

Executive summary

This report examines Switzerland's progress since the previous Environmental Performance Review by the OECD in 1998, and the extent to which the country has met national objectives and honoured international commitments. The report also reviews Switzerland's progress in the context of the OECD Environmental Strategy.^{*} Some 46 recommendations^{**} are made that could contribute to further environmental progress in Switzerland.

Switzerland's environment is subject to severe pressures (pollution, extraction of natural resources, spatial restructuring), due in particular to industry, agriculture, transport and tourism. These pressures stem from very high population densities and a high level of economic activity, and from Switzerland's location at the heart of Europe.

For over 30 years, the ambitious environmental policies promoted by the Confederation have been implemented by the cantons and the communes. They have been based on a prescriptive approach, sustained government funding and active public opinion that is deeply concerned about the environment (especially following certain major industrial accidents, the environmental impact of intensive farming, the deforestation debate and the 1987 floods). These policies have yielded remarkable results in combating pollution and natural hazards. More recently, and during the period under review, environmental policies have focused on partnerships with economic interests and civil society as a whole, on application of the polluter pays principle and on prevention (e.g. in risk management and management of natural resources).

Despite the progress made in factoring the imperatives of sustainable development into sectoral policies, including energy, transport and agricultural policies, it is still difficult to translate the concept of sustainable development into consumption patterns, e.g. the consumption of space, transport and recreational activities. There has been continued regression with regard to biodiversity, nature and landscapes. Concerns about sluggish or weak economic growth, and about international competitiveness, are tending to lessen the priority given to environment-related issues in the short term.

Implementing strengthened environmental policies...

In many respects, Switzerland's performance in fighting pollution is among the best of any OECD country. This is the result, in particular, of an ambitious, long-term legislative and institutional policy regarding the environment. The federal Law on the Protection of the Environment (LPE), revised in the mid-1990s, stresses the principles of co-operation, causality (the polluter pays and user pays principles) and prevention. On the whole, there is very good co-operation among all stakeholders, including civil society (e.g. environmental NGOs, businesses, farmers' associations), as well as between the Confederation and the cantons and communes. The cantons implement most environmental policies and related measures and supervise environmental actions at the local level. The federal authorities (including the Federal Council) also formulate wide-ranging planning documents that incorporate environmental issues. Economic instruments (e.g. charges for water and waste management services) are being used with growing effectiveness within the framework of greater internalisation of external costs. A number of environmental taxes and budget-neutral fiscal measures have been explored and/or adopted (e.g. the VOC incentive tax, the proceeds of which are returned to households via health insurers). The creation of the Federal Office for the Environment (FOEN) on 1 January 2006 demonstrates the determination to expand sustainable management of

* The objectives of the OECD Environmental Strategy for the First Decade of the 21st Century covered in these Conclusions and Recommendations are: maintaining the integrity of ecosystems (Section 1), decoupling of environmental pressures from economic growth (Sections 2.1 and 2.2), and global environmental interdependence (Section 3).

** See Annex.

natural resources (forests, nature, water) and to encompass the management of natural hazards and technological risks. Government and business spending on the environment (pollution abatement and nature protection) has remained stable at around 1.4% of GDP. These outlays have yielded economic benefits with regard to i) health (avoided expenses, improved productivity at work) and ii) the Swiss economy in sectors such as tourism, engineering, electrical equipment, the environmental industry and agri-food (thanks to Switzerland's ecology-friendly international image). All these changes are taking place within an economy that is very open to trade with the European Union and the rest of the world.

However, Switzerland is faced with numerous environmental challenges resulting from non-point source pollution (e.g. of agricultural origin) and unsustainable consumption patterns (e.g. in transport, recreational activities and land use). Its biodiversity and landscapes are threatened. There is a need to focus on the actual results of environmental policies and to strengthen co-ordination among different levels of government, based on reliable data. An integrated and harmonised system should be devised for authorising industrial activities. Switzerland's overall enforcement of environmental legislation is not being documented. Companies with plants in more than one canton sometimes face different environmental regulations and/or enforcement levels. Regional development policy has not been able to contain rapid growth on the outskirts of cities. Thus, there has been considerable construction of farm buildings and transformation of existing structures outside designated zones. Greater use should be made of economic instruments (e.g. the CO₂ tax) to increase the effectiveness of environmental policies and sustainable management of natural resources. Even though progress has been made regarding water and waste, the polluter pays and user pays principles are not applied sufficiently in the realms of climate, air, noise and the protection of nature.

