

# DENMARK

## CONCLUSIONS AND RECOMMENDATIONS

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## CONCLUSIONS AND RECOMMENDATIONS\*

Denmark's open economy thrives on trade and provides the country with high average incomes and extensive welfare benefits. Its landscapes are almost entirely shaped by human activities, notably the intensive agriculture that supports its large agro-food industry. Other major environmental pressures stem from its transport sector and from its energy supply structure, which relies almost exclusively on fossil fuels. In addition to the national dimension, environmental issues in Denmark have a strong international one. This is due to regional economic and environmental interdependencies (Nordic co-operation, North Sea and Baltic Sea pollution, transfrontier air pollution). Denmark is also strongly involved in global environmental issues and environmental aid.

In the 1990s, economic growth and participation in the European Union have provided the context for economic and environmental decision making in Denmark. Denmark has a well established practice of national environmental planning and the implementation of environmental policies is largely devolved to local authorities and is widely supported by public opinion. Environmental policies currently focus on the following themes: acid deposition, nutrient discharges and groundwater contamination, biodiversity, and global issues such as climate change. Measures to address these issues rely on a broad range of diverse and in some cases innovative policy instruments. In particular, the green tax reform introduced in the 1990s has made it possible to reduce taxation on income and labour, whilst increasing fiscal incentives to protect the environment.

This OECD report sets out the baseline for assessing future environmental progress and examines Denmark's environmental performance in three areas:

- implementation of environmental policies;
- integration of environmental concerns and economic decisions;
- international co-operation on environmental protection.

It also assesses the extent to which Denmark's domestic objectives and international commitments are being met, based on environmental effectiveness and economic efficiency criteria. A number of recommendations are put forward that could contribute to further environmental progress in Denmark.

### 1. **Implementing Environmental Policies**

#### *Achievements and further progress*

Building on the solid institutional and regulatory foundations laid in the 1970s and 1980s, Denmark has in recent years taken stock of the remaining and new environmental challenges it faces and has extensively revised and upgraded its environmental legislation. Budgets and staffing have regularly and substantially increased in line with expanding responsibilities and policy priorities. The implementation of environmental responsibilities which are significantly devolved to municipal and county authorities has likewise improved. Land use regulations, particularly those applicable to rural and coastal areas, are rigorous; municipal and county administrations contribute to ensuring that spatial planning is an effective instrument for the protection of the environment, nature and landscapes. Danish environmental democracy is one of the most advanced of OECD countries. Policy making is open and consultative and a wide range of measures are in place to ensure public participation and stakeholder involvement, provision of and access to environmental information, as well as the right of administrative and legal appeal.

Denmark makes extensive use of economic instruments for environmental management: environmental charges, environmental taxes and other economic instruments (e.g. deposit-refund). Overall, the green tax reform, and more generally the use of economic instruments for environmental management, has led to important results: several loopholes in the taxation system that adversely affected the environment have been plugged, the environmental incentive effect of taxation has been improved and the changes have been revenue neutral with taxes on income and labour being reduced to compensate for higher environmental taxation. Pollution abatement and control expenditure in Denmark amounts to about 1 per cent of GDP, a level comparable to that of other Nordic countries and lower than in a number of other OECD countries. Overall, public environmental expenditure is covered by environmental charges and taxes, and the polluter pays principle is applied to households and industry.

\* Conclusions and Recommendations to be discussed, amended and approved by the Group on Environmental Performance at its meeting in November 1998.

The 1990s have confirmed the effectiveness of this approach in continuing to control and reduce pollution from point sources. In particular significant progress has been achieved in reducing atmospheric emissions of conventional pollutants and discharges of organic substances, nutrients and heavy metals into water from municipal and industrial sources. Though this achievement is not always apparent at ecosystem level, air quality has improved, contaminated sites have been identified and are being cleaned up, and surface water quality is well above what it was in the 1970s. On the other hand, trends in waste generation and CO<sub>2</sub> emissions are not favourable. As the Danish economy continues to grow in the 1990s, environmental pressures from energy, agriculture and transport in particular are still strong. There is also concern for nutrient and pesticide discharges from agriculture.

