



GENERAL SECRETARIAT

SG/SD(2004)4/REV1
For Official Use

Sustainable Development

DRAFT FINAL REPORT TO MINISTERS

AD HOC GROUP ON SUSTAINABLE DEVELOPMENT

The Ad Hoc Group on Sustainable Development discussed the draft synthesis report of the 2001-2004 horizontal project on sustainable development at its meeting on 17-18 March 2004. The Group also requested to review the revised report, which will be issued under the responsibility of the Secretary-General.

Ad Hoc Group Members are invited to send their comments to the Secretariat by Monday 19 April 2004.

Ms. Outi Honkatukia, Private Office of the Secretary-General
Tel. +33 1 45 24 79 64 - Fax: +33 1 45 24 79 31 - email: outi.honkatukia@oecd.org

JT00161824

IMPLEMENTING SUSTAINABLE DEVELOPMENT

**Synthesis of the OECD work on sustainable development undertaken over
the period 2001-2004**

TABLE OF CONTENTS

PREFACE.....	5
EXECUTIVE SUMMARY	6
CHAPTER 1. THE 2001 MINISTERIAL MANDATE AND THE OECD RESPONSE.....	9
Sustainable development: vision and obstacles	9
The 2001 Ministerial Mandate.....	12
The OECD response	12
CHAPTER 2. SUSTAINABLE DEVELOPMENT INDICATORS	15
Main activities.....	15
Key results	15
Indicators for use in OECD economic reviews	16
Indicators to measure decoupling of environmental pressures from economic driving forces	18
Indicators to measure the trans-boundary effects of OECD countries	19
Embedding indicators in accounting frameworks	20
CHAPTER 3. POLICIES TO ENHANCE SUSTAINABLE DEVELOPMENT IN MEMBER COUNTRIES: A SYNTHESIS OF THE ECONOMIC REVIEW PROCESS.....	22
Main activities.....	22
Key results	23
Attaining environmental objectives in a cost effective way	23
Attaining social objectives in a cost-efficient way	28
Ensuring sustainable retirement income	28
Improving living standards in developing countries	30
CHAPTER 4. ECONOMIC INSTRUMENTS FOR ENVIRONMENTAL PROTECTION AND OBSTACLES TO THEIR USE.....	33
Main activities.....	33
Key results	33
Environmentally harmful subsidies	33
Environmentally related taxes	37
CHAPTER 5. SOCIAL ASPECTS OF SUSTAINABLE DEVELOPMENT.....	40
Main activities.....	40
Key results	40
Shaping globalisation to the benefit of the world's poor.....	40
Development co-operation, poverty and sustainable development.....	41
Foreign investment and sustainable development.....	42
Trade and sustainable development	43
Policy coherence for development	44
Exploring the links between social and environmental aspects.....	45

Environment and employment	45
Environment and equity	46
Environment and children's health	48
Sustaining social well-being in OECD countries: the role of social protection	49
CHAPTER 6. IMPROVING THE COHERENCE AND INTEGRATION OF POLICIES THAT AFFECT SUSTAINABLE DEVELOPMENT.....	52
Main activities.....	52
Key results	52
Governance challenges and steps taken by OECD countries.....	52
A checklist to improve the coherence and integration of policies for sustainable development	53
ANNEX 1. RECOMMENDATIONS BY THE AD HOC GROUP ON FUTURE OECD WORK ON SUSTAINABLE DEVELOPMENT.....	56

Boxes

Box 1. The OECD Contribution to the World Summit on Sustainable Development.....	11
Box 2. Main OECD Documents and Events Produced in the Context of the 2001-2004 Project on Sustainable Development *.....	13
Box 3. Integrated Environmental and Economic Accounting	21
Box 4. OECD Environmental Performance Reviews.....	22
Box 5. Declaration on International Science and Technology Co-operation for Sustainable Development.....	54

PREFACE

1. OECD work on sustainable development has travelled a long journey since its early days. During most of the 1990s, work was pursued in a “decentralised” way by individual OECD Committees, according to their own priorities and resources, and with minimal internal co-ordination. By the end of that decade, however, sustainable development had taken a more central place in the work programme of the Organisation. Work has involved a larger number of Directorates, with stronger co-ordination among the different activities, greater efforts to provide visibility to such work, and ministerial involvement in sustainable development discussions. A first-cycle of “horizontal work” on sustainable development, from 1998 to 2001, led to a Ministerial meeting between economic and environment ministers in 2001 — the first such an event in OECD history. This cycle of horizontal work was followed by a new Ministerial mandate and work programme, from 2001 to 2004, whose results are described in this document.

2. With the “maturing” of OECD work on sustainable development, time has come for a frank assessment of what this work has delivered, and of ways in which it could be pursued in the future. While the notion of sustainable development is today more firmly established in the political lexicon of most OECD countries, the difficulties in making practical progress in its implementation have not faded. Dramatic events — such as war, terrorism, financial scandals, economic recession — at the turn of the century have also changed political agendas of Member countries, both domestically and internationally, bringing to the forefront more immediate concerns.

3. This is the background of the present report. Chapter 1 describes the Ministerial mandate formulated by OECD Ministers in 2001, and the breadth of the response by the Organisation. Chapter 2 reviews work on indicators and accounting frameworks. Chapter 3 describes work undertaken in the context of the OECD Economic and Development Review Committee on national policies with respect to some core sustainable development concerns. Chapter 4 describes analytic work on the market-based instruments for environmental protection, and obstacles to their greater use. Chapter 5 describes different strands of work of relevance for assessing the social dimension of sustainable development. Chapter 6 reviews work on policy coherence and integration. This document has been revised following comments from Member countries on a previous version. It is issued under the responsibility of the OECD Secretary-General.

EXECUTIVE SUMMARY

4. Between 2001 and 2004, OECD work on sustainable development has focused on indicators and peer reviews; on obstacles to reducing environmentally harmful subsidies and to further use of environmentally related taxes; on social aspects of sustainable development; and on policy coherence and integration. The range of OECD activities undertaken over this period has looked at the “interface” between the environment and the economy, on one side, and between the economy and society, on the other.

Environmental-economic interface

5. Environmental performance has improved in several respects since 1990 and OECD countries continue to set targets for further improvements. Environmental protection costs have also risen throughout this period. They amount to about 2% of GDP or more in countries that have set comparatively demanding standards and could have been at least 25% lower through the greater use of more cost-efficient instruments in many OECD countries. This option has not been exploited in part because of a lack of integration of environmental and economic concerns in policy making. Concerns over the social consequences of environmental policies and political economy considerations have also increased costs as they have led to exemptions or lower abatement granted to some of the most polluting activities. Abatement costs could rise markedly in the future as standards become stricter, thus reinforcing the need to use cost-efficient options in coming years. This is particularly the case with the reduction of greenhouse gas emissions where policies capable of meeting objectives – at least cost – become increasingly urgent as the target date of the first commitment period under the Kyoto Protocol (2008 to 2012) approaches.

6. While all OECD countries use some kind of environmental taxes to lower abatement costs and raise revenues, a number of countries have substantially extended their use since the early 1990's, with environmental tax revenues amounting to about 2% of GDP. Several OECD countries have introduced environmental tax reform, often on a revenue-neutral basis (e.g., combining increases in energy taxes with reductions in social security contributions). While the revenue from environmentally related taxes increased significantly in some countries between 1994 and 2001, proceeds have declined by 8% on average since 1999. About a third of this fall is due to lower revenues from sales of petrol, following higher prices. This highlights that significant behavioural changes can be achieved through the application of appropriate tax rates — or through tradable permit systems that create similar price incentives.

7. While there is little evidence that environmentally related taxes have reduced international competitiveness significantly, this conclusion must be qualified by the many exemptions and tax rate reductions currently granted to sectors most exposed to international competition. As industry usually pays very modest amounts in environmental taxes, significant impacts on competitiveness would not be expected. Moreover, competitiveness concerns must be balanced against the main goal of environmental reforms: to protect the environment by way of encouraging alternatives to harmful products/processes.

8. Environmental damage is often a by-product of subsidy policies. OECD countries provide about USD 400 billion in subsidies every year — about three quarters of these subsidies go to agriculture, one tenth to transport, and the rest to fisheries and forestry, energy production and manufacturing. While there has been a shift towards less environmentally harmful support in agriculture since the mid-1980s, progress has been slow. Agricultural support that is potentially harmful for the environment amounts to about USD

235 billion per year. Most of the USD 6 billion in fisheries subsidies in OECD countries goes to general services — some of which supports research, management and enforcement activities that can benefit the environment. However, some expenditure on general services supports fisheries infrastructure and enhancement programmes that can contribute to over-fishing. Estimates of energy subsidies range between USD 20 and 80 billion per year. Subsidies to coal and peat production are among the most harmful to environment, with OECD countries' support to coal industry estimated at about USD 5 billion per year.

9. Against this background, the OECD has recommended fundamental changes in policy settings:

- In view of the lack of effectiveness and efficiency of *voluntary agreements*, the OECD *Economic Surveys* have called for a reassessment or a termination of such practices.
- While recognising that *regulations* are the most appropriate instrument to control pollution in some cases, the OECD has recommended that less emphasis should be placed on such instruments, as mounting evidence showed that these can prevent companies from using the most efficient ways to reduce their emissions and thus increase costs for society.
- The OECD recommends that greater use should be made of transparent *taxes* or *tradable emission permits* that concentrate abatement in activities where emissions can be cut at the lowest cost. However, these instruments will only be cost efficient if they cover all sources of any given type of pollution. As a result, the OECD calls for the removal of current exemptions from carbon and water pollution taxes in the most pollution-intensive activities.
- Where taxes and tradable permits have adverse social consequences, these should be addressed through the standard social security system, for example, by adjusting the way support payments are calculated or by introducing new support instruments.
- A multi-pronged strategy is required to overcome obstacles to subsidy reform. It is important to recognise that a range of options is available to meet societal objectives, and that subsidies are generally inefficient tools for achieving employment or other social policy goals. Other ingredients of successful reforms include the diffusion of innovative schemes; better targeting of existing subsidies; and improved programme design, to improve the efficiency of subsidies aimed at correcting environmental problems — although even these may violate the polluter pays principle.
- For dealing with cross-border environmental problems, the OECD recommends taking advantage of international agreements that allow abatement to be concentrated in areas where it can be obtained at lower cost, while stressing the benefits of further international co-operation.

Social-economic interface

10. On the economy-social interface, *Economic Surveys* have focused on the sustainability of retirement income systems in OECD countries, and on ways of improving living standards in developing countries. With reference to the first issue, many OECD countries have already taken steps to assure the financial sustainability of public pension systems. In others, however, progress has been slow, and the OECD has recommended specific measures that should be undertaken to accelerate the pace of reforms in ways that do not compromise income adequacy in old age. In particular, the OECD has called on these countries to remove incentives that artificially shorten working lives, such as eliminating opportunities to withdraw from the labour force permanently at an early age via unemployment, disability or special benefit schemes and, in some cases, raising the standard age of pension entitlements.

11. More generally, the OECD has stressed the importance of a well functioning social protection system for addressing social problems and for maintaining conditions that facilitate both economic growth and environmental sustainability. Assuring the sustainability of social protection systems requires confronting a range of long-term pressures — in terms of demography, family structures, labour markets, and distribution of economic resources and opportunities — through policies specific to each phase of individuals' lives. This perspective links concerns about sustainable development at the global level with that of preserving social cohesion with well designed programmes within each country.

12. With reference to living standards in developing countries, the OECD has stressed the improvements that have characterised most of these countries since 1990 have proved elusive in sub-Saharan Africa. In other regions, improvements in living standards have been accompanied by strong export performance, which in part reflects falling protectionist barriers in the OECD countries and specific measures to open up OECD markets to the least-developed countries. However, agricultural products from the developing countries still face barriers because of trade restrictions and agricultural subsidies. The OECD strongly encourages Member countries to reduce support to agriculture. Living standards in developing countries have also been raised through greater emphasis on poverty alleviation in development assistance and through measures to make assistance more targeted and efficient, and the OECD recommends further moves in that direction. Especially important is targeting assistance to health improvement in the least developed countries. For example, welfare in Sub-Saharan Africa could increase by USD 30 billion or more, if the loss of life years caused by infectious diseases could be reduced by two-thirds, yet this region receives only 20% of bilateral development assistance.

Further work

13. There is a demand for the OECD to continue to do work on sustainable development and to raise the visibility of this work. Areas identified for further work include obstacles to reducing environmentally harmful subsidies and to further use of economic instruments; on sustainable resource use including material flow accounting, decoupling of environmental pressures from economic growth and resource productivity; and on emerging issues as appropriate.

CHAPTER 1. THE 2001 MINISTERIAL MANDATE AND THE OECD RESPONSE

Sustainable development: vision and obstacles

14. While much intellectual energy has been devoted to proving a single coherent definition of sustainable development, its general content is well understood. Sustainable development implies a better balance and integration between economic, social and environmental goals in policy formulation; a long-term perspective about the consequences of today's activities; and awareness that many of today's problems have their roots in actions and policies in other fields, whose unintended consequences may not be coherent with society's broader priorities and aspirations. Sustainable development also translates the recognition that global co-operation is required to ensure that we do not exhaust the earth's resources, destroy the environment or create untenable social and economic conditions. OECD countries bear special responsibility for leadership in sustainable development, because they have by far the strongest influence over, and impact upon, the global economy and the environment.

15. This awareness, however, has not always translated into coherent policies. Striking the right balance between the cost of *action* in the environmental and social fields — where policies that do not pay attention to the incentive structure of individuals often lead to excessive costs for the economic dimension of sustainable development — and that of *inaction* — which may translate into much higher environmental and social damage in the future — is difficult, and government decisions are often taken with limited information on the pros and cons of various options. Beyond issues relating to the “balance” between different policies, there are also many examples of outright “incoherence” between measures. For example, governments both encourage farmers to produce surplus crops, and pay them to reduce soil erosion caused by ploughing up hillsides. They subsidise domestic production of tobacco, and use tax and advertisement campaign to discourage smoking among consumers. They finance the construction of fishing fleets, and spend millions in governments financial transfers to reduce the resulting excess capacity. They subsidise coal mining, and help electric utilities clean up the pollution caused by burning coal. Examples of incoherent policies abound.

16. In many cases, governments are aware of the incoherence of their policies, but are forced for political reasons or lack of awareness to act as they do. In other cases, trade-offs between competing policy goals are well recognised but some goals simply “trump” other concerns, reflecting the strength of political constituencies and voters' preferences. In other cases yet, the relationships between different types of policies and actions are not evident, and better analysis is required to highlight these links, and to inform policy makers on how to shift trade-offs between competing goals through better policies. In some of these areas, the OECD can help countries to design policies that support and contribute to, rather than undermine, sustainable development.

17. Sustainable development was defined by the World Commission on the Environment and Development in 1987 as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.¹ While this definition is admirably simple, it does

1 <http://www.un.org/esa/sustdev/>

not always allow clearly distinguishing between “sustainable” and “unsustainable” practices, nor does it offer guidance on where should countries focus their efforts in order to achieve sustainable development. Much of the OECD work in this area has been driven by the belief that, rather than getting bogged down in refining definitions, the Organisation can assist Member countries in pursuing their priority goals through cost-efficient policies, so as to help advance along a more sustainable path of economic development.

18. In 1997, a High-Level Advisory Group convened by the Secretary-General called upon the OECD to “re-interpret the 1961 OECD Convention — which calls on the Organisation to pursue policies that promote “sustainable economic growth and employment — in light of 21st Century conditions and challenges so that sustainable economic growth takes on a new meaning”. Following this recommendation, the 1998 Ministerial Council “agreed to interpret the term *sustainable* as including social and environmental, as well as economic considerations.” Ministers recognised “the achievement of sustainable development as a key priority for OECD countries” and “encouraged the elaboration of the Organisation’s strategy for wide-ranging efforts over the next three years in the areas of climate change, technology development, sustainability indicators, and the environmental impacts of subsidies”.

19. Translating this “key priority” into practice is a difficult challenge. It requires the reform of old policies, the introduction of new ones, and better implementation of those that have proven to be effective. Priorities for action were identified in the report that the OECD addressed to Ministers in 2001² and further elaborated in its contribution to the World Summit on Sustainable Development (Box. 1). But obstacles are retarding implementation in all these areas. At the domestic level, these obstacles often reflect fears from firms, individuals and communities that stand to lose from reforms. However, as amply documented in this report, strategies are available to overcome these barriers. In most cases, more efficient policies in the environmental and social fields (e.g. more consistent use of market-based instruments) would also reduce concerns about their “affordability”.

20. Obstacles to progress have proved to be even greater when addressing global issues. Industrialised countries are responsible for much of the damage that has been inflicted on the global environment, yet their efforts may not suffice to reverse these trends. How to distribute the burden of policies that will deliver global benefits among countries with large differences in living conditions is a question of equity over which many international agreements have foundered. But also in this field there are indications of a new determination by OECD countries to overcome obstacles to global co-operation. Most OECD countries have subscribed to the commitments embodied in the Johannesburg Declaration on sustainable development, the Doha Development Agenda, and the Monterrey Consensus on financing for development. Through these commitments, they have recognised their collective responsibility to help developing countries to find paths that offer real prospects of economic development in ways that are environmentally and socially sustainable. OECD countries can favour such co-operation by expanding access to their markets for the goods and services produced by developing countries, by providing the right conditions to encourage financial flows toward these countries, and by ensuring that these flows support sustainable development priorities. They can increase the level and effectiveness of official development assistance, to help developing and transition countries develop the human capacities, institutions, and governance necessary to benefit from the opportunities offered by globalisation. They can encourage larger and better-directed technology co-operation and ensure that all of their policies are more coherent with the goals of sustainable development.