...and integrating better environmental concerns in economic decisions

While concerns about sluggish or weak economic growth and the international competitiveness of its economy are very real, Switzerland has made significant progress in decoupling environmental pressures and economic growth, in particular with regard to conventional air pollutants (SO_x, NO_x), water abstraction and the use of fertilizer and pesticides. The two sustainable development strategies at the federal level (1997 and 2002) have spurred better collaboration among federal government agencies and have been accompanied by evaluation and monitoring procedures. Indicators of sustainable development have been adopted at the federal level and developed by certain cantons and cities. The federal authorities prepare sectoral strategy or planning documents that cover environmental issues. Progress has been made in internalising external costs in waste management and water treatment, and in integrating environmental concerns into policies for sectors such as agriculture (required ecological services) and transport (shifts of passenger and freight traffic from road to rail). The economic instruments implemented since the previous review, such as the VOC tax and the heavy vehicle fee, have proven effective.

However, problems related to decoupling remain, in particular with regard to road transport and the consumption of space by dispersed urbanisation and by infrastructure. The federal strategy for sustainable development has few quantified objectives (apart from that of limiting urbanisation to 400 square metres of built-up area per capita), is disconnected from sectoral strategies and needs to be better implemented, e.g. with respect to the consumption of transport, recreational activities and space. A long-term vision is lacking in the environmental policy area. The green tax reform recommended in the previous review and by the 2002 federal strategy for sustainable development has yet to be introduced. The taxation of energy, in particular gasoline, is still too low and cannot prompt changes in behaviour. The gasoline price differential between Switzerland and the neighbouring countries should be reduced to encourage savings on fuel consumption and cut back on emissions resulting from "gasoline tourism."

International commitments met...

Switzerland has an effective system for co-ordinating international environmental activities, based on formal consultations (at federal level and between the Confederation and the cantons) and on various processes for informal consultations. It maintains extensive co-operative relations with neighbouring countries and the EU as a whole, including with regard to harmonisation of environmental legislation. It has transposed the provisions of a number of multilateral environmental agreements, including: the Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol) and its amendments, the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention), the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, the Stockholm Convention on Persistent Organic Pollutants (POPs), the Convention on Biological Diversity and the International Treaty on Phytogenetic Resources for Food and Agriculture. It actively promotes environmental protection and sustainable development in international fora. Swiss official development assistance, as a percentage of gross national income, has been increasing (0.44% in 2005). ODA for environmental purposes and other environmental expenditure at the international level (e.g. for activities in the countries of Eastern Europe, Caucasus and Central Asia) have been substantial. In addition, some CHF 250-300 million per year is collected by NGOs and the private sector (e.g. the Swiss Alliance of Development Organisations) and is invested primarily in international co-operative activities with strong environmental relevance.

...and to be met.

Nevertheless, there is room for improvement. Concerning climate change, there are problems meeting targets for reducing emissions of CO₂ and other greenhouse gases (internationally agreed targets as well as domestic ones). It is true that Switzerland has low energy and CO₂ intensities. Likewise, it has adopted voluntary measures that have to some extent reduced CO₂ emissions, although these have been insufficient. The CO₂ tax envisioned in the federal law on CO₂ has yet to be implemented. Switzerland is also having trouble meeting the targets established for several air pollutants (e.g. PM₁₀ and NO_x from automobiles) under the Convention on Long-range Transboundary Air Pollution. It has not ratified the Aarhus Convention and its Protocol on Pollutant Release and Transfer Registers, the Protocol on Strategic Environmental Assessment to the Espoo Convention, the Water and Health and Civil Liability Protocols to the Water Convention, or the Protocols to the Convention on the Protection of the Alps. Even though Switzerland is in fact prepared to comply with the provisions of certain multilateral environmental agreements, reluctance to enter into binding international agreements has recently increased, reflecting a lack of consensus across the country. Certain international commitments have not been fully met at the cantonal level.

