



COST Action E 51

**Integrating Innovation and Development Policies for the
Forest Sector**

COUNTRY REPORT SWITZERLAND

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Abstract

The following "Country report Switzerland" has been prepared for the COST Action 51. The main objective of the Action is to develop knowledge that enables the integration of innovation and development policies for a more effective and sustainable development of the forest sector. Therefore we had a look at nine different sector policies in Switzerland, namely forest policy, forest-based industries policy, innovation policy, rural development policy, regional development policy, sustainable development policy and renewable energy policy. We analysed, if available, the current key documents for each sector in terms of their general content and the integration of innovation. The documents refer to the federal level and comprise Swiss national strategies and programmes as well as federal messages.

As actual surveys show, the economic situation in Switzerland is very positive and it is ranged among the most competitive countries in the world. Despite this fact, the economic situation of Swiss forest enterprises is by the majority in deficit and the forest sector is mainly supported by subsidies. A positive development is the currently rising wood price. Also there is a still unused potential in timber industry as well as in alternative uses of the forest, like non-wood forest products and services. The latter offers opportunities for different kinds of product innovations. Another product innovation is found in the energy sector, where renewable energies are strongly promoted, with a new focus on energy wood, like pellets, wood chips, wood briquettes and biogas. This also includes new methods in supply like the energy wood contracting, where long term contracts between producers of energy wood and house owners are signed. But the most important innovations in the forest sector took place on an organisational and institutional level, with the reorganisation of the forest services. The Swiss National Forest Programme (Swiss NFP) therefore plays an important role as a procedure innovation by reformulating Swiss forest policy and legislation. For sure also projects linked to the forest-based industries (though no special policies or documents for this sector could have been identified), like "Netzwerkholz", "KMU Zentrum Holz" or "Innovation Roadmap 2020", play a crucial role for new innovations and the development of the forest sector. Besides this, the regional development policies have a high impact on the forest sector. That includes regional development programmes like Regio Plus or INTERREG as well as a political instrument like the NFA (Reorganisation of financial equalisation). Innovation policy, rural development policy and sustainable development policy are less connected to the forest sector and have an impact on it only in an indirect way. As for example innovation policies take care for the promotion of education and science in general, or the "Sustainable Development Strategy 2002" gives measures for sustainability in various fields. Such policies are also important as they strengthen basic concepts (sustainability) and needs (e.g. scientific inventions) from which the forest sector can profit.

As the analysis shows there are a lot of interlinkages between forest and other sector policies. The impacts of these policies and optimal coordination between forest and other policies are research issues still to be continued. All these research topics contain fundamental institutional, organizational and financial questions to be tackled as cross-cutting issues in forest policy research.

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1. Introduction

According to the latest survey by Credit Suisse in cooperation with the Centre for European Economic Research (ZEW) the current economic situation of Switzerland is very positive and remains at a high level. The market-based economy of Switzerland is one of the world's most stable economies and its per capita gross domestic product is the fourth highest worldwide at the moment. This is also a result of the high economic interlinkage with other countries, thus Switzerland has one of the highest export rates (exports account for 45% of the country's GDP) with the European Union (EU) being its largest trading partner.

According to "The Global Competitiveness Report 2007-2008" (World Economic Forum; release 31 Oct. 2007) Switzerland has even the most competitive economy in the world, due to different aspects like the country's sound institutional environment, excellent infrastructure, efficient markets and high levels of technological innovation and also the well developed infrastructure for scientific research. Switzerland has in comparison to other European countries an over average high standard of living, a high industrial productivity and quality of education, as well as an excellent health-care system. Under the most important Swiss industries you can find banking, tourism, the pharmaceutical and chemical industries, as well as the biological sciences industries. Also the manufacturing of precision instruments for engineering and watch-making are ranked high in Swiss economy. Though the agricultural sector could not really contribute economically to a significant extent, Switzerland supports it with extensive domestic subsidies. The same situation is to be found in the forest sector. The economic situation of Swiss forest enterprises is by the majority in deficit. This has various reasons such as the small structured management of Swiss forests, too little cooperation, and also the high wage levels in the country. Due to these facts the production costs are often higher than the revenues from harvesting the wood. The competition with imported wood and wood products from foreign countries is increasing. Another point is that many services provided by the predominantly public forest enterprises do not directly pay off, like for example the compliance of societal demands in the spheres of recreation and landscape aesthetics and protection against natural hazards as well as ecosystem protection as for example water circulation. However, there are also positive developments in the forest sector, like the still rising wood prices (since 2005). The timber industry generated about 6.4 billion CHF which is 1.5% of the GDP, in gross value added in 2001, including the transformation of imported semi finished products (Swiss Environmental Report, Federal Office for the Environment 2007). There still is an unused potential, because only two thirds of the entire annual wood increment is actually used. Therefore, as one possibility, the management units in the forestry sector are to be optimized.

