



Sustainable Development

Pocket Statistics 2009



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Neuchâtel, 2009


The **Pocket Statistics 2009** shows by means of a series of indicators where Switzerland finds itself on the path towards sustainable development.


The indicators stem from the system of indicators to monitor sustainable development in Switzerland (**MONET**), which serves as an information basis for the general public and policy makers.

The indicators are divided into the the twelve themes of the MONET system.

Each indicator is accompanied by a statement about a development. Each development is evaluated by means of one of the following symbols to signal progress towards the goals of sustainable development:

 Positive (moving towards sustainability)

 Negative (moving away from sustainability)

 Neutral

The evaluation refers to the development since 1987 (publication of the Brudtlandt Report) or since the first survey (if after 1987). If a graph shows a longer time period, the beginning of the evaluation period is indicated by a ▲.

Revision of the MONET indicator system

The MONET indicator system has been available online since 2003. The system was optimised based on gathered experiences and a revised version was launched in June 2009. The number of indicators was reduced and limited to the most significant indicators. At the same time, twelve new indicators were added. Some of the new indicators show new problem areas in society. Other indicators were already slated to be included in the original system and have now been added because new statistics have recently become available. Moreover, the indicators are now divided into 12 instead of 26 themes.

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What is sustainable development?

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Key priorities are:

- Meeting needs (i.e. mainly addressing the needs of the poor)
- The concept of limitations, in other words, the idea that the environment does not have an unlimited ability to provide resources and to assimilate waste and emissions.

This is the WCED's (World Commission on Environment and Development, known as «Brundtland Commission») definition of sustainable development from 1987. Articles 2 and 73 of the Swiss Constitution and the MONET indicator system are devoted to the cause of sustainable development.

The complex challenge of meeting everyone's needs, ensuring economic development and, at the same time, taking into account considerations of fairness and the limits on the capacity of the environment is illustrated with the three-circle model of sustainable development. Each circle represents one main qualitative objective:

- Economic efficiency
- Social solidarity
- Environmental responsibility

These objectives are interconnected and must not be considered in isolation. The idea behind sustainable development is to make improvements, render the decision-making process transparent and find long-term solutions.

Living conditions

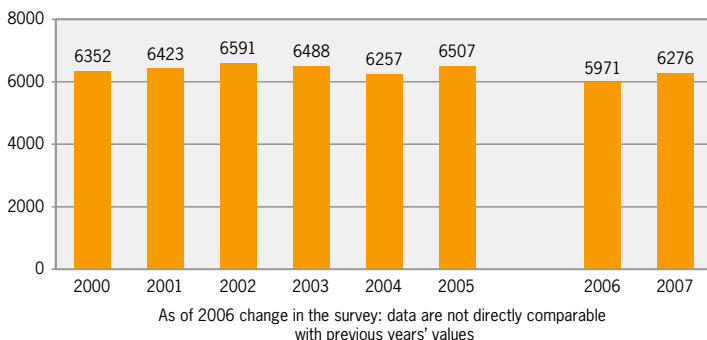
One of the principles of sustainable development states that every member of society has the right to a life that is fit for human beings. For this reason, the aim should be to meet basic needs such as security and housing. But above and beyond these basic needs, appropriate scope for the satisfaction of material and non-material requirements, such as satisfaction and happiness in life, also has to be created.

Household income remains at the same level



Household income

Average disposable monthly household income, in Swiss francs



Source: Federal Statistical Office

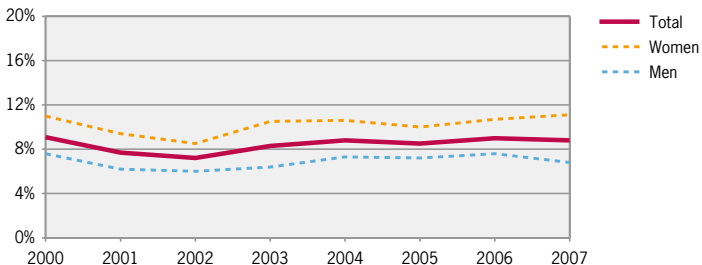
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The poverty rate fluctuates between 7% and 9%



Population living below poverty line

Share of working age people (aged 20 to 59) living below the poverty line



Source: Federal Statistical Office

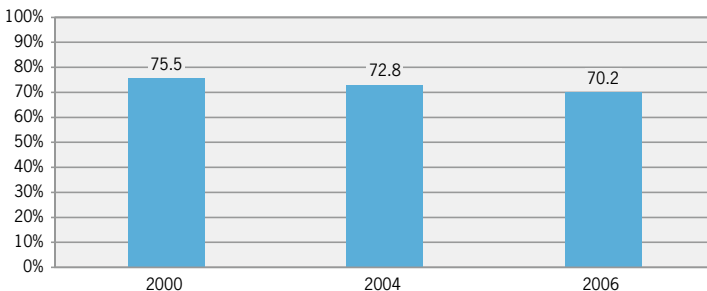
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The share of persons with a high degree of satisfaction is sinking



Life satisfaction

Share of the population aged 14 and over with a high degree of satisfaction



Sources: Swiss Household Panel (SHP); Federal Statistical Office

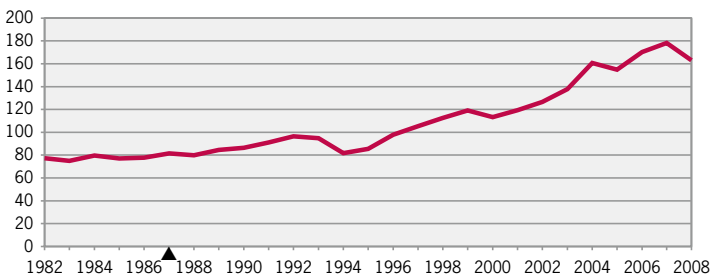
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The number of violent offences is increasing



Violent crime

Crimes (homicides, physical injury, robbery, rape) registered by police per 100,000 inhabitants



Sources: Federal Office of Police; Federal Statistical Office

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Other indicators on the theme of living conditions are available online:

Remittances by migrants to their countries of origin are increasing and can contribute to improving living conditions in those countries



Housing costs: people with lower incomes have to spend proportionally more on housing



The **suicide rate** has decreased in the past 20 years



Health

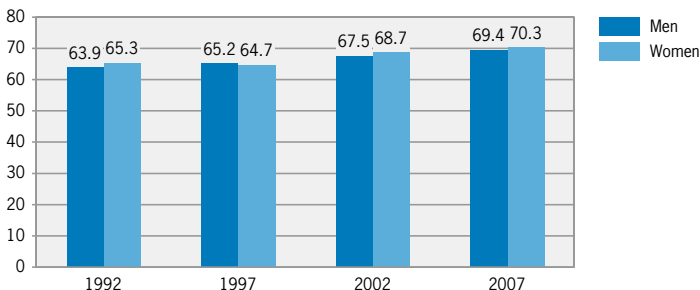
People's state of health has a major influence on their quality of life, and it is an important factor as regards economic efficiency. This is why the protection and promotion of health are accorded high priority in sustainable development. Both physical and mental health are significant in this context.

