



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 9.2.2005
SEC(2005) 161 final

**COMMUNICATION FROM MR. ALMUNIA
TO THE MEMBERS OF THE COMMISSION**

**Sustainable Development Indicators
to monitor the implementation of the EU Sustainable Development Strategy**

COMMUNICATION FROM MR. ALMUNIA TO THE MEMBERS OF THE COMMISSION

Sustainable Development Indicators to monitor the implementation of the EU Sustainable Development Strategy

EXECUTIVE SUMMARY

The Strategy for Sustainable Development adopted by the European Council in Gothenburg in June 2001 sets out a commitment to regular monitoring (the Strategy would be "*comprehensively reviewed at the start of each Commission's term of office*"). Indicators for monitoring long-term progress towards "*meeting the needs of the present generation without compromising the ability of future generations to meet their needs*"¹ assist decision-makers and inform the general public about achievements, trade-offs and failures in attaining the commonly agreed objectives of sustainable development.

The purpose of this Communication is to present the state of play of the Commission's reflections on possible indicators for monitoring the implementation of the EU Sustainable Development Strategy. It describes the conceptual background to this indicator set. The list was devised with the current Strategy in mind and will serve as important input to the ongoing work on the review of the EU Sustainable Development Strategy, which will be finalised in 2005. As such, it is considered sufficiently broad in concept to be easily adapted to future requirements. The list of indicators presented in annex is mainly based on the outcome of discussions held among a group of experts known as the Sustainable Development Indicators Task Force.

1. INTRODUCTION

The purpose of this Communication is to present the state of play of the Commission's reflections on possible indicators for monitoring the implementation of the EU Sustainable Development Strategy. The Commission is currently preparing a review of the Strategy, which should be finalised in 2005. As indicators constitute a key tool for monitoring progress and evaluating the effectiveness of policies, some specific sustainable development indicators (SDI) will be useful in the review process.

Since the adoption of the Strategy in 2001², the EU has made additional commitments which are worth taking into account when designing a set of SDI. These are mainly the conclusions of the European Council held in Barcelona³ and the Declaration and Plan of Implementation of the Johannesburg World Summit on Sustainable Development⁴ (WSSD), both held in 2002. Also, the importance of the economic dimension of sustainable development has been

¹ UN Commission for Sustainable Development (Brundtland report, 1987).

² Commission Communication COM(2001)264 final of 15.05.2001: "A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development".

³ Commission Communication COM(2002) 82 final of 13.02.2002: "Towards a global partnership for sustainable development".

⁴ Commission Communication COM(2003) 829 final of 23.12.2003: "The World Summit on Sustainable Development one year on: implementing our commitments"

increasingly recognised in coherence with the Lisbon Strategy. When the Strategy is revised in 2005, it is likely that these additional considerations will be integrated into the new revised Strategy.

One feature of the post-review Strategy could be a link to the national strategies adopted by EU Member States. Such a link should also bring the different indicator sets closer, but at the current stage EU indicators have been selected only for the purpose of evaluating the EU Sustainable Development Strategy. This means in particular that these indicators are not *a priori* suited to serve national purposes.

2. THE FRAMEWORK FOR SUSTAINABLE DEVELOPMENT INDICATORS

The framework and preliminary set of indicators described in this Communication are based largely on the work of a group of national experts within the SDI Task Force. This work has focused on the political priorities of the EU Sustainable Development Strategy. With a view to harmonisation and rationalisation, the SDI Task Force made maximum use of existing indicator initiatives, such as those of the UN Commission on Sustainable Development and OECD, the Structural Indicators, the Laeken indicators, indicators monitoring the Cardiff integration process (agriculture, energy, transport), and the core set of indicators of the European Environment Agency.

In the same way as the Sustainable Development Strategy and the Lisbon Strategy are related, albeit covering partly different priorities and with different time horizons, the SDI and the Structural Indicators sets are responding to some slightly different needs but are also in some respects overlapping. Moreover, the SDI have very much benefited from the experience gained with the Structural Indicators.

“A framework for organising the selection and development of indicators is essential, although it is recognised that any framework on its own is an imperfect tool for expressing the complexities and interrelationships encompassed by sustainable development”⁵. Following the UN experience and recommendations, the Commission has designed a framework for indicators based on themes and sub-themes, which are directly linked to EU policy priorities.

The policy relevance of SD is best served by a framework that encompasses priority policy issues and forms a clear and easily communicable structure for the SDI. The purpose of indicators is to monitor progress achieved by the implementation of policy measures towards policy goals and objectives. Inevitably, this implies that the framework and the set of SDI have to be flexible to adjust to possible changes in policy priorities and objectives, for instance in line with issues emerging in the context of the Strategy’s review planned for 2005. Tight policy linkages assure user relevancy and effective utilization of indicators in decision-making. In this context, the framework provides a structured approach to policy areas and forms a consistent communication tool between various stakeholders in the EU.

