) and the National Planning Report from the Ministry for the Environment also deal with sustainable human settlement and development. Management of spatial planning is the responsibility of municipalities, who are also in charge of almost all services in terms of infrastructure and maintenance. Decisions on construction of directly subsidised housing are entirely the responsibility of local governments. Municipalities have been granted more freedom to lay down the scope and the pricing of subsidised construction.

One of the top priorities of Danish national policy is to provide the whole population with sound and adequate housing. In this context subsidised construction plays a significant role. Generally there are two categories of subsidised new construction – non-profit housing and subsidised private co-operative apartments. Parallel with housing co-operatives, there is also a new type of co-operative apartment in new construction: Non-subsidised private co-operative apartments. In order to make non-profit housing more attractive – and thereby to promote a more socially balanced development in non-profit housing areas - steps have been taken like flexible rules with respect to letting out.

In addition, the Government has decided to implement an action plan making the physical infrastructure in Denmark fully accessible for the handicapped and elderly over the next 20 years.

Programmes and Projects: Urban renewal: The most important area of commitment in private housing sector is publicly subsidised urban renewal, governed by the Act on Urban Renewal. The Act contains three principal elements: (i) quality standards for planned housing and requirements for satisfactory open space for residents; (ii) a financing system that includes public subsidies; and (iii) rules for planning and implementation of urban renewal projects by the municipalities.

In general, the urban renewal strategy has developed from focusing on limited areas to more widespread work in which publicly subsidised urban renewal is used as a catalyst for an integrated urban policy, and hereby strengthening the sustainability in the local areas. As a supplement to subsidised urban renewal a trial scheme that allows the possibility of obtaining subsidies for the implementation of private urban renewal projects has existed since 1992. In December 2000, the Act on Urban Renewal was amended by the former Ministry of Housing and Urban Affairs. The amendment was designed to enhance the efficiency of urban renewal by providing incentives for the players to keep costs at bay and to optimize their urban renewal programmes. At the same time, the Ministry sought to attract as many private funds as possible to urban renewal programmes.

Urban fund: In order to promote ethnic integration and social cohesion in cities the Ministry of Refugee, Immigration and Integration Affairs has allocated DKK 78 million to the project “Inclusive Cities”.

Housing construction: The Government will carry on the construction of subsidised non-profit rental properties in the coming years. This includes construction of housing for young people and for the elderly. At the same time, the Government will ensure that construction of private rental properties gains momentum, for example by offering better conditions to private investors in terms of construction and rental. Urban areas with different housing tenure types usually thrive, with a broad demographic composition. Therefore, the Danish Government will draw up a reform to allow residents of non-profit housing to acquire the dwellings of which they are tenants – either as owners or on a cooperative basis.

Growth-oriented urban development: The Government will seek to ensure that Danish towns and cities are attractive, while at the same time offering favourable locations for new commercial premises. In order to stay alive and vibrant, urban areas should contain a mixture of housing; service trades; public institutions; and cultural offers.
**Status:** Due to changes in family patterns and growth in the number of elderly people, more single persons are now demanding accommodation. Therefore emphasis has been put on constructing specifically for young and elderly people. 50 percent of dwellings are occupied by their owners. The average floor space available is 51m² per person. 98 percent of all dwellings have central heating and 94 percent have bathrooms. A plan of action for obtaining compulsory measurements of individual household consumption of power; gas; heat; and hot and cold water is being implemented. One of the major problems in relation to sustainable development has been the priority given by a large part of the population to single family housing, leading to additional demand for energy and transportation. Further, differences in housing costs for similar quality housing between: privately owned homes; private housing for rent; and non-profit housing has tended to reduce the mobility of the population, making it difficult to obtain a sound functional distribution of housing, as related to family size and age.

**Capacity-Building, Education, Training and Awareness-Raising:** No information available.

**Information:** In January 2001, the report: “The Danish National Report to Istanbul +5” was published. In October 2001, the report “Urban Renewal in Denmark” was published.

**Research and Technologies:** No information available.

**Financing:** Activities related to spatial planning are financed by the involved ministries; regional and local authorities; as well as by the EU.

**Cooperation:** Denmark participates in EU Commission’s sub-committee on territorial and urban development and in the informal EU Urban Development Group. Furthermore, work on a European Spatial Development Perspective (ESDP) within United Nations Economic Commission for Europe (UN/ECE); United Nations Commission on Human Settlements UNCHS/HABITAT; the Council of European OECD; and the Nordic Council of Ministers is being undertaken.

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CHAPTER 8: INTEGRATING ENVIRONMENT AND DEVELOPMENT IN DECISION-MAKING

Decision-Making: Together with the launching of the strategy for sustainable development, the Government will publish a set of indicators to reflect the development. The set of indicators was a result of a public hearing involving more than 250 major Danish and international NGOs. In addition several NGO-based activities have published strategies and objectives relating to sustainable development. The most important is “Danmarks Deklarationen”, a result of several public meetings, and a wide co-operation between several Danish NGOs. The declaration contains a wide range of ambitious objectives to give inspiration to the Danish Government and strengthen public participation. In addition the “92 group”, a group of 21 Danish environment and development organisations, is working jointly on the follow-up to the UN Conference on Environment and Development. The 92 group has been a major driving force behind “Danmarks Deklarationen”. At the local level several Agenda 21 activities have raised public awareness about sustainable development. More than 150 locally based “green guides” coordinate the activities in the municipalities. Within a year it is the ambition that most municipalities in Denmark will develop a local strategy and a local set of indicators concerning sustainable development.

Programmes and Projects: The final national strategy for sustainable development and a set of indicators will be published in June 2002.

Status: The set of indicators will contain numbers and concrete descriptions of the development.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: A number of international agreements have called for national strategies, plans and programmes in cross-sectoral and sectoral areas. Attempts to review and coordinate the totality of these requests, and their interrelationships with regard to sustainable development are undertaken by both the Ministry of Foreign Affairs and the Ministry for the Environment.

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CHAPTER 9: PROTECTION OF THE ATMOSPHERE

Decision-Making: The Danish Environmental Protection Agency is the primary responsible body for the protection of the atmosphere. The private sector has participated in efforts to prevent stratospheric ozone depletion and reduce transboundary atmospheric pollution.

Programmes and Projects: The Government promotes policies and programmes in the areas of: energy efficiency; environmentally-sound and efficient transportation; industrial pollution control; sound land use practices; sound management of marine resources; and management of toxic and other hazardous waste.

Status: Denmark has undertaken a review of current energy supply mixes (Energy 2000-Action Plan: 1990; Follow-up: 1993; Revised action plan: 1996). CO2- and SO2-related energy taxes are enforced. Compared with other countries in the region, Denmark would rate its current transportation system superior in terms of environmental quality; and equal in terms of relative cost-effectiveness of alternative systems, transportation technologies, establishment of mass transit systems, and safety. As only marginal impact is expected, the Government is not involved in the development and use of terrestrial and marine resources and land-use practices that will be more resilient to atmospheric changes and fluctuations.

Capacity-Building, Education, Training and Awareness-Raising: Denmark has established early warning systems and response mechanisms for transboundary air pollution. The national early detection system, the national level of capacity building and training to perform systematic observations and assessment are rated good, while national capacity to predict changes and fluctuations is rated excellent by the Government.

Information: Information to the general public on climate change issues is published in: a newsletter "KlimaNyt" (in Danish); in articles; in news; media; in reports; and on the Internet server of the Danish Meteorological Institute www.dmi.dk. In addition, a Danish Climate Forum has been established as a domestic network to promote research collaboration and to profile Danish climate change research, both nationally and internationally.

Research and Technologies: Studies on health effects resulting from air pollution have been undertaken by the Government but are not yet finished. Methodologies to identify threshold levels of atmospheric greenhouse gas concentrations have not been developed. In the area of environment and transport, there are comprehensive, systematic, selective, and limited (limited to areas and time periods) observations. Research in the area of climate change and related aspects is conducted by a number of institutes and organisations, including: the Danish Climate Centre at the Danish Meteorological Institute; universities; and research institutes. Danish researchers are participating in international research projects and in the work of the Intergovernmental Panel on Climate Change (IPCC) as lead authors and reviewers. In addition, Danish researchers are participating in the Scientific Assessments of ozone depletion, coordinated by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP). An integrated Danish programme for research related to Climate Change is currently underway.

In the area of transboundary atmospheric pollution control, the Government has facilitated the exchange of data and the exchange of information at the national and international levels. The Government participates in the WMO programme “World Weather Watch, Global Climate Observing System” and “Global Atmosphere Watch”. The Danish Meteorological Institute operates on 200 automatic observation stations throughout Denmark, Greenland and the Faroe Islands. Observing stations in Greenland (Pitufik and Kagerlussuaq) function as primary stations in the global “Network for Detection of Stratospheric Change”. Observations of the Ozone layer are also conducted in Copenhagen. The Government encourages industry to develop safe technologies in accordance with EU-directives.

