# Government Communication 2000/01:38

## Sustainable Sweden – a Progress Report on Measures To Promote Ecologically Sustainable Development

Comm. 2000/01:38

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The Government presents this Communication to Parliament.

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## Brief summary of the Communication

In this Communication the Government describes the progress that has been made on strategies and measures to promote ecologically sustainable development in Sweden, in the EU and internationally. The Communication reports on the progress made on the action programmes presented in the Government's Communication *Sustainable Sweden – a Progress Report and New Measures to Promote Ecologically Sustainable Development* (Comm.1999/2000:13). The Communication also includes a progress report on local investment programmes.

This year, in view of the upcoming Swedish presidency of the European Union, the Government places special emphasis on EU and international environmental policy.

## Note on the English version of the Communication

Chapter 4 of the Swedish text, which describes the measures undertaken by each government ministry, is not included in the English version of the Communication.

# Contents

# 1 Background and subject matter of the Communication

The Government reports annually to Parliament on the progress made in efforts to achieve ecologically sustainable development. This provides Parliament with continuous information on the measures that have been taken within the areas of responsibility of the various ministries. These annual reports, which describe the effects of the measures that have been taken on the process of adjustment to ecologically sustainable development, are presented in conjunction with the Budget Bill. They also describe new measures adopted as a result of proposals made by the Government in bills that have been presented during the year or in connection with other decisions.

Sweden's adjustment to ecological sustainability is based on the programme of action that was presented in 1997 in the Communication *Ecological Sustainability* (Comm. 1997/98:13). The programme contained 93 measures distributed among the then thirteen ministries in the Government Offices. The Communication *Sustainable Sweden – a Progress Report and New Measures to Promote Ecologically Sustainable Development* (Comm. 1998/99:5) was a first report on the progress that had been made in the main policy areas and presented new policies and proposals. The Communication was based to a large extent on *Sustainable Sweden – A Progress Report for 1998*, which was presented by the Committee for Ecologically Sustainable Development in August 1998. In 1999 the Government again reported on developments in the Communication *Sustainable Sweden – a Progress Report on Measures to Promote Ecologically Sustainable Development* (Comm. 1999/2000:13). The arrangement of this year's report is broadly similar to the previous ones. However, this year, in view of the upcoming Swedish presidency of the European Union, the Government places special emphasis on EU and international environmental policy.

# 2 Sustainable development

The objective of sustainable development comprises ecological, social and economic aspects. These three aspects are interdependent and a careful balance must struck between them if the objective is to be attained. Environmental policy must therefore be seen in the context of economic and social development. Use of the term 'ecological sustainability' emphasizes the ecological dimension of sustainable development. Ultimately, the aim is to assure present and future generations the prospect of a bright future and good quality of life. Section 1 of the Environmental Code affirms that nature is worthy of protection and that our right to modify and exploit nature carries with it a responsibility for wise management of natural resources.

One key to success is broad participation by all sectors of the community. Public awareness of the ecological prerequisites on development is therefore of the essence. Key factors determining citizen participation are access to information and opportunities for dialogue and influence.

Environmental concerns and resource management must be integrated into decision-making in all sectors of society. At the same time, sectoral thinking must give way to a holistic approach to the development of society. This calls for a broader perspective, in which both ecological and economic and social aspects are integrated into public authorities', enterprises' and organizations' decision-making processes. Efforts are now being made at the national and international levels to elaborate strategies for sustainable development. An EU strategy for sustainable development will be adopted at the European Council in Gothenburg in June 2001.

## 2.1 Ecological sustainability

In the Statements of Government Policy for the last three years the Government has stated that the work of converting Sweden to ecological sustainability must continue and be speeded up. Sweden must pioneer efforts to achieve ecologically sustainable development. According to the Statement of Government Policy presented this autumn, priority will be given to environmental issues during the coming Swedish presidency in the spring of 2001. This applies not least to climate issues and chemical policy.

*Environmental objectives*

The aim is to hand over a society to the next generation in which the major environmental problems have been solved. In order to assure a good living environment and prosperity for future generations, the Government has set three objectives for ecological sustainability: protection of the environment, efficient use of resources and sustainable supplies. 'Protection of the environment' means that emissions of pollutants must not damage human health or exceed nature's capacity for absorbing or breaking them down. 'Efficient use of resources' means that

utilization of energy and other natural resources must be more efficient than today and we must increasingly rely on renewable resources. 'Sustainable supplies' means that the long-term productive capacity of ecosystems must be assured. These general objectives are dealt with in detail in the 1998 Communication to Parliament (Comm. 1998/99:5).

The Bill *Swedish Environmental Quality Objectives – An Environmental Policy for a Sustainable Sweden* (Gov. Bill 1997/98:145 – 'the Environmental Bill') elaborates on and defines the ongoing efforts to achieve ecologically sustainable development. In April 1999 Parliament adopted 15 new national environmental quality objectives (Report 1998/99:MJU6, Parl. Comm. 1998/99:183). These objectives define the future environmental states that are being aimed for. They centre on human health, biological diversity, the cultural environment and nature. Emissions of harmful substances must be reduced to levels that are not harmful to nature or human beings in the long term. Natural and cultural landscapes with valuable environmental assets must be protected and preserved, while their productive capacity is maintained and developed. The aim is to achieve these objectives within one generation. The horizontal generation objective and the new structure of the environmental quality objectives represent a completely new approach to environmental policy.

The objectives that have been adopted are: 1) Clean air, 2) High-quality groundwater, 3) Healthy lakes and streams, 4) Wetlands teeming with life, 5) A balanced marine environment and flourishing coastal areas and archipelagos, 6) Zero eutrophication, 7) Natural acidification only, 8) Healthy forests, 9) A flourishing agricultural landscape, 10) A majestic mountain landscape, 11) A good built environment, 12) A non-toxic environment, 13) A safe radiation environment, 14) A protective ozone layer, and 15) Limitation of climate change. The objectives are described in detail in the Environmental Bill (Gov. Bill 1997/98:145).

During the last two years work has been in progress on the elaboration of these objectives and the formulation of intermediate objectives and action strategies. About 20 agencies presented their proposals to the Government on 1 October 1999. In June this year a parliamentary committee, the Environmental Objectives Committee (M 1998:07), presented a comprehensive review of intermediate targets that must be achieved if the environmental quality goals are to be achieved within a generation (Dir. 1998:45). The Committee's report *The Future Environment – Our Common Responsibility* (SOU 2000:52) has been circulated for comment and is currently being considered in the Government Offices.

*Sectoral responsibility and environmental management*

In order to achieve ecologically sustainable development a number of measures will have to be taken in various sectors and at various levels of society. The sectors' and sectoral authorities' responsibility for the environment has been emphasized during the last ten years. Parliament has also established the principle of sectoral environmental responsibility. Each sector of society must take responsibility for implementing the measures that are necessary in order to achieve the environmental quality

objectives. This means that enterprises and authorities must integrate environmental concerns into their activities. The enactment of the Environmental Bill (Gov. Bill 1997/98:145) means that the government agencies now have greater sectoral responsibility. Sectoral responsibility must also be developed and better defined. It must also be combined with an integrated approach to sustainable development and better coordination between various sectors and policy areas.

Environmental management helps to establish an integrated approach to environmental concerns in an organization's activities. The principles applied in central government administration are the same as those applied in industry. The task is to establish systematic environmental efforts on the basis of well-defined guidelines and objectives and a clear division of responsibilities and routines for monitoring and accounting. The Government Offices have decided to systematically integrate environmental concerns and resource management into their own activities by introducing environmental management systems.

*Monitoring and evaluation*

The new structure for environmental quality objectives is based on the principle that they must be simple to pursue and monitor. The national objectives are to be used as a basis for regional and local environmental objectives. One monitoring tool in this connection is the 'green indicators', i.e. indicators for ecologically sustainable development, that have been designed by the Environmental Advisory Council (Jo 1968:A). Some of the indicators reflect the adjustment to ecological sustainability by households, enterprises and the public sector. The indicators may be regarded as a first step towards addressing dimensions other than the economic dimension.

The annual Communication *Sustainable Sweden*, in which the Government reports to Parliament on the progress being made on the changeover to ecologically sustainable development is another example of monitoring and evaluation. The Communication is also used in many other connections, for example by public authorities and as educational material in schools. This makes it possible for interested parties other than Members of Parliament to obtain a picture of the Government's measures to support the efforts being made to achieve the objective of ecologically sustainable development. The publication of an English version of the Communication makes information on the progress of Sweden's efforts to achieve a sustainable society available to an international readership, not least in the EU.

## 2.2 Strategies for a better environment and sustainable development

Detailed definition of environmental objectives, integration of environmental concerns into various activities, sectoral responsibility, environmental management, and monitoring and evaluation are important elements of the work of achieving a sustainable society. The Environmental Code, which represents a coordinated and more stringent

body of environmental legislation, as well as well-balanced fiscal and other incentives, are other important components of an effective environmental policy. The work of developing specific international and national strategies for sustainable development has begun. A brief review is given below of the strategies and programmes in the field of environment and sustainable development which will be formulated in the near future.

*Integration of the environment and sustainable development into the EU's policies*

Sectoral strategies for the integration of environmental concerns are a key component of the EU's work with respect to sustainable development. The Treaty of Amsterdam, which entered into force on 1 May 1999, emphasises the goal of sustainable development. The term 'sustainable development' has been incorporated into the preamble to the Treaty, and under Article 6 environmental protection requirements must be integrated into Community policies and activities. Sweden has been a driving force in the work of integrating the environment and sustainable development into all EU policies.

The work on sectoral integration – the 'Cardiff Process' – can be traced back to the conclusions of the UN Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992. This work was initiated by the European Council in Cardiff in June 1998, which invited some of the sectoral councils of ministers to formulate strategies for integrating the environment and sustainable development into their areas of responsibility. Several other sectors have subsequently been added to the list. The sectors currently formulating integration strategies are transport, energy, agriculture, the single market, industry, development assistance, economic issues, fisheries and external policy. The strategies focus in particular on transport, energy and climate change issues.

The Cardiff summit also made environmental assessments compulsory prior to the taking of all major decisions. In recent years the European Commission has continued to elaborate recommendations and tools for the implementation of strategic environmental assessments. A proposal for an EC Directive on strategic environmental assessments (SEAs) will be finalized by the Council of Ministers this autumn.

The European Council in Helsinki in December 1999 scheduled a major review of sectoral integration for the Gothenburg Council in June 2001. Prior to the Gothenburg Council all the different councils are to prepare and embark on implementation of their respective strategies. These strategies will be linked to the sustainable development strategy. In an earlier evaluation the Commission pointed out the need for timetables and more clearly defined sectoral objectives for the strategies and for the preparation of sectoral indicators for monitoring and evaluation purposes.

*The Sixth Community Environment Action Programme*

The Commission is currently drafting a proposal for a new environment action programme. The programme may be regarded as a detailed specification of the environmental dimension of the EU's strategy for sustainable development. The programme will include both

environmental objectives, new instruments and guidance for the various sectors.

The Commission's proposal for the environment action programme is expected to be ready this autumn. As president of the EU, Sweden intends to play an active part in pursuing the work of producing the final draft of the programme in the spring of 2001.

*The EU's strategy for sustainable development*

The Helsinki Council also decided that the Gothenburg Council should adopt an EU strategy for sustainable development. The strategy will encompass economic, social and environmental aspects. The Commission is currently drafting such a strategy in close cooperation with Sweden. The EU strategy will establish a framework and constitute the general policy document for continued work on sustainable development.

The EU's strategy for sustainable development will also be part of the Union's contribution to the international review of Agenda 21 programmes in 2002 (Rio+10).

The sectoral strategies for environmental integration, the environmental action programme and the general EU strategy for sustainable development will be key issues during the Swedish presidency.

Activities in the EU are also dealt with in section 3.10.

*A national Swedish strategy for sustainable development*

In preparation for the coming review conferences in the UN, Sweden, like all other nations, will be expected to present a strategy for sustainable development. A situation report will be presented next spring.

The work of preparing reports on the experiences of the Government's efforts hitherto regarding sustainable development will be a good starting-point for future work in this field.

*The Nordic Council of Ministers' strategy for sustainable development*

This autumn the Nordic Council of Ministers presented the working document *Sustainable Development – New Bearings for the Nordic Countries*. The strategy was drafted in accordance with the prime ministers' instructions to the Nordic Council of Ministers to draft a cross-sectoral strategy for sustainable development in the Nordic countries and the neighbouring areas. The Nordic strategy also covers the Faeroe Islands, Greenland and Åland autonomous areas. The strategy relates to areas in which the Nordic countries have common interests and are particularly well-placed to contribute to sustainable development and in which Nordic cooperation provides added value. The strategy includes objectives and measures for the period 2001-2004 and long-term objectives up to 2020. The Cardiff strategies for environmental integration are mentioned as one important model. In the initial phase the Nordic strategy will only focus on six sectors: energy, transport, agriculture, industry, fisheries and forestry. Apart from these six sectors, the strategy will cover five cross-sectoral action areas: climate, biological diversity, the sea, chemicals and food safety. The strategy also comprises particularly relevant instruments for the implementation of sustainable

development, such as public participation, local Agenda 21 programmes, knowledge bases and resource efficiency. It also identifies the need to develop indicators for the purpose of evaluating implementation of the strategy's objectives and measures. The report points out that the strategy presented is a first step towards a dominant role for the ecological dimension. The economic and social aspects will be elaborated in the continued work on the Nordic strategy for sustainable development. Other important areas for future work are tourism, development, urban and built environments, the financial sector etc.

The report states that the relevant sectors in the Nordic Council of Ministers will monitor progress on implementation of the strategy within the framework of the sectors' action programmes and strategies and of the action programme for Nordic cooperation on the environment during the period 2001-2004. The main responsibility for monitoring and evaluation will rest on the Nordic countries themselves, but the strategy also presents new tasks and challenges for the Nordic Council of Ministers. The strategy will be presented in the form of a proposal from the Council of Ministers to the Nordic Council for consideration in April 2001. Subject to the Nordic Council's decision, the strategy is expected to be approved by the Nordic prime ministers and enter into force on 1 January 2001.

*The OECD's strategies for sustainable development and the environment*

Sustainable development is pursued as a cross-sectoral project in the OECD and has been supported by the OECD's Environmental Committee. A report on the project will be presented in connection with the conference of OECD finance ministers, and a strategy for sustainable development will be adopted at a joint meeting of environment and finance ministers in May 2001. In parallel with this project, the OECD Environmental Committee is engaged in the drafting of an environmental strategy for the next 10 years and an environmental report with a 20-year time scale. These will be presented for decisions at the conference of environment ministers in May 2001.

*Rio+10, Habitat and Istanbul+5*

Rio+10 is the name given to the UN General Assembly conference in 2002, which will be a 10-year review of the progress made since the UN Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992. The UN Commission for Sustainable Development has recommended that the review conference in 2002 should be held at the highest political level. This means that national and regional preparations are important. Issues such as land use, agriculture, trade and investment were dealt with separately in 2000. The main focus in 2001 will be on energy, transport and information issues.

The UN General Assembly's extra session for review of the Habitat Agenda which was adopted in Istanbul in 1996 (Istanbul+5) will take place in 2001.

Sweden has played an active part in the United Nations Centre for Human Settlements (UNCHS) in promoting coordination of the

implementation of the Habitat Agenda and Agenda 21. As president of the EU in the first half of 2001, Sweden will be called upon to play an even more active part in the preparations for the major international Habitat and Agenda 21 conferences.

# 3 The Government's measures to promote ecological sustainability

Sweden aims to show that long-term and systematic efforts to implement change can lead to solutions involving the integration of the three primary objectives of ecological sustainability into all policy areas and interaction between them. As mentioned previously, the work of implementing change must be carried out with measures that also promote growth and thus strengthen the economy and employment. Central government must set an example and pioneer adjustment to ecological sustainability.

This chapter outlines the Government's implementation of its policy on ecologically sustainable development and projected progress in some key areas. The last part of the chapter deals with international cooperation. The first part is a synthesis of the two following chapters, which contain details of the progress made on the action programmes ministry by ministry (chapter 4; however not available in the English version) and a progress report on the local investment programmes (chapter 5).