There are opportunities to improve and refine environmental taxes applied in Denmark. The effectiveness of the differentiation of the carbon tax according to energy forms in meeting environmental goals, and the complexity of the system need to be reviewed; transport taxes need to be redesigned to influence emissions and fuel consumption through both fixed and variable transport costs; pesticide taxes are based on the price of the product and do not necessarily reflect the toxicity of the chemical used; the tax on water should be applied to all users of water, not only households. Recent moves to improve the conservation of coastal areas, notably the prohibition of construction within 300 metres of the shoreline, must be maintained and properly implemented. In the absence of a systematic national inventory of land use and the legal status of protected areas, it is difficult to assess precisely the actual results of policies developed since the early 1970s, notably in coastal areas that have been subject to the highest development pressures. Detailed information is available on public environmental expenditure, but there is no knowledge of the structure of and trends in private environmental expenditure.

It is recommended to:

- ensure the licensing process systemically considers waste prevention, and the efficiency of energy and other material inputs in order to accelerate the move towards cleaner technologies and processes;
- continue to monitor the enforcement of and compliance with environmental regulation, with particular attention to agriculture and fish farming;
- further pursue the green tax reform, calibrating environmental taxes to ensure their full environmental effectiveness and economic efficiency, notably those applied to CO<sub>2</sub>, water, pesticides and transport;
- strengthen the use of economic analysis and economic instruments as part of environmental decision making, particularly with respect to decisions relating to pollution from agriculture;
- complete a systematic inventory of land use and land use changes in order to assess the effectiveness of spatial planning policies in terms of nature and environmental protection;
- improve the availability of data on private environmental expenditure, particularly by industry.

### ***Water management***

Awareness that Denmark's water resources are an asset that need conserving and protecting has grown in the last ten years. Substantial investments in improving waste water treatment by municipalities and industry have made it possible to meet the discharge reduction objectives set for point sources in the Action Plan for the Aquatic Environment. Plans to address nutrient and pesticide loadings have been elaborated, reviewed and regularly updated, with quantitative targets and deadlines, supported by a coherent institutional and planning framework at national, county and municipal level. The target reduction of the 1986 Pesticide Action Plan for pesticide sales was met in 1995, almost two years before the deadline. These achievements have been made through a range of mutually supporting regulatory and economic instruments, including licensing, strict discharge standards, and charges and taxes on water supply and waste water discharges. The protection of areas used for water supply and recent efforts to better define and protect water abstraction areas are beginning to have an effect on groundwater quality. Attention and work have been devoted to improving and restoring watercourses and other aquatic ecosystems. Much effort is being put into monitoring water quality, particularly for tracing pesticides and understanding their effects on drinking water.

Despite reductions in discharges of organic matter and nutrients from municipal and industrial point sources, most watercourses and lakes are a long way from meeting the quality objectives, pollution of groundwater has reached a level that threatens the current system of water supply based on small scale and simple treatment, and coastal waters are affected by eutrophication. Continued pollution from agricultural sources is the main cause for such modest results: the quantity of manure produced by Danish agriculture has not fallen significantly in the last ten years and increasingly exceeds field application capacity of individual farms, especially pig farms, which saw

their production increase by 30 per cent between 1987 and 1996. Whether Danish watercourses, lakes, groundwater and coastal waters actually improve depends largely on the success of measures adopted in 1998 to reduce the nutrient load from field fertilisation and on those to reduce pesticide loadings.

It is recommended to:

- ensure the full implementation of the second Action Plan for the Aquatic Environment, including economic measures aimed at reducing agricultural nutrient loadings and closely monitor their effectiveness;
- strengthen the enforcement of existing environmental regulations relating to water pollution, notably for fish farms;
- consider the extension of the water tax to water users other than households;
- further develop watercourse maintenance improvement and restoration, notably for private watercourses, and upgrade their ecological condition;
- continue efforts to upgrade pesticide monitoring in groundwater and drinking water, as an essential input into priority setting in pesticide management policy;
- elaborate a national water management plan that would take a catchment area approach to both pollution and water resource issues;
- give more attention to the economic analysis of water management measures, and carry out a comprehensive assessment of the economic and environmental effectiveness of measures in different sectors (municipal, industrial, agricultural).

### ***Air management***

Denmark has made significant progress over the last two decades in reducing or containing emissions of conventional atmospheric pollutants. Between 1980 and 1995, while GDP increased by 36 per cent, SO<sub>x</sub> emissions dropped 67 per cent and those of NO<sub>x</sub> fell by 11 per cent. Such emission reductions have made it possible for Denmark to meet its national and international commitments, and have had a positive impact on local air quality. Urban air quality is generally good, though pollution episodes have been observed in unfavourable climatic conditions. These achievements result from a range of abatement measures, notably fuel quality standards, regulatory and economic instruments, as well as greater integration of environmental concerns in energy and transport policies. Many municipalities are committed to reducing the air pollution and other environmental impacts of transport. With the support of the Danish EPA, a major shift in local transport and physical planning policies is under way. Over the last two decades, Denmark has almost stabilised energy use during a period of continued economic growth. It has doubled the contribution made by renewable energy sources to the country's energy needs, and Danish industries have become leaders in environmentally favourable energy technologies such as wind turbines, which are now considered as a viable alternative to coal based power plants.