Financing: See under Cooperation

Cooperation: Denmark contributes financially to various projects concerning climate change including through contributions to the IPCC Trust Fund and the UN Climate Change Secretariat. The Montreal Protocol (1987) was ratified in 1988; the London Amendment (1990) was accepted in 1991; and the Copenhagen Amendment (1992) was accepted in 1993. Denmark has acceded to the Geneva Convention on Long-range Transboundary

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CHAPTER 10: INTEGRATED APPROACH TO THE PLANNING AND MANAGEMENT OF LAND RESOURCES

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 11: COMBATING DEFORESTATION

**Decision-Making:** The National Forest and Nature Agency under the Ministry for the Environment is the national implementing and policy-making agency responsible for the forest sector. This agency is also the central administrative and executive unit for the 25 state forest districts covering one-fourth of the national forest area of Denmark. The general regulations of the Forest Act of 1997 reserve areas for forests, thus ensuring national forest reserves, and it prescribes good and multiple use forest management.

The legislative framework also provides for reestablishment of forest areas after national windfall disasters (last disaster in December 1999) and comprises also the Nature Conservation Act of 1992; the Hunting and Game Management Act of 1993; the spatial planning legislation; and the agricultural legislation (under the Ministry of Food, Fisheries and Agriculture).

The forested area equates 473,000 ha, or approximately 11 percent of the total land area. Approximately 90 percent of this area is forest reserve in accordance with the Forest Act. Most forest areas are managed as production forest. However, in recent years considerable efforts have been undertaken to also designate areas managed with biodiversity conservation as the main objective. Also public recreation is an important forest policy objective. In fact 90 percent of all Danes are visiting a forest at least once a year making public recreation a high priority forest policy objective particularly in publicly owned forests.

Stakeholder organisations are on a regular basis invited to participate in forest policy-making activities. The main stakeholders are organisations representing the private forest owners, the industry and “green” NGO’s. This may take place through ad hoc working groups following policy processes. National Forest Council has been established with the task of advising the Minister for the Environment on forest issues. Recently, a wide public debate addressing forest issues took place within the context of the process leading to a national forest programme, which is expected to be available by mid 2002. The debate included: written contributions; an Internet debate; and debate arrangements in the forests.

At a local level advisory user councils have been set up for each of the 25 state forest districts, and certain hearing procedures have been put in place for forest management planning.

In terms of policy strategies a Strategy for Sustainable Forest Management was drafted in 1994 resulting in a forest policy statement, which was approved by Parliament. Two years earlier a strategy was developed for the Danish nature forests setting: specific area targets for strict reserve forest; and forest subject to particular management regimes aiming at biodiversity conservation. These policies will be revised through the national forest program in 2002. In 1994 a Strategy for the Conservation of Genetic Resources of Trees and Bushes was also endorsed as a part of Government policies. The revised national forest programme is expected to be followed by a revision of the Forest Act, in order to facilitate “near to nature” forest management through a more flexible approach towards regulations on forest management.

**Programmes and Projects:** A project aiming at “Green Forest Management” has been implemented in the state forests focusing on protection of forest nature and sustainable forest management. Also forest recreation has benefited from this activity. Subsidies have been available for similar activities in the private forest sector. Since 1994 the Government has supported activities aiming at the development of wood and wood-based products. The main objective of this activity is to strengthen the use of wood and wood products and identify methodologies to more effectively use wood resources available from the forest sector.

An important objective in Danish forest policy is to double the forest area within one tree generation (80-100 years). Statistics are indicating, that the forest area is increasing, but the present afforestation rate will not allow the objective to be achieved within the timeframe scheduled. There are certain constraints to overcome in terms of financing and in terms of the legal interface between the forest legislation and the agricultural legislation. At present some Government subsidies for afforestation are provided. In the future new financing opportunities may become available such as afforestation as a measure towards groundwater protection and/or carbon sequestration.

Some projects have been launched to strengthen public recreation in the forests. One project is making educational material available for public schools and at the same facilitate co-operation between forest owners and schools setting up arrangements, where school classes are “adopting” specific forest areas.
**Status:** Danish forest legislation protects against deforestation. During the last 200 years the forest area has increased from only a few percent of the Danish land to its present more than 10 percent. However, Denmark still remains a low forest covered country making the small forest area available subject to considerable interest and pressure from the surrounding society. Much of the forest increase during the past 200 years has taken place on the poor soils and in scarcely populated areas. Forestry has been competing with agriculture. Due to the demand for timber production and the harsh site conditions in many afforestation areas, foreign conifers dominate the new forests. Even on the better forest soils in the eastern parts of the country foreign conifers have increasingly replaced indigenous deciduous species. Consequently, while the area with indigenous deciduous forest tree species has been almost constant during the past more than 100 years, there has been a dramatic expansion in the area with coniferous foreign forest tree species, mainly spruce. These forests have been subject to intensive forest management involving: drainage; monoculture; heavy machinery; ploughing; clear-cutting; and etc., leaving rather limited room for development of forest biodiversity. However, during the last 10 to 20 years this situation has changed. In addition to timber production the forests are also expected to provide public recreation, and nature and landscape amenity. Considerable efforts have been undertaken to adjust forest development and to meet these new demands. As a consequence of this, urban or peri-urban forests are established in order to meet recreational demands and indigenous deciduous species are dominating the afforestation activities. Also within existing forests indigenous deciduous tree species are gaining ground. This development is further reinforced by current trends in timber prices, where softwood prices are historically low. This on the other hand has also exhausted the economy of the primary forest sector, thus threatening its economic sustainability. Recent statistics indicate that the continuing increase in forest area is now mainly based on deciduous forest.

Danish forest policies are now being revised. In 2001 a set of guidelines for sustainable forest management was drafted by a working group comprising all relevant stakeholders in the Danish forest sector: forest owners; managers; researchers; green and social NGO’s; and etc. These guidelines are based on the concept of near to nature forest management as it has emerged in Europe during the last couple of years. Sustainable, near to nature forest management will be a core issue in the Danish national forest programme of 2002. The programme is expected to recommend measures to promote a more flexible approach to forest management, and it may be followed by a revision of the 1997 Forest Act. Such measures may relax strict regulation in the forest sector, thus leaving forest owners and managers to define their own individual approach. Bearing in mind the present economic situation of the sector, forest owners and managers are expected to leave more to the nature thus applying natural regeneration wherever possible, and abandoning management measures at sites and spots, where economic benefits cannot be achieved. Consequently, increased flexibility is expected to work as a core measure to further near to nature forest management by reducing costs and at the same time leaving more room for nature and biodiversity.

**Capacity-Building, Education, Training and Awareness-Raising:** A forest ranger scheme has been established, where rangers provide information; awareness raising; and education on forest and nature to the general public. School children constitute an important target group for this programme, which is also providing centres and nature schools throughout the country. At the professional level educational facilities are available for education of: forest workers; forest- and landscape engineers and bachelors; and masters of forest science. Furthermore, several research institutes are engaged in forest research.

A public consultancy service for privately owned forest estates has been established. Most private forest estates are small and cannot assign their own professional staff. For these estates access to consultancy services is important. Consultants and other forest professionals will play an important role in implementing near to nature forest management practices. Only limited experience on such management practices is presently available in Denmark. Considerable efforts are required from practitioners and research institutes in terms of research and development. These efforts have to be extended to forest owners and managers through professional consultants, advisors and other professional staff. Training programmes on sustainable and/or near to nature forest management have also been launched for Government forest staff.

**Information:** No information available.

**Research and Technologies:** No information available.
Financing: In 1999 the value of the production of the primary Danish forest sector was 1.3 billion DKK. The sector employed 2000 staff full time and a similar number part time. The average annual wood production is approximately 2 million m³ comprising around 25 percent of the total Danish wood consumption. Downstream wood processing industries are far more important for the national economy, but they are not relying entirely on wood from the Danish primary forest sector, since much timber is imported to Denmark for further processing. The wood processing industry is employing 14,000 and exporting for almost 5 billion DKK annually (2000). The Danish furniture industry alone is exporting for 20 billion DKK annually (2000). Due to decreasing timber prices the economy of the primary forest sector is declining. Many estates are relying on the profitable production of Christmas trees and greenery. In 2000 the exports of such products amounted to 1 billion DKK. Hunting fees also constitute an important source of income (approximately 120 million DKK annually) for the private forest sector. New sources of income may be linked to groundwater protection; co-financing from local authorities aiming at recreational benefits; and fees for carbon sequestration.