Life expectancy in good health is rising among men and women



Life expectancy in good health

Life expectancy at birth in years



Source: Federal Statistical Office

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Other indicators on the theme of health are available online:

The **mental well-being** of the population is improving



Health expenditures in proportion to gross domestic product (GDP) are rising

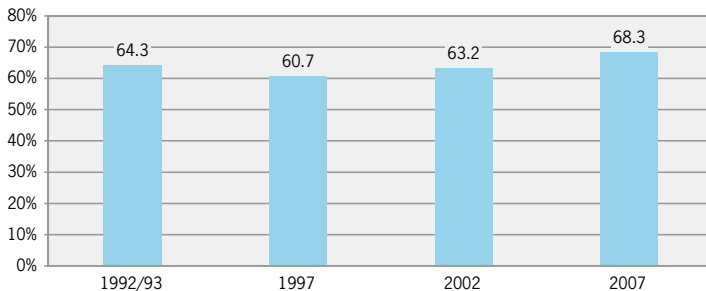


The share of persons who do physical exercise at least once per week to the point of working up a sweat fluctuates



Health-relevant behaviour: physical exercise

Share of persons who do physical exercise at least once per week to the point of working up a sweat



Source: Federal Statistical Office

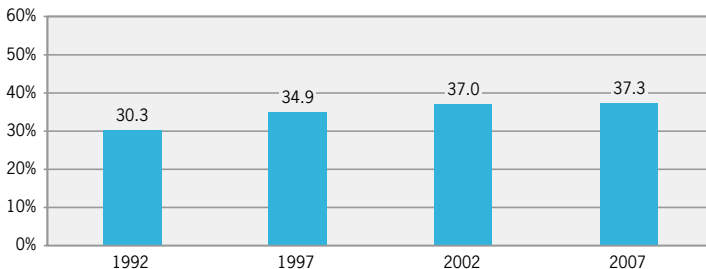
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A growing number of people are overweight



Overweight

Share of the population aged 15 and over who are overweight (BMI of 25 or more)



Source: Federal Statistical Office

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Social cohesion

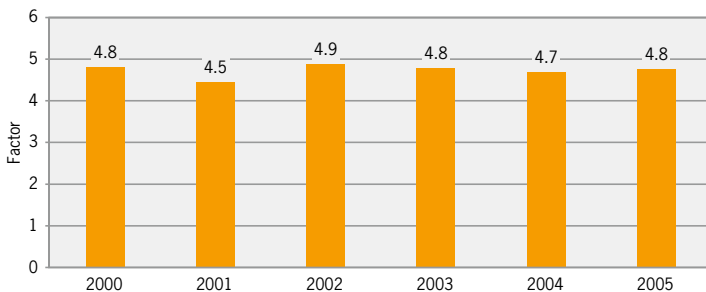
Acting in solidarity is a fundamental requirement if a society is to be capable of functioning and surviving. For this reason, sustainable development places special emphasis on promoting social cohesion and on the participation of all social groups and regions in economic, political and social life. The principle of “equal rights and equal opportunities” is a key factor here.

Unequal income distribution persists



Unequality of income distribution

Ratio of total incomes of the 20% richest to the 20% poorest households
(disposable household income after social transfers)



Source: Federal Statistical Office

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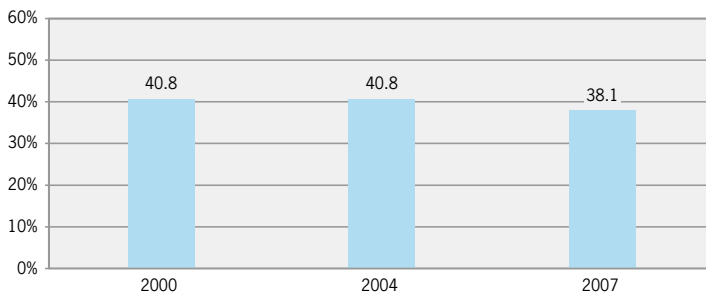
Legend: In 2005, 20% of the richest households earned 4,8 times more than 20% of the poorest households.

Approximately the same number of people do voluntary work



Voluntary work

Share of persons who do voluntary work in the resident population aged 15 and over



Source: Federal Statistical Office

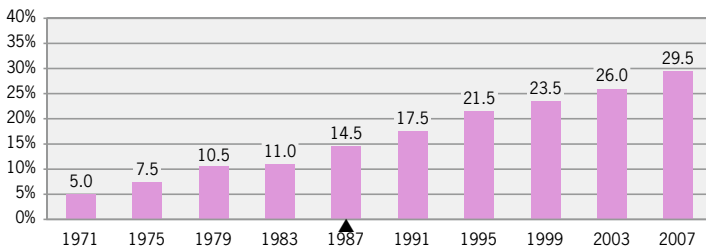
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The share of women in the National Council has doubled in the past 20 years



Women in the National Council

Share of women as a percentage of all elected National Councillors



Source: Federal Statistical Office

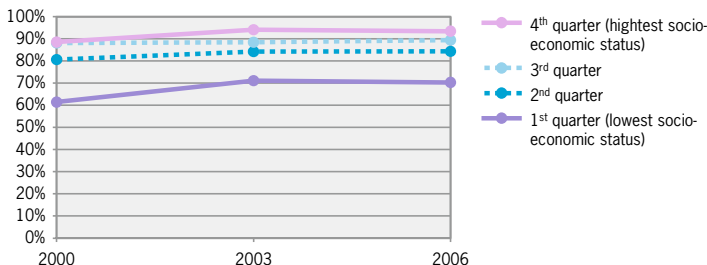
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Young people's reading skills are still largely determined by their socio-economic background



Reading skills of 15-year-olds by socio-economic background

Share of 15-year-olds who attain reading skill level 2 (on a scale of <1 to 5), by socio-economic conditions of the parental home



Source: Federal Statistical Office

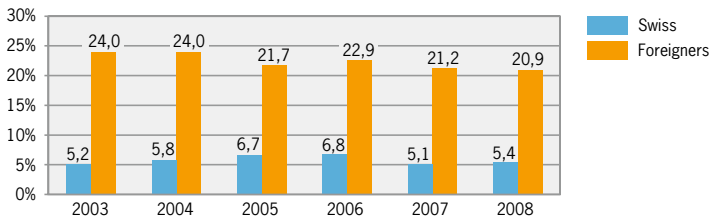
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The share of 18–24-year-olds of foreign origin who do not complete an education or training programme after compulsory education is decreasing



Early school leavers by citizenship

Share of 18–24-year-olds who are no longer in an educational programme and who have at most a compulsory school qualification



Source: Federal Statistical Office

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International cooperation

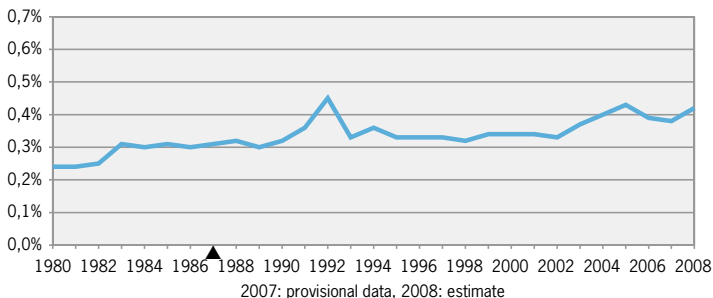
The global fight against poverty and a just distribution of the use of global resources are central aims of sustainable development. All members of the world community should participate in solving global problems. World trade should be commensurate with social justice and with the careful management of environmental resources and should not detract from the satisfaction of the needs of populations in other countries. The peaceful coexistence of peoples and nations and respect for human rights should be promoted.