In the forest sector different kinds of innovation took place, as for example product innovations in the field of Non timber forest products and services. Another innovation is the passive outsourcing, as forest enterprises accept new assignments of third parties, e.g. cleaning or security measures along the railway lines. Also the replacement of timber by pellets is seen to be an important innovative step. But the most important innovations in the forest sector took place on an organisational and institutional level, with the reorganisation of the forest services. The Swiss National Forest Programme (Swiss NFP) therefore plays an important role as a procedure innovation by reformulating Swiss forest policy and legislation. This political action programme results from a participative process in policy formulation where representatives of the forestry sector and other relevant sectors are still actively involved. It contains long-term visions for the desired state of the forest and, based on these visions, quantified objectives for the year 2015. The most important change has taken place with the reorganization of the financial adjustment and the division of responsibilities between the Federation and cantons (NFA). The NFA is one of the most extensive reform projects in Switzerland. It aims at two principal purposes: the reconciliation of cantonal differences in economic performance and administrative burdens and the increase of efficiency. That means on the implementation level that individual decisions on projects are to be replaced by

programs and flat rate budgets that are granted by the Federation after cantonal proposals have been submitted. On the organizational level the former Federal Forest Agency has been reorganized. Different sections are now integrated in forest related sections under the divisions of the FOEN, for example, forest ecology under nature conservation, or forest protection under the natural hazards section.

All these processes are well documented by official bulletins, e.g. messages of the Federal Council, protocols of parliament and reports by the relevant administrations or agencies.

In the following, six current key policy documents of six different policy areas of Switzerland are analysed with regard to innovation and cross-sector coordination (Forest Policy, Innovation Policy, Rural Development Policy, Regional Development Policy, Sustainable Development Policy and Renewable Energy Policy). As no policy document for the forest-based industries could be detected, a short summary shows actual initiatives and developments. The main target of the analysis is to develop knowledge that enables the integration of innovation and development policies for a more effective and sustainable development of the forest sector.

As a prerequisite for the document analyses, the most important current innovations in the Swiss forest sector (forest sector innovation frontier) have been identified for being considered in the subsequent document analysis. The documents refer to the federal level and comprise Swiss national strategies and programmes as well as federal messages. As the cantons of Switzerland are not homogenous with respect to important aspects such as language, productivity or landscape, it was preferred to choose documents on the national level to obtain representative results for Switzerland.

The overall report was accomplished by Petra Kilchling and Michel Comte in cooperation with Klaus Seeland, Willi Zimmermann and Ralf Hansmann. The abstract, introduction chapter and the chapter on innovation areas as well as the chapters on the policy areas 3, 4, 5, 8 (Forest Policy, Forest-Based Industries Policy, Innovation Policy, Sustainable Development Policy) have been processed by Petra Kilchling, and the policy areas 6, 7, 9 (Rural Development Policy, Regional Development Policy, Renewable Energy Policy) have been processed by Michel Comte. The chapter on conclusions and research needs was accomplished by Petra Kilchling, Klaus Seeland, and Willi Zimmermann. No major problems were encountered in the document acquisition and analyses, except for the chapter 4, where no relevant and sector specific documents could be found.

2. Innovation areas in forestry in the country

The innovations which were identified by a group of scientists and practitioners as currently attracting a high level of interest in Switzerland are listed in Table I. The content analysis was supported by a roundtable of experts. The subsequent content analyses of the six policy documents specifically considered these innovation areas under the items of the document analysis guideline that explicitly relate to the “forest sector ‘innovation frontier’”. A list of the documents which have been analyzed according to the guidelines is provided in Table 2.