## 3.1 Developments in the public sector

### 3.1.1 Sectoral responsibility

Public authorities and government agencies have a great responsibility when it comes to integrating environmental concerns into their areas of responsibility. Section 7 of the Government Agencies and Institutes Ordinance (1995:1322) has been amended so as to give all the public authorities and government agencies general responsibility, starting on January 1 1998, for meeting the requirements with regard to ecologically sustainable development that are relevant to their activities. In August 1998, moreover, the Government decided to assign special sectoral responsibility for the ecological sustainability process to 24 of these agencies.

This means that the agencies must integrate environmental considerations and resource management into their activities and seek to promote efforts to achieve ecological sustainability throughout the sector for which they are responsible. Where it appears relevant, the agencies are to ensure that decisions and measures of various kinds contribute to the achievement of the objectives of environmental policy and ecological sustainability.

The 24 agencies to which special responsibility has been assigned are the Swedish Armed Forces, the Swedish Rescue Services Agency, the

Swedish International Development Cooperation Agency, the National Social Insurance Board, the National Board of Health and Welfare, the National Rail Administration, the National Road Administration, the Swedish Maritime Administration, the Civil Aviation Administration, the National Agency for Education, the Swedish Board of Agriculture, the National Board of Fisheries, the Swedish National Labour Market Administration, the National Board of Occupational Safety and Health, the National Heritage Board, the Swedish National Board for Industrial and Technical Development, the Geological Survey of Sweden, the National Board of Forestry, the National Board of Trade, the Swedish National Energy Administration, the National Board of Housing, Building and Planning, the Swedish Consumer Agency, the National Chemicals Inspectorate and the Swedish Environmental Protection Agency.

In October 1999 the sectoral agencies submitted an initial progress report to the Government, in which they defined their perceptions of their roles, the extent of the task, possible problems and ways and means of integrating ecological sustainability into their activities. The extent and content of the reports vary. Generally speaking, most of the agencies have started on this task in their respective sectors and are satisfied with their role. Several of them have made considerable progress. The Government Offices are currently considering the need to extend the special sectoral responsibility. It is particularly important to clearly define this responsibility, clarify the connection with other development processes in environmental policy such as environmental quality objectives and environmental management systems, improve the support provided for the agencies and find suitable tools for their work.

### 3.1.2 Environmental quality objectives

The general objective of environmental policy is to hand over a society to the next generation in which the major environmental problems have been solved. As previously mentioned, Parliament adopted the proposals concerning environmental quality objectives and guidelines for activities in various areas in the spring of 1999. In other words, Parliament has adopted a new structure for the efforts to achieve the environmental quality objectives. The purpose of the environmental quality objectives is to describe the quality or state of the environment, including natural and cultural assets, that is required for achievement of sustainable development. It is necessary to complete the environmental quality objectives by adopting intermediate objectives and action strategies to ensure that the objectives are achieved within a generation. Parliament's decision will lead to further development and specification of the work on ecologically sustainable development. A large number of public authorities were instructed to prepare intermediate objectives and propose measures that will help to achieve these objectives and environmental quality objectives.

The Government decided to appoint a parliamentary committee, named the Environmental Objectives Committee (M 1998:07), in May 1998. It

will carry out a comprehensive review of the intermediate objectives and action strategies that must be adopted to make it possible to achieve the environmental quality objectives, with the exception of Limitation of climate change, within a generation. The reports presented by the authorities mentioned above will form the starting-point for the continuing work of the Committee. On June 7 2000 the Environmental Objectives Committee presented its report *The Future Environment – Our Common Responsibility* (SOU 2000:52) to the Government. The report contains proposals for intermediate objectives, action strategies, instruments, and monitoring and evaluation systems that will make it possible to achieve the environmental quality objectives adopted by Parliament within a generation. The Committee's proposals have been circulated for comment and are currently being considered in the Government Offices.

The Government intends to inform Parliament at the beginning of 2001 of the intermediate objectives and action strategies that must be adopted to make it possible to achieve the environmental quality objectives.

As regards the environmental quality objective Limitation of climate change, the Government authorized the Minister for the Environment in May 1998 to appoint a parliamentary committee for the purpose of presenting proposals for a coherent Swedish strategy and action programmes on the climate. The Committee presented its report *Proposals for a Swedish Climate Strategy* (SOU 2000:23) in April 2000. The Committee proposes that the target for emissions of greenhouse gases in Sweden should, as a mean value for the period 2008-2012, be 2 per cent lower than emissions in 1990. The Committee also proposed that emissions in 2050, in terms of carbon dioxide equivalents, must not exceed 4.0-4.5 tonnes per capita per year. These targets are to be achieved by means of a large number of measures assembled in a basic package, which should be implemented without delay. If this basic package is not sufficient, the Committee proposes the implementation of an additional package, in which fiscal incentives are an important component. Their proposals have been circulated for comment. The Government intends to present a first Climate Bill to Parliament in December. It is hoped that this Climate Bill will be followed by a bill in the autumn of 2001 proposing ratification of the Kyoto Protocol.

*Monitoring and evaluation of environmental quality objectives*

Various monitoring arrangements must be introduced in order to make it possible to assess the progress made in adjustment to ecologically sustainable society. Extensive efforts are in progress, both at national and local level, to develop indicators on the basis of the horizontal environmental objectives that show whether or not progress is being made.

The national and regional environmental monitoring authorities are responsible for the monitoring and evaluation of environmental quality objectives. The Environmental Monitoring Council, which is appointed by the Government and attached to the Swedish Environmental Protection Agency, oversees the environmental monitoring authorities. The Swedish Environmental Protection Agency and the county

administrative boards have been instructed by the Government to present proposals for monitoring systems relating to environmental quality objectives. The Swedish Environmental Protection Agency has presented its first reviews of progress on the environmental quality objectives in *de Facto* (published in May 1998 and August 2000).

The Environmental Advisory Council has drafted a number of green indicators on behalf of the Government. According to the Council, these green indicators are designed to reflect major environmental problems. They also measure strategic factors underlying the existing problems, for example the use of energy and chemicals. Some of the indicators measure progress on the adjustment to ecological sustainability by households, enterprises and the public sector. The indicators are intended to provide decision-makers and the public with readily comprehensible information and they are intended to give a first indication of whether or not progress is being made at an appropriate pace.

Some of the green indicators were presented in the 1999 Spring Finance Bill and in the 1900 and 2000 Budget Bills. The indicators reflect Sweden's share of responsibility for major environmental problems and represent a complement to the economic indicators that are presented in those bills.

Work on the development of indicators is also in progress in the EU, the OECD and the UN. Sweden is taking an active part in this cooperation.

### 3.1.3 The Environmental Code

The Environmental Code plays a crucial role in the implementation of environmental policy. The Code has adapted the environmental legislation to changes in society and to the environmental problems of today. The structure of the Code, with general objectives, general rules of consideration and new instruments, such as environmental quality standards, improves the scope for using the legislation as an instrument for gearing environment-related action to achievement of the objectives adopted by Parliament. Furthermore, on account of its broad area of application, the Code will help to ensure that decisions taken by authorities and individuals are conducive to ecologically sustainable development. The Code is applicable to all operations and measures that are "not of negligible significance to human health and the environment."

In December 1999 the Government decided to appoint a parliamentary committee for the purpose of evaluating the application of the Environmental Code and submitting proposals for necessary reforms (Dir. 1999:109).

### 3.1.4 Environmental management systems

Environmental management systems in public administration are now being established in both public authorities and the Government Offices. Environmental management systems facilitate systematic environmental activities on the basis of well-defined guidelines and objectives, for

example in central policy documents, integration of environmental concerns into day-to-day activities, a clear division of responsibilities, and routines for monitoring and results accounting. Environmental management systems have proved to be an effective tool for integrating environmental concerns into operations. At present, 138 authorities have been instructed by the Government to introduce environmental management systems, and other authorities will be instructed to do so by the end of this year. The environmental effects of introducing these systems are still difficult to assess. Most authorities have carried out a number of concrete measures, particularly in their internal activities, and these have already made a favourable environmental impact. Examples of such measures are reduction of electricity and paper consumption, purchases of environment-friendly products and source separation of waste. The great challenge now is to integrate environmental concerns and resource management into all relevant decisions. Several authorities, including the county administrative boards and the Swedish International Development Cooperation Agency (Sida), have already done so in connection with a number of decisions and administrative procedures.

In many cases environmental management systems have also improved efficiency – not only as regards activities related to the environment – and improved cooperation within and between public authorities. In the long run, better organization and carefully designed routines can lead to economic savings.

As mentioned above, the Government Offices have now also started introducing environmental management systems. To start with, the Government Offices focused on their internal administration, but they will henceforth also concentrate on activities that yield indirect environmental benefits, i.e. decision-making processes.

The introduction of environmental management systems in public administration is a concrete application of the Treaty of Amsterdam, i.e. integration of environmental requirements into various policy areas.

### 3.1.5 Public procurement

Making contract awards in connection with public procurement subject to environmental requirements can be an effective way of contributing to sustainable development. The autumn 2000 Statement of Government Policy declares that all public contracts will be subject to environmental requirements. Making public procurement of goods and services subject to environmental conditions could have a substantial environmental impact in the public sector, in particular since it creates an incentive for manufacturers to take steps to ensure that their products meet high environmental standards. ‘Green’ procurement is an important instrument within the framework of the integrated product policy that is now being introduced by the Government in order to mitigate the adverse impact of products on human health and the environment (see section 3.2.1).

In order to make it easier for public procurement bodies to require compliance with environmental standards the Commission for Ecologically Sustainable Procurement (M 1998:01) is designing an

Internet-based tool for use on a voluntary basis throughout public administration (Dir. 2000:54). By November 2000 the Commission will present a needs analysis and proposals for a procurement policy that will help public authorities, municipalities and county councils to formulate a policy for ecologically sustainable procurement which complies with both the Swedish and EU rules on public procurement.

## 3.2 Industry, the labour market, consumption and regional development

### 3.2.1 Industry and the labour market

One important measure when it comes to achieving ecological sustainability is to prevent and reduce the adverse effects of products on human health and the environment. In its Communication *An Integrated Product Policy* (Comm. 1999/2000:114) the Government presented a strategy for the continuing work of formulating an integrated product policy at the national level and contributing to such a policy in the EU and international forums. One of the foundation-stones of an integrated product policy is participation by all public sector operators, industry and business, non-profit organizations and individual citizens. We must all assume responsibility for improving the environment. This includes responsibility for the work environment and for ensuring that products can be handled safely by employees throughout their life cycles. Manufacturers are well-placed to limit the environmental impact of products and are already making considerable efforts to this end. Their choices of raw materials, chemicals, manufacturing processes, transportation, energy use etc. affect the environment not only at the raw material and manufacturing stages but also during use and in the waste stage. In the long run, the circulation of non-renewable resources must be reduced.

Public bodies are responsible for adopting a framework that is conducive to industry's adaptation to ecologically sustainable development. This Communication gives examples of tools that can already be used in industry to reduce the negative impact of products. The Government's intention is to support the design of a broad range of effective and coordinated tools. It also intends to continue its dialogue with industry and other stakeholders in order to secure the necessary broad-based acceptance of responsibility.

One example of contacts between industry and the Government is the Environmental Advisory Council's assignment of preparing and initiating a dialogue with some sectors of industry about their work on sustainable development. The purpose of this dialogue is to intensify efforts on behalf of sustainable development in certain selected sectors and to produce guidance data for political decisions and environmental policy guidelines. Another important contribution is the work being done by the Swedish National Board for Industrial and Technical Development (NUTEK) in promoting industry's own pro-environment efforts, for example the introduction of environmental management systems.

The working group that was established in 1998 at the Swedish National Labour Market Administration in order to prepare proposals for a central programme for the Administration's measures to promote an ecologically sustainable society concluded its work in the summer of 1999. The Administration is expected to adopt an environmental policy, general objectives and an action plan for future work this autumn. The relevant details will be included in the Administration's annual report that will appear in the spring of 2001.

A new working group was set up in the autumn which was instructed, in accordance with a government decision in December 1998, to start work on environmental management systems. A first step in the work of introducing such systems was the environmental study that was described in the Administration's annual report for 2000. The working group has continued its work since then. This spring it presented a report to the management containing proposals for the continuing work of introducing environmental management in the Administration.

In December 1999, NUTEK, the Swedish Environmental Protection Agency and the Royal Institute of Technology jointly organized a seminar on environment and employment. One conclusion of the seminar was that there is considerable development potential for industry in the environment-driven market. New products and systems with high environmental performance specifications are likely to contribute to the growth and revitalization of industry, and thus create new jobs.

*Development of technologies and products*

Environment-driven development of technologies and products is an important factor for innovation and environmentally sound growth. NUTEK is contributing by taking general initiatives, including the development of an Ecoefficiency Strategy for Swedish industry, programmes in areas where Sweden has comparative advantages, such as new materials (biofibres, composites, biopolymers etc.) and products based on renewable Swedish raw materials (forest and agricultural products). NUTEK also makes grants for development of technologies and know-how in small enterprises (methods for green product development, environmental management in small enterprises), general development of technologies and skills in Swedish industry (life cycle analyses, ICT for process control and lower materials consumption for specified quality requirements) and support for new enterprises and products (seed capital, advisory services and strategic technological development).

Within the framework of large-scale investment in environmentally sound product development the Government is co-financing two ecodesign projects whose purpose is to use ecological design to develop environmentally sounder products.

The Swedish automotive industry and the Swedish Government have, on the Government's initiative, adopted a cooperation programme for the purpose of reducing the adverse environmental impact of road traffic and creating conditions that will ensure that Sweden's automotive industry will remain competitive. The programme will cover the period 2000-2005. The Government and the motor vehicle manufacturers signed an

agreement on the programme in April this year. The industry will contribute SEK 1,300 million during the programme period. The Government will contribute SEK 500 million, which means that SEK 1,800 million will be available for the programme altogether. The programme covers areas such as advanced combustion technologies, hybrid vehicles and fuel cell technologies, weight reduction and the supply of know-how. Universities and research institutes, as well as subcontractors, are expected to take part in the programme. NUTEK, together with the Programme Council for Vehicle Technology Research, will be responsible for implementation of the programme. Since the joint programme has been criticized for lack of coordination with the Swedish environmental objectives, the Swedish Environmental Protection Agency will be given the opportunity to suggest improvements (Gov. Bill 1999/2000:1, expenditure area 22).

The Commission on Environmental Technology, which was appointed in September 1996, was assigned the task of stimulating the development and introduction of environmentally sound products, processes and technologies designed to promote ecologically sustainable development. The measures taken by the Commission will increase the competitiveness of Swedish industry and thus create new jobs. One of the Commission's main tasks is to find methods of facilitating and accelerating the marketing of new environmentally sound technology and testing these methods. The Commission focuses on the demand side. Much of its work is devoted to formulating, together with users of various products and technologies, the functional requirements to be met by environmentally sound products in order to assist the process of developing the commercial potential of innovations and research results and taking them to the market-place.

*Environmental exports and international trends*

Environmental exports are one example of how export successes can be achieved on commercial terms and benefit the environment at the same time. The market for environmental technology today is estimated to be about SEK 4,000 billion and is expected to grow to about SEK 6,000 billion by the year 2010. The OECD countries account for about 80 per cent of the world market. The market is expected to grow by 5-20 per cent per year. Swedish enterprises' share of this market is, however, modest.

The Government has seen an opportunity here for Sweden to increase exports in this area, while helping to bring about global environmental improvements. In the long run, this would also have beneficial development effects on the developing world since modern technology could substantially improve their environments. Important elements of this market are public procurement and donor-financed environmental projects.

In September 1998 the Government decided to allocate SEK 12 million to the Swedish Trade Council for implementation of a three-year programme designed to promote exports of environment-related products and services in priority areas within the framework of regional policy. The programme focuses on technology and services for control of

emissions into air, water and sewage systems, as well as waste management. Many small and medium-size enterprises (SMEs) operate in these sectors. During the past year the Government has allocated a further SEK 9 million to the programme.

