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Swiss Federal Council

**Sustainable Development Strategy:
Guidelines and Action Plan 2008–2011**

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Sustainable Development Strategy: Guidelines and Action Plan 2008–2011

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Contents

1	Background	5
1.1	Remit	5
1.2	The federal government's Sustainable Development Strategy	5
1.3	Key overlaps with the Sustainable Development Strategy	6
1.3.1	Review of the federal government remit	6
1.3.2	Planning for the 2007–2011 legislative period	6
1.3.3	Growth policy	7
2	Guidelines for sustainable development policy	8
2.1	Taking responsibility for the future	8
2.2	Balanced consideration of the three target dimensions	8
2.3	Incorporating sustainable development into all areas of policy	11
2.4	Improving coherence and coordination between policy areas	11
2.5	Forging sustainable development partnerships	12
3	Action Plan 2008–2011	13
3.1	Aims and targets	13
3.2	Key challenges and measures	15
	1 – Climate change and natural hazards	15
	2 – Energy	17
	3 – Spatial development and transport	19
	4 – Economy, production and consumption	21
	5 – Use of natural resources	23
	6 – Social cohesion, demography and migration	24
	7 – Public health, sport and the promotion of physical exercise	26
	8 – Global developmental and environmental challenges	28
3.3	Horizontal issues: challenges and measures	32
	9 – Fiscal policy	32
	10 – Education, research and innovation	33
	11 – Culture	36
4	Responsibilities and ancillary measures in implementing the strategy	38
4.1	Responsibilities, cooperation at federal level and financing	38
4.1.1	Organisation	38
4.1.2	Cooperation at federal level and financing	38
4.2	Sustainability assessments	39

4.3	Updating the strategy, monitoring and reporting, effectiveness review	41
4.4	Cooperation between the federal government, cantons and municipalities	42
4.5	Cooperation with other stakeholder groups	43
4.6	Communications	43
Appendix 1		
	The measures of the 2008–2011 Action Plan	44
Appendix 2		
	Measures from the Sustainable Development Strategy 2002 in relation to the 2008–2011 Action Plan	45
Appendix 3		
	Description of the ISDC sustainable development criteria	47
Appendix 4		
	Key to indicators	51
Appendix 5		
	Government agencies represented on the ISDC	52

1 Background

1.1 Remit

For ten years now, the Federal Council has compiled its strategic intentions and specific directives for action on implementing sustainable development in Switzerland in to a national strategy. Following on from the first «Sustainable Development in Switzerland» strategy in 1997 five years after the UN Conference on Environment and Development in Rio de Janeiro, in 2002 the Swiss Federal Council adopted its second «Sustainable Development Strategy 2002» in the run-up to the World Summit on Sustainable Development in Johannesburg.

At the same time as it adopted the Sustainable Development Strategy 2002, on 27 March 2002, the Federal Council also decided to renew the strategy in 2007. The new strategy was to be based on a complete review of the 2002 strategy¹ and information on the positives and negatives of implementing sustainable development in Switzerland². In acknowledging the report on 17 January 2007, the Federal Council then confirmed its decision to revise the strategy. It does so in the present report.

1.2 The federal government's Sustainable Development Strategy

As the basis of its work in this area, the Federal Council will continue to use the definition of sustainable development drawn up in 1987 by the World Commission on Environment and Development for the 1992 UN Conference on Environment and Development in Rio de Janeiro. It is known as the «Brundtland Definition» after the Commission's chair, Gro Harlem Brundtland. According to this definition, development is sustainable if it guarantees that the needs of present generations can be met without compromising the ability of future generations to meet their own needs. Two complementary aspects of sustainable development are of key importance in understanding the concept fully: the idea that there are limits to what the global ecosystem can bear, and the priority that must be given to satisfying essential needs, particularly those of the poor.³

This definition has an ethical foundation. It expresses the belief that power for a generation to do as it pleases with regard to the future should be replaced by a sense of responsibility toward the future, rooted in a just and fair division of resources between generations and regions of the world. Sustainable development demands that natural resources be secured for all persons living both now and in the future on just and humanitarian terms. This tenet of responsibility to the future was recognised as a guiding principle by the international community – including Switzerland – with the adoption of the corresponding documents at the Rio conference and at the World Summit on Sustainable Development in Johannesburg in 2002.

The Sustainable Development Strategy contains various elements that differ in nature. In its guidelines for sustainable development policy (Section 2), the Federal Council sets out its understanding of sustainable development, and how it wishes to integrate the concept into federal policy as a whole. In doing so, it draws on and further concretises the guidelines of the Sustainability Development Strategy 2002. Section 3 contains the Federal Council's Sustainable Development Action Plan for the 2007–2011 legislative period. It is geared to key long-term thematic challenges, with an additional emphasis on horizontal policy areas such as fiscal policy, education, research, innovation and culture, which impact on all of the key challenges.

¹ Interface/evaluanda working group: Evaluation der Strategie Nachhaltige Entwicklung 2002 (Evaluating the Sustainable Development Strategy 2002). Lucerne/Geneva, 2006

² Interdepartmental Sustainable Development Committee (ISDC): Sustainable Development Strategy 2002 – Review and Recommendations for Revision. Bern 2007

³ World Commission on Environment and Development: Our Common Future. Oxford/New York 1987, p. 43

The Federal Council delegates strategy implementation (Section 4) to existing bodies. The Interdepartmental Sustainable Development Committee (ISDC) is responsible for pursuing the strategy. The Committee is chaired by the Federal Office for Spatial Development (ARE), as the specialist agency for sustainable development matters within the federal government. The assessment and optimisation of political initiatives from the sustainable development viewpoint (sustainability assessments) and monitoring have been strengthened in comparison with the 2002 strategy.

The individual elements of the strategy also remain valid for different periods. The strategy guidelines (Section 2) and the ancillary implementation measures (Section 4) are regarded as permanent elements providing a framework for cohesive, long-term action on the part of the Federal Council. By contrast, the 2008–2011 Action Plan (Section 3) is intended to run for a specific period and be reviewed after four years.

1.3 Key overlaps with the Sustainable Development Strategy

1.3.1 Review of the federal government remit

The Federal Council conducts a systematic review of the federal government's remit. Based upon a portfolio of tasks, it determines which of these tasks can be abandoned altogether and for which state activity can be reduced. It also looks into reforms, outsourcing and disengagement from tasks undertaken jointly by the federal government and the cantons. As a first step in 2006, the Federal Council adopted the overall aim that expansion in the federal government budget – including the shortfall in financing for social security benefits – should keep pace with economic growth up to 2015 (i.e. three percent per year in nominal terms). In April 2008, the Federal Council then set target growth rates and reform objectives for the individual areas of the government remit. At the same time, it decided that pensions should receive special treatment, and extended the time horizon for this area of government activity until 2020. It will now compile the more detailed proposed measures into an Action Plan and distribute the Plan for feedback to the cantons, political parties and interested organisations as part of a political dialogue. Finally, the Federal Council will draw up draft legislation and constitutional amendments, and put the measures that have been adopted into action.

1.3.2 Planning for the 2007–2011 legislative period

In its legislative planning report, the Federal Council sets forth its programme of government for the four years. There are close links between legislative planning and the Sustainable Development Strategy. Both processes cover a wide range of issues, but they differ in terms of their content focus and time horizon. The Sustainable Development Strategy sets out initiatives of a longer-term nature. Where content is concerned, it lends particular emphasis to a series of key challenges (see Section 3). Furthermore, unlike legislative planning, it is not restricted to legislative projects, but also covers important strategic campaigns designed to enforce existing laws.

The foundations for legislative planning were laid down in a report by the federal government's Forward Planning Staff, entitled «Challenges 2007–2011»⁴. This report also incorporates all of the government's significant forward planning work, specifically the GDP growth scenarios drawn up by the State Secretariat for Economic Affairs (seco), the demographic scenarios produced by the Swiss Federal Statistical Office (SFSO), the ARE's outlooks for freight and passenger transport, and the prospects for energy issued by the Swiss Federal Office of Energy (SFOE). All of these also provide an important basis for sustainable development policy. Collating and considering all of this work at

⁴ <http://www.bk.admin.ch/dokumentation/publikationen/00290/00930/index.html?lang=en>

the same time means that the Sustainable Development Strategy is in step with the report on planning for the 2007–2011 legislative period.

1.3.3 Growth policy

As a broad, cross-departmental process that is aligned closely with legislative planning, the federal government's growth policy is intended to increase Switzerland's economic capacity. It is based on packages of reforms that are revised at regular intervals. It also overlaps with the Sustainable Development Strategy, which itself unites and pursues the three target dimensions of economic performance, environmental responsibility and social solidarity (see Section 2.2). Improving economic performance is thus also one of the objectives of sustainability strategy. Growth policy and the Sustainable Development Strategy nonetheless have different areas of focus. Growth policy tends to regard the necessary decoupling of economic growth and resource consumption, as well as the impact of growth on social capital, as subsidiary aims. It does not itself contain a programme of appropriate environmental or social policy action. Meanwhile, the Sustainable Development Strategy addresses economic growth in particular in sections 3.2.4 and 3.2.8. Here, the regulatory impact assessment (RIA)⁵ approach is used to examine the individual measures of the growth package in terms of their impact on sustainability. Points of emphasis are then selected following a relevance analysis conducted using sustainability assessment methodology (see also Section 4.2). The lead agency in each case bears primary responsibility for both analyses and subsequent evaluations.

⁵ RIAs have been used since 2000 at federal level to examine laws and their implementing ordinances. <http://www.seco.admin.ch/themen/00374/00459/00465/index.html> (in German and French)

2 Guidelines for sustainable development policy

The guidelines for sustainable development policy are rooted in the Swiss Federal Constitution⁶, Arts. 2, 54, 73) as well as in important international sustainable development reference documents issued by the United Nations⁷ and the OECD⁸. The European Union's revised strategy⁹ is another important source of information. The following guidelines update and flesh out the guidelines that the Federal Council submitted to the United Nations Commission on Sustainable Development in its report entitled «10 Jahre nach Rio – Die Schweiz auf dem Weg zu einer Politik der Nachhaltigen Entwicklung» («Ten years after Rio – Switzerland's path to a sustainable development policy»)¹⁰ and laid down in its own Sustainable Development Strategy 2002.¹¹

2.1 Taking responsibility for the future

The fundamental challenge, of ensuring that the needs of all people, and specifically those in developing countries, are met while at the same time reducing resource consumption and the burden on the environment requires a long-term process of deep-seated change within business and society. According to the principle of common, yet divided responsibility that is laid down in the Rio Declaration on Environment and Development, with their particular responsibility for past and present development processes and their greater financial and technical resources, the highly developed industrialised countries must lead the way in this. Given their pace of growth, developing countries, and middle-income countries in particular, must nonetheless follow swiftly on their heels.

Responsibility for the future means promoting the principles of prevention, «producer pays» and liability as the essential framework for sustainable, long-term economic, environmental and social action at all levels. A preventative approach is required to avoid possible harm to human health or to the environment, and so that preventative action can be taken even if scientific cause-and-effect has not yet been fully proven or disproven. Care must be taken to ensure that prices reflect true costs, and that harm to human health or to the environment is paid for by the person or body that causes it.

2.2 Balanced consideration of the three target dimensions

The essence of the criteria defined in the Sustainable Development Strategy 2002 with a view to explaining the objectives to be pursued under the three dimensions of «environmental responsibility», «economic performance» and «social solidarity» are retained in the revised strategy (see list below). When formulating policy, care must be taken to include all three target dimensions and all sustainable development criteria (holistic view of the three dimensions of sustainability).

⁶ SR 101

⁷ UN DESA: Guidance in Preparing a National Sustainable Development Strategy: Managing Sustainable Development in the New Millennium. New York 2002; UNESCO: International Implementation Scheme for the United Nations Decade for Education for Sustainable Development 2005–2014. Paris 2005

⁸ OECD: The DAC Guidelines, Strategies for Sustainable Development: Guidance for Development Co-operation. Paris 2001

⁹ European Council: EU Sustainable Development Strategy, adopted on 15/16 June 2006

¹⁰ Swiss Federal Council: «10 Jahre nach Rio 1992 – Die Schweiz auf dem Weg zu einer Politik der Nachhaltigen Entwicklung». Report dated 3 June 2001 to the secretariat of the Commission on Sustainable Development. Bern 2001

¹¹ See also the Interdepartmental Sustainable Development Committee (ISDC): Sustainable Development Strategy 2002 – Review and Recommendations for Revision. Bern 2007

Economic performance	<ul style="list-style-type: none"> – Incomes and employment are to be maintained and increased in line with needs, taking socially and spatially acceptable distribution into account – Productive capital, based on social and human capital, is to be at least maintained and its quality improved – The competitiveness and innovative potential of the economy are to be increased – In the economy, market mechanisms (prices) are to be the primary instrument, factoring in key scarcity factors and external costs – The public sector is to manage its business in a way that will not be paid for by future generations (e.g. in the form of debt or neglected maintenance of value)
Environmental responsibility	<ul style="list-style-type: none"> – Natural areas and biodiversity are to be maintained – The use of renewable resources is to be kept below the regeneration or natural level – The use of non-renewable resources is to be kept below the development potential of renewable resources – Pollution suffered by the natural environment and by humans is to be reduced to a non-damaging level – The impact of environmental disasters is to be prevented or reduced, and accident risks are to be entered into only if no permanent damage lasting more than one generation would be done even in the worst possible case
Social solidarity	<ul style="list-style-type: none"> – The health and safety of humans are to be comprehensively protected and promoted – Education, and with it the development and identity of the individual, are to be guaranteed – Culture, as well as the maintenance and development of social values and resources are to be encouraged in the interests of social capital in general – All people must be guaranteed the same rights and the same legal security. This applies in particular to gender equality, equal rights and protection for minorities, and respect for human rights – Solidarity is to be encouraged, both between generations and world-wide

The «capital stock» model provides an additional foundation for Swiss sustainability policy.¹² Developed by the World Bank, this concept is based on the idea that there are three dimensions of sustainability, or capital stocks: the environment, the economy, and society. The «capital» that is found on earth may not simply be used up, but must be renewed continuously. Sustainability means living off the interest, rather than the capital, in the long term. The capital stock model has been refined further to include the concepts of strong and weak sustainability, which address the issue of whether capital stocks can be substituted for each other. Strong sustainability demands that none of the three capital stocks be permitted to decline over a longer period, while weak sustainability imposes this condition only on sustainability capital as a whole. Weak sustainability therefore permits, for example, the environmental capital stock to be eroded, as long as this erosion is «offset» by the creation of more economic or social capital.