Table I: Innovation areas

Type \ Area	Territory based services	Value added chain
Product	<ul style="list-style-type: none"> - Forests as CO2 sink - Forest schools 	<ul style="list-style-type: none"> - Energy wood products (Pellets, wood chips, wood briquettes, biogas) - Wood construction technology (e.g. wooden apartment buildings) - Surface treatment of wood (nano/thermo)
Process	<ul style="list-style-type: none"> - Full Harvesters, Wood harvesting technology - Valuation of services 	<ul style="list-style-type: none"> - Prefabrication in timber construction (system building) - Computer aided wood processing, wood processing technology
Marketing method	<ul style="list-style-type: none"> - Reorganisation of wood marketing - FSC/PEF/Q certificated wood (labelling) 	<ul style="list-style-type: none"> - Energy wood contracting (Contracts between producers of energy wood and of house owners)
Organisational model	<ul style="list-style-type: none"> - Cooperation of forest owners, - Outsourcing of timber harvesting, - Bundling of suppliers, 	<ul style="list-style-type: none"> - Large saw mills - Cooperation of saw mills - Concentration in timber manufacturing
Institutional innovations	<ul style="list-style-type: none"> - Programme agreements between the Confederation and the cantons (e.g. Effor2', NFA) - Integration of the forest sector into spatial planning 	

Table II: List of analyzed documents

<p>1. Forest Policy (Regional or National Forest Programme): Document: SAEFL 2004: <i>Swiss National Forest Programme (Swiss NFP)</i>, Environmental documentation No. 363, Swiss Agency for the Environment, Forests and Landscape, Bern. 117 pp. Publication Date: 2004 Website: http://www.bafu.admin.ch/php/modules/shop/files/pdf/php7F7p0q.pdf Supplementary documents:</p> <ul style="list-style-type: none"> • Message by the Federal Council for the change of the Federal law on Forests and to the public initiative "Save Swiss forest". March, 28th 2007. • Draft of Federal Law on Forests (2007) • Federal Law on Forests of 4 October 1991 • Ordinance on Forests of 30 November 1992 • Federal Law on the Protection of Nature and Heritage of 1 July 1966 • Federal Law on Hunting and on the Protection of Mammals and Birds Living in the Wild of 20 June 1986 • Federal Law on Hydraulic Engineering of 21 June 1991
<p>2. (not analyzed) Forest Based Sector Policy (Sector Policy Strategy), if any:</p>
<p>3. Innovation Policy (Regional or National Reform Programme): Document: State Secretariat for Education and Research (SER), Federal Office for Professional Education and Technology (OPET) (Eds.): <i>Education, research and innovation 2008-2011. Sustainably securing and improving quality. Increasing competitiveness and growth. The Federal Council's proposed guidelines, goals and funding.</i> Bern 2007. Publication Date: 24. January 2007. Website: http://www.admin.ch/ch/d/ff/2007/1223.pdf Supplementary documents:</p> <ul style="list-style-type: none"> • Federal Council. 24. January 2007. Message on the Promotion of Education, Research and Innovation for the period 2008–2011. • Federal Council. 29. November 2002. Message on the Promotion of Education, Research and Technology for the period 2004–2007. • Federal Department of Home Affairs. Education, Research, and Technology: promoting investment in Switzerland's excellence. Switzerland's education, research, and technology policy between 2004 and 2007. An overview. Bern 2002.
<p>4. Rural Development Policy (Regional or National Rural Dev. Programme, Forestry Part): Document: Message of the Federal Council on Agricultural Policy 2011 Publication Date: 2006 Website: http://www.blw.admin.ch/themen/00005/00044/index.html?lang=en Supplementary documents:</p> <ul style="list-style-type: none"> ▪ Report on the Results of the Consultation on the Development of Agricultural Policy ▪ Federal Law on Agriculture ▪ Federal Law on Farmers' Property Rights Over Soil ▪ Federal Law on Family Allowances in Agriculture ▪ Federal Law on Food ▪ Law on Epizootics <p>Federal Resolution on the Financial Means in Agriculture for 2008-2011</p>
<p>5. Regional Development Policy (Regional or National Regional Dev. Programme): Document: Message by the Federal Council on the New Regional Policy Publication Date: 2005 Website: http://www.admin.ch/ch/d/ff/2006/231.pdf Supplementary documents:</p> <ul style="list-style-type: none"> ▪ Federal Law on Regional Policy ▪ Federal Law on the Support of Swiss Participation in the Common Initiative on Cross-border, Transnational and Interregional Cooperation (INTERREG III) in the years 2000-2006. (Modification as of 23 June 2006). ▪ Federal Law on the Modification of the Federal Resolution on the Support of Structural Change in Rural Areas (as of 23 June 2006). <p>Federal Law on the Modification of the Federal Resolution in favour of economic renewal areas (As of 23 June 2006).</p>