The programmes mentioned above will, among other things, promote collaboration between technical consultants and manufacturing companies. All in all, the Swedish network of enterprises, authorities, development cooperation bodies, financiers and trade organizations will be strengthened. The programme will strengthen cooperation at national level and the profile of Swedish know-how in environmental technology and will facilitate concerted Swedish marketing measures in the international environmental market to a greater extent than before. Furthermore, the programme improves the prospects of international alliances in this area. The programme will continue.

The terms of reference of the Commission on Environmental Technology have been extended in 2000 to measures to promote increased exports of environmentally sound products and services. Since this area is not new to the Commission and this assignment will only last one year, it has concentrated on trying various methods of facilitating the internationalization of SMEs. The Commission's export project is directed at enterprises that offer products and systems that are efficient in terms of ecological sustainability. This sector is considerably larger than the market for dedicated environmental and treatment technologies. Together with interested parties in all parts of Sweden the Commission had, by last summer, launched nearly 20 environmental export projects related to one of the following aspects of the market for environmentally sound goods and services: documentation of the products available in the Swedish market, analysis of export markets, the opening of communication windows and facilitation of collaboration between enterprises.

### 3.2.2 Energy policy

The objective of Sweden's energy policy is to assure short- and long-term supplies of electricity and other energy on competitive terms. The aim is to ensure efficient use of energy and cost-effective energy supplies with the minimum of adverse effects on health, the environment and the climate and to promote adjustment to ecologically sustainable society. Energy policy must also help to create stable conditions to ensure that industry remains competitive and boost the renewal and development of Swedish industry. It should also help to broaden cooperation in the Baltic Sea region on energy, environment and climate. The country's electricity supply must be secured by means of energy systems based on lasting, preferably domestic and renewable, energy sources and efficient use of energy. Energy is to be used as efficiently as possible, taking into account the available resources. The use and development of new energy technologies must meet high standards of security and health and environmental requirements. The rules of consideration embodied in the

Environmental Code lay down that ”preference shall be given to renewable energy sources”.

The Bill *Sustainable Energy Supplies* (Gov. Bill 1996/97:84, Committee Report 1996/97:NU12, Parl. Comm. 1996/97:272), which was passed by Parliament in 1997, established the Government’s energy policy. Adjustment to sustainable energy supplies involves, among other things, the replacement of nuclear power by more efficient use of electricity, conversion to renewable sources of energy and environmentally acceptable technologies for the generation of electricity. SEK 9 billion was allocated for a 7-year period to the energy policy programme that was also adopted in 1997. The main focus of the programme is on large-scale, long-term support for research, development and the demonstration of new energy technologies. The objective is to develop, within the next 10-15 years, commercially profitable technologies for the generation of electricity and heat from renewable sources and for more efficient energy use. The Swedish National Energy Administration is responsible for implementation of most of the programme.

The work on planning targets for wind power continues. On the basis of the report *The Right Place for Wind Power* (SOU 1999:75) the Government has instructed the Swedish National Energy Administration to propose areas where the conditions are particularly suitable for wind power plants, both on land and offshore. The Government will return to Parliament with proposals regarding appropriate planning targets for wind power and the measures that need to be taken to make it possible to achieve these targets.

According to the energy policy guidelines, one of the Barsebäck reactors was to be decommissioned before 1 July 1998. On 14 May 1998 the Supreme Administrative Court suspended the Government’s decision to decommission the first reactor pending a judicial decision. On 16 June 1999 the Court upheld the Government’s decision. On 30 November 1999 the first reactor was decommissioned following conclusion of an agreement between the state, Vattenfall AB and Sydkraft AB on compensation for the owners of the nuclear plant. The obligations associated with this agreement have been approved by Parliament (Gov. Bill 1999/2000:63, Report 1999/2000:NU11, Parl. Comm. 1999/2000:200). According to the guidelines, the other reactor is to be decommissioned before 1 July 2001. A condition for closing down the second reactor is that new electricity production and reduced electricity consumption will compensate for the loss of electricity production. The energy policy programme therefore includes measures designed to stimulate the use of renewable energy sources and more efficient energy use during a five-year period.

In the Communication *The Continuing Conversion of the Energy System etc*. (Comm. 2000/01:15), which was issued in September this year, the Government decided that Parliament’s conditions for closure of the Barsebäck 2 reactor before July 2001 had not been met. The second reactor will be shut down as soon as these conditions are met. The Government’s view is that the conditions for closure should remain unchanged and that the reactor can be closed down when the necessary

measures have taken effect. The Government assumes that this will be the case by the end of 2003. A further examination of whether the conditions are met will be carried out in the autumn of 2001 in connection with the drafting of the 2002 Budget Bill.

### 3.2.3 Consumers and the environment

Consumers can contribute to a better environment by making demands and choosing products that are better from an environmental point of view than similar products, or by refraining from certain types of consumption. Studies presented, inter alia, by the Swedish Environmental Protection Agency show that almost half the environmentally harmful emissions in Sweden are caused by households. Households' consumption of products and services in the transport, food and housing sectors account for the largest environmental impact.

The Government intends to take measures to ensure that consumers have the opportunity and are encouraged to act in a pro-environment manner, in particular within the framework of an integrated product policy. One consumer policy objective is to establish consumer and production patterns that reduce environmental impact and contribute to sustainable development. It is only possible for consumers to take environmental considerations into account if they have ready access to accurate information. An effective method of informing consumers about the environmental impact of various products is ecolabelling. Information about the treatment of end-of-life products is also relevant, since households have a crucial role in efforts to close material loops by taking advantage of the source separation facilities offered by producers and municipalities.

In March 1999 the Government instructed the Swedish Consumer Agency to set up a website with environmental information for households for the purpose of making it easier for them to meet their environmental responsibilities. The website will come into operation this autumn.

In 1999 the Government took measures to launch a campaign on information about and collection of hazardous wastes produced by households. The purpose of the campaign, which was carried out by the municipalities in May 2000, was to raise public awareness of hazardous waste and harmful substances in products.

### 3.2.4 Tourism

Globally, the tourism industry is expected to expand in the next few years more than other industries. The Swedish tourist industry's share of GDP during the period 1995-98 increased from 2.5 per cent to 2.8 per cent. Total consumption during the period increased from SEK 106 to SEK 124.5 billion, or by 17.5 per cent. The number of jobs in the industry during the same period increased from 97,500 to 108,700 in terms of annual labour units.

Tourists today are more interested than previous generations in activities that affect the physical, ecological and social environment. This is something of a mixed blessing. On the one hand, the demand for such experiences encourages entrepreneurs to devise products to meet this demand, and this create jobs. On the other hand, tourism can represent an increasing threat to fauna, flora, the landscape and sensitive cultural assets. In the long run, overexploitation may threaten the very basis of the industry. Sweden's natural assets are an all-important resource for the development of tourism in Sweden. In order to meet the demands of sustainable development, this resource must be used with due consideration for cultural assets, biological diversity and the ecological balance.

The Commission on Tourism is the sectoral authority responsible for tourism; according to its terms of reference, it is to take measures to ensure that tourism is developed in a way that meets the needs of sustainable environment and nature. Together with the industry, the Commission has the task of initiating processes that ensure sustainable development in the tourism sector.

Tourism is one of the seven sectors mentioned in Baltic 21, an Agenda 21 programme for the Baltic Sea region, whose development is considered especially important for achieving sustainable development in the region.

A joint Nordic project has been in progress since spring this year on sustainable development of tourism and society based on the principles of economic, social and ecological sustainability. The results of the project will be reported in December 2000.

### 3.2.5 Regional equalization and development and regional growth agreements

Balanced regional development is an essential condition for sustainable development. The Government introduced a new regional industrial policy in the Bill *Regional Growth – for Work and Prosperity* (Gov. Bill 1997/98:62). Taking into account conditions in each region, the aim is to stimulate sustainable economic growth which can promote the establishment of new, viable enterprises and thus create new jobs. The new industrial policy is based on more effective coordination between policy areas and sectors. The regions will have more influence over the available resources and will also be able to use these resources more flexibly than is the case at present. Sectoral interests will therefore have to be sacrificed to a more integrated approach and better coordination.

Agriculture and forestry are very important for a flourishing Sweden. There is a trend towards diversification of industry in rural areas. Only 20-30 per cent of the jobs in rural areas are related to agriculture and forestry, although there are other associated activities. There is an obvious connection between all these activities and ecologically sustainable development. Management of natural resources, the maintenance of an open landscape, conservation of the cultural heritage and environmentally sound, sustainable agriculture are key factors for the

development of regions and a flourishing countryside. In the long term, tourism may make a significant contribution to employment and livelihoods in rural and sparsely populated areas. If measures to promote sustainable tourism are to be successful, it is essential to preserve the cultural heritage, so that the countryside can offer the tourist interesting and diverse environments.

The need to take regional environmental and resource management programmes into account in connection with regional development planning was pointed out by the Government in the regional policy Bill mentioned above. In the long term the county administrative boards, in cooperation with municipalities, other government agencies and stakeholders, should aim to develop strategies to take environmental and resource management interests into account in the areas in the county that are of particular significance from the point of view of the environment and resource management.

*Regional growth agreements*

The purpose of the regional growth agreements is to improve collaboration between the various bodies involved in the promotion of growth and employment at the local, regional and central levels. The agreements are drafted within the framework of broad partnerships and form a basis for programmes and proposed measures. Among other things, they are supposed to account for the effects of programmes with respect to conversion to ecological sustainability, environmental protection and efficient use of natural resources, and how these aspects are integrated into growth and jobs regardless of the sectors covered by the agreements. The agreements run for three years. The first agreements entered into force on 1 January 2000.

More attention should be paid to clarifying how ecologically sustainable development should be dealt with in the regional growth agreements. The county administrative boards and autonomous bodies that coordinate the work at the regional level submit an annual report to the Government containing information about the progress being made on efforts to integrate ecological sustainability. The year's reports are currently being considered in the Government Offices. The local investment programmes are also an important component of the Government's strategy for development and growth. Closer integration between the regional growth agreements and the local investment programmes could increase the effectiveness of both programmes.

The Government intends to select three pilot counties to spearhead the integration of ecological sustainability into the regional growth agreements. Special funds will be allocated to enable the pilot counties to develop methods for incorporating the sustainability dimension into the growth agreement process and into the various fields of activity.

*Local investment programmes*

In 1997 Parliament passed a Bill (Gov. Bill 1997/98:1, expenditure area 18, Committee Report 1997/98:BoU1, Parl. Comm. 1997/98:81) proposing that funds be allocated to support local investment programmes for the implementation of sustainable development.

Originally, SEK 5.4 billion was allocated for the period 1998-2000. Parliament has subsequently approved further allocations and the total aid granted for the period 1998-2003 is estimated to be SEK 7.2 billion.

The purpose of the aid is to increase the pace of adjustment to sustainable development and to help to create new jobs. Aid is granted to municipalities whose investment programmes are considered likely to make a substantial contribution to adjustment. The eligibility criteria include the requirement that the projects will reduce environmental impacts, promote more efficient use of energy and other natural resources and promote the use of renewable resources. The measures must also help to create new jobs.

Altogether, 125 municipalities (20 of which more than once) and one association of local authorities have been granted a total of almost SEK 5 billion in the form of grants for their local investment programmes under government decisions in 1998, 1999 and 2000. Including the amounts contributed by the recipients themselves, the investments to date total SEK 21.5 billion, of which directly environment-related investments account for about SEK 17 billion

According to the municipalities' estimates, the local investment programmes will make a significant beneficial impact on the environment. They estimate that the programmes will create about 15,600 jobs during the period up to 2002 (see chapter 5).

*The EU's structural funds*

The EU's structural funds consist of the Regional Development Fund, the Social Fund, the European Agricultural Guidance and Guarantee Fund (EAGGF) and the Financial Instrument for Fisheries Guidance. For the period 2000-2006 2.19 billion has been allocated to Sweden from these funds.

The evaluations that were carried out for the previous programme period (1995-99) indicate that the funds have had a beneficial effect on jobs, while their effects on the environment and sustainable development have not been sufficiently marked. The European Commission's programming guidelines for the current programme period focus more explicitly on the environment.

Sustainable development is a recurring theme of the Swedish geographical objective programmes, Objective 1 and Objective 2. For example, the programmes aim to develop local environmental and natural resources and cultural heritage assets as one of several ways of increasing local business opportunities and tourism in the regions. Measures are also taken to protect the natural and cultural environment and to promote more efficient use of resources. The measures should thus help to speed up the conversion to ecological sustainability. The purpose of the measures taken within the framework of Objective 1 and Objective 2 programmes as a whole is to promote balanced and sustainable regional development and growth in these regions.

Sustainable development is also a recurring theme of the Objective 3 programme, one of the purposes of which is to combat unemployment and enhance the skills of the workforce. All projects are analysed on the basis of the sustainable development dimension. The need for training

with respect to environment-related issues and the linkages between these issues and economic and social development is also taken into account in projects where this is considered relevant. Advantage should also be taken of the possibility of creating new 'green jobs' within the Objective 3 programme framework. One of the objectives of the Community Initiative LEADER+, which will be financed entirely by the EAGGF, is to find new ways to support preservation of the natural and cultural heritage at the local level.

## 3.3 Fiscal incentives

### 3.3.1 Environmental taxes

The autumn Budget Bill presents a strategy for gradually enhancing the environmental profile of the tax system by means of green tax switching. The 2000 Spring Finance Bill announced tax switching measures for the period 2001-2010. Higher taxes on activities that make an environmental impact will be offset by lower payroll taxes and higher basic deductions. The Spring Budget Bill presents tax proposals for 2001 (Gov. Bill 2000/01:1, vol. 1).

In accordance with this strategy, tax switching should be based on the environmental objectives adopted by Parliament. Conversion of the energy system and reform of the energy tax system with a view to reducing emissions of carbon dioxide are the main purposes of green tax switching.

According to this strategy, conversion will contribute to more efficient energy use, favour the use of biofuels, create incentives for reducing the environmental impact made by industry, ensure the competitiveness of industry, create conditions for domestic electricity production, simplify the energy tax system and provide a stable foundation for sustainable economic growth. The summary of principles presented in the report of the Tax Switching Committee (SOU 1997:11) is one of the points of departure for the reform. The Government's view is that further tax switching measures can be taken, provided that a cautious and balanced approach is used. The effects of the various measures should also be monitored on a continuous basis.

The Tax Switching Committee concludes that there is scope in the next 15 years for further tax switching measures on a scale similar to the measures taken in the 1980s and 1990s.

As already mentioned, the main purpose of green tax switching is to enhance the environmental profile of the tax system. Consequently, fiscal instruments will play a more significant part in environmental policy alongside legal, administrative and informative instruments. Appropriately designed fiscal instruments send cost-effective signals to market operators, encouraging them to promote environment-friendly and resource-efficient lifestyles, production processes and technologies. The effect of environmental taxes is to put a price on the environment, and thus to make it more expensive, for example, to emit pollutants into air or water. As a result, the economic operators themselves pay the cost of the environmental impact they cause.

### 3.3.2 Environmental accounts

Statistics Sweden, the National Institute of Economic Research and the Swedish Environmental Protection Agency are engaged in close cooperation on environmental accounts, and they present their results in a joint series of reports. The relationship between the economy, employment and the environment is described by recording the utilization of resources and environmental impacts for various sectors in the same way as economic data are recorded in national accounts. This makes it possible to use environmental variables in various types of economic models and to assess the effects of environmental taxes etc. Statistics Sweden uses 'physical' environmental accounts, for example, for energy, certain materials, air pollutants, waste, employment, environmental taxes and the cost of environmental protection. New areas now being developed include the environmental impact of imports, impacts by various product categories, green jobs, chemicals, regional accounts, indicators for sustainable development, water accounts, forestry accounts and the environmental impact of households. The National Institute of Economic Research is developing environmental economic models for analysis of the effects of political proposals and decisions on the environment and the economy. It is also developing monetary environmental accounts for assessments of the costs of environmental damage and impacts. The Swedish Environmental Protection Agency makes estimates of the cost of reducing emissions and other environmental impacts. The Agency also describes the state of ecosystems in Sweden and changes over time. The data collected for the purposes of environmental accounts are used for the Medium-Term Economic Survey and the Commission on Flexible Mechanisms and in the work of the Climate Committee and the Environmental Objectives Committee. They are also used in the work of the Commission on Resource Efficiency (see section 3.3.3).

