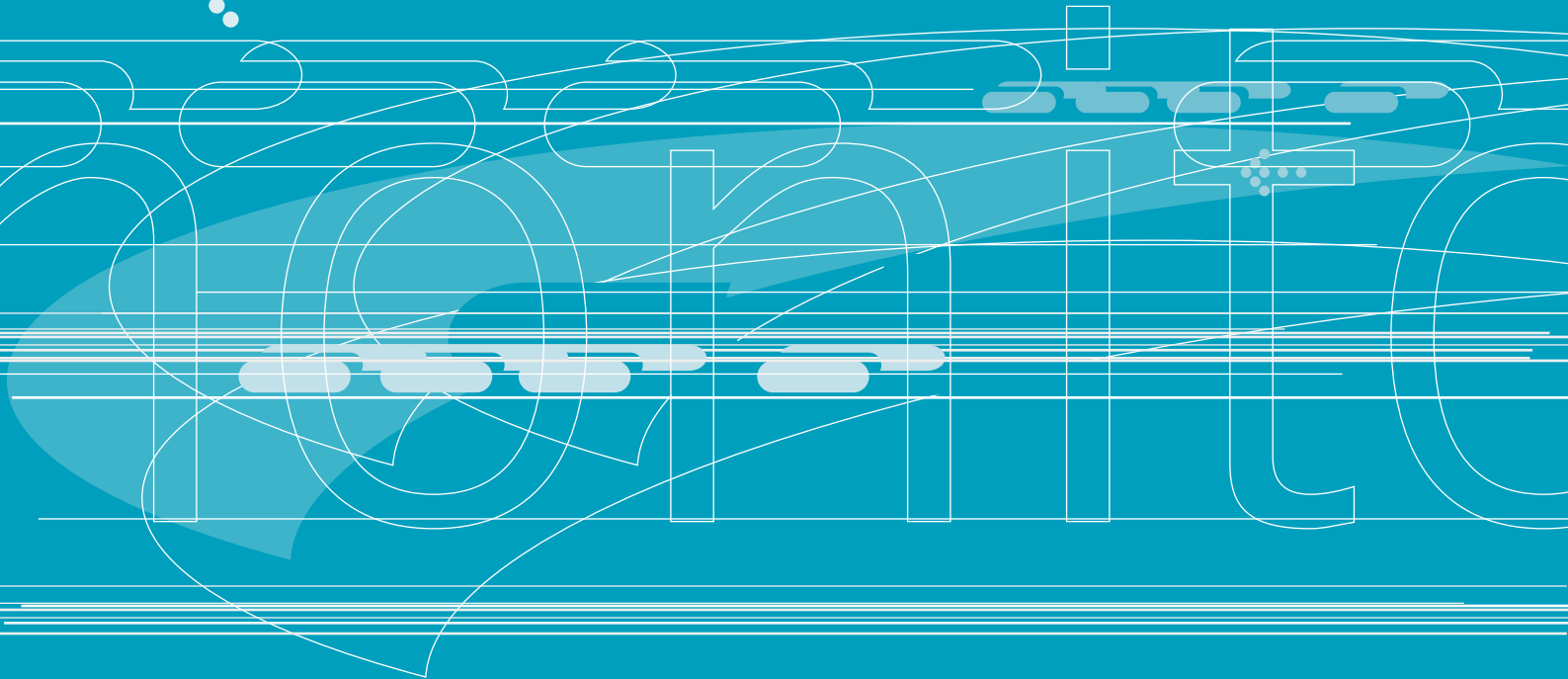


PART 5 - IMPLEMENTING AND MONITORING THE STRATEGY

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Chapter 18

Monitoring and Indicators

"It is very difficult to derive widely acceptable definitions as to when sustainability has been achieved. But it is possible to identify performance indices which can tell us whether we are moving away from, or in the direction of, sustainability."

- F.J. Convery, "Assessing Sustainability in Ireland - a Synthesis"

Introduction

Sustainable development indicators are a means of measuring progress over time towards, or away from, sustainability. The *Policy Agreement for a Government of Renewal* states the Government's commitment to work towards a new set of indicators of sustainable economic development, taking account of environmental and social factors, and to be used alongside existing measures of economic activity such as GDP.

In declaring this commitment, the Government recognised that conventional measurements of national economic activity and wealth do not consider the environmental implications and impacts of development. There are two aspects to the task set by the Government:

- suitable indicators must be devised; and
- they are intended in the long-term to qualify, from a sustainable development perspective, the standard information of traditional National Accounts.

