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2004 EDITION

Eurostat yearbook 2004

The statistical guide to Europe

Data 1992-2002

Chapter 1

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The Eurostat yearbook as a combined product

The Eurostat yearbook 2004 is a combined product consisting of a book and a CD-ROM. The CD-ROM contains the complete statistical information of the Eurostat yearbook 2004, a selection of which is presented in the book.

The CD-ROM is in three languages (English, French, German). It contains the following:

- The PDF files of the paper version.
- More than 1 000 statistical tables and graphs. All data can be easily extracted from the tables. The graphs can be generated dynamically according to the wishes of the reader.
- All the statistical background information about 'In the spotlight: sustainable development'.
- Links to the Eurostat Internet site to find more information, for example on further publications or on more up-to-date data. On its website, Eurostat provides access to a range of statistical information that can be consulted online or downloaded free of charge.

The Eurostat yearbook is easy to use

- Introductory texts for each section explain the main features and the relevance of the information presented and give an idea of what other data on the subject Eurostat has on offer.
- A glossary clarifies the statistical terms and concepts used.
- The abbreviations and acronyms used are spelled out on the bookmark to the yearbook.

Date of data extraction

The statistical data presented in this yearbook were extracted on 10 May 2004 and represent the data availability at that time.

Order and coding of countries

The order of the EU Member States used in the Eurostat yearbook is their order of protocol. It follows the alphabetical order of the countries' short names in their respective native languages.

Generally, the countries are identified in the Eurostat yearbook 2004 by using the shortest official designation. If codes are used, these are the two-digit ISO codes, except for Greece and the United Kingdom for which EL and UK, respectively, are used.

A complete list of ISO codes can be found at:
http://www.iso.org/iso/en/prods-services/iso3166ma/index.html

Symbols and codes in the tables

-	"Not applicable" or "real zero" or "zero by default"
0	Less than half of the unit used
:	not available
p	Provisional value
e	Estimated value
s	Eurostat estimate
r	Revised value
f	Forecast
u	Unreliable or uncertain data (see explanatory texts)
:u	Extremely unreliable data
:c	Confidential
:n	Not significant
b	Break in series (see explanatory texts)
i	see footnote

€ zone stands for Euro-zone. "€ zone", which is not an official symbol, is used for practical reasons.

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1

Eurostat, your key to European statistics

Comparable information about Europe has a name: Eurostat

'Eurostat' is the synonym for a high-quality information service providing statistical data about, and for, the European Union. Using our data means having a finger on the pulse of current developments in Europe: we report the background figures and facts needed to understand these developments.

The Eurostat yearbook: compiled for everyone with an interest in Europe

The Eurostat yearbook opens the door to Eurostat's information service by providing an overview of the spectrum of data we offer. It shows how benchmark figures have developed during the last 10 years in the European Union, the euro-zone and the EU Member States. To facilitate international comparison, some tables include the comparable data for other countries, for example the United States of America.

Introductory texts for each section give an idea of what data Eurostat has on the subject and what the relevance of this information is. We understand the yearbook not to be a mere collection of tables, but a 'portal' to European statistics. We hope it will make you curious about the data Eurostat has on offer.

How to get the data you want

An address for your list of favourites: http://www.europa.eu.int/comm/eurostat

Eurostat offers a wide range of statistical information on its website that you can consult online or download free of charge:

— data, accessible as soon as it is available;
— all of Eurostat's news releases;
— the *Statistics in Focus* series that provides up-to-date summaries of the main results of statistical surveys, studies and analysis;
— all Eurostat publications in PDF format. The background to specific topics is provided in our *Panorama* publications which contain thoroughly elaborated analysis, tables, graphs and maps;
— catalogues;
— working papers and studies (methodological work and reports on data quality; one-off studies and their results; documents drafted by partners such as national statistical institutes or universities);
— methods and nomenclatures, accessible in PDF format or via RAMON, Eurostat's classification server.

1

Eurostat's indicators: long-term or short-term — but always relevant

Long-term indicators

— The 'Structural indicators' help to assess the longer-term progress in the policy domains of employment, innovation and research, economic reform, social cohesion, and the environment as well as the general economic background. They are recognised as being most relevant for political discussion. All Structural indicators are presented in the Eurostat yearbook and are identified with a specific icon ( ).
— Many more predefined tables on different areas of life, work, the economy and the environment in the EU.

Short-term indicators

The 'Euro-Indicators' provide a collection of the latest data which are helpful for a short-term evaluation of the economic situation in the euro zone and in the European Union. The Euro-Indicators are updated daily. Their publication is announced in the 'Release' calendar.

Eurostat's service for journalists

Statistics make news. They are essential background to many news stories, features and in-depth analysis. The printed press as well as radio and TV programmes use our data intensively. Eurostat's Press Office puts out user-friendly news releases on a key selection of data covering the EU, the euro zone, the Member States and their partners. About 150 press releases are published each year, of which nearly 120 are on the monthly or quarterly Euro-Indicators. The Press Office also coordinates interviews and press conferences on important statistical results and events. Eurostat's Media Support helps professional journalists to find data on all kinds of topics.

All Eurostat news releases are available free of charge on the web at 11 a.m. on the day they are released.

Journalists can contact the Media Support if they need further information on our news releases or other data (tel. (352) 43 01-33408, fax (352) 43 01-35349,
e-mail: eurostat-mediasupport@cec.eu.int).

Why Eurostat data?

Equal information for a democratic society

Being informed is the first step to actively participating in a democratic Europe. Europeans demand a high-quality information service providing impartial, reliable and comparable statistical data. They want to access them easily and without exemption: no key information must be withheld; all citizens and enterprises must have equal and complete access to it. Eurostat and its partners in the European statistical system open the door and guarantee this equal and comprehensive information on social, economic and environmental developments in Europe. It is up to you to use it!

Impartiality and objectivity: two pillars of trust

Access to reliable and high-quality statistics becomes evermore important in the information society in which we live, and trust in the source an immeasurable value. Eurostat's trustworthiness is enshrined by law. Article 285(2) of the EC Treaty says: 'The production of Community statistics shall conform to impartiality, reliability, objectivity, scientific independence, cost-effectiveness and statistical confidentiality; it shall not entail excessive burdens on economic operators.' These are not abstract words for us: they are the leading principle for our day-to-day work.

Comparability through harmonisation

It is easier to understand each other if one knows about the other's conditions of life and work. What is true for the relationship between individuals is also true for society as a whole. Comparisons, however, require comparable statistics that, in turn, demand the use of a common 'statistical language'.

The common language has to embrace concepts, methods and definitions, as well as technical standards and infrastructures. This is what statisticians call harmonisation. It is what the European statistical system is all about. And it is Eurostat's primary *raison d'être*.

The European statistical system

The European statistical system comprises Eurostat and the statistical offices, ministries, agencies and central banks that collect official statistics in the EU Member States, Iceland, Liechtenstein and Norway. The statistical authorities in the Member States collect, verify and analyse national data and send them to Eurostat. Eurostat consolidates the data and ensures their comparability. The European statistical system concentrates on EU policy areas. But, with the extension of EU policies, harmonisation has extended to nearly all statistical fields.

The European statistical system is a network in which Eurostat's role is to lead the way in the harmonisation of statistics in close cooperation with the national statistical authorities. At the heart of the European statistical system is the Statistical Programme Committee, which brings together the heads of Member States' national statistical offices and is chaired by Eurostat. The Statistical Programme Committee discusses joint actions and programmes to be carried out to meet EU information requirements. It agrees a five-year programme, which is implemented by the national authorities and monitored by Eurostat.

A matter of disposition: an attractive and relevant data assortment

Data become information when they become interesting. As a matter of disposition, Eurostat has an open ear for what people are interested in.

The statistical programme of the European statistical system does not 'fall out of the blue'. What we report on has been decided through a well-defined political process at the European level in which the EU Member States are deeply involved. Most surveys and data collections are based on European regulations that are legally binding on the national level. A central question during the political and legal discussions that lead to European statistical regulations is: 'To whom and why are the data of interest?' Every statistical regulation has to pass a critical test.

On the other hand, the European statistical programme is constantly revised. In view of the principle of cost-efficiency, the production of data that have been rendered less relevant by new developments will be modified or even discontinued. As a result, the statistical programme is kept lean and modern.

Our data are worth looking at.

Eurostat's Structural indicators

Eurostat's Structural indicators: high-quality statistics for competent governance in Europe

At the Lisbon European Council in spring 2000, the European Union set itself the following strategic goal for the next decade: to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion.

The Council acknowledged the need to regularly discuss and assess progress made in achieving this goal on the basis of commonly agreed Structural indicators. To this end, it invited the European Commission to draw up an annual spring report on progress on the basis of Structural indicators relating to employment, innovation and research, economic reform, social cohesion and the general economic background, as well as, since 2002, the environment.

For the first time in 2004, the Commission has presented a shortlist of 14 Structural indicators which were covered in the statistical annex to its 2004 spring report to the European Council. This shortlist has been agreed with the Council. Its concise layout makes it easier to present policy messages and the Member States' positions towards the key Lisbon targets. In keeping with the recent streamlining of procedures in the wider context of the Lisbon strategy, it is foreseen to keep this list stable for three years.

To ensure that the public has access to the detailed database of Structural indicators, which continues to play an important role in the EU's policy process, Eurostat disseminates the full set of Structural indicators on its Structural indicators website (http://www.europa.eu.int/comm/eurostat/structuralindicators). Time series are presented for EU-25 and EU-15, EUR-12, the EU Member States, the EEA/EFTA countries, Japan, the United States and the candidate countries.

The 2004 complete set of Structural indicators is listed below. The indicators of the shortlist are marked in bold. All Structural indicators are presented in the Eurostat yearbook. They are marked with the following icon ( ) which appears next to the title of the respective tables.

List of Structural indicators

General economic background

GDP per capita in PPS
Real GDP growth rate
Labour productivity per person employed
Labour productivity per hour worked
Employment growth (*)
Inflation rate
Unit labour cost growth
Public balance
General government debt

Employment

Employment rate (*)
Employment rate of older workers (*)
Average exit age from the labour force (*)
Gender pay gap in unadjusted form
Tax rate on low-wage earners: tax wedge on labour cost
Tax rate on low-wage earners: unemployment trap
Lifelong learning (*)
Serious accidents at work (*)
Fatal accidents at work (*)
Unemployment rate (*)

Innovation and research

Spending on human resources
Total R & D expenditure
R & D expenditure by source of funds: industry, government, abroad
Level of Internet access: households and enterprises
Science and technology graduates (*)
Patents, EPO
Patents, USPTO
Venture capital investments: early stage, expansion and replacement
ICT expenditure: IT expenditure
ICT expenditure: telecommunications expenditure
E-commerce: percentage of enterprises' total turnover from e-commerce
Youth education attainment level (*)

Economic reform

Comparative price levels
Price convergence between EU Member States
Price of telecommunications: local calls, national calls, and calls to the United States
Electricity prices: industrial users and households
Gas prices: industrial users and households
Market share of the largest generator in the electricity market
Market share of the incumbent in fixed telecommunications: local calls, long-distance calls and international calls
Market share of the leading operator in mobile telecommunication
Public procurement
Sectoral and ad hoc State aid
Convergence in bank lending rates: loans to households for house purchases, loans to non-financial corporations up to one year, and loans to non-financial corporations over one year
Trade integration of goods, services
Foreign direct investment intensity
Business investment
Business demography: birth rate of enterprises
Business demography: survival rate of enterprises
Business demography: death rate of enterprises

Social cohesion

Inequality of income distribution (income quintile share ratio)
At-risk-of-poverty rate before social transfers (*)
At-risk-of-poverty rate after social transfers (*)
At-persistent-risk-of-poverty rate (*)
Dispersion of regional employment rates (*)
Early school-leavers (*)
Long-term unemployment rate (*)
Children aged 0–17 living in jobless households
People aged 18–59 living in jobless households (*)

Environment

Greenhouse gas emissions
Energy intensity of the economy
Volume of freight transport relative to GDP
Volume of passenger transport relative to GDP
Modal split of freight transport
Modal split of passenger transport: percentage share of cars
Population exposure to air pollution by ozone and by particulate matter
Municipal waste collected, landfilled or incinerated
Share of renewable energy (including indicative targets)
Fish stocks in European marine waters
Protected areas for biodiversity: habitats directive
Protected areas for biodiversity: birds directive

(*) Indicators disaggregated by gender.

The European Union in the global context

Get an idea of the EU's position in the world

Eurostat's data allow comparison between the EU and other parts of the world. They help in analysing its relation to other countries and economic zones. To locate the EU's position in the world, this section presents a statistical selection on the following:

— the EU population and its development relative to the world population;
— some economic indicators;
— the expenditure on information technology and telecommunication as well as the percentage of citizens who have Internet access at home;
— how much energy is being used to produce the GDP in different countries. The indicator 'energy intensity of the economy' gives the answer. Other environmental indicators are available.