### 3.3.3 The relationship between growth and environment

The Government has appointed a Resource Efficiency Commission (Fi 1999:02) to review the relationship between the environment and growth and the need for measures to achieve more efficient use of natural resources with a view to achieving sustainable development. The Commission will consider the need to set short- and long-term targets for efficient resource use at the national level and to propose such targets, as well as further measures at the central level and the measures that need to be taken, where appropriate, by municipalities, industry and individual citizens in order to achieve these targets. The Commission will also study and assess the relationship between economic growth, utilization of natural resources and environmental impacts. This work will be undertaken on the basis of an analysis and assessment of the extent to which it is desirable and possible to increase resource efficiency in both the long and short term. The Commission will report to the Government by 31 December 2000.

## 3.4 Culture, participation and knowledge

A society in which all citizens feel free to participate and have the will and ability to take responsibility for their actions is a prerequisite for efforts to achieve sustainable development. An essential condition is therefore education and knowledge, both about substantive issues and about citizens' opportunities for participation in environmental work.

A commitment to preserving the cultural heritage is an important aspect of efforts to achieve sustainable development. Familiarity with the cultural heritage and a historical perspective are two essential building blocks of a sustainable society.

### 3.4.1 Culture

A sustainable society must be based on prudent management of previous investments and of our common cultural heritage. The cultural sector can contribute to ecologically sustainable development through many activities that are related to community development and cultural aspects.

The cultural assets of the landscape are closely linked to its natural assets. The Environmental Bill (Gov. Bill 1997/98:145) emphasizes the importance of closer cooperation between bodies in the nature conservation and cultural environment sectors. The Environmental Code includes provisions relating to the natural and cultural environment and introduces a new protection mechanism – 'culture reserves'. In the Bill *Implementing Forestry Policy* (Gov. Bill 1997/98:158) the Government declares that an integrated approach to the natural and cultural heritage values of forests is essential for the success of the continuing work of preserving and developing their environmental assets. The National Heritage Board has special responsibility for the work of achieving ecologically sustainable development in the cultural environment sector.

### 3.4.2 Participation and the environment

In order to create an ecologically sustainable society, all individuals and public bodies must share responsibility for development. A first step in this direction is to ensure that all citizens have access to the information that is available.

There is an ever wider range of sources of information, and they are increasing very rapidly, as a result of which more and more information is available, but it is more fragmented. Since part of this information only reaches a limited group, different people have increasingly disparate frames of reference. This makes it even more necessary than before to improve communication and dialogue between people and a critical, questioning attitude. Society is also becoming increasingly multicultural, which leads to a greater need for understanding in respect for different cultural identities. More than 900,000 of Sweden's inhabitants were born outside the country. Among the more recent arrivals there is a great need of information about Sweden's environmental policy, at the same time as the ability to understand and absorb traditional environmental

information may be insufficient. In its Communication *An Integrated Product Policy* (Comm. 1999/2000:114) the Government notes that the ability to absorb environmental information varies between different groups of consumers and that such information should therefore be adapted to different target groups.

### 3.4.3 Education

Education is a precondition for both employment and growth, which in turn are an essential condition for prosperity. Furthermore, knowledge is valuable in itself since it offers people the possibility of living a fuller life.

The rapid development and dissemination of knowledge create scope for a better quality of life for the world's population, but they also pose new problems on a global scale. Growing environmental problems, which lead to more ill-health and widening gaps between rich and poor, call for closer national and international cooperation in order to find solutions and ensure an equitable distribution of prosperity, but also to preserve ecologically sustainable living conditions to assure the possibility of a high quality of life for future generations. Knowledge is crucial to sustainable development.

The three dimensions of sustainable development – ecological, social and economic sustainability – present a challenge to the education system to build bridges between science/technology and the humanities and social sciences. The introduction of environmental management systems by public authorities and institutions of higher learning and the requirement for environmental accounts as a complement to financial accounts, and also the introduction of the Environmental School Award, are examples of how such bridges can be built.

The national regulatory framework in this area, i.e. the Education Act, school curricula, programme objectives and syllabuses, as well as international policy documents, calls for, and also facilitates, the provision of education in sustainable development in schools and universities.

The Government has decided that it is necessary to introduce new syllabuses for compulsory school and new programme targets for upper secondary schools. The National Agency for Education has adopted new syllabuses for both compulsory and upper secondary school education, including local authority administered adult education. Sustainable development has been taken into account in this connection.

Since 1993, the National Agency for Education and the National Agency for Higher Education have operated the Science and Technology Project, which is designed to stimulate students' interest in this field. A new Science and Technology Project has now been set up and will run from 1999 to 2003; its main purpose is to seek to change attitudes and disseminate information. According to the Government's guidelines, this work should be directed at various interest groups in schools and the community as a whole, including cooperation with the research community, schools and working life. The new project will devote

particular attention to the question of teaching methods. The new grants for continued work on values and a national environmental education centre are also of great importance. National grants are given for the participation of schools in various networks related to environmental education. These play an important part in supporting and stimulating efforts to develop education in sustainable development.

Importance is also attached to supplementary education in environmental and natural sciences for teachers. Education in environmental and natural sciences is one of the priority areas for the allocation of funds by the National Agency for Education for in-service training for teachers.

Teachers' knowledge is a key factor in stimulating the interest of the pupils. Teacher training courses must provide teachers with a basic knowledge in this area, and teachers must update their knowledge continuously. Sustainable development is emphasized in the bill *Renewal of Teacher Education* (Gov. Bill 1999/2000:135), which was presented recently.

The national resource centres for physics, chemistry, technology, mathematics and the natural sciences are a significant asset when it comes to teacher education in sustainable development.

Education and research in universities and university colleges is important in many ways for increasing knowledge about sustainable development. Research continuously generates new knowledge, which can be utilized for decisions with long-term effects, and for this reason higher education's links with research must be refreshed and improved on a continuous basis. This year's Budget Bill (Gov. Bill 2000/01:1, expenditure area 16) substantially increased the allocation of funds to the National Agency for Higher Education for its work on supervising and improving the quality of the Swedish higher education system (see section 4.6).

The autumn research policy bill (Gov. Bill 2000/01:3) presents the environment and sustainable development as an important strategic area for investment in research and postgraduate studies in the next few years (see section 3.8).

Effective collaboration between the new research authorities is likely to promote the links between basic research, applied research and development, which could in turn benefit the research being done on the environment and sustainable development.

Higher education should continuously improve as a result of the new research that is carried out due to the requirement that universities must maintain research links. The higher education authorities are keen to introduce environmental management systems, and in the long run sustainable development will probably occupy a more prominent place both in education and research and in the authorities' own activities.

In the abovementioned research policy bill the Government states that Sweden should use its influence to ensure that the Sixth Framework Programme for Research and Development focuses on the strategic research areas prioritized by the Government, two of which are the environment and sustainable development.

*A Green Adult Education Initiative*

In connection with the Spring Finance Bill (Gov. Bill 1999/2000:100) the Government announced a Green Adult Education Initiative, which will be implemented together with popular movements and other bodies. The aim of this initiative is to raise public awareness of the need of conversion to sustainable development and to show how individuals can contribute to this process in their everyday lives.

As mentioned above, the success of the adjustment process depends on the broad participation of all sections of society: the public sector, industry and business, organizations and individual citizens. There is therefore a need for long-term civic education in the classical sense, so that greater knowledge of the issues leads to commitment and changes both in behaviour and public decision-making. It is very important in this connection that such education should succeed in reaching out to people who are not likely to approach formal education structures of their own accord.

The Government has declared that Sweden should pioneer the international development of sustainable society. The work on an Agenda 21 for education for sustainable development in the Baltic Sea region should be used as an example and a model of such an agenda for the EU. By continuing to play an active part in environment-related projects linked to the EU's framework programme and by pursuing issues related to the environment and sustainable development, for example in the discussions on the content of the Sixth Framework Programme for Research and Development, Sweden can continue to be a driving force in the EU's environmental policy.

## 3.5 Natural resources and nature conservation

Efficient and wise use of the earth's resources is crucial to ecologically sustainable development. Two of the general goals associated with sustainable development are, as was previously mentioned, efficient resource use and sustainable supplies. The first objective involves more efficient use of energy and other natural resources than is the case today and a changeover to increasing use of renewable resources. The second objective is to secure the long-term productive capacity of ecosystems.

### 3.5.1 Agriculture and forestry and the agricultural landscape

The importance of agriculture and forestry for employment in rural areas is declining. On the other hand, their importance for a flourishing agricultural landscape and a variety of landscape types, for the preservation of our cultural heritage and for sound management of natural resources is receiving increasing attention. As has already been mentioned, the importance of the agricultural landscape for tourism and recreation is also increasing, both in rural areas and in the vicinity of urban areas. In June 2000 the Ministry of the Environment invited representatives of organizations, authorities and other stakeholders to a think-tank on ways and means of preserving the cultural landscape in a

time of change. Furthermore, a campaign, 'Greener Forests', whose purpose is to emphasize the landscape aspect of forestry, has been in progress since September 1999 for persons engaged in forestry. More than 6,000 persons have taken part so far.

In September 2000 the Government decided to appoint a special investigator to make a survey of all forest land owned by the state or by fully state-owned limited companies. The investigator's task is to present proposals for more efficient management of the state-owned forests on the basis of an integrated approach (Dir. 2000:60). State-owned forests must be managed in an exemplary manner both from the point of view of production and the environment in order to assure sustainable development in ecological and production terms, while at the same time meeting their commercial objectives.

At national and international level Sweden advocates modern, environmentally sound agriculture and forestry. At the Helsinki summit in December 1999 the Agriculture Council presented a strategy for integrating environmental protection requirements and sustainable development into the EU's Common Agricultural Policy. The European Commission's rural development programme for Sweden for the period 2000-2006 aims to promote ecologically, economically and socially sustainable development of agriculture, forestry and rural areas and to facilitate adjustment of the agricultural sector to new conditions.

### 3.5.2 Nature and culture conservation

Extensive government measures have been taken to guarantee lasting protection for particularly valuable land and water areas. During the year the Government has also proposed that additional areas should be included in Natura 2000, the European network of valuable natural sites.

The need for more collaboration between the nature conservation and cultural environmental sectors has been emphasized in several contexts. A project designed to meet this need by establishing cross-sectoral collaboration arrangements in connection with planning related to the management of existing resources has been initiated by the National Heritage Board, in collaboration with the National Board of Housing, Building and Planning and the Swedish Environmental Protection Agency.

In connection with the renewal of nature conservation policy more decentralized management models are now being tested in order to raise public awareness and arouse citizens' interest in nature conservation. The wide-ranging studies and civic education undertaken within the framework of the Green Adult Education Initiative may help to strengthen and revitalize local activities.

The ArtDatabanken species database is maintained by the Swedish Threatened Species Unit at the Swedish University of Agricultural Sciences. Its most important tasks are to collect, store, evaluate and provide information about threatened and rare plant and animal species. National red lists describing the status of such species are prepared on the basis of this information. The unit also initiates research and surveys and

is engaged in international cooperation. During the year a new exhaustive red list of Swedish species has been published. In accordance with the new criteria that have been adopted, 4,120 of the 20,000 species examined have been red-listed.

### 3.5.3 Management of natural resources

Community planning must promote prudent management of land and water resources when it comes to the construction of both buildings and infrastructure. The National Board of Housing, Building and Planning has been instructed by the Government to develop a strategy for integrating the management of land and water resources into planning. The task of the new Research Council for Environment, Agriculture, Forestry and Community Planning is to improve our knowledge of land and water resources and society's sustainable utilization of natural resources (cf. section 3.8.2). As regards wind power, the Government decided in July 2000 to appoint a working group to carry out a study of the feasibility of locating wind power plants offshore and in mountainous areas. As previously mentioned, the Government has also instructed the Swedish National Energy Administration to identify areas that are particularly appropriate for wind power plants on land and offshore and to present proposals for planning targets for wind power.

The EU's structural funds and the Swedish geographical objective programmes emphasize the importance of sustainable development and therefore prioritize measures to develop and promote more efficient use of natural resources, at the same time as they contribute to conversion to ecological sustainability and to the protection of natural and cultural environments. At the regional level, the regional growth agreements must describe how the measures concerned meet the need for efficient use of natural resources and for ecological sustainability.

During the last year Sweden has taken an active part in the drafting of the recently adopted EC Framework Directive on water. The Directive will affect the future management of water resources in Sweden. Within the framework of fisheries policy the Commission has presented a proposal for an action plan for biological diversity that could be used as a tool for achieving sustainable development of fisheries in connection with the forthcoming review of the Common Fisheries Policy.

## 3.6 Environment and health

### 3.6.1 People and the environment

Every day people are exposed to health risks in their local environment. Combating environmental health risks in order to improve the public health situation is therefore of great importance to Sweden. Air pollutants indoors and outdoors, pollutants and contaminants in water and food, and high noise and radon levels are examples of environmental factors that have an adverse effect on people's mental and social well-being in Sweden today. The situation calls for preventive measures.

According to the WHO's assessment in connection with the Rio+5 review, environment-related diseases such as cancer are on the increase. According to WHO, climatic changes are also liable to increase the incidence of diseases caused by parasites, such as malaria.

Protection of human health is one of the environmental policy goals adopted by Parliament and is also an integral part of the efforts to achieve ecologically sustainable development. Protection of the environment is one of the three headline objectives of these efforts. This means that pollutant emissions must not damage health or exceed nature's capacity for absorbing or degrading them.

Several of the environmental quality objectives that have been adopted, e.g. Clean air, A good built environment, A poison-free environment and A safe radiation environment, are calculated to prevent health problems by reducing exposure to health risks in the environment. The proposals for a national action programme to reduce environmental health problems presented by the Commission on Environmental Health (SOU 1996:124) in its final report provide useful material for the work of the Environmental Objectives Committee.

### 3.6.2 Chemical policy

The efforts to reduce the risks involved in the use of chemicals have been very successful. The factors behind this success include better product information about risks and protective measures, the phasing-out of particularly dangerous chemicals and the introduction of an authorization procedure for the use of control agents. Nonetheless, in the Government's view the ongoing work of reducing the risks of chemicals to health and the environment needs to be speeded up. The Government expressed the view in the Environmental Bill (SOU 1997/98:145) that all safety work on chemicals should be based on risk assessments. Today's methods should be complemented by the application of a general approach to substances whose hazardous properties are well-documented and to organic, man-made, bioaccumulable, persistent substances. The special investigator appointed by the Government in October 1998 (M 1998:09) presented the report *Risk-Free Products – Implementation of New Guidelines for Chemical Policy* (SOU 2000:53) in June this year. The investigator proposed, inter alia, detailed specifications in the form of limit values etc. for the characteristics and effects referred to in the chemical policy guidelines that were adopted by Parliament. In the investigator's view, these measures must, in order to make a sufficient impact, be implemented at EU level at least. The guidelines on chemical policy should also be coordinated with the integrated product policy.

The 2001 Budget Bill announces a renewal of chemical policy (SOU 2000/01:1, expenditure area 20). The Government will present a new chemical strategy to Parliament early in 2001.

### 3.6.3 Polluted areas

The pollution of land and water has been going on for a very long time. Pollution occurs in the soil, groundwater and surface water, sediment, and buildings and other structures. The pollutants include substances and compounds that are now prohibited, for example mercury and PCB. There is a risk of such toxic substances circulating in nature and poisoning and disrupting ecosystems. There is, in particular, a risk of harm being caused to sensitive species and species at the higher end of the food web. Toxic substances that circulate in ecosystems are impossible to remove.

The pollution of land and water areas is primarily caused by emissions, waste products or accidents, particularly after the Second World War and up to the 1980s. Such pollution has also occurred later and indeed new areas are still being polluted.

Polluted land and water areas may represent a health risk. Human beings can be affected by eating plants or fish, or by direct contact with the soil, dust or gases. Such risks can be avoided by cleanup and remediation measures.

The Government's aim is to ensure that all polluted areas have been cleaned up or remediated by 2020 (SOU 2000/01:1, expenditure area 20).