Both aspects will be developed within the framework of this Strategy.

The Purpose of Indicators

Indicators are a means of assimilating information to improve communication and enable trends to be understood. Several kinds of indicators may be used to fulfil particular functions and measure the quality/quantity of environmental resources:

- state of the environment indicators reflect environmental quality;
- stress indicators reflect development effects; and

- performance indicators may be used to evaluate long-term achievements in environmental management and protection.

Sustainable development indicators introduce a new dimension to the provision of information, in that they seek to describe and measure key relationships between economic, social and environmental factors. In all cases, indicators both quantify and simplify information, thereby making it more accessible to policy-makers and the public.

International Context

Agenda 21 recognised that "in sustainable development, everyone is a user and provider of information".² Despite the wealth of data and information already in existence, "finding the appropriate information at the required time and at the relevant scale of aggregation"³ was a difficult task. *Agenda 21* acknowledged that institutional capacity to integrate environment and development, and to develop relevant indicators, was lacking at both national and international levels, and advocated that the concept of sustainable development indicators should be further progressed.

Substantial work on the development of indicators has been under way for some time in the OECD, and more recently within the EU, the UN Commission on Sustainable Development and the World Bank. The OECD has identified a Core Set of Indicators on the State of the Environment. Attention is now focusing on the means of defining and measuring indicators which will link economic growth and physical environmental impacts. No single conceptual framework has yet emerged. The UN is seeking to build international consensus on a suitable range of indicators for purposes of *Agenda 21*. While a standard approach would facilitate comparison across countries and maintain a global perspective, indicators must also address national development frameworks, and add value to policy and action in the appropriate environmental and socio-economic contexts.

Alongside this work, it is increasingly recognised that national accounts, which measure the national income from economic activity and do not take account of the environmental implications of that activity, cannot illustrate whether economic growth is sustainable or not. There are, however, substantial difficulties in producing environmentally adjusted, or "green" accounts.

National Context

Apart from national accounts aggregates and standard macro-economic variables, such as GDP, inflation rates, employment levels and balance of payments figures, use of indicators is not well developed in Ireland. Environmental monitoring systems provide quantitative and qualitative information clearly identifying some unsustainable trends in current growth patterns. But a systematic framework within which environmental trends can be evaluated and key conclusions widely communicated has not yet been devised.

An important development, however, has been the inclusion of a series of macro-development, sectoral and environmental indicators in the CSF. It is a primary objective of the CSF to enhance economic performance through sustainable growth and development. The indicators are being measured having regard to quantified forecasts for 1999, and they represent a first attempt to make the relationship between structural funds' assisted economic growth and environmental sustainability more tangible. Their measurement, therefore, has significance in the context of this Strategy as well as for purposes of the CSF. Indicators which are relevant in a sustainable development context include:

Agriculture, Forestry and Rural Development⁴

unit	1992	1999
serious pollution from agricultural waste		
km of river	32	28
number of fish kills due to agriculture		
recorded kills	22	15
gross forestry output		
IR£m 93 prices	108	185

Fisheries⁵

	1993		1999	
	value IR£m	volume tonnes	value IR£m	volume tonnes
fish landings	98.0	254,300	118.0	301,000
aquaculture production	40.4	27,060	103.1	69,140

Tourism⁶

	1993	1999
visitors in the off-peak periods	70%	75%

Transport⁷

	1993	1999
rail passenger numbers	7.90m	8.70m

Energy⁸

	1993	1999
energy intensity (TPER/GDP)	80%	75%
primary energy supply by source %		
- coal	21 ¹	18
- peat	14 ¹	10
- oil	49 ¹	53
- natural gas	15 ¹	17
- renewables/hydro	2 ¹	2
Energy supplied from renewables	-	+75(MW)
	¹ 1992 Figures	

Environment⁹

	1993	1999
compliance with EU standards in relation to public or group water supplies based on the drinking water Directive (80/778/EEC)	94%	100%
proportion of urban waste water being treated in accordance with the requirements of the urban waste water treatment Directive (91/271/EEC)	20%	80%
dumping of sewage sludge at sea	40%	0%
recovery rate for packaging waste	10%	25%
level of recycling of municipal solid waste	8%	15%

The above indicators were identified for objectives which lend themselves to quantification; where this was not possible they were supplemented by qualitative goals in Operational Programmes. It was also recognised that external factors could influence the indicators and that they should be kept under review and amended if necessary. Certain trends, indicating a basis for amendment, have now been identified in the EPA's *State of the Environment in Ireland* and some new targets have resulted from specific policy developments since 1993. For example:

- agricultural activities now account for some 31%, or 24 km, of recorded serious water pollution;
- the number of fish kills due to agriculture was 18 in 1996;
- over 100 MW of electricity from renewable energy sources will be installed by the end of 1999; and
- the rate of recycling of packaging wastes will be increased to 27% by 2001.