Cooperation: Danida is providing funding for development activities focusing on forest issues in several developing countries. A number of projects aiming at sustainable forest development have been implemented. In addition, Denmark is providing financial resources for the Consultative Group on International Agricultural Research (CGIAR), and is participating in several EU or Nordic research networks. Denmark actively participates in international negotiations on forests, within the context of fora such as: the United Nations Convention of Biological Diversity (UNCBD); United Nations Convention to Combat Desertification (UNCCD); the International Tropical Timber Organization (ITTO); the United Nations Forum of Forests (UNFF); the United Nations Framework Convention on Climate Change (UNFCC); and regional arrangements like the pan-European forest process, EU forest policies, Baltic 21, and etc.
CHAPTER 12: MANAGING FRAGILE ECOSYSTEMS: COMBATING DESERTIFICATION AND DROUGHT

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: Desertification and drought is not an issue in Denmark. Programmes for combating desertification and drought on a global level is covered by the policies of the Danish development aid.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: The International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification, Particularly in Africa, was ratified 22 December 1995.

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CHAPTER 13: MANAGING FRAGILE ECOSYSTEMS: SUSTAINABLE MOUNTAIN DEVELOPMENT

This issue does not apply to the country.

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CHAPTER 14: PROMOTING SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT

Decision-Making: The Ministry of Food, Agriculture and Fisheries is the primary responsible Government body for the agricultural sector in Denmark. The Ministry is part of the National Coordinating Mechanism for Sustainable Development. Relevant national legislation covering agriculture and rural development consists of the Act on Agricultural Holdings and the Act on Support for Rural Development, from 1999 and 2000 respectively. The Acts are revised as required and have met the requirements for sustainable development. Organic farming has increased considerably in recent years. Organic farming is regulated by the Act on Organic Farming from 1999 and the Action Plans on Organic Farming from 1995 and 1999. These amendments fully constitute a coherent national policy framework for sustainable development. Danish agricultural policy covers a broad spectrum of issues relating to nature and the environment. At present, efforts in agricultural policy are aimed at finding solutions to the pollution challenges related to the leaching of nutrients and the loading due to pesticides.

The significance of matters relating to nature is expected to increase in the future. In 1991, the Action Plan for the Sustainable Development of Agriculture introduced a tightening of the requirements governing the use of farmland manure. In 1995, the Government proposed a 10-point programme for the protection of the water table and drinking water. In 1998 the Aquatic Environment Plan and in 2000 the Action Plan on Pesticides were adopted by Parliament setting absolute reduction targets for the use of nitrogen and pesticides in the farmland. The plans are follow-ups to plans from 1987 and 1986. The use of pesticides has decreased with respect to the quantity of active substances. Also the treatment frequency has decreased. A tax on pesticides has been imposed and 220 pesticides have been removed from the market since 1994. In the recent years the use of fertilizers has decreased, indicating that the utilization of livestock manure has increased. When the targets in the Aquatic Environment Plan are reached the EU Nitrates Directive will be fulfilled.

In recent years, Danish agricultural policy has been implemented through initiatives that based on the expectation of continued market orientation and strict requirements, e.g. on the environment, nature and animal welfare, had the purpose of establishing the foundation for high-quality industries. A sustainable agricultural sector must be able to survive without financial support. Within the framework of the Common Agricultural Policy (CAP) of the European Union, efficient farms must provide working conditions and income-earning possibilities comparable to other sectors, as well as the possibility of consolidating the productive capacity of farms. The reforms of the CAP in 1992 and 2000 and the GATT agreement reached in 1993 have led to a reduction in the traditional market support for agriculture in the EU. With Agenda 2000 EU has set new targets for the future support for agriculture. The goal is a multifunctional agricultural sector producing: quality food; beautiful landscape; a clean environment; animal welfare; and local identity. Denmark supports the WTO Doha conclusions from 2001 about reductions of, with a view to phasing, all forms of export subsidies; and substantial reductions in trade-distorting domestic support.

Programmes and Projects: Since the adoption of Agenda 21, the priority has been to complete reviews and, as appropriate, establish policies and programmes with respect to, among other, the following: integration of environmental and sustainable development in policy analysis; improve farm productivity; increase diversification while ensuring that risks to the ecosystem are minimized; facilitate the transfer and adoption of environmentally sound technologies for integrated production and farming systems; establish mechanisms to encourage efficient and environmentally sound use of resources; and implement policies and programmes to conserve areas in risk of degradation. Sustainable development including economic, environmental and social sustainability is the central objective of the Danish rural development plan that was implemented in 2000 in accordance with the EU programme for rural development. The Danish rural development plan runs from 2000 to 2006 and includes a number of different measures aiming to promote sustainable development in agriculture and rural areas. The measures include for example support: for organic farming; for environmentally beneficial farming; and for rural adaptation and development. To support sustainable development the Innovation Law-support for agricultural research, innovation and development was in 2001 put in to force. With this act projects aiming to improve: food safety; traceability; organic farming; animal welfare; and ensuring the environment and the resource base are economically supported.

Status: No information available.
**Capacity-Building, Education, Training and Awareness-Raising:** Active nature management requires ongoing dialogue between the authorities and the agricultural sector managing large parts of the open landscape. Dialogue and co-operation are therefore cardinal features of the future nature management effort. Environmental aspects of agriculture are important parts of farmers’ education, training and agricultural advisory service in Denmark.

**Information:** No information available.

**Research and Technologies:** The Government supports a wide range of research projects concerning sustainable development in agriculture, including environmentally sound farming practices and technology. High priority is on: the research on sustainable and optimal utilization of the agricultural resources; the research on sustainable handling and utilization of livestock manure; and the research on organic production.

**Financing:** No information available.

**Cooperation:** Within the EU, Denmark actively promotes common regulations for application of environmentally and ethically responsible methods of agricultural production. Denmark also has extensive cooperation with the other Nordic countries in the agricultural sector. Through Danida, Denmark supports a number of agricultural and rural programmes in developing countries including: soil and water conservation projects; rural forestry projects; major restructuring projects in the dairy sector; women oriented agricultural extension; and training projects.

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CHAPTER 15: CONSERVATION OF BIOLOGICAL DIVERSITY

Decision-Making: The Ministry for the Environment is the focal point for the Convention on Biological Diversity and has the overall responsibility for the conservation and sustainable use of biodiversity. The Ministry of Food, Agriculture and Fisheries is responsible for domesticated biodiversity and fisheries. The County Councils administer nature conservation as well as spatial planning legislation at the regional level and manage a large number of protected areas. The Municipalities are responsible for spatial planning at the local level.

The Nature Protection Act of 1992 provides a regulatory framework for biodiversity conservation including: provisions on conservation orders; general habitat protection; protection of coastlands; and species protection. Other legislation of particular relevance to biodiversity includes: the Hunting Act; the Forest Act; the Watercourses Act; and the Planning Act. During the last 12 years a considerable efforts have been made by the Government and the county councils to recreate some of the lost natural areas of the past. Lakes; wetlands; meadows; river valleys; and moors have been restored, and straightened watercourses have been given back their natural course. The Government has designated 194 specially protected areas in pursuance of the EC Habitat Directive of 1992 comprising of approx. 1,000,000 ha. (of which 77 percent are marine areas).

In compliance with Article 6 of the Convention, the former Danish Ministry for the Environment and Energy in 1995 prepared a strategy titled “Biological Diversity in Denmark - Status and Strategy”. The strategy was prepared in close cooperation with a wide range of authorities and NGOs, including ministries responsible for sectoral integration, e.g. the Ministry of Agriculture. The strategy is primarily based on existing strategies, legislation and generally approved guidelines for environment and nature protection in Denmark. It covers: biodiversity in general; describes the status and problems related to biodiversity; and indicates future target areas. The strategy has been made an integral part of the more comprehensive Strategic Environmental Planning Process launched by the Government in 1993. Strategies for: Sustainable Forestry; for Natural Forests and Other Forest Types of High Conservation Value; and for the Conservation of Genetic Resources in Trees and Bushes (covering both in situ and ex situ conservation) were adopted in 1994, to protect ecosystems and for the conservation of biological and genetic resources. In 2002, the Government is preparing an overall Action Plan for Nature Protection and Biodiversity based on the above-mentioned strategy of 1995 and a strategy on the conservation and sustainable use of plant genetic resources for food and agriculture.

Programmes and Projects: The Nordic Gene Bank operates a number of projects on conservation of gene pools of crop species and wild relatives.

Status: Compared to its size Denmark is one of the European countries with the largest arable land area. Conversely, this means that Denmark is one of the European countries with the fewest natural areas in relation to total land area. One of the reasons for this is that the natural resources of Denmark are well suited to agricultural use, a process which socio-economic pressure has accelerated.

During the past 20 to 30 years, Danish enterprises and authorities have made continuously growing efforts to support nature protection and reduce environmental impacts. These efforts have borne good results, but have not been able to alleviate the negative impacts on wild plants and animals. The loss of biodiversity is due to the fact that natural areas in Denmark are to constricted; contain too many nutrients and too little water. The loss is also caused by the inability of nature and natural habitats to cope with both contemporary intensive farming, and the widespread decline of extensive farming.