¹² Swiss Agency for Development and Cooperation, Federal Office of Spatial Development: Sustainable development in Switzerland: Methodological foundations. Bern 2004

Under the capital stock model, the term «capital» is less broad than the target dimensions. It covers factors such as production facilities, natural resources or the capital represented by social sentiment. The target dimensions, meanwhile, include further aspects, such as distribution issues and principles for formulating policies. While the concept of capital can be described without particular difficulty with regard to the economy and the environment, social capital is still a controversial issue in the academic literature.

Based on the legal content of the sustainability provisions in the Federal Constitution (specifically Articles 2 and 73),¹³ the Federal Council has taken the middle road between strong and weak sustainability. This is referred to within expert circles as «sensible sustainability» in English-speaking countries, and as «weak sustainability plus» in Switzerland. This approach rests on the precept that individual elements of the aforementioned capital stocks can be substituted for each other. They can therefore be offset against one another to a limited extent, provided such offsetting is transparent, is not systematically detrimental to the same sustainability dimension, and the biosphere's overall ability to bear the attendant burden is respected. In the view of the Federal Council, many aspects of the environmental dimension display specific characteristics which, even taking the potential for technological advancement into consideration, make it unrealistic that they could ever be replaced by social or economic capital. Many environmental goods such as a stable climate, biodiversity, fertile soils or the atmosphere's ozone layer are vital for the survival of humanity, and capital would not, as a rule, compensate for their destruction. Intervention in the natural world must not be allowed to result in an irreversible loss which compromises future generations' scope for action.

The «weak sustainability plus» concept means that certain frameworks or limits to substitutability must be observed when giving full consideration to target dimensions in project development or assessment:

- Minimum social, economic and environmental requirements¹⁴ must be respected,
- Developments or effects that are difficult or impossible to reverse must be avoided,
- Adverse impacts that are not associated with a corresponding benefit may not be transferred to the future generations,
- Environmental pollution and social problems should not be shifted abroad,
- Great care must be taken in the case of uncertainties or risks that exist because of an insufficient degree of knowledge, or that are unlikely to occur, but have the potential to cause great harm,
- Efforts must be taken to prevent further deterioration in areas that are already afflicted by acute sustainability problems, or in which the effects might, in the light of current trends, worsen existing problems.

The Federal Council provides the necessary tools to ensure that initiatives are assessed from the sustainable development viewpoint in accordance with standard criteria (see Section 4.2).

¹³ Federal Office for Spatial Development, ARE: Fragen im Zusammenhang mit den Nachhaltigkeitsbestimmungen in der Bundesverfassung – Rechtsgutachten (Issues in connection with the sustainability provisions of the Federal Constitution – A legal opinion). Bern 2004.

The term «sustainable development» is used in a broad sense in the general «object» article of the Federal Constitution. This article refers to the Brundtland definition of sustainable development, while emphasising the three target dimensions, the priority to be given to the basic needs of disadvantaged persons, and the tolerance limits of the biosphere in general. The constitutional principle of sustainability, as laid down in Article 73, obliges the federal government and the cantons to endeavour to bring human demands on the natural environment into balance. One of the main features of this equilibrium is its focus on capacity for renewal. Article 73 therefore addresses the environmental dimension specifically, setting it out in greater detail than Article 2. This is because sustainability is now recognised alongside the prevention and producer pays principles as one of the three supporting tenets of environmental action.

¹⁴ These might be: thresholds laid down in law (e.g. emissions, health-related environmental norms under conservation legislation and its corresponding ordinances), scientific thresholds that are not (yet) reflected in statutory limits (e.g. greenhouse gas emission levels at which further global warming would be halted), socio-political norms such as equal opportunities, minimum wages, dignified living conditions, a social safety net and guaranteed human rights.

2.3 Incorporating sustainable development into all areas of policy

The Federal Council regards sustainable development not simply as another sectoral policy, but as a regulatory concept to be integrated into all specialist policies. All areas of policy are to be geared to sustainable development. This derives from Article 2 of the Federal Constitution, which declares sustainable development to be a mandatory part of the federal and cantonal government remit and, in particular, insists that all federal authorities adopt it as a guiding principle. The «object» provision is to be understood as a legally binding directive and as a mandate for action for all authorities that either make or apply the law. The main purpose of this article is to give direction to top-level state authorities, be they federal or cantonal. The Federal Council for example, must feat its decision making on the aims and means of government policy to Switzerland's objectives as a state. The article also sets out the course that the Federal Supreme Court must chart in its capacity as the authority of last instance in matters of law. This directive means that sustainable development should be integrated from the very start into the existing planning and management processes of the Federal Council, the departments of the federal government, and other agencies. No further, parallel structures should be created for sustainability policy purposes.

2.4 Improving coherence and coordination between policy areas

Sustainable development requires the three target dimensions to be incorporated into policy-making at an early stage, as well as a concerted cross-agency effort to examine the issues and identify enduring solutions. The environmental, economic and social dimensions of sustainable development must be taken into consideration in the performance of each and every task. Integrating these three dimensions of sustainable development is a top priority in political planning and decision-making, as well as in specific initiatives. It must be ensured that important political decisions are made on the basis of proposals, the social, economic and environmental impact of which have been assessed transparently at an early stage, as required by Article 141 of the Federal Act of 13 December 2002 on the Federal Assembly (Parliament Act)¹⁵. Another important element in sustainable policy-making is the ex-post assessment of the impact of political decisions (Art. 170 Federal Constitution). Based on effectiveness reviews, these assessments are designed to provide information on how measures are implemented, how those who are targeted respond, whether and which side effects result, and whether or not the policy achieves its intended aims.

Transparent decision-making processes and the involvement of all the various parties concerned are designed to ensure that all conflicting interests are balanced against each other and to generate both broad support for decisions and feasible solutions, thereby helping to ensure that political decisions give maximum consideration to the sustainable development perspective. The conflicts revealed in this process must be disclosed, and reasons must be given for the way in which they are handled. Over and above these coordination and conflict management aspects, efforts must be made to optimise policies and to develop synergies. Sustainability assessment tools may assist in the coordination process by providing objective frameworks and decision-making support. The relevant regulations with regard to the implementation of this strategy are laid down in Section 4. Suitable collaborative structures are also required to improve coordination and coherence.

¹⁵ SR 171.10 Parlamentsgesetz (http://www.admin.ch/ch/d/sr/171_10/a141.html (in German))

2.5 Forging sustainable development partnerships

Sustainable development is not just a matter for public-sector bodies or for the federal government alone. Many of the problems our country faces can be resolved constructively only by all three levels of the state working closely together. A federal strategy that restricted itself solely to federal policy would therefore be too limited in its effect.

Cooperation with the cantons and municipalities is essential. Switzerland's structure as a federal state means that cantonal and municipal administrations wield considerable power and influence in many areas of relevance to sustainability. As such, promoting sustainability processes at cantonal, regional and municipal levels, where the public sector comes into direct contact with civil society, as well as encouraging a general receptiveness to the idea of sustainable development, is extremely important.

Given the influencing factors and stakeholder groups that are relevant to sustainable development today, a strategy that were limited to the public sector would fall short of its targets in the same way as would a strategy restricted to the federal level. Civil society and the private sector must therefore also be involved in sustainable development policies. Collaboration between government authorities and pressure groups already happens in practice. Where international sustainability policy is concerned, policy-makers have been working alongside interested non-governmental organisations, primarily from the environmental, development, business and social spheres, on a regular basis for many years. These organisations are included in the authorities' preparations for important international negotiations, and have lent considerable impetus to sustainable development in Switzerland over the last ten years. Cooperation with non-governmental organisations should be continued in the future.

However, non-institutional bodies and individuals must also incorporate the strategy's guidelines into their day-to-day activities. This specifically concerns private-sector enterprises, who are called upon to act responsibly. Companies can encourage sustainable development in their everyday operational activities by using their existing scope for action to design their products and production processes to generate the minimum burden and maximum added value for society and the environment. A company's commitment to these principles can also result in it being respected as a leader in its compliance with the various regulations, norms and standards that apply to areas such as environmental management and social responsibility.

3 Action Plan 2008–2011

3.1 Aims and targets

The Federal Council's aim is for the Sustainable Development Strategy to boost the momentum of existing approaches to sustainable development during the forthcoming legislative period. Efforts are to be made to move from sector-based thinking and action toward a more horizontal, transdisciplinary view. In doing so, initiatives to improve environmental quality while simultaneously improving economic performance and social solidarity must be coordinated more effectively.

Where at all possible, opposing trends – such as the offsetting of environmental efficiency by an increase in consumption, or inequalities in the way in which needs are met among different sections of the population – should be avoided. Ultimately, improvements within Switzerland should not be to the detriment of future generations or have wider-ranging impacts at the global level.

Specific action is necessary to achieve the targets that have been set and to guide growth toward sustainability. The Federal Council will be tackling those axes of action identified in the Interdepartmental Sustainable Development Committee (ISDC) status report¹⁶ as top priorities, specifically:

- Combating global warming and managing natural hazards, in particular by reducing energy consumption and the increasing use of renewable sources of energy, with special attention paid to the important mobility and spatial development sectors,
- Boosting economic productivity, in combination with a decoupling from resource and energy consumption, shifting to more sustainable patterns of production and consumption,
- Using natural resources sustainably and reducing the qualitative and quantitative impairment of the environment,
- Ensuring fair access to social and economic resources, and improving integration among all sections of the population,
- Increasing contributions to the global fight against poverty and the promotion of peace, and improving their effectiveness.

From these and from a comparative assessment of sustainability strategies abroad, the Federal Council has derived eight key strategic priority challenges that form the basis of its action on sustainable development:

1. Climate change and natural hazards,
2. Energy,
3. Spatial development and transport,
4. Economy, production and consumption,
5. Use of natural resources,
6. Social cohesion, demography and migration,
7. Public health, sport and the promotion of physical exercise,
8. Global developmental and environmental challenges.

In addition, there are a number of policy areas that impact on all key challenges because of their markedly horizontal nature. These areas must create the proper foundations and conditions for sustainable action:

9. Fiscal policy,
10. Education, research and innovation,
11. Culture¹⁷.

¹⁶ Interdepartmental Sustainable Development Committee (ISDC): Sustainable Development Strategy 2002 – Review and Recommendations for Revision. Bern 2007

¹⁷ Culture is given the status of a transversal issue – rather than a sectoral policy – to emphasize its role as a basis for the processes of economic and social change that are vital to sustainable development.

In the Action Plan that accompanies its strategy, the Federal Council indicates the priority aims that it will be pursuing for individual key challenges (Section 3.2) and horizontal issues (Section 3.3) in the forthcoming legislative period, as well as the measures that will be applied to achieve these targets. The Action Plan is not, essentially, an additional programme of federal government activity. Rather, the measures determine points of focus or shifts in emphasis within existing policies to align them more closely with sustainable development. They will therefore be financed via the regular budgeting process (see Section 4.1).

The Action Plan is composed of measures that lie within the direct powers of the Federal Council. These include both legislative initiatives and important strategic programmes or emphasis shifts in the enforcement of applicable law which can help to resolve sustainable development issues. Further measures, some of which will involve the enforcement of policies that have already been adopted, are generally required to achieve targets in relation to the key challenges.

The measures of the Action Plan fulfil all, or at least the majority of, the following criteria:

- They are holistic, i.e. they factor in the three target dimensions of environmental responsibility, economic performance and social solidarity,
- They are intergenerational, i.e. the measures concern long-term problems or dynamics,
- They are relevant at the global level, i.e. the measures concern global problems or dynamics,
- They are general in nature (measures may be allocated to one or more key challenges),
- They are important and relevant (measures require action or support on the part of the Federal Council, and make a relevant contribution to overcoming challenges),
- They have an innovative element and are groundbreaking in nature (measures represent a new approach to the problem and/or can also be applied to other areas).

Implementation of the Action Plan is monitored as part of a detailed controlling system (see Section 4.3) on the basis of MONET sustainability monitoring¹⁸. Its 120 regularly updated indicators serve as a basis of information for the general public and politicians alike. However, these indicators do not provide conclusive information, as an issue as complex as sustainable development cannot be reduced to figures alone. Progress with regard to the key challenges and horizontal issues in general is discussed below using a selection of particularly meaningful indicators drawn from the MONET system. It should be noted here that MONET is reviewed and updated regularly, so the choice of indicators may vary. The indicators listed in Section 3.2 have been selected because of their suitability for monitoring purposes, i.e. they track developments over time. Indicators stemming from one-off studies or surveys are therefore not included. The assessments presented here are all evaluations of trends relative to the desired direction, not assessments in relation to a particular target value set by a given standard or in law. Indicators are also used to track the results of individual measures. The technical report on the strategy,¹⁹ which is updated annually, provides details of the exact content and organisational cornerstones of monitoring activities (dates, responsibilities, etc.).

¹⁸ www.monet.admin.ch

¹⁹ The technical report is available (in German) from www.are.admin.ch/themen/nachhaltig/00262/00528/index.html?lang=de

3.2 Key challenges and measures

1 – Climate change and natural hazards

Challenges and aims

Humankind has been changing the composition of the atmosphere with greenhouse gas emissions for some 250 years. These gases accentuate the natural greenhouse effect and result in climate change. Consequences for Switzerland include extreme rainfall, and with it floods and mudslides, increasing heatwaves and periods of drought. The average global temperature has already risen by 0.6°C over the past century, with a particularly sharp rise since 1970. This warming effect has very probably been caused by greenhouse gases that humans release into the environment in particular by burning fossil fuels such as coal, oil and gas, as well as large-scale deforestation in tropical areas. Climate change affects not only environmental, but also social and economic development at a fundamental level (e.g. changes to Alpine tourism because snow becomes less certain, seasonal changes to water levels in lakes and rivers that become significant in the longer term). Global warming also impacts on human health, with excessive heat causing health problems and giving rise to new pathogens. According to the Intergovernmental Panel on Climate Change (IPCC), by 2050 global CO₂ emissions would have to be cut to half their 1990 levels by 2050 to keep the rise in temperature below 2° C and avert disastrous consequences for humankind. Industrialised countries are being called upon to make much greater cuts, i.e. to reduce CO₂ emissions by between 60 and 80% by 2050. The IPCC estimates that the world has only until 2020 to act to avoid the far-reaching and irreversible consequences of climate change.