2 OECD (2001), *Policies to Enhance Sustainable Development*, Paris.

Box 1. The OECD Contribution to the World Summit on Sustainable Development

At the World Summit on Sustainable Development, held in Johannesburg in 2002, countries assessed progress towards sustainable development achieved in the ten years since the Earth Summit in 1992. Further, they indicated the way forward through a Declaration by Heads of State and Government and a detailed Plan of Implementation. The OECD participated actively in the preparations for the summit and in the meeting itself. A special report, *Working Together Towards Sustainable Development: the OECD Experience*, summarised the lessons learned by the Organisation through its analytic and policy work on sustainable development. This report notes that OECD countries have made progress towards sustainable development since 1992, but that many challenges remain. Policy priorities for OECD countries are:

- **Making markets work for sustainable development.** The price system should ensure that all individual agents are confronted with the full costs that their decisions impose on others. This means addressing externalities and market failures through greater use of taxes, charges and tradable permits; and correcting policy failures through reforms of support programmes that are environmentally harmful, economically inefficient, and have undesirable social effects.
- **Strengthening the decision-making process for sustainable development.** Reform of government decision-making processes is needed to integrate sustainable development considerations across government policy-making. Institutional innovations are also required to enhance transparency and public participation at all levels of government.
- **Fostering sustainable development through science and technology.** Smart technologies can help decouple environmental degradation from economic growth. Policies can contribute to this goal through permanent incentives to innovate and diffuse technologies that support sustainable development objectives, investment in long-term basic research that is in the public interest, funding efforts to build capacity, and addressing the unintended social or environmental consequences of technological progress.
- **Making their policies more coherent and mutually supportive, and opening markets in ways that ensure that the benefits of globalisation and technological advance are widely shared.** This implies contributing to worldwide poverty eradication by increasing development assistance and making it more effective, and increasing trade and investment liberalisation so as to improve market access for those countries that have remained at the margins of globalisation. Domestically, it also requires introducing reforms at a pace and in a manner that allow for appropriate responses to any adverse social effects.

Beyond this report, a range of other OECD reports — on sustainable development strategies, water and wastewater management, OECD Guidelines for Multinational Enterprises — were disseminated at the meeting. OECD Secretary-General Donald Johnston participated actively to the Summit, sharing OECD experiences and policy recommendations.

The OECD also agreed to contribute to a number of Type II Partnerships established at the summit: *i)* global partnership for capacity building to implement the globally harmonised system for chemical classification; *ii)* integrated approach to prevention, preparedness for, and response to environmental emergencies in support of sustainable development; *iii)* children's environmental health indicators; *iv)* Pan-European east-west environmental partnership for sustainable development; *v)* EU water Initiative: Water for Life; *vi)* Euro-Mediterranean water poverty facility; and *vii)* enhancement of regional strategy on climate change through the Asia-Pacific Network on Climate Change. The International Energy Agency also participates to several Type II Partnerships: *i)* Mediterranean Renewable Energy Programme; *ii)* designing country profiles on sustainable energy development; and *iii)* indicators for sustainable energy development (ISED).

The 2001 Ministerial Mandate

21. While this message was well articulated in previous OECD reports on sustainable development, OECD Ministers — at their meeting of 16-17 May 2001 — asked the Organisation to pursue and strengthen its work in this area. Ministers recognised sustainable development as an “overarching” goal for the Organisation and its member countries, implying that sustainable development is more than a narrow set of well-identified activities, but rather a way of approaching policies in various fields. Beyond endorsing the key recommendations that emerged from the 1998-2001 cycle of OECD work on sustainable development, Ministers asked the OECD to continue to assist them in formulating and implementing policies to achieve sustainable development, with special focus on the following areas:

- Develop agreed indicators that measure progress across all three dimensions of sustainable development, including decoupling of economic growth from environmental degradation, with a view to incorporating these into OECD’s economic, social and environmental peer review processes, and filling gaps in the statistical and scientific data.
- Identify how obstacles to policy reforms, in particular to the better use of market-based instruments and to the reduction of environmentally harmful subsidies, can be overcome, and deepen its analytical work on these instruments.
- Analyse further the social aspects of sustainable development, including work on human and social capital, as well as their interaction with their economic and environmental dimensions.
- Provide guidance for achieving improved economic, environmental and social policy coherence and integration.

Ministers also asked the OECD to contribute to the 2002 World Summit on Sustainable Development.

The OECD response

22. Responding to this mandate has required the involvement of a large number of the OECD Directorates, and the establishment of a specific institutional infrastructure. Following deliberations by the OECD Council in July 2001, an *Ad Hoc Group on Sustainable Development* was established in late 2001. The task of this Ad Hoc Group, which is composed of delegates from Member countries, was to provide overall guidance to the work of the Organisation in this field. Its bureau was composed of the chairpersons of some of the relevant OECD bodies (the Economic Policy Committee and its Working Party No. 1, the Economic and Development Review Committee, the Environmental Policy Committee, and the Employment, Labour and Social Affairs Committee) and was chaired (until 2002) by the head of the Economic Policy Committee. Internally, a Steering Group made up of different OECD Directors and chaired by Deputy Secretary-General Berglind Ásgeirsdóttir, has overseen day-to-day work of the Secretariat. Beyond the boundaries of the Organisation, the activities of the *Round Table on Sustainable Development*, chaired by Simon Upton, have contributed to enhance Ministerial interest in the sustainable development agenda, attract Ministers from Member and non-member countries to meetings in Paris, and provide intellectual stimulus to the work of the Secretariat.

23. Several of the Secretariat proposals for further work on sustainable development themes were not pursued or were scaled back because of lack of funding. Despite this budgetary context, however, the Organisation has delivered quite substantial outputs. The Organisation has produced a range of documents and events in the context of the 2001-2004 horizontal project (Box 2), involving a wide range of policy constituencies in discussions about sustainable development.

24. Main results from this work are described in the following Chapters. The range of activities that is relevant for responding to the Ministerial mandate is wide. It includes both specific activities initiated following the mandate — activities that would have not been performed in its absence — and activities undertaken by various sectoral Committees in the context of their regular programme of work. Only the first set of activities has directly implicated the Ad Hoc Group on Sustainable Development. Activities falling in the second category are also referred to in this section, to the extent that they are relevant to the various parts of the Ministerial mandate. On the background of these activities and findings, the Ad Hoc Group on Sustainable Development agreed — at its meeting of 17 and 18 March 2004 — to a set of recommendations on how best OECD work on sustainable development should be pursued in the future. These recommendations are provided in Annex 1 of this report.

Box 2. Main OECD Documents and Events
Produced in the Context of the 2001-2004 Project on Sustainable Development *

Main OECD publications

OECD (2002), *Working Together Towards Sustainable Development. The OECD Experience*, Paris.
 OECD (2002), *Improving Policy Coherence and Integration for Sustainable Development: A Checklist*, Paris.
 OECD (2003), *Environmentally Harmful Subsidies. Policy Issues and Challenges*, Paris.
 OECD (2003), *Integrated Economic, Environmental and Social Accounting for Sustainable Development*
 OECD *Economic Surveys*, Paris. Sections on sustainable development for each country in the period 2001-2004.

Main OECD documents

“Indicators to Measure Decoupling of Environmental Pressure from Economic Growth”, SG/SD(2002)1/FINAL
 “Integrating Concerns for Sustainable Development in the Policy Process: Synthesis of the EDRC Peer Reviews”.
 ECO/CPE/WP1(2004)2 and annexes.
 “Draft Synthesis Report on Environmentally damaging Subsidies”, SG/SD(2004)3.

Other relevant documents

Ahmad N. and A. Wyckoff (2003), “A Framework for Estimating Carbon Dioxide Emissions Embodied in International Trade of Goods”, OECD Science, Technology and Industry Working Paper No. 15, Paris.
 Haas J.L., F. Brunvoll and H. Høje (2002), “Overview of sustainable development indicators used by national and international agencies”, OECD Statistics Working Paper No. 1, Paris.
 Mira d’Ercole M. and A. Salvini (2003), “Towards Sustainable Development. The Role of Social Protection”, OECD Social, Employment and Migration Working Paper No. 12, Paris.

Workshops and events

Workshop on Improving Governance for Sustainable Development, November 2001.
 Workshop on Environmentally Harmful Subsidies, November 2002.
 Technical Expert Meeting on Environmentally Harmful Subsidies, November 2003.
 Workshop on Accounting Framework to Measure Sustainable Development, May 2003.

Global Forum on Sustainable Development.

- “Financing the environmental dimension of sustainable development”, April 2002.
- “Emission trading and project-based mechanisms to mitigate greenhouse gas emissions”, March 2003.
- “Financing water and environmental infrastructure for all”, December 2003.
- “Environmental compliance and enforcement”, winter 2004.

*. Reports produced by individual OECD Committees outside the horizontal project are referred to in the main text.

CHAPTER 2. SUSTAINABLE DEVELOPMENT INDICATORS

Main activities

25. Monitoring progress towards sustainable development requires the use of a wide range of economic, environmental and social indicators. The OECD is active in all these fields. In the economic field, macroeconomic and structural indicators are published through a variety of media. In the environmental field, OECD Environmental Ministers agreed in 2001 to a set of “key environmental indicators” covering pollution and natural resource issues, which are published regularly and used—alongside “core” and “sectoral” environmental indicators — in OECD environmental performance reviews. In the social field, the OECD regularly publishes social, health, labour market and educational indicators.³ Work on indicators of relevance for sustainable development is also conducted for individuals sectors, as in the case of agri-environmental indicators produced by the OECD Agricultural Committee. This section presents results from a limited range of activities, namely work by the Statistics Directorate on national experiences in developing indicator sets and accounting frameworks to measure sustainable development; by the Economic and Development Review Committee on indicators for use in economic reviews of Member countries; by the Environmental Policy Committee on decoupling indicators; by the Directorate for Science, Technology and Industry on indicators of carbon embedded in trade flows; and by the Round Table on Sustainable Development on indicators measuring trans-boundary effects of OECD economies.

Key results

26. Developing indicators to monitor progress is one of the busiest areas of work in the sustainable development field. While scores of indicators have been proposed by government agencies, not-for-profit groups and international organisations — ranging from “single value” indicators to collections of indicators covering the economic, social and environmental areas — this production does not always shed much light as to what exactly should be measured, and how the information provided by each indicator can be combined into an intelligible framework. A review of sustainable development indicators assembled by individual OECD countries when testing the set proposed by the UN Commission on Sustainable Development (UNCSD), undertaken by the OECD Statistics Directorate, shows much diversity in the indicators selected under each of the categories and themes proposed by UNSCD (Table 1). These differences should not surprise, as indicators have different uses, each of them requiring different measuring tools.⁴ What these national efforts underscore is the importance of assessing national conditions with respect to a broad range of outcomes (including economic, social and environmental conditions) — a

3 See OECD (2003), *Society at a Glance*, Paris; OECD (2003), *Health at a Glance*, Paris and OECD Health Data; OECD (2003), *Employment Outlook*, Paris; OECD (2003), *Education at a Glance*, Paris.

4 For example, “headline” indicators (which aim to summarise in a single number the situation of a country with respect to sustainable development) are more suited for communication to the general public; sectoral indicators will be required by sector Ministries to assess how economic activities of a specific sector impinge on sustainability; and other “accounting tools” may be required by the prime minister office to assess the overall impact of individual policies.

goal also shared by recent initiatives in the United States, Canada, Australia, Ireland and Norway to launch systems of indicators to monitor “national performance”. The Organisation plans to support these national initiatives through the organisations of a periodic “OECD Key Indicators World Forum”.⁵

Indicators for use in OECD economic reviews

27. OECD work on sustainable development has been driven by the belief that indicators are better regarded as “means to an end” rather than as an end in themselves. In this respect, one stream of OECD work has aimed at integrating indicators into the review of the policies of Member countries in different areas of sustainable development. Such integration has been achieved by widening the peer reviews of economic policy undertaken by the Economic and Development Review Committee to include a limited range of sustainable development themes (substantive results from this work are discussed in the next section). Beginning in 2001, each OECD country has been reviewed with respect to three issues selected from a “menu” of seven key environmental and social themes. For each of these seven themes, a range of indicators have been used to highlight differences in performance (Table 2). Indicators were originally proposed by the Secretariat, and then revised in 2002 following comments from delegates at the Ad Hoc Group. None of the indicators retained in this list was contested by countries, although some countries objected for the absence of a number of items from the revised list. In the event, this “consensual” list was not acceptable by all countries, but the Ad Hoc Group agreed that the reviews could proceed on the basis of this set of indicators. However, the list was implicitly endorsed by all delegates of the Economic and Development Review Committee, as *Economic Surveys* are issued under its responsibility.

28. The choice of the indicators shown in Table 2 has been driven by practical considerations. First, for all OECD countries to be reviewed over the 2001-2004 period, and for meaningful comparisons to be made across countries, only a limited set of issues could be addressed. Because of this constraint, the seven issues listed in Table 2 are not exhaustive of the themes that each individual country may regard as important for sustainable development, but rather represent themes that are common to policy agenda of all Member countries, and which could be addressed in the context of the review process. Second, the indicators included in this list are all indicators of “performance”. They exclude indicators of “policy settings”, as different policies will be appropriate under different national circumstances.

5 “The Proposed OECD Key Indicators World Forum” [C/2003)240].

Table 1. Comparison of different sets of sustainable development indicators developed by OECD countries

Countries using categories and themes identified by the UN Commission on sustainable development

	Australia	Denmark	Finland	Korea	Nether-lands	Portu-gal	Swe-den	Switzer-land	United Kingdom	United States	EU structural indicators
SOCIAL INDICATORS											
Equity											
Poverty		♦	♦	♦	♦	♦		♦	♦	♦	♦
Gender Equality	♦		♦	♦	♦		♦	♦	♦		♦
Health											
Nutrition				♦							
Mortality	♦	♦	♦	♦	♦	♦			♦	♦	
Sanitation				♦		♦		♦			
Drinking Water		♦	♦	♦		♦			♦		
Healthcare				♦		♦			♦		
Education											
Education level	♦		♦	♦	♦	♦	♦	♦	♦	♦	♦
Literacy						♦		♦	♦		
Housing											
Living conditions		♦		♦	♦			♦	♦	♦	
Security											
Crime			♦	♦	♦	♦	♦	♦	♦	♦	
Population											
Population	♦		♦	♦			♦		♦	♦	
ENVIRONMENTAL INDICATORS											
Atmosphere											
Climate Change	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ozone Layer		♦	♦	♦		♦			♦	♦	
Air Quality	♦		♦	♦		♦		♦	♦	♦	♦
Land											
Agriculture	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	
Forests	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	
Desertification						♦					
Urbanisation	♦	♦	♦	♦				♦	♦		
Oceans, Seas, and Coasts											
Coastal Zone	♦		♦	♦	♦	♦			♦		
Fisheries	♦	♦	♦	♦		♦	♦		♦	♦	
Fresh-Water											
Water Quality	♦	♦	♦	♦	♦	♦		♦	♦	♦	
Water Quantity	♦	♦	♦	♦	♦	♦		♦	♦	♦	
Biodiversity											
Ecosystems	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	
Species	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	
ECONOMIC INDICATORS											
Economic Structure											
Ec. performance	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Trade		♦		♦	♦	♦		♦	♦		
Financial status	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Consumption and Production Patterns											
Material cons.		♦	♦	♦	♦	♦			♦	♦	
Energy use	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Waste		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Transport		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
INSTITUTIONAL INDICATORS											
Institutional Framework											
Implementation of Sust. Dev.		♦		♦					♦		
International Co-op.		♦				♦		♦	♦		
Institutional Capacity											
Access to Infor. Comm. & infrast. Sc. & tech.			♦	♦	♦	♦	♦	♦			♦
Disaster preparedness				♦				♦			

Source: Haas, Brunvoll and Høje (2002).

Table 2. Indicators used in the EDRC cycle of sustainable development reviews

Greenhouse gases	Water pollution
<i>Global</i>	Biochemical oxygen demand
Global mean surface temperature	Phosphate concentrations
Sea surface temperature	Nitrate concentrations
<i>National</i>	Nitrogen balance
Greenhouse gas emissions (Total)	Phosphate balance
Greenhouse gas emissions (per unit of GDP)	Cadmium concentrations
<i>Sectoral</i>	Chromium concentrations
GHG emissions from electricity (per kWh)	Lead concentrations
GHG emissions from industry (per unit of production)	Pesticide concentrations
Carbon dioxide emissions from transport (per vehicle)	Waste management
Renewable share of total electricity	Municipal waste (total and relative to consumption)
	Total waste (total and relative to GDP)
	Hazardous waste (total)
Air pollution	Nuclear waste (total)
Sulphur dioxide concentrations	
Sulphur emissions	Sustainable retirement incomes
	Projections of public pensions outlays
Nitrogen dioxide concentrations	Average age of withdrawal from labour market
Nitrogen dioxide emissions	Proportion of persons over 55s who are employed
Volatile organic compounds concentrations	Personal retirement accounts and public pension fund assets
Volatile organic compounds emissions	Living standards in developing countries
Carbon monoxide concentrations	Extreme poverty
Carbon monoxide emissions	Imports from least developed countries
Particulates concentrations	Imports from low income countries
Particulates emissions	Country concentration of OECD imports
Particulates (Number of days exceeding guidelines)	Share of untied Official Development Assistance
Ozone concentrations	Total Official DA
Number of days exceeding ozone guidelines	Average partnership ratings of aid recipients
	Growth of average incomes
Natural resource management	Average tariff
Resource consumption	Population with adequate water supplies in developing countries
Fish sustainable yield	Proportion of population with adequate sanitation in developing countries
	Infant mortality in developing countries
Intensity of forest resources	Life expectancy in developing countries
	Illiteracy rates in developing countries
Water withdrawals	
Soil erosion	
Land use	

Source: EDRC synthesis report.

Indicators to measure decoupling of environmental pressures from economic driving forces

29. Specific work on indicators was conducted by the Environmental Policy Committee following the request by Ministers in 2001 for developing indicators that help track the relation between an environmental “pressure” and its economic “driving force” within individual countries. While several decoupling indicators are part of the list used by the Economic and Development Review Committee in its sections on sustainable development, a document released in 2002 by the Environment Directorate developed indicators for a broader range of environmental issues⁶: 16 indicators relate to decoupling total economic activity from environmental pressures in the areas of climate change, air pollution, water quality, waste disposal, material use and natural resources; and 15 indicators focus on environmental pressures for the sectors of energy, transport, agriculture and manufacturing. Evidence in this report shows that “relative decoupling” (i.e. a reduction in environmental pressure *per unit* of its economic driving force) for these

6 “Indicators to Measure Decoupling of Environmental Pressure from Economic Growth” [SG/SD(2002)1/Final.

environmental issues has been common across OECD countries since the early 1980s; and that “absolute decoupling” (i.e. an absolute fall in environmental pressures) is also occurring in some cases. Decoupling indicators are attractive for their simplicity. They can also be “decomposed” to highlight the contribution of technology and structural factors to environmental pressures;⁷ and their trends can be compared to policy targets to show the “distance to go” to attain them. Comparisons of decoupling indicators across countries also highlight the scope for progress — as absolute decoupling, at the economy-wide level, was recorded in at least one OECD country for all but two of the environmental pressures considered.