Capacity-Building, Education, Training and Awareness-Raising: Denmark has built up a modern organisation and modern training courses for the Nature interpreters. A series of active interpretation methods have been developed in order to make experiencing nature an important tool in modern Danish environmental management and hopefully to inspire the population to have a positive attitude towards the future and towards a sustainable development. The Danish Nature Interpreter Service is a network of 250 Nature interpreters. There is every year more than 20,000 Nature Interpretation-events in Denmark with around 800,000 participants together. In September 2002, Denmark will host a World conference: “Nature Interpretation as a Tool in Promoting Sustainable Development”. The aim of the Conference is to promote Nature Interpretation as a tool in promoting sustainable development and to promote the inclusion of the sustainability aspect in all Nature Interpretation. In addition, there will be a number of extra advantages: The main result of the Conference is to
be a “Code of Conduct” for nature Interpretation and a handbook with practical examples to show how one can involve sustainable development in Nature Interpretation Worldwide.

**Information:** No information available.

**Research and Technologies:** The scientific work is mainly undertaken by the National Environmental Research Institute and by universities.

**Financing:** See under Cooperation

**Cooperation:** Denmark is party to all the biodiversity related conventions and participates actively in them. As member of the EU, Denmark is obliged by the EU Habitats and Birds Directives as well as the policy target to halt the loss of biodiversity in the EU by 2010 included in the conclusions of the June 2001 EU summit. Since 1994 the Government has followed up on the objectives of the Conventions in Biological Diversity and the other Rio decisions through the funding of environmental assistance including assistance for sustainable management and natural resources, particularly in: Central and eastern Europe; South-East Asia; Southern Africa; and in the Arctic.

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CHAPTERS 16 AND 34: ENVIRONMENTALLY SOUND MANAGEMENT OF BIOTECHNOLOGY AND TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY, COOPERATION AND CAPACITY-BUILDING

Decision-Making: Technology: Denmark has an Integrated Product Policy (IPP). This is developed from the Cleaner Technology Action Plan and covers everything from the use of raw materials to consumption and the handling of waste. In addition, both subsidies and green taxes are used to encourage the use of environmentally sound technologies (EST’s). EST’s are most important in the sectors of transport, agriculture, and industry, but also important in crosscutting activities such as the relation between health and environment or the objectives concerning a reduced use of resources in the future.

Biotechnology: The Danish Environmental Protection Agency is one of the bodies responsible in the area of biotechnology. The exchange of information at national and community levels, with regard to procedural requirements for: safe handling; risk management; and conditions of release of the products of biotechnology, is organized through the law on biotechnology and environment which translates EU directives into Danish law.

Programmes and Projects: Technology: The current plan for Integrated Product Policy aims to integrate the environmental aspects of: production; pollution; transportation; consumption; reuse; and disposal of products. In addition to the Integrated Product Policy the ministry has actively supported the dissemination of environmental management systems and several projects integrating environment friendly production and increased employment. Since 1997, 300 millions DKK have been used through the so-called Green Job-Pool to create new jobs. The Danish Environment Protection Agency has also started several Product Panels where representatives from the line of Production, consumption, and disposal get together to discuss initiatives to decrease the overall environmental impact.

Biotechnology: There are no specific plans to promote the use of traditional and modern biotechnologies.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: Several private companies are using advanced biotechnology techniques in their production, especially companies producing medical products as well as genetically modified crops. It is not possible to enumerate the scientists working in this field, but Denmark has traditionally had a strong capacity in this area.

Information: Technology: Denmark has no single system of information on environmentally sound technologies at the national level. Special funds to assist in integrating the economies in transition into the system of global technology cooperation and partnership are provided. They are allocated in a competitive application procedure by the Multi-Science Council for Development Research.

Biotechnology: No information available.

Research and Technologies: No information available.

Financing: Technology: Since 1987, the Ministry for the Environment has supported clean technology projects, at an expense of approximately $US90 million.

Biotechnology: The private sector invests significant amounts in biotechnology. In 1991, the total amount spent on Research and Development (R&D) in the private sector was US$91 million.

Cooperation: Technology: Transfer of technology, including support for research, training, and institutional capacity-building, are integral parts of Danish development assistance. Danish technical cooperation is aimed at supporting the sustainability of aid programmes by means of local capacity building on an institutional as well as an individual level. As a result, training and transfer of knowledge are increasingly important elements in Danish development cooperation. In 1990, the Centre for Technology Transfer to Developing Countries was established by the Danish Technological Institute to ensure an appropriate transfer of technology and corresponding know-how. In addition: the Danish Bilharziasis Laboratory; the Danish Government Seed
Pathology Institute; the DANIDA Forest Seed Centre; and the Centre for Development Research, undertake training programmes for researchers and technicians from developing countries.

Denmark also supports the Consultative Group on International Agricultural Research (CGIAR). Other international institutions dealing with environmental issues and receiving Danish funds are the International Centre for Insect Physiology and Ecology; and the International Service for the Acquisition of Agri-Biotech Applications. An important part of the effort to assist in the establishment of collaborative networks of research centres has been the financing of four specialized Danish institutions dealing with issues of concern to developing countries. The Danish Fellowship Programme sponsors supplementary training of personnel from recipient countries either in Denmark or regionally. A programme for enhancing research capacity in developing countries (ENRECA) has been launched by the Ministry of Foreign Affairs (Danida). Recently Danida has become a donor of the Economy and Environment Programme for South East Asia (EEPSEA), which will support research and training programmes in this field by the region's researchers. Partnerships in developing countries between companies from Denmark and a member of developing countries, as well as Joint Ventures, are supported through development assistance of Danida. Under these facilities special support is provided to ensure environmental sustainability.

**Biotechnology:** Denmark participates in the work of the Nordic Council of Ministers in the field of biotechnology.

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CHAPTER 17: PROTECTION OF THE OCEANS, ALL KINDS OF SEAS, INCLUDING ENCLOSED AND SEMI-ENCLOSED SEAS, AND COASTAL AREAS AND THE PROTECTION, RATIONAL USE AND DEVELOPMENT OF THEIR LIVING RESOURCES

**Decision-Making:** The Ministry for the Environment is responsible for the integrated management and sustainable development of coastal and marine areas, including EEZ. The Ministry of Defence is responsible for the combating of oil and chemical pollution. In accordance with national legislation, the general public is involved in coastal planning. In 1994, an Act on Coastal Planning was adopted. Under this Act, special planning and function justifications are required for permitting building projects in the coastal zone. If such justifications exist, the main rule is to locate behind already existing settlements. At the same time, legislation covering already built-up areas (urban zones) was eased, so that the main emphasis was placed on a quality based incorporation of new constructions in the city viewed in relation to the surrounding coastal landscape. The Act further stipulates that a coastal projection zone in cities be reduced and in some cases removed completely. Through the Act on Coastal Planning, Danish coasts are preserved as an important landscape resource, while in the areas, where the population is actually living, planning requirements are only imposed when absolutely necessary.

The Ministry of Food, Agriculture, and Fisheries is responsible for managing fisheries and for the sustainable exploitation of the marine living resources. Through the National Fisheries Act (1999), the basic principles on regulation of commercial and recreational fisheries are established. The Danish Fisheries Policy if formulated and implemented within the framework of the Common Fisheries Policy, CEP, of the European Union. Further integration of environmental policies into the fisheries management will be ensured in the current process of reforming the CEP as will sustainable use of the marine living resources.

**Programmes and Projects:** The national policy on oceans is part of the National Sustainable Development Strategy. A programme for the integrated management and sustainable development of coastal and marine areas, including the EEZ exists. All activities under this programme area are rated “important” or “very important”. The Danish Government participates in systematic observation systems.

Denmark’s goal is that its clean-sea programme will be completed by no later than 2020. This is also called a “generation goal”, because Denmark, and the other North-Sea countries, have given themselves 25 years in which to attain the targets, starting from 1995. One of these targets is a marine environment without environmentally harmful substances, in which the occurrence of heavy metals has been brought down to the natural environmental background level. Another target is to bring down the occurrence of nutrients to a level that ensures that oxygen depletion and toxic algae blooming only occur as the result of natural conditions.

**Status:** Regarding construction planning in coastal regions, structures must not exceed 8.5 m in the coastal zone of 3 km. For structures taller than 8.5 m, justification for visual effects is required. All sewage-related issues are rated “very important” or “important”. Some 94 percent of sewage discharges are subject to secondary treatment and 67 percent to tertiary treatment.

**Capacity-Building, Education, Training and Awareness-Raising:** No information available.

**Information:** A database (PLAN-GIS DENMARK) is in place for integrated coastal management with the aim of monitoring the coastal regulations of the Planning Act of 1994. This database contains information on protected areas, habitats and uses of coastal zones.

**Research and Technologies:** Denmark has access to a multitude of technologies that serve to identify the major types of pollution of the marine environment from land-based sources.

