

## Environment Switzerland 2013

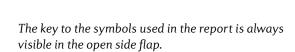


Swiss Confederation

Federal Office for the Environment FOEN



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## **Environment Switzerland 2013**

Published by the Federal Office for the Environment FOEN Bern 2013

#### Published by

Federal Department of the Environment, Transport, Energy and Communications (DETEC)
Federal Office for the Environment (FOEN), Bern

www.bafu.admin.ch/en

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#### Source to be referenced

FOEN (ed.), Environment Switzerland 2013, Bern 2013, 86 pages. Copying of this work for non-commercial purposes is authorised as long as the source is given.

#### Writing completed on

20 December 2012

#### Orders/distribution

BBL, Publications distribution office, CH-3003 Bern Tel. +41 (0)31 325 50 50, fax +41 (0)31 325 50 58 verkauf.zivil@bbl.admin.ch, www.bundespublikationen.admin.ch

#### Order numbers

810.400.081eng (English), 810.400.081f (French), 810.400.081d (German), 810.400.081i (Italian)

#### PDF file

www.bafu.admin.ch/ud-1070-e

#### Price

CHF 8.- (incl. VAT)

#### TODA

978-3-905782-88-2 (e), 978-3-905782-86-8 (f), 978-3-905782-85-1 (d), 978-3-905782-87-5 (i)

#### Language versions

This report is available in English, French, German and Italian as a print publication and PDF file.

#### Print rui

1,000 in English, 1,300 in French, 3,600 in German, 500 in Italian

#### Paper

Recystar, 100% recycled paper

#### Cove

Cover photo: Bee hives at Hongrin (Vaud) queen breeding station, Yannic Bartolozzi

#### Additional information

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#### Acknowledgement

The publisher would like to thank all the scientists and the experts within the federal administration who provided invaluable suggestions and comments.

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#### **Foreword**

The earth is a limited planet with a multitude of finite resources that do not regenerate on a human timescale. However, the human race is currently acting as though it had a second planet in reserve. This finding, which is presented in the new chapter of this report entitled "Global Megatrends", also applies to Switzerland. It is only possible to reduce the pressure on natural resources by decoupling economic growth from environmental pollution. At international level, the efforts to achieve this are subsumed under the concept of the green economy. The Federal Council is tackling this issue through the Green Economy Action Plan and its indirect counterproposal to the popular initiative for a green economy.

Happily, the environmental impacts on the air and surface waters have declined considerably in recent decades. However, since the turn of the millennium, this success story has reached a standstill in some sectors as new substances are being produced that can cause new environmental impacts. These developments – for example in the area of nanotechnology – must be monitored closely and their eventual impacts should be minimised and eventually eliminated at source through product design. The upgrade of wastewater treatment plants to include an additional processing stage that can also prevent endocrine disrupters and other micropollutants from entering surface waters is currently being examined. Further efforts to reduce greenhouse gas emissions are needed throughout the world and in Switzerland, particularly in the transport sector.

Environmental policy incorporates all policy fields today. This is evident in the case of biodiversity, a field in which considerable action is still required. The pressure on animals, plants and ecosystems continues unabated. The Federal Council's new Agricultural Policy 2014–2017 represents a welcome step in the direction of better compensation for agricultural services provided in the interest of biodiversity. The Swiss Biodiversity Strategy is another policy tool now available in this sector. In the medium term, the provision of sufficient lands of adequate ecological quality is crucial to the conservation of biodiversity.

This report by the Federal Office for the Environment uses data provided by its own sections and departments and by other federal authorities, in particular the Swiss Federal Statistical Office, which no longer acts as co-publisher of the report. A comprehensive and forward-looking environmental policy relies on good base data. In this spirit of furthering transparency in environmental matters, I wish you an informative and enjoyable read.



Bruno Oberle, Director Federal Office for the Environment

#### **Overview**

The report "Environment Switzerland 2013" provides an overview of the current state of the environment in our country. It assesses the measures implemented by the federal authorities to improve the quality of the environment and identifies areas in which further action is required. It also presents the progress achieved in Switzerland in the global context.