The world population from 1960 to 2002
Mid-year population in million persons

	1960	1965	1970	1975	1980	1985	1990	1995	2000	2001	2002
World	3 039.7	3 346.2	3 708.1	4 087.3	4 454.3	4 850.4	5 275.9	5 686.0	6 079.0	6 154.3	6 228.6
More developed countries, of which:	910.4	961.6	1 003.2	1 044.9	1 080.8	1 111.5	1 143.0	1 171.8	1 192.0	1 195.7	1 199.1
EU-25	378.0	395.1	406.9	418.4	427.0	432.6	439.5	447.1	452.0	452.4	453.1
Japan	94.1	98.9	104.3	111.6	116.8	120.8	123.5	125.3	126.7	126.9	127.1
United States	180.7	194.3	205.1	216.0	227.7	238.5	250.1	266.6	282.3	285.0	287.7
Russian federation	119.6	126.5	130.2	134.3	139.0	144.0	148.1	148.1	146.0	145.5	145.0
Less developed countries, of which:	2 129.3	2 384.6	2 704.4	3 042.5	3 373.5	3 739.0	4 132.9	4 514.2	4 887.0	4 958.7	5 029.5
China	650.7	715.5	820.4	917.9	984.7	1 054.7	1 138.9	1 206.0	1 262.5	1 271.1	1 279.2
India	445.9	495.7	555.0	620.5	687.0	762.4	841.7	922.1	1 002.7	1 018.5	1 034.2
Nigeria	39.9	45.0	51.1	58.9	69.6	79.9	92.6	107.4	123.4	127.1	130.5
Brazil	71.7	83.1	95.7	108.8	123.0	137.3	151.1	163.5	175.6	177.8	179.9

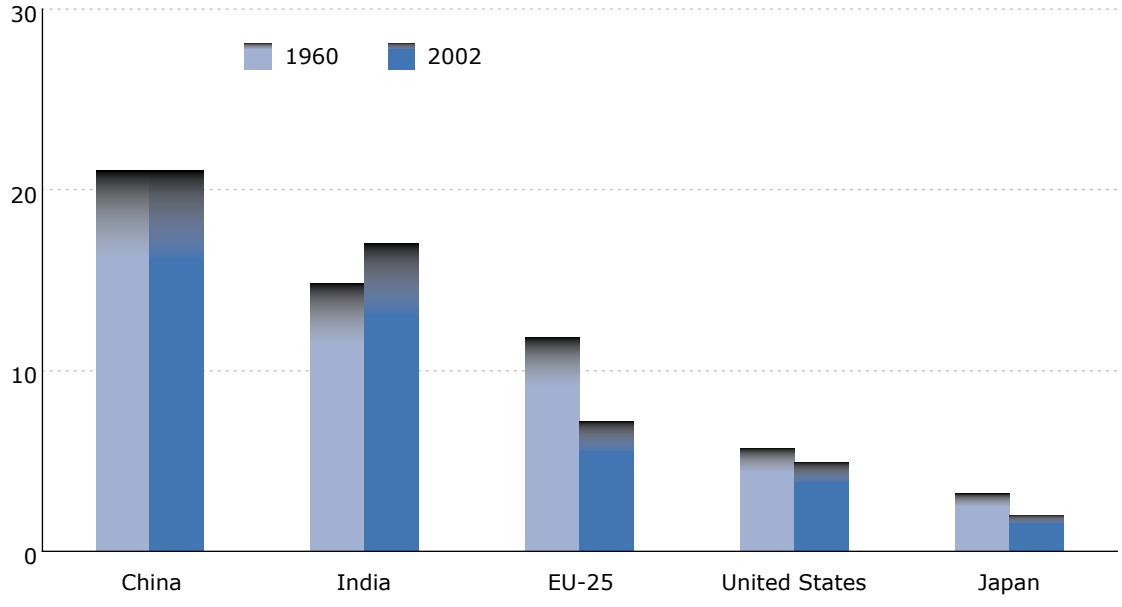
Source (excluding EU-25): US Bureau of the Census, International database.

Shares in the world population from 1960 to 2002
Mid-year population; in %

	1960	1965	1970	1975	1980	1985	1990	1995	2000	2001	2002
World	100	100	100	100	100	100	100	100	100	100	100
More developed countries, of which:	30	29	27	26	24	23	22	21	20	19	19
EU-25	12	12	11	10	10	9	8	8	7	7	7
Japan	3	3	3	3	3	2	2	2	2	2	2
United States	6	6	6	5	5	5	5	5	5	5	5
Russian Federation	4	4	4	3	3	3	3	3	2	2	2
Less developed countries, of which:	70	71	73	74	76	77	78	79	80	81	81
China	21	21	22	22	22	22	22	21	21	21	21
India	15	15	15	15	15	16	16	16	16	17	17
Nigeria	1	1	1	1	2	2	2	2	2	2	2
Brazil	2	2	3	3	3	3	3	3	3	3	3

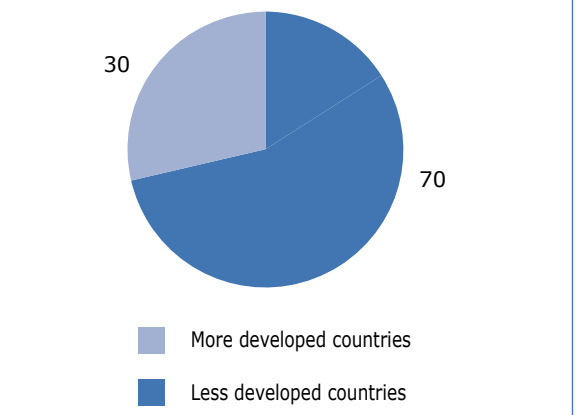
Source (excluding EU-25): US Bureau of the Census, International database.

Share in the world's population
In %



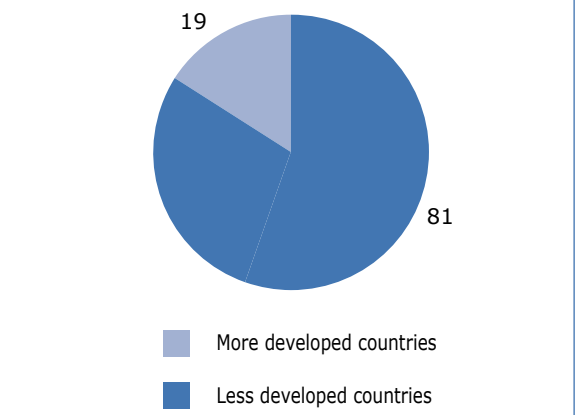
Source (excluding EU-25): US Bureau of the Census, International database.

Share in the world population 1960
In %



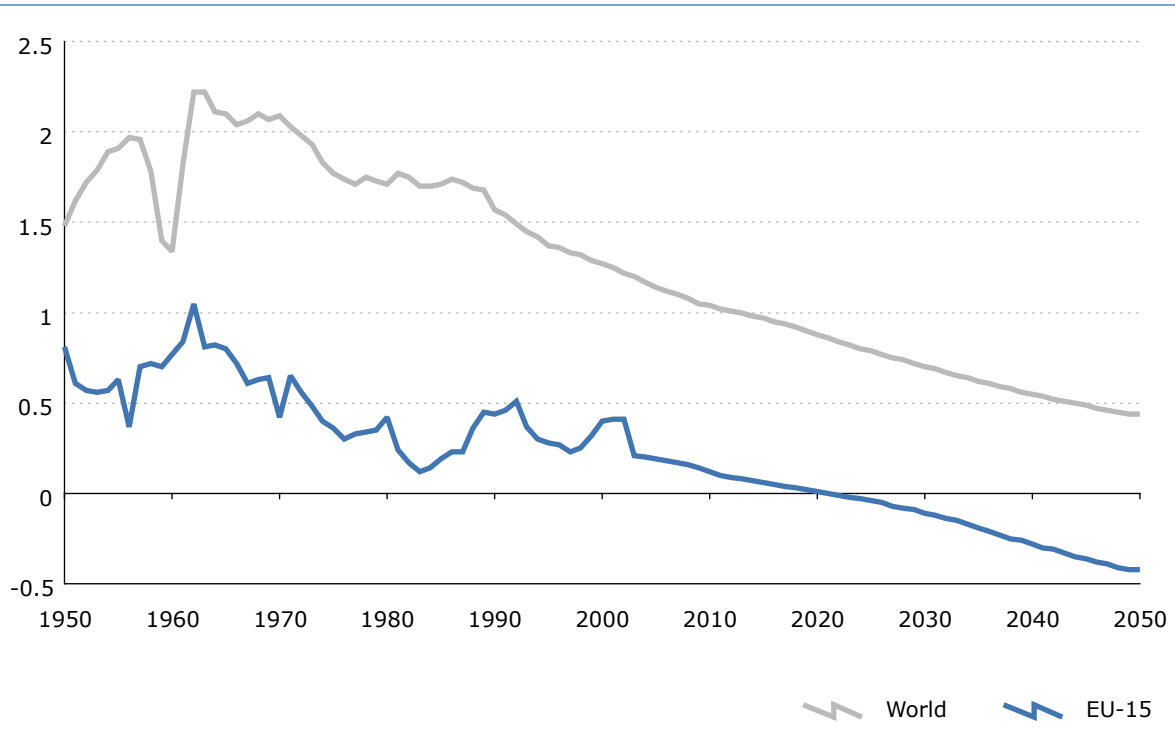
Source (excluding EU-25): US Bureau of the Census, International database.

Share in the world population 2002
In %



Source (excluding EU-25): US Bureau of the Census, International database.

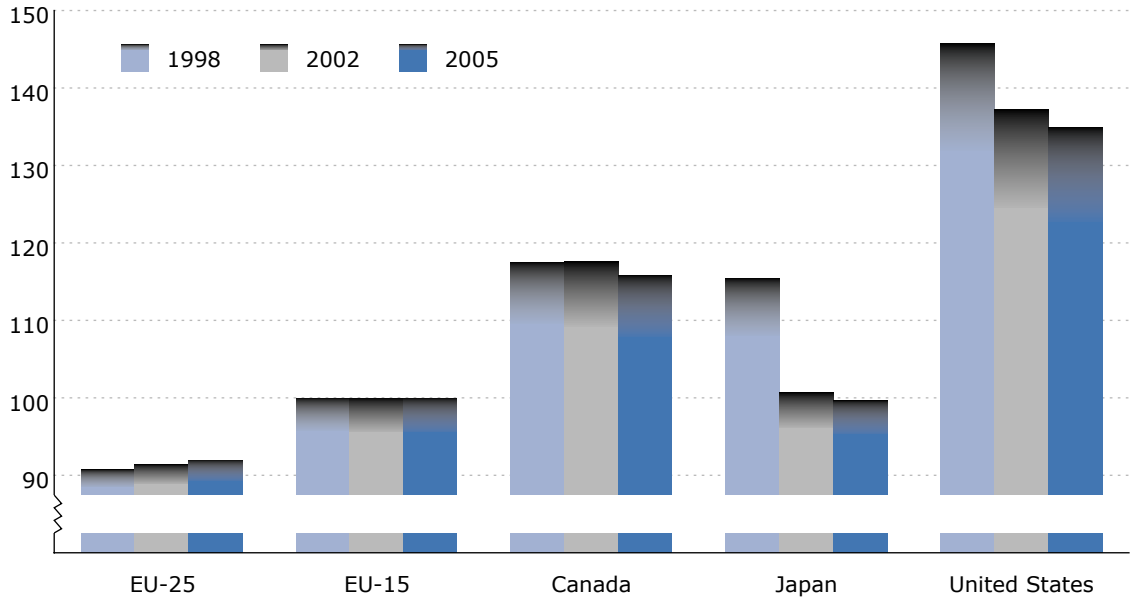
Total population change in the world and the EU-15
Change to the preceding year in %



Includes forecast.

Gross domestic product per capita in purchasing power standards (PPS)

EU-15 = 100

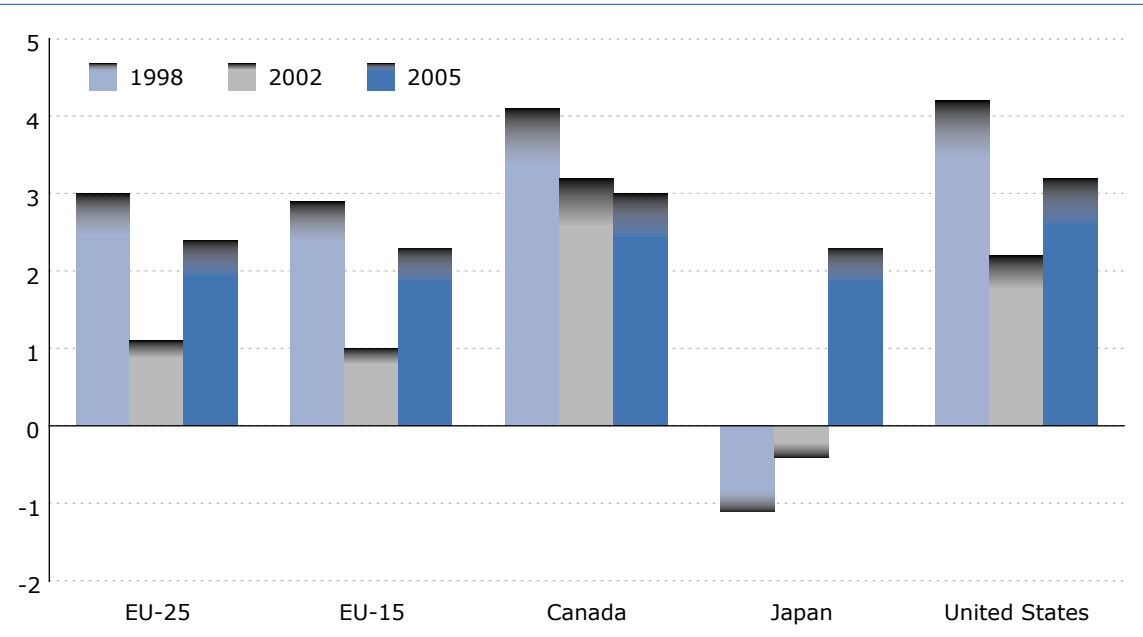


2005: forecast; 2002 Canada, Japan, United States: forecast.