6. Sustainable Development Policy (Regional or National Sustainable Dev. Strategy):

Document:

Swiss Federal Council (Ed.), 2002: *Sustainable Development Strategy 2002, report dated 27 March 2002*. Bern: Interdepartmental Rio Committee (IDARio) c/o Federal Office for Spatial Development (ARE)

Publication Date: March 2002

Website: <http://www.are.admin.ch/dokumentation/publikationen/00014/index.html?lang=en>

Supplementary documents:

- Interdepartmental Sustainable Development Committee (ISDC) (Ed.), 2007. *Sustainable Development Strategy 2002. Balance and recommendations for the renewal*.
- Federal Office for Spatial Development (ARE), Federal Department of the Environment, Transport, Energy and Communications (DETEC) (Eds.), 2006.: *Balance and renewal. Sustainable Development Strategy put to test*.
- Interdepartmental Rio Committee (IDARio) (Eds.), 2004: *Swiss activities for sustainable development: Balance and perspectives 2004*.
- Working group Interface and Evaluanda (Eds.), 2006. *Evaluation of the Sustainable Development Strategy 2002. Final report to the attention of the Federal Office for Spatial Development, section sustainable development*. Lucerne and Geneva.

7. Renewable Energy Policy (Regional or National (renewable) Energy Strategy):

Document: Energy Perspectives 2035 - Vol. 1 Synthesis

Publication Date: 2007

Website:

http://www.bfe.admin.ch/themen/00526/00538/index.html?lang=de&dossier_id=01100

Supplementary documents:

- Swiss Federal Office of Energy SFOE, Bureau of energy efficiency and renewable energy, 2007. Action plan renewable energy. Draft, September 3th 2007.
- Swiss Federal Office of Energy SFOE, Bureau of energy efficiency and renewable energy, 2007. Action plan energy efficiency. Draft, September 3th 2007.
- Swiss Federal Office of Energy SFOE, 2007. Energy perspectives. Volume 1-5.

3. Forest Policy – National Forest Programme

Swiss National Forest Programme (Swiss NFP)

The Swiss National Forest Programme is a political action programme. It contains long-term visions for the desired state of the forest and, based on these visions, quantified objectives for the year 2015. The Swiss NFP also defines the strategies to be adopted to enable the fulfilment of these objectives and the necessary measures and instruments. Some of the measures require the partial revision of the Federal Law on Forests. This was drafted by FOEN and sent to parliament by the Swiss Federal Council (Swiss government) in spring 2007. The parliamentary commission has rejected the revision and recommends parliament not to put it on the agenda.

The NFP forms the basis for the future orientation of the Swiss Confederation's forest policy. The future focus of Switzerland's forest policy shall lie on stable protection forests and the conservation of biological diversity. The forestry sector will enjoy greater freedom and scope, however, in return, it must become more efficient.

The Swiss National Forest Programme was developed as part of a participative process. Representatives of the forestry sector and other relevant sectors are actively involved in the process. (Source Federal Office of the Environment; see <http://www.bafu.admin.ch/wald/01152/01154/index.html?lang=en>)

3.1 General information

Table 1: Part A - General document information

Name:	Swiss National Forest Programme (Swiss NFP)
Adoption: Please mark by whom and at which level the document is adopted	<input type="checkbox"/> Parliament <input type="checkbox"/> Government <input checked="" type="checkbox"/> Ministry: Swiss Agency for the Environment, Forests and Landscape (SAEFL). SAEFL is an office of the Swiss Department for the Environment, Transport, Energy and Communication (DETEC) <input type="checkbox"/> Others: _____ <input type="checkbox"/> No formal approval Level: <input checked="" type="checkbox"/> National <input type="checkbox"/> Regional <input type="checkbox"/> Local Adoption date: 2005
Validity period:	2004-2015
Revision:	Some of the measures of the NFP require the partial revision of the Federal Law on Forests. This is being drafted by FOEN and referred to parliament by the Swiss Federal Council (Swiss government) in spring 2007.
Monitoring/Evaluation:	Midterm evaluation 2008 Final evaluation 2015
Related documents:	<ul style="list-style-type: none"> • Message by the Federal Council for the change of the Federal law on Forests and to the public initiative "Save Swiss forest". March, 28th 2007. • Draft of Federal Law on Forests (2007) • Federal Law on Forests of 4 October 1991 • Ordinance on Forests of 30 November 1992 • Federal Law on the Protection of Nature and Heritage of 1 July 1966 • Federal Law on Hunting and on the Protection of Mammals and Birds Living in the Wild of 20 June 1986 • Federal Law on Hydraulic Engineering of 21 June 1991