The Federal Act of 8 October 1999 on the Reduction of CO₂ Emissions (CO₂ Act)²⁰ requires that overall CO₂ emissions resulting from the production of energy from fossil fuels be reduced by a total of 10% of their 1990 level by 2010. Also ratified by Switzerland, the Additional Kyoto Protocol to the UN Framework Convention on Climate Change demands that emissions of six different greenhouse gases be reduced by 8% of their 1990 levels by 2008–2012. In addition to the power and transport sectors, relevant areas for action to meet Kyoto targets include agriculture, forest management and industrial processes (specifically cement manufacturing and the use of synthetic greenhouse gases). Negotiations have already begun on targets within the Framework Convention for the period up to 2012. An important point of reference for Switzerland is the European Union's announced target of reducing emissions by 20% of their 1990 level by 2020.

Yet reducing emissions does not go far enough. A targeted strategy of adaptation to cope with the consequences of climate change is also needed. Where global warming is concerned, the number of extreme weather events must be expected to increase further. Adapting defence measures to the effects of climate change will thus become a challenge for the whole of society. An additional factor is that many water and forest infrastructures are in need of replacement because they no longer meet today's requirements. Replacement and renovation are essential to maintaining appropriate protection. Such programmes require a great deal of investment, but as prevention costs are much less than repairing any subsequent damage, the Federal Council wishes to strengthen this area.

²⁰ SR 641.71

A certain basis of information on hazards is required to put integrated risk management into practice. A comprehensive set of «hazard maps» for Switzerland is therefore to be drawn up by 2011. The information that they contain must then be incorporated as swiftly as possible into municipal land use planning. In addition, existing defence structures must be reviewed with regard to their suitability for their intended purpose. Architects, planners and the population as a whole must be familiar with how to handle natural hazards, so that they are taken into account in building schemes, and so that the correct action is taken in the event of a hazard warning. This will keep any damage to a minimum, and ensure that human lives and property are protected as well as is possible. However, no in-depth analysis has yet been conducted of the longer-term impact of climate change on the economy (e.g. tourism, agriculture, power and water supplies) and society (in particular health) neither have corresponding programmes for change yet been drawn up.

The following are some of the indicators of whether or not development is sustainable:

Indicators ²¹	Target trend	Actual trend	Evaluation
CO ₂ intensity of individual motorised transport	↘	↘	+
CO ₂ intensity of the national economy	↘	↘	+
Greenhouse gas emissions	↘ ²²	~	=
CO ₂ emissions	↘ ²³	→	-
Trend in damage caused by natural disasters	↘	...	□

Measures

The Federal Council aims to meet these targets by implementing existing instruments and programmes (the CO₂ Act, the Kyoto Protocol, the PLANAT national platform for natural hazards, etc.). It has also defined the following additional measures as part of its Action Plan:

- 1-1 Ongoing refinement of climate policy
Current policy is based on the CO₂ Act and the Kyoto Protocol and must be developed further into a comprehensive climate policy that is appropriate to the post-2010 period. Future climate-related legislation should help to stabilise concentrations of greenhouse gases at a safe level and play a part in dealing with the negative impacts of climate change. Low-emission products and structures must be promoted, and emissions from the use of fossil fuels and other sources reduced further. However, given the climate change that is already in progress, policy must create a foundation for the systematic monitoring of its long-term implications and the development of suitable adaptation strategies.

²¹ Please refer to Appendix 4 for explanations of the symbols used in the tables.

The authors have decided not to display time series in chart form. Continually updated figures for the individual indicators, as well as additional background information, are provided on the MONET website.

²² A specific target figure exists for this indicator in addition to a general direction: by 2010, emissions should be 8% lower than their 1990 level (reference = average for 2008–2012).

²³ A specific target exists for this indicator in addition to a general direction: by 2010, CO₂ emissions from the use of fossil fuels for energy should be 10% lower (reference = average for 2008–2012). This figure is divided into emissions from the use of fossil fuels to generate electricity (-15 %) and emissions from the use of fossil fuels for transport purposes, excluding aircraft fuels for international flights (-8 %).

– 1–2 Protection against natural hazards

Integrated risk management must be put into practice on all fronts, with an emphasis on encouraging prevention. Warning and alarm systems, as well as cooperation and coordination with the various stakeholder groups concerned must be improved. In the academic and training sectors, efforts must be made to ensure that architects and planners pay due attention to natural hazards when designing their buildings and complexes, and that the population responds appropriately in the event of an incident. Long-term financing for the prevention of such hazards must also be reviewed.

2 – Energy

Challenges and aims

In 2006, Switzerland's primary energy needs were met 46.4% by oil, 24.6% by atomic fuels (for the generation of nuclear power), 10.1% from water (for the generation of hydroelectricity), 9.7% by natural gas and 9.2% by other sources of energy. Of these, only around 18% are renewable (mainly hydroelectricity and wood). Similarly, around 80% of primary energy needs worldwide are met from non-renewable sources. As such, the current energy system is based largely on non-renewable resources. In addition, it places a strain on the environment, damages the global climate and leaves a whole raft of problems behind for generations to come. Since the world's remaining fossil energy resources are increasingly concentrated on unstable areas, there are challenges to be faced in terms of the continuity of supply, as well as political crises and conflicts.

An energy system can be sustainable only if it meets the needs of society and the economy with a much lower level of resources, thanks to more rational energy use, and also, as far as is possible, generates that energy from renewable sources. A sustainable energy system also means the sparing use of energy. Article 89 of the Federal Constitution (energy policy)²⁴ and the Swiss Energy Act of 26 June 1998²⁵ both demand that federal and cantonal governments ensure a sufficiently broad-based, secure, economical and environmentally-friendly energy supply. They must also act to encourage the sparing and rational consumption of that energy. The federal government is looking to ways to chart a path to a «2000 Watt society» that, thanks to much more efficient energy use, the promotion of renewable energies and new and less energy-intensive ways of life and business, manages on one third of its present energy needs, and meets them in the main using renewable resources.

²⁴ <http://www.admin.ch/ch/d/sr/101/a89.html>

²⁵ SR 730.0, Energiegesetz

The following are some of the indicators of whether or not development is sustainable:

Indicators	Target trend	Actual trend	Evaluation
Total energy consumption per person	↘	→	=
Renewable energies	↗ ²⁶	→	=
Consumption of fossil fuels for electricity and transport	↘	↗	–
Energy-intensity of the national economy	↘	↘	+
Total energy consumption in the transport sector	↘	→	=

Measures

The Federal Council aims to meet these targets by implementing existing instruments and programmes, specifically financial incentives for feeding electricity from renewable resources into the national grid, as well as regulations and information campaigns, and applied, interdisciplinary research. It has also defined the following additional measures as part of its Action Plan:

- 2–1 The EnergieSchweiz programme
In its second phase from 2006 to 2010, the EnergieSchweiz energy programme is emphasising continuity and even greater impact to make it a more effective tool in achieving the objectives of energy and climate policy. This second stage of the programme centres on promoting energy efficiency in all segments of the market. The following specific points of focus have been set: (1) building modernisation (comprehensive information for property owners on the energy-related aspects of building modernisation); (2) renewable energies (provision of a wider range of instruments to promote renewable energies); (3) energy-efficient appliances and engines (better use of the savings potential offered by household and electronic appliances, lighting and electrical systems), (4) rational use of energy and waste heat within the economy (inclusion in agreed targets and supplementary programmes to meet the target of halving CO₂ emissions from combustible fuels used in the industrial and service sectors), (5) energy-efficient, low-emission mobility (reducing the CO₂ output from new vehicle fleets to 140 g/km up to 2010, accompanied by a substantial cut in energy consumption and air pollution).
- 2–2 Ongoing refinement of energy strategy
The latest energy forecasts indicate that energy consumption, particularly in the form of electricity, transport fuels and industrial processes, will continue to rise. In addition to the problem of climate change, this raises the question of how growing demand can be balanced against a sufficient, safe and affordable energy supply. The Federal Council presented its energy strategy on 21 February 2007. It has essentially four pillars: renewable energies, energy efficiency, external energy policy, and the construction of large-scale new power generation plants. Building on past and present policies, the energy strategy is to be refined and developed further with a view to securing a sustainable, long-term supply of energy, and given practical application in the form of action plans for energy efficiency and renewable energies.

²⁶ A specific target exists for this indicator in addition to a general direction: by 2030, electricity generated from renewable sources is to be increased by 5400 GWh, or 10% of Switzerland's current electricity consumption: <http://www.bfe.admin.ch/themen/00490/index.html?lang=en>

3 – Spatial development and transport

Challenges and aims

The Federal Council's 1996 Swiss Planning Policy Guidelines are committed explicitly to honouring the sustainability principle. At their heart is the concept of a networked system of urban and rural areas with compact, space-saving settlements. This core idea is intended comprehensively to balance the economic (locational requirements for business, infrastructure, balanced development of individual regions, accessibility, etc.), social (attractive, high-quality living and recreation spaces, protection against natural hazards), and environmental (economical land/soil use, continued development of valuable cultural landscapes, protection of remaining undeveloped areas) demands on Switzerland's national territory. As evaluations show, spatial development does not yet meet these objectives and thus cannot be described as sustainable. The most striking evidence of this is that land use remains almost unchecked, with undeveloped space disappearing at a rate of around 1 m² per second. At the same time, the landscape is being increasingly divided up and covered by an urban sprawl.

Mobility is the backbone and key determinant of spatial development. Sustainable transport means meeting the mobility needs of the population and the economy and providing appropriate access to individual districts, while reducing the associated harmful effects on humans and the environment. The energy efficiency of transport has improved overall in recent decades. That said, the tide has not turned to a sufficient degree where energy consumption and greenhouse gas emissions are concerned. There has also been little change to the modal split, i.e. how mobility is distributed across non-motorised transport, individual motorised transport, and public transport. Despite considerable investment, public transport's share of individual mobility has stagnated at around 20% for some years now, because road traffic infrastructures have been improved at the same time. Furthermore, traffic volumes continue to rise in step with gross domestic product, while freight traffic is growing even faster.

Efforts to promote economical land use must be strengthened, while settlement growth must be turned increasingly inward. As a benchmark figure, it is proposed that built-up area should stabilise at 400 m² per head of population. The balanced development of the various individual regions within Switzerland must be ensured, and we must maintain a transport system that meets the needs of the population and the economy and reduces the negative impact of traffic on people, the environment and business.

The following are some of the indicators of whether or not development is sustainable:

Indicators	Target trend	Actual trend	Evaluation
Built-up area	→	↗	–
Built-up area per capita	→	↗	–
Modal split/public and non-motorised transport as a proportion of passenger traffic (by land)	↗	→	=
Persons affected by noise	↘	↗	–
Goods transport intensity	↘	↗	–

Measures

The Federal Council intends to meet these targets by setting points of emphasis in its ongoing policies, and by implementing existing instruments, specifically the Federal Act of 22 June 1979 on Spatial Planning²⁷, as well as transport infrastructure planning and financing instruments. It has also defined the following additional measures as part of its Action Plan:

- 3–1 Spatial Concept for Switzerland
With a view to updating the principles of the Swiss Planning Policy Guidelines of 1996, the Spatial Concept for Switzerland is intended to draw up objectives and guidelines for the country's future spatial development that are coordinated at all institutional levels. It is also aimed at developing the necessary measures for their implementation. The concept's central aspects are that cantonal structural planning and municipal land use planning must be aligned more closely with sustainable development principles, and that a suitable framework for space and cost-saving urban development must be created. In the future, demands on and for space should be directed firmly inward, i.e. toward areas that are already well developed. To achieve this, there needs to be an improvement in coordination between spatial planning, transport and environmental policy, as well as collaboration between municipalities.
- 3–2 «Future-proof transport infrastructure» programme
Coordinated targets are to be implemented for and between the different modes of transport (public transport, individual motorised transport and non-motorised transport). These are to be supplemented with original approaches to transport-related problems. One of the points of focus, «implementing the Sectoral Transport Plan», is intended to ensure that detailed planning for individual modes of transport pursues the objectives, principles and priorities laid down in the programme section of the Sectoral Plan, which is geared throughout to sustainable development. The programme section was adopted by the Federal Council in 2006. Another area of emphasis, «infrastructure fund – financing infrastructure» ensures that transport infrastructures are financed in accordance with the planning requirements of the Infrastructure Fund, which factor in sustainability principles. A third point, «strengthening public transport», will apply the maintenance, modernisation and expansion of the railway infrastructure, and the creation of suitable institutional structures, to achieve the targeted shift of transalpine freight and passenger traffic on to the railways and public transport respectively. Meanwhile, «strengthening non-motorised transport» will introduce targeted measures to achieve an increase in the proportion of total individual mobility accounted for by journeys on foot, by bicycle, etc.
- 3–3 «Sustainable mobility» programme
The framework for a transport system that is geared to sustainable development must be developed further. Modal shift is an area of emphasis is designed to apply market mechanisms to encourage the shift of transalpine freight traffic from the roads to the railways (e.g. by means of the new alpine transit exchange, currently under development) and to balance the external costs of transport. Where air travel is concerned, the focus is on inclusion in an international emissions trading system. The «creation of environmental label» focus point is intended to develop an environmental label that provides information on the environmental pollution and energy and resource-efficiency of cars. Finally, the «DETEC Service Centre for Innovative and Sustainable Mobility» will support projects that develop and test new ideas for and marketable approaches to sustainable mobility.
- 3–4 «Traffic safety» programme
Over the next ten years, the Federal Council wishes to reduce significantly the number of people killed or seriously injured in road traffic accidents. To achieve its aim, it has asked DETEC to put

²⁷ SR 700, Bundesgesetz über die Raumplanung

forward options for implementing a traffic safety programme. Priorities, cost estimates and alternatives are to be given for each. The Federal Council is likely to decide on its next steps during the first half of 2008. Meanwhile, DETEC's horizontal traffic safety remit means that it is also responsible for proposing further measures and putting them into action to achieve the Federal Council's stated aim.