⁵ UN Division for Sustainable Development: “Indicators of Sustainable Development: Guidelines and Methodologies” (2001)

3. THE SET OF THEMES

The hierarchical theme framework has been developed on the basis of the above-mentioned policy documents. Seven themes correspond to the priority areas of the 2001 and 2002 Commission Communications, while Production and Consumption Patterns and Good Governance arise from the WSSD Plan of Implementation. The theme on Economic Development highlights the economic dimension of sustainable development in the framework and bridges it to the Lisbon Process. Five themes correspond also to the international engagements taken in the framework of the Millennium Declaration. The ten themes, which may be further developed in the future, are:

1. Economic development
2. Poverty and social exclusion
3. Ageing society
4. Public health
5. Climate change and energy
6. Production and consumption patterns
7. Management of natural resources
8. Transport
9. Good governance
10. Global partnership

The themes are further divided into sub-themes and ‘areas to be addressed’. The sub-themes usually monitor the progress towards the headline objectives while the ‘areas to be addressed’ facilitate a more detailed and diversified analysis of background factors in each theme. In some cases the sub-themes also address so-called ‘slow burning’ concerns that may need a very long time to reverse.

The framework is determined by policy themes that unavoidably partially overlap. Some driving forces, such as energy, affect developments in several themes, but cannot be presented several times in the indicator set. Furthermore, the scope of themes differs considerably as some themes address a very specific domain (e.g. Climate change and energy) and some (e.g. Production and consumption patterns) encompass a wide variety of general socio-economic and environmental issues. Accordingly, the framework is based on a strict prioritisation of indicators inside each theme, but it ensures, with the help of standardised concepts, definitions and classifications, structuring of information in a manner that facilitates the use of indicators in the monitoring of progress in other themes too.

4. A PYRAMID OF INDICATORS

A large number of indicators are needed to properly assess the multidimensional nature of SD. In order to facilitate communication about SDI, the indicator set is built as a three-level pyramid. The different levels can be used to match the needs of different types of users. The hierarchical framework lends itself to an indicator pyramid, especially as the three levels of the framework also correspond to the headline objectives and implementation measures to be monitored by the SD indicators.

- Level 1: consists of a set of 12 high level indicators allowing an initial analysis of the theme development. These indicators are aimed at a high-level policy-making and general public and can therefore be seen as a set of headline indicators.
- Level 2: corresponds to the sub-themes of the framework and, together with Level 1 indicators, monitors progress in achieving the headline policy objectives. These 45 indicators are aimed at evaluation of the core policy areas and communication with the general public.
- Level 3: corresponds to the areas to be addressed, i.e. various measures implementing the headline objectives, and facilitates a deeper insight into special issues in the theme. The Commission Communications describe specific areas to be addressed for several of the themes. These 98 indicators are aimed at further policy analysis and better understanding of the trends and complexity of issues associated with the theme or inter-linkages with other themes in the framework. They are intended for a more specialised audience.

The identification of appropriate indicators is an iterative process. As the Commission is required to review the Strategy regularly, this may result in revision of the indicator set, to adapt to new needs, which become apparent following the review.

5. SELECTION CRITERIA

The Commission and the European Statistical System already have a long experience in the selection of indicators. The proposed set of selection criteria is very close to that used for the Laeken indicators. The criteria are the following:

- An indicator should capture the essence of the problem and have a clear and accepted normative interpretation.
- An indicator should be robust and statistically validated.
- An indicator should be responsive to policy interventions but not subject to manipulation.
- An indicator should be measurable in a sufficiently comparable way across Member States, and comparable as far as practicable with the standards applied internationally by the UN and the OECD.
- An indicator should be timely and susceptible to revision.
- The measurement of an indicator should not impose on Member States, on enterprises, nor on the Union's citizens a burden disproportionate to its benefits.

And the portfolio of indicators should follow the following principles:

- The portfolio of indicators should, as far as possible, be balanced across different dimensions.
- The indicators should be mutually consistent within a theme.
- The portfolio of indicators should be as transparent and accessible as possible to the citizens of the European Union.

However, due to the policy needs and the lack of data in some fields, a pragmatic approach has been taken and the criteria have been, and will be, applied with some flexibility in order

not to exclude too many new key areas for sustainable development. Therefore some of the indicators proposed do not fulfil all of the criteria, but have been included because they are important contextual indicators for the Strategy.

As is the case for the Structural Indicators, a description of the quality will be progressively introduced and attached to each indicator in order to communicate their main quality features in a user-friendly way.

6. SCOPE OF SUSTAINABLE DEVELOPMENT INDICATORS

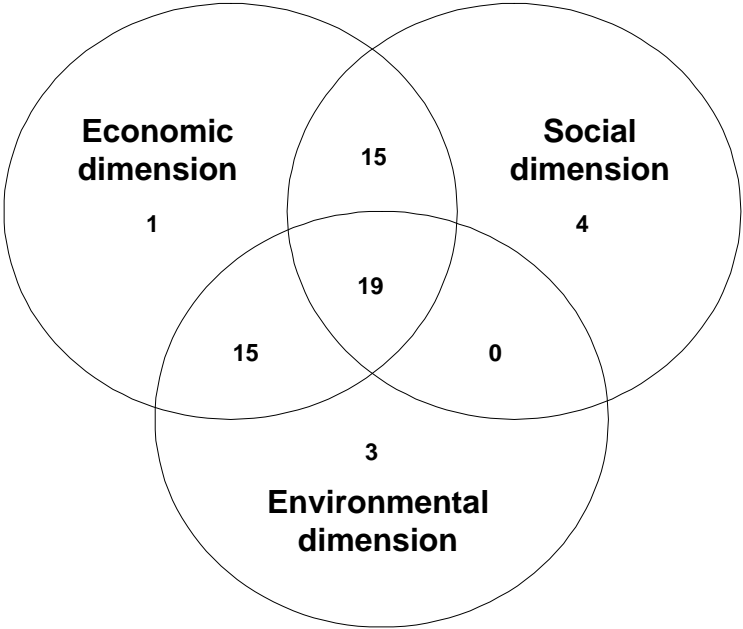
The preliminary set of SDI – consisting of 12 headline, 45 core policy and 98 analytical indicators – forms a good basis for regular monitoring of progress in the headline objectives of the Sustainable Development Strategy and the other core EU policy documents. The indicators capture the essence of the theme developments and are easily understandable and responsive to policy interventions.