The gross domestic product is an indicator for a nation's economic situation. It reflects the total value of all goods and services produced less the value of goods and services used for intermediate consumption in their production. Expressing GDP in purchasing power standards eliminates differences in price levels between countries, and calculation on a per head basis allows the comparison of economies significantly different in absolute size.

Growth rate of the gross domestic product

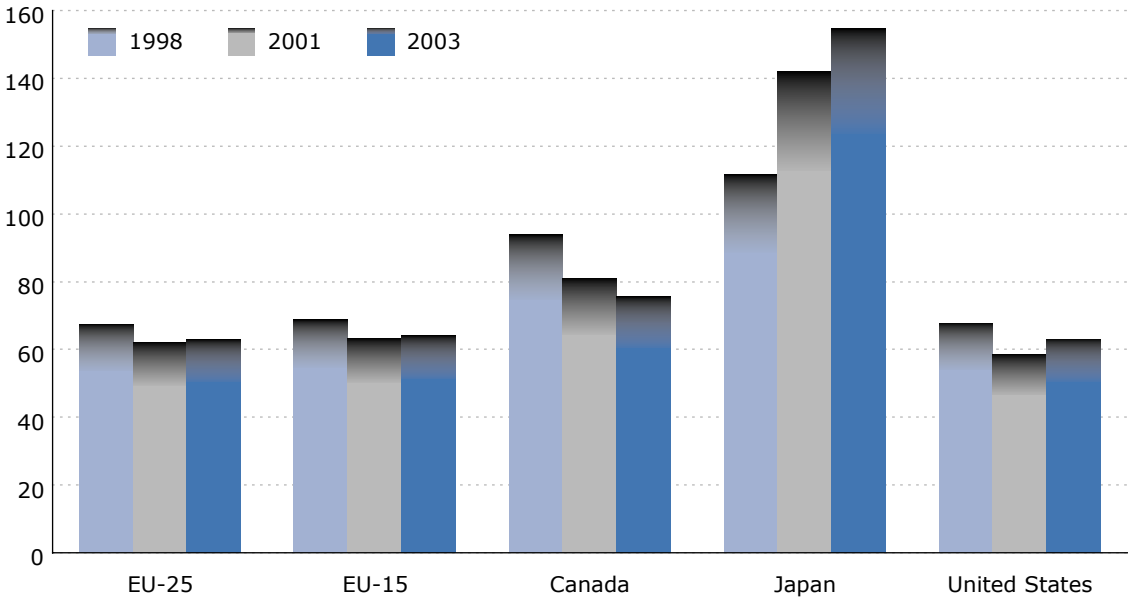
Percentage change to the previous year; GDP at constant prices (1995)



2005: forecast.

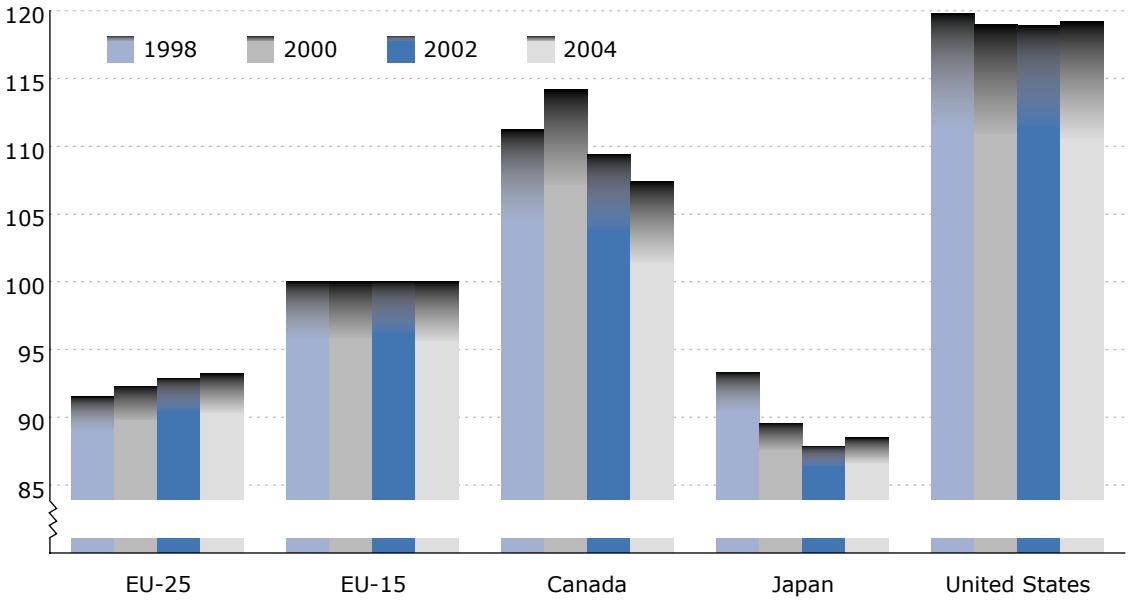
Gross domestic product (GDP) is a measure for the economic activity. It is defined as the value of all goods and services produced less the value of any goods or services used in their creation. The calculation of the annual growth rate of GDP at constant prices is intended to allow comparisons of the dynamics of economic development both over time and between economies of different sizes. The growth rate is calculated from figures at constant prices since these give volume movements only, i.e. price movements will not inflate the growth rate.

General government consolidated gross debt
In % of GDP



The general government sector comprises the subsectors of central government, State government, local government and social security funds. GDP used as a denominator is the gross domestic product at current market prices. Debt is valued at nominal (face) value, and foreign currency debt is converted into national currency using end-year market exchange rates (though special rules apply to contracts). The national data for the general government sector are consolidated between the subsectors. Basic data are expressed in national currency, converted into euro using end-year exchange rates for the euro provided by the European Central Bank. Data are compiled on an accrual basis.

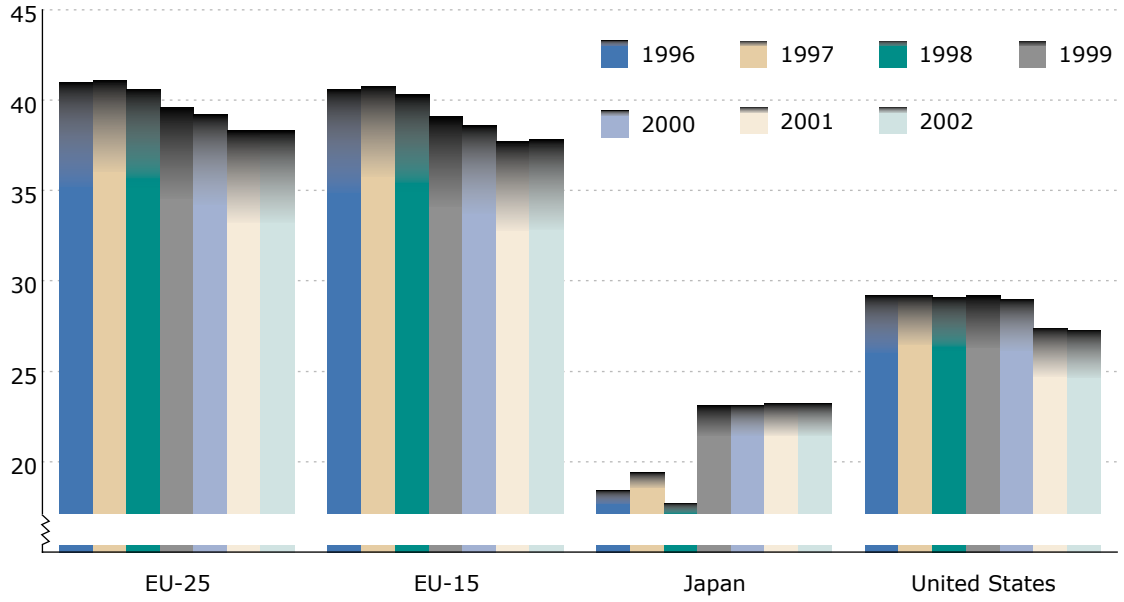
Labour productivity
GDP in purchasing power standards (PPS) per person employed relative to EU-15 (= 100)



Includes forecasts.

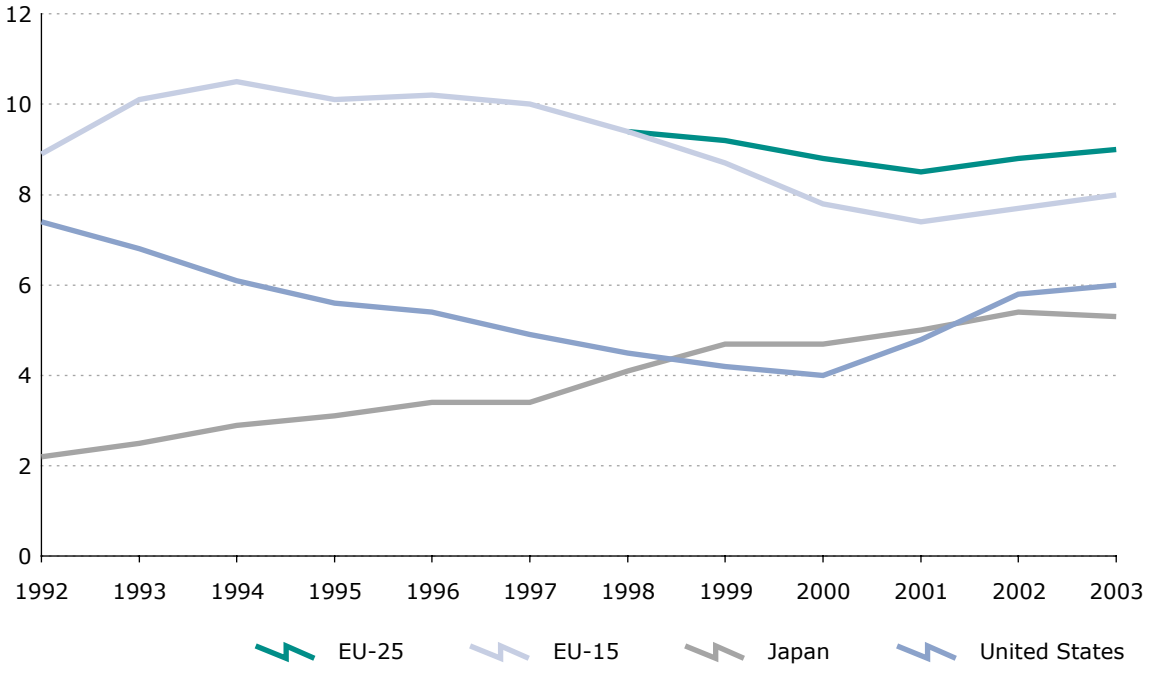
Gross domestic product (GDP) is a measure for the economic activity. It is defined as the value of all goods and services produced less the value of any goods or services used in their production. GDP per person employed gives an overall impression of the productivity of national economies expressed in relation to the European Union (EU-15) average. If the index of a country is higher than 100, this country's level of GDP per person employed is higher than the EU average and vice versa. Basic figures are expressed in PPS, i.e. a common currency that eliminates the differences in price levels between countries allowing meaningful volume comparisons of GDP between countries. Please note that 'persons employed' does not distinguish between full-time and part-time employment.