Geographical scope:	<input checked="" type="checkbox"/> National <input type="checkbox"/> Regional; name: _____ <input type="checkbox"/> Local, name: _____
Budget:	It will cost around CHF 2.7 billion to implement the Swiss NFP between 2004 and 2015. Of this CHF 1.1 billion or 41%, which represents around CHF 95 million per year, will be born by SAEFL/Swiss Forest Agency. The remaining costs will be carried mainly by the cantons followed by other federal authorities (FOAG, FOE, seco etc.), forest owners and associations. Additional costs for: structural protective measures (around CHF 50 million/year), forest surveys and educational projects (CHF 8 million/year), implementation of the Federal Law on Hunting (around CHF 5 million/year) and other miscellaneous areas (e.g. international affairs at less than CHF 1 million/year).
General description of contents as written in document	
Objective of the document	The main objective of the Swiss NFP is to guarantee sustainable forest management in Switzerland and, as a prerequisite for this, conditions favourable to the development of an efficient and innovative forestry and timber sector. The NFP aims to optimize the three dimensions of sustainability and to improve the economic and social value of the forest as compared with its current relatively high ecological value.
Priorities	Twelve objectives: Five priority objectives: 1. The services of the protection forest are guaranteed 2. Biodiversity is conserved 3. Forest floor, trees and drinking water are not at risk 4. The wood value chain is strong 5. The economic performance of the forestry sector improves Other objectives: 6. Conservation of forest area/forest as CO2 sink 7. Landscape diversity 8. Interconnected forests/forest edges 9. Potentially harmful organisms 10. Forest and game 11. Recreation and leisure 12. Education, research and development
Structure	1. Why Do We Need A Forest Programme? (Background and starting point; Assessment of previous forest policy; The international context) 2. Process and Methodology (Project organization; Project process; Participation and transparency; Integration of findings from other ongoing projects) 3. Main Trends and Problems 4. Vision and Objectives (Main objective; Vision; Twelve objectives, five priorities; The forest's protective function is guaranteed; Biodiversity is conserved; Forest soils, trees and drinking water are not threatened; The wood value-added chain is strong; The economic viability of the forest sector has improved; Other objectives; Conflicts between objectives) 5. Strategic Directions and Measures (Overview; Protective forest and biodiversity: priority services; Guaranteed protection of the forest ecosystem; Improved structural efficiency in the forest sector; Good market conditions for wood utilization; Innovation through education, further training, research and development; Cross-sector partnerships; Information and dialogue; Measures relating to the other objectives) 6. Implementation (Subsidy mechanisms; Organization and allocation of roles; Estimation of the costs of the Swiss NFP; Partial revision of the Federal Law on Forests; Programme monitoring and evaluation; Crisis management in the aftermath of extreme natural hazards)