The current set of indicators allows integrated evaluation of sustainable development at EU level for instance according to:

- top EU policy issues via headline indicators;
- priority policy issues via headline and level 2 indicators;
- theme assessments via theme indicators and complementary SDI from other themes;
- new and emerging concerns by special indicator clusters addressing simultaneous but independent developments endangering sustainable development in the EU.

The dimensions and perspectives of sustainable development are systematically integrated in the scope of the indicators, enabling fairly comprehensive assessment of long-term sustainable development at EU level. In the current set, a majority of the level 1 and 2 indicators (86%) address more than one dimension and 34% can be considered three-dimensional, thus addressing simultaneously economic, social and environmental aspects of the issue (see Figure 1).

Figure 1. Integration of economic, social and environmental dimensions – Number of indicators of levels 1 and 2



However, their integration could be the subject of some improvement in the future. Socio-economic factors, individual preferences, choices or behaviour tend to be ‘invisible’ driving forces for both economic and environmental development, but are not fully surveyed from the sustainability perspective. For example, the economic value and social importance of the diversity and quality of natural environment are seldom distinguished as contributors to welfare, although they improve the well-being of individuals and the wealth of the economy.

Although the majority of headline objectives are or will be monitored by the current SDI, shortcomings in knowledge and/or methodologies have hindered identification of indicators in some problem areas, such as ‘Public access to information’ and ‘EU impact on global carrying capacity’.

7. ‘BEST AVAILABLE’ AND ‘BEST NEEDED’ INDICATORS

The Sustainable Development Strategy and the relevant EU policy documents encompass several priority areas on which no information or only partial information is available. To overcome this technical constraint and assure the production and compilation of the necessary data for policy making in a longer time perspective, the list at annex divides indicators into two categories, ‘best available’ and ‘best needed’.

The ‘best available’ indicators refer to indicators that can be compiled on the basis of existing data. Nevertheless, some of these indicators may not be the ideal indicators for sustainable development policy issues, but serve as proxies for the ideal ones, so-called ‘best needed’ indicators. Some of the indicators may also be classified as ‘best needed’ due to data quality problems. Consequently, the ‘best needed’ indicators (marked in italics in the attached list) are indicators for which:

- data and/or methodology do not exist yet;
- data exist, but the quality is poor or unknown or does not allow publication;
- data exist, but the breakdowns needed are not yet available.

Depending on the indicator, these categories call for different kinds of development efforts relating to concepts, methodologies and data collection procedures. The Commission, in cooperation with the European Statistical System, will investigate the feasibility of the “best needed” indicators and will report on progress in ensuring the availability of those indicators which are feasible.

8. CONCLUSIONS

The Commission recognises the importance of proper information on sustainable development indicators. Such information will serve to inform policy-makers and the general public of the latest developments in trends concerning sustainable development.

The Commission endorses the work undertaken and this Communication, which sets out the framework of themes and the annexed list of indicators intended for assessing progress made in implementing the EU Sustainable Development Strategy. The list of indicators can be adapted in line with any priorities and issues emerging in the context of future reviews of the Strategy, starting in 2005. The Commission departments, and the European Statistical System, will continue to develop new indicators and improve the quality of the existing indicators referred to at annex. The sustainable development indicators will be made available on the Eurostat website.

ANNEX

Normal text = 'best available' indicator i.e. indicator expected to be available; if numbered with an 'a' then is a proxy indicator for the best needed of the same number.

Italics = 'best needed' indicators; needed but facing problems of definition, data availability or data quality.