Tax rate on low-wage earners
Tax rate on labour cost in %



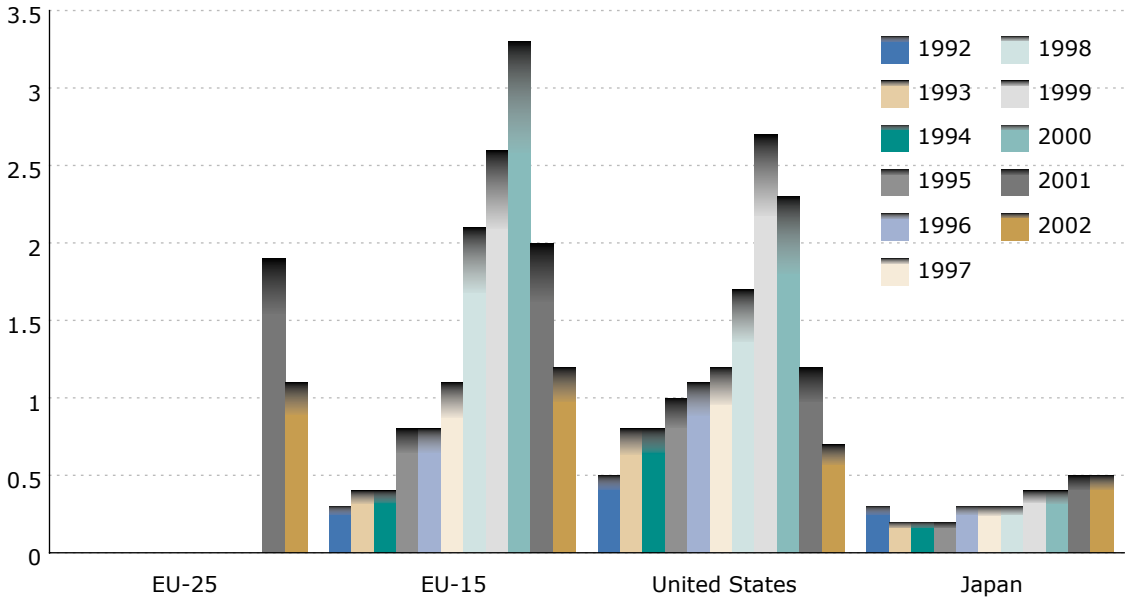
The tax wedge on labour cost calculates the income tax on gross earnings plus the employee's and employer's social security contributions, and then expresses this sum in % of the total labour cost for this low-wage earner.

Total unemployment rate
In %



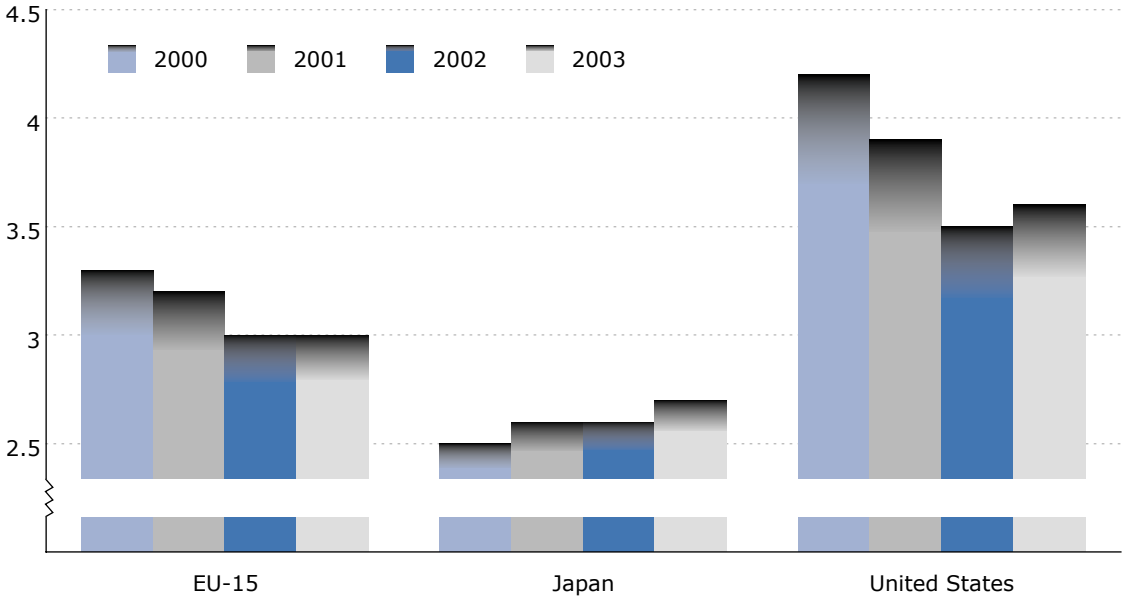
Unemployment rates represent unemployed persons as a percentage of the labour force. The labour force is the total number of people employed and unemployed. Unemployed persons comprise persons aged 15 to 74 who were: a. without work during the reference week, b. currently available for work, i.e. were available for paid employment or self-employment before the end of the two weeks following the reference week, c. actively seeking work, i.e. had taken specific steps in the four weeks period ending with the reference week to seek paid employment or self-employment or who found a job to start later, i.e. within a period of, at most, three months.

Foreign direct investment intensity
In %



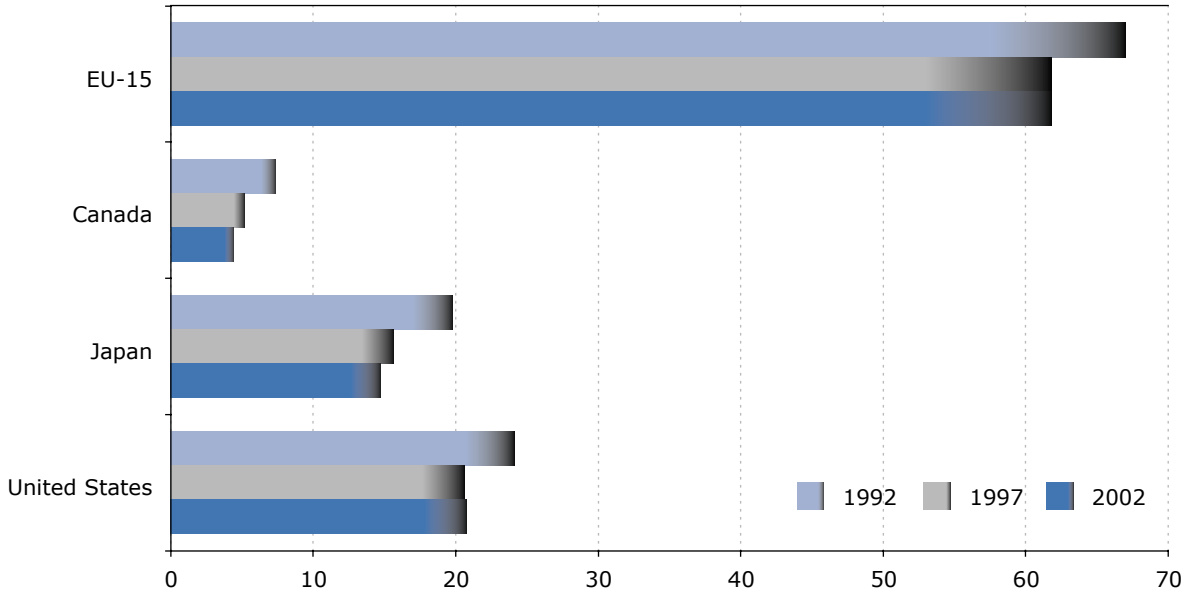
Average of inward and outward foreign direct investment (FDI) flows divided by gross domestic product (GDP). The index measures the intensity of investment integration within the international economy. The direct investment refers to the international investment made by a resident entity (direct investor) to acquire a lasting interest in an entity operating in an economy other than that of the investor (direct investment enterprise). Direct investment involves both the initial transactions between the two entities and all subsequent capital transactions between them and among affiliated enterprises, both incorporated and unincorporated.

Expenditure on information technology
In % of GDP



Expenditure on IT (information technology) hardware, equipment, software and other services as a percentage of GDP.

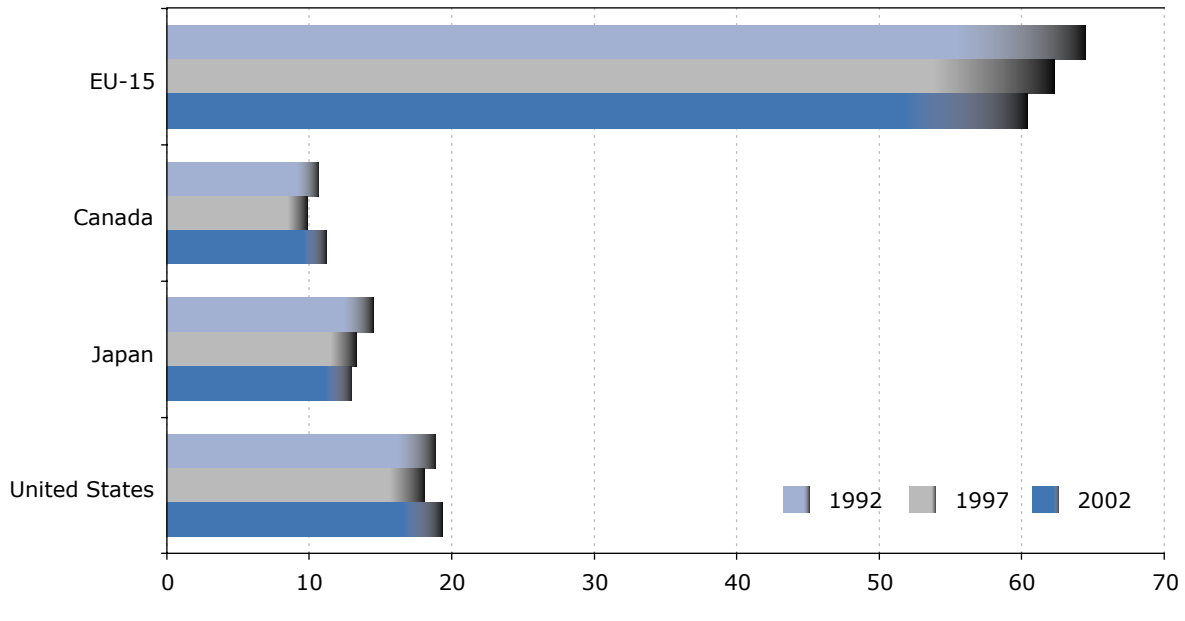
Exports to EU countries
Share in total national exports (fob); in %



Source: Eurostat, national sources, United Nations.

The graph shows the part of intra-EU exports of declaring countries expressed in value compared to their total exports.

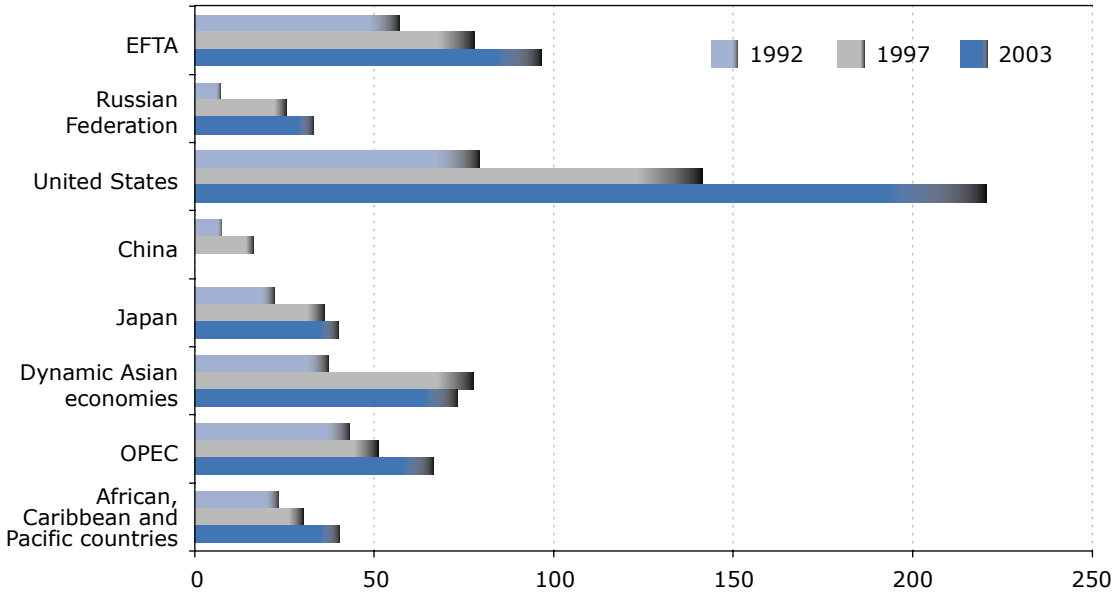
Imports from EU countries
Share in total national imports (cif); in %



Source: Eurostat, national sources, UN.