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Annex: 46 Recommendations^{*}

Environmental Management	<ul style="list-style-type: none"> ▪ step up efforts to promote <u>more sustainable consumption patterns</u> by adopting appropriate regulatory and economic instruments, and through adequate demand management; ▪ continue efforts to implement the <u>principle of causality</u> (the polluter pays and user pays principles); ▪ further improve the effectiveness and efficiency of environmental policies with improved <u>monitoring of the environment</u> and its interactions with the economy (environmental data and economic analysis), expanded use of <u>economic instruments</u> and documentation of compliance with environmental legislation; ▪ continue efforts to strengthen co-ordination between the Confederation and the cantons, so as to implement <u>harmonised and efficient environmental policies</u> throughout the country (e.g. by adopting an integrated system for authorising industrial activities, along the lines of the European Union's IPPC approach); ▪ adopt strategies that are more highly integrated to <u>manage natural hazards and technological risks</u>, taking into account other sectoral policies (e.g. regional planning, transport, forests); accelerate completion of cantonal cadastres of <u>contaminated sites</u> and begin to decontaminate priority sites.
Air	<ul style="list-style-type: none"> ▪ implement further measures to combat <u>fine particulates and ground-level ozone</u> from transport (on-road and off-road vehicles), industry and households, and <u>ammonia</u> generated by agriculture (e.g. by adopting tougher emissions limits, promoting innovation and increasing the use of particulate filters on diesel engines); ▪ further exploit the <u>multiple benefits</u> associated with air quality, climate change and energy efficiency objectives; ▪ continue to <u>internalise the external environmental costs of road passenger transport</u> (e.g. by introducing distance-related incentives or combining energy labels with a bonus/malus system applicable at the time of purchase); ▪ pursue a <u>freight traffic shift</u> from road to rail through targeted investment, financial support for public transport and intermodality, and extension of the heavy vehicle fee; ▪ pursue implementation of the <u>SwissEnergy</u> programme; consider increasing taxes on gasoline and diesel fuel to improve internalisation of external costs; further promote energy efficiency in buildings and industrial installations.
Noise	<ul style="list-style-type: none"> ▪ establish a <u>countrywide integrated noise monitoring system</u>; ▪ expand efforts to establish <u>noise limits</u> (e.g. for motor vehicles, aircraft and household appliances) and take further measures to reduce noise from <u>road transport</u> (e.g. economic instruments, speed limits, construction of noise barriers); ▪ <u>extend the concept of noise abatement</u> to encompass natural sites and recreational and residential areas.
Water	<ul style="list-style-type: none"> ▪ promote <u>integrated water basin management</u>, in particular by combining objectives for water quality and for the quantity of water resources, as well as the objectives of nature conservation and guaranteed minimum space for watercourses so they can perform their ecological functions; ▪ make further progress in <u>financing the upkeep and renewal of water treatment infrastructure</u>, including through pricing measures; ▪ establish funding mechanisms for the <u>renaturing of watercourses</u>; ▪ prepare national <u>flood management</u> plans by water basin, in co-operation with the cantons; help avert flood risks by implementing the recommendations of cantonal master plans for land use; ▪ identify sources of <u>micropollutants</u> from cities, industry and agriculture; introduce preventive measures in line with the polluter pays principle; continue to reduce <u>non-point source pollution from agriculture</u>, especially in small lakes and in groundwater; ▪ harmonise <u>water quality monitoring</u> by the cantons and the Confederation.
Nature, Landscapes and Biodiversity	<ul style="list-style-type: none"> ▪ prepare and adopt a <u>National Biodiversity Strategy</u> (which could succeed the Swiss Landscape Concept), along with corresponding plans of action; set precise objectives and timetables which anticipate, <i>inter alia</i>, the effects of climate change; ▪ limit consumption of agricultural and natural space; contain dispersed urbanisation by enhancing the integration of biological and landscape diversity goals into spatial planning by cantons and communes, based on <u>reform of the federal law on regional development</u> and adjusted property taxation; ▪ clarify the <u>federal inventory of natural landscapes, sites and monuments</u> so that landscapes can be factored more rigorously into cantonal and communal planning; ▪ set up <u>Regional Natural Parks</u>, peri-urban natural parks, a national ecological network and a second national park; extend international <u>networks of protected areas</u>, such as Ramsar, Man and the Biosphere, and World Heritage sites, and establish the Emerald Network (Bern Convention); expand <u>financial resources</u> to invigorate policy for the development of protected areas; ▪ strengthen sustainable <u>forest management</u>; expand forest reserves and ensure the "public good" function of forests; ▪ do a better job of evaluating, taking into account and remunerating services rendered by ecosystems.