30. The “simplicity” of decoupling indicators is sometimes deceptive. Most driving forces have multiple environmental effects, and most environmental pressures are generated by multiple driving force. These relationships cannot be captured by a single indicator, but require use of complex modelling tools. Evidence from decoupling indicators also raises questions about the trajectories for environmental pressures if economic growth continues. How can we judge whether, for development to be sustainable, specific environmental pressures need to be reduced in absolute terms or can be allowed to grow — albeit at rates less than that of GDP? If pressures need to be reduced, to what threshold? If they are allowed to rise, to what ceiling?

31. These questions should remind policy makers of the importance of addressing a range of scientific gaps that are of critical importance for any sustainability assessment. Many ecological systems are still poorly understood, and scientists have warned of risks of discontinuities in the behaviour of many ecological processes.⁸ More often than not, the nature of these thresholds cannot be shoehorned in the format of simple indicators. Even in the absence of discontinuities, evidence about the extent of decoupling is no substitute for information on the specific measures required to achieve environmental goals — minimising costs of a given policy requires that all external costs are reflected in product prices, and that markets are allowed to determine the “appropriate” use of environmental resources. Despite these considerations, “decoupling indicators” are important in a variety of applications.

Indicators to measure the trans-boundary effects of OECD countries

32. Most “sustainable development” indicators refer to the performance of individual OECD countries within their borders. As a result, they fail to account for possible trans-boundary effects of OECD countries on other countries and regions. This is a limit with respect to both global environmental pressures and, more importantly, to the relationships between OECD and non-OECD countries. Most OECD countries have signed up to a range of international commitments in the economic, social and environmental fields. Yet, available indicators provide little guidance on whether these commitments are being followed by concrete actions and whether they are having the desired results.

33. The importance of these trans-boundary relations is well illustrated in the case of carbon emissions that are embodied in OECD imports. As most OECD countries are parties of the UN Framework Convention on Climate Change, indicators of each country’s carbon emissions are part of virtually all projects on sustainable development indicators currently underway. Yet, most of these indicators focus on carbon emitted from domestic production, while neglecting carbon embodied in imports required to meet

7 For example, decoupling indicators highlight that absolute reductions in sulphur-dioxide emissions recorded in the OECD areas since 1980 reflected both lower energy intensity of production and, to a lesser extent, lower emissions per unit of energy produced.

8 For example, certain pressures can continue to grow without apparent effects and then, after crossing some unsuspected threshold or ceiling, suddenly show dramatic discontinuities or even complete collapse (as in the case of some over-fished species).

consumption needs. The size of these flows is far from negligible.⁹ Because of the size of carbon emissions embodied in gross flows of imports and exports, relatively small changes in competitive conditions or relative prices could imply a shift from domestic to foreign production, and higher global emissions if the latter is more carbon-intensive than the former.

34. Trans-boundary effects are not limited to greenhouse gas emissions. The commitments made by OECD countries under the Monterrey Consensus relate to the role of OECD countries in providing financing for development and investment in developing countries. The Doha Development Agenda provides for fewer restrictions on — and greater participation by — developing countries in international trade not just in the field of goods but also of services. To monitor whether concrete actions have followed these commitments, a project undertaken by the Round Table on Sustainable Development has proposed indicators to measure: *i*) the transfer of natural resources (e.g. oil) from countries with natural endowments to other countries; *ii*) the demand for differing types of agricultural products (e.g. from cropland and grassland) by regions; *iii*) the role of services (e.g. travel) for countries at different stages of development; *iv*) the extent to which profits generated locally are repatriated to parent companies; *v*) the level of governments' debt repayment as a proportion of their tax revenues; *vi*) the extent to which new lending to countries (e.g. those with low income) exceeds repayments of principal and interest; and *vii*) the share of bilateral aid targeted at specific Millennium Development Goals (e.g. education, health, water and sanitation). While the requirement to develop further data sets in this field, and to track changes over time, are demanding, this work indicates that progress is possible in this hitherto neglected field.

Embedding indicators in accounting frameworks

35. While indicators covering the various dimensions of sustainable development are illustrative of the range of issue that OECD countries regard as important for measuring progress, they do not provide much insight about the interrelations between various indicators. Accounting frameworks can shed light on this, by providing both a representation of the relationships between the variables implicated, and (often) a common “scale” to compare developments in each variable. Accounting frameworks have a long history as a tool for integrated assessments, most notably in the form of national accounts. While well established in the economic field, accounting frameworks have been increasingly used in the environmental and social domain. In the environmental field, much focus has been on the production of flow accounts for pollution, energy and material use among different industries, and of asset accounts for stocks of various types of natural resources. A major contribution in this field has come with the recent adoption of a handbook to guide efforts by national statistical agencies to produce integrated environmental and economic accounts (Box 3). In the social field, the focus has been mainly on constructing flows accounts to link labour use and industries of employment and, to a lesser extent, production by various industries and distribution of income among households with different characteristics. An important contribution in this field has been provided by the European Leadership Group on Social Accounting Matrices.

36. To discuss the usefulness of accounting tools for measuring sustainable development, the OECD organised a workshop on “Accounting frameworks for sustainable development” in May 2003, whose proceeding are in the course of publication. One finding from this workshop — which was attended by more than 70 experts from 19 OECD countries — is that, although not always well known at the international level, several good practices already exist. However, most of these applications have focused on relationships between “pairs” of dimensions. Frameworks capable of bringing the three pillars of sustainable development together simultaneously are, by and large, still missing. While frameworks

9 OECD estimates suggest that carbon emissions from domestic consumption, for the OECD area as a whole, are around 5% higher than those associated with its domestic production — a gap that is comparable to the target set by the Kyoto Protocol for reducing the emissions of signatory countries by 2008-2012 relative to 1990 levels (Ahmad, 2003).

focusing on the economic/environmental interface often rely on the concept of “capital” to derive a single measure of sustainability, use of this approach to integrate the social dimension will require both expanding the asset boundary to human and social capital and, more importantly, gathering information on how different types of assets (including conventional types) are distributed among the population — assets of individuals being a key determinants of their opportunities and capabilities.

Box 3. Integrated Environmental and Economic Accounting

The Integrated Environmental and Economic Accounting (SEEA) is a system of accounts that complement the “standard” economic accounts that provide the basis for the calculation of aggregates such as GDP (the System of National Accounts, SNA). The SEEA brings together economic and environmental information in a common framework to measure both the contribution of the environment to the economy and the impact of the economy on the environment. It provides policy-makers with indicators and descriptive statistics to monitor these interactions as well as a database for strategic planning and policy analysis. A revised version of the manual of the SEEA was released in 2003. It identifies four categories of accounts:

- *Flow accounts for pollution, energy and materials* provide information at the industry level about the use of energy and materials as inputs to production and the generation of pollutants and solid waste.
- *Environmental protection and resource management expenditure accounts* identify expenditures incurred by business, government and households to protect the environment or to manage natural resources. Building on those elements of the existing SNA that are most relevant for environmental management, these accounts show how environment-related transactions can be made explicit.
- *Natural resource asset accounts* record stocks and changes in stocks of natural resources such as land, fish, forest, water and minerals.
- *Valuation of non-market flow and environmentally adjusted aggregates* presents non-market valuation techniques and their applicability in answering specific policy questions. This section of the manual discusses the calculation of several macro-economic aggregates adjusted for depletion and degradation costs, as well as adjustments concerning the so-called defensive expenditures.

The revision of SEEA was undertaken under the joint responsibility of the United Nations, Eurostat, IMF, OECD and the World Bank. Much of the work was done by the London Group on Environmental Accounting.

Source: <http://unstats.un.org/unsd/environment/seea2003.htm>

37. While a number of practical conclusions emerged from the workshop, probably the most important one is that greater involvement of national statistical offices — and of national accountants in particular — is crucial for progress in this measurement area. This requires that national statistical offices elaborate long-term strategies in this field, identifying concrete intermediate deliverables. It also requires greater international co-operation. A step in this direction is represented by the recent agreement by OECD, EUROSTAT, and the Statistical Divisions of the United Nations and of the UN Commission for Europe to launch a steering group on statistics for sustainable development in the context of the Conference on European Statisticians.

CHAPTER 3. POLICIES TO ENHANCE SUSTAINABLE DEVELOPMENT IN MEMBER COUNTRIES: A SYNTHESIS OF THE ECONOMIC REVIEW PROCESS

Main activities

38. Peer reviews are important to strengthen the credibility of government commitments and improve the effectiveness of their policies. The OECD contributes to these goals through a variety of processes. Following the 2001 Ministerial mandate, the Economic and Development Review Committee, which conducts periodic reviews of economic policies of Member countries, has broadened its reach to include sections dealing with key sustainable development issues. The Environmental Performance Reviews conducted by the Environmental Policy Committee have also devoted increasing attention to a range of sustainable development issues (Box 4). Other OECD processes of broader relevance for the sustainable development agenda include the reviews of development co-operation policies conducted by the Development Co-operation Committee, reviews of educational policies conducted by the Education Committee, and reviews of selected social policies conducted by the Employment, Labour and Social Affairs Committee. While the Ad Hoc Group has devoted its earlier meetings to discuss the framework of the sustainable development reviews performed by Economic and Development Review Committee, it has not been implicated in the reviews of individual countries and in the other review processes referred to above.

Box 4. OECD Environmental Performance Reviews

A second cycle of OECD "environmental performance reviews" started in 2001, with around 15 countries reviewed so far. Compared to the previous cycle, the emphasis of the current cycle is on monitoring implementation of the "OECD Environmental Strategy for the First Decade of the 21st Century" and on sustainable development issues. This implies focus on progress achieved in integrating environmental concerns into both general and sectoral policies (mainly energy, transport and agriculture, but also forestry, mining, building and industry). These reviews look at the full range of instruments used by Member countries, recommending ways in which this policy mix can be changed to improve both environmental effectiveness and economic efficiency.

The OECD Environmental Performance reviews have helped shaping environmental policies of individual countries, and transforming general principles into concrete policy recommendations. Each country review leads to a set of recommendations that are endorsed by all Member countries participating to the Working Party on Environmental Performance. Within two years of its release, examined countries usually publish formal "Government responses" to the OECD recommendations. Because of its success, this process has been extended to a range of non-member countries. In co-operation with the UN Economic Commission for Europe (UN-ECE), the OECD carried out four examinations of countries in Central and Eastern Europe, while reviews of Chile and China are being planned. A similar programme of environmental performance reviews has been established by UN-ECE for Eastern European, Caucasian and Central Asian Countries, and one is considered by the UN Economic Commission for Latin America. Programme co-operation is also developing with the Asian Development Bank (in the greater Mekong Region) and the World Bank.

Key results

39. In response to the Ministerial mandate, *Economic Surveys* of each OECD country conducted over the 2001-2004 period have included a discussion of domestic policies in selected areas that are regarded as key to progress towards sustainable development. The EDRC reviews for each country covered three policy areas, drawn from a menu of seven topics characterised by their strong degree of permanence and analytical tractability:

- Reducing emissions of greenhouse gases.
- Reducing air pollutants.
- Reducing water pollution.
- Moving towards sustainable use of renewable and non-renewable natural resources.
- Reducing and improving management of waste.
- Improving living standards in developing countries.
- Ensuring sustainable retirement income policies.

The distribution of topics across countries has been fairly even (Table 3), with a tendency for the topic “reducing greenhouse gas emissions” to be over-represented, and for the topic “improving living standards in the developing countries” to be under-represented.

40. Against the background of performance indicators described in previous sections, the EDRC reviews have focused on the extent to which current policy settings are oriented towards minimising the trade-offs that may be involved in attaining goals in one dimension of sustainable development for outcomes in other dimensions. On the basis of this analysis, the Economic and Development Review Committee recommended changes in policies that could reduce the economic cost of attaining environmental and social objectives. A synthesis report, drawing main lessons from this cycle, was discussed by the Economic and Development Review Committee, Working Party 1 of the Economic Policy Committee, and the Ad Hoc Group on Sustainable Development, and revised to reflect some of the main comments raised by country delegates at these meeting. The revised synthesis report provides the basis of this section.

Attaining environmental objectives in a cost effective way

Performance

41. In the environmental areas examined in these economic reviews, performance has improved in several respects. Greenhouse gas emissions fell in the 1990s in almost half OECD countries, and even in the countries where emissions continued to rise the rate of increase slowed down. Virtually all countries achieved a decoupling of emissions of greenhouse gases from economic growth, although global concentrations continued to increase. Emissions and concentrations of traditional air pollutants fell in the 1990s in most OECD countries, strongly for sulphur-dioxide emissions, more moderately for nitrogen-oxide. Quality of surface water quality generally improved in the OECD countries since the early 1980s, although local problems remain in a few cities. Natural resource use — in the areas covered by the reviews, i.e. marine fish stocks, water resources and (in selected countries) forests and petroleum resources — has fallen in many countries, with water use declining in absolute terms in 11 of the 18 countries for which data are available for the 1990s, and relative to GDP in virtually all. Municipal waste generation continued to increase in most member countries, while relative to private consumption it fell in just under half of all countries.

42. The improvement in environmental conditions in these five areas is likely to continue in the future if member countries respect the environmental objectives they have set themselves. In the area of greenhouse gases, most OECD countries will have to reduce their emissions substantially if the targets set in the Kyoto Protocol for 2008-2012 are to be met. In subsequent periods, abatement targets would have to become more ambitious, with official documents from some OECD countries indicating national objectives of cutting emissions by half or more by mid-century in order to stabilise concentrations of greenhouse gases. For air pollutants, most countries may have to reduce their emissions of sulphur dioxide, nitrogen oxides and volatile organic compounds to attain their targets set for 2010. For water pollution, international conventions call for major declines in nitrate emissions to European coastal waters. Although municipal waste generation is likely to continue rising in the coming years, ambitious targets for more extensive treatment of waste will reduce (if attained) their environmental costs.

43. The strengthening of the environmental pillar of sustainable development, however, has come at an excessive cost to the economic pillar. Although comprehensive data on the total economic costs, or on public and private outlays, associated with abatement are not available for most OECD countries, a range of estimates suggest that abatement costs could already amount to the equivalent of 2% of GDP in many countries, and that these costs could rise significantly in the future. Total greenhouse gas abatement costs have so far been small in most countries but might escalate in the future, as measures are implemented to attain the Kyoto targets and more ambitious targets are introduced for subsequent periods. Total costs of air pollution mitigation programmes vary significantly across OECD regions, with estimates ranging between $\frac{1}{4}$ and 1% of GDP per year. Water pollution control costs are high in several countries, with expenditure on reducing pollution from wastewater exceeding $\frac{3}{4}$ per cent of GDP in 2000 in several European countries, and annual investment costs to upgrade water treatment facilities often in a range between $\frac{1}{2}$ to over 1% of GDP. Waste collection and treatment outlays amount on average to $\frac{1}{2}$ per cent of GDP in the OECD area, ranging from less than one-tenth to over 1%.

Table 3. Topics selected for the sustainable development sections of EDRC economic reviews

	<i>Reducing emissions of greenhouse gases</i>	<i>Reducing air pollution</i>	<i>Reducing water pollution</i>	<i>Sustainable use of renewable and non-renewable resources</i>	<i>Reducing and improving management of waste</i>	<i>Improving living standards in developing countries</i>	<i>Ensuring sustainable retirement income policies</i>
<i>Australia</i>				♦		♦	♦
<i>Austria</i>	♦				♦	♦	
<i>Belgium</i>		♦			♦		♦
<i>Canada</i>		♦	♦				♦
<i>Czech Republic</i>	♦	♦					♦
<i>Denmark</i>	♦		♦		♦		
<i>Finland</i>	♦	♦		♦			
<i>France</i>	♦		♦				♦
<i>Germany</i>		♦			♦		♦
<i>Greece</i>	♦	♦					♦
<i>Hungary</i>	♦	♦					♦
<i>Iceland</i>	♦	♦		♦			
<i>Ireland</i>	♦		♦		♦		
<i>Italy</i>	♦		♦				♦
<i>Japan</i>		♦				♦	♦
<i>Korea</i>		♦			♦		♦
<i>Luxembourg</i>	♦					♦	♦
<i>Mexico</i>		♦	♦	♦			
<i>Netherlands</i>	♦		♦	♦			
<i>New Zealand</i>	♦		♦			♦	
<i>Norway</i>				♦	♦	♦	
<i>Poland</i>	♦		♦		♦		
<i>Portugal</i>		♦	♦	♦			
<i>Slovak Republic</i>	♦	♦					♦
<i>Spain</i>	♦			♦	♦		
<i>Sweden</i>		♦	♦		♦		
<i>Switzerland</i>	♦		♦		♦		
<i>Turkey</i>	♦	♦		♦			
<i>United Kingdom</i>	♦					♦	♦
<i>United States</i>	♦		♦	♦			
<i>Total</i>	20	15	13	10	11	7	14
<i>Percentage-distribution</i>	22	17	14	11	12	8	16

Source: EDRC synthesis report

Policies

44. High current costs of measures to improve environmental performance, and prospects for yet higher costs in the future, highlights the importance of using the most cost efficient methods in improving the environment. For most of the OECD countries, the reviews have argued that costs could have been kept lower by greater use of more cost-efficient instruments, with cost reductions of more than one-quarter being common in most established anti-pollution activities when flexible instruments are introduced.

Alternatively, more ambitious environmental goals could have been achieved with no increase in economic costs. Such options have not been exploited because of a lack of integration of environmental and economic concerns in policy making, of concerns over social consequences, and of political-economy arguments.