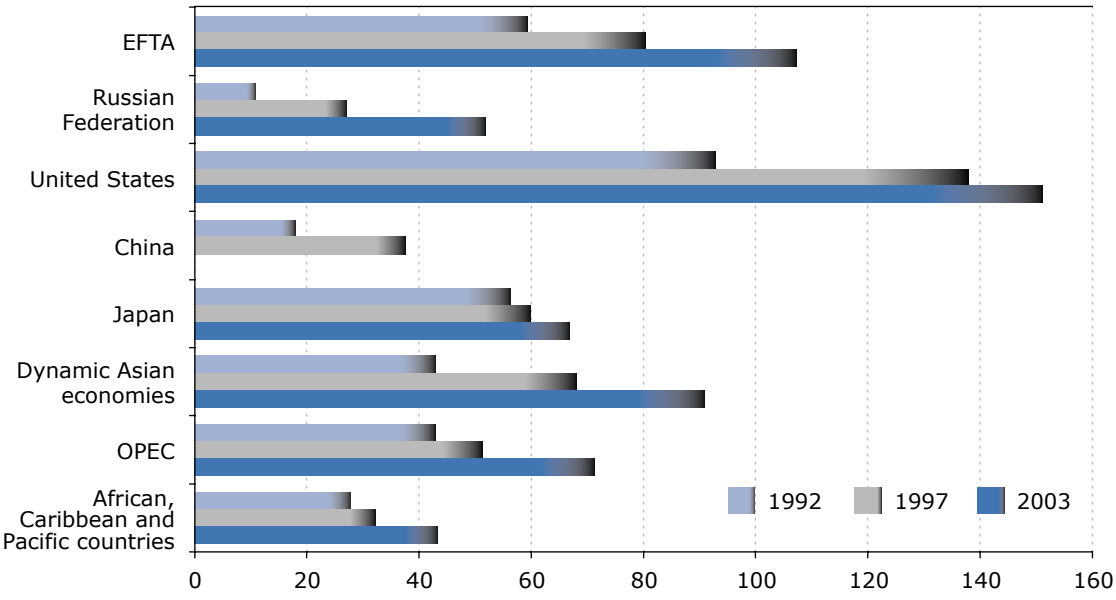
The graph shows the part of intra-EU imports of declaring countries expressed in value compared to their total imports.

Extra-EU exports — Main trading partners
In 1 000 million ECU/EUR



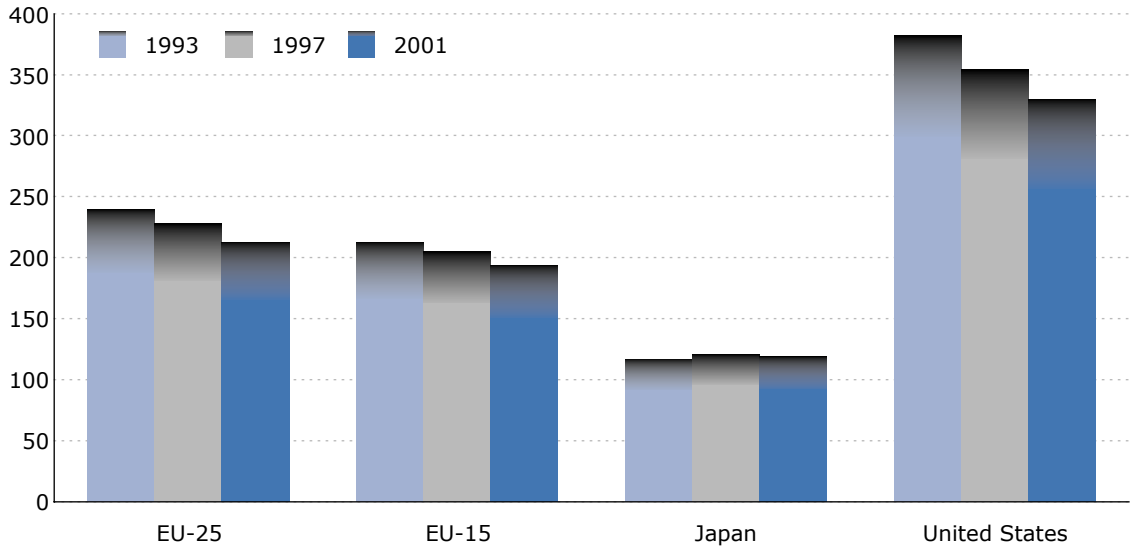
Extra-EU exports represent the value of the Union's exports to the main third countries. Values are fob (free on board), i.e. the costs of transport and insurance outside the declaring country are not taken into account.

Extra-EU imports — Main trading partners
In 1 000 million ECU/EUR



Extra-EU imports show the value of the Union's imports from the main third countries. Values are cif (cost, insurance, freight), i.e. the costs of transport and insurance within the borders of the declaring country are included.

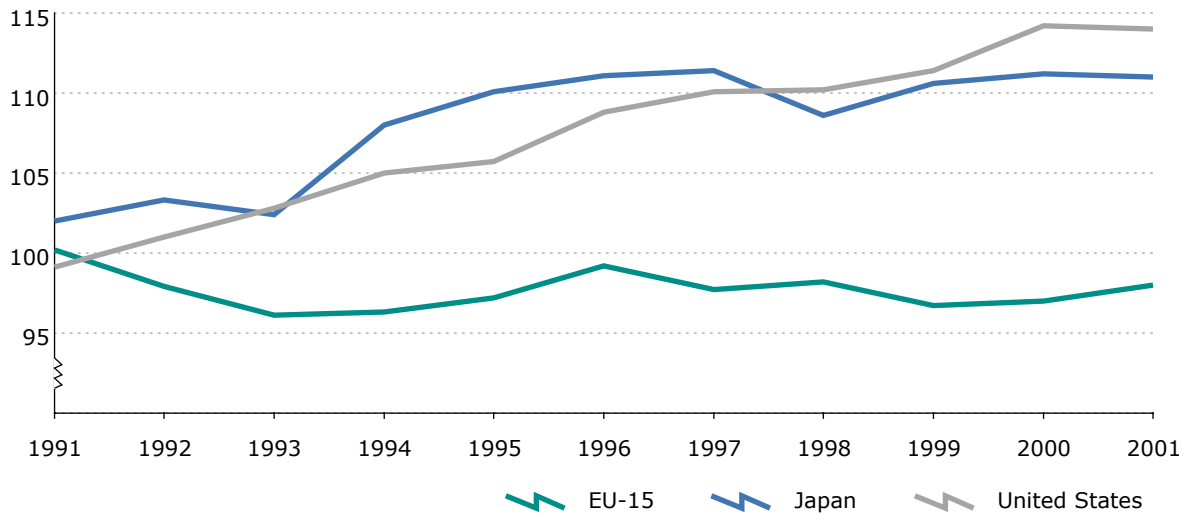
Energy intensity of the economy
Kgoe per 1 000 EUR



2001 EU-25, EU-15: provisional data.

This indicator is the ratio between the gross inland consumption of energy and the gross domestic product (GDP) for a given calendar year. It measures the energy consumption of an economy and its overall energy efficiency. The gross inland consumption of energy is calculated as the sum of the gross inland consumption of five energy types: coal, electricity, oil, natural gas and renewable energy sources. The GDP figures are taken at constant prices to avoid the impact of the inflation, base year 1995 (ESA 95). The energy intensity ratio is determined by dividing the gross inland consumption by the GDP. Since gross inland consumption is measured in kgoe (kilogram of oil equivalent) and GDP in 1 000 EUR, this ratio is measured in kgoe per 1 000 EUR.

Greenhouse gas emissions
1990=100



Under the Kyoto Protocol, the EU has agreed to an 8 % reduction in its greenhouse gas emissions by 2008–12, compared to the base year 1990. The reductions for each of the EU-15 countries have been agreed under the so-called EU burden-sharing agreement, which allows some countries to increase emissions, provided these are offset by reductions in other Member States. The ACCs have chosen other reduction targets and other base years, as allowed under the protocol. These and the 'burden-sharing' targets for 2008–12 are shown in the table as figures for 2010. Emissions of the six greenhouse gases covered by the protocol are weighted by their global warming potentials (GWPs) and aggregated to give total emissions in CO_2 equivalents. The total emissions are presented as indices, with the base year = 100.

In the spotlight: sustainable development

Sustainable development (SD) is a complex concept which accentuates the need for 'better', rather than just 'more'. Ever since Gro Harlem Brundtland first defined sustainable development as development that 'meets the needs of the present without compromising the ability of future generations to meet their own needs' ([1]) it has been criticised for its vagueness. However, sustainable development is not a fixed objective, but rather an evolving process that will move us in the 'right' direction. The challenge lies in making the concept operational.

While we do not know precisely the recipe for achieving sustainability we do know what is unsustainable. Therefore, the pursuit of sustainability is not so much a journey towards sustainability but rather away from unsustainability. Supranational organisations such as the European Union have an important role to play in creating a policy framework that is conducive to SD.

It was with this in mind that the European Council adopted a strategy for sustainable development at Gothenburg in 2001 ([2]), which was subsequently completed by the adoption of an external dimension — the role the EU intends to play to promote global sustainable development — at the Seville European Council ([3]). The strategy has been further extended by the EU commitments at the World Summit on Sustainable Development in Johannesburg in autumn 2002. The EU strategy adopts an integrated and holistic approach to policy-making that seeks to strike the 'right' balance between the economic, social and environmental dimensions. To keep a tight focus, the strategy limits itself to a number of key trends that pose a serious threat to our future well-being.

While SD is perceived to have three dimensions — economic, social and environmental — we can also identify a number of issues or themes which cut across these dimensions. It is, in fact, these themes that the sustainable development indicators (SDIs) set out to measure. The advantage of such an approach is that, rather than individually measuring economic, social or environmental issues, the indicators often capture elements of two or three of the dimensions.

This strategy has been divided into 10 policy themes: 'Economic development', 'Poverty and social exclusion', 'Ageing society', 'Public health', 'Climate change and energy', 'Production and consumption patterns', 'Management of natural resources', 'Transport', 'Good governance' and 'Global partnership'. For each theme, one, or sometimes two, headline SDIs have been identified, covering the essence or the most important aspect of the theme. This spotlight chapter presents only the trends in the headline indicators,

([1]) Report of the World Commission on Environment and Development (Brundtland report, 1987).
([2]) Commission communication COM(2001) 264 final.
([3]) Commission communication COM(2002) 82 final.

while basing its analysis on the trends in both the indicators themselves and on other, complementary, policy indicators. This larger set of more detailed indicators is either presented in other chapters of the yearbook or included on the CD-ROM attached to the yearbook ([4]).

Although many of the SDIs have been constructed from existing data collections or indicators, statistics for sustainable development will constitute a challenge for official statistics, as it will require both looking at or even collecting some new data and also combining these data in a different way in order to measure the trade-offs and the interlinkages between the various SD dimensions.

Economic development — Striving for structural reforms and new dynamism

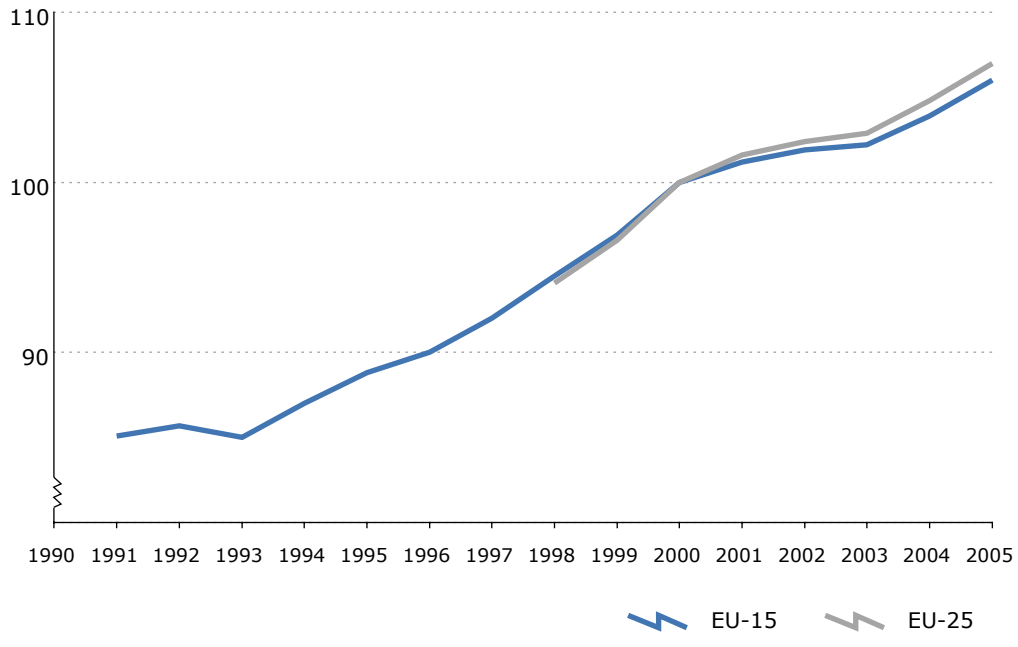
The Lisbon process lays down the ambition that the EU should have the world's most competitive and knowledge-based economy by 2010. The agenda underlines the need for economic growth, innovation and the pursuit of structural reforms to raise Europe's growth potential. Simultaneously, it recognises the need for social cohesion and environmental protection.

The headline indicator, GDP per capita growth ([5]), measures the dynamism of the economy and its ability to deliver general welfare to its population. It represents the core socioeconomic element in the overall set of SDIs, influencing also the themes 'Poverty and social exclusion', 'Ageing society', 'Public health' and 'Production and consumption patterns'. Increasing GDP per capita generally increases consumption, with knock-on effects on the themes 'Climate change and energy', 'Management of natural resources' and 'Transport', as well as on 'Global partnership'.