**Financing:** No information available.

**Cooperation:** At the international level Denmark signed The United Nations Convention on the Law of the Sea (UNCLOS) in 1982 and is now in the process of ratifying the Convention. In 2000 Denmark completed its internal ratifying procedures on the agreement for the implementation of the provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. Denmark will ratify the Convention together with the European Union.
The regional collaboration on protection of the environment – The Helsinki and OSPAR conventions and the North Sea Conferences – serve as beacons for the individual countries’ political significance to these countries’ national regulation of marine pollution. There is also broad co-operation on marine policy between the EU and OSPAR. Denmark gives high priority to the work of these conventions, e.g. by drafting new proposals for decisions and by leading the way, through incorporation of the agreements into Danish environmental legislation. Together with a Danish effort, the international marine agreements are crucial factors on the path to a clean marine environment.

The fourth conference of ministers responsible for Spatial Planning and Development in the Baltic Sea Region was held in 1996. The Ministers adopted recommendations for spatial planning of the coastal zone in the Baltic Sea Region. The recommendations are divided into three chapters: (i) objectives; (ii) recommendations; and (iii) planning procedures. Furthermore, the ministers recommended that the Committee for Spatial Development in the Baltic Sea Region monitors the implementation and the results of the recommendations through demonstration projects and reports to the next Ministerial Conference.

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CHAPTER 18: PROTECTION OF THE QUALITY AND SUPPLY OF FRESHWATER RESOURCES: APPLICATION OF INTEGRATED APPROACHES TO THE DEVELOPMENT, MANAGEMENT AND USE OF WATER RESOURCES

Decision-Making: Coordination of water resource management and development at the national level is the responsibility of the Ministry for the Environment and the Environmental Protection Agency (DEPA). Regional and local authorities coordinate at sub-national levels. In case of conflicts, the general rule is that the superior level of administration mediates. Water supply is regulated through: the Water Supply Act of 1978, last amended by Act No. 1273 on December 20, 2000; and the Environmental Protection Act, last amended by Act No. 479 on June 7, 2000. The National Act on Regional Planning provides a policy for integrated land and water management. When major laws, policies, and so forth, are prepared, stakeholders are normally invited to sit on a Committee with the task of formulating a report with recommendations for action. There is also an act concerning equal representation of women and men on public committees.

Programmes and Projects: A programme of action for improving wastewater treatment in the countryside has been prepared in order to improve the conditions of small streams and lakes. The programme stipulates that municipalities may offer improved treatment to settlements in the countryside through local wastewater treatment in order to meet ambient surface water quality standards. An Aquatic Action Plan on the Environment was launched in 1987 with the objective of reducing the nitrogen and phosphorus content of the aquatic environment by 50 percent and 80 percent, respectively. A comprehensive nation-wide monitoring programme was designed to quantify the effectiveness of the Action Plan. As a result of the Action Plan, the emissions of nitrate and phosphorous from agricultural activities and wastewater treatment plants for agricultural emissions have been reduced. It has however proven more difficult than expected to reach the goals of the Action Plan. A second Action Plan on the Aquatic Environment was prepared in 1998 in order to further reduce emissions from agriculture. The second Action Plan also introduced a new framework for groundwater protection based on detailed hydrogeological mapping by the counties. Water works were allowed to compensate farmers for loss of income associated with measures to protect ground water.

Status: About 90 percent of the water works are run privately, while the municipalities run the remainder. The public water works supply two-thirds of the water-works water. 99 percent of the drinking water supplied to consumers comes from groundwater reservoirs. The basic principle for the drinking water policy is to prevent pollution of the groundwater rather than having to clean polluted water. A planning system has been established on a regional basis to ensure the integrated management of freshwater resources. The counties balance the different interests against each other. Monitoring of the groundwater takes place at the waterworks and in a national monitoring programme.

The Government has taken several steps to protect and improve the quality of fresh water based on the principle that substances likely to pollute must not be discharged into watercourses, lakes or the sea; or stored in a manner, which may lead to pollution of the water. The Water course Act of 1992, and the Nature Management Act of 1989 encourage actions to improve the condition of streams and lakes. An urgent problem concerning groundwater is toxic leaching from waste dumps and old industrial sites. The regional authorities are actively searching for the location of these sites before serious damage is caused. Further, Danish planning rules concentrate possible polluting activities in areas where the water resources are the least vulnerable. The EU water Framework Directive will have a major impact on the management of water resources in Denmark. The directive requires the establishment of river basin districts. Water resources have until now been managed by the counties. A committee headed by DEPA is in charge of analysing how a future administrative model for water management can be designed.

Capacity-Building, Education, Training and Awareness-Raising: The public authorities and the water works encourage the consumer to use less water. From 1 January 1999, the consumption of water for all dwellings connected to common water works must be metered. This is expected to lower water consumption 10 to 15 percent. Industry and agriculture are also encouraged to use less water. In some instances these sectors can get subsidies from the Government to develop special water-saving techniques. In order to ensure stability in the supply of drinking water, information campaigns have been launched suggesting different ways in which the
consumer can save or reuse water. In 1994, an environment tax on drinking water for household use was introduced in order to encourage conservation.

**Information:** Information on water management and development, including: water quality; quantity; number of water works; drillings; and consumption by sector, is regularly collected and distributed, and is made available inter alia on the World Wide Web Site of the Ministry at [http://www.mim.dk]. Another relevant website belongs to the Danish Water Works Association: [http://www.dvf.dk].

**Research and Technologies:** The total capacity for treating and recycling wastewater is 8.3 million PE. All urban sewage is treated. The coverage of water supply is practically 100 percent. There are no major technological needs for water purification. 99 percent of Danish drinking water originates from the groundwater and needs nearly no treatment. The policy is to maintain this situation.

**Financing:** The general pricing policy for water follows a principle of balance, i.e., the total revenue from water charges must not exceed total costs, including appropriation for future investments. On the other hand, the water charges must cover total costs. The local authority can however, in some cases subsidize the water works. Almost 100 percent of water costs are recovered through water charges. The Ministry has made general guidelines for water tariffs. One principle is that the price charged per cubic meter should not vary with the quantity consumed. There are no special policies implemented concerning the sectors. The Government has limited funds to remedy pollution where the polluter cannot be found or is not able to pay. In addition, in 1996, the Parliament adopted a tax on wastewater for discharges of nitrogen, phosphorous and organic substances. This tax entered into force 1 January 1997. In accordance with the Action Plan, US$ 1.2 billion have been invested for municipal treatment plants. Additional investments, not included in the Plan, are estimated to total US$ 48 million. In order to improve wastewater treatment to meet the requirements of the Action Plan, the 19 largest companies are expected to invest US$ 162 million. Denmark invested US$ 4 billion and 2.4 percent of GNP in the tourism sector.

**Cooperation:** No information available.

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CHAPTER 19: ENVIRONMENTALLY SOUND MANAGEMENT OF TOXIC CHEMICALS, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN TOXIC AND DANGEROUS PRODUCTS

Decision-Making: Principles for assessment of chemical risk and the setting of limit values in/on: drinking water; groundwater; air; and polluted soil, have been laid down in national guidelines based on the Act on Environmental protection. The Danish Environmental Protection Act enforces: substitution of harmful substances with less harmful substances; the principle of best available technology; and the use of cleaner technologies and products based on life-cycle analysis. The Chemical Act regulates notification, classification and labelling of substances and preparations according to EU directives. The Act also regulates safe handling, producer and manufacturer responsibility and includes restrictions on certain dangerous substances and products.

Programmes and Projects: No information available.

Status: In Denmark, priority is generally given to the handling of high volume substances, and substances, which give rise to high concern, such as: heavy metals; persistent organic pollutants; and pesticides.

In January 1999, the “Strategy for Intensified Efforts in the field of chemicals - in Denmark, the EU and globally” was presented. The Strategy defined the framework of the future overall effort with respect to chemicals. The goal of the Strategy is to restrict the consumption of dangerous chemicals to the extent possible, and to ensure that the manufacturing, consumption and disposal of chemicals have no unacceptable effects on the environment or on man. The intensity of this effort must be adjusted according to the dangers presented by the individual chemical substances. The greatest efforts will focus on chemical substances that are persistent and bio accumulating; and substances that can cause irreversible damage (carcinogenic effects; mutagenic effects; effects on reproduction; and endocrine disruption, etc.). Every effort must also be made to ensure that special consideration is given to children and other sensitive groups, such as pregnant women and people with allergies and chronic illnesses, as well as particularly vulnerable ecosystems. As the problems presented by chemicals are universal and not limited by national borders or diverse fora for decision, this effort cannot be pursued solely at the national level, but must also be made at the EU and international levels.

The “List of Undesirable Substances” 2000 (the List) constitutes one of the cornerstones of the Strategy. It has been promising to note that the List has in fact, been used by both the industry and the retail trade. Special initiatives on the high priority substances on the List have been taken. Partial or general bans on substances is one of the measures. Moreover the following measures for limiting the use of problematical chemicals may be mentioned: taxes on chemicals; subsidies for substitution; and initiatives and information campaigns, including the dissemination of knowledge on eco-labelled products without problematic chemicals.