Nevertheless, Danish emissions of SO<sub>x</sub> and NO<sub>x</sub> per unit of GDP are relatively high in Europe and further reductions in emissions of atmospheric pollutants are necessary, particularly to reduce ozone levels and reduce acid deposition. Transport emissions play an increasingly central role in air pollution management and CO<sub>2</sub> emission reduction policies. Many of the measures will have to be directed at controlling the increase in road traffic and related emissions, though it is not clear to what extent current price levels and planned tax increases can significantly contribute to meeting these goals. The balance of taxation between the ownership of cars and the use of cars must be reviewed. Measures to reduce the average age of the car fleet should be considered. Energy efficiency should be further improved and energy substitution reviewed. Given the international context, the development of renewables in Denmark is unlikely to be supported by market based instruments such as large carbon taxes; renewables will therefore remain at best marginally competitive and will require a more interventionist approach. As a result, Denmark may incur costs by seeking to move faster than other countries on the rapid deployment of renewable energy.

It is recommended to:

- carefully monitor the effect of measures designed to reduce NO<sub>x</sub> and VOC emissions to ensure that they can contribute to meeting national and international objectives and are sufficient to provide a long term improvement in air quality, notably with respect to ozone levels;
- continue to reduce emissions resulting in acid deposition both in Denmark and elsewhere;

- ensure that efforts to support renewable energy and energy conservation are targeted at the most cost effective measures to reduce atmospheric emissions;
- consider the environmental effectiveness and economic efficiency of influencing variable transport costs, including the use of higher taxation of gasoline and road use pricing systems such as tolls;
- provide further support for the development of sustainable transport policies at county and municipal level;
- continue to ensure that public transport can compete with private car use through vigorous policies measures designed to discourage car use and support local and regional public transport.

### ***Chemical products and waste management***

The Danish system for the safe management of chemical products has been most successful for substances of concern in identified product uses (such as lead in gasoline, cation-active surfactants in detergents or chromium in wood impregnation products) and has used a combination of regulatory measures, voluntary agreements and economic incentives. Denmark has made a good start in setting priorities for action on unassessed existing substances, by establishing a list of unwanted substances and making best use of international co-operation. It has also made significant progress in pesticide management; in particular, the approval system for pesticide use has been improved, with the re-assessment of 209 active ingredients and the prohibition (or strict regulation) of the 29 ingredients of most concern.

To pursue its efforts to control chemicals, Denmark should maintain and improve the quality of the information in its chemical product database and reinforce its efforts to promote its initiatives internationally. As the decline in pesticide use seems to be largely due to improved low-dose products and a reduction in the arable land in production, the cost effectiveness of general measures to reduce pesticide use and specific measures of the pesticide approval system should be reviewed.

Danish waste management policy has largely met its objectives. Since the mid-1980s, there has been a substantial reduction in landfilling, and recycling/reuse has more than doubled over ten years, to 60 per cent of waste in 1996. Regulatory measures have been successfully supplemented by economic instruments. In particular, the waste tax, the waste charges and taxes on packaging have provided the incentive needed for reuse and recycling, while collection and recycling is mandatory for some waste. Deposit-refund systems for bottles has been effective and could be usefully extended to cans. Hazardous waste collection and treatment are well managed, with such waste increasingly being recycled. Denmark is addressing the problem of contaminated land; the proposed amendment of the Contaminated Sites Act should close remaining loopholes in the regulatory approach and ensure that progress in cleaning up all types of contaminated sites can resume.

Nevertheless, recent waste data show no trend towards a reduction in waste generation at source. In the absence of new measures aimed at waste reduction, stabilisation is unlikely, particularly if the economy continues to grow as it has since the early 1990s, largely driven by buoyant private consumption. To achieve waste reduction at source, a product policy to reduce waste generated and improve the quality of the waste, and medium to long term changes in both production and consumption patterns are needed.