<p>Measure Areas</p>	<p>Protective forest and biodiversity: priority services</p> <ol style="list-style-type: none"> 1. Definition of the priority services “protective forest” and “biodiversity” and their indemnification during planning (instrument: programme agreement in accordance with the NFA). 2. Promotion of region-specific programmes for the ecological improvement of forest edges, for creation of quiet zones for fauna in areas of high ecological value, to increase quantities of dead wood, interconnection of habitats, definition of protected forest areas and for the continued practise of traditional forms of management. 3. Guaranteeing a minimum level of protective forest maintenance and identification of maintenance deficits as part of a national protective forest programme. 4. Pilot projects and creation of incentives for new structures based on integrated natural hazard risk management (business structures, centres of competency, innovative organizational models). <p>Guaranteed protection of the forest ecosystem</p> <ol style="list-style-type: none"> 5. Legislative definition and implementation of an ecological standard for forest management. 6. Development and implementation of specific promotion and genetic conservation programmes for priority species (including identification of priority species). 7. Identification of the extent of damage caused by air-born pollution and its impact on the forest. Efforts to reduce the level of contamination in excessive cases. 8. Identification of sensitive and polluted locations and provision of bases and target agreements for the special management of sensitive and polluted locations. 9. Identification of soil compaction and, where necessary, measures to improve compacted soils. <p>Improved structural efficiency in the forest sector</p> <ol style="list-style-type: none"> 10. Campaigns to raise awareness of the potential for change (opportunities in the forest sector) among important target groups, such as municipal managers, managers of forest operations, opinion leaders etc.; creation of a clear understanding of paradigm shift within the sector: the Confederation, cantons, municipalities, educational institutions take a stand for the forest sector. 11. Provision of business models, concepts and sample documents for the improvement of the economic viability of the forest sector; temporary promotion of the creation of cost-effective management units and forms of management that foster market success. 12. Examination and, where appropriate, adaptation of legal and other regulatory provisions (Confederation and cantons) with respect to negative effects on economic viability; clarification of the public-service role (state tasks) of the forest services and their withdrawal from operative issues. <p>Good market conditions for wood utilization</p> <ol style="list-style-type: none"> 13. Programmes to promote increased use of wood and wood energy. 14. Support for the introduction of a CO2 tax; indemnification of CO2 fixed in wood products in the calculation of the CO2 balance. 15. When selecting wood, the generally most ecologically optimum variant should be chosen (including consideration of transport distance); Inclusion of the examination of a “wood” variant in rules governing invitations to tender (e.g. as in the forest law of the canton of Bern). 16. Creation of technical documentation on fire protection, noise protection, sustainability and construction systems and the implementation of the corresponding principles in practical building solutions; reduction of the competitive disadvantages of wood with respect to other materials through the liberalization of fire regulations and the adoption of wood-friendly building regulations. 17. Argumentative support of the forest and wood sector for the creation of good general operating conditions. 18. Provision of basic assistance for possible structural improvements in the wood sector (e.g. analysis of the structure and potential of Swiss sawmills). 19. Granting of investment credits for future-oriented investments in wood processing; conceptual examination and adaptation of the existing instruments.
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<p>Measure Areas</p>	<p>Innovation through education, further training, research and development</p> <p>20. Formulation of core competencies in the context of a charter (with all forest actors). Promotion of the ongoing adaptation of the education system to the core competencies on the basis of the legislation in force.</p> <p>21. Provision of opportunities for further training and promotion of joint educational opportunities in the area of forests and wood; education and further training in the wood value-added chain (managers, employees), including cooperation with planners.</p> <p>22. Formulation and implementation of a joint continuing education policy with all actors involved in the area of education policy.</p> <p>23. Improvement of business management knowledge among all actors involved in the forest and wood sector (five-year educational programme throughout the forest education system).</p> <p>24. Partnership-based dialogue. Creation of a network platform for the transfer of knowledge which includes representatives of the universities, technical colleges, other institutions and forest practice; development of a centre responsible for the integration of the results of applied research into forest education and for keeping the general public informed (Extension Service Center).</p> <p>25. Provision and support of research on wood in universities and technical colleges; deciduous wood research and construction-oriented wood research should be intensified in particular (new wood materials, high-performance materials, system solutions etc.).</p> <p>26. Consolidation of the Foundation for the Promotion of Forest and Wood Research.</p> <p>27. Institutionalization of forest monitoring, in particular in relation to protective forest development and the concentration and deposition of air pollutants in the forest.</p> <p>Cross-sectoral partnerships</p> <p>28. Joint programmes with other sector policies (joint funding for joint objectives)</p> <p>29. Implementation of pilot projects with a strong integrated approach (including diffusion of the expertise gained) and granting of funding in association with certain conditions (consideration of integrated approaches as a criterion for granting of funding).</p> <p>30. Communication campaigns to raise awareness among the general public about interrelations within the forest ecosystem; presentation of the services provided by the forest and the forest and wood sector (coherent messages and comprehensive argumentation).</p> <p>31. Establishment of a platform for decision makers and experts from sectors with an interest in the forest to support the implementation and further development of the Swiss NFP.</p>
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Follow-up / Implementation	
Follow-up measures:	<input type="checkbox"/> No follow-up activities so far <input checked="" type="checkbox"/> New or adapted funding programme(s) /budget line; name: <input checked="" type="checkbox"/> New or adapted regulations/laws; name: Federal Law on Forests Partial revision of the Federal Law on Forests <input checked="" type="checkbox"/> New or adapted informational campaigns/instruments; name: placates, brochure and information material about forest issues <input type="checkbox"/> New or restructured institutions/organisations; name: <input checked="" type="checkbox"/> Implementation in forest policy: The parliamentary commission has rejected the revision of the Federal Law on Forests and recommends parliament not to put it on the agenda.
General comment:	-