The rate of official development assistance is on an upward trend



Official Development Assistance

ODA in proportion to gross national income at market prices
(previously gross national product)



Sources: Swiss Agency for Development and Cooperation; State Secretariat for Economic Affairs

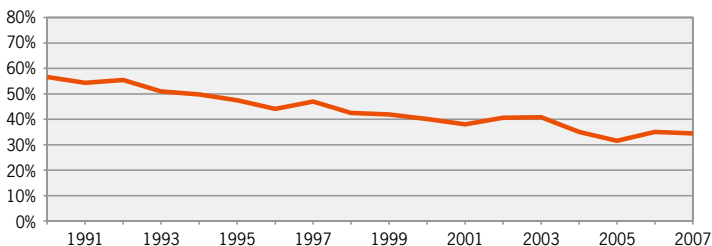
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The share of official development assistance to poor countries is decreasing



Official Development Assistance to poor countries

Share of bilateral official development assistance that flows to the least developed countries and low-income countries (as defined by the OECD/DAC)



Sources: Swiss Agency for Development and Cooperation; State Secretariat for Economic Affairs

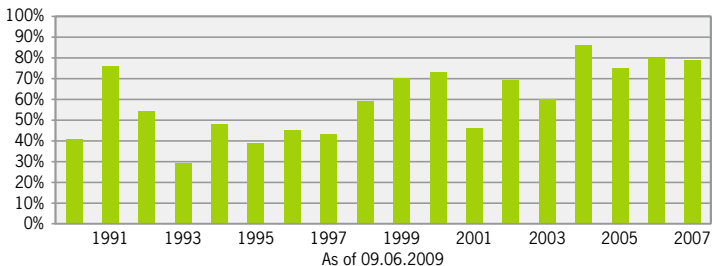
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The number of concluded multilateral treaties that are coming into force is rising



Multilateral treaties

Share of multilateral treaties that have come into force in Switzerland (in the year treaty is concluded or in a following year) in the total of treaties concluded in one year



Source: Federal Department of Foreign Affairs

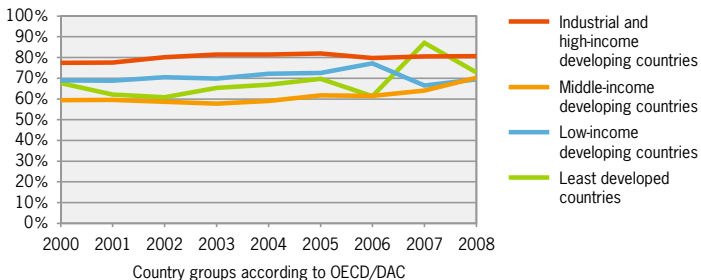
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Imports that can be imported free of customs duties from developing countries are increasing



Duty-free imports from developing countries

Share of duty-free imports in the total value of all imported goods, by countries' income categories (gross national income)



Source: Federal Customs Administration

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Other indicators on the theme of international cooperation are available online:

Attitude towards development assistance: fewer people want an increase in official development assistance



Switzerland's **direct investments in developing countries** are increasing but they remain proportionally lower than investments in rich countries



Education and culture

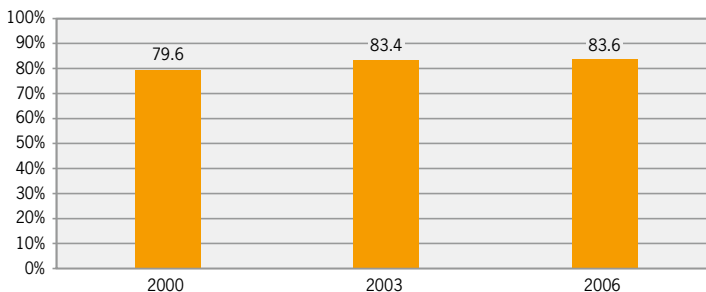
Sustainable development should maintain and develop human capital. Everyone ought to be given access to an adequate basic education as well as continuing education. The unrestricted flow of information and the free expression of opinion are also of central importance. Sustainable development also includes guaranteeing cultural diversity and maintaining the socio-cultural heritage.

The share of young people who are capable of basic reading tasks is not increasing significantly



Reading skills of 15-year-olds

Share of 15-year-olds who attain at least reading skill level 2 (on a scale of <1 to 5)



Source: Federal Statistical Office

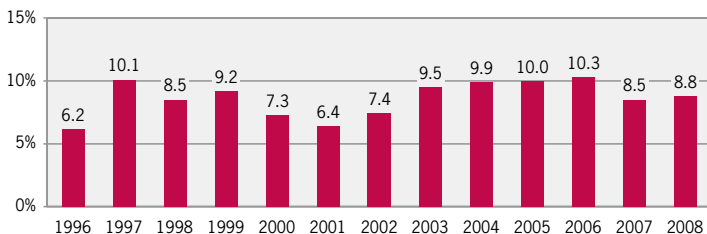
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The share of 18–24-year-olds who do not pursue an education or training programme after compulsory education fluctuates between 6.2% and 10.3%



Early school leavers

Share of 18–24-year-olds who are no longer in an educational programme and who have at most a compulsory school qualification



Source: Federal Statistical Office

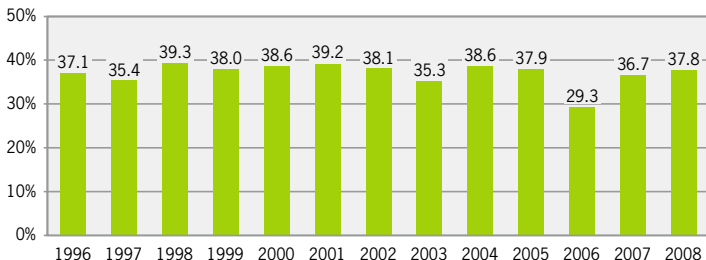
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The participation in further education courses has been relatively stable since 1996