It is recommended to:

- maintain and improve the quality of information in the chemical product database;
- consider how best to renew international efforts to identify priorities for action amongst existing chemical substances which have not yet been assessed;
- examine and take account of the relative cost effectiveness of general measures to reduce pesticide use and measures to improve the pesticides approval system;
- make more use of economic instruments (e.g. waste taxes and charges, deposit-refund) to encourage waste reduction at source, as well as recycling and reuse;
- develop a medium to long term policy to change production and consumption patterns, geared to reducing the amount of waste generated at source and influencing its composition;
- consider options for funding clean up measures for orphan contaminated sites.

### *Nature conservation*

Denmark has adopted and is implementing an extensive body of nature conservation legislation in an effort to stop habitat loss and improve conditions for biodiversity. A large part of its territory is placed under various forms of protection (general habitat protection, conservation orders, protection zones along coast lines, Ramsar sites, EC Bird protection directives), covering almost all types of terrestrial ecosystems. A number of lakes, coastal meadows, humid permanent grassland, bogs, watercourses, uncultivated dry grasslands and heaths have undergone restoration since 1989. For a small number of species, suitable habitats have been re-established together with breeding and re-introduction programmes. The establishment of peri-urban forests and eco-schools are additional achievements. Denmark plays a significant part in international efforts for conservation of biodiversity, and has ratified most major conventions concerning wildlife and biodiversity.

There is however a great need for additional and continuous efforts for nature restoration and biodiversity protection. Freshwater ecosystems as well as marine ecosystems are often affected by agricultural pollution and little conservation of marine areas has been implemented. About 97 per cent of watercourses have been channelled or otherwise modified. Monitoring of changes in habitat quality and species richness is generally not well developed, and due to a lack of comprehensive area statistics, it is difficult to get an overall view of protected habitat area and land use changes. More attention should be given to nature management as part of agricultural practices including traditional grazing and hay harvesting. Ambitious domestic efforts at county level could be more effective if supported by a national ecological network concept. Denmark is not on the way towards fulfilling its afforestation objectives (including those for “re-creation”), which should give higher priority to deciduous forest plantations.

It is recommended to:

- continue the implementation of the national strategy for biological diversity and formulate a national action plan for nature protection, including quantitative targets and deadlines;
- develop a national ecological network in support of county efforts to develop ecological networks;
- continue the development of management plans for areas under conservation orders;
- continue to improve and extend the conservation of marine areas, and improve the integration of biodiversity concerns in fisheries policy;
- accelerate the implementation of the 300 metre dune and beach protection zones;
- investigate the possibility of establishing a network of national parks, which could include some of the most valuable coastal ecosystems, such as tidal flats, dune areas, cliff coasts and heaths;
- improve the integration of nature, landscape and biodiversity concerns in agricultural policies and practices;
- strengthen efforts to meet the objectives for afforestation and natural forest protection, and promote sustainable forestry practices;
- develop comprehensive nation-wide area statistics for all protected areas; and improve the co-ordination of biodiversity knowledge and nature monitoring as part of a comprehensive nation-wide monitoring programme.

## **2. Integrating Environmental Concerns in Economic Decisions**

Despite much progress in decoupling the generation of some environmental pressures from GDP (e.g. SO<sub>2</sub>, NO<sub>x</sub>, water abstraction, nitrogenous fertiliser use), Denmark’s national objectives and international commitments (e.g. waste generation, nitrate pollution of surface waters, GHG emissions) call for not only cost-effective environmental policy but also a significant strengthening of the integration of environmental concerns in economic and sectoral decision making. Such integration is seen as a key to improving environmental performance and moving towards sustainable development. This is because economic forces and changes in major economic sectors, such as transport, energy, fishery and agriculture, strongly influence environmental conditions and trends, and thus can enhance or counteract the benefits of environmental policies and technical progress.

### *Environmental and economic policies*

Denmark’s general development objectives presented in the 1997 government report “Denmark 2005” provide goals for 2005 concerning employment, public debt, environment and international action. The report recognises several dimensions to sustainable development, including concern for the welfare of future generations in

Denmark, and for development in central and eastern Europe and in developing countries. The 1994 White Paper on the Environment stresses the need for more sustainable agriculture, forestry and fisheries. Although there is no formal interministerial mechanism to deal with sustainable development in general, work is done at sectoral level and through environmental planning to translate sustainable development concepts into concrete action. The Danish local Agenda 21 campaign was launched in 1994.