^{*} These Recommendations were formally approved by the OECD Working Party on Environmental Performance.

<p>Integration environment economy</p>	<ul style="list-style-type: none"> ▪ implement the <u>green tax reform</u> called for in the 2002 federal strategy for sustainable development; identify and eliminate subsidies and tax provisions that are potentially detrimental to the environment (in particular, eliminate the planned deductibility of expenses for commuting by car); ▪ formulate a pro-active, long-term <u>environmental policy</u> vision; ▪ improve the use and <u>integration of strategic instruments in the areas of transport, energy, the environment and regional development</u>, from a sustainable development standpoint; ▪ promote the use of environmental indicators and indicators of sustainable development in government strategies, paying special attention to <u>regional development and land use planning</u>; ▪ associate the federal <u>strategy for sustainable development</u> with sectoral strategies; set quantified objectives; encourage the <u>cantons</u> to implement strategies for sustainable development in liaison with their sectoral policies.
<p>Integration environment- agriculture</p>	<ul style="list-style-type: none"> ▪ pursue <u>agricultural policy reform</u> in order to enhance economic competitiveness and, at the same time, ecological efficiency; in this context, continue to give high priority to meeting agri-environmental objectives; ▪ continue to <u>reduce pollution of agricultural origin</u>, in particular through targeted and regional actions; ▪ maximise <u>agriculture's beneficial effects</u> on the environment, especially with regard to biodiversity and the landscape; ▪ develop a market conducive to trade in more environmentally friendly products by applying the principles of integrated product policy to the entire <u>agri-food chain</u>, and by heightening consumer awareness; ▪ continue to develop <u>monitoring and evaluation</u>, especially in areas for which indicators are insufficient, and base the formulation of future objectives on extensive analysis and on close co-operation among all the parties involved; ▪ bolster co-ordination between <u>agricultural and other policies</u> (e.g. environmental, regional, forestry) and between actions taken by federal and cantonal authorities.
<p>Social and environment</p>	<ul style="list-style-type: none"> ▪ ratify the <u>Aarhus Convention</u> and ensure that practices at the federal and cantonal levels concerning access to environmental information, public participation, and access to justice comply with obligations under this convention; ensure that NGOs have access to the courts and can participate in decision-making related to EIA procedures at an early stage; ▪ continue efforts to disseminate <u>environmental information</u>; continue to ensure high-level <u>environmental education</u> at all stages; ▪ fully implement the ongoing <u>Environment-Health action plan</u>; formulate and implement complementary measures that are cost-effective; ▪ make further efforts to achieve <u>sustainable mobility and recreational activity</u>, in particular by integrating protection of the environment, nature and landscapes into transport and regional planning at all levels; extend <u>Agenda 21</u> programmes to rural and scarcely populated areas.
<p>International co-operation</p>	<ul style="list-style-type: none"> ▪ take steps to meet Switzerland's targets under the Kyoto Protocol, including introduction of a <u>CO₂ tax</u>; ▪ implement the measures needed to further reduce <u>emissions of NO_x, VOCs and PM₁₀</u> so as to meet the targets in the Ordinance on Air Pollution Control and the Convention on Long-range Transboundary Air Pollution; ▪ improve <u>implementation of the provisions of multilateral environmental agreements (MEAs)</u>, including at federal and cantonal levels; ▪ expand <u>Alpine co-operation</u>, in particular concerning transport, energy and tourism; ▪ ratify and implement <u>recent MEAs</u> to which Switzerland is not yet a party; ▪ further increase overall <u>official development assistance</u> (ODA) and improve reporting on ODA in the area of environmental protection (e.g. water).