Participation in further education

Share of 20–74-olds who attend further education courses



Source: Federal Statistical Office

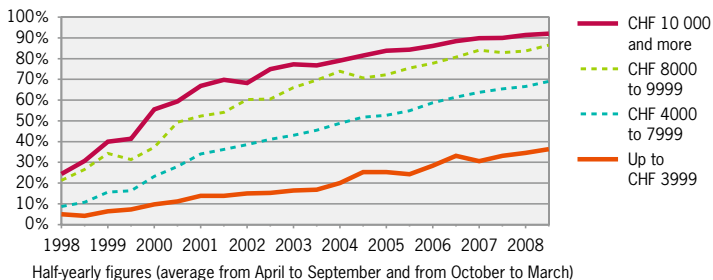
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There was a sharp increase in the difference in internet use between persons with low incomes and persons with high incomes



Internet use by income group

Share of persons in the population aged 14 and over who use the internet several times per week, by monthly income



Sources: MA-Net; Net-Matrix-Base

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Other indicators on the theme of education and culture are available online:

Around one fifth of the population use at least **two national languages** in their daily life



Participation in cultural activities

1 value

Own cultural activities

1 value

Research and technology

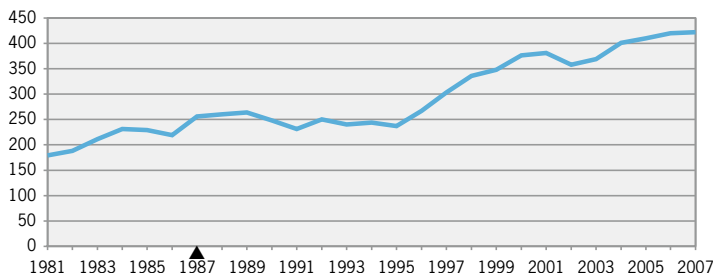
Research, development and technology are regarded as important motors for a society's innovative activity and competitiveness. It follows that they are important conditions for the maintenance of economic efficiency. Sustainable development also calls for productive and human resources to be maintained and qualitatively improved.

The number of patent applications is rising



Patent applications

Number of patent applications filed with the European Patent Office by persons resident in Switzerland, per million inhabitants



Source: Organisation for Economic Cooperation and Development (OECD)

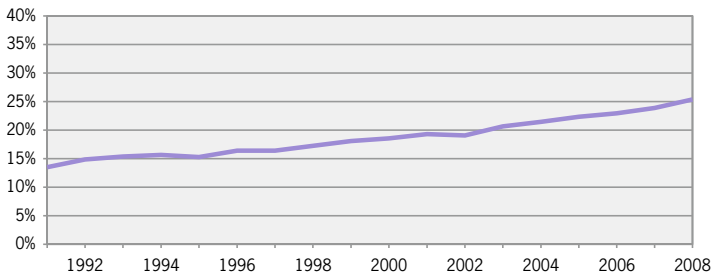
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The number of persons employed in science and technology is rising



Human resources in science and technology

Share of persons educated and active in science and technology in relation to total working population



Source: Federal Statistical Office

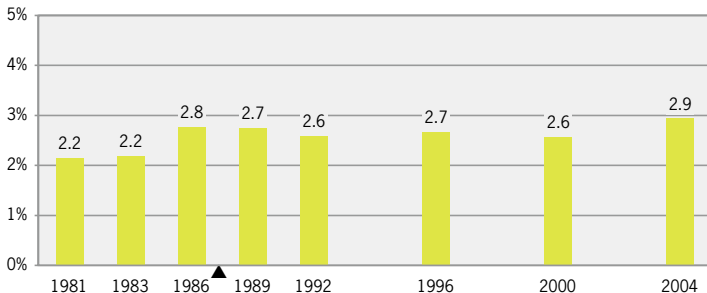
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Expenditure on research and development is stagnating



Expenditure on Research and Development

Share in gross domestic product



Source: Federal Statistical Office

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Work

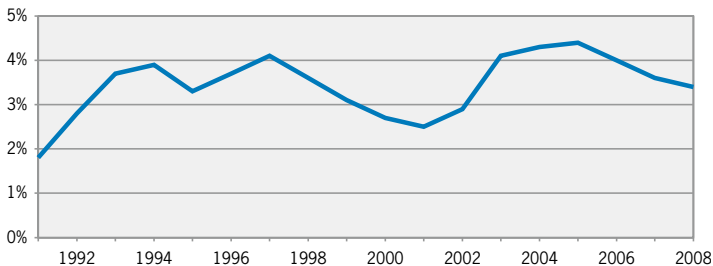
As part of sustainable development, people who want to be gainfully employed should be able to find reasonable work from which they can support themselves. Also, an adequate supply of labour is a requirement for an economy that is able to perform efficiently. Everyone should have equal opportunities on the labour market and disadvantaged groups should be integrated.

The unemployment rate is fluctuating and in 2005 it reached the highest level (4.4%) since 1991



Unemployment rate

Share of unemployed in relation to total working population



Source: Federal Statistical Office

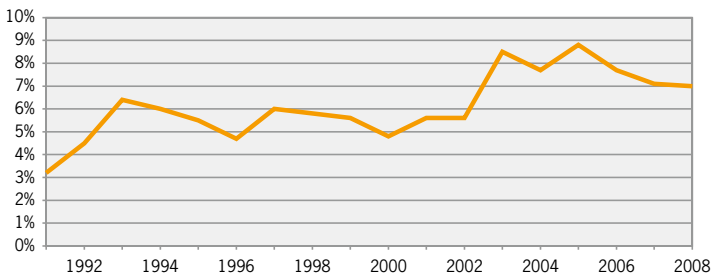
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The share of unemployed young people is increasing



Youth unemployment

Share of unemployed in the 15–24-year-old economically active population



Source: Federal Statistical Office

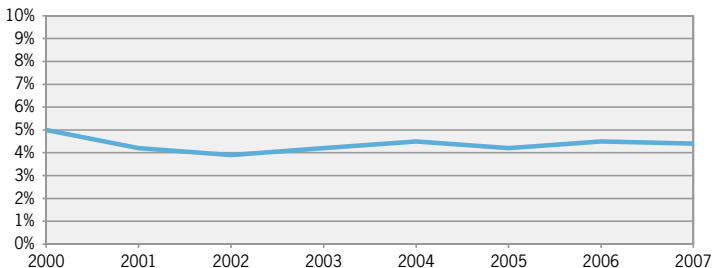
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The share of persons living in poverty despite being in paid employment (working poor) fluctuates between 4% and 5%



Working Poor

Share of working poor in the 20–59-year-old economically active population



Source: Federal Statistical Office

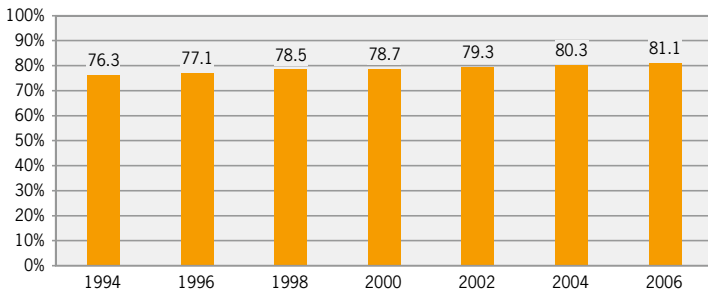
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The wages of women and men are gradually equalising