Much progress has been made in sectoral integration at planning, budgeting and project levels. Sectoral plans such as the Energy 21 action plan, the 1991 sustainable development action plan for agriculture and the Traffic 2005 plan are important steps towards integration. Environmental planning in the form of general goal setting by periodic White Papers on the environment and specific action plans (concerning water, waste and pesticides) supports and extends these integration efforts. The next White Paper on environment is due in 1999.

Efforts made by Denmark to apply strategic environmental assessments (SEA) to government bills and proposals and to the national budget are innovative and exemplary. The greening of government operations was one of the major elements in the SEA of the 1998 national budget. With green auditing, action plans by many State institutions and public procurement plans, progress is real in Danish administrations. While the environmental evaluation carried out on the 1998 budget focused on the marginal effect of changes in the budget, it would be useful to also consider the whole structure of public funding and expenditure in terms of its environmental impact, notably for natural resources such as energy.

The strong link between project related EIA procedures and spatial planning should not lead to excessive flexibility and inconsistency in land use planning. While the rigour and precision of planning procedures need to be balanced by the possibility of applying for exemptions that will require an EIA, amendments to regional or municipal development plans can undermine planning procedures, particularly in rural areas.

There is no evidence that environmental measures and expenditure in Denmark have to date adversely affected its economic growth or international competitiveness. On the contrary, environmental protection has become an important selling point for Danish industry. The Danish eco-industry has a combined annual turnover of Dkr 2 billion (50 per cent for export), and the Danish wind turbine industry has an annual turnover of over Dkr 4 billion (80 per cent for export).

It is recommended to:

- pursue and further develop strategic environmental assessments, notably with respect to sectoral policy proposals and the national budget, in order to promote and evaluate progress towards sustainable development;
- continue and strengthen the integration of environmental concerns in planning and policies relating to agriculture, transport, energy and fisheries;
- ensure cost-effective implementation of sectoral plans with respect to environmental targets; review the cost-effectiveness of environmental actions in an intersectoral context;
- strengthen efforts to improve the environmental performance of government including the implementation of environmental action plans by public institutions, sustainable public procurement, and the management of buildings and offices;
- carry out a comprehensive review of existing fiscal and other subsidies in terms of their environmental impact, particularly for natural resources.

### ***Integration of environmental concerns in agricultural policy***

Over the last ten years, the structural adjustment of Danish agriculture has led to higher concentration and specialisation of agricultural production, particularly in the livestock sector. Livestock, with 11 million pigs and 13 million broilers, makes up for 70 per cent of the value of agricultural production. There has been a decrease in the number of farms (by 40 per cent) and cattle (by 30 per cent), but the agricultural area has only decreased by 4 per cent and still accounts for almost two-thirds of Denmark's total area, and the density of pigs per hectare has increased by 20 per cent. Two-thirds of agricultural production is exported and agriculture represents 22 per cent of total exports. Overall, agriculture has had adverse impacts on the environment: extensive loss of biodiversity due to farm amalgamation and the drainage of wetland for farming, high levels of nitrogen discharges into surface water, high contribution to eutrophication of surface and coastal waters, contamination of groundwater from pesticides, ammonia volatilisation due to over-fertilisation with manure, despite reduced pressures from the use of commercial fertilisers.

Some environmental objectives relating to the agricultural sector have been met. In particular, progress has been made in reducing ammonia emissions from agriculture and the phosphorus discharge reduction target has been met. Objectives have also been met for pesticide use, as the consumption of active ingredients has decreased. Less distortion in agricultural production through the reduction of market price support, in the context of Common Agricultural Policy reform, should contribute to promoting a more efficient use of natural resources. The measures implemented have included very detailed regulations and standards and, increasingly, economic instruments, such as a tax on pesticides, direct payments linked to environmental outcomes, and, more recently, a tax on excess consumption of nitrogen. The designation of Sensitive Farming Areas (SFAs) addresses the site-specificity of many environmental issues associated with farming activity. The number of farmers engaged in organic production has substantially increased in recent years, partly due to increased incentives to convert; certified organic farms now account for 3.5 per cent of the total agricultural area. Efforts have been made to include an environmental dimension in research, training and advisory services.

Environmental objectives in the agricultural sector that relate to water still require a major effort. The objective of reducing nitrogen discharges to water by 50 per cent by 1997 could not be achieved and the deadline has had to be extended to 2000, with more stringent measures recently introduced. The frequency of treatment by pesticides has remained high. A balance needs to be reached between the targeting of measures to environmental concerns in the agricultural sector, and the public resources required to implement and enforce such measures. In particular, the cost-effectiveness of economic instruments in agri-environmental policy greatly depends on the transaction costs involved (implementation, enforcement and monitoring costs). The level of incentives associated with SFAs has not always been attractive enough to reach voluntary agreements with farmers in groundwater protection areas, which raises the issue of the costs and benefits associated with agri-environmental measures. Little has been done on nature conservation as part of agricultural policies, although the protection of semi-natural grassland against agricultural intensification or abandonment has contributed to enhancing biodiversity and wildlife habitat.