4 – Economy, production and consumption

Challenges and aims

A long-term process of change is needed to achieve a knowledge-based and highly productive yet low-resource economy. This change process must also strengthen socioeconomic development and be compatible with the need to achieve an absolute reduction in the consumption of the environment and its resources. Productivity must be improved continuously throughout the economy. A broad spectrum of policies – education, research, innovation, fiscal and competition policy, labour market policy and infrastructure-related policies – must all contribute to this improvement. Reference should be made here to the complementary growth strategy that is being pursued in parallel (see Section 1.3.3). The content of this policy is not repeated here in the interests of avoiding repetition. The Sustainable Development Strategy does, however, have an additional feature in its emphasis on reorienting patterns of output and consumption.

Nowadays, goods and services are produced under enormous competitive pressure and in a globalised market. Consumption is rising around the world. There is the danger that this trend is being pursued at the expense of the environment and of fair working conditions. The challenge is to structure the manufacture and consumption of products (goods, services, buildings) so that they satisfy high economic, environmental and social standards for their entire life cycles. Meeting these standards may result not only in cost savings, but also lower external costs with regard to human health, for example. Suitable measures must therefore be implemented in accordance with the UN resolution on a ten-year framework programme to promote sustainable production and consumption patterns. Switzerland was co-initiator of this resolution and is also a signatory to it.

Consumers have an important part to play here, by demanding such sustainable products. The federal government sets an example in its own consumer behaviour, by purchasing products and realising construction projects based on economical, environmentally friendly, healthy and socially responsible processes. A concerted partnership between the public sector, business, society and the academic world is very important in determining and implementing sustainable development measures. Corporate social responsibility, in which companies attach growing importance to sustainability issues within their business practices, should be emphasised here. It might be reflected, for example, in the development of sustainability-based business strategies, the design of sustainable products and production processes, or the adoption of norms and standards for environmentally and socially responsible action (see also Guideline 2.5). State intervention must be kept to a minimum.

All in all, incentives and suitable frameworks must be developed to lend greater innovative impetus to a process of structural change in society that revolves around sustainability. One of the primary requirements here is that prices for energy, mobility, waste disposal, and the use of space and resources reflect true costs. This can be achieved by reducing non-sustainable subsidies and internalising external costs. Reflecting true costs in prices creates incentives to improve environmental efficiency. This can also save costs, while guiding technical progress toward sustainable products and process optimisation. The economic potential that this trend offers will become increasingly important during the 21st century.

The following are some of the indicators of whether or not development is sustainable:

Indicators	Target trend	Actual trend	Evaluation
Household incomes	↗	→	=
Multi-factor productivity	↗	↗	+
Materials intensity of national economy	↘	↘	+
Energy intensity in the production of goods and services	↘	↘	+
Production of waste (total incl. recycling)	↘	↗	-

Measures

In order to achieve the goals set for this key challenge, the Federal Council wishes to carry out the following measures in addition to its growth policy and to the other important and relevant elements of this Action Plan (specifically 1–1, 2–1 and 3–3):

- 4–1 Integrated product policy IPP
The federal government wishes to increase the production and consumption of goods and services that satisfy high economic, social and environmental standards by means of public-sector demand (sustainable federal government procurement practices) and the provision of well-founded, resource-relevant information for market participants. Furthermore, in the context of sustainable materials management strategies are to be proposed to reduce resource consumption and environmental impact while maintaining or improving product quality.
- 4–2 Sustainable construction
Switzerland spends more than 50 billion francs a year on construction, a third of which is accounted for by public-sector contracts. It is planned that the trend in construction spending will be brought into line with the guidelines of this strategy. To this end, the federal government is to formulate a sustainable real estate strategy that also includes an agreement on limiting CO₂ emissions from federal government buildings. The government aims to purchase buildings and building services that satisfy high economic, social and environmental standards throughout their life cycles. It also wishes to exert its influence on the construction sector by setting up construction-related programmes (such as EnergieSchweiz), by helping to determine regulations, norms and standards in construction (e.g. Minergie-ECO), and by strengthening sustainable construction networks in Switzerland.
- 4–3 Ongoing refinement of agricultural policy
Where agricultural policy is concerned, the switch from a system of market subsidies to direct payments will continue at a socially acceptable pace, and a new instrument introduced to promote the sustainable use of resources (implementation of Agricultural Policy 2011). A report on the direct payments system will be drawn up as part of measures to ensure that resources are allocated in as targeted a way as possible. Foreign trade policy is a factor here, with further steps towards deregulation within the framework of the World Trade Organisation WTO and/or a possible free trade agreement in the agricultural and foodstuffs sector between Switzerland and the EU.

5 – Use of natural resources

Challenges and aims

Since natural resources such as biodiversity and forest areas offer benefits that ultimately provide essential foundations for economic and social development, maintaining them is in the interests of all the target dimensions of sustainable development. Without biodiversity, humanity itself could not survive. In Switzerland, many endangered species are now to be found only in small numbers and in few locations. Only in the last 15 years has the protection, improvement and interlinking of these locations been addressed properly. However, these protected areas are too small to sustain endangered species in the long term. Several instruments have already been developed to protect biodiversity in Switzerland. These include biotope inventories, red lists, biodiversity monitoring, environmental offsets, etc. The natural landscape is the basis for ensuring that natural, renewable resources are able to regenerate at a sufficient level of quality. In other words, for ensuring that ecosystems can continue to function. In addition, the quality of Switzerland's countryside is also the foundation for the country's quality of life and locational appeal. The woods and forests are a central source of raw materials, they provide habitats for a wide range of species, counteract emissions into the air, provide living and working space and recreational areas for people, and even filter water, act as a protective barrier, and stabilise the nation's ecosystems. While the focus worldwide is on protecting forests from over-exploitation, Switzerland concentrates instead on increasing the use of wood as a home-grown raw material and source of energy, and on improving domestic value creation through energy and climate policies.

Furthermore, with its important environmental function, not to mention its economic and social status owing to its use for hydroelectricity and drinking, water should continue to be given the attention it deserves. Other challenges are to be found in the environmental damage done by the pollution of lakes and rivers with chemical compounds and hormones, air pollution by particulate matter, soil contamination by heavy metals, and the safe and sustainable treatment of chemicals and hazardous waste.

The following are some of the indicators of whether or not development is sustainable:

Indicators	Target trend	Actual trend	Evaluation
Numbers of breeding birds	↗	→	=
Fragmentation of landscape	↘	↗	–
Environmental offset areas	↗	↗	+
Phosphor levels in lake water	↘	↘	+
Concentration of fine particulate matter	↘	↘	+

Measures

The Federal Council wishes to achieve the targets set for this area by defining priorities for current policies and by implementing existing instruments (such as the Federal Act of 7 October 1983 on Environmental Protection²⁸, the Federal Act of 24 January 1991 on the Protection of Lakes, Rivers and Streams²⁹, the Federal Act of 1 July 1966 on the Protection of the Countryside and Switzerland's National Heritage³⁰, the Federal Act of 4 October 1991 on Forests³¹, and enforcement programmes such as the action plan for assessing and managing the risks associated with nanomaterials). It has defined the following additional measures as part of the Action Plan for this strategy:

- 5–1 Biodiversity impact analysis
The effectiveness of the action that Switzerland has taken to date to maintain biodiversity must be examined. This analysis will then give a basis for determining whether policies that have been pursued to date are sufficient, or whether a more broad-ranging strategy is needed to encourage biodiversity.
- 5–2 Ongoing refinement of chemicals policy
The new EU chemicals regulation REACH completes a paradigm shift that eliminates some of the shortcomings of the old chemicals regulations. Some of these continue to apply in Switzerland, however. The central element of the new regulation is the reversal of the burden of proof, i.e. that substance manufacturers and importers are responsible for demonstrating safety in use. In the EU, a sound basis of evaluation of possible risks is now a condition for admission to the market. This means that many substances that had previously been marketed without any knowledge of their potential risks must undergo toxicological testing. Switzerland must also review its policy on chemicals, and gradually remedy its current failings over the coming years. This is the only way to guarantee a high level of protection for people and for the environment alike. Furthermore, as underscored at the Johannesburg World Summit on Sustainable Development in 2002, Switzerland should do its utmost to introduce the «Globally Harmonized System of Classification and Labelling of Chemicals» (GHS) at the same time as EU states.

6 – Social cohesion, demography and migration

Challenges and aims

Sustainable social development demands a cohesive and fair society. What this actually means must be adjusted continually in line with changing challenges. Many developments put a strain on social cohesion. The anticipated general ageing of the population, for example, will present the social security system and social policy with some tough challenges in the medium to long term. The old-age dependency ratio (those aged 65 and over relative to 20–64 year-olds) will rise over the coming decades from 25.7% (2005) to around 50% in 2050. Systems for providing security in old age must therefore be adapted to demographic trends, without placing a significant additional financial burden on future generations. Demographic trends are demanding that we prepare ourselves for a «four-generation society». In the future, policies must increasingly adopt approaches that use the potential offered by the different generations, and that strengthen intergenerational relations overall.

²⁸ SR 814.01, Bundesgesetz über den Umweltschutz

²⁹ SR 814.20, Bundesgesetz über den Schutz der Gewässer

³⁰ SR 451, Bundesgesetz über den Natur- und Heimatschutz

³¹ SR 921.0, Bundesgesetz über den Wald

There is also an urgent need for social benefits in financial form and state services to be better coordinated and integrated. This is true not only of social policies, but also of labour market, immigration, health, housing, family, education and tax policies, if we are to prevent people genuinely falling into the poverty trap. The area as a whole presents further challenges on the integration front. Social cohesion is being put to the test because of pluralisation and the fact that society as a whole is drifting apart. Social capital – meaning the sum of factors that support orderly cohabitation, mutual trust and thus social development – must be strengthened. Of primary importance here is the integration of the foreign sections of the residential population. Mutual knowledge of and understanding for the different cultures by which people live in Switzerland are decisive to the country's social cohesion. Problems that stem from a lack of integration must be reduced, and the costs that result from those problems must be minimised. Low levels of integration into society and the labour market entail a greater risk of unemployment, poverty, illness, addiction and crime. The state must create favourable conditions that give everyone the same opportunities and the chance to participate fully in Swiss society.

The following are some of the indicators of whether or not development is sustainable:

Indicators	Target trend	Actual trend	Evaluation
Youth unemployment	↘	↗	–
Persons below the poverty line	↘	↘	+
Volunteer work, foreigner participation, as % of Swiss	↗	→	=
18–24 year-old foreigners in post-compulsory education as % of Swiss	↗	↘	–
Equality: women's pay as % of men's pay	↗	↗	+

Measures

The Federal Council wishes to attain the goals for this area by setting points of focus for policies that are already in effect, and by implementing existing instruments, namely implementing the fifth revision of disability insurance (IV), by ensuring additional funding for IV, by planning the 12th revision of old age and survivors' insurance (AHV), and by means of a federal government remit to implement a programme of integration measures. It has also defined the following additional measures as part of this Action Plan:

– 6–1 Strategy to combat poverty

A strategy to combat poverty is to be drawn up in accordance with a mandate from the federal parliament³². The strategy is to be developed and implemented in tandem with the central bodies involved. While upholding the principle of subsidiarity and the respective responsibilities of the federal government and the cantons, the new strategy will primarily comprise adjustments to existing measures. It will be aimed at all three levels of the Swiss state, as well as to the social partners. In order to guarantee a broad base of support, the strategy is to be approved by the Federal Council, the Conference of Cantonal Governments, and the municipalities and cities.

³² Motion 06.3001 from the National Council's Committee for Social Security and Health (SSH).

It will revolve around the following issues: (1) children and young people of pre-school and school age, (2) transition from vocational training into the working world, (3) working poor families and single parents, (4) coordination and design of needs-based benefits, taxes, etc. to prevent poverty traps and negative work incentives, (5) long-term unemployment.

– 6–2 Adjusting labour market policy to an ageing population

As the Swiss population continues to age and its demographic structure shifts, efforts must be made to keep a high proportion of older workers in employment. This is important in terms of both economic growth and funding for the nation's social security safety nets. Labour market policy, and the other policy areas that are closely related to it, such as social insurance, must set incentives so that older employees are not disadvantaged and forced out of the labour market against their will before they would otherwise have retired. The Federal Council will determine other steps to be taken to put this policy into action based on package of measures that was proposed in 2005.

7 – Public health, sport and the promotion of physical exercise

Challenges and aims

In terms of life expectancy and mortality rates, the Swiss population has never been so healthy as it is today. However, these positive factors contrast with an increase in chronic diseases, specifically as a result of obesity (diabetes, cardiovascular diseases), tobacco smoking (cancer, lung problems) and other addictions, as well as psychological problems owing, for example, to greater pressure at work or related, unhealthy working conditions. In the past, healthcare has been focused far too much on treatment (curative medicine). In the future, the emphasis must be on the general health of the population. There must therefore be a shift in emphasis toward preventing illness and promoting health in general. Prevention and promotion must be strengthened as cornerstones of the healthcare system, and the management and coordination of the various parties and programmes in this area must be improved. A multisectoral policy must be pursued. This would draw attention to the links between state of health, on the one hand, and a person's environment, dietary habits, exercise and mobility patterns, and social differences, on the other. It is vital that public health is encouraged on the same terms for all – this also includes health-related information, education and training. Greater social cohesion and improved protection from threats to health are also essential. Sporting activity on the part of the population and muscle-driven mobility must also be promoted, and spaces that are beneficial for both exercise and health – not to mention quiet – must be created or maintained. In doing so, the best possible conditions must be established for the population to engage in regular sporting activity.