A large number of chemical substances have not been examined and, therefore, have not been assessed. To handle this, the Danish Environmental Protection Agency has developed advanced computer models for predicting the dangerous effects of chemical substances. A first result of this work is the ”Advisory List for Self-classification of Dangerous Substances” 2001, a list of about 20,000 substances, with advisory classifications for one or more types of effect. This publication has made the results broadly accessible so that, e.g., manufacturers and importers receive help in fulfilling their obligation to classify their chemicals. This list was well received both nationally and internationally, and there is no doubt that computer based classification will become an important tool in our efforts to increase our knowledge of the vast number of unexamined substances.

Capacity-Building, Education, Training and Awareness-Raising: In the near future, training will begin for operators in waste treatment plants and for persons handling hazardous waste. By combining environmental, health and safety aspects, operators will be trained to optimise environmental interests in connection with plant operation, while at the same time, taking health and safety aspects into account.

Information: National guidelines containing principles of environmental standards for selected chemicals have been published and preparatory work for updating and revising these guidelines has been initiated. Creation of a database on chemicals and an emission inventory programme was initiated in 1993.
**Research and Technologies:** The Ministry for the Environment and other relevant ministries and agencies conduct a great number of inventories and research projects in order to establish background data for regulation, e.g., to use multidisciplinary approaches to chemical safety problems.

**Financing:** No information available.

**Cooperation:** As a member of the European Union (EU), Denmark uses the harmonized systems of classification and labelling of chemicals established within the European Community (EC). Denmark has implemented the EC Directive on the control of major accident hazards involving dangerous substances. Denmark also participates actively in international cooperation within the United Nations system, including within the framework of: the Stockholm Convention on Persistent Organic Pollutants (POP’s); the Organisation for Economic Cooperation and Development (OECD); the Nordic Council; and others. Denmark has approved the London Guidelines for the exchange of information on chemicals in international trade including the prior informed consent procedure (PIC) procedures, as replaced by the Rotterdam Convention. Danish legislation on export of chemicals follows the PIC procedure. The Danish principles of chemical risk assessment and regulation as described in the Environmental Protection Act and the Chemicals Act, as well as in a number of guidelines, have been successfully used in connection with export of environmental know-how and technology to countries in Eastern Europe and to developing countries. Denmark has ratified the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal and its amendments and actively seeks to have the provisions of the Convention tightened.

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CHAPTERS 20 TO 22: ENVIRONMENTALLY SOUND MANAGEMENT OF HAZARDOUS, SOLID AND RADIOACTIVE WASTES

Decision-Making: The Ministry for the Environment is responsible for the overall framework legislation on waste management but not on the legislation of radioactive waste, which is taken care of by the Ministry of Interior and Health. The waste is regulated by one framework Statutory Order (the Statutory Order of Waste) in connection with a series of specific Statutory Orders dealing with specific waste streams. In Denmark the responsibility for management of all waste lies with the local councils.\(^1\)

Hazardous wastes: The municipalities are responsible for collecting hazardous waste originating from industries and households. In order to ensure environmentally sound handling of hazardous waste and its safe delivery at a destruction facility, each firm that generates hazardous waste must report to the municipality, which is obliged to collect the waste at site. Each municipality is expected to establish its own collection scheme.

Solid wastes: It is the responsibility of the municipalities to provide disposal facilities for all solid waste and ensure the necessary incineration capacity. Special arrangements are made for the disposal of: newspapers; magazines; glass; cardboard (from private households in areas with more than 2,000 households); paper; cardboard and plastic transport packaging from trading companies; food waste from large-scale kitchen catering for use as animal feed; and paper from all public institutions. Special arrangements are made for the management of PVC and impregnated wood from private household; enterprises; and public institutions. Combustible waste suitable for incineration must not be disposed of at landfill sites.

Programmes and Projects: Hazardous wastes and solid wastes: The national waste management plan, Waste 21, was developed in 1998 and covers initiatives on both hazardous and solid waste for the period 1998-2004. In the subsidy programme “Programme for cleaner products etc.” Funds have been allocated to projects on recycling, cleaner technology, and waste. The Environmental Council for Cleaner Products is in charge and overall prioritisation of funds, whereas the Danish Environmental Protection Agency is in charge of the administration of funds for specific projects.

Radioactive wastes: No information available.

Status: Hazardous wastes: The collection of problem waste from households and companies is well organized. There is at least one collection point in every municipality. Private citizens can also dispose of oil and chemical waste at these collection points. Pharmaceutical waste is to be handed in to dispensing chemists. From these collection points, the waste is sent to one of the municipally-owned receiver stations, where a final sorting is made before shipment to in around 50 percent to “Kommunekemi”, which is under the common ownership of the municipalities, to be destroyed by incineration, neutralization or depositing. Denmark shares its knowledge of the collection and treatment of hazardous waste through consultancy activity with a number of industrial companies, as well as private and public organizations nationally and abroad.

Solid wastes: Presently, 65 percent of the waste is recycled. According to the national waste management plan – “Waste 21” – the objective for recycling is 64 percent in the year 2004. This means that the objective for recycling has already been achieved.

The guiding principle for Danish waste policy is that prevention is better than cure. The aim is to make optimal use of the resources of, first of all, waste materials, then the energy resources. Environmental protection measures are directed at the entire cycle of polluting materials and products circulating in society. The total amount of waste in Denmark was in 2000 13 million tonnes. However, waste preventive initiatives are expected to stabilize waste quantities in 2004 at the latest. In waste management, waste prevention has been given first priority. The collected waste is managed of in four different ways: 24 percent is incinerated in heat and power producing plants; 11 percent ends up on landfills; 65 percent is recycled; and less than 1 percent constitute hazardous waste. Recycling has been given the highest priority. Primary efforts are directed towards increasing the recyclability of materials and products. Land filling has been given the lowest priority and waste has been

\(^1\) Local councils do not manage Radioactive as well as agricultural waste and residues from coal-fired power plants.
redirected from landfills in the central parts of Denmark to large controlled sites in coastal areas. The need for land filling of waste has been reduced by 50 percent since the mid 90’s, significantly reducing the need for new landfill sites. For decades, Denmark has employed deposit return scheme, ensuring that the return of beer and soft drink bottles remains at the rate of 99.5 percent. The same bottle can be in circulation scores of times until it is removed and recycled as raw material in the production of new bottles.

*Radioactive wastes*: No information available.

**Capacity-Building, Education, Training and Awareness-Raising:**
- **Hazardous wastes**: No information available.
- **Solid wastes**: No information available.
- **Radioactive waste**: No information available.

**Information:**
- **Hazardous wastes**: No information available.
- **Solid wastes**: No information available.
- **Radioactive waste**: No information available.

**Research and Technologies:**
- **Hazardous wastes**: No information available
- **Solid wastes**: No information available.
- **Radioactive wastes**: No information available.

**Financing:** **Hazardous wastes**: As an instrument to try to avoid illegal dumping of hazardous waste Denmark has no tax on hazardous waste. But the producer has to pay a treatment fee corresponding to the treatment costs.

**Solid wastes**: Apart from such traditional control measures as legislation and regulations, since 1994, Denmark has made use of a number of economic instruments within the field of waste management, including: a general waste tax of US$26 per ton of waste for incineration; US$32 per ton of waste for disposal on landfills; and tax exempt on recycling. In addition, there is a levy on certain forms of packaging. All household waste removal is fully paid for by the consumer through waste fees. Total annual expenses for operation and investments in the waste collection sector amount to US$323-646 million, one third of which is paid by the local authorities. In connection with the implementation of the Action Plan, the need for investments by both local authorities and private companies will increase.

**Radioactive wastes**: No information available.

**Cooperation:** **Hazardous wastes and solid wastes**: As a member of the European Union (EU) Denmark participates active in the development of new EU regulation, Directives and strategies. Denmark also participate actively in international cooperation within the OECD and the United Nations; and has ratified The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal and its amendments.

**Radioactive wastes**: No information available.

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CHAPTERS 24 TO 32: STRENGTHENING THE ROLE OF MAJOR GROUPS

Women: Decision-Making: The Convention on the Elimination of All Forms of Discrimination Against Women was signed in 1980 and ratified in 1983. Gender equality in Denmark is advanced, especially when viewed within an international context. Therefore, the Government has decided not to consider women as a particular population group in Local Agenda 21 campaigns where they participate in Local Agenda 21 activities on equal terms with men.

Children and youth: No information available.

Indigenous people: Decision-Making: Greenland is a geographically separate and well-defined part of the Danish Realm situated in the North Atlantic, covering an area of 2,175,600 square kilometres. The majority of the population is born in Greenland. As of January 1 2000, the total population was 56,124, out of which 49,369 persons were born in Greenland. By and large, the population born in Greenland constitutes the indigenous population of Greenland, sharing a language and culture distinct from the Danish.