It is recommended to:

- develop a comprehensive agri-environmental strategy regrouping all the various environmental objectives associated with farming activity, and providing a framework for the designation of Sensitive Farming Areas;
- give greater attention to nature conservation and biodiversity protection policy objectives;
- continue efforts in integrating environmental concerns in research, training and advisory services;
- ensure that policy measures are more closely targeted to the desired environmental outcomes;
- give greater attention to the economic and environmental costs and benefits associated with the implementation of policy measures, and their compatibility with the polluter pays principle;
- strengthen the enforcement of environmental regulations and standards in agriculture;
- improve the monitoring and evaluation of the environmental performance of agriculture.

### **3. International Co-operation**

International issues play a major part in Danish environmental policy and environmental matters are high on the agenda of Danish foreign policy. This is a consequence of regional ecological interdependencies, within Northern Europe and as a riparian state of both the North Sea and the Baltic Sea. This is also a consequence of regional economic interdependencies, notably within the European Union and with other Nordic States. In addition, Denmark promotes international environmental co-operation and environmentally sustainable development worldwide for reasons of solidarity. With other like-minded countries, Denmark's proactive stance on protecting the environment through international co-operation has played an influential role in a number of international negotiations. Denmark is particularly active within the EU context to drive European policies towards sustainable development and to influence EU positions in global environmental negotiations.

For its part, Denmark has met or is well on the way to meeting its international commitments concerning discharges of phosphorous and heavy metals in the Baltic and the North Sea, and atmospheric emissions of SO<sub>2</sub>, NO<sub>x</sub> and VOCs. It has taken expensive measures to reduce inputs of nitrogen to coastal waters from waste water treatment plants. It has phased out or reduced its emissions of ozone depleting substances ahead of internationally agreed deadlines. It is one of the few OECD countries that have introduced a carbon tax on energy products to reduce CO<sub>2</sub> emissions. Denmark is doing its share to reduce marine pollution and control maritime traffic according to MARPOL commitments, and is promoting international agreements to control the spread of persistent organic chemicals in the global environment.

Denmark devotes the highest official development assistance effort among OECD-DAC countries: over 1 per cent of GNP in 1996. Including assistance to Central and Eastern Europe, Denmark's overall aid is well above one per cent of GNP. This level enjoys wide public support. The environmental component of ODA reaches about 13 per cent and is set to increase with the higher budget appropriations planned for the Environmental and Disaster Relief Facility. Environmental assessment is applied to all development projects. In recent years, Denmark has granted much financial support for environmental action in Central and Eastern Europe. Its contribution to the Global Environmental Facility is high.

Though Denmark mostly lives up to the high standards of international environmental co-operation it strives for, there is scope for progress in a number of areas. Denmark has been slow to ratify some international agreements (e.g. 1982 UN Convention on the Law of the Sea). Further significant reductions in nutrient discharges from agricultural sources are needed to meet Denmark's international commitments relating to the protection of marine waters. Denmark has not so far succeeded in limiting its CO<sub>2</sub> emissions, which were well above 1990 levels in 1995 and 1996 and seem unlikely to stabilise at 1990 levels by 2000. Denmark therefore needs to review its range of policy options concerning energy efficiency and substitution, as well as energy and transport pricing and taxation (towards internalisation for all end users). Denmark's national CO<sub>2</sub> emission data differs from those measured internationally, as Denmark adjusts its emission data for temperature variations and, unlike other countries, for trade in electricity.

It is recommended to:

- accelerate the ratification of international environmental agreements already signed (Annex III), notably concerning the protection of the marine environment;
- closely monitor the implementation of measures to reduce nutrient discharges to the marine environment and ensure that Denmark's related international commitments are achieved;
- consider additional measures needed to meet CO<sub>2</sub> emission reduction targets, particularly in the energy and transport sectors;
- review the basis for adjusting CO<sub>2</sub> emission data according to energy trade and temperature variations, to ensure compatibility with methodologies used in other OECD countries and internationally;
- continue to play an exemplary role in development aid, notably by maintaining a high level of official development assistance with a large environmental component.