45. Against this background, the EDRC has recommended fundamental changes in policy settings, so as to achieve environmental objectives at a lower economic cost:

- *Voluntary agreements* have been used to control air-pollution, limit greenhouse gas emissions, improve energy efficiency and fuel efficiency of cars, reduce packaging waste, control pesticides and nitrate discharges from the farming sector. By the late 1990s, more than 300 voluntary agreements had been identified in the 15 countries of the European Union. Voluntary agreements can be useful in revealing information on abatement costs, in disseminating information on environmental costs and impacts, and in establishing the infrastructure (e.g. certified emission accounts) required for the introduction of alternative policies. However, because of asymmetries of information between the government and the industry, the latter can often limit the targets under these agreements to easily achievable levels. Environmental effectiveness of voluntary agreements is often questionable and their economic efficiency is generally low. In view of these results, the reviews recommended a reassessment or termination of such practices.
- *Regulation* has remained a major instrument to control pollution or resource extraction over the past decade in most of the environmental areas considered in the reviews, including greenhouse gas emissions. While the form of regulations will influence their abatement costs, there is ample evidence that even flexible regulations are a costly way to deal with environmental problems. Regulatory instruments typically result in very different marginal abatement costs across emitters, as different plants vary in the extent to which they can reduce emissions. Evidence reported in the reviews showed that regulations based on the mandated use of a particular technology entailed very high costs and discouraged cost-saving innovations. While recognising that regulations are the most appropriate instrument to control pollution in some cases (e.g. when monitoring costs are high), the reviews recommended less emphasis on such instruments for the purpose of improving the environment (particularly in the areas of renewable energy and recycling), based on evidence that restraining the freedom of companies in reducing their emissions typically increases costs for society.
- *Taxation*, as a means of environmental control, has met much reluctance (see discussion in paragraphs 69-75). Apart from the generalised taxation of petrol, diesel and cars, only 60 examples exist of taxation or charges in eight environmental domains and across 30 OECD members. In any particular environmental domain, typically about ¼ of countries use taxes, most often in the form of levies for the abstraction or pollution of water, taxes on waste sent to landfills, and taxes on carbon emissions or releases of traditional air pollutants. Even when used, however, such taxes are rarely set at uniform levels across firms (thus reducing their economic efficiency and often also their environmental effectiveness) and their levels are often too low compared with the benefits of abatement. Although their design has often been suboptimal in the past, the potential gains of employing environmental taxes led the reviews to recommend their expanded use. In the area of greenhouse gases, the further use of carbon taxation was seen as means of ensuring that sectors outside the scope of future allowance trading face the same abatement incentives as sectors within the system. This led to recommendations to introduce such taxation, linked to allowance prices, in most countries reviewed, and with exemptions to industry wound down in some. Other recommendations included the introduction of emission charges for dealing with air pollution, the harmonisation of taxes on diesel and petrol, the easing of abatement in the road transportation sector, taxing nitrogen surpluses on farmland, establishing charges on wastewater treatment in line with costs, removing exemptions from paying waste extraction fees. The reviews also

recommended scaling down or abolishing *environmentally-harmful subsidies* in a number of countries, in particular on subsidies to coal, peat, and water use.

- *Use of markets* to establish the price of freely-transferable rights to emit pollution or to use a natural resource is a new development in resource management. About one-third of OECD countries have had some experience in using such instruments in the fields of water, greenhouse gases, natural resources, air pollution, recycling and use of landfills. In addition, a few countries have experimented with limited small-scale markets, either in the form of sector-wide trading or geographically-limited offset programmes. While there are both drawbacks and advantages to using tradable quota systems for controlling the environment, experience shows that they are cost efficient in attaining environmental objectives and that concerns often raised relating to their operation can be addressed through appropriate design.¹⁰ The reviews recommended developing the infrastructure for such systems; importing allowances from international markets and developing countries; abolishing carbon taxes in the activities that will be covered by the EU trading allowance system; and introducing allowance trading in air pollutants. While nearly all examples of quota trading systems have involved the granting of allowances (or quota rights) free of charge, this practice transfers substantial resources to the new owners of the quotas and raises the equity value of the companies concerned, while not changing production decisions. In these cases, the reviews recommended taxing the proceeds from sales of these permits.

46. *Social concerns* have been a barrier to the introduction of policies to improve environmental outcomes in several cases, with objections being the commonest in the areas of impact of policies on low-income groups, on employment in polluting industries, and on adverse regional impacts (see also the discussion in paragraphs 95 to 105). In all these areas, governments can use targeted policies to moderate accompanying social problems at lower cost. Governments already grant benefits to the poorest groups in society and, in many cases, provide benefits for the lowest paid workers. In both cases, a careful choice of the price index used to revalue transfers — using the consumption weights of the target groups — can alleviate distributional concerns stemming from increased prices caused by environmental policies. By making payments in cash, the welfare of the poor would improve relative to receiving the same value as a benefit in kind, as recipients would be free to choose how to use the payment, and environmental incentives would be maintained. Reviews recommended that full-cost pricing be established for households' energy consumption, and that direct income support be used to mitigate any undesirable social consequences. In respect of the employment consequences of environmental policies, labour market policy settings should be moved further into line with those suggested in the *OECD Jobs Strategy*, thereby smoothing the process of adjustment to sectoral change, avoiding long periods of unemployment or permanent withdrawal from the labour market by those affected by the changes. The penalties of not adopting more flexible labour market policies are large. Reviews of several countries also recommended that energy subsidies or tax breaks aimed at maintaining employment in isolated areas be replaced by direct payments or different regional policy measures.

47. The low efficiency of many of the abatement programmes in use in OECD countries partly reflects a failure to integrate the environmental and economic dimensions of sustainable development in environmental policy making (see also discussions in paragraphs 120 to 124). Indeed, most OECD countries do not subject environmental protection laws to a systematic review of their economic consequences. In those countries where cost-benefit analysis (CBA) is used almost systematically as part of the analysis of regulatory impacts, this tool has helped to move policy away from costly regulatory instruments. Moreover, there have been instances when CBA has been poorly integrated into policy decisions. Cost-benefit studies are resource intensive and sometimes difficult to subject to independent

10 For example, the Californian market for nitrogen oxides addresses fears that prices raise to excessive levels through the imposition of a "safety valve", i.e. unlimited supply of extra permits by the government to keep prices below a predetermined level.

assessment. When such studies are supervised by the agency sponsoring the regulation, results of CBAs can be influenced by the desired outcome.

Attaining social objectives in a cost-efficient way

48. All OECD countries have in place a number of social objectives whose achievement may entail costs for the economic pillar of sustainable development. The Economic and Development Review Committee examined policies to attain only two of these targets: sustainable retirement income arrangements and increased living standards in developing countries. The focus of the reviews in both cases was on whether current policy setting was effective in reaching these objectives, and on whether the least-cost options were being employed for this purpose. Given that the issues and policies differ significantly across these two areas, they are discussed separately.

Ensuring sustainable retirement income

49. The main objective of the 15 economic country reviews on ensuring sustainable retirement income was to examine if measures had been taken to contain ageing-related fiscal pressures without compromising the income adequacy of the elderly. The reviews concluded that several countries had yet to tackle this challenge and recommended a wide range of reforms (see also paragraphs 110 to 118).

Performance

50. Thanks in part to higher public pensions, income adequacy in retirement has improved significantly over the past decades, with average money income of the retired in the reviewed countries ranging between 68% and 97% of that of all individuals. However, in a number of countries, standard income replacement calculations can be misleading, as retired people have significant income in kind from owner-occupied housing, government-provided health services and agricultural activities, or because living standards can be maintained by running down assets accumulated during working life. Once imputed income from owner-occupation is taken into account, the evidence reported in the reviews shows that average income of retired households is often close to, or exceeds, that of working-age households, and that, in several countries, the income of workers with low earnings capacity is close to or higher after retirement. However, some groups remain disproportionately exposed to risk of poverty in old age.

51. A high level of non-employment income has been accompanied by the almost complete withdrawal from the labour force of people over the age of 65, with this proportion ranging between $\frac{1}{4}$ and $\frac{1}{2}$ of the population — although being significantly higher in a few countries. Reflecting these participations rates, the average of withdrawal from the labour force varies between 67% and under 60%.

52. Despite these outcomes, high pensions and low effective retirement ages may not be sustainable in most OECD countries in the face of ageing-related pressures in the coming decades. The size of these demographic pressures vary considerably across countries, being higher in Greece, Italy, Czech Republic, Poland, Korea and Japan, where the ratio of people aged over 64 to those 15 to 64 is expected to triple; and more moderate in Australia, Germany, Canada, France and Hungary, where the old-age dependency ratio could double. However, reflecting differences in public pension rules across countries, there is no direct link between changes in the old-age dependency ratio and public pension outlays: projections of public pension increases relative to GDP range from virtually zero or less in Italy, the United Kingdom and Poland to more than 6% of GDP in the Czech Republic, Greece and Korea.

Policies

53. Since the mid-1990s, policy reforms with respect to retirement-income arrangements have been significant in several countries, and pension reforms continue to remain high on the policy agenda. The

extent of reforms has been variable across countries. In a first group of countries (Australia, Belgium, Canada, Italy, Hungary, Poland, the Slovak Republic and the United Kingdom) public pension spending is projected to remain broadly stable over the next 50 years, because of a combination of fundamental changes in public pension arrangements (i.e. the introduction of notional defined benefit systems), pre-funding of future pension outlays (i.e. higher primary fiscal surpluses and contributions to second-pillar pensions), and means-testing of pensions. In a second group of countries (France, Germany and Japan), reforms have limited the projected deterioration in the financial position of the pension system, without however making it financially sustainable. In a third group of countries (Czech Republic, Greece, Korea and Luxembourg), changes to pension systems have failed to address ageing-related fiscal pressures, and pension outlays could rise significantly in the future. Even where measures to ensure the sustainability of the public pension system in the very long term have been introduced, short-term pressures on public finances can emerge because of the costs of transitional arrangements or of slow implementation.

54. In all of the countries where action has been taken to move towards long-term stabilisation of pension spending, the replacement rates of public retirement benefits have been, or will be, reduced. In the coming five decades the declines are expected to be much more substantial, e.g. by over 40% on average in the standard public pension systems of Italy, Poland and the United Kingdom. Pension replacement rates have also fallen, or are scheduled to fall, in the countries that have been limiting future growth in outlays but without achieving financial sustainability. In those countries where pension reforms have yet to be put in place to meet the challenge of ageing, replacement rates have either been unchanged or risen further.

55. The reviews recommended a reduction in replacement rates in a number of the reviewed countries as a part of a strategy to stabilise the financial position of the public pension system — e.g. by indexing pensions on prices rather than wages in the Czech Republic and Japan; by reducing pension generosity before the system matures in Korea; by aligning pensions in the public sector to those (less generous) in the private sector in France; by reducing minimum pensions in Greece. As an alternative to parametric changes to the existing pension system, some countries were recommended to introduce a notional defined benefit system, and others to extend the time horizon of their spending projections. Even for the countries that have achieved a large measure of sustainability in their long-term pension finances, the reviews expressed reservations about the ways in which reforms were implemented (e.g. recommending to establish a legally-binding path for debt reduction in Belgium; to increase resources to the fund financing the transition to the new pension regime in Poland; to raise effective retirement age to offset recent changes in Hungary; to accelerate the switch to the new system in Italy).

56. Measures to promote private saving have been important in many of the reforms introduced to address the demographic pressures on pension systems. Confronted to less generous public pensions, many individuals will need to make additional saving (or delay retirement) to maintain living standards in retirement. Increased saving for retirement has been either enforced through mandatory means or stimulated by financial incentives to invest in voluntary schemes. In countries where the generosity of basic state pensions is projected to fall the most, additional saving is often mandatory (Australia, Hungary, Poland and — under consideration — in the Slovak Republic), although with differences in the form and size of these mandated savings. Mandatory savings are particularly important for lower-income workers who typically have low, if any, accumulated savings in retirement, as compared to higher-income workers who may simply substitute voluntary with mandated saving. On balance, these arrangements are likely to increase private and national saving, and strengthen the income-generating capacity of the economy. In some countries, authorities have required that low-cost and easily-transferable retirement-saving products are offered by employers not offering occupational pensions (the United Kingdom). In other countries, the reviews recommended that separation payments be transformed into retirement-savings (Italy, Japan and Korea). Such reforms would not only strengthen savings for retirement but also reduce the default risk to employees by preventing firms from using these liabilities as a source of cheap finance.

57. While recent reforms in many countries have increased the generosity of tax-favoured pension saving, there are doubts as to the effectiveness of such measures in either ensuring income adequacy on retirement or strengthening the economic pillar of sustainable development. In many cases, tax preferences are largely enjoyed by individuals who already make adequate provision for retirement, and higher private saving due to tax privileges may be more than offset by falls in public saving. The reviews recommended changing the tax treatment of private retirement saving (Greece); making these schemes more attractive by allowing lump-sum withdrawals at retirement (Germany); and improving the vesting and portability arrangements (Germany, United Kingdom). The reviews also recommended the establishment of a strong regulatory framework and effective supervision of private-pension providers, as greater reliance on private pension savings shifts risks towards individuals at the same time as their risk aversion declines with age. Sound functioning of private pension providers is needed to encourage people to invest in such instruments and to avoid the risk of defaults that might adversely affect public finances. To that effect, a variety of regulatory requirements for private pension providers have been introduced. Others are recommended by the reviews.¹¹

58. Means-testing of pensions has been used in some countries (Australia and the United Kingdom) to ensure that the necessary reduction of pension replacement rates fall mainly on the better off. Such schemes, however, may also discourage work and saving — because of the high marginal taxes on work after the pension entitlement age, and of the high marginal taxes on saving before the pension age that they imply. Because of these effects, the review recommended that means testing should be limited to income (rather than assets), and that the marginal withdrawal rate of the government pension should be lowered.

59. In several of the reviewed countries, reforms have aimed to encourage people to delay retirement, so as to increase incomes among the elderly, reduce pressures on public finances, and increase the output capacity of the economy. For males, the rise in the standard and early ages of entitlement to old-age benefits since the mid-1990s has been limited to Italy and New Zealand, but the standard retirement age for women is being raised towards that of males in several countries. The disincentives to work at older ages embedded in pension systems have also fallen in some of the reviewed countries (Italy and France) and this trend will be strengthened in other countries by the introduction of notional defined contribution systems. Several countries have also taken measures to tighten access to early retirement benefits that create strong incentives to withdraw from the labour market before the earliest age of pension entitlement by reducing the scope to use unemployment benefit systems as an exit route from the labour market (France, Belgium, Australia, Japan); tightening entry of older people into disability benefit system (Canada, Luxemburg, Germany and the United Kingdom); closing access to some special early retirement schemes to new entrants (Belgium, France, Germany and Luxemburg). To almost all the reviewed countries, the reviews recommended to lengthen working life, as significant progress in this respect would alleviate, or even eliminate, the reductions in replacement rates from public pensions that are required to stabilise public finances.

Improving living standards in developing countries

60. Concern over poverty in the non-OECD area has received renewed emphasis in the past few years. Reviews of economic policies to improve living standards in developing countries have focused on the extent to which policies are oriented towards this goal. However, only seven countries were reviewed, limiting the general conclusions that can be drawn from this exercise (see also the discussion in paragraphs 77 to 94).

Performance

11 For example, strengthening of valuation techniques used by the regulator in Japan; and careful design of pension protection funds in the United Kingdom.

61. Indicators of welfare in developing countries show substantial gains during the 1990s but also significant variations across groups of countries. Life expectancy has been rising in developing countries as a whole, but falling in sub-Saharan Africa where it now one year below its 1980 level (against an increase of five years in other developing countries). Infant mortality data similarly point to a sizeable drop for developing countries as a whole, and to a rise in sub-Saharan Africa. These disparities extend to extreme poverty, which fell by 15% in the 1990s in all developing countries but rose by 76% in sub-Saharan Africa.

62. Higher living standards in developing countries as a whole have been accompanied by rapid growth in their exports to OECD markets, with an increase in market shares in the second half of the 1990s for the least-developed countries and large differences in performance across regions. The performance of the least-developed countries in OECD market has slightly lagged that on world markets, while the United States has been the most buoyant market for all developing countries, particularly for the least developed. Flows of net Official Development Assistance (ODA) fell in nominal terms in the decade to 2001, and even more so when expressed as a proportion of Gross National Income of donor countries. However, from the mid-1990s onwards, flows began to grow again in real terms, although not as rapidly as a proportion of Gross National Income. The bulk of ODA is now “untied” (i.e. not linked to the purchase of goods and services produced by the donor country), though with considerable differences across countries. An increasing share of ODA is also devoted to projects targeted at improving social conditions (i.e. education and health) and administrative infrastructure, and away from direct production-related projects. While an increasing share of ODA flows to lower-income countries, in 2001 only 23% of bilateral ODA flows from OECD countries reached Sub-Saharan countries, which account for over 40% of all people leaving in absolute poverty.

Policies

63. Trade barriers against imports from the developing countries have fallen significantly for industrial goods, but with exceptions. Together with the general fall in tariffs on goods in the wake of the Uruguay Round, the concessions granted to all developing countries in the context of the generalised system of preferences (GSP) and the special arrangements conceded to the least-developed countries have taken tariff rates for the latter group down to zero for the bulk of all tariff lines. However, a considerable portion of developing country exporters choose not to take advantage of GSP tariff preferences, because of rules-of-origin requirements and of the cost of documentation. In some of the reviewed countries, the drop in tariffs was accompanied by the elimination of quantitative restrictions, while in Japan such quotas continued to limit the possibility of the least-developed countries to take advantage of lower tariffs. In contrast to the general trend for manufactured goods, imports of textiles and clothing have remained subject to quantitative restrictions, which will be changed to restrictive tariffs at the beginning of 2005.