Central government activities in this area, which are coordinated by the Swedish Environmental Protection Agency, focus on establishing the extent and effects of pollution and developing methods for investigation and remediation. An outline survey of remediation needs for polluted areas has been carried out in cooperation with the county administrative boards. The Swedish Environmental Protection Agency estimates the total number of polluted areas at about 22,000. Half of these have been identified and the rest are an estimate. In 1999 the Swedish Environmental Protection Agency allocated almost SEK 40 million in grants for county-wide surveys, investigations and measures in individual cases.

The Government has made substantial investment in this area. The Swedish Environmental Protection Agency is instructed by the Government to investigate and make proposals concerning the organization of remediation measures financed by the Government. Its proposals have been circulated for comment and are currently being considered in the Government Offices.

## 3.7 Community planning, construction and transport

An essential condition for sustainable development is a society based on fundamental democratic values. Participation in planning processes, and open decision-making and planning processes in which all citizens feel involved and have the will and ability to take responsibility for their actions, are important conditions for the practical work of achieving sustainable development. Transparency, dialogue and citizen influence in connection with planning are therefore essential in connection with planning. The local Agenda 21 programmes are one of several examples of broad public participation in the shaping of our future society.

One of the most important tasks in connection with community planning is to abolish sectorization. A broader planning approach must be adopted in which both ecological, economic and social aspects are integrated into decision-making on land use and development. Planning processes and other tools such as impact analyses and strategic environmental assessments need to be refined.

Ecologically sustainable development is an important goal for all community planning and construction activities. The transformation of society as a whole to ecological sustainability is only possible if the construction process itself, buildings and other structures, the transport system and infrastructure as a whole are put on an environmentally sound footing and are more resource-efficient than is the case today. One of the environmental quality objectives – A good built environment – envisages cities, urban areas and other built environments as sound and healthy living environments that contribute to a good regional and global environment. The objective also encompasses the indoor environment. Prudent management of land, water and other resources must be promoted. Natural and cultural assets must be preserved and developed.

### 3.7.1 Community planning

Rules making it compulsory to take environmental concerns into account have gradually been introduced in planning and building legislation, as well as in other legislation relating to operations that involve the use of land, water and other natural resources. The location and design of buildings and other structures must be appropriate from an environmental point of view. The rules relating to analyses and assessments of the impacts, in a broad sense, of changes in land and water use have been made more stringent. Citizens are demanding greater transparency and influence. Various sectors are required to take responsibility for the environment. Spatial planning should be regarded as an element of overall policy on sustainable development. The natural and cultural environment, as well as the built environment, must be managed and developed in such a way as to make it possible to achieve the objectives of sustainable development. The Environmental Code establishes a sound framework for sustainable community planning. Matters relating to community planning, infrastructure and the development of industry must be addressed in such a way as to make it possible to achieve the environmental objectives.

The methods and tools used for the purposes of community planning have been refined. The experience gained from broad participation in Agenda 21 processes has been utilized in other forms of community planning. Analysis and assessment methods, for example the elaboration of environmental objectives and indicators relevant to planning, have also been developed. Strategic environmental assessments have also been developed as a tool in connection with planning. An EC Directive on strategic environmental assessments is currently being finalized by the Council of Ministers and the European Parliament.

Far-sighted spatial planning, combined with measures in other areas, opens up the possibility of avoiding many environmental problems and supporting efforts to achieve the environmental quality objectives adopted by Parliament. The national environmental objectives are given concrete form and followed up in local and regional planning. Since the municipalities are mainly responsible for spatial planning, they have a key role in efforts to achieve ecologically sustainable development. It is also important to development intermunicipal and regional coordination. Infrastructure planning and matters relating to the development of industry, as well as environmental issues, can often be dealt with at the regional level through intermunicipal collaboration.

*International work*

The EU's Member States and the European Commission have for several years been preparing an integrated regional development plan for the territory of the Union – the European Spatial Development Perspective (ESDP). The demographic structure and the structure of industry, infrastructure and the environmental situation etc. have been analysed in this connection. Strategies for the coordination of future development measures in the EU's Member States have been formulated on the basis of this work. The aim is to make it possible to utilize the resources available in the Community and the Member States in order to achieve sustainable economic growth that is regionally well-balanced and also sustainable from an environmental point of view. As the ESDP process has progressed, it has become apparent that the EU's structural policy – in particular within the framework of the Regional Development Fund – is an important instrument that can help to implement the strategies that are described in the ESDP report and in other documents within the Union. The ESDP will be taken into account in the Interreg III programme for transnational cooperation that is now being drafted.

The ESDP has to do with ways of coordinating planning and investment in various sectors and coordinating development measures in the Member States with a view to achieving economic growth, increased employment and a sound environment at the same time. In connection with the implementation of the ESDP in Sweden, the Government has instructed the National Board of Housing, Building and Planning and NUTEK to investigate how the ESDP is likely to affect national, regional and local policies. Both these agencies will also assist the Government Offices in connection with Sweden's input to EU policies in this area.

A report entitled Guiding Principles for Sustainable Spatial Development of the European Continent has also been prepared in the Council of Europe by the European Conference of Ministers Responsible for Regional Planning (CEMAT). The Member States adopted the principles outlined in the report at a ministerial conference in Hanover on September 7-8 2000.

### 3.7.2 Habitat and Agenda 21

*International efforts*

In June 2000 the Government adopted terms of reference for implementation and further development of Agenda 21 and the Habitat Agenda. The Swedish National Committee on Agenda 21 and Habitat (M 2000:02) was appointed to raise awareness about, coordinate and develop efforts to fulfil Sweden's commitments within the framework of Agenda 21 and the Habitat Agenda.

The National Committee's main task is to provide the Government with input for its report on implementation of the Habitat Agenda at the UN General Assembly special session in 2001 for an overall review of the Habitat II Conference in Istanbul in 1996 (Istanbul+5). The National Committee will likewise provide input for the UN General Assembly's review conference in 2002 of the Rio Conference (UNCED) in 1992 (Rio+10). As president of the EU in the first half of 2001, Sweden will be called upon to play an even more forceful role in the preparations for the major international Habitat and Agenda 21 conferences.

The National Committee is represented in the non-profit association Agenda 21 and Sustainable Development (see *www.agenda21forum.org*).

*National monitoring and evaluation of Agenda 21 and the Habitat Agenda*

A number of conferences have been organized in various parts of the country together with local, regional and other partners in the context of an active dialogue with the various bodies that are engaged in the work on Agenda 21 and the Habitat Agenda.

The purpose of these conferences was to create opportunities for disseminating information and establishing dialogues as a starting-point for the day-to-day work on Agenda 21 and the Habitat Agenda. Examples of issues that have been dealt with at these conferences are the status of Agenda 21 programmes in the municipalities, collaboration between local stakeholders and central authorities, and information and civic education measures. There has also been discussion of coordinating the Agenda 21 and the Habitat processes, municipal comprehensive planning and work on the local investment programmes. Health issues, the efforts of local industry to promote sustainable development, and further development of local forms of democracy have also been discussed.

In December 1999 the Government instructed the National Board of Housing, Building and Planning to follow up and develop the efforts being made to implement the Habitat Agenda and to elaborate a strategy for an integrated approach to planning and management of land and water resources. This assignment includes analysing commitments on housing conditions and describing the integration of the results of local Agenda 21 programmes and local investment programmes into comprehensive planning, taking into account the possibility of more active participation by individuals, enterprises and organizations.

The Swedish Environmental Protection Agency presented a national communication strategy for Agenda 21 and sustainable development to the Government in December 1999. The purpose of the strategy is to

assist government agencies, municipalities and other local stakeholders with information and civic education measures. It also includes proposals for further central government initiatives to support such efforts.

In May 2000 the Government instructed the Swedish Environmental Protection Agency to survey and report on the work on Agenda 21 and sustainable development done by public authorities during the period 1996-2000. This survey will form the basis of Sweden's report prior to the review conference of UNCED in 2002 (Rio+10).

In the autumn of 1999 the Department of Political Science at Umeå University initiated a study of the municipalities' work on Agenda 21 on behalf of the Ministry of the Environment. The first part of the study consisted of a questionnaire survey, the findings of which were reported in the Government Communication *Sustainable Sweden* (Comm. 1999/2000:13). The survey was subsequently followed up by in-depth interviews in selected municipalities.

*Habitat and Istanbul+5*

At the meeting of the United Nations Centre for Human Settlements in Nairobi in 1999 (UNCHS 17) Sweden argued for a coordination of the implementation of the Habitat Agenda and Agenda 21. It urged governments, in cooperation with local authorities and the competent organizations at the national and local levels, to initiate information campaigns to raise awareness about the Habitat Agenda and local Agenda 21 programmes and to support their implementation at the local level.

The first preparatory committee meeting (PrepCom 1) prior to the UN General Assembly review of the Habitat II Conference in Istanbul in 1996 (Istanbul+5) was held in Nairobi in May 2000.

*Agenda 21 and Rio+10*

The Commission on Sustainable Development (CSD) held a conference in New York in April 2000 by way of preparation for the review conference on Agenda 21 (Rio+10). The conference (CSD 8) recommended in its decision on the 10-year review that this should take place in the form of a summit at the highest political level in 2002, that the summit should be held in a developing country and that national and regional preparations were of key importance. The CSD 8 conference dealt with the two cross-sectoral areas financial resources and trade and the sectoral areas agriculture and land use.

### 3.7.3 Construction

Community development continuously makes large and new demands on land use planning and the construction and management of buildings in order to meet the need of suitable housing, non-residential premises and infrastructure. Integration of the environment into the activities of all sectors is a prerequisite for conversion to ecologically sustainable development.

The construction, use and management of buildings account for a substantial proportion of the total consumption of national resources.

Building regulations are adopted in order to ensure that buildings and other structures meet certain requirements with respect to hygiene and health and environmental protection, and also to the management of energy and water resources. This in turn requires professional execution by all the operators concerned. It is essential that all the operators concerned in the construction and management of buildings should develop methods that ensure professional workmanship and that buildings function as a whole for their intended purpose and meet all the regulatory requirements. To this end, the Government has in recent years taken several initiatives with a view to establishing standards for functional buildings with a good indoor environment which will speed up long-term improvement of resource use and ecologically sound practices in the construction sector.

It is sometimes difficult to upgrade current wastewater treatment technologies so that they meet the environmental requirements, and this gives rise to eutrophication problems. These technologies must be improved and new technologies incorporating alternative solutions must be developed. The Government has allocated funds within the framework of the local investment programmes for alternative water and sewerage solutions (see chapter 5).

### 3.7.4 Transport

The aim of transport policy is to contribute to sustainable development in social, cultural, economic and ecological terms. The design and function of transport systems must be adapted to the need for a sound and healthy environment for all, in which natural and cultural assets are protected. Prudent management of land, water, energy and other natural resources must be promoted. The 1998 Transport Policy Resolution specified targets for emissions of major pollutants and climate-changing gases from transport operations. Guideline values have also been set for traffic noise and an action programme against traffic noise has been adopted for state infrastructures in existing built environments.

*Transport and the environment*

The report of the European Environment Agency on the environmental situation in the European Union identifies the environmental impact of transport as one of the environmental problems that is most difficult to solve. One reason for this is the continuing rapid increase in air, road and sea traffic. The volume of road and rail freight transport in Europe is expected to increase by 50 per cent between 1995 and 2010. This may prejudice the EU's undertaking to reduce its impact on the climate. The Freight Transport Commission (K 1998:06) has been assigned the task of developing a cross-modal approach for the purpose of improving the efficiency of the freight transport system and making it ecologically sustainable. In June 2001 the Commission will present proposals for a comprehensive Swedish freight transport strategy, as well as proposals for measures at international and national level.

There is also growing competition for land between the needs of the transport sector and other important needs. The development of information technology will not by itself be enough to reduce the burden on transport systems, although ICT applications may well support more efficient transport solutions. Sweden and the rest of Europe need reliable transportation and transport systems that are efficient, dependable and ecologically sustainable.

In December 1998 the EU's Transport Council submitted a report on implementation of the conclusions of the European Council in Cardiff. The report emphasized the Council's intention to continue to prepare a uniform strategy and relevant environmental objectives with a view to speeding up the integration of environmental protection requirements into the Common Transport Policy. In October 1999 the Transport Council adopted a strategy for integration of the environment and sustainable development into transport policy. The strategy will be implemented during the period 2000-2004 and will be reviewed for the first time during the Swedish presidency in the spring of 2001.

*Development of technology*

Sweden's automotive industry is in the forefront of the development of advanced systems for environmentally sound transport. The industry is also important to the economy and jobs in Sweden. Technological know-how and organizational solutions that can contribute to sustainable development are important competitive advantages. Many of the world's leading vehicle manufacturers are now investing substantial resources in building competitive advantages by being among the first to develop more fuel-efficient vehicles or vehicles using alternative fuels. To ensure a viable future for the automotive industry, special measures must be taken to meet tomorrow's challenges. Close and active cooperation between the Government and industry is very important for the development of leading-edge technology. For this purpose, as mentioned earlier, representatives of the Government and the automotive industry are now discussing cooperation on a sustained effort to develop new, environmentally sound vehicle technologies.

*Sectoral responsibility*

The directives for the central transport and traffic agencies long ago included responsibility for the environment among their duties, and there are many examples of successful environment-related cooperation projects in the transport sector. One such project concerns an environmentally sound transport system for Helsingborg, in which nine authorities have cooperated with representatives of the motor vehicle and oil industries. At the same time, international cooperation is of strategic importance to the successful establishment of an environmentally sound transport system. This applies not only to rail and sea transport, but also to road transport. The free competition between Sweden's and other countries' transport enterprises in the EU makes it necessary for the Member States to cooperate in ensuring that any measures that are taken are neutral to competition. Development of Helsingborg's transport system therefore continues, now with a European dimension.

*Infrastructure planning*

National and regional long-term plans for transport infrastructure for the years 1998-2007 are now being implemented. Before a final decision is taken on the planned investments, detailed environmental impact assessments will be made of the different options. Following the entry into force of the Environmental Code on 1 January 1999, some major traffic facilities must now be approved by the Government and the environmental impact of an infrastructure project must be clarified at an early stage.

The Government is currently reviewing the permissibility of the Bothnia railway line and part of the E6 road in the northern part of Bohuslän province. Owing to the more stringent requirements with respect to urban and rural landscapes, natural and cultural assets and aesthetic considerations that were introduced in the Roads Act (1971:948) and the Construction of Railways Act (1995:1649), greater importance is now attached to design in the planning of road and rail projects. The transport and traffic agencies are also further developing their quality programmes in order to promote architectural and design qualities in connection with the construction and management of buildings and structures.

Conversion to an ecologically sustainable transport system will require action to be taken by a large number of players and a combination of various instruments and incentives. Although the role of fiscal incentives of various kinds will become increasingly important, more stringent technical standards will be necessary in the future too.

## 3.8 Research

Research, technological development and new know-how open up new opportunities for adjustment to ecologically sustainable development. Practically all disciplines, from the natural sciences to technology and from social sciences to the humanities, can make a contribution. Globally, rapid technological advances play a vital role for ecological sustainability, or may do so in the future. New technologies, for example in the field of more efficient use of energy and other resources and treatment and recycling technologies, are crucial to progress towards greater ecological sustainability. Knowledge about organization, behaviour and values also plays an important part. Social science research is therefore also important.

### 3.8.1 Priorities for the environment and sustainable development

The Government presents the background to its research policy and proposals for priority research areas in the research policy bill (Gov. Bill 2000/01:3). The priority action areas include bioscience and biotechnology, as well as the environment and sustainable development. As regards research on sustainable community development, the main focus should be on sustainable urban development, sustainable energy

systems for urban areas, ecologically sound construction and management of buildings, and the importance of buildings and the built environment for health and the living environment. The priority areas for environmental research are:

- research as a basis for the achievement of environmental quality objectives and climate policy,
- research to provide input for international negotiations,
- research on biological diversity,
- research on products, processes and improvement of resource efficiency,
- research on chemicals and radiation protection, and
- social science and environmental law research.

In order to achieve sustainable development, society as a whole must improve the management of natural resources and energy. More knowledge will be needed in many areas in order to choose appropriate measures and provide information about what must be done to achieve sustainable development. Technologies and systems will have to be adapted to human needs, and we will have to accept environmentally sound lifestyles.