In EU-15, GDP per capita has increased steadily over the last 10 years, although in recent years economic growth has been weaker than the target of 3 % ([6]). In the new Member States, GDP per capita growth has been considerably higher than in EU-15, although from a lower level.

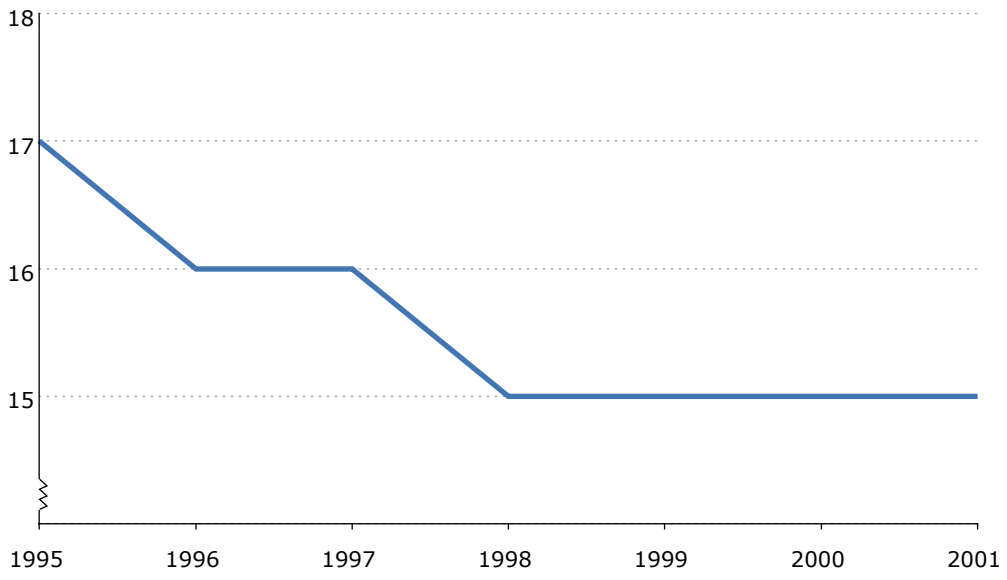
Further assessment of the sustainability of macroeconomic developments looks at investments, competitiveness, and employment.

GDP per capita at constant prices
2000 = 100



([4]) The list of SDIs and the work of the SDI Task Force are accessible at http://forum.europa.eu.int/Public/irc/dsis/susdevind/home.
([5]) Gross domestic product (GDP) is defined as the value of all goods and services produced less the value of any goods or services used in their creation. The indicator refers to the growth rate of GDP per inhabitant at constant (market) prices.
([6]) See 'GDP growth in the EU' on the attached CD-ROM.

Population at risk of poverty in EU-15
In %



These topics also influence long-term developments in socioeconomic conditions, technological developments and shifts to more sustainable production and consumption.

Poverty and social exclusion — Towards stronger cohesion

Poverty and social exclusion have high social costs and lead to a waste of human capacity. Tackling these problems is central to the sustainable development of present and future generations. Therefore, one of the objectives of the SD strategy is to make a decisive impact on the eradication of poverty.

The headline indicator, population at risk of poverty ([7]), monitors this target and also contributes to the assessment of the situation in the themes 'Ageing society', 'Public health' and 'Production and consumption patterns'. The percentage of the population at risk of poverty in EU-15 fell slightly during the 1990s, but, since 1998, has remained at around 15 %.

Further assessment of poverty and social exclusion looks at monetary poverty, access to the labour market, and other aspects of social exclusion. These also affect the overall state of health, the income of persons aged over 65, and levels of consumption.

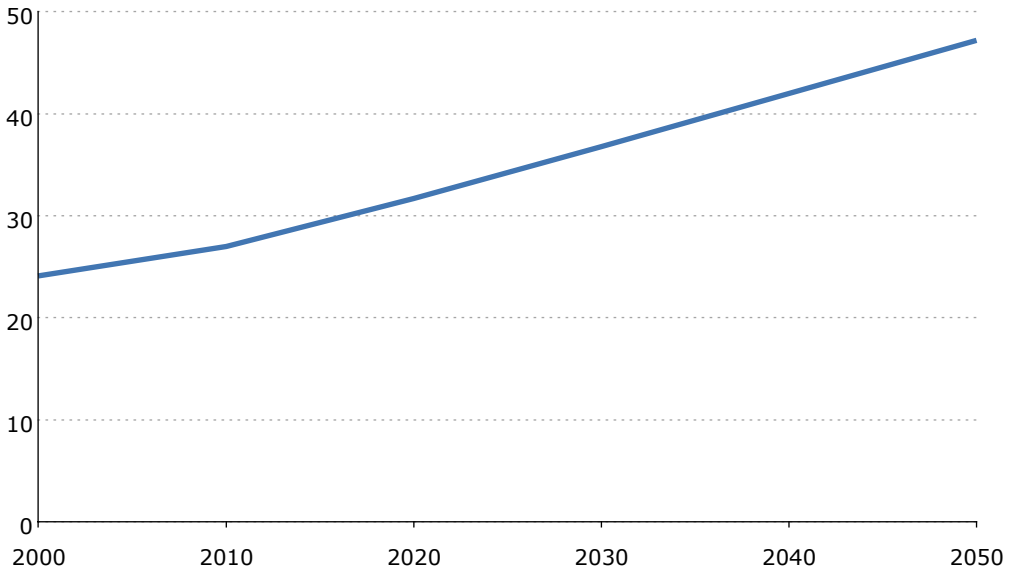
Ageing society — Highlighting needs for renewal of the economy

The ageing society is a complex socioeconomic issue that affects not only retired persons, but also the whole workforce and economy. The objective of the SD strategy is to address the demographic challenge and to ensure the adequacy of pension systems as well as healthcare and childcare systems while maintaining the sustainability of public finances and intergenerational solidarity.

The headline indicator, current and projected old-age dependency ratio ([8]), indicates the potential increasing financial burden in terms of pensions and costs of elderly care systems, if measures such as the structural reform of labour and pensions, later withdrawal from the

([7]) The indicator is defined as the share of persons with an equivalised total net income (after social transfers) below 60 % of the national median income.
([8]) The old-age dependency ratio is the ratio of the number of elderly persons of an age when they are generally economically inactive (aged 65 and over or aged 60 and over depending on the context) to the number of persons of working age (from 15 to 64 or from 20 to 59 depending on the context).

Current and projected old-age dependency ratio in EU-15
In %



labour market, flexible employment, immigration, better labour productivity and technological developments are not taken. This indicator is also particularly linked to developments in the themes 'Economic development', 'Poverty and social exclusion', and 'Public health', as well as 'Production and consumption patterns'.

On current trends, the dependency ratio in the EU will almost double in 50 years from 24.1 % to 47.2 %. The most drastic changes will take place in Ireland — where the ratio could be multiplied by 2.5 from 17.4 % to 43.6 % — followed by Italy and Spain, where this ratio could increase by 2.3 and 2.1 respectively by 2050.

A complementary analysis looks at pension adequacy, demographic changes, and financial stability that describe welfare conditions, but also influence the production and consumption of goods and services.

Public health — Poorly known welfare factor

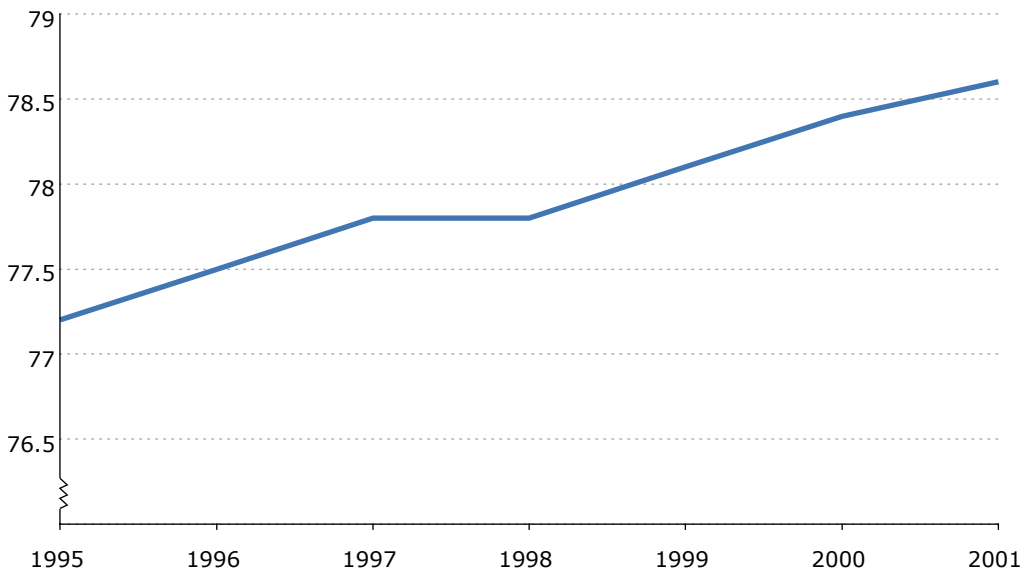
A healthy population is traditionally considered crucial for the well-being of society, and also as an important driver of economic prosperity. The main concerns of the EU sustainable development strategy and the EU health strategy relate to the overall health of citizens, outbreaks of infectious diseases and resistance to antibiotics, maintenance of food safety and quality, chemicals management and also for health and the environment (with particular reference to children), inequalities and the effectiveness of health systems, mental health, and communicable diseases.

The proxy headline indicator, life expectancy at birth, shows the number of years a person may be expected to live if subjected throughout their lives to the current mortality conditions. This indicator will be replaced by an indicator on disability-free life expectancy which is still under development. Both indicators reflect long-term socioeconomic and environmental conditions which are described first of all in the themes 'Economic development', 'Poverty and social exclusion', 'Ageing society' and 'Management of natural resources'.

Between 1995 and 2001, life expectancy at birth increased by almost two years. However, the situations of men and women differ by almost 10 years and the gap is even larger in the new Member States.

Further assessments focus on human health protection and lifestyles, food safety and quality, chemicals management, and health risks due to environmental conditions. These issues tend to reflect developments in socioeconomic conditions, but also reflect environmental conditions and how nature is used.

Life expectancy at birth in EU-15
Years



Climate change and energy — Limiting global warming

Man-made impact on the climate is primarily due to emissions of the six main greenhouse gases (GHGs), largely arising from industry and energy, but also from transport, agriculture, and waste management. The objectives of the SD strategy are to meet the Kyoto commitment ([9]) and to increase the use of clean energy.

The indicator measuring GHG emissions versus the Kyoto target ([10]) shows that the reductions made by EU-15 in the early 1990s have been eroded by rising emissions since 2000. The current upward emission trend threatens both the fulfilment of the Kyoto target and the continuous reduction path of 1 % a year. The targets and reference years for the new Member States largely differ from one another and do not facilitate a similar distance-to-target assessment for EU-25.

The second headline indicator, gross inland energy consumption ([11]), demonstrates that the upward trend in energy consumption is dominated by an increase in the use of fossil fuels ([12]). The uptake of renewable energy has been sluggish as it still accounts for only 6 % of primary energy and 15.7 % of electricity, while the targets set for 2010 are 12 and 22 % respectively ([13]).

Several of the other themes, such as 'Economic development', 'Production and consumption patterns', 'Transport', 'Management of natural resources' and 'Global partnership', contribute to climate change. Global warming may require costly changes in infrastructure, cultivation practices, human health protection, and ecosystem functions.

([9]) The EU ratified the Kyoto Protocol in 2002. The EU target of a reduction in GHG emissions by 8 % compared with 1990 levels should be achieved by 2008–12. The EU SD strategy has set a further objective of an average 1 % per year reduction over 1990 levels up to 2020.
([10]) Emissions of the six greenhouse gases covered by the protocol are weighted by their global warming potentials and aggregated to give total emissions in CO_2 equivalents. The total emissions are presented as indices, with 1990 = 100.
([11]) Gross inland energy consumption is the quantity of energy consumed within the borders of a country/zone.
([12]) See data on the CD-ROM.
([13]) See data on the CD-ROM.