One of the key challenges facing health insurance is the continuous fight to keep rising costs down. Reforms that meet the needs of a changing society and ensure efficiency, competition and quality within the healthcare system are therefore essential. It is particularly important to eliminate incentives that encourage an expansion in the volume of medical services used with no apparent justification to be found in the additional needs of an ageing society.

The following are some of the indicators of whether or not development is sustainable:

Indicators	Target trend	Actual trend	Evaluation
Health-related behaviour: physical activity	↗	→	=
Life expectancy in good health	↗	↗	+
Expenditure on prevention and health promotion	↗	↘	-
Health spending	→	↗	-
Consumption of alcohol and other addictive substances: smoking	↘	~	=

Measures

The Federal Council wishes to meet the targets for this year by setting points of focus for current policies and by implementing existing instruments, specifically the Federal Act of 18 March 1994 on Health Insurance³³ and the attendant ordinances. It has also defined the following additional measures as part of its Action Plan:

- 7-1 Strengthening prevention, health promotion and equal opportunities for health
Switzerland is to have a new foundation for strengthening prevention and health promotion that is laid down in federal law. This new statutory foundation is intended to improve the management and coordination of the prevention and health promotion activities of all state (federal, cantonal, municipal) and private-sector parties. It is also intended to close the gap that currently exists in federal law in respect of the prevention of non-contagious and psychological conditions. In addition, a policy is to be drawn up to list the options and actions that might overcome the unequal distribution in Switzerland of opportunities to maintain health, and thus to reach an age that corresponds to average life expectancy.
- 7-2 National «Exercise, diet and health» strategy 2008–2012
The principal aim of this strategy is to halt and then reduce the increasing number of people, and particularly children, in Switzerland, who are overweight or obese. Particular importance will also be attached here to the way in which foods are produced and sold.
- 7-3 «Migration and health» strategy, phase 2
The long-term aim of this strategy is to create a healthcare system that accommodates the needs of a society that has been changed by migration. In order to improve access to healthcare and to provide specific services, measures will be implemented in four defined areas of intervention: training (initial, continued and advanced); information, prevention and health promotion; healthcare services; and research and knowledge management.
- 7-4 Promoting sport and exercise in general
Targeted offerings for all ages and abilities should encourage the Swiss population to take more exercise. Acceptance of the social importance of sport and exercise must be raised, and framework conditions and structures for promoting sport and exercise must be improved. Daily

³³ SR 832.10, Bundesgesetz über die Krankenversicherung

sport and exercise for children and young people, as well as regular physical activity for adults are to be encouraged. In addition, sport is to be used to a greater extent as a means of social integration.

– 7–5 Fair, safe sport

If sport is to impact positively on sustainable development, efforts must be made to combat its less appealing side. An action plan is intended to help implement the principles of the ethics charter in sport, and to make an effective contribution to the fight against illegal substances. Preventing addiction in and because of sport must be given greater weight, and more action must be taken against violence and sexual harassment in sport.

8 – Global developmental and environmental challenges

Challenges and aims

Economic globalisation will continue as the 21st century progresses. Western countries, as well as a number of more advanced developing countries, are becoming «knowledge societies» whose wealth is based on knowledge and the use of new information and communications technologies. Industrial output will increasingly be relocated to developing countries, especially in Asia. Transnational companies are engines of economic growth and important players in the globalisation process. The international exchange of financial services will become more and more important. This economic globalisation process is associated with significant environmental, developmental and poverty-related challenges. Use of the earth's biocapacity by western countries remains too high, and is also growing quickly in some industrialising developing countries. Even today, more of the world's natural resources are being used than sustainable development would permit.

Environmental changes are increasing around the world. In 2005, the «Millennium Ecosystem Assessment» found that around 60% of ecosystems without which life on our planet would be impossible are being degraded or used in a non-sustainable way. The «Global Environment Outlook – GEO 4» issued by the United Nations Environment Programme UNEP is the latest comprehensive analysis of the global environmental situation. It reaches similar conclusions. Present development trends indicate that the situation will worsen markedly in the next 50 years. These problems can be solved only if the public and private sectors succeed in coordinating their activities. The global environmental governance system should be able to withstand all present and future global environmental problems in a coherent way, and address them efficiently and effectively. It must offer an institutional framework that guarantees the protection and sustainable use of natural resources around the world, and it must also create an institutional equilibrium with the other key elements of sustainable development. Global environmental governance requires significant strengthening and enhancement before it can fulfil its conceptual function. There are many overlaps, inconsistencies and even contradictions in some areas between the various parties and conventions involved. These all hinder effective processes. In addition, there are still gaps in international regulation that need to be filled, while existing conventions and agreements must be implemented in full. For example, action must be taken to put the Convention on Biological Diversity, CBD, into action. Where chemicals are concerned, there is still no international convention on heavy metals and persistent inorganic pollutants. Neither are there any binding international rules on sustainable wood and forest usage. In addition, an international forum should be formed to discuss water-related issues and formulate policies based on sustainable usage.

The objective of a strong and effective environmental regime can be attained only if broader international support for environmental issues can be achieved, and if appropriate funding can be directed into existing coffers. Furthermore, environmental policy must be coordinated with development policy, humanitarian aid policies, international security policy, migration policy, international health policy and international trade policy.

Since 1990, it has been possible to reduce the proportion of people who must live on less than a dollar a day from around 28% to 18% (2004). Although, from the global perspective, inequalities have grown, in many regions – especially in Africa – there has been an encouraging increase in incomes among the poor. However, the economic chasm between rich and poor countries remains vast, and the number of potential migrants is increasing as a result. In a development context, the Millennium Development Goals (MDG) issued by the United Nations in 2000 are regarded as the cornerstones of a development policy that integrates environmental factors and also honours human rights. The MDG oblige all countries to increase their commitment to eliminating poverty, to promoting human dignity and equal rights, and to turning peace, democracy and environmental sustainability into realities. All of the members of the United Nations have agreed together to achieve measurable targets to combat hunger, poverty, illness, illiteracy, discrimination against women and the destruction of the environment by 2015. The points of emphasis of international policy were confirmed once again in three action areas at the UN Earth Summit in 2005: sustainable development (Millennium Development Goals), security (security policy to promote development), and human rights and the rule of law. It became clear during the preparations for this summit that the Millennium Development Goals cannot be achieved if the present environmental destruction continues unchecked. This underscored the need for international development policy and international environmental policy to be even more closely aligned with each other.

All in all, efforts must be made to achieve greater coherence between, and equal status for the institutional, multilateral pillars of sustainable development. A key element here is an effective set of global rules and regulations for international trade and capital exchange that are not concerned solely with one-sided economic factors. In addition to promoting access without discrimination, the World Trade Organisation must drive forward in its endeavours to achieve a system of trade that is not only environmentally friendly, but also helps to alleviate poverty. Meanwhile, international, institutional rules and regulations that address environmental concerns at the global level (multilateral environmental conventions) are still relatively weak and uncoordinated. These rules and regulations must be strengthened in both the environmental and social spheres. They must be placed on an equal footing with the rules and regulations that apply to the economy and to business. These enjoy the greatest enforceability because of the dispute resolution and sanction mechanisms that are operated within the framework of the World Trade Organisation.

The following are some of the indicators of whether or not development is sustainable³⁴:

Indicators	Target trend	Actual trend	Evaluation
Public-sector development aid as a proportion of gross national income at market prices	↗	→	=
Proportion of bilateral public-sector development aid targeted at poor countries (as per UN definition)	↗	↘	-
Public-sector development aid to strengthen trading capacity	↗	↗	+
Proportion of public-sector development aid that directly supports international environmental policy	NN	NN	NN
Fair trade	↗	↗	+

Measures

To achieve the targets set for this area, the Federal Council has defined the following priorities within its Action Plan:

- 8-1 WTO and sustainable development
Switzerland endeavours to drive forward the continued deregulation and integration of the global economy within the framework of the WTO. In doing so, it is particularly committed to sustainability issues. In negotiations within the WTO, the Federal Council wishes to be an advocate for the economic and development-specific dimensions of sustainability. It believes in particular that the economical use of resources should be optimised by further reducing non-sustainable subsidies and removing barriers to trade and investment. It also wishes to strengthen the other dimensions of sustainability within the WTO. On the ecological front, the Federal Council is committed to coherence in trade-related regulations and international environmental conventions, to ensuring appropriate information to consumers by means of a WTO-compliant eco-labelling system, to the recognition of minimum environmental standards by the trading regime, and to the application and expansion of the prevention and producer-pays principles within the WTO. Where social measures are concerned, Switzerland is an advocate within the WTO for closer collaboration within multilateral organisations, as well as improved dialogue with non-governmental organisations.
- 8-2 Strengthening international environmental governance
Switzerland campaigns for a stronger United Nations Environment Programme (UNEP) as the central pillar of the international environmental regime. It also believes that the international community should implement and enhance the measures to strengthen international environmental governance that it adopted in 2002, advocates the strategic vision of a UN environmental organisation, and is committed to upholding the idea of Global Environmental Goals (GEG). Switzerland is also promoting a comprehensive international climate regime that would place

³⁴ The indicators on this key challenge should be regarded as provisional.

At the time decisions were being made on the present strategy, the global dimension of the MONET system of indicators was the subject of a special review project.

all major issuers under obligation. It is committed to further strengthening and implementing the Biodiversity Convention and, in particular, to a tough regime governing access to genetic resources, as well as the fair distribution of the profits generated by the related activities. In addition, Switzerland believes that a convention should be drawn up to deal with the problem of persistent inorganic pollutants, that the global chemicals strategy should be refined further, and supports partnership initiatives in order to solve international waste problems. The country is campaigning for a convention on woods and forests, a water forum, adequate funding to put international conservation initiatives into action, the continued replenishing and strengthening of the global environment fund at an appropriate level as a central international environmental financing mechanism, and the inclusion of environmental policy priorities in development policies.

- 8–3 Appropriate funding to achieve the MDG
Switzerland is lobbying actively for appropriate international funding for the MDG to be agreed when the «Financing for Development» framework is reviewed in 2008. This funding should factor in all six dimensions in accordance with UN priorities: (1) own financial resources for developing countries, (2) foreign direct investment, (3) trade as a driver of development, (4) international development cooperation, (5) multilateral debt relief packages and (6) better coherence and consistency in the global financial development architecture. Where its own contribution is concerned, Switzerland subjects its relations with developing countries overall to cost/benefit and quality analyses, with a particular focus on how globalisation can be shaped so that it promotes development and reduces poverty and inequality.
- 8–4 Co-determination of multilateral agreements on sustainable development
Switzerland plays an active role in determining the business policies of international organisations, and is also an active proponent of sustainable development in their various bodies and forums. It participates in the Marrakech process to promote sustainable patterns of production and consumption, especially with regard to sustainable procurement. In the interests of prevention, in this context it advocates strengthening the environmental aspects of sustainable development specifically, and it voices the concerns of the poorest developing countries that globalisation should be both fair and in harmony with the natural environment. With regard to the social dimension of sustainable development, Switzerland is concerned in particular with agreements to meet the basic needs of the poorest people in the world (primarily by means of the MDG), with securing work and incomes for poor rural populations whose subsistence is jeopardised by globalisation, as well as with protecting the most vulnerable sections of the population against risks such as infectious diseases, increasingly scarce resources (water, energy), the consequences of climate change and natural hazards, and against uncertainty and violence in fragile states. The federal government endeavours to achieve a high level of acceptance for multilateral sustainable development policies among the Swiss public, civil society and the economy.
- 8–5 Promotion of civil peace and human rights
Within its scope of regional and global action, Switzerland works to help facilitate non-violent solutions to existing conflicts. In selected cases in which Switzerland has access to the conflicting parties, as well as their respect, it makes a valuable contribution to building trust, mediation and prevention. Switzerland's actions are rooted in a systematic analysis of the context. It helps the main parties concerned to resolve their conflicts by means of political and legal processes, provides support in overcoming the structural causes of poverty and violence, in establishing the rule of law, with respect for human rights and with reconstruction in post-war situations. Switzerland will also systematically integrate a human rights-based approach into its fight against poverty, namely in access to water, food and healthcare, as well as the fundamental right not to suffer discrimination.

- 8–6 Separating «global public goods» from development policy
There are overlaps between development cooperation and initiatives to safeguard global public goods, such as protection from infectious diseases or guarantees of stable international financial markets. Separating the two should allow a more efficient allocation of funding and provision of services in both areas. It should also provide a basis for restructuring the domestic and foreign policy responsibilities of the various federal agencies in response to the conditions imposed by globalisation. Involvement in the «Global 25 Forum» would also offer a platform for commitment at the international level.

3.3 Horizontal issues: challenges and measures

9 – Fiscal policy

Challenges and aims

Sustainable development demands that present generations do not live at the expense of future generations. From the fiscal policy perspective, this means preventing an undesirable redistribution of wealth between generations. Fiscal policy must ensure stability, create favourable conditions for economic growth, and promote employment, prosperity and social cohesion. This is achieved by means of a balanced federal budget in the medium term, low rates of debt and low levels of government spending and taxation in comparison with other countries. Strict limits on debt ensure that financial deficits can be held down. These structural deficits have been the greatest source of new debt since 1990. There has been a change of direction in debt management, and public sector debt has been falling since 2005. More far-reaching measures are nonetheless required to stabilise federal debt and thus bring debt ratios down.

Structures must be in place to ensure that debt limits can continue to be enforced in the long term, without jeopardising the quality of the budget as a whole. Reforms and conscious priority-setting are to be used to slow down the acceleration of federal expenditure overall and to reduce the fast pace of spending growth in certain areas of public-sector activity. Furthermore, the long-term challenges presented by an aging society – one of the biggest tests for future fiscal policy – must be addressed at as early a stage as possible. Estimates indicate that, long term, compulsory state social security schemes will incur considerable spending surpluses if no corrective action is taken on the benefit and/or financing side. Both social security debts and the pressure on federal government spending would increase as a result.