Wage gap between men and women

Women's monthly gross wage as a percentage of men's monthly gross wage



Source: Federal Statistical Office

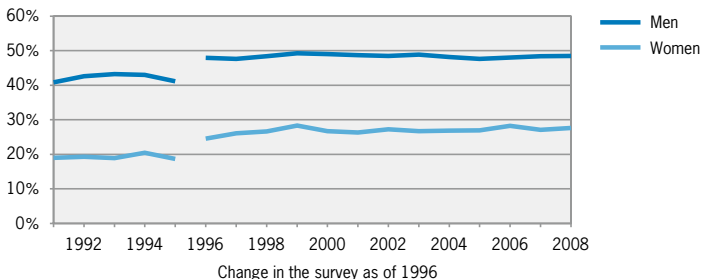
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The share of women in managerial positions remains approximately 20 percentage points lower than that of men



Professional position by gender

Share of all employees accounted for by men and women in managerial positions



Source: Federal Statistical Office

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Economic system

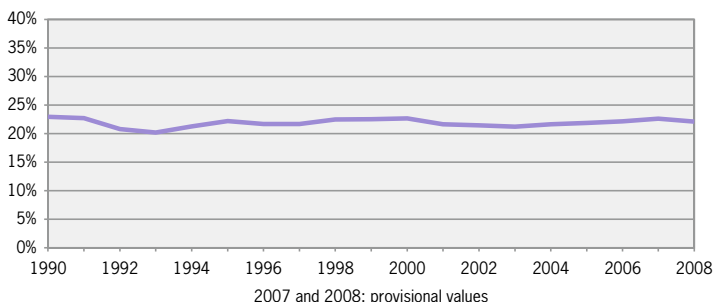
To ensure that the population's basic requirements are met in the long term, an economy that is capable of performing efficiently is needed. This also entails promoting innovation and competitiveness. When the market mechanism fails, the state should primarily intervene with market instruments. Sustainable development also requires that public-sector debt be incurred only to the extent that it does not jeopardise the capability of future generations to meet individual and social needs.

The share of investment in GDP is stagnating



Investment to GDP ratio

Gross investments in relation to gross domestic product



Source: Federal Statistical Office

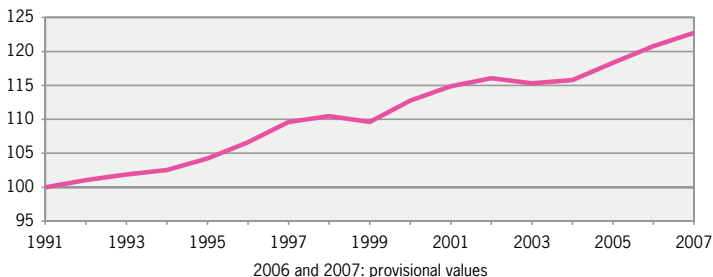
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The productivity of labour is increasing



Labour productivity

Productivity trend by hours worked, index 1991 = 100



Source: Federal Statistical Office

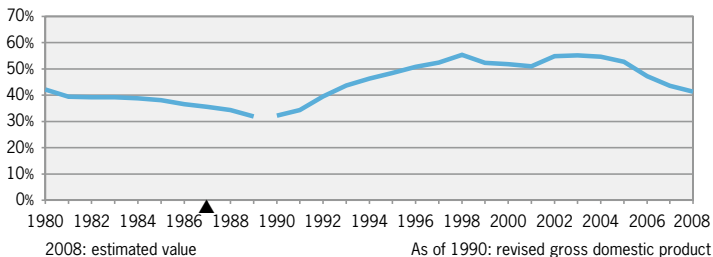
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Indebtedness has risen and decreased again in recent years



Level of public debt

Gross debt of the Confederation, cantons and municipalities (without social insurances) in relation to gross domestic product



Source: Federal Finance Administration

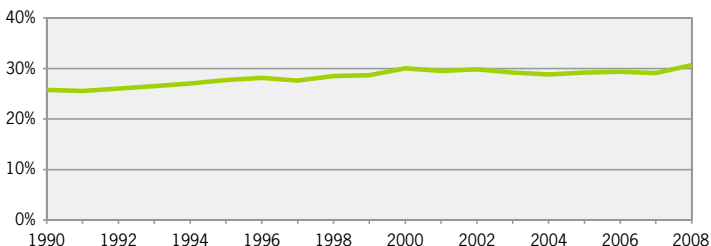
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The public sector's fiscal revenue rate is rising



Public sector fiscal revenue rate

Revenues from taxes and compulsory social security contributions¹ in proportion to gross domestic product



¹ Excluding church taxes and Swiss Accident Insurance Fund premiums

2008: estimated value

Source: Federal Finance Administration

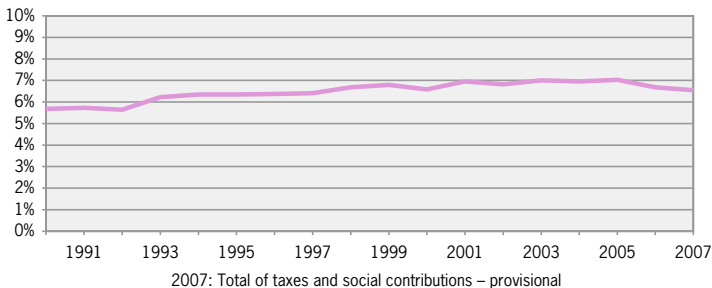
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Revenues from environmental-related taxes are increasing



Environment-related taxes

in proportion to total revenues from taxes and social contributions¹



2007: Total of taxes and social contributions – provisional

¹ According to ESA95 – European System of Accounts 95

Source: Federal Statistical Office

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Production and consumption

An economy that is able to perform efficiently is a condition for the ability to meet people's requirements. Production and consumption should be as environmentally compatible and socially just as possible. Efficient use of the resources deployed is essential. Waste resulting from production and consumption should be avoided whenever possible.

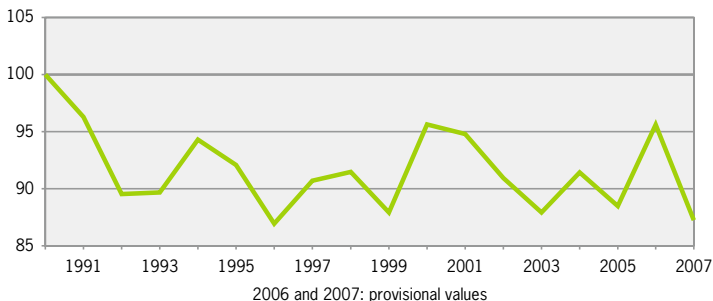
The relationship between material requirement and economic value added fluctuates