Level I	Sub-themes	Level II	Level III	Headline Objectives in the EU SD Strategy (SDS) Presidency conclusions of European Council (EC) WSSD Plan of Implementation (PoI) 6th Environmental Action Programme (6EAP) Millennium Declaration Goals
THEME 1: ECONOMIC DEVELOPMENT				
1. Growth rate of GDP per capita	INVESTMENT	1. Investment as % of GDP, by institutional sector	1. Real GDP growth rate 2. GDP per capita in Purchasing Power Standards 3. Regional breakdown of GDP per capita 4. Total consumption expenditure as % of GDP 5. Net national income as a % of GDP 6. Inflation rate 7. Net saving as % of GDP, by institutional sector	<p><u>EC Lisbon2000</u>: An average economic growth rate of around 3% a realistic prospect for the coming years. The inflation rate of a given Member State must not exceed by more than 1½ percentage points that of the three best-performing Member States in terms of price stability.</p> <p>SDS: Promote more balanced regional development by reducing disparities in economic activity and maintaining the viability of rural and urban communities, as recommended by the European Spatial Development Perspective</p>
	COMPETITIVENESS	2. Labour productivity per hour worked 3. International price competitiveness (Real effective exchange rate)	8. Unit labour cost growth, for total and industry 9. Life-long learning 10. Turnover from innovation as a % of total turnover, by economic sector 11. Total R&D expenditure as a % of GDP 12. Public expenditure on education as a % of GDP	<p><u>EC Lisbon2000</u>: A substantial annual increase in per capita investment in human resources. Provide new basic skills through lifelong learning of IT skills, foreign languages, technological culture, entrepreneurship and social skills.</p> <p><u>EC Barcelona 2002</u>: Increase spending of R&D and innovation with the aim of approaching 3% of GDP by 2010.</p>
	EMPLOYMENT	4. Total employment rate	13. Total employment growth 14. Total employment rate, by gender and by highest level of education attained 15. Total unemployment rate, by gender, by age group, and by highest level of education attained 16. Regional breakdown of employment rate	<p><u>EC Lisbon2000, SDS</u>: Raise the employment rate to 67% for January 2005 and to 70% by 2010; increase the number of women in employment to 57% for January 2005 and to more than 60% by 2010.</p>

Normal text = 'best available' indicator i.e. indicator expected to be available; if numbered with an 'a' then is a proxy indicator for the best needed of the same number.
Italics = 'best needed' indicators; needed but facing problems of definition, data availability or data quality.

Level I	Sub-themes	Level II	Level III	Headline Objectives in the EU SD Strategy (SDS) Presidency conclusions of European Council (EC) WSSD Plan of Implementation (PoI) 6th Environmental Action Programme (6EAP) Millennium Declaration Goals
THEME 2: POVERTY and SOCIAL EXCLUSION				
1. At-risk-of-poverty rate after social transfers	MONETARY POVERTY	1. At-persistent-risk-of-poverty rate	1. At-risk-of-poverty rate, by gender, by age group, by highest level of education attained, and by household type 2. Relative at-risk-of-poverty gap 3. Inequality of income distribution (Income quintile share ratio) 4. <i>Poverty mobility (i.e. probability to enter or exit poverty)</i>	<u>EC Lisbon2000, SDS</u> : Make a decisive impact on the eradication of poverty; greater social cohesion <u>EC Barcelona2002</u> : Reduce significantly the number of person at risk of poverty and social exclusion by 2010 <u>GP 2002</u> : Ensure adequate financing to attain the International Development Targets and the MDGs
	ACCESS TO LABOURMARKET	2. Total long-term unemployment rate	5. Gender pay gap in unadjusted form 6. Very long-term unemployment rate 7. People living in jobless households, by age group 8. At risk-of-poverty rate after social transfers by most frequent activity	<u>EC Lisbon2000</u> : sustainable economic growth with more and better jobs
	OTHER ASPECTS OF SOCIAL EXCLUSION	3. Early school leavers	9. Persons with low educational attainment, by age group 10. <i>Adequacy of housing conditions</i>	<u>EC Lisbon2000, SDS</u> : Halve by 2010 the number of 18 to 24 years olds with only lower secondary education who are not in further education and training <u>GP 2002</u> : Ensure adequate financing to attain the International Development Targets and the MDGs

Normal text = 'best available' indicator i.e. indicator expected to be available; if numbered with an 'a' then is a proxy indicator for the best needed of the same number.

Italics = 'best needed' indicators; needed but facing problems of definition, data availability or data quality.

Level I	Sub-themes	Level II	Level III	Headline Objectives in the EU SD Strategy (SDS) Presidency conclusions of European Council (EC) WSSD Plan of Implementation (PoI) 6th Environmental Action Programme (6EAP) Millennium Declaration Goals
THEME 3: AGEING SOCIETY				
1. Current and projected old age dependency ratio	PENSIONS ADEQUACY	<p>1. <i>Projected theoretical replacement ratio (ratio between income after and prior to retirement)</i></p> <p>1a. Ratio of median household equivalised income of persons aged 65+ to median household equivalised income of persons aged <65</p>	1. At-risk-of-poverty rate for persons aged 65 years and over	<p><u>SDS</u>: Address the demographic challenge by raising employment rates, reducing public debt and adapting social protection systems, including pension systems.</p> <p><u>SDS</u>: Ensure the adequacy of pension systems as well as of health care systems and care of the elderly, while at the same time maintaining sustainability of public finances and inter-generational solidarity.</p> <p><u>SDS</u>: Increase the average EU employment rate among older women and men (55-64) to 50% by 2010.</p> <p><u>EC Barcelona 2002</u>: A progressive increase of about 5 years in the effective average age at which people stop working in the EU should be sought by 2010.</p> <p><u>EC Cardiff1998</u>: Public sector budgetary deficit to be less than 3% of GDP and gross debt less than 60% of GDP.</p>
	DEMOGRAPHIC CHANGES	2. Life expectancy at age 65 by gender	<p>2. Total fertility rate</p> <p>3. Net inwards migration, by main age groups</p>	
	PUBLIC FINANCE SUSTAINABILITY	3. General government consolidated gross debt as % of GDP	<p>4. <i>Current and projected public (and private) pensions expenditure as % of GDP</i></p> <p>5. Total employment rate by age group</p> <p>6. Average exit age from the labour market</p> <p>7. <i>Current and projected public expenditure on care for the elderly as % of GDP</i></p>	

Normal text = 'best available' indicator i.e. indicator expected to be available; if numbered with an 'a' then is a proxy indicator for the best needed of the same number.
Italics = 'best needed' indicators; needed but facing problems of definition, data availability or data quality.