On the 5th of June 1953, a revised Danish Constitution was passed. Section 1 of the Constitution provides that the Constitution shall apply to all parts of the Danish Realm. Greenland’s colonial status was thus ended through full integration into the Danish Realm and the Constitution secured the Greenland population two out of the 179 seats in the Danish Parliament, the Folketing. Greenland Home Rule, as introduced by the Greenland Home Rule Act No. 577 of 29th November 1978, is an extensive type of self-government. By the Greenland Home Rule Act, effective from May 1st 1979, the Danish Parliament has delegated legislative and executive powers to the Home Rule Authorities, consisting of the popularly elected legislative Greenland Parliament, the “Landsting”, and the Greenland Home Rule Government, the “Landsstyre”. During the years that have elapsed since the establishment of Home Rule in 1979, the Home Rule Authorities have assumed authority in most aspects of life in Greenland, including inter alia: The organisation of the Home Rule system; taxation; regulation of trade, including fisheries and hunting; education; supply of commodities; transport and communications; social security; labour affairs; housing; environmental protection; conservation of nature; and health service.

The Home Rule Act states that the resident population of Greenland has fundamental rights to the natural resources of Greenland (Joint decision on mineral resources). In respect of mineral resources, the Home Rule Act contains a special provision, vesting joint decision-making power in the national authorities and the Home Rule Authorities, making it possible for either party to oppose (eventually to veto) a development policy or specific resolutions considered by the party in question being undesirable. Due to an agreement between the Danish Government and the Greenland Home Rule Government, the responsibility for the mineral resources administration in Greenland was transferred to the Home Rule Government on July 1, 1998 by amendment to the Danish Mineral Resources Act.

Extensive legislative and executive powers, territorially as well as functionally defined, have been transferred to Home Rule. Consequently, the co-operation of the Home Rule Authorities will often be necessary to fulfil Denmark’s international obligations. Accordingly, the Home Rule Act provides that the Danish Government must consult the Home Rule Authorities before entering into treaties that particularly affect Greenland interests. This consultative procedure applies whether or not the treaty concerns a transferred field. Through this procedure Greenland has decided that the Danish ratifications of the following important conventions also cover Greenland:

- Convention on Economic, Social and Cultural Rights (1966);
- Ramsar Convention on Wetlands (1971);
- Washington Convention in International Trade in Endangered Species of Wild Fauna and Flora (1973);
- Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal (1989);
- Vienna Convention for the Protection of the Ozone Layer (1985) and the Montreal Protocol on Substances that Deplete the Ozone Layer and its amendments (1987);
- Convention on Biological Diversity (1992);
- Framework Convention on Climate Change (1992); and
- Convention to Combat Desertification (1994).
“The Strategy for Danish support to indigenous people” (1994) describes the basic principles for development assistance within the area both bilaterally and multilaterally. The strategy gives priority to projects that aims to strengthen the capacity of indigenous peoples own organisations, but also includes a number of more traditional areas of development cooperation (health, education etc.). A review of the strategy was undertaken in 2001 and an updated version of the strategy is under preparation. Cooperation: International treaties concluded by the Danish Government and customary international law bind the Home Rule Authorities to the same extent as they do the Government of Denmark. In order to ensure that Denmark and Greenland comply with their international obligations, the Danish Government may direct the Home Rule Authorities to take the necessary steps to fulfil such obligations. Furthermore, it should be mentioned that Greenland is an active member - albeit non-voting like the two other Nordic self-government territories: Faroe Islands and Åland - in the Sustainable Development cooperation of the Nordic Council of Ministers, and have thus signed on the Nordic Strategy on Sustainable Development. Likewise, the Greenland Home Rule Government is an active participant in the Arctic Council and its international circumpolar cooperation on Environmental Protection and Sustainable Development.

Legislative and administrative orders of the Home Rule Authorities, e.g. concerning regulation of fisheries may affect third State interests and the position of the Danish Government vis-à-vis other countries. Under the Act the Home Rule Authorities are, therefore, under obligation to consult the central authorities of the Realm before introducing measures that might prejudice Denmark’s interests. The Home Rule Government may send representatives to Danish diplomatic missions in order to safeguard important commercial interests of Greenland. Although, in principle, treaty-making powers are vested exclusively in the Danish Government, the central authorities of the Realm may, upon request, authorise the Home Rule Authorities to conduct, with the assistance of the Foreign Service, international negotiations on purely Greenland affairs. The Home Rule Authorities has notably availed itself of the right to conduct bilateral negotiations in connection with the conclusion of fishery agreements.

Non-governmental organizations: Decision-Making: NGOs occasionally participate in the design of national sustainable development policies. 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. It also collaborates with international NGOs and other organizations of Major Groups in national and regional sustainable development programmes. The “92 Group” is a group of 21 Danish environment and development organizations working jointly on follow-up to the UN Conference on Environment and Development. The “92-Group” is actively involved in the national preparations for the World Summit on Sustainable Development (WSSD). Danish representatives from major groups have been included in: the National Delegation to the Commission on Sustainable Development (CSD); United Nations Framework Convention on Climate Change (UNFCCC) negotiations; and the Convention on Biological Diversity.

Programmes and Projects: The Government (Danida) has funded a project coordinated by the 92 Group aiming at building capacity among civil society organisations in 30 developing countries to take part in the preparations for the WSSD in Johannesburg.

Local authorities: No information available.

Workers and trade unions: No information available.

Business and industry: Decision-Making: Private enterprises are considered to be key actors in achieving sustainable development in Denmark. Therefore it is important that companies take an active part in the efforts to improve the environment and contribute to green industrial development. Concerns for the environment is valued as an important ingredient of competitive power for companies. For further information concerning initiatives that still need to be done to achieve well-functioning green markets, greener organisational development in companies, and more green innovations, see the discussion paper by the Working Group on Green Industrial Strategy on: www.em.dk. As a new initiative to increase economic efficiency of environmental regulation, a Working Group is established to clarify options on Green Market Economy. The Working Group shall propose policy options on how to direct the market into a more environmental protective direction, in order to obtain the ambitious environmental goals by least cost. The Working Group will conclude its work by the end of 2002.

The Confederation of Danish Industries (DI), which is the leading business organisation in Denmark, recently launched a new initiative “Business Enterprises as Citizens of the World”. The initiative recognises that Denmark is currently fully integrated in the global economy. Through their involvement in the global economy,
Danish producers face an increasing number of direct and indirect requirements on the global market. Among other things, the initiative is directed towards the World Summit on Sustainable Development (WSSD) in Johannesburg. The main thought of the initiative is combating world poverty, developing and spreading of technology and making globalisation work for the poor. The strategy focuses on better education and science to assure development of new technologies and on combating barriers for free trade. It also discusses the challenges for industry in a globalized world and the use of new tools for better business practices such as the UN Global Compact. The Confederation of Danish Industry is an associated member of the Global Compact. 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. nordicpartnership@mm.dk.

**Scientific and technological community:** No information available.

**Farmers:** No information available.

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CHAPTER 33: FINANCIAL RESOURCES AND MECHANISMS

Decision-Making: Denmark has introduced environmental taxes on both households and industries. Taxable substances or materials are: CO$_2$, SO$_2$, energy; pesticides; waste; wastewater; chlorinated solvents; Nickel-Cadmium batteries; PVC; raw materials; drinking water; green owner charge for cars; packaging; disposable items; and shopping bags. The revenue from environmental taxes constitutes approximately five percent of GDP and approximately 10 percent of the total tax revenue.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Cooperation: Denmark is among the very foremost countries in the world with respect to assistance to developing countries’ efforts to reduce poverty. Danish ODA equalled approx. 12.9 billion DKK in 2001, well above the UN goal of 0.7% of GDP. It is a central goal of Danish development policy to promote environmentally, socially and economically sustainable development as a crucial prerequisite for poverty reduction in developing countries now and in the future. Concern for the environment being one of three cross cutting objectives of Danish development cooperation, a sizable part of Danish assistance is directed toward contributing to the solution of national, global and cross-border environmental problems.

Supplementary to the above-mentioned programmes, the Environment, Peace and Stability Facility was established as a response to UNCED. In 2000, total commitments for environmental assistance under this facility were approximately DKK 800 million, equivalent to approximately 0.08 percent of GNP. Half of its funds are allocated to environmental projects in selected developing countries and countries in economic transition. The facility is administered by the Ministry of Foreign Affairs (Danida). In accordance with the Danish legislation on international development cooperation, the Danish Investment Guarantee Scheme was introduced in 1996. Within a limit presently of US$ 414 million, the Minister of Foreign Affairs guarantee Danish companies against losses incurred in connection with direct investment in developing countries.