3.2 Integration of innovation

Table 2: Part B - Overall Innovation Orientation

Overall innovation orientation (use word search function).	Please mark the frequency of occurrence of the <u>more generic terms</u> 'innovation' or synonyms ('new products', 'new services', 'new processes', new marketing methods', 'new business models') in the document	<input type="checkbox"/> never <input type="checkbox"/> sometimes <input checked="" type="checkbox"/> frequently
	Please mark the frequency of occurrence of the forest sector ' <u>innovation frontier</u> ' – innovation areas identified in Chapter 3 - in the document	<input type="checkbox"/> never <input type="checkbox"/> sometimes <input checked="" type="checkbox"/> frequently
	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	<input type="checkbox"/> never <input checked="" type="checkbox"/> sometimes <input type="checkbox"/> frequently Terms used: entrepreneurship, entrepreneurial approach/ initiative, competitiveness, modernisation
	Further comments on overall innovation orientation of the document: -	
Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)	<input type="checkbox"/> No relevance at all <input type="checkbox"/> Marginal issue <input type="checkbox"/> One issue among others <input checked="" type="checkbox"/> Important issue <input type="checkbox"/> Central issue Comments: -	

<p>Degree of specification: Please mark how general or specific innovation is addressed by the document (one answer) Please use comments section to describe if the degree of specification varies for different parts of the document, esp. when concerning forestry</p>	<p><input type="checkbox"/> very general (<i>innovation is named in general parts, e.g. preamble, but no related goals, measures, identified needs or similar are addressed by the document</i>)</p> <p><input type="checkbox"/> rather general (<i>innovation is addressed in overall goals, needs are identified but no specification of measures</i>)</p> <p><input type="checkbox"/> rather specific (<i>innovation is addressed in concrete goals, measures are formulated</i>)</p> <p><input checked="" type="checkbox"/> very specific (<i>quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist</i>)</p> <p>Comments:</p> <ul style="list-style-type: none"> - Efficiency and innovation as goals for the forest and wood sector - Productiveness and innovation to achieve more competitiveness - Innovation as an essential process for the forest sector - Innovation as a precondition for a sustainable forest management
<p>Understanding of innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1</p>	<p><input type="checkbox"/> Predominately traditional science and technology policy</p> <p><input type="checkbox"/> Traditional S&T policy with systemic elements</p> <p><input type="checkbox"/> Systemic innovation policy with S&T policy elements</p> <p><input checked="" type="checkbox"/> Predominantly systemic innovation policy</p> <p>Comments:</p> <ul style="list-style-type: none"> - Innovation through education, further training, research and development (Education, further training and research are all driving forces in the essential innovation process in the commercial, technical and institutional contexts). ->Research as an important developer of possible innovations and synergies. - Creating a favourable framework as a precondition for innovation - Investment loans for innovations in the wood sector - Adaptation of the forest education system to the new challenges as a necessity for the success of the desired innovations. - To foster innovations, the improvement of knowledge transfer, strengthening of commercial and business skills and providing the competencies required in the context of integrative approaches and cooperation are of particular importance. - Pilot projects and creation of incentives for new structures (business structures, centres of competency, innovative organizational models)
<p>Goals and objectives:</p> <ul style="list-style-type: none"> - Strengthening of innovation in terms of products and processes (e.g. new wood materials, high performance materials, system solutions), through research and development, education and further training. - Promotion of innovative projects and organizational models at regional level. - Incentives for innovative product development and for the creation of marketable products and services (inter alia with cultural and historical content) for leisure, tourism and health. 	
<p>Issues, problems and related topics:</p> <ul style="list-style-type: none"> - An "increased acceptance of economic integration and market deregulation" will force the sector to implement structural adaptations and embrace a significantly higher level of innovation. - Excess capacities in the public forest operations have negative financial consequences; there are few incentives for technical and organizational innovations. 	
<p>Innovation areas:</p> <p>The document asks for any type of innovation, e.g. for new innovative forest products and services, including new possibilities for the marketing of those and hence the commercial exploitation of forest services. To do this it needs to develop a better understanding of itself as part of entire value-added chains. The document also asks for new or improved processes (production and delivery methods), as well as for an overall more strategic and entrepreneurial thinking. It recommends a better organisation and communication, e.g. cooperation models between forest enterprises themselves, between forest and timber operations, private-sector and public organizations, as well as financial institutions, institutional investors and insurance companies. It emphasises the necessity of cross-sector partnerships. One of the main focuses that is meant to foster innovation and development lies on education and research.</p>	