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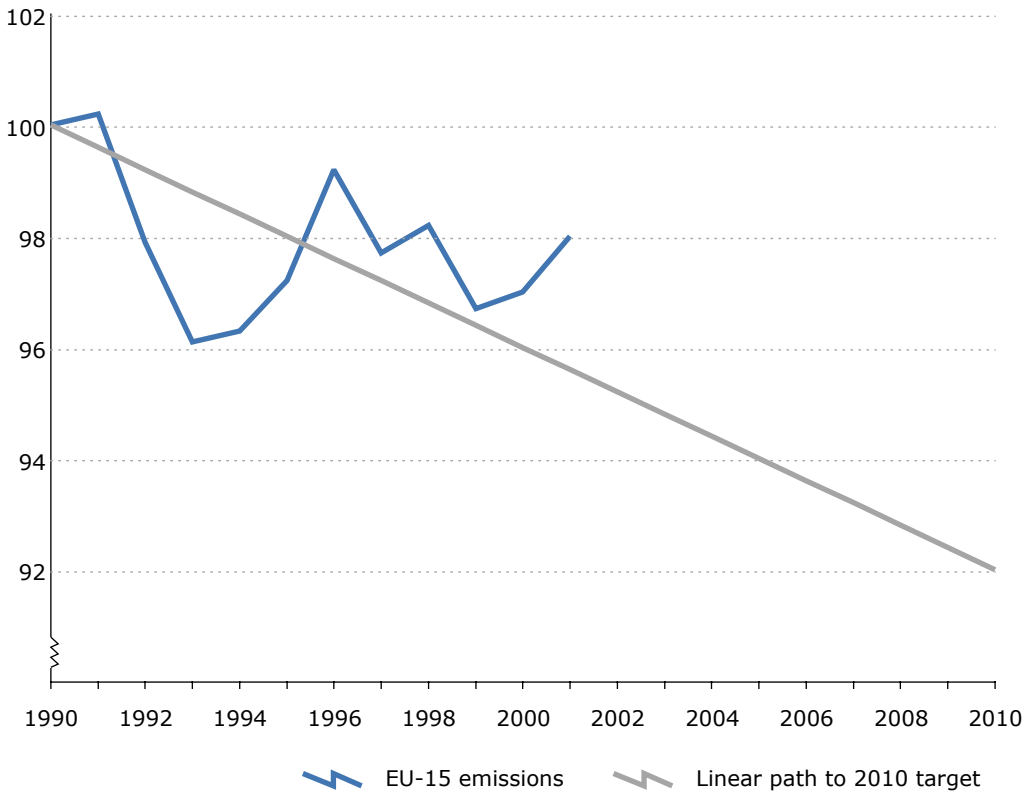
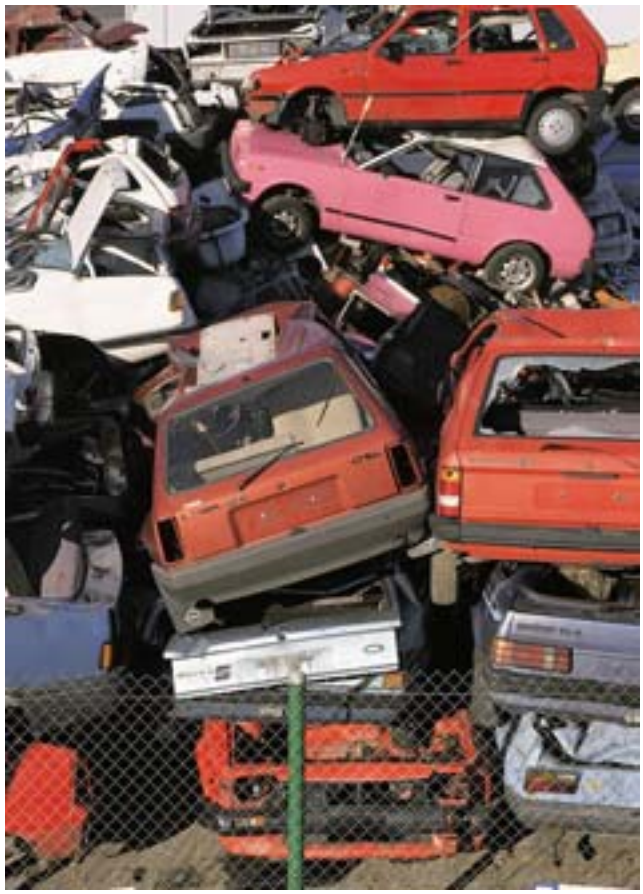
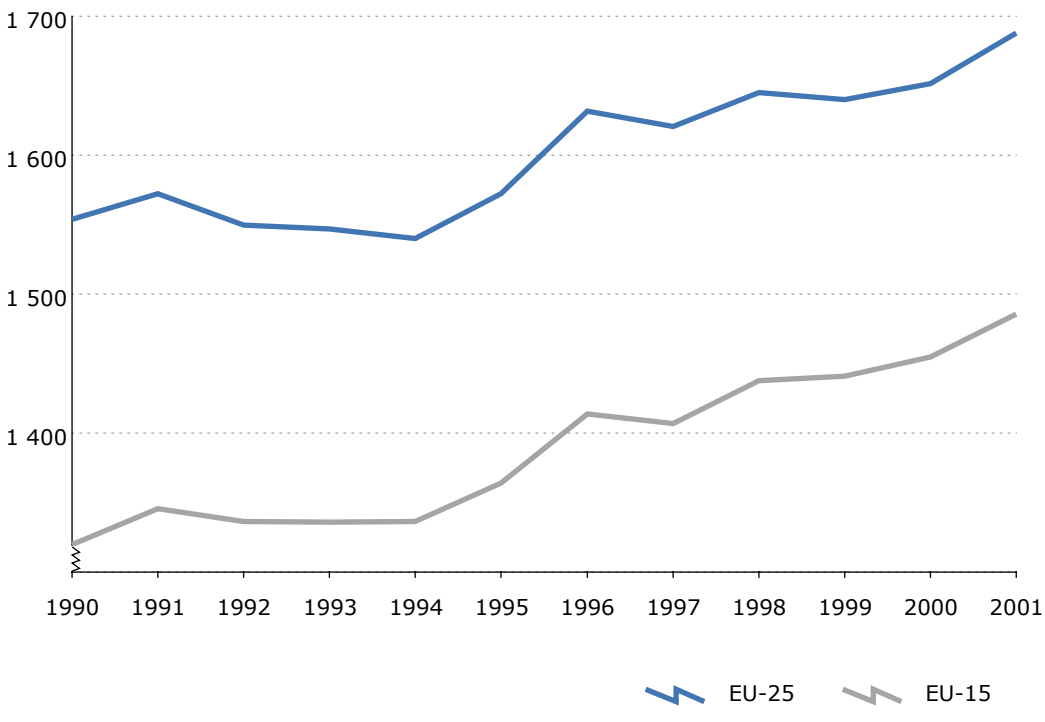
Greenhouse gas emissions versus Kyoto target for EU-15
1990 = 100



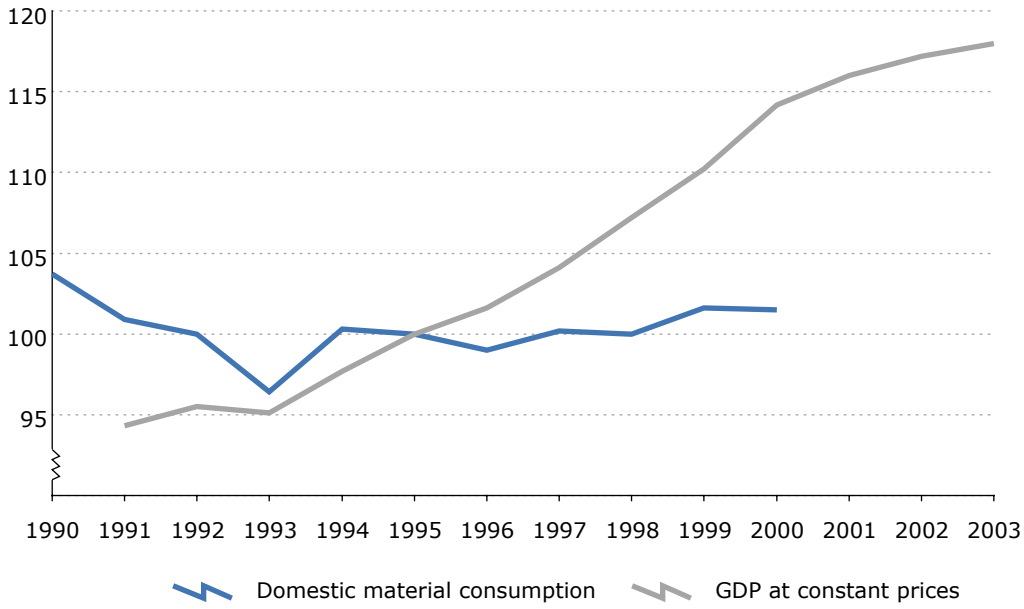


An example for material consumtion (see next page).

Gross inland energy consumption
Million toe



Domestic material consumption versus GDP at constant prices in the EU-15
1995 = 100



Production and consumption patterns — A new path to an eco-efficient economy

The goal of sustainable production and consumption is to decouple resource use and generation of environmental pollution from GDP growth. This is possible through more efficient use of natural resources so creating more from less and by requiring the main actors, such as enterprises, public authorities and consumers, to contribute to the changes.

The current headline indicator, domestic material consumption (DMC) ([14]) versus GDP, is intended to represent the amounts of material consumed by EU countries, although there are some methodological shortcomings. This indicator is closely interlinked to developments in the themes 'Economic development', 'Climate change and energy', 'Management of natural resources', 'Transport' and 'Global partnership'.

DMC decreased during the period 1990–93 due to the weakness of economic growth in the EU and the restructuring of east German industries, but since then has stabilised while GDP has steadily increased. This indicator indicates a relative, but not absolute, decoupling of environmental pressures and economic growth, reflecting the relative decline in manufacturing and the rise of services in the EU economy. However, the indicator does not include the consumption of natural resources used to produce goods imported from non-EU countries.

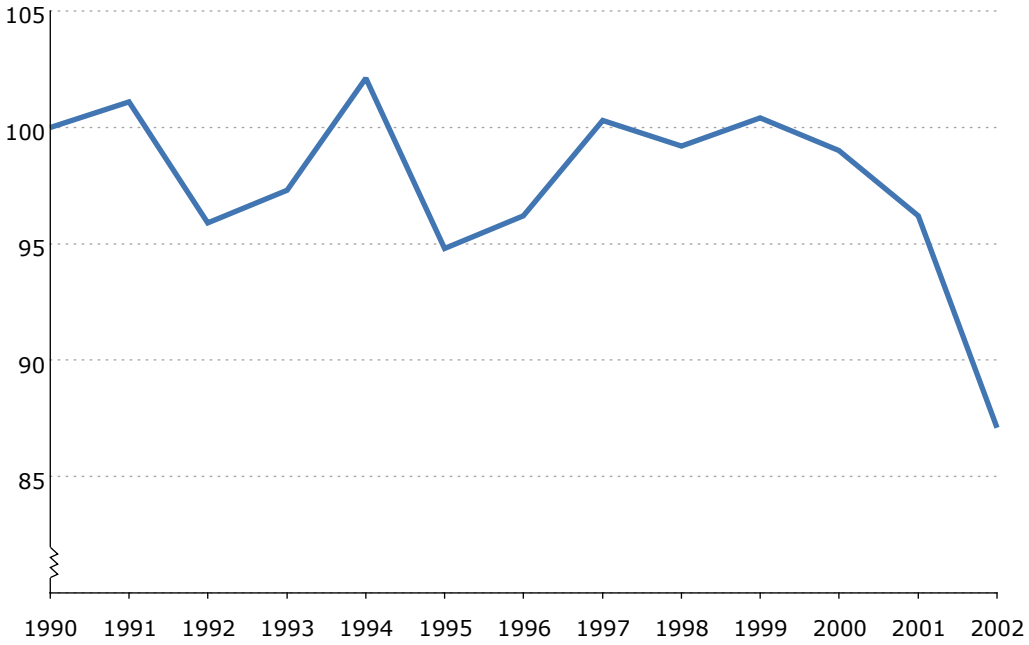
Further analysis of eco-efficiency, consumption patterns, agriculture, and corporate social responsibility describe the contributions of various sectors and stakeholders, but also highlight interactions between the internal and external dimensions of sustainable development.

Management of natural resources — Halting the decline of biodiversity

The destruction and fragmentation of ecosystems usually take place as a consequence of land-use changes, agriculture, forestry, transport infrastructure, and urbanisation. Other threats arise due to changing environmental conditions, overexploitation of resources, and pollution. These factors impair or exceed the carrying capacity of ecosystems and can lead to considerable economic and social losses due to diminished possibilities of benefiting from nature.