As part of the mid-term evaluation of all structural fund operations, which commenced in the second half of 1996, a detailed examination of indicators in each Operational Programme is being undertaken to examine how well they serve their purpose and whether they need alteration or amendment.

Approaching the Development of Indicators

In approaching the development of indicators, it is important to identify the characteristics of good indicators, as well as the limitations associated with their use. These are only partly attributable to current gaps in information.

Successful indicators are readily understandable, representative of key environmental policies and concerns, and capable of illustrating trends over time. They must be scientifically valid, analytically sound, measurable and verifiable. They depend significantly, therefore, on

the availability of adequate, good quality data which is updated at regular intervals. Methods for aggregating data and composing indicators needs to be clear and unambiguous.

There are many difficulties involved in preparing sustainable development indicators; so far, most attention has focused on environmental indicators, where the OECD Pressure-State-Response (PSR) framework provides a widely accepted model. This recognises cause and effect relationships; human activities exert pressure on the environment, and change its state in terms of the quality and quantity of natural resources. Society then responds to these changes through environmental, economic and sectoral policies.

The PSR framework provides a means of grouping information on the environment; there is much similarity in the choice of environmental themes at international level, and EPA has advised on prioritisation of themes in an Irish context in *State of the Environment in Ireland* (see below). Experience suggests that data is most readily available for pressure indicators and least available for response indicators.

Environmental indicators do not adequately measure progress towards or away from sustainability. Interrelationships between environment, economy and society are more complex than the linear PSR framework allows; this is now being further amplified by a closer focus on economic driving forces as the anterior cause of environmental pressures.

ESRI Study on Indicators

In 1995, the Department of the Environment requested the ESRI to advise on the issues and options arising in connection with the Government commitment to the preparation of sustainable development indicators. The resultant study was published by the ESRI in April 1996.¹⁰ It contains separate essays on environmental and social indicators as an integrated

approach to these areas has not yet emerged. While there are difficulties with information and monetary evaluation, three main types of environmental indicators are discussed.

Environmental indicators for individual themes

Most international work has focused on this area, forming a foundation for the development of more sophisticated indicators in the future. The indicators can be expressed in physical terms and the choice of themes may reflect environmental aims and priorities at national, regional or local levels. The OECD's core set of indicators¹¹, and ongoing work by Eurostat on Pressure Indices, use individual themes; many such indicators could be assembled for Ireland.

Environmentally-adjusted (or green) national income

This would extend the measurement of national income to take account of important environmental considerations. National income is a measure of economic activity rather than well-being. It ignores the depletion of natural assets and the negative impact on welfare of environmental damage which has not been remedied. It also reflects "defensive expenditure", i.e. expenditure to prevent or correct pollution - and maintain the status quo environmentally - as output rather than costs.

There are no easy ways to adjust national accounts. Monetary valuation of depletion and degradation, judgement on whether/the extent to which human-made capital can substitute for natural assets, and methodologies for dealing with defensive expenditures in an integrated framework are still largely at an experimental stage.

National sustainability indicators

These are related to green national income and have similar data requirements, but go further in terms of estimating national change in assets over time. The national savings rate adjusted for depletion and degradation of environmental assets would be the appropriate national sus-

tainability indicator to use alongside GDP. Where the change in assets, measured by the adjusted savings rate, is positive when averaged over a period of years, society is on a sustainable path. However, the difficulties of measurement associated above with green national income also arise here. In both cases, measurements which rely on monetary valuation cannot easily include aspects of environmental sustainability which have no price.

As the Government intends that sustainable development indicators should take account of social as well as environmental factors, the ESRI addressed the issues associated with the selection and quantification of social indicators. National income does not adequately measure welfare; the essential purposes of social indicators are to focus on the distribution of economic resources, and to extend traditional economic measurements to include non-economic aspects of social life.

While a comprehensive set of social indicators would require considerable additions to existing data sources, a List of Social Indicators developed by the OECD¹² provides a useful starting point for the development of social indicators for Ireland. This contains 33 indicators covering health, education, employment, quality of working life, distribution of income and wealth, leisure, physical environment, social environment and personal safety. It is broadly applicable across developed countries and generally feasible in measurement terms.