Research on a resource-efficient and sustainable society should concentrate on laying the foundation for a new way of thinking, new behaviour and new structures. The focus should be on demonstrating ways and means of achieving change, identifying obstacles and developing tools and methods. Research that is characterized by an integrated approach and systemic thinking must be based on research cooperation in the fields of technology, natural science, social science and the humanities. Researchers should be encouraged to collaborate more. Areas that fall between the traditional disciplines will need to be emphasized and established patterns and traditional thinking will have to be questioned. It is also important for research, in an active dialogue with the rest of society, to utilize and develop the knowledge and experience that exist in various industrial and social sectors. Research findings must also be publicized, tried out and evaluated in practical trials or demonstrations before they are applied generally.

The processing, use and consumption of materials and products is affected by many factors and players. We need to know more about the interplay between various factors that promote or obstruct changes leading to increased sustainability. Systemic knowledge is needed as a basis for the strategic choices that must be made. Systemic knowledge is also needed as a basis for assessments of the effects and risks associated with various options.

*Cycles and products*

Resource consumption, environmental impacts and the possibility of closing cycles and material loops depend on how products are designed, the materials they are made of and the way they are used. In the case of many products, little progress has been made on ecological conversion. There is still a great need of knowledge about what happens to materials when they are used, how materials age or degenerate and how various

metals and plastics cycles are closed. It is important not only to look to the future, but also to seek to acquire knowledge that will improve the handling of products and materials currently in circulation and identify the risks and opportunities involved in the use of recycled materials.

The Government intends, within the framework of an integrated product policy, to take measures to improve our understanding of the adverse effects of products on both human health and the environment. This will require more profound knowledge and development in several areas. Here are some examples:

Environmentally sound design that facilitates dismantling and repair and the recycling and separation of materials.

Environmentally sound use of materials and new environment-friendly materials.

Policy instruments, obstacles and incentives.

Landfill sites whose content is unknown, which may sooner or later start leaking. More research is needed to improve our understanding of the processes that take place in landfill sites, especially long-term processes. Research is also needed on risk assessment methods for landfill sites and methods for neutralizing pollutants.

Evaluation tools such as life cycle analyses, weighting and assessment methods.

Research on behaviour and lifestyles.

Such research could make a substantial contribution to an integrated product policy. The need of research on sustainable development and an integrated product policy should be taken into account in connection with the drafting of the next EU Programme for Research and Development.

### 3.8.2 A new research organization

A new Research Council for the Environment, Agriculture, Forestry and Community Development will be set up on January 1 2001. This council will take over responsibility for research funding from the Council for Building Research, the Swedish Council for Forestry and Agricultural Research and, to a certain extent, the Swedish Environmental Protection Agency and the Council for Planning and Coordination of Research. Streamlining the research organization in these areas will make it easier to launch productive interdisciplinary research projects with a view to promoting sustainable development. This research will increase our knowledge of biological natural resources, land and water resources, sustainable utilization of natural resources, community planning, construction and management, and housing and environmental matters, contribute to the achievement of sectoral development targets and create links and cooperation between researchers and the users of research results. The research will be of great importance to international cooperation in these areas.

A total of SEK 450 million will be allocated to the new Research Council for Environment, Agriculture, Forestry and Community

Planning. In the 2000 Budget Bill the Government proposed supplementing environmental research resources by allocating SEK 50 million to the Swedish Environmental Protection Agency. The environmental research appropriation for 2001 and 2002 was estimated at SEK 100 million. It was proposed in the Budget Bill that SEK 55 million of this should be allocated to the Swedish Environmental Protection Agency, and the remaining 45 million to the new research council.

## 3.9 International cooperation

Sweden's ambition to act as an international driving force and pioneer of ecologically sustainable development remains unchanged. International cooperation is the cornerstone of efforts to achieve ecological sustainability. Implementation of Agenda 21 and preparations for the UNCED review conference (Rio+10) are crucial to these efforts. In 2000 Sweden has played an active part in many international forums, in particular the EU, the OECD, the UN, the WTO, international environmental convention processes and cooperation on regional development in our neighbouring region.

### 3.9.1 The United Nations

A process of reform of the United Nations was launched in 1997 in order, inter alia, to achieve more integrated and systematic management of the environment and sustainable development in all UN operations. An important feature of this process is to strengthen the United Nations Environment Programme (UNEP) and the United Nations Centre for Human Settlements (UNCHS).

UNEP has been revitalized in recent years under new leadership, and now has a functioning organizational structure and rationalized budget and programme planning arrangements. Another major step forward was taken this year when UNEP held its first Global Ministerial Environment Forum (GMEF). Sweden was invited to host the forum. On 29-31 May hundreds of environment ministers gathered in Malmö to discuss three subjects: new and emerging environmental issues, the impact of industry on the environment and the roles and responsibility of civil society and the media in environmental protection activities. The conclusions were formulated in intelligible and visionary terms in the Malmö Declaration. Efforts to ensure more coherent, focused and vigorous treatment at the global level of matters related to sustainable development, and to strengthen the international regulatory framework for the environment, are being intensified on the basis of the Declaration.

The Commission on Sustainable Development (CSD) meets once a year to pursue and facilitate implementation of the recommendations of the Agenda 21 action programme. As mentioned above, it paid special attention in 2000 to issues relating to land use and agriculture and trade and investment. In 2001 it will deal with matters relating to energy, transport and information diffusion. In view of the significance of these issues it will be an important task for the Swedish presidency to unite the

EU on common positions and speak for it in the dialogue with the rest of the world.

Global environmental cooperation focuses increasingly on the Rio+10 summit in 2002. Sweden hopes that the summit will revive the spirit of Rio and yield concrete results. By way of preparation for the conference the Government will invite young people from all over the world to a conference on sustainable development in Borgholm in May 2001.

The negotiations on a convention prohibiting a number of persistent organic pollutants (POPs) will enter their final phase in 2001. The aim is to finalize the convention at a conference in Stockholm in May. The adoption of a convention in Stockholm would assure significant protection against a very dangerous category of chemicals.

### 3.9.2 The OECD

Many international organizations today play an active part in the field of the environment and sustainable development. Sweden has encouraged the OECD to assume a leading role in the development of proposals for political discussions about sustainable development. The OECD's speciality is to prepare high-quality guidance data and proposals for political recommendations. It should maintain this role, with the emphasis on economic analyses, although it could be enhanced by coordinating economic analyses with studies of social issues and environmental impacts.

The issue of sustainable development is pursued by the OECD as a cross-sectoral project and has received support from the OECD's Environmental Committee. A report on the project will be presented in connection with the OECD's Ministerial Council Meeting and a sustainability strategy will be adopted at a joint meeting between the environment and finance ministers in May 2001.

The OECD does not try to make new definitions of sustainable development, but focuses on studies of key areas that are crucial to the achievement of sustainable development. These areas are trade, investment, technology, natural resources, climate, energy, transport, agriculture, industry and land use. The OECD's export credit group is currently drafting guidelines for environmental criteria in connection with the granting of export credit guarantees. This work will be completed in November 2001.

The OECD also pursues some traditional issues, such as the importance of institutions, legal frameworks and environmental impact assessments, integration of the environment into all sectoral policies and the building of partnerships between various players, as well as the importance of correcting markets and abolishing harmful subsidies, and also internalizing external costs in various sectors.

The OECD emphasizes the role of technology in driving economic development. The possibility of breaking the link between economic growth and adverse environmental impacts depends in particular on technological development and industrial innovation.

The OECD regards the use of natural resources as a particularly important issue. Many ecosystems are threatened, and there are several examples of shortages of important materials and overexploitation of natural resources. This raises questions about reproductivity and the use of renewable resources.

Within the framework of sustainable development the OECD is also engaged in the *Greening of Governments* project. Sweden is a member of the steering committee for this project.

Parallel with the sustainable development project the Environmental Committee is engaged in efforts to design an environmental strategy for the next 10 years and prepare an environmental report extending over the next 20 years. These will be presented for adoption at the meeting of environment ministers in May 2001.

Sweden's priorities in the OECD's environmental work are, apart from its environmental strategy, resource efficiency, the climate, chemicals, trade and investment, and fiscal incentives in environmental policy.

### 3.9.3 Non-EU Europe

Within the framework of pan-European environmental cooperation outside the EU, which is pursued through the UN's Economic Commission for Europe (ECE), Sweden urges the need to define the priorities and concrete objectives of this cooperation more clearly. In Sweden's view, the focus should be on the new states of the former Soviet Union and the Balkan countries.

Issues that should be raised within the framework of this cooperation are the implementation of existing conventions and protocols and the integration of the environment into various sectors.

Within the framework of development assistance for countries in Central and Eastern Europe a bilateral environmental cooperation project is being implemented through the Swedish International Development Cooperation Agency (Sida) and the Swedish Environmental Protection Agency both in countries in the Baltic Sea region and other countries.

Sweden also plays an active part in international cooperation on defence sector environmental programmes in two NATO bodies, the Euro-Atlantic Partnership Council (EAPC) and the Committee on the Challenges of Modern Society (CCMS). Sweden, together with the USA, has also assumed some planning responsibility within the framework of the EAPC for helping states, particularly in Eastern Europe, to draft international defence sector environmental programmes.

### 3.9.4 The Kattegat and the Skagerrak and the Barents Euro-Arctic region

In the cooperation between the Arctic countries and the countries around the Barents Sea Sweden advocates that environmental issues should be given priority and works for coordination of this cooperation.

It is important to strengthen the EU's input, and this can be done by giving practical effect to the EU's Northern Dimension.

*The Barents Euro-Arctic Council*

About five million people live in the Barents Euro-Arctic region, which includes the counties and corresponding regions that intersect or lie to the North of the Arctic Circle. Great distances, an arctic climate and plentiful natural resources are features that are common to the region.

Improving and strengthening regional cooperation in the Barents Euro-Arctic region in all areas is one way of integrating Russia into the European security structure. Many of the environmental problems in the region are, however, too large to be solved by regional cooperation alone. This applies in particular to measures to reduce the risks of radioactive emissions, the reduction of air pollution and protection of the marine environment.

The mandate for the Barents Euro-Arctic Council's environmental group is to develop projects on the basis of the environmental objectives for the region and the principles and priorities in cooperation on the Arctic. Activities include investment projects identified by the Nordic Environmental Finance Corporation/Arctic Monitoring and Assessment Programme (NEFCO/AMAP). The purpose of its work is to integrate the environment into other activities and sectors that make a significant impact on the environment in the Barents Euro-Arctic region, e.g. infrastructure, energy and natural resources, including marine resources and forests.

This work will be coordinated with activities in the Barents Euro-Arctic Regional Council and its Environmental Committee, as well as with local Agenda 21 programmes.

The next ministerial conference will take place in August 2001.

*The Arctic Council*

The Arctic Council was formed in 1996 and is based on environmental cooperation between the Nordic countries, the USA, Canada and Russia. The work of the Council is organized in four working groups that deal, respectively, with surveys and measurements of the state of the environment, protection of the sea, flora and fauna, and protection of coasts against oil pollution.

The Arctic is the largest region in the world in which multilateral cooperation is based mainly on environmental protection matters. Arctic cooperation is basically environmental cooperation and relates to protection of the marine environment, coastal areas and flora and fauna, as well as extensive cooperation on the state of the Arctic environment.

This cooperation is also unique in that the indigenous inhabitants take part as full members.

The Arctic Council will hold a ministerial meeting in Alaska in October 2000. The agenda will include decisions on an Arctic climate project, an action plan to limit pollutant emissions in the Arctic and an Arctic programme for sustainable development.

A priority area for Sweden in the context of Arctic cooperation is to reduce the use and emissions of persistent organic pollutants (POPs).

The programme on sustainable development relates, among other things, to institution-building and infrastructure, natural resources and marine resources, education, the cultural heritage and public health.

### 3.9.5 The Baltic Sea region

Sweden is actively engaged in promoting sustainable development in the Baltic Sea region. At their meeting in Visby in May 1996 the prime ministers of the states in the Baltic Sea region and the European Commission agreed that sustainable development should be the basis for continuing cooperation in the region. In June 1998 the foreign ministers in the Council of the Baltic Sea States and the EU adopted an Agenda 21 for the Baltic Sea region, which is called Baltic 21. This includes objectives and scenarios for sustainable development in the region over the next 30 years and an action programme establishing timetables and containing details of participants and financing. Baltic 21 concentrates on seven sectors (agriculture, energy, fisheries, forestry, industry, tourism and transport) whose development is considered especially important within the context of a sustainable Baltic Sea region. The work on regional development planning in cooperation with VASAB (Visions and Strategies Around the Baltic Sea) is also considered an important issue. This work focuses on the implementation of the action programme, for which the sectors themselves are responsible. At a meeting in Stockholm of ministers for the environment in the Baltic Sea region in March this year it was decided to develop and implement an Agenda 21 for the educational sector in the Baltic Sea region. The meeting of prime ministers in the Baltic Sea States Council in Kolding on 12-13 April this year decided to add education to Baltic 21 as an eighth sector. Sweden is responsible for organizing and coordinating this work together with Lithuania. A large number of NGOs and intergovernmental organizations take part in the work of all the sectors.

Together with Russia, Sweden is responsible for coordinating measures in the industrial sector. The first international meeting of representatives of the industrial sector from all the Member States was held on 21-22 March this year in Stockholm with representatives of all the Member States. The meeting adopted an international strategy for implementation of the action programme for the industrial sector and set up the Baltic 21 Industrial Sector Task Force under a shared Swedish-Russian presidency.

Progress reports will be presented every two years. The first report on implementation of Baltic 21 was presented in June 2000. It is based partly on a large number of indicators for sustainable development in the region.

The governing body of Baltic 21 is the Senior Officials Group (SOG), which consists of representatives of all participating countries and organizations. Sweden, which has held the presidency of the SOG since the start, handed this over to Estonia on July 1 this year. Sweden and Russia, together with Denmark and Poland, were elected to the office that assists the president and the secretariat in their work after 1 July. The steering committee is supported by an interim secretariat that has been based in Stockholm from the start and is entirely financed by Sweden.

Other organizations and measures also play an important part in promoting sustainable development in the Baltic Sea region, e.g. the International Baltic Sea Fishery Commission (IBSFC), the Baltic Marine Environment Protection Commission (HELCOM) and Vision and

Strategies around the Baltic Sea (VASAB), a cooperation structure organized by the ministers who are responsible for spatial planning, all of whom take an active part in Baltic 21. Cooperation on the marine environment of the Baltic Sea is carried on within the framework of the Helsinki Convention. The coastal states cooperate in this framework on the development of principles relating to all important aspects of the environmental objectives adopted for the Baltic Sea. Cooperation between the Nordic countries within the framework of the Nordic Council of Ministers, which concentrates on the regions in the Nordic countries' immediate proximity, is also an important factor for sustainable development in the region, particularly in view of the work on sustainable development that was initiated by the Nordic Council of Ministers in 1998 under the Swedish presidency and will be completed in the autumn of 2000.

The Swedish Environmental Protection Agency, the National Chemicals Inspectorate and the Swedish Nuclear Power Inspectorate are engaged in extensive project cooperation with their counterparts in the Baltic states and northwestern Russia. Cooperation with the Baltic Sea region is very significant for closer association between the candidate countries and the European Union. Investment support for the expansion of wastewater treatment plants continues in the Baltic states and Russia.

The Swedish Armed Forces, the Defence Matériel Administration and the Defence Research Establishment are implementing various defence environment projects in the states around the Baltic Sea on behalf of the Government. In addition, the Swedish Coast Guard is taking part within the framework of HELCOM in joint aerial surveillance operations around the Baltic Sea for the purpose of detecting and combating illegal oil discharges.

In January 1999 the Oil Discharges Commission presented its report *Dealing with Oil Discharges* (SOU 1998:158). The report stresses the importance of preventing oil discharges, in particular by ensuring that there are effective arrangements for oil collection in all ports and that illegal discharges are effectively prosecuted. The Commission's proposals are currently being considered, and a Government Bill is planned for the spring of 2001.

### 3.9.6 The Nordic countries

The Nordic prime ministers have initiated cooperation within the framework of the Nordic Council of Ministers on the elaboration of a strategy for sustainable development in the Nordic countries. The strategy will focus on areas where the Nordic countries have common interests and are particularly well-placed to cooperate and where Nordic cooperation provides added value.