Material intensity

Total Material Requirement (TMR) to gross domestic product ratio

Index 1990 = 100



Source: Federal Statistical Office

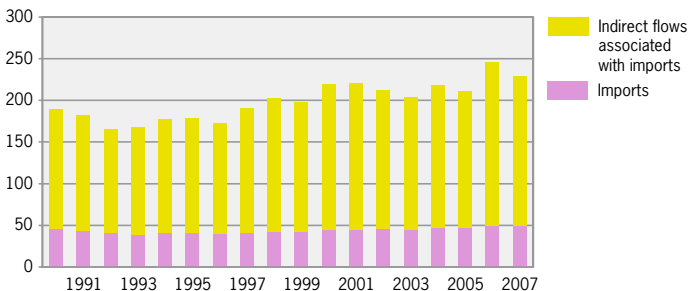
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The transfer of material requirement abroad is increasing



Material requirement abroad for imports to Switzerland

Imports to Switzerland and indirect flows associated with imports, in million tonnes



Source: Federal Statistical Office

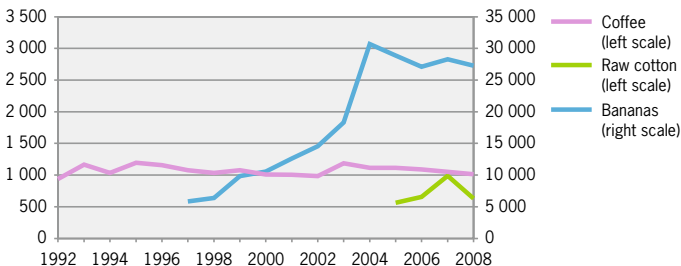
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The sale of fair trade products fluctuates



Fair Trade

Sale of Max-Havelaar-certified products in Switzerland, in tonnes



Source: Max Havelaar Foundation (Switzerland)

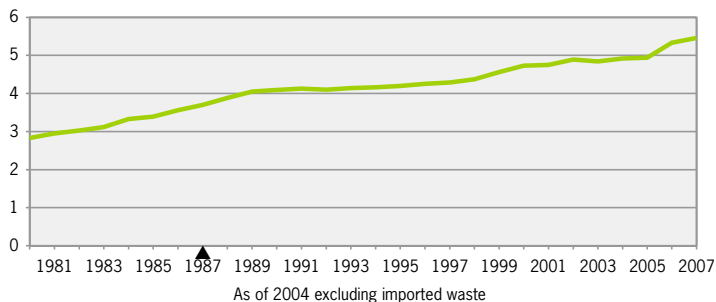
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Ever more waste is being produced in Switzerland



Municipal Waste

Total municipal waste produced including recycling, in millions of tonnes



Source: Federal Office for the Environment

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Other indicators on the theme of production and consumption online:

The **total material requirement** is increasing



Swiss consumers are increasingly buying **organic products**



The share of waste that flows into a **recycling** process is increasing



Mobility and transport

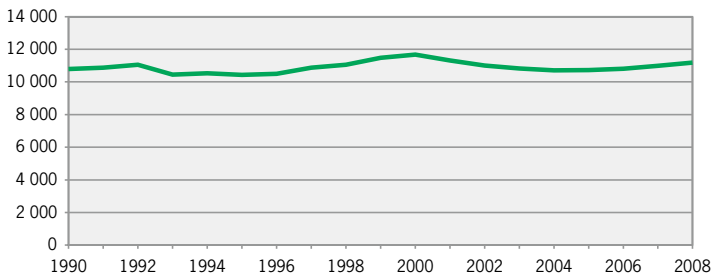
Sustainable development requires a transport system that allows access to mobility for all groups of the population and all parts of the country; however, such a system must also cope efficiently with the transport that is necessary for the economy to function without destroying the natural foundations of life or exceeding the limits on the use of non-renewable resources.

Energy consumption in transport fluctuates around 10,800 kilowatt hours per person



Final energy consumption in transport

Final energy consumption of all public and private passenger and freight traffic, in kilowatt hours per person



Sources: Federal Office of Energy; Federal Statistical Office

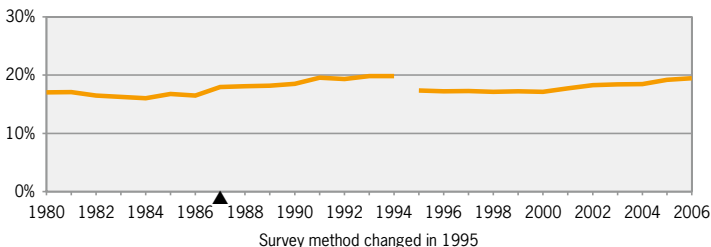
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The share of public transport in total rail and road passenger travel is increasing



Modal split in passenger transport

Share of public transport in total passenger transport by road and rail
in % of passenger km



Source: Federal Statistical Office

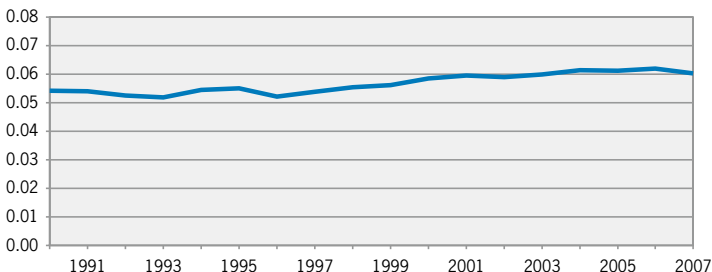
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Freight transport is growing faster than the economy



Intensity of freight transport

Performance of freight transport (road and rail) in relation to gross domestic product
at previous year's prices with reference year 2000, in tonne-kilometres/Swiss franc



Source: Federal Statistical Office

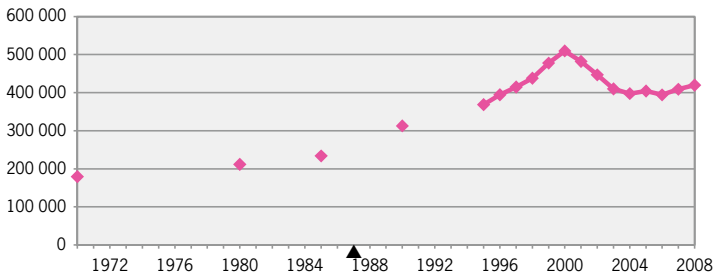
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The number of flights increased particularly sharply up to the year 2000



Take-offs and landings

Number of scheduled airline and charter flight take-offs and landings in the three national airports



Sources: Federal Office of Civil Aviation; Federal Statistical Office

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Other indicators on the theme of mobility and transport are available online:

CO₂ intensity of individual motorised transport: less CO₂ is emitted per kilometre travelled



Modal split in freight transport: the share of rail freight transport is decreasing



Persons affected by noise: more people are affected by traffic noise



Energy and climate

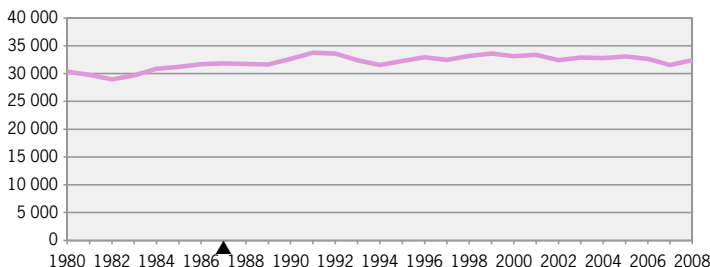
For the supply of energy to be consistent with the goals of sustainable development, the level of use of non-renewable resources should be kept below that of the development potential of renewable sources. Sustainable development also requires the prevention of severe or irreversible environmental damage. Therefore, the emission of greenhouse gases should be avoided whenever possible.