A Work Programme towards Sustainable Development Indicators

The Government will now build on the work already undertaken and in train to develop sustainability indicators for purposes of the monitoring and implementation of this Strategy. In doing so, it will take account of the recommendations made by the ESRI and EPA, and the output of the National Sustainability Indicators Forum¹³ (April 1995). The Department of the

Environment, the Department of Finance and the CSO, as appropriate, will participate in related work at EU, OECD and UN Commission on Sustainable Development levels, with particular reference to the developing EU framework for the integration of environmental and economic systems and the preparation of environmental accounts as a satellite to national accounts.

A phased approach will begin with the preparation of a series of national environmental quality indicators, to be developed by EPA by 1998. This will take account of the EPA's conclusion, in *State of the Environment in Ireland*¹⁴, that initial priority be given to three themes - eutrophication, the urban environment and waste. In the meantime work will proceed on the longer-term areas including research, data assembly, methodology development and monetary valuation necessary to approach the measurement of sustainability indicators and the preparation of satellite environmental accounts. Progress will be reported annually as part of the annual review of the Strategy.

It is clear that the quality of underlying data will determine the quality of indicators, and that the availability of data in a number of areas is an immediate constraint. Equally, to fill gaps efficiently, and ensure that the environmental data collected meet national requirements for economic policy analysis and monetary valuation, there is a need for good liaison between the agencies involved. The EPA has primary responsibility for the coordination of environmental data, while the CSO has overall responsibility for statistics, in particular, economic and social statistics and national accounting data.

The CSO, following consultation with EPA, the Department of the Environment and the ESRI, has assessed requirements arising from a Eurostat project on the integration of environmental accounts in a national accounts matrix. It will commence a work programme in 1997 to

formulate a methodology for the preparation of satellite environmental accounts in a national accounting framework. This will have regard to the emerging work at EU level.

Given their existing responsibilities, EPA and CSO will have a primary role in the collection and coordination of environmental data and official statistics to develop suitable indicators and, ultimately, satellite environmental accounts. The overall work programme will be coordinated by the Department of the Environment, which will be assisted by a Steering Group, with representation from EPA, CSO, relevant Government Departments, ESRI and the research community. The Group will be convened in 1997.

A preliminary series of economic and environmental trend tables, reflecting the priorities of this Strategy and the recommendations already referred to above, is included in Appendix I, for illustration and discussion. Work towards the definition of indicators will be refined as information systems and methodologies are developed, and as consensus grows internationally about the choice of themes for international comparisons.

Chapter 19

Implementation and Review

Introduction

Achieving sustainable development will involve:

- the active engagement of economic actors and society;
- support at all levels of Government and in the Oireachtas; and
- participation by the public at community and individual levels.

It will also be facilitated by good spatial planning, and the inclusion of sustainability concerns in urban and built environment policies.

This chapter identifies the approaches to be pursued, and the instruments to be developed, by Government and public authorities generally, and by socio-economic sectors, in support of sustainable development. These will be designed to:

- reinforce the new directions provided by the Strategy;
- emphasise the need for leadership and exemplary action at all levels of Government;
- create a foundation for good partnerships with non-governmental interests;
- create new, innovative opportunities for sustainability initiatives; and
- support a comprehensive and long-term process of conversion to a sustainable development path.

Structures

Joint Oireachtas Committee on Sustainable Development

The Government will propose that the Joint Oireachtas Committee on Sustainable Development should become a standing Committee of the Oireachtas to oversee relevant policy development and the implementation of this Strategy. New terms of reference will be prepared to broaden the remit of the Committee in this regard, and, in particular, to enable it effectively to discharge a supervisory and monitoring role. The Committee should regularly hear from Ministers and Departments/Agencies about their progress in implementing the Strategy and

will develop its own assessments and reports. It will retain its current powers to send for persons, papers and records; engage specialist services; publish evidence and related documents; invite submissions; and discuss and draft proposals for legislative changes.

National Sustainable Development Council

The Government will establish a National Sustainable Development Council to facilitate participation by economic, social and environmental interests in the achievement of sustainable development, and to promote better consultation and dialogue on key sustainability issues. The Council will be independently chaired, and will include wide representation from the social partners and NGOs. Relevant Government Departments and Agencies, as well as Regional and Local Authorities, will also participate. The Council's work, which will begin in 1997, will be supported by the Department of the Environment, which will provide necessary back-up services.