Fiscal policy instruments are also deployed in the energy, transport, emissions and resources fields in order to promote sustainable development. Financial incentives are a useful means of influencing human behaviour. In conjunction with sector policies, the recent past has seen the introduction of some new and important instruments on both the income and expenditure sides, e.g. the CO₂ tax, the Heavy Vehicle Fee HVF, and direct payments to the agricultural sector.

The following are some of the indicators of whether or not development is sustainable:

Indicators	Target trend	Actual trend	Evaluation
Deficits as a proportion of public-sector budgets	↘	=	=
Tax revenue as a proportion of public-sector budgets	↘	↗	–
Restructuring of the tax system along environmental lines	↗	↗	+
Environment-related taxes	↗	↗	+
Rates of debt in public-sector budgets	↘	↗	–

Measures

The Federal Council wishes to achieve the set targets in this area with the following measure, which mainly affects budget equilibrium. Please refer to the measures described in connection with the key challenges above for measures to make the income and expenditure sides of the public sector budget more sustainable.

– 9–1 Development scenarios

Fiscal policy must address the challenges of the future to a greater degree. Only if the right course is charted at an early stage will the federal government be able to maintain room for manoeuvre and prevent society having to change course much more drastically at a later stage. The federal government needs a means of factoring the long term perspective into its fiscal policy. Under its development scenarios programme, the Federal Council will draw up long-term development scenarios for certain areas of its activity at least every four years. These scenarios will extend beyond the fiscal planning time horizon. Development scenarios offer the federal government a tool that reveals where possible management and corrective action might be taken. Development scenarios plot developmental trends in particular areas of state activity, as well as their financial consequences, beyond the fiscal planning framework, thereby facilitating discussion about policy options. This new instrument will be used for the first time in fiscal planning for the 2007–2011 legislative period.

10 – Education, research and innovation

Challenges and aims

Today, knowledge and how that knowledge is used are two of the most precious resources in designing sustainable development processes. High skill levels (specialist and core skills) enable people to solve complex problems and strengthen the country's creativity and competitiveness. Knowledge derived from education, research and innovation is also essential to enable people to reflect critically on values and behaviours, to develop their own identity and to adopt practical points of reference in life. It also permits cultural and economic integration between the different sections of the population. Finally, knowledge and skills are also important in promoting an understanding of how society, politics, business and the natural environment interact, and in encouraging the corresponding action. Lifelong learning plays a key role here, and it will have to be factored in to any continuing education legislation under the new Article 64a of the Swiss constitution.

The Federal Council has made education, research and innovation policy a priority and has applied to the Swiss parliament to increase the budget for this area by an average of 6% per year between 2008 and 2011. The targets set on the education front follow the «Education: maintaining and increasing quality in the long term» guideline, while the objectives for research and innovation are based on the «Research and innovation: increasing competitiveness and growth» guideline. This measure should also help firmly and comprehensively to root and strengthen an understanding of sustainability in all fields and at all levels of education (in formal³⁵ education, including vocational training, in informal³⁶ education and in non-formal³⁷ education from the perspective of lifelong learning) and in research.

The quality and focus of the education system – key factors in enabling future generations to achieve the Federal Council's sustainable development targets effectively – must be improved on an ongoing basis at all levels, from nursery schools through to universities. It is also vital here to continue the process of reform within tertiary education in Switzerland. In this context, the many academic and research opportunities in sustainable development fields must be coordinated better at the national level, and an holistic approach taken to their ongoing refinement. The draft new Federal Act on Promoting Tertiary Education and Coordinating the Swiss Tertiary Education System (Tertiary Education Act (Bundesgesetz über die Förderung der Hochschulen und die Koordination des schweizerischen Hochschulbereichs), which is expected to enter into force in 2012, will also have to factor in these needs.

Finally, it is also important that local administrations, the private sector, civil society, those involved in continuing education and training, as well as the media, are made aware of the active role that they can play, as agents of informal and non-formal education, in increasing awareness of sustainable development in their particular environments.

The following are some of the indicators of whether or not development is sustainable:

Indicators	Target trend	Actual trend	Evaluation
Reading skills among 15 year-olds	↗	→	=
Human resources for science and technology	↗	↗	+
18–24 year-olds in post-compulsory education	↗	→	=
Patent applications	↗	↗	+
Spending on research and development (share of gross domestic product)	↗	↗	+

³⁵ Education offered by educational institutions and leading to recognised qualifications and diplomas.

³⁶ Education acquired by individuals in their daily lives (learning at work, in a family setting, etc.).

³⁷ Education that is received outside the main teaching and educational structures or in parallel with them, and that usually does not result in an official diploma. It may also be provided by institutions that complement the formal education system, such as instruction in art, music or sport, or private courses.

Measures

The Federal Council wishes to meet targets in this area mainly by setting points of focus for the formulation and implementation of its education, research and innovation policy. Where the Federal Institutes of Technology (Eidgenössische Technische Hochschulen, ETH) are concerned, the emphasis is on research into and the early recognition of natural hazards, the reliability and sustainability of materials and systems and the study, planning and continued development of resource conservation, resource and energy consumption, as well as Switzerland's infrastructure and spatial planning regulations. Meanwhile, the Swiss National Science Foundation (SNSF) is to concentrate on basic research (environmental sciences) and targeted national research programmes such as those into the climate and north-south relations, and National Research Programme (NRP) 54, «Sustainable Development of the Built Environment». Switzerland's participation in the European Union's framework research programmes on sustainability, conservation and renewable energies is also an important element of its commitment to education, research and innovation. In the interests of strengthening the involvement of individual universities and colleges, the sustainable development ethos is to be emphasised in the new Tertiary Education Act. Universities and colleges are called upon to drive forward their research activities in relation to the key challenges and horizontal issues of this strategy. The Federal Council also attaches great importance to the roles of the academies of science in Switzerland. They make an important contribution to sustainable development with their activities with regard to early recognition, the dialogue between research and politics/society, and ethics. Sustainable development is a horizontal remit that is laid down in law for Switzerland's universities of applied sciences and providers of professional and vocational training. The activities of the KTI innovation promotion agency are also geared to sustainable development criteria. In addition to its regular promotion activities, it has lead-managed an environment and energy consortium, designed to facilitate knowledge transfer, since 2006. This spotlights specific areas of particular importance for the future: environmental technology and conservation. Finally, in the education sector, monitoring is an additional tool that provides an opportunity to evaluate past and present activities. In parallel with the measures described above, the Federal Council has defined the following areas as priorities:

- 10–1 Continuation of policy to root the concept of sustainable development in Swiss schools
The Federal Council welcomes the «Education for Sustainable Development Platform» programme that runs from 2007–2014. The programme unites the Conference of Cantonal Directors of Education and a number of federal government agencies with an interest in education for sustainable development. The objective of the programme is to integrate sustainable development concerns into the Swiss education system, while upholding the principle of subsidiarity and respecting the respective authorities of the federal government and the cantons where education is concerned. Its initial phase focuses on formal education within compulsory schooling, and it will be enhanced and extended at intervals in the future.
- 10–2 Strengthening non-formal and informal education on sustainable development
In addition to education in a formal context, practical action must be taken with regard to non-formal and informal education. The Federal Council supports the efforts of those involved in this sphere to create a closer and more effective network and to develop implementation programmes together. These activities should be recognised as part of the United Nations' Decade of Education for Sustainable Development.

11 – Culture

Challenges and aims

Sustainable development and cultural growth are mutually dependent. The social and cultural blossoming of the individual is one of the main objectives of human development, while culture forms the basis of all social existence and action. Cultural aspects must therefore be factored into all policy activities. In addition to being an integral part of policy-making, sustainable social and societal development also makes specific demands of the way in which culture is created and cultivated. While respecting cantonal powers, the implementation of the federal government's cultural policy is therefore very important. It sets out and concretises the way in which cultural diversity is to be encouraged and conveyed, and gives all age groups and sectors of the population access to culture. The federal government's core objectives are to promote creativity, to care appropriately for Switzerland's cultural heritage, and to ensure that the proper frameworks are in place.

As a part of Switzerland's national identity, cultural diversity is rooted in the federal constitution. The UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions, which Switzerland played a defining role in drafting, recognises cultural diversity as a fundamental factor in sustainable social development. Guaranteeing this diversity is one of the central postulates of Swiss sustainability policy³⁸ In this respect, contemporary cultural property is just as integral a part of the policy as safeguarding the nation's tangible and intangible cultural heritage. Within the legal and financial scope afforded to it, the federal government's cultural policy must therefore encourage and secure diversity in cultural creativity in the interests of the whole of Switzerland, the proper care of the nation's cultural heritage, and creating the right framework conditions to the extent its authority permits.

The following are some of the indicators of whether or not development is sustainable³⁹:

Indicators	Target trend	Actual trend	Evaluation
Public-sector spending on promoting culture	NN	NN	NN
Public-sector spending on fostering culture	NN	NN	NN
Museum visits/proportion of young people	NN	NN	NN
Regular use of a second national language	→	→	=
No. of persons whose mother tongue is a minority language	NN	NN	NN

³⁸ Swiss Federal Statistical Office (SFSO), Federal Office for Spatial Development (ARE), Federal Office for the Environment (FOEN): Monitoring Sustainable Development MONET – Final Report. Neuchâtel 2003, p. 18 (postulate 1a)

³⁹ The indicators applied to this horizontal issue are only an indicative selection. The final set of indicators must be determined in the course of strategy implementation.

Measures

Given the importance of culture as a basic condition for sustainable development, the Federal Council emphasises its importance as a horizontal issue that should have a beneficial effect on all other fields. The Federal Council aims to achieve the targets set for this area through the proper implementation of existing instruments. Specifically, these include the Federal Act on Promoting the Culture of the Confederation (Bundesgesetz über die Kulturförderung des Bundes), in order to provide direct support for cultural diversity. In addition, Article 70 of the federal constitution encourages language with a view to creating a multilingual society of multilingual individuals and facilitating communication between the different sections of the population. The Federal Council also wishes to protect culturally important landscapes and Switzerland's architectural heritage by implementing the Federal Act on the Protection of the Countryside and Switzerland's National Heritage (Bundesgesetz über den Natur- und Heimatschutz). It has defined the following measure as part of its Action Plan:

- 11–1 Protect and foster intangible cultural heritage
Fostering Switzerland's intangible cultural heritage helps to ensure cultural continuity and strengthens cultural identities. Faster social change, the global networking of communications and trade and the attendant trend toward standardisation and homogeneity heighten awareness of the vital importance of intangible cultural heritage in the socialisation of children and young people, in communication between the generations, in conveying values, in shaping cultural self-image and in intercultural dialogue. Conditional upon the Swiss parliament ratifying the UNESCO Convention for the Safeguarding of Intangible Cultural Heritage, the Federal Council will commit itself to fostering Switzerland's intangible cultural heritage and to increasing awareness of its importance, specifically by producing and maintaining an inventory.

4 Responsibilities and ancillary measures in implementing the strategy

4.1 Responsibilities, cooperation at federal level and financing

4.1.1 Organisation

No additional implementation structures are foreseen to put the strategy into effect. However, successful implementation requires that the related structures and responsibilities be determined and described clearly. Political responsibility for the strategy and the Action Plan lies with the Federal Council. Alongside the ARE, the Interdepartmental Sustainable Development Committee (ISDC) provides a platform for information, coordination and discussion with regard to all of the federal government's sustainability-related activities and processes, including the sustainable development strategy and its ongoing refinement. Individual government agencies bear central responsibility for implementing the Sustainable Development Strategy both inside and outside the federal government. The commitment of the directors of those government agencies is very important in ensuring effective implementation.

The following principles apply to the consistent implementation of the strategy at federal level:

- G1-1: The ISDC is charged with promoting cooperation between government agencies and the integration of sustainability principles into sectoral policies.
- G1-2: All government agencies whose remits are relevant to sustainable development are represented on the ISDC (see list of ISDC government agencies in Appendix 5).
- G1-3: ISDC delegates are to be appointed by the government agencies themselves; the delegates should have considerable executive powers in their representational role.
- G1-4: The ISDC is headed by the ARE, as the federal government's specialist unit for sustainable development matters. The ARE will run the ISDC secretariat and prepares the Committee's work.
- G1-5: The ARE, the Swiss Agency for Development and Cooperation (SDC), the Federal Office for the Environment (FOEN), the Federal Office for Agriculture (FOAG) and the Federal Office of Public Health (FOPH) together form the ISDC Office that functions as a steering body.
- G1-6: The deputy chairmanship of the ISDC is assumed in rotation by one of the agencies that forms part of the ISDC Office. The agency that holds the deputy chairmanship will set the areas of focus in a programme for the year. The office of deputy chairman will be handed over in consultation between the old and new incumbents.
- G1-7: The ISDC itself determines the organisational details of its working practices.

4.1.2 Cooperation at federal level and financing

It is important not to regard sustainable development as an additional part of the federal government's remit, but to integrate it as far as possible into the usual planning and policy management processes at the agency, departmental and Federal Council levels. As part of this, government agencies must work towards making the broadest possible use of synergies and cooperating as effectively as possible in the event of conflict. Integrating sustainable development also demands familiarity with the relevant principles, which in turn requires a concerted effort on training.

In principle, sustainable development should not result in an expansion of public-sector activity. Instead, it should be achieved primarily by setting priorities and reallocating existing resources. It is essential that the individual measures described above be financed via the regular budgeting procedure.

In addition to guaranteeing coordination between government offices and producing a detailed strategy implementation programme, the ARE handles reporting on the progress of that implementation, based on the information released by the individual agencies. Information on the individual measures and their implementation is collated into a technical report on the strategy. In addition, the ARE heads up evaluation work, ensures that the strategy is communicated both at federal level and among other stakeholders, and fosters exchange on national strategies in the broader European context.