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CHAPTER 35: SCIENCE FOR SUSTAINABLE DEVELOPMENT

Decision-Making: The Ministries responsible for natural and social sciences, legislation, and policies are: the Ministry for Science, Technology and Innovation; the Ministry of Education; the Ministry for the Environment; and the Ministry for Food, Agriculture and Fisheries. There is no single legislative act covering natural and social sciences.

Programmes and Projects: See under Research and Technologies and Cooperation

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: Increasing research and teaching at the university level by women is part of a government policy to enhance the role of women. Funding for education amounts to approx. 8 percent of GNP. In 1991, the total number of steady teaching staff (who do research 40 percent of the time) dealing with environment and development at universities, was 251 men and 27 women. The total number of externally financed full-time researchers/scientists/engineers in the natural and social sciences dealing with environment and development was 195. These figures include independent research institutions. The total number of full-time researchers in environment and development in the public sector was 818.

Information: No information available.

Research and Technologies: The launching of the Strategic Environment Research Programme and the National Strategy for Polar Research have been the most important post-Rio activities in the natural, social and engineering sciences. The Aquatic Environment Action Plan of 1997 supports research into more sustainable production and consumption patterns.

Financing: No information available.

Cooperation: As part of the Danish Environmental Research Programme, Danida is financing a sub-programme concerning “Sustainable Use of Natural Resources in Developing Countries”. A total amount of US$ 8.3 million during the years 1994-1998 has been allocated for three cross-disciplinary research projects under this sub-programme. In addition, Denmark has contributed US$7 million to CGIAR programmes addressing science for sustainable development.

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CHAPTER 36: PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING

Decision-Making: The Ministries of Education; the Foreign Affairs; and for the Environment are primarily responsible for education activities in the field of the environment. An Act on the Danish “Folkeskole” (The Danish Primary and Lower Secondary School) provides the basis of environmental education in schools. The general goal of the Education Act states that education should further the pupil’s understanding of human interaction with nature. The Act emphasizes the integration of environmental education with existing subject areas. The new subject aims and, along with the redefined basic knowledge and proficiency area, demonstrates that the “green” aspect is essentially present in many subjects. Public participation is a key activity in the Danish strategy for sustainable Development. It is also the main subject of the Århus Convention. The objectives are to make it possible for every interested person to gain enough information to participate in every decision-making process about environmental issues in a qualified way.

Programmes and Projects: The national plans of action for environmental education and green dimension are implemented through the decisions referred to above and through different national school development projects, including those undertaken as a part of the “Nordic Environmental Education” and by the Nordic Council of Ministers on conflicting interests in the use of natural resources. In addition, several innovative initiatives are being carried out locally with the aim of developing education that gives priority to understanding sustainable development. Cooperation takes place on several levels among NGOs, research centres and ministries, through projects; seminars; coordination meetings; and other mechanisms. In-service training programmes are available for teachers, concerning the nature and methods of environment and development education. Environment and development concerns are part of teacher educational programmes. In Denmark 100-200 green guides are employed on a municipality level coordinating Local Agenda 21 activities with a number of NGOs. Their function as green guides covers a variety of issues depending on local priorities and individual assessments, but usually it includes public awareness and local initiatives to improve the quality of the environment.

Status: In Denmark, education is free at all levels.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: Denmark participates in several international projects and reports to a number of ad hoc working groups. The following projects are examples of this international cooperation: OECD project on environmental education (ENSI); project for countries around the Baltic Sea (BSP); global IT-project on environment and nature (GLOBE); and Nordic project on environmental education (MUVIN). Denmark also participates in EU cooperation on environmental education through the Directorate General (DGXI).

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CHAPTER 37: NATIONAL MECHANISMS AND INTERNATIONAL COOPERATION FOR CAPACITY-BUILDING IN DEVELOPING COUNTRIES

This issue has been covered either under Chapter 2 or under Capacity-Building, Education, Training and Awareness-Raising in the various chapters of this Profile.

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CHAPTER 38: INTERNATIONAL INSTITUTIONAL ARRANGEMENTS

This issue deals mainly with activities undertaken by the UN System. This issue has been covered under **Cooperation** in the various chapters of this profile.

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CHAPTER 39: INTERNATIONAL LEGAL INSTRUMENTS AND MECHANISMS

Decision-Making: Sustainable Development is a cornerstone in Danish policy. The principles of sustainable development cut through most policy areas, including development assistance. Denmark is a firm adherent of Agenda 21 and the development of international legal instruments to strengthen sustainable development globally.

Programmes and Projects: No information available.

Status: Denmark is party to among other the following important Conventions:

- Convention on Economic, Social and Cultural Rights (1966);
- Ramsar Convention on Wetlands (1971);
- Washington Convention in International Trade in Endangered Species of Wild Fauna and Flora (1973);
- Convention on the Conservation of Migratory Species of Wild Animals; Bonn Convention (1979);
- Basle Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal (1989);
- Vienna Convention for the Protection of the Ozone Layer (1985) and the Montreal Protocol on Substances that Deplete the Ozone Layer (1987) and its amendments;
- Convention on Biological Diversity (1992);
- Framework Convention on Climate Change (1992);
- Convention to Combat Desertification (1994); and

Denmark is planning to become a party to the following Multilateral Environmental Agreements (MEAs) as soon as possible:

- Kyoto Protocol to the Framework Convention on Climate Change (1997);
- Rotterdam Convention on the Prior Informed Consent Procedure for certain hazardous Chemicals and Pesticides in International Trade (1998);
- Cartagena Protocol on Biosafety to the Convention on Biological Diversity (2000); and

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 40: INFORMATION FOR DECISION-MAKING

Decision-Making: No information available.

Programmes and Projects: The Government has established a programme to develop or use indicators of sustainable development at the national level. The Ministry for the Environment is involved in the work on indicators of sustainable development and is further developing its internal information system.

Status: Denmark continuously publishes environmental data and statistics. Statistics Denmark, to a large extent, is fed with data provided by the Ministry for the Environment. The main sources of information on sustainable development are data provided by industry and local authorities. Computer networks, providing access to international information systems, are available for the public and private sectors. The main users of sustainable development information are decision-makers at all levels and in all sectors. Danish data collection related to sustainable development is a full-fledged system, which is continually being expanded and revised to account for any shift in needs and circumstances, and it covers virtually every aspect of life in a complex, industrial society. Denmark also has access to international information systems. A comprehensive inventory of databases, relevant to sustainable development, was carried out in 1994.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER:  INDUSTRY

Decision-Making: The Ministry of Economic Affairs, Business and Trade will launch a growth strategy in May 2002, which will replace the former Government’s strategy for Denmark’s industrial policy called “dk.21”.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER: SUSTAINABLE TOURISM

Decision-Making: The Ministry for the Environment and the Ministry for Economic and Business Affairs are cooperating to strengthen the planning restrictions that regulate development in tourist areas. Considering the importance of tourism at the national level, vacation centres and hotels with floor space above 50,000 m² are subject to mandatory Environmental Impact Assessments (EIAs); there is also the green key, a certificate granted upon efficient use of resources to hotels, vacation centres and camping areas.

Programmes and Projects: Regarding the harmonization of standards for tourism nationally and regionally, small businesses are encouraged to create commercial and marketing networks at regional levels. To protect cultural integrity, a special planning department has initiated local demonstration projects on how to strengthen the relationship between local culture and tourism. The Government has entered into a co-operation with an eco-labelling scheme “Destination 21 - a labelling scheme for tourist destinations with sustainable development”. The Danish Tourist Board in association with the Outdoor Council and Tourism Development Centre began the development of a destination-labelling scheme in 1997 in order to promote sustainable tourism development at a destination level.

The development of the recognition scheme was born out of the need to address the lack of strategy for sustainable tourism in Denmark and to provide an association or forum in which Danish tourism actors are able to obtain information and guidance and exchange knowledge and skills in their efforts to develop their industry on a sustainable basis and in accordance with the principles outlined in Agenda 21. The development of the labelling scheme Destination21 is aiming at implementing a set of criteria at destination level, based on all three sustainability elements: Environmental; social; and economic sustainability.

Another scheme is the label “green-key”, for the accommodation sector. The Green Key is a diploma awarded to: hotels; youth hostels; conference- and holiday centres; camping sites; and holiday houses that live up to a long list of environmental requirements. These requirements are contained in a number of criteria, which the company has to fulfil. In selected areas the company also has to draw up action plans. Camping sites and holiday houses can also obtain the Green Key, and separate criteria have been made for these two sectors. Frequent inspection visits are of decisive importance for an establishment gaining - and keeping - The Green Key diploma. Ongoing checks are also undertaken in which guests are invited to participate. If the inspection reveals that the company is not fulfilling the criteria - or violating them - the company loses it's right to the Green Key. In order to ensure the fulfilment of the Green Key's criteria the company has to appoint a responsible environmental representative. The Green Key is awarded for a period of 12 months, after which it must be renewed.

Status: Tourism is Denmark's fourth-largest industry. Tourists attach great importance to a sound environment and to the possibility of bathing in clean water.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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