Three important developments (known as "global megatrends") are currently influencing the state of the environment worldwide: the progressive overuse of natural resources, the increasing pollution of the environment and the intensifying impacts of climate change. The consequences of these developments are also noticeable in Switzerland.

Swiss environmental policy has achieved many successes since the 1980s and reduced the pollution of the environment by certain contaminants. As a result, the country's air quality has improved considerably over the past 25 years. The quality of surface waters and groundwater is also generally good today. The contamination of the soil by heavy metals, for example lead and cadmium, is generally declining and the first country-wide evaluation of the register of contaminated sites presents a positive picture: overall, there are fewer contaminated sites in Switzerland than was previously assumed (38,000 as opposed to the estimated 50,000) and the programme for the rehabilitation of contaminated sites is on target.

However, most of this progress, for example in relation to air and water quality, was achieved before the year 2000 and there has been little change since then. Ambient concentrations of certain pollutants (particulate matter, ozone, nitrogen oxides, ammonia) still regularly exceed the prescribed limit values. A large number of chemical substances (e.g. drugs, personal care products, plant protection products) are not filtered out by wastewater treatment plants and cause damage to ecosystems in the form of micropollutants.

Since the mid-1980s, more resources are used globally than are replaced through regeneration. Switzerland consumes over twice the volume of resources that can be sustainably provided by the earth. To meet its requirements for production and consumption, our country imports increasing volumes of raw materials, e.g. fuels and metals, feed and food. Over half of the environmental impacts generated through our domestic consumption arise abroad. In response to this problem, the Federal Council passed the Green Economy Action Plan in March 2013. The measures proposed in this plan shall contribute to fostering approaches to economic activity and consumption that conserve resources.

The pressure on Switzerland's own natural resources is also high: the pressure on surface waters and landscape is growing through high energy consumption, increasing mobility and the constant expansion of settlement and transport areas. Soil continues to be sealed at a worrying rate. This is mainly reflected in the unsatisfactory state of biodiversity. To ensure the long-term conservation of biodiversity, the Federal Council passed the Swiss Biodiversity Strategy in April 2012. The federal authorities will develop an action plan by mid-2014 which will substantiate the strategy's objectives. An important milestone has also been reached in the area of water protection: the revised Waters Protection Act contains provisions for the restoration of rivers and lakes so that they can fulfil their natural functions again and contribute to the conservation and promotion of biodiversity. The cantons must complete their strategic plans for the rehabilitation of watercourses and reduction of the negative impacts of hydropower production by the end of 2014. The first projects are already being implemented. However, Switzerland's decision to withdraw from nuclear power and the associated expansion of hydropower production make the simultaneous task of conserving or re-establishing natural habitats and landscapes a challenging one.

Switzerland could be particularly severely affected by changes in the climate: according to new climate scenarios, an unchecked rise in global greenhouse gas emissions could increase temperatures here by over 6 °C as compared with preindustrial times by the end of the 21st century. Despite the efforts made at international level, it has not been possible to stem the rise in greenhouse gas emissions up to now. Considerable action is also required in this area in Switzerland, particularly in relation to transport. Although the country has succeeded in reducing CO<sub>2</sub> emissions from heating fuels as compared with 1990 levels, transport-related emissions have continued to increase. Hence, the country's domestically and internationally defined emission-reduction targets could only be achieved through the purchase of emissions certificates for climate protection projects abroad. In the revised CO<sub>2</sub> Act, which came into force on 1 January 2013, Switzerland has set itself the goal of reducing its domestic greenhouse gas emissions by at least 20  $\!\%$ by 2020, as compared with 1990 levels. At the same time, the federal authorities shall also coordinate new measures for adaptation to climate change. The first part of the national strategy for adaptation to climate change was passed by the Federal Council in March 2012. The strategy shall be substantiated in a national action plan by the end of 2013.

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