64. Trade-distorting support of agricultural production remains an obstacle to developing countries capitalising on their comparative advantage. Both the aggregate level of support and the use of the most trade-distorting types had declined by 2000 relative to the mid-1990s. Since then, support has changed little, remaining widespread and particularly high in Norway and Japan. The European Union agricultural reform in 2003 is expected to lead to further decoupling of agricultural support from production, though this will be partially at the discretion of individual countries and will leave the overall level of agricultural support unchanged. However, some EU member states have shifted agricultural support towards less trade-distorting methods. In the United States, the 2002 Farm Act expanded and increased production-linked support, to shield farmers’ incomes from price declines in commodity markets, although the trade distorting element is considerably less than in the EU.

65. As the scope for further gains from liberalising OECD non-agricultural trade for the least-developed countries diminishes, a number of OECD countries have recently committed themselves to increase both the volume of ODA and its effectiveness. In some cases, the increase in volume of aid is

significant, while other countries have pledged to raise it in the future. The effectiveness of aid has also been a matter of concern, prompting a number of countries to enhance evaluation and monitoring (including external audits) of their overall policies. Achieving further improvement in the monitoring and evaluation of policies was one of recurring recommendations of the reviews.

66. Aid programmes are also becoming more targeted on meeting the Millennium Development Goals. Amongst the reviewed countries, Australia, New Zealand and the United Kingdom are setting poverty alleviation as the central goal of development co-operation policies, while Austria and Norway have adopted all the Millennium Development Goals as key elements for framing their aid programmes. Some OECD countries have also targeted their ODA to improving health conditions. In Sub-Saharan Africa, infectious diseases are responsible for the loss 16% of potential life years in the area (World Health Organisation, 2001). If GDP rose in line with the induced rise in life expectancy, a two-thirds reduction in lost life years — a feasible target according to the WHO — would boost welfare in the region by USD 30 billion or more. Such potential gains appear to significantly exceed the benefit to least-developed countries from a complete liberalisation of agricultural trade (estimated at under USD 2 billion). Better targeting of development assistance to bring it more in line with the most pressing problems, as manifested in Africa, was the primary recommendation coming from the country reviews.

67. A strong emphasis has been placed on the developing countries themselves taking greater responsibility in establishing poverty reduction strategies and implementing the associated policies. A few of the reviewed donor countries are aiming at improving governance and institutions in recipient countries. Reviewed countries have generally managed intervention in such sensitive areas through partnerships programmes, or by encouraging the strengthening of governance institutions. In addition, the United States has committed resources to the Millennium Challenge Account that will reward those low-income countries that perform well on selected governance indicators. Finally, some reviewed countries are supporting policies aimed at improving the capacity of countries to administer trade policy.

68. Overall, policies to help developing countries have focussed on allowing greater access to OECD markets, with development assistance being on a falling trend until recently. Imports from low and middle-income developing countries are still subject to significant tariff barriers and the stalled multilateral trade negotiations demonstrate the difficulties in making progress in this area. However, using trade liberalisation in the OECD area to further increase living standards in the least developed countries is reaching its limits, with several estimates quantifying the net gains from agricultural liberalisation to all least-developed countries at only USD 2 billion. These will soon have tariff-free access for the bulk of their exports to developed countries, though their position could be improved by trade liberalisation between developing countries. Agriculture and textiles are two areas where reductions in protection would help developing countries. However, gains to the least-developed countries from such a liberalisation might be small as compared to those generated by an improved alignment of aid with the Millennium Goals.

CHAPTER 4. ECONOMIC INSTRUMENTS FOR ENVIRONMENTAL PROTECTION AND OBSTACLES TO THEIR USE

Main activities

69. Under a variety of circumstances economic instruments — such as taxes and tradable permits — will play a key role in promoting sustainable development. While regulations will continue to be required, economic instruments hold the promise of improving environmental management in cost-effective terms — in particular where environmental pressures reflect decisions of a variety of actors each responsible for a small part of total environmental damage — by providing incentives to all agents to substitute towards technologies and products with lower environmental impacts. While country-specific evidence on the scope for better use of economic instruments is provided in the previous section, this section describes activities undertaken in the context of the cross-directorate work on environmentally-harmful subsidies, and work by the Joint Meetings of Tax and Environment Experts. While results from this latter activity have not been discussed by the Ad Hoc Group on Sustainable Development, work on environmentally-harmful subsidies has been reviewed by the Group on a variety of occasions, and partly financed by voluntary contributions provided under the horizontal programme on sustainable development.

Key results

Environmentally harmful subsidies

70. Policy makers have traditionally been confronted with a range of definitions (of “subsidies”, “support” and “transfers”) and approaches, patchy and incomplete data, and non comparable estimates across sectors. Difficulties are even larger when trying to identify the circumstances that give rise to harmful effects on the environment. To address these difficulties, a range of OECD Committees have joined forces to provide a better basis to understand the nature of environmentally-harmful subsidies, and ways to their reforms. Much of this work has built on the pioneering work undertaken by the Committee for Agriculture in quantifying support granted to agricultural producers in OECD countries.

71. Work on environmentally harmful subsidies initially focused on the nature and measurement of these subsidies, with a view to developing a shared understanding of the state of play and of the information and analytical gaps standing in the way of subsidy reform. A workshop, organised in 2002, developed a “checklist” for identifying environmentally harmful subsidies, and applied it to sectoral case studies covering agriculture, fisheries, water, transport and energy sectors. The case studies, and implications of subsidy reform in these sectors, were further discussed at the Technical Expert Meeting on Environmentally Harmful Subsidies in November 2003. The meeting explored the main obstacles to reforming environmentally-harmful subsidies from a cross-sectoral perspective, and identified some of the means by which they could be addressed. A synthesis report brings together the key findings from these workshops, a stocktaking of subsidy data and evidence from the sectoral case studies. This report includes policy conclusions and recommendations on areas of OECD work that may be required in the future.

72. Subsidies, as defined in OECD work, generally refer to cash payments, market-price support, subsidies to the purchase of production inputs, and tax expenditure. OECD countries provide about USD

400 billion in subsidies to different economic sectors every year. About three quarters of these subsidies go to agriculture, one tenth to transport, and the rest to fisheries and forestry, energy production and manufacturing. Although agriculture appears as the sector receiving the largest amount of subsidies in absolute terms, subsidies to other sectors are most probably underestimated due to incomplete coverage and methodological issues. While governments provide subsidies to promote particular industries or regions, or to support employment and incomes of some groups of individuals, most of these subsidies distort prices, adversely affect resource allocation, and change the mix of goods and services produced and consumed in the economy. Subsidies can also have unintended consequences for the environment. For example, fuel tax rebates and low energy prices stimulate the use of fossil fuels and greenhouse gas emissions, while subsidies for road transport increase congestion and pollution. In agriculture, subsidies can lead to the overuse of pesticides and fertilisers, while in fisheries they may contribute to the overexploitation of fish stocks in the absence of appropriate management regimes. Subsidies for energy production and consumption, while often justified by social concerns, are rarely effective in reducing poverty. Thus subsidies are often inefficient, expensive, socially inequitable and environmentally harmful. — all arguments for reforming existing subsidy policies.

73. However, not all subsidies are bad for the environment. For example, road transport and pollution would increase in the short-term in the absence of subsidies to rail transport. Some subsidies are also explicitly used to encourage the generation of environmental benefits. For example, OECD countries increasingly link agricultural support payments to farmers' actions to improve the environmental performance of agriculture, through payments to limit the use of inputs such as fertilisers and pesticides, or to encourage the use organic farming techniques. Others support farmers in planting trees to reduce agricultural runoff, and removing marginal land from production to provide habitat for wildlife. Most OECD countries also have substantial programmes to support the development and production of renewable energy. Even in these cases, however, subsidies may be unnecessarily high, as they are used to offset the environmental damage caused by other measures that stimulate production, and they may not be well targeted to achieve specific environmental outcomes.

74. Quantifying the environmental impact of a subsidy is difficult, as all production and consumption activities potentially have an impact on the environment. A subsidy will be harmful to the environment if it leads to higher levels of waste and emissions (including in the previous stages of production and consumption) than would be the case in its absence. The environmental impact of a subsidy hence depends on how support is provided; on the nature of markets for intermediate and finished products; on the availability of technologies, products or services causing less environmental stress; on tax systems, regulatory and institutional framework; and on the biophysical features of the environment. To guide policy makers across these factors, the OECD has developed a "checklist" to identify subsidies whose removal would most benefit the environment.¹² This checklist, which classifies various support measures according to the transfers generated and method of implementation provides a good basis for assessing subsidies according to their damage on the environment:

- Work on agricultural support and the environment allow different type of subsidies to be ranked according to their relative impacts on the environment. Market price support, output payments and input subsidies (such as fertilisers, pesticides and energy subsidies) are potentially the most harmful for the environment. These types of support accounted for three quarters of producer support on average in 2000-2002, about USD 235 billion per year. While their share has declined since the mid-1980s, the shift towards less environmentally harmful support has been slow.

12. "Summary and Conclusion from the OECD Workshop on Environmentally Harmful Subsidies" [SG/SD(2003)4].

- Work on the linkages between subsidies to fisheries and catches under different management regimes (open access, catch control and effective management) allows examining the environmental impact of subsidies. OECD countries provide around USD 6 billion a year in government financial transfers to the marine capture fishing sector, representing 20% of the value of landing (OECD, 2003). Around a third of these subsidies are paid for fisheries management including R&D, surveillance, and management services, contributing to the sustainable management of fish resources. Yet the remaining subsidies can help develop and sustain over-capacity in fishing fleets and the over-exploitation and eventual exhaustion of fish stocks. In particular, subsidies to vessel construction and modernisation and to reduce operating costs will have the most adverse impacts on the sustainability of fish stocks.
- Estimates of energy subsidies range between USD 20 and 80 billion per year. They include publicly funded research and development programmes as well as grants and soft loans to producers or consumers, market price support, and differential tax rates on different fuels. While it is not easy to identify which of these subsidies are more environmentally harmful, subsidies to coal production — notably less clean-burning coal — are among the most harmful to the environment. Support to coal industry in OECD countries amounted to USD 5 billion in 2000, decreasing significantly in absolute terms over the past few years. However, as this was accompanied by lower coal production, support per tonne of coal equivalent produced has been stable since 1990.¹³

75. A range of obstacles stand in the way of reform of environmentally harmful subsidies across both countries and sectors. While not unique to environmentally harmful subsidies, the key obstacles to reform include the following:

- *Strength of special interests and rent-seeking behaviour.* Lack of political will to undertake reform of environmentally harmful subsidies is often linked to the strength of special interests, and to their rent-seeking behaviour in gaining and retaining subsidies. Benefits of subsidies tend to be highly concentrated in the hands of specific groups, while their costs are spread widely across the taxpayers (and sometimes consumers). This divergence in the concentration of benefits and costs increases the expected returns to specific groups, and their incentive to lobby to attain and retain subsidies. Empirical evidence suggests that older and declining industries, which are more environmentally harmful, tend to secure most support and trade protection.
- *False perceptions and fear of change.* Special interests have successfully invoked “mythologies and mantras” in order to gain popular and political support for the subsidies they receive. For examples, subsidies have sometimes been justified in order to maintain the ideal of small scale fishing and farming. However, even when such ideals may reflect legitimate policy objectives, subsidies are not necessarily the most effective means of attaining them, particularly if they have adverse effects on the environment.

13 OECD work on environmentally-damaging subsidies has excluded “indirect subsidies” in the form of non-internalised externalities — which are important in the energy sector. In the case of nuclear technologies, the Nuclear Energy Agency (NEA) — in its 2003 report *Nuclear Electricity Generation: What are the External costs* — argues that established mechanisms largely internalise the potential externalities (financial liabilities due to decommissioning, health and environmental impacts of radioactivity releases in routine operations, radioactive waste disposal and effects of severe accidents) of nuclear technology. More generally, NEA has increasingly oriented its work programme to include studies of the key aspects of nuclear technology (economics, nuclear safety, radioactive waste management) which influence its credentials as a sustainable technology. Specific studies have also been completed on the societal acceptance of nuclear technology, and on the implications of the Kyoto Protocol for the deployment of nuclear energy. Ongoing studies are addressing the infrastructural aspects of nuclear energy, the role of governments in respect of it, and the comparative economics of all electricity-generating options

- *Competitiveness and distributional concerns.* Despite the demonstrable benefits from unilateral subsidy reform, policy makers are often reluctant to undertake such reforms unless forced to by either economic or environmental crisis, or in response to external pressures (such as might occur through new multilateral or regional trade agreements). Similarly, distributional concerns (including concerns over regional interests) can inhibit moves to reform subsidy programmes. In this regard, there is scope for learning from experiences with other policy reforms such as higher environmental taxes, privatisation of state-owned enterprises, and tariff reform.
- *Legal, administrative and technological constraints.* Such constraints can result from structural rigidities that restrict the ability of society to adapt to subsidy reforms. For example, restrictions on the sale, amalgamation or sub-division of farming land in some countries may restrict the ability of farmers to alter their farming practices in response to changes in subsidy policy. Constraints can also result from technological factors, as in the case of transport where the introduction of electronic charges based on marginal costs for passenger cars is impeded by the huge cost and technological challenges involved.
- *Establishment of a culture of “entitlement” to subsidies.* Long-term provision of subsidies generates perceptions of “entitlement” that may be hard to break, as they become capitalised into the prices of factors of production (for example, in the value of land, fishing vessels and catch quotas). The expectation that subsidy programmes will continue can also become embedded in the expectations of producers and consumers.

76. A multi-pronged strategy is required to overcome these obstacles to reform. Challenging the misconceptions surrounding the provision of subsidies to particular sectors will contribute to changing the terms of the policy debate. Recognition that a range of options is available to meet societal objectives is also important, as it contributes to the recognition that subsidies are generally inefficient tools for achieving policy goals. Other ingredients of successful reforms include the diffusion of innovative schemes;¹⁴ better targeting of existing subsidies; and improved subsidy design, to improve the efficiency of subsidies granted to correct environmental problems — although they may violate the polluter pays principle.

77. Political economy considerations are crucial for successful reform. Windows of opportunity which may enable governments to undertake reform should be seized when they materialise, rather than waiting for crisis to strike a sector or a country. In some countries, reforms have been driven by the need to respond to a fiscal or environmental crisis (e.g. reforms of fisheries subsidies in Canada) while in others they have been part of wider economic reforms (e.g. reform of agricultural subsidies in New Zealand). In yet other countries, a confluence of political forces agreeing on the need for change were the major factors in driving policy reforms (e.g. Sweden).

78. In all cases, a major factor in the push for reform of environmentally harmful subsidies is increased transparency. Transparency can stimulate voter opposition to subsidies and make subsidy reform less politically harmful for governments. In this regard, identifying who benefits from subsidies, and highlighting their relative “bargaining power”, can provide a powerful motivating force for change. A good example is agriculture, where analysis of who receives and who benefits from subsidies, both in terms of income levels and location, has strengthened the determination of some countries to reform subsidy programmes. Structural impediments and rigidities in the legal and administrative framework should also be addressed. This requires a holistic approach to policy, as such impediments may not always be apparent when designing reform packages, and assessment of the administrative and geographical level at which the subsidy is provided. Transitional measures may also be required when phasing out or reducing subsidies.

14 For example, the “Bush Tender” pilot programme in Australia is an auction scheme to compensate landholders who enter into agreements to provide management services that improve the quality or extent of native vegetation on their land.

Such measures involve not only payment or compensation to assist in structural change, but also the provision of information, advice and retraining to affected workers and businesses. The appropriate speed of adjustment will depend on the resilience of the community to change and on the availability of alternative sources of employment and income. Finally, subsidy reform should be considered within the overall context of the economy. For example, increased competition and the opening up of economies to international forces may reduce the lobbying power of special interest groups and create opportunities for reforming environmentally harmful subsidies.

Environmentally related taxes

79. Taxes are key instruments for environmental policy and to promote sustainable development, with high effectiveness and efficiency, and a proven track record. Their broad application could, *inter alia*, help addressing the climate change issue at lowest possible costs for society. While some form of environmentally related taxes are in use in all OECD member countries, a number of countries have substantially extended their use since the early 1990's, often as part of a revenue-neutral environmental tax reform, combining for example increases in energy taxes with reductions in social security contributions.

80. Under the auspices of the Joint Meetings of Tax and Environment Experts – an initiative of the CFA and EPOC – a considerable amount of work on environmentally related taxes has been carried out since 2001, with particular focus on the competitiveness and income distribution issues. Following the release in 2001 of the OECD publication *Environmentally Related Taxes in OECD Countries: Issues and Strategies*, which developed a framework for analysing the obstacles to greater use of environmental taxes, the focus of later work has been on putting this framework into practice.¹⁵ This choice of focus was based both on findings of previous OECD work on environmentally related taxes and on a survey of member countries' perceptions of what represents the most important "obstacles" to a more wide-spread use of such taxes. Work undertaken since 2001 includes a model-based study of potential impacts on the steel sector of greater use of environmentally related taxes (or emission trading) to address carbon emissions; an international conference in Berlin in 2002 on ways of addressing concerns over international competitiveness and income distribution; and case studies in specific sectors.^{16,17}

81. One of the main outputs from work undertaken by the Joint Meetings of Tax and Environmental Experts is the maintenance of a database on environmentally related taxes and other economic instruments, accessible on the OECD website. While the revenue from environmentally related taxes increased significantly in some countries between 1994 and 2001, proceeds declined on average since 1999. The

15 Other outputs of the work include: *i*) the study "Environmental Taxes and Competitiveness: An Overview of Issues, Policy Options, and Research Needs", prepared by Professor Stephen Smith, COM/ENV/EPOC/DAFFE/CFA (2001)90/FINAL; *ii*) the study "Environmental Policy in the Steel Industry: Using Economic Instruments", prepared by Dr. Ottar Mæstad, COM/ENV/EPOC/DAFFE/CFA (2002)68/FINAL; and *iii*) the Secretariat paper on "Distributive Impacts of Environmentally-Related Taxes" COM/ENV/EPOC/DAFFE/CFA(2002)75.