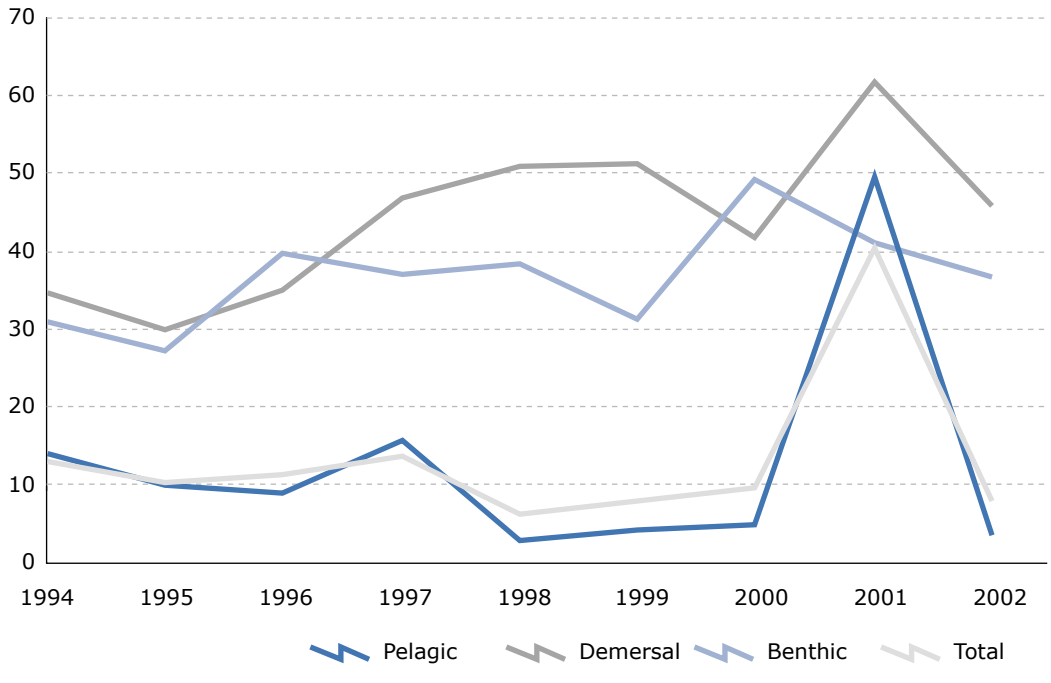
([14]) The indicator domestic material consumption presents the quantity of material consumed by EU countries. DMC equals domestic material input (DMI — i.e. domestic extraction plus extra-EU imports) minus extra-EU exports.

Population of wild birds in the EU — Farmland species
1990 = 100



Sources: Royal Society for the Protection of Birds, European Bird Census Council and Birdlife International.

Fish catches outside the SBL in the north-east Atlantic
In %



Source: European Commission, Fisheries DG.

Industrial: O for all years.

The EU sustainability target is to halt the decline in the loss of biodiversity by 2010. As it is difficult to measure biodiversity with a single indicator, statisticians have suggested using the population of wild birds ([15]) as the headline indicator for the terrestrial environment. The basic idea behind this choice is that the population of birds may contribute to measuring the degree of environmental health and the sustainability of human activities. This indicator shows a deterioration in ecological conditions for farmland breeding birds.

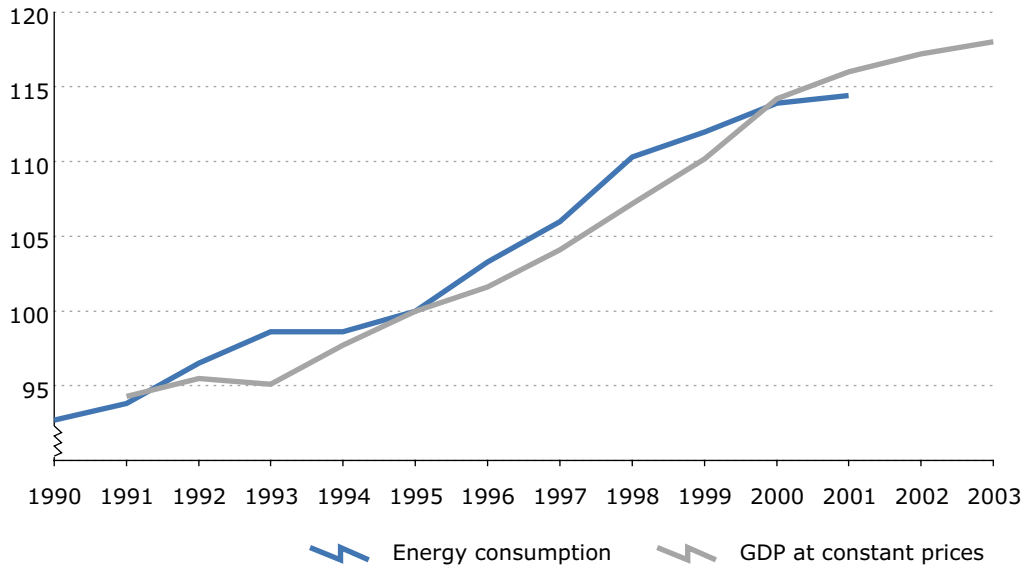
The EU has also set a target for the protection of fish resources: to halt the decline in fish stocks by 2015. The second headline indicator for the management of natural resources, fish catches taken from stocks that are considered to be outside the safe biological limit (SBL) ([16]), shows that 8 % of catches in the north-east Atlantic were outside the SBL in 2002 and thus not sustainable.

Changes in terrestrial and aquatic ecosystems are due to complex socioeconomic and environmental developments and are therefore closely related to the themes 'Economic development', 'Climate change and energy', 'Production and consumption patterns', 'Transport' and 'Global partnership'.

Transport — Striving for decoupling and restructuring

Transport has an important role in access to community services and healthy economic development in both rural and urban areas. Nevertheless, transport growth is a major contributor to congestion, air pollution, noise, and ecosystem fragmentation, leading to an impairment of human health and the state of the environment.

Final energy consumption by transport in EU-15 versus GDP at constant prices
1995 = 100



([15]) The indicator is defined as the index of the wild bird population for 23 selected farmland species measured over 11 countries of the EU (Belgium, Denmark, Germany, Spain, France, Ireland, Italy, the Netherlands, Austria, Sweden and the United Kingdom). This indicator has been prepared by the Royal Society for the Protection of Birds, the European Bird Census Council and Birdlife International and is currently under scrutiny by Eurostat. Time series on the population of woodland and wetland birds are also maintained, but still need some further methodological improvements.

([16]) This indicator relates to the catches of a number of stocks that have been assessed to be outside safe biological limits. In general terms, it is considered that a stock is within safe biological limits if its current biomass is above the value corresponding to a precautionary approach advocated by the International Council for the Exploration of the Sea (ICES).

Significant decoupling of transport growth from GDP growth is an essential goal of the SD strategy. Due to its economic and material implications, it is interlinked with the themes 'Economic development', 'Climate change and energy', 'Production and consumption patterns' and 'Management of natural resources'.

It is currently difficult to construct a robust indicator showing transport growth, which ideally would show vehicle-kilometres versus GDP. The proxy indicator, energy consumption by transport ([17]) versus GDP, indirectly shows the increase in the volume of transport, and illustrates that, despite the increase in the fuel efficiency of new vehicles, energy use by transport has increased by 14.4 % in EU-15 since 1995 when the GDP rose by 16.0 %. These figures show that no significant decoupling has been achieved.

Further analyses relate to transport growth and the environmental impact of transport that are linked to improved mobility and changes in socioeconomic, environmental and health conditions.

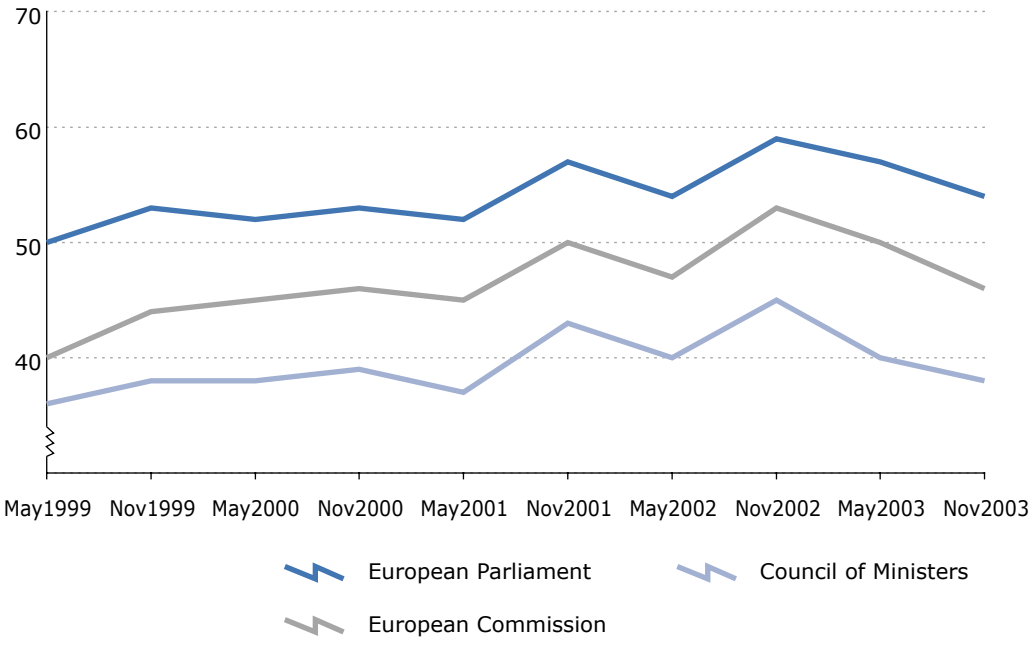
Good governance — Emphasis on citizens and policy coherence

Modern, open and citizen-oriented institutions are considered essential for the European Union. Improving policy coherence, better information, widespread participation, and strong leadership are proposals for EU sustainable development.

The headline indicator, citizens' confidence in EU institutions ([18]), is taken from the standard Eurobarometer opinion poll organised twice a year by the European Commission. Over the last five years, citizens' confidence in the EU institutions has increased by between 5 and 10 %.

Policy coherence and participation are essential preconditions for the advancement of sustainable development in the EU.

Citizens' confidence in EU institutions
In %



([17]) The indicator is expressed as the energy consumption by all transport modes, i.e. rail, road, air, inland navigation (final energy consumption) and marine bunkers.
([18]) The indicator is defined as the share of the population who tend to trust the European Parliament, the European Commission and the Council of Ministers.

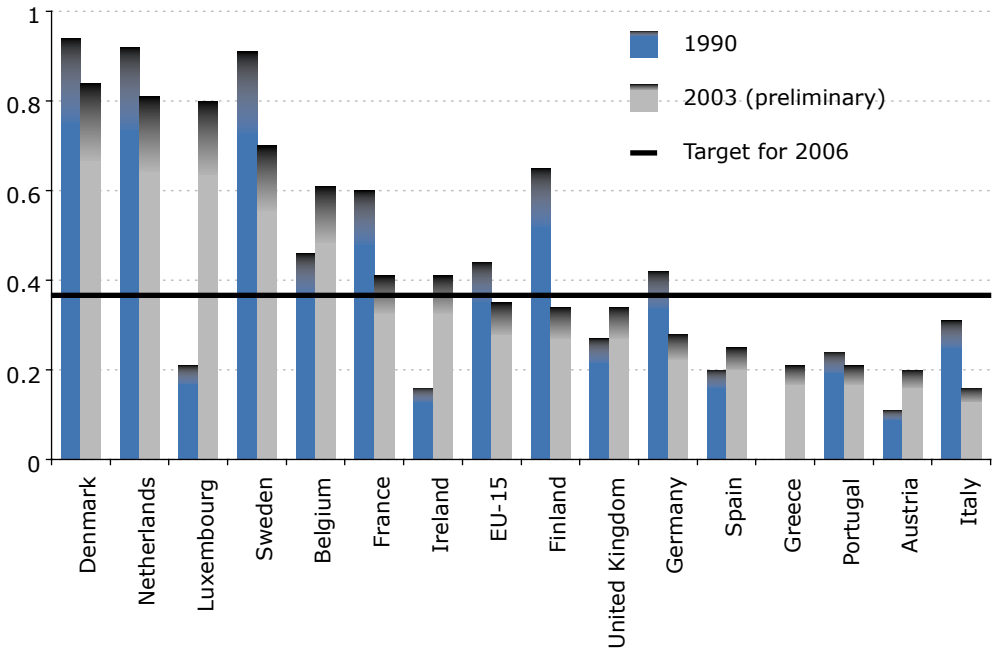
Global partnership — Towards new modes of cooperation

The interdependencies and interactions between countries have considerably increased over the last two decades. At the Millennium Summit in 2000, the EU together with other nations acknowledged their global responsibility for concerted actions leading towards a better world. The EU is committed to take a leading role in the pursuit of global sustainable development.

This theme refers to six priorities ([19]), of which the headline objective for the priority 'financing sustainable development' is to help developing countries to receive the necessary financing for the attainment of the millennium development goals. The EU objective is to reach the United Nations goal of 0.7 % of gross national income (GNI) for official development assistance (ODA). Member States lagging behind this goal are requested to increase their ODA by 2006 to at least 0.33 % so that collectively an EU average of 0.39 % is reached by 2006. In 2002, the EU average was 0.35 % and well above the average of 0.23 % in the donor countries. Nevertheless, the majority of EU countries were still below the 0.39 % target.

Further analyses focus on globalisation of trade, financing for development, and resource management. These are interwoven, especially with the themes 'Economic development' and 'Production and consumption patterns'. Furthermore, the tighter interdependencies between the EU and developing countries also set new requirements to ensure that current trends in the loss of environmental resources will be effectively reversed at national and global levels by 2015.

Official development assistance per Gross national income
In %



([19]) The six priorities are: harnessing globalisation, fighting poverty and promoting social development, sustainable management of natural resources and environmental resources, coherence of EU policies, better governance at all levels, and financing sustainable development.