The Sustainable Development Council will:

- generally advise Government on the implementation of policies and actions under this Strategy, and assist with the Strategy monitoring and review arrangements;
- review reports prepared periodically by Task Managers appointed to operationalise the Strategy at sectoral level;
- review implementation of Agenda 21 and the Rio Agreements, and prepare/contribute to national reports to the UN Commission on Sustainable Development;
- promote information exchange and dialogue among the participants to reinforce the national commitment to sustainable development; and
- increase public awareness and work towards the creation of a sustainable development ethos throughout society.

In discharging its functions, the Council will join a growing network of national councils or sim-

ilar entities within the EU and at a wider international level, with mutually beneficial interaction in the pursuit of sustainable development.

Management and organisation

"... many of the most pressing issues which must be addressed require the expertise and commitment of a variety of Departments and Agencies in order to achieve a successful outcome."

- Strategic Management Initiative: Delivering Better Government'

The Government's Strategic Management Initiative (SMI) emphasises the need to go beyond traditional structures to achieve more effective delivery of policies. In developing SMI, more appropriate mechanisms were examined for cross-Departmental action on a number of issues; these involved the long-acknowledged need to integrate consideration of the environment into Government decision-making at all relevant levels.

International experience of environmental integration shows it to be a complex task, still in its formative stages. No definitive structural or institutional solutions have so far been identified internationally. However, it is clear that the capacity of Government to formulate environmentally-sustainable economic and social development plans and programmes should be enhanced and supported. Environmental integration will therefore be designated as a "Strategic Result Area" in the context of SMI.

Strategic environmental assessment (SEA) is becoming a recognised means of advancing integration of environmental considerations into key policy areas. The Government recognises its potential as an integration tool, and a means of strengthening preventive rather than remedial action. Accordingly, in addition to supporting SEA of land use plans and programmes (see Chapter 14), proposals will be brought forward within three years to develop an SEA system for major plans and programmes, likely to have significant environmental impacts, in the sectors covered by this Strategy.

The Government will designate relevant Government Departments as Task Managers to lead in the development of the more detailed processes and measures necessary fully to operationalise the Strategy across the economic sectors discussed in Part III. The EPA will be designated as Task Manager to monitor and report on environmental quality trends in the context of strategy implementation, and the Department of the Environment (which will coordinate the reporting programme overall) will have a similar role in respect of the balance of the Strategy, including spatial planning, the built environment and the development of sustainable development indicators.

The role and functioning of Departments as Task Managers, and the better internalisation of environmental considerations into their work, will be supported by:

- **Environment Units** to be maintained or provided in all Departments and Agencies, whose remit has significant, or potentially significant, environmental implications; and
- further development of the **Green Network of Government Departments**², to be undertaken under the coordination of the Department of the Environment, so as to deepen cross-departmental awareness of the environmental agenda.

A timetable for progress reporting by Task Managers will be set out by the Department of the Environment, in consultation with the National Sustainable Development Council, having regard to the annual reporting agenda of the UN Commission on Sustainable Development and other international requirements. All reports will be provided to the Council for comment; together with any such comments this will provide a basis for periodic review by Government, and the re-direction, rebalancing or updating of the Strategy as appropriate. Task Managers may also be requested to discuss progress on relevant aspects of the Strategy with the Council at any time.

Annual review of the Strategy, as envisaged by the *Programme for a Government of Renewal*³, will be addressed through the process outlined above.

Better Environmental Practice in the Public Sector

There is a special obligation on the public sector to demonstrate good environmental performance as part of the services which it delivers.

"The public sector will lead the way in demonstrating best environmental management practice. This will include formulating environmental management plans incorporating waste minimisation, green purchasing and recycling policies."

- Policy Agreement for a Government of Renewal⁴

The public sector is a major consumer of natural resources. Adoption of green housekeeping in the interests of environmental sustainability can also enhance the quality of service to the public and produce administrative savings. The *Green Government Guide*⁵ (published in 1996) is designed to:

- promote a progressive approach to the environmental management of each Government Department;
- integrate green housekeeping into each Department's management strategy; and
- demonstrate a basis for extending the concept of green housekeeping to the wider public sector and the private sector.

The office environment is demanding on many resources, including energy, water, paper, equipment and consumables for this equipment. Green housekeeping is directed primarily at realising benefits for the environment through reductions in the consumption of natural resources, emissions/discharges and waste generated. But Departments can also expect progressively to increase savings in their administrative costs, e.g. energy costs, paper and other materials costs, reduced storage requirements, etc. **Green housekeeping involves taking conservation and demand management as central**

principles, so that quantities used are always the minimum consistent with the efficient running of the office. A key element of this initiative involves Government Departments formulating environmental management plans for their organisations.