The per-capita energy consumption remains at the same level



Final energy consumption

Final energy consumption in kilowatt hours per capita



Sources: Federal Office of Energy; Federal Statistical Office

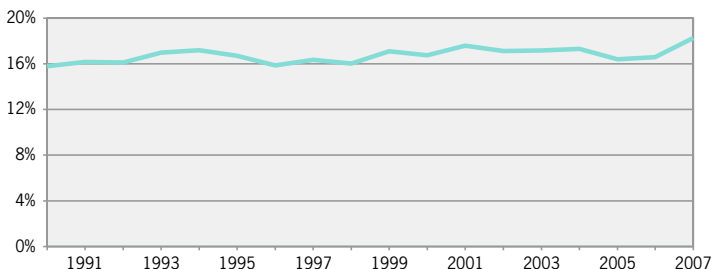
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The share of renewable energies in final energy consumption is stagnating



Renewable energies

Share in final energy consumption



Source: Federal Office of Energy

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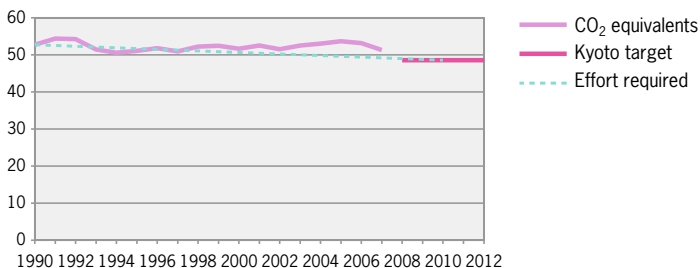
Greenhouse gas emissions are fluctuating



Greenhouse gas emissions

Movement towards target value of Kyoto Protocol for 2008–2012

CO₂ equivalents, in million tonnes



Source: Federal Office for the Environment

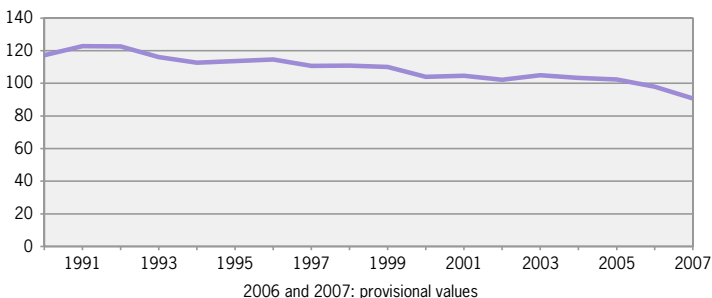
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CO₂ intensity is decreasing



CO₂ intensity

CO₂ emissions in relation to gross domestic product at previous year's prices with reference year 2000, in grams per Swiss franc



Sources: Federal Statistical Office; Federal Office for the Environment

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Other indicators on the theme of energy and climate are available online:

Energy intensity: energy consumption in relation to GDP is decreasing



Energy dependency: energy imports are increasing



CO₂ emissions: the emission of CO₂ fluctuates around 45 million tonnes



Natural resources

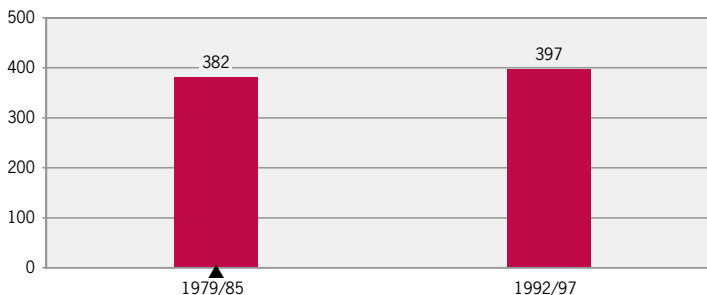
Economic use of resources is essential for sustainable development. The natural foundations of life, biodiversity and the quality of ecosystems should be maintained in the long term. Fertile soils, good-quality water and clean air are vital for the well-being of present and future generations.

The settlement area required per person is increasing



Per-capita settlement area

Building areas, industrial and commercial areas, special urban areas, recreation facilities, parks and transportation areas, in square metres per person



Source: Federal Statistical Office

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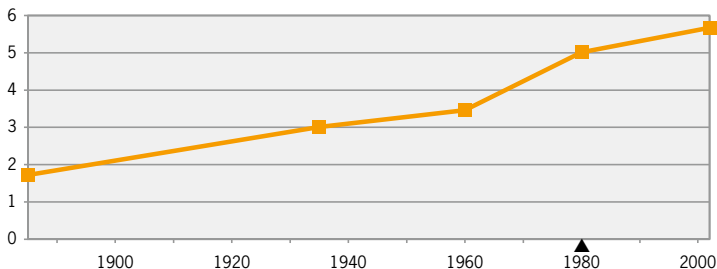
The fragmentation of the landscape is increasing



Landscape fragmentation

Fragmentation of terrestrial area below 2100 m

Effective mesh density in number of meshes per 1000 km²



Source: Jaeger J., Bertiller R., Schwick C., 2007

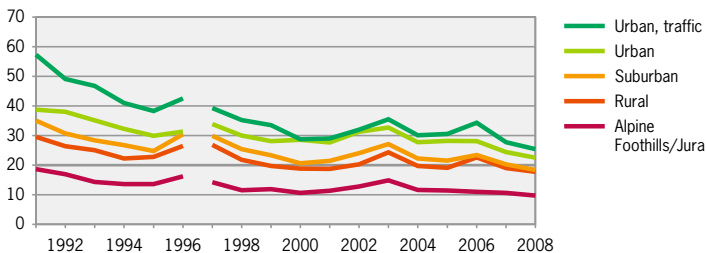
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The concentration of particulate matter in the air is decreasing



Particulate matter concentration

PM 10 concentration, annual average values* in micrograms per cubic metre (prior to 1997 calculation based on TSP [total suspended particles])



* Limit value in Switzerland: annual mean 20 µg/m³

Source: Federal Office for the Environment

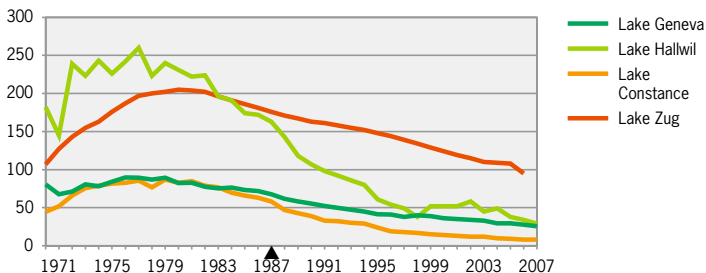
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The pollution of Swiss lakes by phosphorus is decreasing