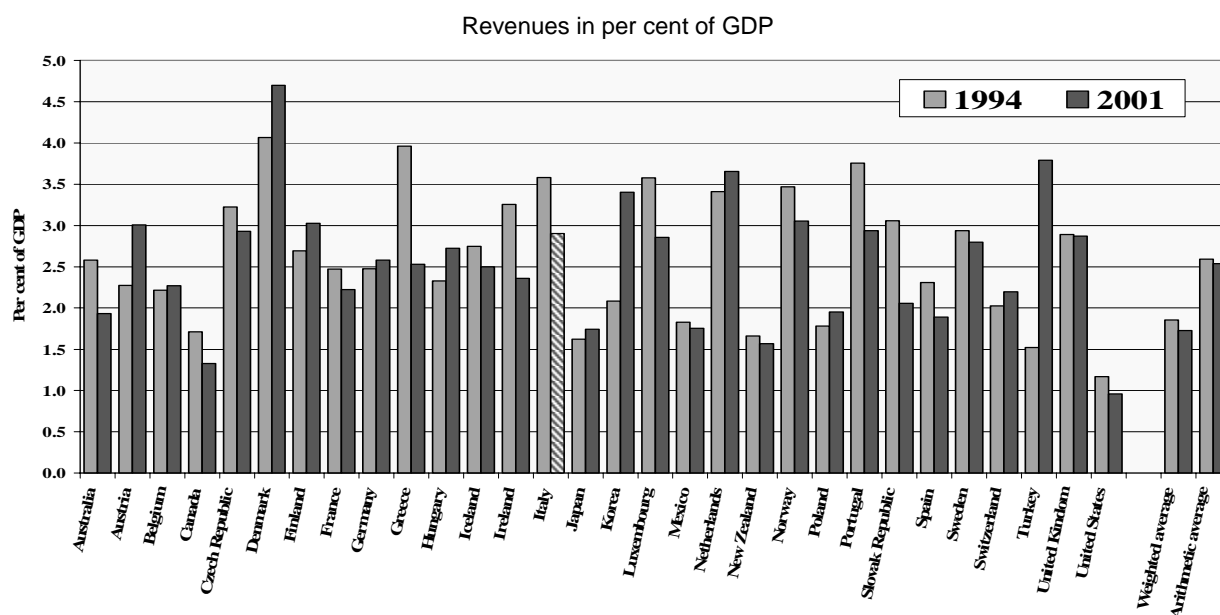
16 Case studies have examined the climate change levy in the United Kingdom; the ozone depleting substances tax in the United States; the distance and weight-related tax on heavy goods vehicles in Switzerland; and the manure accounting and trading system in the Netherlands. While the number of cases in which environmentally related taxes have been applied to major productive sectors are few, these cases were developed with a view to providing guidance to other countries as to how concerns about international competitiveness and distributive effects can be overcome in practice.

17 Work on the implementation of tradable permits was also pursued by the Environmental Policy Committee through Strategic Guidelines; a review of recent developments with the use of tradable permits at the domestic level; and analysis of how tradable permits may be used in combination with other policy instruments. A review of *ex post* evaluations of tradable permits will be published in 2004.

decline, in nominal terms, across the countries shown in Figure 1, is of around 8% in the three years to 2001, with approximately a third of this fall due to lower revenues from sales of petrol. Most of this decline occurred in Europe following the spike in oil prices over this period and associated declines in petrol use. The increase in world prices for motor fuels led some European governments to lower the tax rate per litre for such fuels in order to stem protests from motor vehicle users.¹⁸ This decline in revenues from environmentally-related taxes can be seen as underlining the potential of price-based instruments to lead, even over a relatively short time period, to significant changes in demand for a product that is often considered as being rather inelastic with respect to prices. In other words, significant behavioural changes can be achieved through the application of appropriate tax rates — or through tradable permit systems that create similar price incentives.

82. Many of the concerns related to greater use of environmental taxes relate to fears about the competitiveness of affected firms and industries.. However, there is little evidence that environmentally related taxes have caused significant declines in the international competitiveness of any sector in any member country to this day.¹⁹ This conclusion must, however, be qualified by the many exemptions and tax rate reductions currently granted to sectors most exposed to international competition. As industry, in most cases, pays very modest amounts in environmentally related taxes, significant competitiveness impacts should not be expected. Moreover, these concerns must be balanced against the main goal of environmental reforms: to protect the environment by way of encouraging substitution away from harmful products/processes. [Concerns about the undesired effects of these taxes on poverty and income distribution are discussed in paragraphs 101-105]

Figure 1. Revenues from environmentally related taxes



Source: OECD database on environmental taxes.

83. The environmental improvements might involve cutbacks in output and even plant closures. These effects are normally part of the economy's adjustment to a new structure that efficiently reflects the need for environmental improvements. However, in the short term, they can sometimes create political

18. On the other hand, the tax rate per litre on petrol was *increased* in this time-period in several other European countries, in spite of the increase in world market prices for petrol products.

19. OECD (2001), *Environmentally Related Taxes in OECD Countries: Issues and Strategies*, Paris.

opposition that undermines support for the environmental taxes. In these cases, policy makers could consider combining market-based approaches, such as environmental taxes, with time-limited compensating mechanisms. Unfortunately, the relieving mechanisms most often used — exemptions and differentiated rates to protect business — are generally the least attractive options in terms of impacts on environmental goals, as they tend to ‘lock-in’ polluting processes and lead to higher overall abatement costs. Better options might be to combine environmental taxes, applied at their full rate, with compensation to industries for the additional costs of production associated with the taxes.

84. This could be done by recycling part of the revenues from environmental taxes back to industry, for example by lowering other taxes or by providing non-wastable tax credits or cash transfers. The extent of the recycling required to offset higher production costs will depend on the sensitivity of supply and demand to the taxes, and will in general be well below the amount of total taxes raised. In designing a recycling mechanism, a key consideration is to maintain incentives to abate (pollute less). Even so, revenue recycling can be expected to result in fewer plant closures, and thus less pollution abatement. For example, simulations of revenue recycling of an OECD-wide carbon tax applied on steel production show a significant dampening effect on not only OECD steel output but also CO₂ emissions. However, the exact design of the recycling mechanism and the industry structure will be influencing factors. For example, if a sector consists of many firms with largely varying emission intensities, and if a uniform refund per produced unit is applied, the less-polluting firms can be expected to fare better than the more-polluting (smaller net tax burden, smaller output contraction). In all cases, when considering alternative compensation strategies, policy-makers should carefully select approaches that will not run against domestic laws or other legal constraints.

85. The discussion of ways to address competitiveness concerns, point to a number of general paths for progress. First, gradual implementation of new or increased taxes will often be useful to ease resistances. Second, implementation can be facilitated through the involvement of stakeholders — trade unions, employers’ associations, environmental NGO’s — for example through the establishment of green tax commissions gathering relevant ministries, experts, etc. While each country will decide on its own how best to use revenues, many countries have found it useful to implement new or increased environmental taxes in the context of revenue-neutral reforms that also include the reduction of some other tax (see also paragraphs 95 to 99). Environmental tax reform must be considered within the context of the fiscal budget, and alongside other tax reform measures which — as a package — aim to provide a competitive business environment, support job creation and ensure an equitable sharing of resources. The examples of successful environmental tax reform strategies illustrate how each of these facets must be factored in, and that their role within the optimal strategy of each country will depend on its special circumstances.

CHAPTER 5. SOCIAL ASPECTS OF SUSTAINABLE DEVELOPMENT

Main activities

86. The notion of sustainable development translates the recognition by the international community of the need to reconcile the protection of global environmental commons with domestic priorities for economic and social development. Which “social aspects” are more relevant for sustainable development discussions depends on the context. At the global level, discussions about the social aspects of sustainable development call attention to the collective responsibility of the international community, and of OECD countries in particular, to reduce absolute poverty and to shape globalisation to the benefit of the world’s poor. At the level of individual OECD countries, two sets of issues are encompassed under the heading of social aspects of sustainable development. The first relates to the relationship between social and environmental conditions, and to the scope for policies capable of delivering progress in each dimension. The second relates to the conditions that are required for economic and social development to move in sympathy, so that changes in one dimension do not lag those in the other. The first two of these activities have been carried out in the context of the regular work programme of individual directorates, with no involvement of the Ad Hoc Group on Sustainable Development. The third activity, while also being carried out by a single directorate, has its origin in the 2001 Ministerial mandate, was financed out of central resources and discussed by the Ad Hoc Group.

Key results

Shaping globalisation to the benefit of the world’s poor

87. While globalisation is a key feature of today’s life and a major driver of economic growth, it also raises fears. These fears have often their roots in perceptions of a widening in inequalities of living conditions within and across countries, or that the size of these differences is too large. The promotion and implementation of sustainable development has been one way in which the international community has responded to these concerns. Reducing absolute poverty, which is mainly concentrated in developing countries, is today the overarching goal of international co-operation, and has come to occupy a prominent role within the sustainable development agenda. The development priorities of the poorest countries have dominated discussions at the 2002 World Summit on Sustainable Development as much as global environmental considerations did at the Earth Summit in 1992. In this context, the sustainable development agenda has become increasingly intertwined with other policy processes focused on poverty and development such as the UN Millennium Development Declaration, the Monterrey Consensus on financing for development, and the Doha Development Agenda.

88. Making globalisation work to the benefits of the world’s poor requires coherent policies by OECD countries in a range of fields. OECD activities that are relevant to this issue include work by the Development Co-operation Committee, the Trade Committee, and the Committee on International Investments and Multinational Enterprises. It also includes horizontal work, initiated following a 2002 mandate from OECD Ministers, to promote greater integration of “development” concerns into the work of other OECD sectoral committees. Work by the Round Table on Sustainable Development on indicators to monitor how far and fast the international commitments of OECD countries with respect to developing

countries is also relevant here. “Improving living standards in developing countries” is also one of the seven issues pursued by Economic and Development Review Committee, whose findings are summarised in a previous section of this report.

Development co-operation, poverty and sustainable development

89. Bilateral assistance provided by donors is a key leverage for poverty reduction and sustainable development. To improve co-ordination between development agencies, and to better integrate their programmes with partner country’s development strategies, bilateral agencies of donor countries have developed a set of guidelines on “poverty reduction” and on “strategies for sustainable development”. These guidelines, which were endorsed in 2001 by the High Level Meeting of the Development Assistance Committee, define an action agenda for the bilateral community in this field. This work has been further pursued in 2002 with the adoption of a set of guidelines on poverty and health.

90. Health is central to poverty reduction in developing countries. The poor suffer worse health conditions and die younger than other individuals. They experience higher-than-average rates of child and maternal mortality, higher levels of diseases, and more limited access to health care and social protection. The DAC/WHO guidelines on poverty and health provide a framework for action by donors within the health system of developing countries, as well as in areas — such as water, sanitation, food security, education and the environment — that critically influence the health of the poor. They point to the importance of leveraging donor efforts to strengthen the capacity of the public sector to act as regulator, purchaser and provider of health services, and to develop a health systems tailored to the needs of the poor. At the domestic level, the guidelines stress the importance of placing health-interventions within the context of broader governance reforms, with priority given to those diseases that affect the poor disproportionately. At the international level, they point to the importance of greater medical research and development focused on diseases that most affect the poor (diseases that account today for less than 10% of global funding of health research), and of efforts to stem cross-border spread of communicable diseases.

91. The relationships between environment and social aspects, such as poverty, are especially evident in developing countries. For rural households, many environmental resources are direct sources of food, fodder and building materials. The urban poor are less directly dependent on natural resources, but are disproportionately exposed to air and water pollution, and other types of environmental hazards that critically affect their health. Moreover, it is also clear that women have special roles with respect to the maintenance of life-supporting environmental resources, and that their empowerment holds the key to reducing population growth and poverty, and improving children’s health and natural resource management. Work by the Development Co-operation Committee on the linkages between poverty, gender and the environment has highlighted that many of the drivers of poverty and environmental degradation have their roots in policies and regulatory frameworks that prevent the poor, in particular women, from developing their capabilities and potential. For example, laws that reduce women’s ability to obtain tenure of land can create insecurity and poverty, but also undermine incentives to shift towards more sustainable production patterns. This work has laid the basis for more detailed analysis of the links between health and poverty, and between local and global environmental issues pursued by the Committee.

92. The environmental threats that undermine the resource base on which the poor depend are not only local but also global. Climate change is projected to results in lower precipitation in arid and semi-arid areas, aggravating land degradation, reducing livelihoods, and increasing the threats of hunger and famine. Biodiversity loss threatens ecosystem goods and services that are important for agricultural production, and reduce the capacity of the rural poor to adapt to changed conditions. Desertification deteriorates the quality of natural resources, forces poor people to encroach further on fragile soils and limited water resources, and fuels involuntary migration out of the affected lands. Although a legal framework exists at the international level to address these environmental threats, concrete follow-up

measures at the domestic level are often lagging, especially in the poorest countries where these environmental threats are often perceived as having little consequences for poverty reduction. The “Guidelines on Integrating the Rio Conventions in Development Co-operation”, approved by the Development Assistance Committee in 2002, provide practical guidance to donors on the actions that they can take to foster the integration of global environmental threats into poverty reduction strategies. The analysis that supports these guidelines has highlighted that many of the measures needed to take global environmental threats into account are consistent with those aimed at reducing poverty. It also suggests that possible conflicts among different priorities that may arise in the short-term are better handled through participatory processes that involve all stakeholders and give a voice to the concerns of the poor.

93. Work is currently being pursued jointly by the OECD Development Assistance Committee and the Environmental Policy Committee on the linkages between development and climate change adaptation. This ongoing work — which draws on a number of detailed case studies (Bangladesh, Nepal, Tanzania, Egypt, Uruguay and Fiji) and is partly financed out of voluntary contributions provided by countries in the context of the sustainable development project — reviews the expected impacts of climate change in these countries, assesses the attention devoted to these effects by plans and projects in sectors and regions most vulnerable to climate change, and considers the trade-offs involved in integrating specific adaptation measures into these projects. This project has also contributed to the report *Poverty and Climate Change*, co-authored by the World Bank, OECD and eight other bilateral and multilateral development agencies. Work by the Development Assistance Committee is also looking at the scope for policies capable to both improve environmental management in developing countries, and to contribute to poverty reduction — by improving poor people’s access to environmental services, addressing environmental problems that affect the poor, and generating revenues that could be used to finance investments that will benefit them. Drawing on OECD analysis of economic instruments for environmental management described above, this work reviews developing countries’ experiences with environmental-fiscal reforms, with focus on specific sectors of particular relevance to these countries (e.g. forestry, fisheries, water and energy) and on the preconditions for successful implementation.

Foreign investment and sustainable development

94. Because private international flows related to investments and trade dwarf official flows, a key priority is to leverage private decisions in ways that better support sustainable development of the poorest countries. Multinational enterprises, like other parts of the business sector, have a crucial role to play in promoting sustainable development. While their “core” goal is to undertake profitable investment — and, in so doing, create jobs and provide goods and services that consumers want to buy — multinational enterprises also have broader responsibilities. They must obey the law (not necessarily an easy task for the many companies that straddle dozen of countries and thousands of legal and tax jurisdictions), and respond to “softer” societal expectations that are not written down in law books. Work by the Committee on International Investment and Multinational Enterprises shows that multinational enterprises have invested heavily in learning how to comply with legal and “softer” norms. OECD work seeks to encourage further progress in this area by promoting the OECD *Guidelines for Multinational Enterprises*, in partnership with business, trade unions and non-governmental organisations.

95. The Guidelines — which refer to sustainable development as a core concept — are recommendations addressed by 38 (OECD and non-OECD) countries to multinational enterprises operating in and from their territories. They define standards for responsible business conduct in areas such as human rights, employment and industrial relations, product safety, environmental management, supply chain responsibilities, disclosure of major risks and competition. While observance of the Guidelines by companies is voluntary, the adhering countries are formally committed to promoting them among multinational enterprises based in them. The most concrete expressions of this commitment are the “national contact points” — government offices that promote and oversee their implementation.

96. Since their Review in 2000, progress in implementing the Guidelines has been significant. They have been used to address such issues as human rights abuses in Myanmar, population resettlement in Zambia, and labour standards in India and Guatemala. Although Guidelines implementation is still in progress, the annual cycle of reporting suggests that they are beginning to make a difference — some “national contact points have encouraged corporate head offices to pay more attention to what their subsidiaries are doing in host countries; embassy networks are being used to monitor corporate performance and increase transparency of their operations; information from non-OECD non-governmental organisations has been made available to OECD governments. The Committee on International Investments and Multinational Enterprises, the “national contact points” and other partners are working to consolidate progress in the implementation of the Guidelines.

97. Beyond direct investments, financial flows are an important vehicle for promoting sustainable development. In the past few years, emerging market economies have gained enlarged access to global capital markets, and collective investment schemes (e.g. mutual funds and unit trusts) are a major source of financing for countries such as China, India and Indonesia. The OECD assist many emerging economies in developing the institutional and regulatory infrastructure to take advantage of expanding opportunities in world financial markets while protecting themselves from the vulnerability that may accompany larger capital movements. In order to limit their legal liability and enhance their reputation, institutional investors have to consider the social and environmental consequences of investing in markets where environmental and labour standards may be below international ones. They work towards these goals typically through policies to assure that they operate in accordance to the laws and regulations of host countries, but also through voluntary screening procedures to ensure conformity with social and environmental standards that go beyond legal requirements. The social and financial dimensions of financial flows have been addressed in the past by the OECD Committee on Financial Markets, and are part of the ongoing analysis of financial markets performed by other OECD bodies.

Trade and sustainable development

98. The special needs of developing countries are at the top of the WTO agenda for trade negotiations. The OECD is supporting trade negotiations through analytic work on a wide range of topics, as well as through activities specifically designed to help developing countries to make the most of the benefits of globalisation. Recent activities in this field include work to identify the benefits that can accrue from trade facilitation measures, and to highlight how these can be harnessed to promote development objectives; analysis on the contribution of trade policy to the financial stability of developing countries, particularly in the case of countries eligible to the IMF and World Bank debt initiative for “Heavily Indebted Poor Countries”; and the development of tools to monitor implementation of the technical assistance commitments made at Doha.

99. Access to markets in developed countries is crucial for developing countries. A modelling exercise conducted by the OECD Trade Directorate shows that, under a range of scenarios for multilateral cuts in tariffs, one half or more of the potential welfare gains to developing countries comes from increased exports by developing countries to the OECD area.²⁰ Model results also indicates that developing countries could boost their welfare gains substantially through their own participation in tariff cuts, a move that would stimulate domestic markets and promote South-South trade.