The following principles apply to cooperation and financing:

- G1-8: Each government agency is responsible for incorporating the financial resources required to implement the Sustainable Development Strategy into its financial planning. In the case of draft legislation, they will demonstrate to the Federal Council how provisions at ordinance, law and constitutional level dovetail with the Sustainable Development Strategy, and they will factor the Sustainable Development Strategy into their planning and internal procedures. All government agencies will encourage staff to participate in training courses that are dedicated to sustainable development.
- G1-9: The ISDC supports the various government agencies in the fulfilment of their sustainable development-related tasks. It will also support the ARE with the compilation and assessment of reports and with strategy evaluations for consideration by the Federal Councils. It will then submit the recommendations on the ongoing refinement of the Sustainable Development Strategy that derive from this evaluation to the Federal Council.
- G1-10: The ARE ensures mutual exchange between the various government agencies in order to guarantee the consistency and effectiveness of work to implement the Action Plan. Interested government agencies within the ISDC participate in joint projects under the ISDC umbrella and thereby supplement the ARE's limited financial resources.
- G1-11: In the interests of raising awareness and providing information other federal government staff, whether directly or indirectly involved in strategy implementation, may be included in ISDC activities in addition to the individual government agencies' official delegates.
- G1-12: The ISDC produces a collection of good examples of the integration of sustainability into sectoral policies, and will brief federal government agencies and the public about such practices by suitable means.

4.2 Sustainability assessments

In the interest of the balanced inclusion of the three target dimensions (see Guideline 2.2) and improving policy coherence (see Guideline 2.4), it is very important to the Federal Council that decisions are presented and explained transparently. These decisions must be based on comprehensive supporting documentation and the various interests involved must be weighed up against each other at an early stage. The sustainability assessment methodology developed in the context of the Sustainable Development Strategy 2002⁴⁰ fulfils the requirements for such analyses. Sustainability assessments are an ex-ante means of evaluation and optimisation that permit the social, economic and environmental impacts of the federal government's political projects and initiatives to be analysed at strategy, plan and programme level. They help to reveal conflicting objectives and enable proposals for improvement and optimisation to be developed at the earliest possible opportunity so that different options can be discussed. The method centres on the systematic capture of a project's

⁴⁰ Federal Office for Spatial Development, ARE Sustainability Assessment – Conceptual framework and basic methodology. Bern 2004

direct and indirect, desirable and undesirable effects. It creates transparency by means of a comprehensive, holistic calculation and evaluation of its impacts. In addition to the evaluation itself, sustainability assessments are built around principles (procedures) that must be observed while the assessment is in progress. Sustainability assessments are conducted throughout the project cycle, from initial development through to final decision. As such, a sustainability assessment may comprise several interim assessments.

Within the sustainability assessment framework, the content of initiatives and projects is to be evaluated using the 15 sustainability criteria set out in Guideline 2.2, the 27 more specific criteria applied by the Interdepartmental Sustainable Development Committee (ISDC)⁴¹ or sector-specific sustainability criteria and indicators that are derived from them. The general sets of criteria mentioned here serve as a basis for deriving these sector-specific criteria, and the latter must be compatible with the former. In accordance with the conceptual framework for sustainability assessments, the procedure for establishing the impacts of a political project using a matrix of content-based criteria is supplemented by rules on how conflicting objectives are to be handled and how specific individual impacts are to be evaluated (in line with the concept of «sensible sustainability» or «weak sustainability plus», see Guideline 2.2).

A sustainability assessment must be conducted in particular in the case of new and important projects of a legislative, planning/conceptual or building nature that are relevant to sustainability. Sustainability assessments overlap with other existing and planned evaluation tools in certain areas. At legislative level, these include regulatory impact assessments (RIA). Where planning is concerned, a strategic environmental assessment (SEA) must be conducted where an initiative creates a basis for projects that would be subject to environmental impact assessments (EIA).⁴² Meanwhile, projects in the transport sector must be evaluated in terms of the Guidelines for Assessing Railway Transport Projects (Leitfaden zur Bewertung von Projekten im Schienenverkehr, NIBA) and the sustainability indicators for road infrastructure projects (NISTRA). The extent to which synergies between these approaches might be better used, or even integrated assessments applied, must be investigated.

Together with the federal offices responsible for other strategic analyses, the ARE supports federal government agencies in their choice of methods and instruments and in conducting the assessment itself.

⁴¹ See Appendix 3.

⁴² While SEAs are compulsory for EU Member States under the terms of the corresponding Directive, Switzerland is still looking into them in more detail.

The following principles apply in this area:

- G2-1: Sustainability assessments should be used in the case of relevant projects to reduce conflicts between objectives and make the best possible use of synergies between the target dimensions of sustainable development. In respect of the measures of the Action Plan, in particular, evidence must be provided of compliance with the principles of sustainable development in their formulation and as preparation for the decision of the Federal Council. The ARE will determine the procedure in conjunction with the federal government agencies responsible, and with the agreement of the government agencies in charge of other strategic assessments.
- G2-2: The goal must be to harmonize framework conditions for all of the assessment methodologies used. The ARE will work with the government agencies concerned to draft and develop the necessary foundations (e.g. sector-specific criteria and indicators, more detailed assessments in specific areas), will make them available as support tools, and will inform the various sections of the federal government and the general public by suitable means.

4.3 Updating the strategy, monitoring and reporting, effectiveness review

The Federal Council updates the Action Plan (Section 3) at intervals that correspond to its legislative periods. Sections 2 (Guidelines) and 4 (Responsibilities and Ancillary Measures) continue to apply beyond these periods and are adjusted only where necessary.

Monitoring mechanisms to track the progress of strategy implementation, as well as regular reporting, allow the Federal Council to respond swiftly to changing circumstances. The Monitoring Sustainable Development (MONET) scheme and other indicator-based analyses of sustainable development status, such as the ecological footprint⁴³, have an important role to play here. MONET measures and documents the current situation and trend in Switzerland with regard to the social, economic and environmental aspects of sustainable development. As such, it forms the basis of reporting at the national level. In line with the strategy, government agencies are integrating sustainable development to an increasing degree in their regular reporting on individual sectoral policy programmes and areas.

Article 170 of the Federal Constitution requires the Federal Assembly to ensure that the effectiveness of federal government measures is reviewed. The Federal Council wishes to make the Sustainable Development Strategy more results-driven. To achieve this, the ISDC is holding discussions about the strategy's fundamental structure. An evaluation after four years will yield a comprehensive retrospective assessment of implementation, impact and target attainment that can then be used as a basis for updating the Action Plan.

⁴³ See Interdepartmental Sustainable Development Committee (ISDC): Sustainable Development Strategy 2002 – Review and Recommendations for Revision. Bern 2007, sections 4.1 and 4.2.

The following principles apply in this area:

- G3-1: As part of implementation monitoring, the lead agencies update their measures pages in the technical report each year. These are then published on the internet for the attention of interested stakeholders both inside and outside the federal government.
- G3-2: The strategy will be subjected to a comprehensive review after four years and the Action Plan updated where necessary. The Federal Council will be briefed on the findings of this review. As part of this report, the individual government agencies must also demonstrate (see Section 4.3) how they put the principles of the strategy into effect internally.
- G3-3: The MONET system of indicators serves as a national sustainable development monitoring tool. The system is being enhanced continually and is reviewed at regular intervals.
- G3-4: Sustainable development must be incorporated to a greater degree in regular reporting on individual sectoral policy projects and areas.

4.4 Cooperation between the federal government, cantons and municipalities

The Federal Council is particularly concerned that sustainable development principles become an integral part of government at cantonal and municipal levels. The vertical integration of federal, cantonal and municipal efforts on sustainable development is one of its primary objectives, and the Sustainable Development Forum that was created in the context of the Sustainable Development Strategy 2002 will continue actively to pursue this aim. Where at all possible, the Sustainable Development Strategy drawn up by the Federal Council is to be adapted and extended appropriately at cantonal and municipal levels. Switzerland's cantons and municipalities are called upon to embark on initiatives similar to the Federal Council's strategy – whether their own sustainable development strategies, the use of measurement and analysis tools from the sustainable development perspective, institutional measures to make sustainable development a more integral part of policy management, or the integration of sustainable development into key policy areas. All such initiatives should follow the guidelines for action on sustainable development set out in Section 2. However, sustainable development should not be regarded as an additional task, but instead integrated as far as possible into normal planning and policy management processes at all levels.

In promoting cooperation within the federal state of Switzerland and between sustainability processes in its cantons and municipalities the ARE, in collaboration with the ISDC, is guided by the following principles:

- G4-1: The «Sustainable Development Forum» is to continue in operation and dialogue between the federal government, the cantons and Switzerland's cities and municipalities is to be strengthened.
- G4-2: There is to be continued support for local sustainability processes with the aim of rooting them more firmly in normal planning and policy management processes.
- G4-3: Cantons and municipalities are to receive support with the development and deployment of suitable instruments for monitoring, managing and evaluating sustainable development.
- G4-4: Good examples of sustainability strategies and activities at cantonal and municipal level should be collated to provide motivation and incentives to others.

4.5 Cooperation with other stakeholder groups

The present distribution of power and authority in Switzerland means that Federal Council influence does not extend to all areas. Alongside the cantons, municipalities and regions, all of the other parties involved – such as the private sector, NGOs, religious organisations and political parties – must also factor the content of the Sustainable Development Strategy appropriately into their own activities. This might mean developing their own sustainable development strategy, promoting sustainability reporting or assessments, fostering a process of dialogue with individual stakeholder groups, or being active on the education side. The cooperation that has begun in connection with strategy revision work is intended to mark the beginning of a dialogue between the federal government, other institutional stakeholders, civil society and the private sector that is to be deepened and strengthened in order to ensure effective strategy implementation.

The following principle applies with regard to cooperation with other stakeholder groups:

G5-1: Working with the ISDC, the ARE is to create a network that will involve additional stakeholder groups more closely in the Sustainable Development Strategy implementation process.

4.6 Communications

The transparency of state activities – and thus a proactive information policy – is key to the successful implementation of the strategy at national, cantonal and municipal levels. The Federal Council strives to achieve a perfectly balanced and cohesive blend of its various communications activities with all of the parties involved, whether inside or outside the federal government.

The following principle applies to encouraging to communicate the Sustainable Development Strategy to all of the different stakeholder groups:

B6-1: The ISDC will improve communications with the strategy's main target groups. In doing so, it will develop an appropriate procedure that meets the needs of the various dialogue groups both inside and outside the federal government.

Appendix 1

The measures of the 2008–2011 Action Plan

Key challenges and horizontal issues	Measures
1 – Climate change and natural hazards	1–1 Ongoing refinement of climate policy
	1–2 Protection against natural hazards
2 – Energy	2–1 The EnergieSchweiz programme
	2–2 Ongoing refinement of energy strategy
3 – Spatial development and transport	3–1 Spatial Concept for Switzerland
	3–2 «Future-proof transport infrastructure» programme
	3–3 «Sustainable mobility» programme
	3–4 «Traffic safety» programme
4 – Economy, production and consumption	4–1 Integrated product policy IPP
	4–2 Sustainable construction
	4–3 Ongoing refinement of agricultural policy
5 – Use of natural resources	5–1 Biodiversity impact analysis
	5–2 Ongoing refinement of chemicals policy
6 – Social cohesion, demography and migration	6–1 Strategy to combat poverty
	6–2 Adjusting labour market policy to an ageing population
7 – Public health, sport and the promotion of physical exercise	7–1 Strengthening prevention, health promotion and equal opportunities for health
	7–2 National «Exercise, diet and health» strategy 2008–2012
	7–3 «Migration and health» strategy, phase 2
	7–4 Promoting sport and exercise in general
	7–5 Fair, safe sport
8 – Global developmental and environmental challenges	8–1 WTO and sustainable development
	8–2 Strengthening international environmental governance
	8–3 Appropriate funding to achieve the MDG
	8–4 Co-determination of multilateral agreements on sustainable development
	8–5 Promotion of civil peace and human rights
	8–6 Separating «global public goods» from development policy
9 – Fiscal policy	9–1 Development scenarios
10 – Education, research and innovation	10–1 Continuation of policy to root the concept of sustainable development in Swiss schools
	10–2 Strengthening non-formal and informal education on sustainable development
11 – Culture	11–1 Protect and foster intangible cultural heritage

Appendix 2

Measures from the Sustainable Development Strategy 2002 in relation to the 2008–2011 Action Plan

Measure under the 2002 strategy	Status of implementation as per 2006 review ⁴⁴	Relation to 2008–2011 Action Plan
1. WTO and sustainable development	+	Measure will be continued in the context of key challenge 8.
2. Public service concept in the infrastructure sector	√	Measure has been implemented and will therefore be discontinued.
3. Fiscal incentives for the economical use of resources	–	Measure will be integrated into key challenge 2.
4. Introduction of an integrated product policy	+	Measure will be continued in the context of key challenge 4.
5. Raising public awareness via the education system	+	Measure will be continued in the context of horizontal issue 2.
6. Promotion of scientific cooperation with developing and transitional countries	+	Will continue to be pursued in the context of normal government activities.
7. Countering new poverty risks	+	Measure will be continued in the context of key challenge 6.
8. National «Health Diet Exercise» programme	+	Measure will be continued in the context of key challenge 7.
9. Refinement of energy and climate protection policy	+	Measure will be continued in the context of key challenges 1 and 2.
10. Support for clean-fuel vehicles	–	Measure will be continued in the context of key challenge 3 (measure 3.3).
11. Incentive strategy for nature and the countryside	√	Measure will be continued in the context of key challenge 5.
12. Strengthening the system of international environmental governance	+	Measure will be continued in the context of key challenge 8.
13. «Sustainable spatial planning» programme	+	Measure will be continued in the context of key challenge 3.
14. New regional policy strategy	+	Measure implemented. Will continue to be pursued in the context of normal government activities.
15. Guiding principles for sustainable mobility	+	No actual guiding principles will be produced, but the essence of the measure will be continued in the context of key challenge 3.
16. Strengthening public transport	+	Measure will be continued in the context of key challenge 3.
17. New policy on road safety	+	Measure will be continued in the context of key challenge 3.
18. Participation in the formulation and implementation of a multilateral sustainability policy	+	Measure will be continued in the context of key challenge 8.
19. New forms of development funding	+	Measure will be continued in the context of key challenge 8.