Phosphorus content in selected lakes

Total phosphorus in micrograms per litre (annual average values)



Source: Federal Office for the Environment

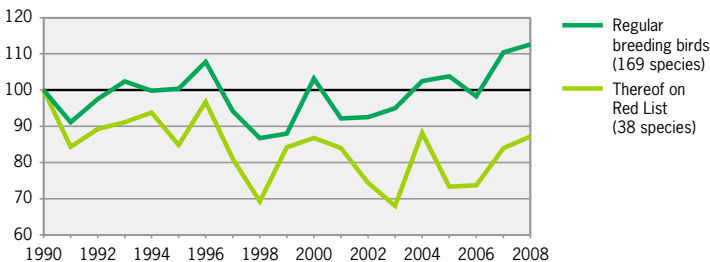
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A moderately positive trend is evident for the bird species that regularly breed in Switzerland; the populations of the 38 endangered species on the 2001 Red List register fluctuations



Populations of breeding birds

Trend in breeding birds population in Switzerland, index 1990 = 100



Source: Swiss Ornithological Institute Sempach

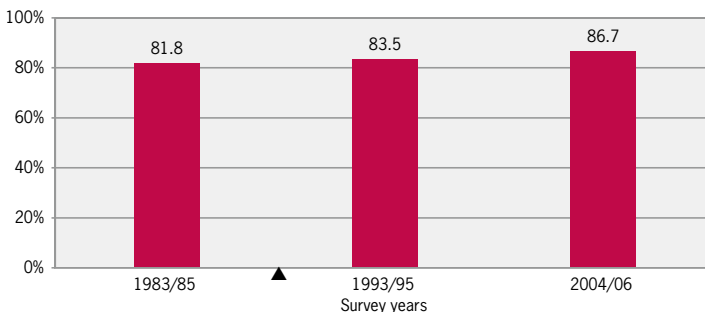
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The share of forest area with medium and high biotope values, i.e. the ecological quality of the forest, is increasing



Ecological quality of forests

Share of forest area with medium and high biotope value



Source: Swiss Federal Institute for Forest, Snow and Landscape Research

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Other indicators on the theme of natural resources are available online:

The **ecological footprint** per person in Switzerland fluctuates at a high level; at the same time, the global biocapacity per person is decreasing



The **land used for settlement** is increasing



The **arable land** area is decreasing



Nitrate content in groundwater

1 value

Ozone concentration: the number of ozone exceedances fluctuates



Switzerland's sustainable development at a glance

Is Switzerland on the path to sustainable development?

	Indicator	Evaluation of development
Living conditions	Household income	
	Population living below poverty line	
	Life satisfaction	
	Violent crime	
	Remittances by migrants	
	Housing costs	
	Suicide rate	
Health	Life expectancy in good health	
	Health-relevant behaviour: physical exercise	
	Overweight	
	Mental wellbeing	
	Health expenditure	
Social cohesion	Inequality of income distribution	
	Voluntary work	
	Women in the National Council	
	Reading skills of 15-year-olds by socio-economic background	
	Early school leavers by citizenship	
International cooperation	Official development assistance	
	Official development assistance to poor countries	
	Multilateral treaties	
	Duty-free imports from developing countries	
	Attitude towards development assistance	
	Direct investments in developing countries	
Education and culture	Reading skills of 15-year-olds	
	Early school leavers	
	Participation in further education	
	Internet use by income group	
	Regular use of a second national language	
	Participation in cultural activities	1 value
	Own cultural activities	1 value
Research and technology	Patent applications	
	Human resources in science and technology	
	Expenditure on research and development	
Work	Unemployment rate	
	Youth unemployment	
	Working Poor	
	Wage gap between men and women	
	Professional position by gender	

Evaluation of development	Indicator	
	Investment to GDP ratio	Economic system
	Labour productivity	
	Level of public debt	
	Fiscal revenue rate	
	Environment-related taxes	
	Material intensity	Production and consumption
	Material requirement abroad for imports	
	Fair trade	
	Municipal waste	
	Total material requirement	
	Consumption of organic products	Mobility and transport
	Waste recycling	
	Final energy consumption of transport	
	Modal split in passenger transport	
	Intensity of freight transport	
	Take-offs and landings	Energy and climate
	CO ₂ intensity of individual motorised transport	
	Modal split in freight transport	
	Persons affected by noise	
	Final energy consumption	
	Renewable energies	Natural resources
	Greenhouse gas emissions	
	CO ₂ intensity	
	Energy intensity	
	Energy dependency	
	CO ₂ emissions	
	Per-capita settlement area	
	Landscape fragmentation	
	Particulate matter concentration	
	Phosphorus content in lakes	
	Breeding bird populations	
	Ecological quality of forests	
	Ecological footprint	
	Settlement area	
	Arable land	
1 value	Nitrate content in groundwater	
	Ozone concentration	

Additional information

More information about **MONET** available at www.monet.admin.ch:

- ▶ All **indicators** are online with explanations of what they mean for sustainable development and additional information.
- ▶ **17 key indicators** that illustrate sustainable development in a compact and easily comprehensible way.
- ▶ **45 sustainable development postulates** that indicate the direction sustainable development should take.
- ▶ Information about **KLARTEXT**, a card game with exciting information about Switzerland based on the MONET indicators.
- ▶ Print or electronic **publications**:

Federal Statistical Office, Federal Department for Spatial Development, Swiss Agency for Development and Cooperation, Federal Office for the Environment: **Sustainable development – a brief guide 2008** – 17 key indicators to measure progress, Neuchâtel 2008

Federal Statistical Office, Federal Department for Spatial Development, Swiss Agency for Development and Cooperation, Federal Office for the Environment: Monitoring Sustainable Development – **Switzerland in a Globalised World**, Neuchâtel 2008

Extensive information about **sustainable development policy in Switzerland** available at www.are.admin.ch/sustainabledevelopment

The Pocket Statistics 2009 is a joint publication of the Federal Statistical Office (FSO), the Federal Office for Spatial Development (ARE), the Federal Office for the Environment (FOEN) and the Swiss Agency for Development and Cooperation (SDC).

www.statistics.admin.ch

www.environment-switzerland.ch

www.are.admin.ch

www.sdc.admin.ch

Imprint

Publisher: Federal Statistical Office (FSO)

Concept, editor: Jana Wachtl

Layout: DIAM, Prepress/Print, FSO

Translations: FSO Language Service, available as a PDF file or in a printed version in German, French, Italian and English

Photos: Wachtl, PRISMA/Rainer Witzgall, AURA

Information: Federal Statistical Office, Environment, Sustainable Development, Territory, Jana Wachtl, tel.: 032 713 67 45, e-mail: monet@bfs.admin.ch

Orders: Order number 737-0900 (free of charge), tel.: 032 713 60 60, e-mail: order@bfs.admin.ch, fax: 032 713 60 61