The strategy covers the following areas: climate change, seas and oceans, chemicals, food safety, energy, transport, agriculture, industry, fisheries, and forestry.

Nordic cooperation on the environment is based on the Nordic environmental strategy, the purpose of which is to preserve biological

diversity, achieve sustainable use of natural resources and reduce pollutant emissions to levels that are below the critical loads.

Negotiations are under way on a new environmental action programme which will be adopted by the environment ministers at their meeting in November 2000.

Work is also in progress on a Nordic Integrated Product Policy. A cross-sectoral working group plans to present its proposals by the new year.

In connection with the revision of the EC procurement directives and the drafting of an interpretative communication to clarify the directives, the Nordic environment ministers have informed the European Commission of their view that it should be possible to impose environmental requirements in connection with procurement.

The environment has always been, and continues to be, a major element of the Nordic countries' policies. Nordic cooperation is important not only to the Nordic countries, but also for our neighbouring regions, the Baltic Sea region and the Barents Euro-Arctic region. Nordic environmental cooperation activities in Russia and the Baltic states have been dealt with at the level of environment ministers during the year. They emphasized that environmental cooperation with Russia must be an integral part of the reform process in Russia and aim to build up the organization and supervision of public administration and industry in the country. The main measures taken within the framework of this cooperation relate to municipal waterworks and sewage treatment plants.

As president of the Nordic Council in 1999 Iceland has mainly pursued issues relating to marine resources and the marine environment, cooperation in the Baltic Sea region, environmental cooperation in the Arctic and the contacts between Nordic environmental cooperation organization and the EU. In October 1999 Iceland held a seminar in Brussels on the environment and the EU's Northern Dimension.

During its presidency in 2000 Denmark has focused on cross-sectoral cooperation and integrated action to preserve landscape assets in the Nordic countries, sustainable development in the Arctic, chemicals and the global negotiations on POPs, the EU's acidification strategy and evaluation of the WTO Conference in Seattle.

Nordic environmental cooperation in the defence sector continues to be developed. In the autumn of 1999 an Agenda 21 for the defence sector was adopted at ministerial level. The Nordic defence agencies also cooperate at the administrative level, inter alia, on the introduction of environmental management systems.

### 3.9.7 The World Trade Organization

Sustainable development is already a declared objective of the World Trade Organization (WTO). This means that the trade system and the WTO itself must make a contribution to global efforts on behalf of sustainable development. This is necessary in order to maintain confidence in the organization and increase understanding of the advantages of free trade. In a Communication on trade policy (Comm.

1998/99:59) the Government stated that this is one of many important aims of a new WTO round.

Sweden participates in the international discussions on trade and the environment, in particular in the WTO's Committee on Trade and Environment (CTE). This Committee is the main forum for discussion of the relationship between trade and the environment. The CTE plays a very significant role when it comes to proposing and enforcing any amendments to the trade rules that are designed to promote sustainable development. Sweden is committed to integration of the environment and sustainable development into the trade rules so that trade liberalization can further sustainable development.

It is generally agreed that environmental problems can only be solved within the framework of broader WTO negotiations. In order to achieve the desired result, Sweden's and the EU's position is that environmental issues should be included in the next WTO negotiation round. Sweden and the EU argue that it should be possible to integrate environmental issues horizontally into all areas of negotiation and also to deal with specific environmental issues. These include the important question of the relationship between the regulatory framework for trade and the trade measures laid down in environmental conventions, the scope for implementation of the precautionary principle in connection with application of the WTO rules and the question of the status of ecolabelling systems in relation to the WTO Agreement.

### 3.9.8 Cooperation with Asia

Developments in Asia, not only as regards the economy and trade but also the environment, greatly affect the rest of the world. The scale of the environmental problems in Asia is such that they have already made a global impact. The Government therefore considers it important for Sweden to develop and deepen its environmental cooperation with the countries of Asia. The Government presented its Asian policy in a number of important areas in the Communication *The Future with Asia. A Swedish Strategy on Asia for the 21st Century* (Comm. 1998/99:61). The strategy is to intensify Sweden's relations with the region. The environment and sustainable development are one of the eight areas of cooperation that are given special mention.

As a contribution to the Government's strategy for Asia, the Ministry for Foreign Affairs and the Ministry for the Environment hosted a conference in Stockholm on 15-17 May this year which focused on environmental problems in Asia's large cities. Many of the large cities in Asia have very serious environmental problems, particularly as regards the air, water and waste management. Environmental degradation has been rapid and the trend towards ever larger cities poses a great challenge for the countries' governments. Pollution is already extremely costly to society in terms of loss of production, health problems, loss of biological diversity and increasing vulnerability to natural disasters. The conference was entitled *Swedish-Asian Forum on the Future of Asia's Urban Environment* and it was organized in close cooperation with the Swedish

Environmental Protection Agency, the Swedish Trade Council and Sida. About 50 important decision-makers from 13 countries in Asia, as well as Hong Kong and Macao, took part in the Forum. Swedish researchers and business leaders also took part.

Sweden and the EU import large and increasing volumes of products from the countries in Asia. Many products (textiles, electronics etc.) contain chemicals that for various reasons create problems in the recipient country. In November 1999 a joint Swedish-Thai seminar was held in Bangkok on chemicals in products. The seminar was attended by senior officials of governments and agencies in four EU countries and eight Asian countries in the Asia-Europe Meeting (ASEM), as well as five international organizations. The purpose of the seminar was to raise awareness in the producer countries of the risks of using dangerous chemicals in products which in the course of trade are spread all over the world. Products containing dangerous chemicals can cause serious damage to human health and the environment, not only in the country where they are produced but also in the countries where the products are used and subsequently end up as waste. The need to regulate the use of chemicals in products has increased in proportion to the volumes used. In recent years, the potential adverse effects on human health and the environment of the use of dyes in textiles, brominated flame retardants in electronic equipment and phthalates in toys has attracted special attention.

Environmental issues also have a prominent place in the cooperation between Asia and Europe. The conclusions from the first ASEM in Thailand on 1-2 March 1996, in which all the EU's Member States, as well as the European Commission, Thailand, Indonesia, Malaysia, the Philippines, Singapore, Brunei, Vietnam, China, the Republic of Korea and Japan took part, emphasized the importance of strengthening environmental cooperation between the two regions. Particular emphasis was placed on environmental cooperation for the benefit of both regions and mutual transfer of environmental technology as a means of promoting sustainable development. In order to promote this cooperation ASEM decided to establish the Asia-Europe Environmental Technology Centre (AEETC) in Thailand. The ASEM also appointed the Pilot Phase Guidance Group, consisting of representatives of five Asian and four European countries, and of the European Commission, to operate the Centre. Since July 2000 Sweden has had a seat on the steering committee and has thus had the opportunity to be a driving force in environmental cooperation between Asia and Europe.

## 3.10 The European Union's efforts on behalf of sustainable development and integration of the environment

### 3.10.1 Cooperation within the EU

Ever since Sweden joined the EU it has been a driving force in efforts to integrate environmental protection requirements and sustainable

development into all EU policies. The entry into force of the Treaty of Amsterdam on 1 May 1999 greatly improved the prospects of success in this respect.

At Sweden's proposal the Commission prepared a report on ways of integrating environmental issues more closely into the various EU sectors. The broad lines of the Commission's report were adopted at the European Council in Cardiff in June 1998. The various sectoral councils were called upon at the Cardiff Council to draft strategies for integrating the environment and sustainable development into their areas of responsibility. The transport sector, the energy sector and the agricultural sector were invited to pilot these efforts. Sweden has taken an active part in the work of drafting the specific strategies. It has also urged the Member States to agree on specified timetables and instructions both to the Commission and the relevant councils to facilitate implementation.

In Vienna in December 1998 three new sectoral councils – the single market, industry and development assistance – were invited to take part in this work. In June 1999 in Cologne another three councils – the Economic and Financial Council, the Fisheries Council and the Foreign Affairs Council – were invited to report on integration of the environment and sustainable development to the European Council in 2000. It has been emphasized on several occasions that the sectors should pay special attention to the issue of climate change. The transport and energy sectors are of particular importance in this connection.

Prior to the Helsinki Council in December 1999 preliminary sectoral strategies had been drafted by six councils (transport, energy, agriculture, the single market, industry and development assistance). In Helsinki the Commission also presented a report containing an assessment of the situation as regards efforts to integrate environmental protection requirements into the different areas. The Commission mentioned, among other things, that there was a general lack of specified timetables and objectives for the strategies.

It was decided at the Helsinki Council that the next major review of sectoral integration would take place at the European Council in Gothenburg in June 2001. By the Gothenburg Council all the councils concerned are to have completed and started to implement their respective strategies.

The Gothenburg summit will also adopt a strategy for economic, social and environmental sustainable development. A proposal for such a strategy is expected from the Commission in the spring of 2001. The strategy should be sufficiently concrete to influence practical policy and facilitate changes in areas where development is not sustainable at present. The strategy for sustainable development will form part of the EU's contribution to the international review of efforts to implement Agenda 21 in 2002 (Rio+10). Both the sectoral strategies and the general strategy for sustainable development will be key issues during the Swedish presidency.

The conclusions from the Helsinki Council also call upon the Commission to prepare a proposal by the end of 2000 on a new action programme for the environment (the Sixth Community Environment Action Programme).

At the Environment Council in March this year a number of conclusions were adopted for the purpose of establishing general guidelines for the new action programme. The conclusions note that there is an acute need to integrate the environment into other policy areas. They also state that it is important for a new action programme to address the shortcomings of the previous programme and to focus on new problems that arise due to the failure of the present policy to reverse negative trends or break the link between economic growth and adverse environmental impacts. It is also noted in the conclusions that the new programme should seek to make environmental issues more accessible to the public and to evaluate, strengthen and improve the instruments used within the framework of the EU's environmental policy.

The Commission's proposal for the Sixth Community Environmental Action Programme is expected to be completed this autumn. As the next president, Sweden intends to pursue the work on the programme actively during the spring of 2001. The programme might be called a 'concretization' of the environmental dimension in the strategy for sustainable development.

### 3.10.2 Sectoral integration ('the Cardiff Process')

As mentioned above, the Cardiff Council in 1998 initiated the process in which the sectoral councils mentioned below are to devise strategies for integrating the environment into their operations.

*Transport*

In October 1999 the Transport Council adopted a strategy for integrating the environment and the principle of sustainable development into the Common Transport Policy. This strategy discusses various objectives, for example the need in the long run to place environmental aspects on par with economic and social factors in the formulation of transport policy. Further measures are identified as particularly important in certain areas, for example internalization of the external costs of traffic.

Work on formulating specific guidelines for the development of a sustainable transport system is in progress in various working groups at the Commission. Sweden takes an active part in this work. The Commission has been invited to present a report to the Council based on this work during the autumn of 2000. The report is intended to provide the basis for the conclusions to be adopted by the Transport Council in April 2001.

*Agriculture*

In November 1999 the Agriculture Council adopted a strategy for integrating the environment and sustainable development into the Common Agricultural Policy. This strategy mentions the new integrated environmental and rural development programmes that were introduced under agenda 2000. Apart from that, all Member States must adopt environmental programmes, all structural measures must be evaluated in environmental terms, and each Member State must establish a minimum

level of environmental standards that must be met by the farmers taking part in the programme.

The work of formulating the agricultural strategy continues. One priority during the Swedish presidency will be to establish a timetable for the continuing work on the design of indicators for the purpose of developing the integration of the environment and sustainable development into agricultural policy. This priority is consistent with the conclusions of the Helsinki Council concerning the need of regular monitoring and evaluation of sectoral strategies so as to make it possible to adjust and deepen them as the need arises.

*Energy*

In October 1999 the Energy Council adopted a strategy for integrating the environment and sustainable development into the EU's energy policy. The three priority issues when it comes to formulating a sustainable energy policy are assured supplies, competitiveness and the environment. This means:

- a long-term commitment to increasing energy efficiency and conservation;
- increased use of safe energy sources with low or no carbon dioxide emissions within the framework of the Member States' energy policies;
- reduction of the environmental impact caused by the use of energy sources with a high carbon content.

A number of priority areas have been identified. These include development of the single market for energy, promotion of renewable energy sources, increased energy efficiency and efforts to internalize external costs and environmental benefits. One important step is to develop supplies of renewable energy in the single market. The Commission therefore presented a proposal on May 10 2000 for a framework directive on access to the single market for electricity production based on renewable energy sources.

*The single market*

In October 1999 the Single Market Council adopted a report on the integration of the environment and sustainable development into single market policy.

The report evidently only deals with the first stage of the integration process, i.e. the first stage of the ongoing process of developing a comprehensive strategy with a view to eventually adopting objectives, timetables and indicators for environmental protection and sustainable development in single market policy.

The report points out that the integration of environmental protection should ensure that all the economic advantages of the single market are achieved in a sustainable and responsible manner from an environmental point of view. The integration of environmental protection requirements into the single market should be based on the assumption that there is no inherent conflict between a high level of environmental protection and the free movement of goods and services.

The report does not describe the environmental problems that exist in the single market. Instead, it mentions established single market mechanisms in connection with which measures have been taken to identify synergies, such as harmonization, standardization and ecolabelling. Further measures will, however, be required in all areas. The areas that will be analysed carefully in connection with formulation of the integration strategy include effective implementation of the existing environmental legislation, identification of gaps in the legislation, examination of the Community framework for state aids for environmental protection and review of environmental agreements and other market-oriented measures.

The Commission, the European Environment Agency and Eurostat are now engaged in adopting indicators. It will be possible to use these to monitor the progress of integration of environmental aspects into the single market.

*Industry*

In November 1999 the Industrial Council adopted a report on the integration of sustainable development into the EU's industrial policies. The following conclusions are drawn in the report:

- the requirements of the three pillars – economic, social and ecological – must be met if development is to be considered sustainable;
- policy must be cost-effective and market-based;
- voluntary action is to be encouraged where appropriate;
- cooperation with all stakeholders is important, and small and medium-sized enterprises (SMEs) must be given special consideration;
- there must be a high level of ambition with regard to sustainable development;
- the integration of sustainable development will contribute to fulfilment of the undertakings made under the Kyoto Protocol; and
- enlargement of the EU will require measures to modernize industrial production and thus help to meet the requirements of sustainable development.

The council will continuously monitor progress towards sustainable development within all the three pillars and continue its work on a strategy, which will include a timetable and a number of indicators. In this connection the council will take into account the existing report, a Communication to be issued by the Commission and the conclusions of the Helsinki Council.

*Development assistance*

In November 1999 the Development Assistance Council adopted a report on the integration of sustainable development into Community development assistance policy. The report points out that development is sustainable when it is economically efficient, politically democratic and pluralistic and socially equitable and environmentally sound.

The report briefly describes the evaluation made of the environmental aspects of the EU's programmes in developing countries. It notes that, although progress has been made, the level of integration of the environment into the country programmes is still rather low. One obstacle according to the report is the lack of environmental awareness and demand for environmental cooperation among the governments in the partner countries. Another obstacle is the lack of staff resources for environment and development matters within the Commission. In order to achieve improvements, measures were proposed to strengthen the partner countries' awareness and capacity, as well as the systematic integration of environmental protection requirements into all programmes for these countries.

*Fisheries, economic and financial issues and external and horizontal policies*

The councils that were most recently instructed, in June 1999, to formulate strategies – the Fisheries Council, the Economic and Financial Council and the ECB General Council – have not yet presented any ready-made strategies. The Fisheries Council, which adopted a report in June describing current policy for integration of environmental concerns into fisheries policy, has made most progress. The preparation of strategies in all these three areas will continue this year and during the spring of 2001 prior to the European Council in Gothenburg. The Ecofin Council will adopt a sectoral strategy at the European Council in Nice in December this year. Sweden is taking an active part in the elaboration of the sectoral strategy.

# 4 Measures to promote ecologically sustainable development in the ministries' areas of responsibility

Section 4, only available in the Swedish version of this Communication, describes the progress made by each government ministry on the action programmes and measures to promote ecologically sustainable development.