100. Work has also been undertaken to identify examples of service exports of special interest to developing countries, and to quantify the benefits of service trade liberalisation for them. This work shows that developing countries have important interests in service exports beyond “mode 4” (temporary

20 For example, under a full tariff liberalisation scenario, yielding potential gains of USD 68.5 billion for developing countries, about USD 54 billion of the gain is attributed to developed country liberalisation.

movement of persons supplying services), being significant players in business (out-sourcing), port and shipping, audiovisual, telecommunications, construction and health services. Quantitative studies on the gains from services liberalisation document that for most countries, including many developing countries, export-related welfare gains from services liberalisation are neither the only nor the largest basis of expected gains. A large share of benefits from services liberalisation derive, not from better market access abroad, but from the increased competitiveness and efficiency of the domestic market.

101. Progress in agriculture is crucial for ongoing trade negotiations to become a true “development round”. Agricultural trade reform can contribute significantly to the growth of those developing countries that stand to gain from greater market access and lower export subsidies in rich countries, but need to be complemented by measures to soften the negative effects on those developing countries that are net food importers, and who may face higher food import bills following reforms (see also paragraph 58). Recent OECD work has focused on the links between agricultural trade reform and poverty in developing countries. This work underlines OECD countries’ commitment to consider the effects of their own policies on the world’s poor, and the importance for developing countries of combining policies that both reap the long-term benefits of trade and mitigate the possible short-term consequences of these policies on the poor.

102. Export credits provided by OECD countries are also important leverages for sustainable development. In July 2001, the OECD's Working Party on Export Credits and Credit Guarantees (ECG) adopted a “Statement of Principles on Officially Supported Export Credits to the Heavily Indebted Poor Countries (HIPC)” recognizing the potential impact of export credits on the external debt burden of the these countries. By agreeing that export credits should only be provided for “productive” purposes (e.g. for transactions that are consistent with these countries’ poverty reduction strategies), ECG Members have accepted responsibility for ensuring that their activities in support of national exporters do not undermine the development objectives of HIPCs.²¹ On the environment side, the OECD Council approved in December 2003 the “Recommendation on Common Approaches on Export Credits and the Environment”, which apply more stringent disciplines than those agreed in 2001.²²

Policy coherence for development

103. The OECD policies that affect the development prospects of the poorest countries go beyond development assistance, foreign investments and trade, but extend to migration, technology transfers, and a range of sectoral measures that impinge on the development prospects of poor countries. To focus on this broad range of channels, the OECD launched in 2002 a project on “policy coherence for development”. The project involves a range of activities to increase the visibility of a “development” perspective within the sectoral agendas of several OECD committees, to improve understanding of how OECD countries’ policies impact on developing countries, and to build political support in capitals on this agenda.²³

21 On an annual basis, ECG Members exchange information on transactions supported by official export credits to the HIPCs, which is publicly disseminated (at an aggregate level). This reporting mechanisms highlights that, to date, official export credit to HIPCs are not large in size, and that such support is consistent with the ECG's “Statement of Principles”.

22 The OECD Recommendation strengthen previous discipline, by requiring that Members classify all projects they support when their share in such projects is above a *de minimis* threshold, as well as projects in sensitive areas — irrespective of the share of export credits in such projects. For the most sensitive projects, Members agreed to require that an “Environmental Impact Assessment” be carried out, and to make such environmental impact information publicly available at least 30 days before a final commitment on the project has been taken. The Recommendation also specifies that international environmental standards should be applied if they are more stringent than the local ones, and that deviations below these standards be justified before the OECD Working Group on Export Credits and Credit Guarantees.

23 An overview paper is currently being reviewed by various OECD committees. Work on fisheries, to be completed in 2004, will provide early results in terms of methodology and impacts of OECD policies on a

“Coherence” issues will also be part of the forthcoming reviews of development effectiveness to be undertaken jointly by the OECD and the Economic Commission for Africa, in the context of the “New Partnerships for Africa’s Development” (NEPAD) initiative.

104. Taking a broad view of the range of OECD policies bearing on the development’ prospects of the poorest countries is all the more important as current policies significantly reduce the “net” resource transfers towards developing countries. While the difficulties that hamper the statistical quantification of these effects are many, work undertaken by the Round Table on Sustainable Development is suggestive of their scale. For example, notwithstanding increasing awareness of the importance of remittances by foreign workers for poor countries, estimates suggest that most remittances from OECD countries move to other developed countries; and that most remittances received by non-OECD originate from within that region. Similarly, despite awareness of the importance of foreign direct investments for the development of poor countries, less than 15% of these flows benefit countries outside the OECD region. This runs against OECD countries’ commitments on private foreign investments, as embodied in the Monterrey Consensus on Finance and Development, and is a cause of concern when account is taken of the decline of this share over time, and of significant repatriation of profits that these investments generate. These examples flag the importance of better statistical information to highlight the interconnectedness of OECD and developing countries, and the impacts of policies of each OECD country on the prospects of achieving sustainable development at the global level.

Exploring the links between social and environmental aspects

105. Links between social and environmental aspects are also important, although less investigated, in OECD countries. This importance is reflected in the “OECD Environmental Strategy for the 1st Decade of the 21st Century”, adopted by OECD Environmental Ministers in May 2001, which identified “enhancing the quality of life” through greater focus on the social-environment interface as one of its five strategic goals. To support progress towards this goal, the Environmental Policy Committee has included in its work programme a range of dedicated activities on the relationship between the environment, on one side, and employment, equity and children’s health, on the other. Chapters on the social-environment interface are also included within the second cycle of the OECD Environmental Performance Reviews of individual countries. While such work has not involved the Ad Hoc Group on Sustainable Development, it is referred to here as is central to the OECD response to the 2001 Ministerial mandate. Lessons from the work of the Environmental Policy Committee on the social-environment interface are grouped under three headings.

Environment and employment

106. The effects of environmental policies on employment can be either positive or negative, depending on the sectors considered, the time frame over which they materialise, and the channels (direct or indirect) that are considered. To improve understanding of these effects, activities undertaken by the Environmental Policy Committee have aimed to extend the empirical information and analysis provided in

global resource that is crucial for many developing countries. This will be followed by similar work in the areas of agriculture, trade and migration. A regional case study, whose results will be discussed at an international seminar in June 2004, examines concrete impacts of OECD countries policies on Asian developing economies [OECD (2003), *The Impact and Coherence of OECD Country Policies on Asian Developing Economies*, Paris].

the past.²⁴ This new work has mainly focused on the *economy-wide* impacts of environmental policies on employment, with special focus on policies towards climate change.²⁵

107. Environmental policies may directly encourage job-creation in environmentally-related activities pursued by the private, public and not-for-profit sector. According to OECD estimates, the sector producing environmental goods and services account today for a small but not negligible share of total employment, ranging between 0.4% and 3.0% across OECD countries, and between 1% and 1.5% in most of them. These figures are lower-bound estimates, as they often exclude jobs in the public and third sector, as well as job creation in other sectors due to the expansion of the sector producing environmental goods and services. While the ongoing OECD work to quantify the employment size of this sector has extended the coverage of these data, it also highlights the large differences in the methodologies used by Member countries in this field, and the importance of developing a common framework for data collection.

108. Most discussions on the employment effects of environmental policies focus on job losses that occur in the firms that most contribute to environmental damage, losses that are often concentrated in specific sectors and regions and that are especially visible in the short run. Environmental policies, however, may affect employment also in positive ways, depending on their design and on the ways in which revenues generated by some of them, such as taxes or auctioned tradable permits, are used to finance higher expenditure or lower other taxes. For example, the possibility that employment may rise when the revenues from economic instruments for environmental protection finance lower payroll taxes and labour costs has been intensively discussed in the past. Recent work conducted by the Environmental Policy Committee has reviewed the main environmental tax-reforms introduced by OECD countries in the second half of the 1990s, and assessed their potential employment implications.

109. The evidence gathered in the context of this work suggests that environmental measures introduced in the context of more comprehensive tax reforms might lead to modest net employment gains, especially when targeted at low-wage earners. These reforms have taken a variety of forms. While in some cases, the revenue from environmental taxes have been used to reduce labour (e.g. Germany and Sweden) and income taxes (e.g. Netherlands), in others cases they have financed higher environmental expenditures or active labour market programmes targeted to workers most affected by environmental measures. In most cases, however, the net employment gains of these “top-down” measures appear to have been very small and temporary, as labour costs increase in the longer run as a result of higher employment.

110. Recent OECD work on the employment effects of environmental policies has given special attention to local initiatives aimed at integrating environment and employment objectives. These initiatives have become more common in several OECD countries in recent years, and they range from small networks of enterprises to large multi-sector partnerships involving different stakeholders. Despite their increasing use, data allowing for a thorough assessment of these approaches are scarce. Evidence suggests that the positive employment contribution of these local initiatives is limited, and that these initiatives are best viewed as complements, rather than substitutes, of the more conventional top-down approaches.

Environment and equity

111. Equity concerns affect the design and implementation of environmental policies because of disparities in both the distribution of environmental quality (e.g. in terms of exposure to environmental

24 OECD (1997), *Environmental Policies and Employment*, Paris.

25 “Draft Synthesis Report on Environment and Employment”, [ENV/EPOC/WPNEP(2003)11]. Evidence of the likely employment impact of policies towards climate change, under different assumptions about labour market flexibility, was also addressed in OECD (1999), *Action Against Climate Change: The Kyoto Protocol and Beyond*, Paris.

risks, or access to natural resources, among different groups) and in the ways the financial consequences of environmental policy (e.g. higher prices of necessities) affects different groups of the population. As the latter effects are more visible than the former, social considerations are often used to delay the introduction of more ambitious environmental policies (see paragraph 71). In the context of a new activity launched by the Environment Policy Committee in 2001, a workshop was held in Paris on 4-5 March 2003, to focus on the conceptual frameworks that may be used to analyse the distributional effects of environmental policies, on the empirical evidence on their size and nature, and on policy implications.²⁶ Proceedings of this workshop are in the process of publication.

112. While differences in the impacts of environmental conditions and policies on individuals can be analysed along a variety of dimensions (such as age, place of residence, ethnicity), most empirical work has focussed on distribution according to levels of household income or wealth. The workshop widened the scope of previous work in a number of ways, in particular by addressing simultaneously the distribution of environmental quality and the distribution of the financial impacts of environmental policies; and by considering the distributional effects not just of economic instruments but also of other measures.

113. The evidence suggests that low-income households are often disproportionately exposed to environmental risks (e.g. exposure to hazardous waste facilities). It is however difficult to generalize these findings, as much of the literature is limited both geographically and in respect to the environmental factors considered (which scarcely addresses exposure to noise and access to environmental amenities). Evidence tends to be stronger as it relates to the costs of environmental policies, with most country evidence indicating that these costs fall relatively more heavily on lower-income households. Most of this evidence refers to economic instruments and in particular to environmental taxes. However, regulations may also have distributive implications.

114. Equity concerns have come to play a more important role in the design of environmental policies in several OECD countries. There are however large differences in the ways in which countries have responded to such concerns. As in the case of measure dealing with possible effects on international competitiveness (paragraphs 72 to 75), policy options available to governments include actions aimed to mitigate *ex ante* the impacts on low-income households (e.g. tax exemptions and rebates, capped tariffs, ‘tapering’ provisions that reduce the level of relief as household income increases) or to compensate them *ex post* (e.g. tax refunds, reduction of other taxes, financial help to low-income households), as well as general measures that might benefit low-income households incidentally. Policy choices on how to respond to these equity concerns are also constrained by the timing of policy action, the determinants of disparities, and the type of environmental policy instrument used.²⁷

115. This OECD work on the environment and equity has highlighted three main conclusions. First, although many environmentally-related taxes tend to fall more heavily on low-income households, *all* environmental policies are likely to have distributional impacts: while these effects have a greater “visibility” in the case of economic instruments, they can also be important in the case of direct regulations. Second, though the distributive burden of environmental policies is generally assessed only in terms of direct effects, taking into account indirect effects (e.g. the effect of a carbon tax on the price of manufactured goods, or the effects of how revenues are “recycled” in the economy) may have significant implications on results. Third, policymakers confront important choices when considering how best to respond to these equity concerns. In particular, they need to consider simultaneously how different groups of individuals will be affected by both the burden of environmental policies and by changes in

26 “Draft Synthesis Report on Environment and Distributional Effects”, ENV/EPOC/WPNEP(2003)12.

27 In particular whether or not there is a potential for revenue raising when implementing the instrument, as in the case of economic instruments such as taxes or auctioned tradable permits; and how precisely this revenue is recycled – for instance through reductions in different tax rates or earmarking of expenditures.

environmental quality (both directly and indirectly, i.e. through changes in real estate markets). In addition, when introducing measures to mitigate these distributive impacts, policy-makers need to retain the incentive effects of the environmental policy.

Environment and children's health

116. Concerns about the effects of environmental degradation on children's health loom large in a range of recent initiatives undertaken by international organisations and OECD countries. To help policymakers identify how environmental conditions may lead to health and safety risks that largely affect children a workshop was held in Paris on 11-12 September 2003. The workshop aimed to take stock of methodological advances in empirical studies to value these effects, to identify issues confronting policymakers in different countries, and to highlight general policy questions.

117. The set of environmental factors that can impact on the health of children is large. It ranges from air pollution in urban areas, to toxic and carcinogenic substances present in water, food and the environment. Some of the health pathologies that derive from these environmental risks are specific to individual countries, while others are global — as in the case of asthma and other respiratory pathologies, whose incidence among children have increased in many OECD countries. The health effects of environmental exposure are often specific to children, and may lead to acute and chronic impacts. Because they accrue over a longer number of years, benefits from improved children health that may follow from better environmental conditions can also exceed those occurring to adults.

118. Because of the difficult methodological problems that they raise, only few economic studies have valued the benefits of reducing environmental hazards in terms of improved health of children. Despite this lack of data and of epidemiological research, policymakers are asked to set priorities among different goals and to make decisions on the most suited instruments to attain them. In the case of policies affecting children health, this raises questions on whether the policies in place adequately reflect differences in health effects between adults and children. Moreover, because of the different methodologies used to value these health effects, comparability of results across sectors is very limited. Three possible problems arise:

- The priority given to reducing specific types of environmental risks is often established based on adult health responses to such risks. However, existing epidemiological research is an inappropriate guide for the environmental effects on children's health, and this may lead to sub-optimal allocation of governments' investments.
- The standards that are set for emissions or concentrations of specific environmental media are often based on their impacts on adults. However, these impacts may be quite different from those for children. Ignoring these differences may lead to standards being set at a wrong level, for example in terms of the maximum allowable level of emissions of air pollutants.
- The allocation of resources among alternative policies may turn out to be imbalanced. This is a specific concern in terms of the allocation of resources between policies targeted at improving environmental conditions and those targeted at health sector interventions, with perhaps excessive focus on curing the health problems generated by environmental hazards rather than on preventing the environmental problems in the first place.

119. The discussion among participants at the workshop underscored the need to support and encourage further research on children's health, in both the economic and the epidemiological fields. Better data and research are needed to inform policies on which environmental risks pose the greatest

threat to children's health, and on the measures with the largest pay-off. In the absence of such information, inefficient policy decisions are likely to be undertaken.²⁸

Sustaining social well-being in OECD countries: the role of social protection

120. Concerns about the “social aspects” of sustainable development often have their root in the perceptions that progress in social development is lagging economic gains. This may happen when the benefits of economic growth are unequally shared in society and some groups have neither the resources nor the opportunities to benefit from it. Following the 2001 Ministerial mandate for further work on the social aspects of sustainable development, the Committee on Employment, Labour and Social Affairs completed a report that provided the basis for discussions between delegates from Member countries in various bodies of the Organisation. The report reviews the practical interpretation that OECD countries have attached to the notion of “social aspects” of sustainable development, as reflected in their “national sustainable development strategies”. The report then identifies a range of challenges — in terms of demography, family structures, labour markets, distribution of economic resources — to the “sustainability” of social protection systems, and the measures that are required to confront these challenges in ways that are both economically efficient and socially desirable.

121. OECD countries have realised significant progress in their own social conditions over the past few decades. These achievements include longer and healthier life expectancy, higher education, more jobs, and lower poverty, especially among the elderly. These positive social outcomes are the result of both economic growth and of the set of institutions that OECD countries have put in place to support the well-being of the weaker members of societies, to protect against a range of risks faced by individuals, and to facilitate the structural adjustment of societies as economic forces unfold.

122. Sustaining the performance of these institutions, however, is becoming more difficult over time. The very success of institutions in protecting from a range of social risks generates demands for new forms of protection. Some of the social risks that emerge are themselves the outcomes of new patterns of economic development. For example, competition from newly-industrialised economies does hurt some workers in advanced countries at the same time as it raises questions about the “affordability” of existing social protection programmes. Similarly, changes in labour markets increase the importance of individual determinants of work conditions, and reduce the possibility of insuring against such risks through their mutualisation. Changes in the structure of the workforce, linked to population ageing and to growing participation of women to the labour market, lead to new demands on social policies which existing programmes are inadequately equipped to provide for. These demands relate to the difficulties in reconciling work and family responsibilities; in assuring the renewal of the skills and competences of an ageing labour force; in addressing the special needs of groups that remain at the margin of the labour market; in responding to needs for care by the frail.

123. Guidance on the practical interpretation that OECD countries have given to the notion of “social aspects” of sustainable development is provided by the *National Sustainable Development Strategies* that most OECD countries have adopted in the wake of the 2002 World Summit on Sustainable Development. A review of these strategies highlights two main findings. The first is that, in an overwhelming majority of cases, OECD countries interpret the notion of sustainable development as going beyond environmental stewardship and support for the development priorities of the poorest countries, to encompass domestic priorities for sustaining the quality of social development within their own borders. The second finding is

28 As part of the 2005-2006 programme of work, further activities on environment and health are likely to be carried out under the guidance of the Environmental Policy Committee. These may include conducting a number of valuation studies in several OECD countries on the basis of a common methodology, and the preparation of a reference manual to guide further research in this field.

that there is large variation across countries in the specific social issues that are singled out as priority goals within these strategies. These issues range from concerns about poverty and social exclusion, to focus on children, immigrants, gender roles and other groups and pathologies of societies.