Level I	Sub-theme	Level II	Level III	Headline Objectives in the EU SD Strategy (SDS) Presidency conclusions of European Council (EC) WSSD Plan of Implementation (PoI) 6th Environmental Action Programme (6EAP) Millennium Declaration Goals
THEME 4: PUBLIC HEALTH				
1. Healthy life years at birth by gender	HUMAN HEALTH PROTECTION AND LIFESTYLES	1. Percentage of overweight people, <i>by age group</i> 2. Resistance to antibiotics (Streptococcus pneumoniae pathogens)	1. Healthy life years at age 65 by gender 2. Health care expenditure as % of GDP 3. Cancer incidence rate, by gender and by type 4. Suicide death rate, by gender and by age group 5. Percentage of present smokers, by gender and by age group 6. <i>Work with high level of job strain/stress</i> 7. Serious accidents at work	<u>SDS</u> : Ensure the adequacy of pension systems as well as of health care systems and care of the elderly, while at the same time maintaining sustainability of public finances and inter-generational solidarity. <u>SDS</u> : Tackle issues related to outbreaks of infectious diseases and resistance to antibiotics. <u>PoI2002</u> : Enhance health education with the objective of achieving improved health literacy on a global basis by 2010.
	FOOD SAFETY AND QUALITY	3. <i>Deaths due to infectious food-borne diseases</i> 3a. Salmonellosis incidence rate in human beings	8. <i>Dioxins and PCBs in food and feed</i> 9. <i>Heavy metals, and mercury in particular, in fish and shellfish</i> 10. <i>Pesticides residues in food</i>	<u>SDS</u> : Make food safety and quality the objective of all players in the food chain. <u>6EAP</u> : Reduce impacts of pesticides on human health and environment; achieve a more sustainable use of pesticides, a significant overall reduction in risks and use of pesticides consistent with the necessary crop production.
	CHEMICALS MANAGEMENT	4. <i>Index of apparent consumption of chemicals, by toxicity class</i> 4a. Index of production of chemicals, by toxicity class		<u>SDS</u> : By 2020, ensure that chemicals are only produced and used in ways that do not pose significant threats to human health and the environment. <u>6EAP</u> : Dangerous chemicals (especially PBTs) should be substituted with the aim of reducing risks to man and the environment (ground and surface water, air quality).
	HEALTH RISKS DUE TO ENVIRONMENT. CONDITIONS	5. <i>Population exposure to air pollution by particulate matter</i>	11. <i>Population exposure to air pollution by ozone</i> 12. Proportion of population living in households considering that they suffer from noise and from pollution 13. <i>Monetary damage of air pollution as % of GDP</i>	<u>6EAP</u> : Achieving levels of air quality that do not give rise to significant negative impacts on and risks to human health and the environment. <u>6EAP</u> : Substantially reducing the number of people regularly affected by long-term average levels of noise.

Normal text = 'best available' indicator i.e. indicator expected to be available; if numbered with an 'a' then is a proxy indicator for the best needed of the same number.
Italics = 'best needed' indicators; needed but facing problems of definition, data availability or data quality.

(1) According to the sectors defined by the Intergovernmental Panel of Climate Change (IPCC).

Level I	Sub-themes	Level II	Level III	Headline Objectives in the EU SD Strategy (SDS) Presidency conclusions of European Council (EC) WSSD Plan of Implementation (PoI) 6th Environmental Action Programme (6EAP) Millenium Declaration Goals
THEME 5: CLIMATE CHANGE AND ENERGY				
1. Total greenhouse gas emissions 2. Gross inland energy consumption by fuel	CLIMATE CHANGE	1. GHG emissions by sector ⁽¹⁾	1. CO ₂ intensity of energy consumption 2. <i>CO₂ removed by sinks</i>	<u>SDS</u> : Meet the Kyoto commitment. However, Kyoto is but a first step. Thereafter, the EU should aim to reduce atmospheric greenhouse gas emissions by an average of 1% per year over 1990 levels up to 2020.
	ENERGY	2. Energy intensity of the economy 3. Final energy consumption by sector ⁽²⁾ 4. Gross electricity generation by fuel used in power stations	3. Share of renewable energy, by source 4. Combined heat and power generation as % of gross electricity generation 5. Energy intensity of manufacturing industry 6. Consumption of biofuels, as a % of total fuel consumption in transport 7. <i>External costs of energy use</i> 8. Energy tax revenue at constant prices and energy consumption	<u>SDS</u> : Adopt energy products tax directive by 2002 and propose more ambitious environmental targets for energy taxation aiming at the full internalisation of external costs, as well as indexation of minimum levels of excise duties to at least the inflation rate. Phase out subsidies to fossil fuel production and consumption by 2010. <u>EC Brussels2003: (revised SDS objective)</u> Increase the share of renewable energy with an EU-wide indicative target for renewable energy of 12% of primary energy needs and 21% of electricity needs by 2010. Promotion of 5.75% target for the use of biofuels in transport by 2010. <u>EC Barcelone2002</u> : Enhance substantially energy efficiency by 2010. <u>6EAP</u> : Doubling the overall share of Combined Heat and Power in the Community as a whole to 18% of the total gross electricity generation. <u>GP 2002</u> : Ensure adequate financing to attain the International Development Targets and the MDGs
			9. High-level radioactive waste and spent nuclear fuel awaiting permanent disposal	<u>SDS</u> : More support to the research, development and dissemination of technology on safer nuclear energy, namely the management of nuclear waste