The proposals for green housekeeping are complementary to the measures recommended in the Government's Programme for *Energy Conservation in State Buildings*.⁶

Good environmental management in Government Departments must serve as a model for the extension of green housekeeping to the wider public sector. In the longer term, it will also allow Departments to progress to a more formalised system of environmental management and audit along the lines of the EU's voluntary Eco-Management and Audit Scheme (EMAS). This would involve the carrying out of an environmental audit, preparation and publication of an environmental statement, on-going reporting on, and the improvement of, environmental performance, together with independent verification and review.

The public sector can exert a positive influence on the production of environmentally-friendly goods and services through the integration of environmental considerations in public procurement policy. A range of purchasing policies to minimise waste and emissions, save energy and give preference to environmentally-responsible suppliers and products is outlined in the *Green Government Guide*. The Government will examine what further steps should be taken, by 1999, to develop a policy for environmentally-sustainable public procurement.

Local Government

A major programme for the renewal of local government, *Better Local Government - A Programme for Change*, was launched by the Minister for the Environment in December 1996. Setting a path to the new millennium for the

progressive renewal and revitalisation of local government, the Programme is based on core principles of

- enhancing local democracy,
- serving the customer better,
- developing democracy, and
- providing proper resources.

It *"seeks to move progressively towards a system which provides efficient services; embraces local development in all its forms; has an input to other public bodies whose actions impact locally; and the strength of which lies in its local democratic mandate and genuine partnership with the local community"*.⁷

A reformed local government system will support this Strategy by enabling local authorities at regional and local levels, in terms of the efficiency of their structures and operations, and their leadership of and interactions with local communities, to participate more effectively in the achievement of sustainable development.

Regional Authorities

The Regional Authorities, established on 1 January, 1994, provide a focus for regionally based coordination

- between different areas and sectors,
- between local and other public authorities/agencies, and
- in the provision of public services.

The membership of the Regional Authorities consists of county/city councillors from the region, who are appointed by the constituent local authorities. Each Regional Authority has established an Operational Committee, which includes the relevant county and city managers and executives of various public agencies. In addition, for EU purposes, a wide range of interests is represented on a special monitoring committee to assist the Regional Authority in reviewing the implementation of EU Structural and Cohesion Fund programmes in its area.

This Strategy places importance on the regional dimensions of sustainable development. Previous chapters have referred, for example, to regional coordination of land use policy and

development planning, the need for a catchment based approach to water pollution, regionally balanced economic development, the implications of dispersed population and economic activity for transport policy, and regional impacts of tourism and forestry development. A number of structural measures are identified in *Better Local Government* to provide better supporting systems and increase the level of commitment of public bodies, including local authorities, to the work of the Regional Authorities. These measures will help to underpin the coordinating and representative roles of the Regional Authorities⁸, which will be relied upon to:

- provide a regional perspective on environmental issues and resources, including strategic waste management, regional water quality and coordination of water services, groundwater resources, the coastal zone, uplands and scenic landscapes;
- promote coordination among existing organisational and institutional structures to help secure the most beneficial, effective and efficient use of resources; where development pressures threaten the sustainability of environmental resources, the Regional Authorities may provide appropriate fora for achieving the best balance regionally between development and sustainability;
- promote partnership between service providers on the Operational Committees, semi-State bodies, and business and development organisations to secure a unified vision regarding sustainability targets at the regional level; and
- review local authority Local Agenda 21 initiatives to ensure consistency across the region and monitor implementation actions.

Having regard to the framework of the Strategy and the findings of *State of the Environment in Ireland*, and building on Local Agenda 21 initiatives in their areas, Regional Authorities, in cooperation with the various interests represented on the Operational Committee, will also be asked to:

- identify and define sustainability priorities for their regions within the framework of this Strategy;
- recommend appropriate implementation mechanisms based on the involvement of bodies at regional level; and
- assist in the development of regional sustainability indicators relevant to conditions in their regions.

To start promoting action on these lines, a series of Regional Sustainability Fora, involving the Regional Authorities, will be organised in 1997 by An Taisce, with funding from the Department of the Environment and the European Union. Effectively, Regional Authorities will have ongoing responsibility for the regionalisation of this Strategy. Local authorities will be asked to report regularly to the Regional Authorities on the implementing and supporting actions taken by each authority.