# 5 Local investment programmes for ecological sustainability

## 5.1 Grants for local investment programmes in 1998, 1999 and 2000

By passing the 1998 Budget Bill (Gov. Bill 1997/98:1, expenditure area 18, Report 1997/98:BoU1, Parl. Comm. 1997/98:81) Parliament approved the allocation of grants for local investment programmes for the

implementation of ecological sustainability. Altogether, SEK 7.2 billion will be allocated for grants for the period 1998-2003 in the 2001 Budget Bill (Gov. Bill 2000/01:1). Pursuant to the Government Grants for Local Investment Programmes which Increase the Ecological Sustainability Ordinance (1998:23), the Government can provide grants for programmes that meet certain criteria.

Grants will be made to the municipalities whose investment programmes appear most likely to contribute to the adjustment process. The criteria for the grants are that the programmes will reduce environmental impacts, increase efficient use of energy and other natural resources, favour the use of renewable raw materials, increase reuse and recycling, contribute to the preservation and strengthening of biological diversity and preserve cultural heritage assets and/or contribute to improving the circulation of nutrients in cycles. The programmes should also help to create new jobs. Municipalities may also receive grants for civic education measures related to the programmes.

The Government has taken decisions on grants in three rounds. In the spring of 1998 it approved grants for three-year local investment programmes in 42 municipalities for the period 1998-2000. In the spring of 1999 it approved grants for investment programmes in 47 municipalities for the period 1999-2001. In the third round of decisions in the spring of 2000 the Government allocated a total of SEK 1.2 billion for a further 56 investment programmes. A total of SEK 4.5 billion will be invested in connection with implementation during the period 2000-2002, and according to the municipalities' estimates 4,100 jobs will be created.

Altogether, 125 municipalities (20 of which more than once) and one association of local authorities were granted a total of almost SEK 5 billion in the form of grants for their local investment programmes under government decisions in 1998, 1999 and 2000. Together with the funds contributed by the recipients themselves, the total volume of investment is SEK 21.5 billion, of which SEK 17 billion represents environment-related investment. According to the municipalities' estimates, about 15,600 jobs will be created during the period up to the year 2002.

### 5.1.1 Overall environmental effects

The municipalities have assessed the environmental effects of each project which receives a grant. The funds invested so far are expected to produce the following results:

- Energy consumption will be reduced by 2.1 TWh per year.
- Fossil fuels corresponding to 2.3 TWh per year will be replaced by renewable energy sources, which is equivalent to the energy consumed by 92,000 detached houses.
- Carbon dioxide emissions will be reduced by 1.57 million tonnes or 2.8 per cent of all Sweden's emissions. This reduction corresponds to a halving of heavy goods vehicle traffic in Sweden.
- Nutrient discharges into seas and watercourses are expected to be reduced by almost 2,500 tonnes of nitrogen, which is equivalent to

2 per cent of the current discharges into the sea. The corresponding figure for phosphorus is 180 tonnes, which is the equivalent of 4 per cent of discharges into the sea.
- The amount of waste that is landfilled is expected to be reduced by 500,000 tonnes as a result of ongoing investment programmes, which is the equivalent of 10 per cent of the waste volumes that are landfilled today.
- During the periods 1999-2001 and 2000-2002 at least 2,061 hectares of natural environments that are valuable from the point of view of biological diversity will be preserved or restored (there are no reliable data for the period 1998-2000).

### 5.1.2 Breakdown of measures

*The period 2000-2002*
The grants made for the period 2000-2002 relate to measures that can be broken down into six main categories. Most of the grants (36 per cent) are for measures involving conversion to renewable energy sources, while 11 per cent are energy efficiency measures. 17 per cent of the grants are for projects relating to waste, including biogas, while traffic and transport projects account for 12 per cent, water and sewerage for 10 per cent, and nature conservation and biological diversity for 6 per cent. The remaining 6 per cent relate to construction projects, supporting measures etc. This distribution is broadly similar to that for previous investment programmes. The most obvious difference is the smaller percentage of grants for cleaning up polluted areas (see below under Remediation).

*Conversion of energy systems*
Conversion to renewable energy sources is the category of measures that received the largest proportion of funds. A total of almost SEK 1.2 billion, or 24 per cent of the funds allocated for local investment programmes, was granted for energy conversion projects (these figures do not include biogas facilities, which fall within the waste category). The commonest measures in connection with the conversion of energy systems are investments in biofuel-based district heating systems and associated expansion of these systems.

*More efficient use of energy*
Almost SEK 490 million, or 10 per cent of the funds granted in 1998, 1999 and 2000, was allocated for improving energy efficiency. A large proportion of these funds was granted for projects utilizing waste heat, especially from industries, but also from wastewater and transformer substations. One example is the utilization of waste heat from Södra Cell's Värö paper mill, which is part of Varberg's investment programme. Utilization of the waste heat in Varberg's district heating system replaces fossil fuel-based energy corresponding to 58 GWh per year. Examples of other waste heat projects are those being implemented in Vänersborg-Trollhättan and Lysekil.

*Water and sewerage*
The Government has made grants totalling SEK 480 million, or 10 per cent of the total, for water and sewerage projects in the 1998, 1999 and 2000 rounds. The most common measures include improvements of individual sewage treatment systems by means of individual or joint solutions and projects relating to improved recirculation of sludge to agricultural land. Many projects also have to do with local stormwater management and leachate from landfill sites.

*Traffic and transport*
The transport sector accounts for 10 per cent, or SEK 470 million, in the three grant rounds. New cycle tracks, cycle tunnels and bridges, cycle parks and information campaigns are examples of measures that will encourage people to cycle more. Public transport projects include new through bus routes, more efficient bus services and improved traffic mobility. The transport projects also include the use of alternative fuels and purchases of vehicles in this connection.

*Waste*
Waste projects are dominated by the production of biogas, source separation and materials recycling. Grants for waste projects total about SEK 600 million for the three rounds, which corresponds to 12 per cent of all grants. The most important types of measures are investments in plants for extracting biogas from household waste and for sewage sludge and industrial residues. Biogas is used as a fuel and for heating purposes. Grants have also been made for projects involving the recycling of plastics, sand or composite materials in connection with the manufacture of new products.

*Remediation of polluted areas*
The percentage of grants for the remediation of polluted areas fell sharply in the 2000 round compared with earlier years; a total of about SEK 10 million was granted for such projects, which corresponds to less than 1 per cent of the total allocation. This may be compared with 1999, when grants for remediation totalled SEK 93 million, or 6 per cent. The reason for the drastic decline in the number of remediation projects in the local investment programmes is that grants for such projects can now be applied for from the Swedish Environmental Protection Agency and that grants were made in previous years for many of the most thoroughly investigated sites. Altogether, SEK 370 million, or 7 per cent of the total, was allocated for remediation measures within the framework of the local investment programmes.

*Nature conservation and biological diversity*
A total of more than SEK 310 million, or 6 per cent, of the funds granted, was allocated for nature conservation and biological diversity. The commonest measures in this category are restoration of lakes and watercourses and restoration or establishment of wetlands. These are often dual-purpose projects, one aim being to reduce nutrient leakage into lakes, rivers and coastal areas and another to restore wetland areas that

are important in the context of biological diversity. There are several examples of projects intended to improve the reproductive conditions for fish, for example sea trout.

The nature conservation projects include measures to preserve and restore cultural landscape types such as meadow land, wooded pasture and riparian meadows. Among other projects which received grants in 2000 was the first major project focusing on biological diversity in forests. SEK 8.2 million was granted to the Dalsland association of local authorities for a project involving forest management, information and method development in deciduous forestry. The project aims to improve biological diversity in forests and favour habitats, in particular for the white-backed woodpecker.

*Construction-related projects*

Various types of complex measures relating to construction and housing received grants totalling SEK 840 million, or 17 per cent of the total. These are mostly complex projects that include measures to increase the efficiency of energy use and measures relating to water supply and sewerage and waste management. Some of the projects involve the reuse of construction materials and stormwater management connected with housing estates (these measures are included in the categories Multidimensional projects and Construction projects in the diagram).

During the period 2000-2002 about 10 camping sites in Borgholm and Mörbylånga municipalities on the island of Öland will be upgraded by the installation of solar collectors for the preheating of water, water conservation equipment and wastewater collection systems for mobile homes.

*Information, administration and evaluation*

Municipalities can apply for grants for supporting measures within the framework of the local investment programmes. This category consists of administration, evaluation and quality assurance in connection with the implementation of the investment programmes, and also of information and education measures linked to the programmes. About 3 per cent of the total funds allocated for programmes are for supporting measures. Information measures and civic education are also linked to individual projects and are therefore included in the grant amounts for the categories concerned.

Information and civic education sometimes consist of information to the public or to various groups in a municipality for the purpose of explaining the measures undertaken within the framework of the programme. In other cases information has a more operational role. This applies in particular to measures for which the participation and behaviour of the citizens is crucial to implementation and achievement of the desired results, e.g. conversion projects in housing estates, transport and waste projects, and projects in which the municipality makes grants to individuals for investments in energy or sewerage systems. Examples of large-scale traffic and transport projects in which investments in public transport, cycle tracks and alternative fuels are combined with information measures occur in Lund, Borås, Jönköping and Halmstad.

The linkage between information and physical measures is often vital to the success of a project.

The municipalities' obligations in connection with the implementation of investment programmes include presenting annual reports to the Ministry of the Environment and a final report when the programme is completed. They are also required to coordinate implementation of the programme and to maintain continuous contact with the county administrative board, the Ministry and other authorities. The administration grants mainly relate to such measures. Many municipalities also include monitoring and evaluation in their non-compulsory activities. The municipalities' monitoring and evaluation is very important for the purpose of documenting and disseminating experience of the implementation of the investment programmes and for providing data for evaluations at central government level.

**Grants by main categories. Totals for all years.**

/Medurs/

Water supply and sewerage
10%

Waste 12%

Construction projects
4%

Remediation 7%

Energy efficiency/
conservation 10%

Conversion to renewable energy
24%

Multidimensional projects
13%

Industrial projects 1%

Nature conservation,
biodiversity 6%

Supporting measures
3%

Traffic and transport
10%

### 5.1.3 Breakdown by recipients

The percentage of grants made for projects in private enterprise increased sharply in the programmes that received grants in 2000. Almost SEK 290 million was allocated for environmental projects undertaken by private

enterprises, and this corresponds to 23 per cent of the grant total for the period 2000-2002. This may be compared with the figures for 1999, when less than SEK 120 million, or 8 per cent, was allocated for private enterprise projects. The reason for this increase is mainly that the condition for grants in the private sector, i.e. that projects should involve the use of new technologies or new methods, has been abolished. Consequently, grants can now be made for investment in enterprises even where they intend to use existing technologies or methods. Most of the grants in the private sector relate to energy efficiency, conversion to renewable energy sources, waste management and the recycling of residues.

The breakdown of grants by other project owners in the 2000 round was as follows: municipal administrations (37 per cent), municipality-owned companies (28 per cent), associations and organizations (4 per cent) and associations of local authorities and other cooperation projects (1 per cent each).

**Grants by recipients. Totals for all years**

/Medurs/

County councils 1%

State 2%

Other 1%

Other cooperation projects
11%

Intermunicipal projects
2%

Associations/organizations
2%

Enterprises 9%

Municipal administrations
41%

Municipally-owned companies
31%

## 5.2 Continuing measures

### 5.2.1 Changes in the application procedure for the period 2001-2003

The Government decided last spring to make some changes in the Government Grants for Local Investment Programmes which Increase the Ecological Sustainability Ordinance (1998:23). These changes entered into force on 1 April 2000 and involve the following:

- Applications can be submitted at any time during the year. Government decisions on grants are also taken on a continuous basis.
- Declarations of interest are no longer to be submitted.

On 1 October 2000 another amendment of the Ordinance entered into force. It is now possible to make grants for measures to improve the indoor environment for the purpose of reducing the presence of allergenic or other substances and materials that are detrimental to health, on condition that the measures, which can also be combined with other measures, also address the environmental effects specified in the Ordinance.

Applications for grants within the framework of local investment programmes still relate to entire programmes, and grants are normally provided for single programmes. However, in the 2000 Budget Bill the Government allowed for the possibility of providing grants for individual measures of particular significance even if the programme as a whole does not qualify. Parliament adopted this proposal.

### 5.2.2 Support for the municipalities

207 declarations of interest were submitted prior to the programme period 2000-2002. All the municipalities that submitted declarations of interest were offered consultations with the Ministry of the Environment about the programmes. 195 such consultations took place during the period June-October 1999. The purpose of these consultations is to support the municipalities in the application process. Consultations also take place between the county administrative boards and the municipalities during this process. Following completion of the process, 191 applications were submitted to the Government by 1 November 1999.

The changes in the application procedure for the period 2001-2003 also involve changes in the grant arrangements for the municipalities. In May and June 2000 the Ministry of the Environment organized regional conferences throughout the country in cooperation with the county administrative boards. In this connection, municipalities whose grant applications were rejected were offered the opportunity for individual talks to receive feedback about their applications.

*The Swedish Institute for Ecological Sustainability*

The Swedish Institute for Ecological Sustainability was set up mainly for the purpose of supporting the municipalities in their work on local investment programmes and thus increasing the pace of conversion to an ecologically sustainable society. The Institute is located in Umeå, and its main tasks are to arrange contacts and pass on information between practicians in municipalities, researchers, sectoral authorities and enterprises. Its main tools consist of the website *www.swecol.se*, an electronic newsletter, conferences on various subjects and thematic networks. The Institute has also been instructed by the Government to

give special support to municipalities in rural areas in their work on the local investment programmes. The Institute will gradually assume a larger role in supporting municipalities and arranging contacts with the research community in connection with the monitoring and evaluation of the investment programmes.

### 5.2.3 Monitoring and evaluation

The programmes which received grants for local investment programmes are followed up on an annual basis. The municipalities must submit activity reports by March 1. The county administrative boards examine the reports submitted by the municipalities and submit their opinion to the Ministry of the Environment. The county administrative boards have been instructed to focus on discrepancies between implementation of the programmes and the applications and government decisions.

The Government has also instructed the Swedish National Audit Office to monitor and evaluate the local investment programmes, and the Office presented a report in June 1999. The Office has also been instructed to carry out an evaluation of the grant system as a whole in the spring of 2002 for the purpose of providing data for possible future programmes to promote ecological sustainability.

Reports on the investment programmes that were launched in 1998 will be submitted in the spring of 2001. The municipalities' reports will provide important material for central initiatives on evaluation of the investment programmes and for disseminating knowledge and experience. In the autumn of 2000 the Ministry of the Environment and the Institute are planning various activities to support the municipalities with their final reports. Various central initiatives concerning scientific evaluation of local investment programmes are also being planned.

## 5.3 Aid for Bo01 City of Tomorrow

Part of the appropriation for local investment programmes (up to SEK 250 million altogether) can be used for the housing exhibition Bo01 City of Tomorrow which will be staged in May-September 2001. The general theme of the exhibition is ”The City of the Future in an Ecologically Sustainable Information and Welfare Society”. It will provide a unique opportunity to demonstrate ideas and technical solutions for full-scale ecologically sustainable development in the permanent built environment. The grant will be used for the extra costs of ecologically sustainable solutions in connection with the construction of permanent housing and infrastructure in the area.

In the spring of 2000 the city of Malmö was granted SEK 212.2 million for 45 different projects connected with the exhibition. These include various investments in infrastructure for sound environmental management of waste and wastewater and for environmentally sound transport. They also include environmentally sound energy solutions, such as solar collectors. Several developers have received grants for environmental investments in their construction projects. The measures

for which the grants were made also include civic education and information measures. The Government will decide on further support for the exhibition this autumn.

# Ministry of the Environment

Extract of minutes of Cabinet Meeting held on 26 October 2000.

Present: Prime Minister Persson, chair, and Ministers Thalén, Winberg, Lindh, Sahlin, von Sydow, Klingvall, Pagrotsky, Östros, Messing, Engqvist, Rosengren, Larsson, Wärnersson, Lejon, Lövdén, Ringholm, Bodström

Rapporteur: Minister Larsson

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The Government adopts Communication 2000/01:38, *Sustainable Sweden – a Progress Report on Measures to Promote Ecologically Sustainable Development.*