(2) According to sectors applied in the EU energy statistics.

Normal text = 'best available' indicator i.e. indicator expected to be available; if numbered with an 'a' then is a proxy indicator for the best needed of the same number.

Italics = 'best needed' indicators; needed but facing problems of definition, data availability or data quality.

Level I	Sub-themes	Level II	Level III	Headline Objectives in the EU SD Strategy (SDS) Presidency conclusions of European Council (EC) WSSD Plan of Implementation (PoI) 6th Environmental Action Programme (6EAP) Millennium Declaration Goals
THEME 6: PRODUCTION AND CONSUMPTION PATTERNS				
1. <i>Total material consumption and GDP at constant prices</i> 1a. Domestic Material Consumption and GDP at constant prices	ECO-EFFICIENCY	1. Emissions of-acidifying substances and ozone precursors and GDP at constant prices, by source sector 2. <i>Generation of waste by all economic activities and by households</i> 2a. Municipal waste collected per capita	1. Components of Domestic Material Consumption 2. Domestic Material Consumption, by material 3. Municipal waste treatment, by type of treatment method 4. <i>Generation of hazardous waste, by economic activity</i>	<u>SDS</u> : Break the links between economic growth, use of resources and generation of waste. Propose system of a resource productivity measurement to be operational by 2003. <u>6EAP</u> : Achieve a significant overall reduction in the volumes of waste & hazardous waste generated and going to disposal, without increasing emissions to air, water and soil. <u>PoI2002</u> : Promote the development of 10-year framework of programs to accelerate the shifts towards sustainable consumption and production. Renew commitments to the sound management of chemicals & hazardous wastes throughout their life-cycle.
	CONSUMPTION PATTERNS	3. Electricity consumption per dwelling for lighting and domestic appliances 4. <i>Green public procurement</i>	5. Household number and size 6. Meat consumption per capita 7. <i>Share of consumption of products with an EU or national eco-label</i>	<u>SDS</u> : Institutional reform and changes in corporate and consumer behaviour. Encourage private sector initiatives to incorporate environmental factors in their purchasing specifications. <u>PoI2002</u> : Develop and adopt effective, transparent, verifiable, non-misleading and non-discriminatory consumer information tools to provide information relating to sustainable consumption and production, including human health and safety aspects.
	AGRI-CULTURE	5. Share of area under EU agri-environmental support in total utilised agricultural area 6. Livestock density index	8. Nitrogen surplus 9. Share of area occupied by organic farming in total utilised agricultural area 10. <i>Use of selected pesticides</i>	<u>SDS</u> : The CAP should contribute to achieving sustainable development by encouraging healthy, high quality products, environmentally sustainable production methods, including organic production, renewable raw materials and the protection of biodiversity.

	CORPORATE RESPONSIBILITY	<p>7. <i>Share of industrial production from enterprises with a formal sustainable management system</i></p> <p>7a. Enterprises with an environmental management system (EMS)</p>	<p>11. <i>Ethical financing</i></p> <p>12. Eco-label awards, by country and by product group</p>	<p><u>SDS</u>: Publish annually a triple bottom line measuring companies' performance against economic, environmental and social criteria. Demonstrate and publicize worldwide adherence of EU businesses to the OECD guidelines for multi-national enterprises or other comparable guidelines.</p> <p><u>EC Lisbon2000</u>: An appeal to companies' sense of social responsibility regarding best practices in lifelong learning, work organization, equal opportunities, social inclusion and sustainable development.</p> <p><u>PoI2002</u>: Promote corporate responsibility & accountability, incl. through development and implementation of intergovernmental agreements & measures, international initiatives, public-private partnerships, and national regulations.</p>
--	-------------------------------------	---	--	---

Normal text = 'best available' indicator i.e. indicator expected to be available; if numbered with an 'a' then is a proxy indicator for the best needed of the same number.
Italics = 'best needed' indicators; needed but facing problems of definition, data availability or data quality.