Local Authorities

Better Local Government emphasises that local authorities have an important role both as environmental protection authorities and as agents for sustainable development. As to the former, the role of local authorities in providing and managing infrastructure services, implementing environmental regulations, monitoring, and providing information is now balanced in important respects by that of the EPA. Formal supervision by EPA will make local authorities more transparently accountable for the proper environmental management of the services they provide. Implementing *Better Local Government* will involve the following actions, underway or planned, in addition to those already identified elsewhere in this Strategy:

- increased emphasis on the provision of support and training services to improve the management and maintenance of water services;
- consolidation of responsibility for water and waste water services at county/city level;
- intensification and improvement by local authorities of their environmental performance, in particular under guidance being developed by EPA;
- adoption of environmental management plans and development of information policy statements as a commitment to openness and transparency in providing environmental information;
- provision of more accessible and user-friendly monitoring data; and
- continued promotion of environmental awareness activities and campaigns, where appropriate jointly with community/NGO interests.

Local Authorities and Local Agenda 21

"Building on the strongly representative character of the local government system, on its key functions ... and on the opportunities for coordination offered by the regional authorities, Local Agenda 21 can give new emphasis and direction towards the goal of sustainable development."

- Minister's Foreword: *Guidelines on Local Agenda 21*⁹

In 1995, the Department of the Environment prepared Guidelines on Local Agenda 21 for local authorities, inviting them to develop this process further in their own functional areas, building on existing policies, plans and programmes and bringing forward appropriate initiatives. The Guidelines offered recommendations for the development of an environmentally responsible ethos throughout local government organisations, the incorporation of Local Agenda 21 aims in current policies and actions, and the development of information, consultative and participative arrangements in the community.

Better Local Government acknowledges the Local Agenda 21 process as an important means by which local authorities can promote sustainability in their areas with the involvement of local communities. There is no single, prescribed response to Local Agenda 21; however, the Guidelines recommend:

- leading by example; local authorities should "green" their own performance and operations through, for example, pursuing green house-keeping measures and adopting environmental management systems;

- integrating sustainability considerations into policies and functions, for example, in regard to planning, urban development, housing and traffic management; and
- leading and facilitating action in the community, through the provision of information, and dialogue and partnerships with business/industry and voluntary/NGO interests to promote sustainable development.

The Government is now requesting all local authorities to complete a Local Agenda 21 for their areas by 1998. This can be advanced by, for example, building on the suggestions made in the Guidelines, or participating in the European Sustainable Cities and Towns Campaign (by adopting and signing the Aalborg Charter (1994)) or in other Local Agenda 21 initiatives by the International Council for Local Environmental Initiatives (ICLEI). The role of local government in the achievement of sustainable development will be supported by:

- the development, by the Department of the Environment in consultation with local authorities, of an Eco-Management and Audit System for local government; and
- advice and assistance from the Environmental Protection Agency.

Non-Governmental Organisations

Ireland has many highly committed non-governmental organisations (NGOs), who provide a focus for public involvement in environmental protection, and support socio-economic development nationally and internationally. The NGO movement is an effective contributor to environmental action and, like Government, is committed to the pursuit of sustainable development policies. Voluntary groups also play a key role in local environmental action, maintaining dialogue with local government, State agencies, business and industry, promoting environmentally responsible behaviour throughout communities, and encouraging change by households and individuals.

There are numerous separate organisations of different scale and range, and with different

agendas. However, NGOs are also forming and participating in networks which promote shared involvement and increase the effectiveness of action.

Government will continue to act in, and develop, partnership with the NGO movement. In particular, a new Environment Partnership Fund will co-fund sustainable development projects to be undertaken by local authorities and NGOs in partnership at local level.

Ongoing action will include, as appropriate:

- sponsoring NGO organisations/networks to undertake national, regional and local environmental protection campaigns;
- improving the flow of information on environment and development issues;
- providing for inclusion of NGO representation in national delegations to major international fora; and
- increasing NGO representation in national and official fora concerned with environment and development issues.

"Non-governmental organisations ... possess well-established and diverse experience, expertise and capacity in fields which will be of particular importance to the implementation and review of environmentally sound and socially responsible sustainable development ..."

- Agenda 21¹⁰

Instruments

The Need for New Approaches

Sustainable development requires conditions where economy and society can more fully share responsibility for the environment. In creating those conditions, a balance must be achieved between traditional (mainly regulatory) controls and new approaches which may have the potential to meet environmental objectives more flexibly and cost-effectively.