⁴⁴ Interdepartmental Sustainable Development Committee (ISDC): Sustainable Development Strategy 2002 – Review and Recommendations for Revision. Bern 2007

Measure under the 2002 strategy	Status of implementation as per 2006 review ⁴⁴	Relation to 2008–2011 Action Plan
20. Civil peace promotion, conflict prevention and reconstruction	+	Measure will be continued in the context of key challenge 8.
21. Monitoring of sustainable development	√	Measure will continue to be pursued as an ancillary measure to strategy implementation.
22. Sustainability assessment	+	Measure will continue to be pursued as an ancillary measure to strategy implementation.
Legend: measure √ (completed), + (as planned), – (not yet started)		

⁴⁴ Interdepartmental Sustainable Development Committee (ISDC): Sustainable Development Strategy 2002 – Review and Recommendations for Revision. Bern 2007

Appendix 3

Description of the ISDC sustainable development criteria

Environment

En 1 Biodiversity

More and more species are becoming extinct, particularly in Switzerland, but also globally. It is happening very quickly in some areas, and is an irreversible destruction of resources on one of the largest scales we have ever seen. The long-term consequences and impacts are almost impossible to gauge. It will certainly impact on ecological equilibrium, but nobody can yet say how important this lost heritage – a potential resource – will prove to be in the future.

En 2 Climate

The feared man-made changes in the global climate will impact on the human race in many ways, some of them serious. The affected areas include food production, water supplies, coastlines, natural hazards and many more. The key point is always the impact that climate change will have on the human communities that it affects. The comparatively short time span in which this change has taken and will take place is a major consideration here. The thinning of the stratospheric ozone layer triggered by certain man-made materials, such as CFCs in particular, was not detected until the late 1980s. The resulting increase in UV radiation to the earth's surface has negative (sometimes carcinogenic) effects on all forms of life. The «hole» in the ozone layer initially appeared over the South Pole, but has now extended to populated areas and is increasingly to be found in the northern hemisphere. It is one of the most dramatic and undisputed effects of the progress of civilisation.

En 3 Emissions

Civilisation generates emissions of many types. Those addressed under this criterion are first and foremost pollutants released into the air (sulphur, nitrogen, fine particles, etc.), noise emissions and ionising and non-ionising radiation. They primarily affect human health and well-being, but also have many direct and indirect, short and long-term impacts on natural habitats and biospheres. Emissions are regarded largely as a local or regional problem, but as urbanisation spreads across the world and life becomes more and more technology-dependent, they are becoming increasingly important on a global scale.

En 4 Countryside, undeveloped areas and areas of cultural importance

Natural habitats provide an essential basis of life for humans, animals and plants alike. For humans in particular, their importance takes many forms, both direct and indirect (health, recreation, emotional ties, etc.). Undeveloped areas are therefore often areas of cultural importance, part of cultural property and national identity. In undeveloped areas, animals and plants are dependent on an ecological equilibrium that is changed and disturbed to a considerable degree by civilisation. The countryside, undeveloped areas and areas of cultural importance hold a particular significance in densely populated regions such as Switzerland, but they are also growing in importance around the world.

En 5 Water

Where this criterion is concerned, a distinction must be made between its quantitative and qualitative aspects. Water is both a resource and a habitat. Quantitatively, water resources are distributed very unevenly around the world. In Switzerland, water quantity is only a marginal problem. Instead, the clear focus is on quality, which is impaired by the varied burdens placed on the nation's lakes and rivers by civilisation. This affects both the resource and habitat dimensions. From the global perspective, regional water shortages are one of the most critical problems, and may even lead to political destabilisation.

En 6 Materials, organisms, waste

Materials in the broadest sense of the term are resources, but in many ways they also impact negatively on the (materials) eco-cycle, especially where their qualities are manipulated by man, they are used in excess, or where they are introduced «unnaturally» into natural cycles. The question of long-term impact and irreversibility, in particular, is often a very difficult one to answer. Although the problems that materials produce are generally local, they may lead by natural means – as well as by trade and transport – to pan-regional and global problems.

En 7 Energy

This criterion concerns the use of natural resources, but also the burdens (emissions, waste) that result from the generation and use of energy. At present, certain limited energy resources are being used inefficiently, while virtually inexhaustible resources are all but ignored. This results from distorted cost structures that do not reflect the reality of relative scarcities, as well as the production of considerable external costs. At the same time, energy is being generated using technologies that lead to still-unresolved problems in the eco-cycle (nuclear energy). These problems are mainly of a global nature in both resource and pollution terms. It is local approaches that provide the key to their resolution, however.

En 8 Soil, land area, fertility

This criterion concerns both the quantitative loss of arable land owing to the continued spread of urban areas and transport networks in densely populated regions, and qualitative changes to that land brought about by different types of burden. Meanwhile, on a global scale the problem is the increasing loss – both quantitative and qualitative – of arable land as an important basis for food production. There are manifold reasons for this, including the climate, erosion, overuse with the resulting salinisation and compaction, etc.

En 9 Minimising environmental risks

This criterion essentially says that the impact of environmental disasters is to be reduced, and accident risks are to be entered into only if no permanent damage lasting more than one generation would be done even in the worst possible case. Events that, although highly improbable, have a high damage potential, must be avoided as far as is possible.

Economy**Ec 1 GDP per capita**

GDP (gross domestic product) is a measure of the economic output of a national economy within a given period. It corresponds to the value of all the goods and services produced domestically, and GDP per capita reflects average income per head of population. This is interpreted as an indicator of prosperity. Prosperity has many dimensions, and income is an important one, especially because, in addition to direct material wealth (consumption) it also affords access to the other dimensions of prosperity, such as personal assets, education, health, environmental quality, etc. The inclusion of this (not entirely uncontroversial) indicator is rooted in the theory that sustainable development is impossible if too many cutbacks are made in GDP per capita.

Ec 2 Efficient infrastructure and services

High-quality, efficient public-sector infrastructures and services generate benefits for society and therefore form part of that society's overall wealth. A fall in this indicator results in a loss of prosperity. This criterion targets quality and efficiency, not the scope of infrastructures and services provided by the public sector. The particular concern here is that service provision by the state (in addition to the private sector) for the general public should be both efficient and of a high quality.

Ec 3 Value-adding investment

The investment ratio (gross investment as a proportion of gross national product) maintains value if devaluation in the capital stock is offset at regular intervals by replacement investments. An investment ratio that maintains value is necessary to sustain a national economy's capital stock in both the private and public sectors.

Ec 4 Affordable long-term public-sector debt

A public sector budget that is balanced in the medium term – i.e. over the course of an economic cycle – is essential in ensuring that the government and government agencies can fulfil their remit. Long-term disequilibrium eventually renders the state unable to act and has a negative impact on economic growth.

Ec 5 Resource efficiency

Resources (capital, labour, land, environment, knowledge) are scarce. The efficient use of resources is therefore vital to sustainable development. Wasting resources makes it more difficult to satisfy the needs of present and future generations.

Ec 6 Competitiveness

Economic competitiveness refers to the ability of the Swiss economy to maintain and expand its position in international trade. As a small and open economy, it is important for Switzerland to maintain its economic competitiveness as a means of sustaining appropriate per-capita incomes in the long term, and thereby satisfying the legitimate needs of present and future generations.

Ec 7 Workforce potential

Alongside capital and environmental resources, labour is a key factor of production for any economy, and therefore one of the determinants of economic growth. The qualitative and quantitative potential of a workforce is the product of the population that is capable of gainful employment, multiplied by its skills and expertise. Maintaining or increasing workforce potential improves an economy's capability to satisfy the needs of present and future generations, and is therefore positive in sustainable development terms.

Ec 8 Innovative capacity, productive research

Innovative capacity is the ability of a national economy to create something new that results in the needs of society being satisfied in a better way. Productive research, and its practical application, is essential to an innovative, competitive economy.

En 9 Regulatory framework

This refers to the framework addressed in Article 94 of the Federal Constitution. Within the scope of their individual authorities, the federal government and the cantons must ensure that a favourable framework exists for private-sector business. This framework should be structured to serve the economy as a whole, rather than particular individual interests. Deviations from the principle of economic freedom, especially measures that impair competition, are permitted only if they are provided for in the constitution or rooted in statutory cantonal regulations.

Society**So 1 Education, capacity to learn**

Education supports personal development, socialisation and the ability of people to learn, thereby qualifying them for the labour market.

So 2 Health, wellbeing, security, legal certainty

The World Health Organisation (WHO) defines health as the complete physical, mental and social well-being of the individual. To some extent, «well-being» extends beyond health. It results, for example, from a pleasant climate in buildings, good air and peace in residential areas, healthy food and much more. This well-being is important to both quality of life and performance at work. Humans have a need for security in a wide range of different forms. These begin with the avoidance of violent conflict between peoples and factions, and extend to freedom from acts of violence and other crimes of everyday life. However, it also concerns security from disasters, and the individual's own safety from accidents. Where sustainable development is concerned, security policy must be understood as securing peace on a comprehensive scale, as well as defence against economic, social and environmental dangers. Article 8 of the Federal Constitution describes the principle of «equality before the law» right at the beginning in paragraph 1, with the statement that «all people are equal before the law». This statement is further strengthened by Switzerland's ban on discrimination. According to Article 9, legal certainty demands protection from arbitrary decision and action, and for good faith to be upheld.

So 3 Freedom, independence, individuality

In addition to the various freedoms contained in the list of basic rights (such as freedom of religion and moral belief, Article 15 of the Federal Constitution, etc.), Article 10 para. 2 declares the right to «personal freedom», namely freedom from physical and mental injury, and freedom of movement. This also includes the right to independence and individuality. Personal responsibility is addressed in the third chapter of the Federal Constitution (social aims), in Article 41, para. 1, which determines that state agencies should be brought into play only as a complement to «personal responsibility and private initiative».

So 4 Identity, culture

Protection for the dignity of each and every individual is crucial to personal identity. This is guaranteed by Article 7 of the Federal Constitution. The ban on discrimination laid down in Article 8, para. 2 also upholds freedom of personal identity. Meanwhile, Article 11 offers particular protection for the freedom from injury of children and young people. Culture provides an important basis for coexistence in Switzerland. Common values such as tolerance, solidarity and the human rights ethos form part of the nation's cultural property.

So 5 Conserving value

The preamble to the Federal Constitution lays down responsibilities for the nation and the state to preserve value for other people and for the environment, or «to creation and to future generations». It also expresses a will to live in «mutual consideration and respect». Article 2 (Object), para. 3 of the Federal Constitution refers to state intervention in favour of the «lasting conservation of natural habitats and a peaceful and just international order».

So 6 Solidarity, community

The preamble to the Federal Constitution also addresses endeavours to achieve solidarity. According to the «Object» article of the Federal Constitution, Switzerland should regard itself as a society built on solidarity, in which «the common prosperity ... internal cohesion and cultural diversity of the nation» are encouraged (Art. 2 para. 2). Social cohesion is promoted by factors such as «the security of the nation» (Art. 2 para. 1), to which a sense of «internal security» is also a contributing factor.

Justice is demanded by the Rio Declaration, in which it is described as an equitable partnership between states. Meanwhile, the Federal Constitution states in Article 2 para. 4 that Switzerland is committed to a «... just international order». The objective of the second title of the Federal Constitution, «Basic rights, civil rights and social objectives», is to ensure justice for all.

So 7 Openness, tolerance

The preamble to the Federal Constitution talks of «openness to the world», while Article 2, para. 4, commits the state to action on behalf of a peaceful and just international order. The freedom of religion and moral belief (Art. 15), the ban on discrimination laid down in Article 8 para. 2 and the prohibition of arbitrariness embodied in Article 9 might be interpreted as the basic conditions for a tolerant society.

So 8 Social security, poverty rate

Switzerland's social security system is intended to protect its citizens from the consequences of illness, disability, old age, accident, death and loss of earnings. It is also intended to ensure the subsistence of all those who are not able to do so for themselves. Article 12 of the Federal Constitution refers to «the right to help in situations of need» directly: anyone who is in need and who is not able to provide for themselves is entitled to assistance. This help must guarantee a dignified human existence.

So 9 Equal opportunities, equal status, participation

Under Article 2 para. 3 of the Federal Constitution, the Swiss Confederation is obliged to ensure the greatest possible equality of opportunity among its citizens. Article 8 para. 3 is intended to secure equal rights for men and women. Under Article 37, political participation at federal level is largely the preserve of Swiss citizens.

Appendix 4

Key to indicators

Target trend		Actual trend*		Evaluation	
↗	Increase	↗	Increase	+	Positive (towards sustainability)
↘	Decrease	↘	Decrease	-	Negative (away from sustainability)
→	Stability	→	No major change	=	Neutral
		~	Irregular	□	No statement
NN	No statement possible	***	No statement possible (1st-time measurement)	NN	No information yet available
		NN	No information yet available		
* Generally since 1990 (where a sufficient time series exists)					

Appendix 5

Government agencies represented on the ISDC

Federal Chancellery, FCh
Federal Office for Buildings and Logistics, FBL
Federal Office for Professional Education and Technology, OPET
Swiss Federal Office of Energy, SFOE
Federal Office of Public Health, FOPH
Federal Office of Communications, OFCOM
Federal Office of Culture, FOC
Federal Office for Agriculture, FOAG
Federal Office for Migration, FOM
Federal Office for Spatial Development, ARE
Federal Social Insurance Office, FSIO
Federal Office for Sport, FOSPO
Swiss Federal Statistical Office, SFSO
Swiss Federal Roads Authority, FEDRO
Federal Office for the Environment, FOEN
Federal Office of Transport, FOT
Federal Veterinary Office, FVO
Federal Housing Office, FHO
Federal Office of Civil Aviation, FOCA
Swiss Agency for Development and Cooperation, SDC
Directorate of Public International Law, DPIL
Federal Consumer Affairs Bureau, FCAB
Federal Institute of Intellectual Property, IGE
Federal Finance Administration, FFA
General Secretariat of the Federal Department of Defence, Civil Protection and Sport, GS-DDPS
Directorate of Political Affairs, Federal Department of Foreign Affairs, DPA-FDFA
Secretariat of the Swiss National UNESCO Commission
State Secretariat for Education and Research, SER
State Secretariat for Economic Affairs, SECO