Level I	Sub-themes	Level II	Level III	Headline Objectives in the EU SD Strategy (SDS) Presidency conclusions of European Council (EC) WSSD Plan of Implementation (PoI) 6th Environmental Action Programme (6EAP) Millenium Declaration Goals
THEME 7: MANAGEMENT OF NATURAL RESOURCES				
1. <i>Biodiversity Index</i> 1a. <i>Population trends of farmland birds</i> 2. <i>Fish catches outside safe biological limits</i>	BIODIVERSITY	1. <i>Sufficiency of Member States proposals for protected sites under the EU Habitats directive</i>	1. <i>Change in status of threatened and/or protected species</i>	<u>SDS</u> : Protect and restore habitats and natural systems and halt the loss of biodiversity by 2010. <u>6EAP</u> : Conservation of species and habitats with a special concern of preventing habitat fragmentation. Ensure that the consumption of resources and their associated impacts do not exceed the carrying capacity of the environment. <u>GP 2002</u> : Ensure adequate financing to attain the International Development Targets and the MDGs
	MARINE ECOSYSTEMS	2. <i>Trends of spawning biomass of selected fish stocks</i>	2. <i>Effective fishing capacity and quotas, by specific fisheries</i> 2a. Size of fishing fleet 3. <i>Structural support to fisheries and % allocated to promote env. friendly fishing practices</i>	<u>EC Gothenburg2001</u> : The review of the CFP should address the overall fishing pressure by adapting the EU fishing effort to the level of available resources, taking into account the social impact and the need to avoid over-fishing. <u>6EAP</u> : Conservation, appropriate restoration and sustainable use of marine environment, coasts and wetlands. <u>PoI2002</u> : On an urgent basis, and where possible by 2015, maintain or restore depleted fish stocks to levels that can produce the maximum sustainable yield.
	FRESH WATER RESOURCES	3. Groundwater abstraction as % of available groundwater resources	4. Population connected to wastewater treatment systems 5. <i>Emissions of organic matter as biochemical oxygen demand to rivers</i> 6. <i>Index of toxic chemical risk to aquatic environment</i>	<u>6EAP</u> : Ensure that the rates of extraction from water resources are sustainable over the long term. Achieve quality levels of ground and surface water that do not give rise to significant impacts on and risks to human health and the environment. <u>PoI2002</u> : Develop integrated water resources management and water-efficiency plans by 2005. <u>GP 2002</u> : Ensure adequate financing to attain the International Development Targets and the MDGs

	LAND USE	<p>4. <i>Land use change, by category</i></p> <p>4a. Built-up area as a % of total land area</p> <p>5. <i>Exceedance of critical loads of acidifying substances and nitrogen in sensitive natural areas</i></p>	<p>7. <i>Percentage of total land area at risk of soil erosion</i></p> <p>8. <i>Percentage of total land area at risk of soil contamination</i></p> <p>9. Percentage of forest trees damaged by defoliation</p> <p>10. <i>Fragmentation of habitats due to transport</i></p>	<p><u>6EAP</u>: Conserve and restore areas of significant landscape value including cultivated and sensitive areas. Promotion of sustainable use of the soil, with particular attention to preventing erosion, deterioration, contamination and desertification.</p> <p><u>PoI2002</u>: Accelerate the implementation of the IPF/IFF proposals for action and by the Collaborative Partnership on Forests, and intensify efforts on reporting to the UN Forum of Forests so as to contribute to an assessment of progress in 2005.</p>
--	-----------------	---	--	--

Normal text = 'best available' indicator i.e. indicator expected to be available; if numbered with an 'a' then is a proxy indicator for the best needed of the same number.
Italics = 'best needed' indicators; needed but facing problems of definition, data availability or data quality.

Level I	Sub-themes	Level II	Level III	Headline Objectives in the EU SD Strategy (SDS) Presidency conclusions of European Council (EC) WSSD Plan of Implementation (PoI) 6th Environmental Action Programme (6EAP) Millennium Declaration Goals
THEME 8: TRANSPORT				
1. <i>Vehicle-km and GDP at constant price</i> 1a. Energy consumption by transport and GDP at constant price	TRANSPORT GROWTH	1. Car share of inland passenger transport 2. Road share of inland freight transport	1. Modal split of passenger transport 2. Modal split of freight transport 3. Volume of freight transport and GDP at constant price 4. Energy consumption by transport mode 5. <i>Access to public transport</i>	<p><u>SDS</u>: Decouple transport growth significantly from growth in Gross Domestic Product in order to reduce congestion and other negative side effects of transport.</p> <p><u>SDS</u>: Bring about a shift in transport use from road to rail, water and public passenger transport so that the share of road transport in 2010 is no greater than in 1998. Promote teleworking.</p> <p>(Updated in EC Gothenburg2001): The sustainable transport policy should tackle rising levels of congestion, noise and pollution and encourage use of more environmentally-friendly modes of transport as well as the full internalisation of social and environmental costs. Propose a framework for transport charges to ensure that by 2004 prices for different modes of transport, including air, reflect their costs to society.</p>
	TRANSPORT PRICES	3. <i>External costs of transport activities</i>	6. <i>Freight transport prices by mode</i> 7. <i>Investment in transport infrastructure by mode</i>	
	SOCIAL AND ENVIRONMENTAL IMPACT OF TRANSPORT	4. Emissions of air pollutants (particulate matter and ozone precursors) from transport activities 5. Greenhouse gas emissions by transport activities, by mode	8. People killed in road accidents, <i>by age group</i> 9. Emissions of NO _x from road vehicles (petrol and diesel)	

Normal text = 'best available' indicator i.e. indicator expected to be available; if numbered with an 'a' then is a proxy indicator for the best needed of the same number.
Italics =best needed' indicators; needed but facing problems of definition, data availability or data quality.