Regulation

Irish environmental policy has traditionally relied heavily on legislative instruments for purposes of implementation. This position is rein-

forced by the need to give effect to the extensive body of EU legislation; EU derived provisions are estimated to comprise some 80% of the environmental legislation of Member States. Major developments, such as the enactment of the *Environmental Protection Agency Act, 1992*; the establishment of the Agency in 1993 and the commencement of integrated pollution control licensing in 1994; and the enactment of the *Waste Management Act, 1996*, have substantially updated environmental legislation. For activities with significant polluting potential integrated, rather than single medium, controls are in general preferable.

Strong emphasis will continue to be placed on regulations which offer clear and reliable means of defining and maintaining standards for environmental and public health protection, as well as the quality and quantity of emissions to environmental media. Short-term priorities include:

- the completion of detailed regulations under the *Waste Management Act, 1996*, to implement waste licensing and support recycling activity;
- the complete phase-in of integrated pollution control licensing of activities scheduled under the *Environmental Protection Agency Act, 1992*, and the amendment of that Act to give effect to the European Council Directive (96/16/EC) on Integrated Pollution Prevention and Control; and
- the enactment and vigorous implementation of the Litter Pollution Bill.

Within this overall emphasis, Government will also have due regard to the relationship between regulation and competitiveness, and to the commitment in *Partnership 2000* in regard to the development of a national strategy to improve the quality of regulation and reduce the administrative burden.

Legislation must also be effectively enforced. The Government will continue to resource the Environmental Protection Agency to support and supervise local authority statutory environ-

mental functions, and to advise Ministers of the Government, as appropriate, for the purposes of environmental protection. It will also support efforts at EU level to improve the implementation of Community environmental law. Penalties for breaches of environmental regulations will be regularly updated.

Economic Instruments

However reliable in the definition of standards and other environmental objectives, traditional forms of regulation control rather than prevent pollution. Because it must be clearly and widely prescribed, regulation may lead to inefficiencies in some instances.

Conservation of the environment must be internalised both in economic sectors and the fiscal

"New economic instruments are ... emerging which are more sensitive to environmental needs; new approaches to regulations are emerging that are more flexible (and thus more cost-effective). The result is that the emphasis will increasingly be on finding combinations among economic and regulatory instruments, rather than choosing between them."

- OECD¹¹

regime, while maintaining the competitiveness of the economy. Means and methodologies for such internalisation are largely at a developmental stage, but are driven by a range of considerations, including:

- concerns about the cost-effectiveness and inflexibility of environmental regulation;
- growing recognition of the cost and other efficiencies which may be associated with economic instruments, which create an incentive to better environmental performance and can promote technological innovation;
- rising estimates of environmental externalities and their economic impacts;
- the revenue raising potential of environmental taxes and charges, which may be used to fund further environmental improvements, or reduce other taxes, including taxes on labour; and
- increasing realisation that a mix of policy instruments (environmental and economic) may offer the best long-term approach to achieving environmental goals.

As noted in *State of the Environment in Ireland*, several economic instruments for environmental protection (including taxes, charges and subsidies) have been in operation in Ireland for some time, although, in general, the use of such instruments is not widespread here. The Government is now developing a more concerted approach to the use of economic instruments in the interests of sustainable development and application of the polluter pays principle. This will increase the use of economic instruments where this can achieve efficiency gains without compromising environmental and economic policy objectives.

Internationally, tax policy has become a common route for applying economic instruments. In the context of the 1996 and 1997 Budgets, the Government has given a new recognition to the key role of the taxation system in environmental policy. Taxation measures with environmental advantages were adopted in the 1997 Budget:

- excise duties on petrol and diesel were increased;
- the VRT refund scheme for car scrappage was extended to the end of 1997; and
- a three-year improved capital allowance for farm pollution control was announced.

Green taxation policy is of growing relevance worldwide, and the European Commission is developing framework proposals for a Community-wide energy tax regime. Against this background, an Environmental Tax Group in the Department of Finance, with representation from relevant Departments and Agencies, is

undertaking a complete examination of possible options for environmental taxation for purposes of future budgets. This will develop a medium to long-term policy on environmental taxation and seek to structure a progressive shift in taxation from labour to polluters. It will involve two approaches:

- removing anomalies or distortions in the current system of taxation and subsidies, including those which hinder labour-intensive environmental activities, to ensure that the structure of existing arrangements does not have significant adverse effects on the environment; and
- developing new measures to secure more environmentally-friendly behaviour across economic sectors.

An economic approach to environment policy must have a broader focus on market-based as well as fiscal instruments. In the light of implementing policy elsewhere, and developing EU policies, strategic options will include pricing of resources and services, emissions trading and product and emission charges. In the design of instruments for application, particular attention will be paid to issues related to environmental effectiveness, economic efficiency and public acceptability.