124. A broad framework is required to encompass this variety of social concerns. The one proposed by the Employment, Labour and Social Affairs Committee stresses the role of well functioning social protection systems for addressing these different social problems. Social protection systems define the collective interventions of society to protect its citizens from vulnerabilities, sustain their well-being and enhance their capacity to manage risks. Because of its contribution to maintain an environment that facilitates further both economic growth and environmental sustainability, social protection is an “asset” of society, as important as man-made and natural capital. Its sustainability requires preserving the capacity to respond to the needs of citizens, today and in the future, by adapting to changes in the conditions under which they were first established. While concerns about the financial sustainability of social programmes loom large in current discussions about economic and social policies, the notion of sustainable development suggests a broader focus on the “outcomes” of social policy interventions. It points to the importance of adapting social protection to new constraints, of responding to new aspirations of individuals, and of balancing new and old demands on social protection.

125. The trends that challenge the sustainability of social protection are well understood. They include demographic trends towards lower fertility and longer life expectancy in old-age; changes in the role played by families and communities, towards smaller families and increasing isolation of many individuals; changes in the work environment, leading to growing differentiations in work conditions and earning prospects; and changes in the distribution of economic resources, towards wider differences in the distribution of market income. Each of these factors affects in specific ways the capacity of social protection to deliver high quality outcomes.

126. The challenges confronting OECD societies can be illustrated by looking at the various stages of the individual life-course. A life-course perspective is especially suited in a sustainable development context as it highlights the nature of inter-temporal relations in the social sphere. At the level of individuals, life chances are affected to a significant extent by the previous experience of individuals during childhood, education and the transition to adult life, as well as by the experience of their parents, through inheritance of economic and cultural resources and the transmission of role models. At the level of generations, intergenerational relations underlie the implicit contract embodied in old-age pension systems, as well as the intergenerational transfers of human and social capital. Because of these relations, social problems may often come to exhibit features of persistence and, in extreme cases, irreversibility.

127. The Secretariat document highlights the long-term implications of social problems specific to each stage of the individual’s life-course, the indicators that may be used to monitor performance, the trade-offs that policies confront in these fields, and the interventions capable to shift them over time:

- Supporting child development is the most direct way in which today’s policies may contribute to the well-being of future generations. It requires a combination of transfers towards families with children, flexible work arrangements, and availability of quality and affordable child care and education to ease the trade-off between mothers’ employment and children’s development.
- Improving quality and equity in education is important to sustain the pace of human capital accumulation and to provide opportunities for a healthy development to all children, whatever their family background. It requires efforts to prevent school failure, to encourage students’ involvement in compulsory education, and to diversify supply at the post-secondary level.

- Easing youths' transition to adulthood is important to improve their financial autonomy, partnership formation and fertility decisions. It requires making labour markets more "youth friendly", flexibility of upper-secondary education and specific labour market programmes.
- Supporting the adaptability of workers throughout their life is required by both more flexible labour markets and to improve the prospects for groups at the margin of it. It requires reforms of passive income support programme that may lead to "unemployment traps", expanding workers opportunities to train, and measures to top-up the earnings of low-paid workers.
- Addressing risks of poverty for individuals who face specific barriers to the labour markets — e.g. the long-term unemployed, lone mothers and the disabled — is important to avoid that these risks lead to permanent exclusion from mainstream society. Policies in this area need to balance concerns about ensuring adequate living standards and avoiding long-term benefit dependence. This requires greater emphasis on poverty at all levels of policy-making, and a combination of rehabilitation, training and income support for those individuals that are hard to place.
- Ensuring the sustainability of retirement income systems, in a context of rapid population ageing, is important to avoid transferring public debt to future generations but reforms must avoid compromising income adequacy in old age. This issue is part of the "menu" of sustainable development reviews undertaken by the Economic and Development Review Committee. Policies involved in balancing this trade off are described in paragraphs 40 to 49.
- Addressing needs for care by the frail elderly is becoming an increasingly important priority in several OECD countries, because of prospects of both rising demand for care linked to ageing, and of lower supply of such care due to lower institutionalisation and higher labour force participation of women. Policies in this field requires providing a continuum of care-services adapted to needs, expanding supply, integrated policies for long-term care, health, pensions and housing, and measure to help family member to fulfil their caring obligations.

128. The range of measures, and the trade-off among different goals that have to be confronted when implementing them, are well understood. There is today, probably more than at any point in the past, large consensus among OECD countries on what works and what does not to support lasting social development. Drawing on its work on social indicators, a range of indicators are proposed to assess the performance of OECD countries in these areas, similar to those that have been used in the recent cycle of sustainable development reviews undertaken by the Economic and Development Review Committee. It belongs to Member countries to identify which ones, among the social issues proposed by the Secretariat, belong to a common "core" of sustainable development issues.

CHAPTER 6. IMPROVING THE COHERENCE AND INTEGRATION OF POLICIES THAT AFFECT SUSTAINABLE DEVELOPMENT

Main activities

129. Making progress towards sustainable development poses fundamental challenges to the government structures of OECD countries. The importance of government issues for the sustainable development agenda is reflected in the attention recognised to them by the 2001 Ministerial mandate on sustainable development, and by Section X ("Institutional Frameworks for Sustainable Development") of the WSSD Plan of Implementation. Policy coherence and integration are important criteria for a variety of OECD activities related to sustainable development, and are also part of the regular activities of the Public Management Committee.²⁹ This section takes a more narrow approach, and illustrates results from specific work on the governance aspects of sustainable development. In the context of the 1998-2001 horizontal project, the Public Management Committee reviewed the experience of a small number of OECD countries in establishing government structures and mechanisms aimed to "mainstream" sustainable development into their day-to-day decision making.³⁰ Findings from these case studies were discussed by experts from government, academia and non-governmental organisations at the seminar on "Improving Governance for Sustainable Development" held in 2001. In turn, these case studies have provided the basis for the formulation of a "checklist" of criteria that government may use to assess whether their institutional arrangements are consistent with sustainable development principles, which was discussed by the Public Management Committee in 2002.

Key results

Governance challenges and steps taken by OECD countries

130. Sustainable development confronts governments with three sets of inter-related challenges. The first relates to the cross-cutting nature of many sustainable development issues. Most often, unsustainable practices have their roots in policies undertaken in different areas that, while pursued to attain narrow sectoral goals, are not consistent with the broader priorities and aspirations of society. Correcting these practices is difficult when the government machinery is organised along sectoral lines with narrow technical competencies, and is poorly equipped to address issues that require a cross-cutting approach. A second challenge relates to the long-term nature of sustainable development goals. Making progress towards these goals requires institutions that are capable of making long-term strategic choices, and of maintaining their commitments over time: however, because of short-term electoral cycles, most decision-making is often driven by shorter-term considerations, and sustainable development goals may be overridden by political considerations. A third challenge relates to the relationship between governments and different stakeholders. Because sustainable development policies often carry implications for a variety of actors, governments need to leverage the initiatives of all stakeholders (individuals, firms, and organised

29 They are summarised in the document "Policy Coherence", GOV/PUMA(2003)4/FINAL.

30 OECD (2002), *Governance for Sustainable Development — Five OECD Case Studies*, Paris.

groups in civil society) towards these goals. This requires broad-based involvement of citizens, and participatory processes to set shared priorities and confront the perspectives of different stakeholders.

131. A specific example of these institutional challenges is provided by the experience of many OECD countries in the preparation of their “National Sustainable Development Strategies”, which often represent the most visible manifestation of the importance of sustainable development for the policy agenda of individual OECD governments. These strategies specify goals and actions to attain them in the economic, environmental and social fields. In most cases, however, goals pertaining to each dimension of sustainable development are simply listed alongside each other, and can hardly be described as integrated into a single strategy. There are often no priorities among these goals, no indication of how progress in respect to each will impinge on others, no indication of the timeframe over which they will be achieved, and little follow-up in terms of concrete actions. Responsibility for the preparation of these strategies often rests with Environmental Ministers, rather than involving the full cabinet. Participatory processes that should underpin these strategies are often weak or not existent.

132. The institutional steps that governments have taken to further their sustainable development agenda are many, ranging from efforts to develop new working practices to overcome traditional segmentation within government, to the creation of new institutions to foster integration. The “comprehensive” approaches followed by Canada and the United Kingdom have given emphasis to diffusing a coherent message to all public entities, ensuring their responsiveness, and overseeing implementation through steering mechanisms.³¹ Others countries, such as the Netherlands and Germany, have put more emphasis on specific environmental goals and achievements, supported by a clear allocation of responsibilities and clearly-assigned enforcement roles. OECD governments have also relied on a variety of tools to foster policy integration. These include procedures for integrating sustainable development priorities within the budgetary process; medium-term assessments of the environmental consequences of governments’ procurement and spending; performance management systems; monetary evaluations of policies through cost-benefit analysis; non-monetary evaluations through environmental and sustainable development assessments; accountability mechanisms (see also paragraph 37). However, most of these of tools have been neither extensively used nor applied on a systematic basis. Despite the many efforts and interesting innovations, the conclusion of this OECD review was that “the main constraint to implementing sustainable development across levels of government remains the inadequacy of traditional co-ordination mechanisms... to establish truly integrated practices across levels of government”.³²

A checklist to improve the coherence and integration of policies for sustainable development

133. Building on the lessons learned from these case studies, the OECD has developed a checklist to assist policy-makers in assessing the adequacy of the domestic institutional practices to further the sustainable development agenda. This checklist identifies five criteria that need to be borne in mind to improve policy coherence and integration for sustainable development, with each of them supplemented by a range of more detailed questions. These five criteria are illustrated below.

- ***Common understanding of sustainable development.*** Because of the breath of sustainable development, all actors should have a common understanding of its content and priorities. This

31 Institutional innovations introduced by these countries include the creation of a sustainable development commissioner in Canada, reporting to Parliament on whether government commitments have been followed by action, and the establishments of “green” Ministers in all departments in the United Kingdom.

32 Ways of improving these co-ordination mechanisms remain high on the political agenda of most OECD countries. In the United States, for example, the State Department and the U.S. Agency for International Development have recently adopted their first-ever joint Mission Statement and Strategic Planning Framework.

implies confronting questions like the following. Have clear objectives and principles for government policies been identified? Are these objectives set at the right level of ambition? Have their benefits and costs been adequately assessed? Are priorities widely accepted within government? Are indicators used to monitor performance in attaining them?

- ***Clear commitment and leadership.*** Once the goals are set, it is important that cabinet invests all its credibility into their achievement. For example, who is responsible within government for the delivery of sustainable development goals? Is this commitment shared at the highest level of government? What mechanisms are used to bridge gaps between the political and administrative agendas? What are the tools used to encourage, reward and disseminate “best practices”?
- ***Institutional mechanisms to steer integration.*** Goals need to be supported by concrete strategies to steer integration between different sectors and levels of government. For example, are policies in each sector assessed for their consequences on sustainable development goals? What evaluation tools are in place? Are sustainable development priorities integrated into the budget process? Is government periodically reviewing progress? What steps are foreseen in the event of discrepancies between objectives and realisations of different sectors and level of governments? Are independent institutions auditing government initiatives and reporting results to the public?
- ***Effective involvement of stakeholders.*** Stakeholders need to be closely involved when identifying goals, defining strategies to attain them, discussing roles and responsibilities of each. For example, have governments conducted consultations with stakeholders prior to setting sustainable development goals? Is there a legal framework for conducting these consultations with stakeholders? Do guidelines for consultation and participation exist? Is transparency ensured at different government levels?
- ***Efficient management of scientific evidence.*** Because of their complexity and long-term nature, sustainable development policies need to be informed by scientific evidence. Are governments supporting the production of such evidence? Are they encouraging debate between different perspectives and scientific disciplines? Is scientific research directed to areas of greater importance for sustainable development? Are results integrated into the policy process through long-term scenarios? Are they disseminated to the public? Because of the global nature of many sustainable development issues, effective scientific and technical co-operation across countries is required for furthering progress towards sustainable development, as stressed by recent Ministerial declaration on science and technology co-operation (Box 5).

Box 5. Declaration on International Science and Technology Co-operation for Sustainable Development

The importance of science and technology for sustainable development is reflected in the declaration adopted by the Meeting of the OECD Committee on Scientific and Technological Policy (CSTP) at Ministerial level, held in Paris on 29-30 January 2004. Ministers from Member and Observer countries:

- Reaffirmed their commitment to the promotion of sustainable development through the application of science and technology, by strengthening national innovation policies and by enhancing existing global collaborative networks.
- Agreed to take steps to strengthen existing research and development funding to support international collaboration for: *i)* improving citizen education and public awareness regarding safety and ethical concerns related to science and technology for sustainable development; and *ii)* strengthening innovation capacities of developing and transition countries to entrench science and technology for sustainable development.
- Agreed to support initiatives undertaken by the OECD and its affiliates to promote international collaboration in the scientific and technology fields through: *i)* exchanges of information about methods to promote sustainable development through science and technology; *ii)* initiatives that promote research and partnerships on scientific issues of global concern, on new policy choices and benchmarking good practices and biotechnology; and *iii)* dialogues between the science and technology community and sustainable

development fora.

- Agreed to review progress with respect to these goals within a period of three years.

134. Because of their general nature, these criteria are only a first step for assessing policy coherence and integration. It is likely, however, that more concrete insights on ways to improve coherence of different policies can be only be gained at the level of specific goals and policies. The range of policies implicated, and the attendant risks of incoherence, differ depending on whether the priority goal for sustainable development is poverty reduction, climate change or something else. In other terms, the concrete steps required to “integrate” different policies can only identified when the issue at stake, and the sectoral policies bearing on them, are well identified. Further, it is important to recognise that “coherence” of policies is a function of more than institutional design. Because of the difficulties to identify “win-win” policies, policy makers typically confront trade-offs between competing goals. In these situations, lack of coherence will reflect competing values and conflicting interests. The extent to which certain goals overwrite others is a matter of stakeholder power and political will. What institutions can do in these situations is to bring these conflicts into the open, highlight the trade-off between goals, and allow policy-makers to take informed decisions in ways that reflect the preferences of citizens.

ANNEX 1. RECOMMENDATIONS BY THE AD HOC GROUP ON FUTURE OECD WORK ON SUSTAINABLE DEVELOPMENT

As approved by delegates at the meeting of 17 and 18 March 2004

The Ad Hoc Group on Sustainable Development believes that over the long term work on sustainable development should be “mainstreamed” in the regular work of Committees and Directorates. At present, however, it is important to ensure that work on sustainable development continues in the OECD, including in the relevant committees. The Ad Hoc Group recommends that a horizontal programme should be primarily financed through Part I resources. The Ad Hoc Group recognises that the work is also likely to require substantial voluntary contributions. The Group recommends to Ministers that the Organisation should continue to do work on sustainable development, including analytical work, improve the co-ordination of this work as well as raise the visibility of the work.

Regarding **institutional arrangements**, the Ad Hoc Group recommends establishing an Annual Meeting of Sustainable Development Experts, initially for a two year period. This meeting will:

- Provide a substantive policy dialogue on sustainable development, to promote mainstreaming of sustainable development across the Organisation, and promote enhanced inter-ministry co-ordination among OECD Member governments;
- Review an annual survey on the ongoing, OECD-wide work on sustainable development, with a particular focus on priority, “cross-cutting” areas, identified by the Sustainable Development Experts.
- Report to the Council, making recommendations on future areas for prioritisation, mainstreaming and improved co-ordination among OECD subsidiary bodies.

This Meeting would be composed of representatives of all Member Countries and be chaired by the Chair of the Committee most closely related to the topics discussed at the meeting.

This Annual Meeting of Sustainable Development Experts shall include joint sessions consisting of relevant OECD Committee Chairs/Bureaus and expert group sessions on specific, identified areas. In one meeting, for example, specific sessions could focus on common obstacles of reforming environmentally harmful subsidies. Depending on the Agenda, the duration of these meetings could be 2-3 days.

The first Meeting of Sustainable Development Experts would be held in the third quarter of 2004 and subsequent meetings in 2005 and 2006. The 2006 meeting would, in addition to considering substantive issues, consider whether and in what form the meeting would continue after 2006. The 2004 meeting would discuss and recommend a specific work programme and output results to be considered in the

OECD budget context for delivery in 2005/2006. It could also identify a number of output results in other areas of work that could be delivered with additional voluntary contributions.

Regarding **internal co-ordination within the Secretariat**, the Ad Hoc Group recommends that

- The OECD should have a Deputy Secretary-General responsible for work on sustainable development.
- The Deputy Secretary-General should give a progress report to the Council twice a year.
- Secretariat's co-ordination capacity be increased by having a full-time co-ordinator to support the Deputy Secretary-General and serve the Annual Meeting of Sustainable Development Experts. The Group recommends that the co-ordinator post would be established for a period of two years.

Regarding **issues for further work**, the Ad Hoc Group recommends that OECD efforts on sustainable development should meet the following criteria:

- The work should contribute to the Johannesburg Plan of Implementation, Doha Development Agenda and Monterrey Consensus.
- It should cover areas in which Member countries have a particular responsibility for sustainable development.
- It should concentrate on areas where the OECD as an organisation has a specific expertise.
- It should not duplicate work going on in other *fora*, such as UNEP and UNCSD.

More specifically, the Ad Hoc Group recommends that a horizontal programme on sustainable development, that takes into account the environmental, economic and social pillars, could address the following issues:

- Obstacles to reducing environmentally harmful subsidies.
- Obstacles to further use of economic instruments, which could include environmentally related taxes, tradable permits or both.
- Sustainable resource use including material flow accounting, decoupling and resource productivity.
- Emerging issues that meet the criteria above to feed into the work of, for example, the UNCSD.

The Ad Hoc Group encourages relevant committees to continue to include work on sustainable development in their work programmes, for example, in Committee for Employment, Labour and Social Affairs, Committee on International Investment and Multinational Enterprises, Development Assistance Committee, Economic Development and Review Committee, Environmental Policy Committee, and Trade Committee.