Level I	Sub-themes	Level II	Level III	Headline Objectives in the EU SD Strategy (SDS) Presidency conclusions of European Council (EC) WSSD Plan of Implementation (PoI) 6th Environmental Action Programme (6EAP) Millenium Declaration Goals
THEME 9: GOOD GOVERNANCE				
1. Level of citizens' confidence in EU institutions	POLICY COHERENCE	<ol style="list-style-type: none"> 1. <i>Proportion of environmentally harmful subsidies</i> 2. Number of infringement cases brought in front of the Court of Justice, by policy area 3. <i>Administrative cost imposed by legislation</i> 	<ol style="list-style-type: none"> 1. <i>Share of major proposals in the Commission's Legal and Work Programme for which an impact assessment has been undertaken</i> 2. Transposition of Community law, by policy area 	<p><u>SDS</u>: Improve policy coherence; all policies must have sustainable development as their core concern. In particular, forthcoming reviews of Common Policies must look at how they can contribute more positively to sustainable development.</p> <p><u>(revised in Barcelone2002)</u>: Ensure that all major internal and external policy proposals include an impact assessment.</p> <p><u>SDS</u>: Earlier and more systematic dialogue, in particular with representatives of consumers. The views outside the Union should also be sought.</p> <p><u>EC Lisbon2000</u>: Real efforts must be made by public administrations at all levels to exploit new technologies to make information as accessible as possible.</p> <p><u>EC Gothenburg2001</u>: The Union must be served by modern, open and citizen-oriented institutions. The new rules on the public's right of access to documents are a major step in making the Union more open.</p>
	PUBLIC PARTICIPATION	<ol style="list-style-type: none"> 4. Voter turnout in national parliamentary elections 5. <i>Responses to EC Internet public consultations</i> 	<ol style="list-style-type: none"> 3. Voter turnout in EU parliamentary elections, <i>by gender, by age group and by highest level of education attained</i> 4. E-government on-line availability 5. E-government usage by individuals 	

Normal text = 'best available' indicator i.e. indicator expected to be available; if numbered with an 'a' then is a proxy indicator for the best needed of the same number.
Italics = 'best needed' indicators; needed but facing problems of definition, data availability or data quality.

Level I	Sub-themes	Level II	Level III	Headline Objectives in the EU SD Strategy (SDS) Presidency conclusions of European Council (EC) WSSD Plan of Implementation (PoI) 6 th Environmental Action Programme (6EAP) Millennium Declaration Goals
THEME 10: GLOBAL PARTNERSHIP⁽¹⁾				
1. Official Development Assistance (ODA) as % of Gross National Income	GLOBALISATION OF TRADE	1. EU imports from developing countries (total and agricultural products) and agricultural budgetary support 2. Sales of selected fair-trade labelled products	1. Total EU imports from developing countries, by income group 2. Total EU imports from developing countries, by group of products	<u>GP2002⁽²⁾</u> : Ensure that globalisation contributes to sustainable development. <u>EC Barcelona2002</u> : Integrate developing countries into the world economic system notably through the implementation of the Doha Development Agenda and ensure that trade policies and investment flows contribute to sustainable development. <u>6EAP</u> : Ensure that trade and env. policy measures are mutually supportive. <u>PoI2002</u> : Improve access by dev. countries to alternatives to ozone-depleters by 2010, and assist in complying with phase-out schedule under the Montreal Protocole.
	FINANCING FOR SD	3. Bilateral ODA by category	3. Total EU financing for development, by type 4. ODA and FDI to developing countries, by income group and geographical area 5. Share of untied ODA in total bilateral ODA commitments 6. ODA per capita, in EU donors and in recipient countries	<u>GP2002⁴</u> : Ensure adequate financing to attain the International Development Targets and the Millennium Development Goals. <u>EC Barcelona2002</u> : Reach UN goal of 0.7% for ODA/GNI: MS lacking behind this goal to increase their ODA in the next four years within their respective budget allocation processes, whilst the other MS renew their efforts to remain at or above the target of 0.7% of ODA, so that collectively a EU average of 0.39% is reached by 2006 and each MS at least 0.33% ODA/GNI by 2006 (<i>Monterrey2002</i>). <u>EC Barcelona2002</u> : Encourage sustainable foreign direct investments (FDI) in developing countries and export credits consistent with sustainable development.
	RESOURCE MANAGEMENT	4. EU imports of materials from developing countries, by group of products	7. <i>Contribution of the Clean Development Mechanism (CDM) to GHG emission reductions in developing countries</i> 7a. CO ₂ emissions per capita in the EU and in developing countries	<u>GP2002⁴</u> : Ensure that current trends in the loss of environmental resources are effectively reversed at national and global levels by 2015. Develop sectoral and intermediate objectives in some key sectors – water, land and soil, energy and biodiversity. <u>6EAP</u> : The pursuit of ambitious environmental policies at the international level paying particular attention to the carrying capacity of the global environment. The further promotion of sustainable consumption and production patterns at the international level.

(1) In the context of sustainable development and in order to keep groups of countries consistent between the indicators, the group of 'developing countries' has been identified to the countries receiving development assistance from the Development Aid Committee (DAC Part I countries).

(2) Commission Communication Towards a global partnership for sustainable development, COM(2002) 82 Final.