General comment:-

Table 3: Part B - Innovation Support Measures

Innovation support measures <i>Consult classification in chapter 2.2.2</i>	Research and Development	<p>Innovation through education, further training, research and development. Education, further training and research are all driving forces in the essential innovation process in the commercial, technical and institutional contexts. A flexible forest educational system that meets today's requirements must be able to guarantee the core skills and competencies required by the forest and wood sector.</p> <p>The improvement of knowledge transfer, strengthening of commercial and business skills and provision of the competencies required in the context of integrative approaches and cooperation are of particular importance here.</p>
	Diffusion of innovation	<p>Goal: The value-added wood chain is strong - Good market conditions for wood utilization</p> <p>- Wood promotion by the Confederation</p> <ul style="list-style-type: none"> ➔ Programmes to promote increased use of wood and wood energy ➔ Support of CO2 and energy taxes ➔ Support the wood sector's organizations through the promotion of wood-based building solutions and elimination of competitive disadvantages ➔ Promote the use of wood in the construction of public buildings
	Strengthening the knowledge base	<p>See "Research and Development"</p>
	Strengthening interaction	<p>1. Cross-sector partnerships enable a long-term guarantee of sustainable forest management.</p> <ul style="list-style-type: none"> ➔ Cooperation with other federal policies (e.g. regional policy, agricultural policy, energy policy, rural development policy, research policy) ➔ Partnerships between the Confederation, cantons and private-sector actors (financial institutions, institutional investors, foundations etc.) ➔ Promotion of an integrated approach and cooperation models (e.g. between forest enterprises, between forest and timber operations) <p>2. Fostering of information and dialogue</p> <ul style="list-style-type: none"> ➔ Intensification of communication both within the forest and wood sector and with external target groups is intensified. ➔ Development of a general concept for the programme to enable coordinated joint communication with clear and coherent content ➔ Public relations work (comprehensive communication with the general public and individual target groups (e.g. leisure seekers)).

	Demand creation	<ul style="list-style-type: none"> - Communication campaigns to raise awareness among the general public about interrelations within the forest ecosystem; presentation of the services provided by the forest and the forest and wood sector - Consolidation of the Foundation for the Promotion of Forest and Wood Research. - Campaigns to raise awareness of the potential for change (opportunities in the forest sector) among important target groups, such as municipal managers, managers of forest operations, opinion leaders etc.; creation of a clear understanding of the paradigm shift within the sector: the Confederation, cantons, municipalities, educational institutions take a stand for the forest sector. - Provision of business models, concepts and sample documents for the improvement of the economic viability of the forest sector; temporary promotion of the creation of cost-effective management units and forms of management that foster market success. - Examination and, where appropriate, adaptation of legal and other regulatory provisions (Confederation and cantons) with respect to negative effects on economic viability; clarification of the public-service role (state tasks) of the forest services and their withdrawal from operative issues.
	Improving frame conditions	<p>Create better framework conditions for the wood sector</p> <ul style="list-style-type: none"> - Cross sector cooperation (e.g. transport, environmental protection, land-use planning) - Provision of basic assistance for possible structural improvements in the wood sector - Granting of investment credits for future-oriented investments in wood processing; conceptual examination and adaptation of the existing instruments.
	Comments	
Priorities	<p>Strengthening interaction and cooperation between the different key actors (cross-sector partnerships, Information and dialogue) and fostering research and development are represented in various measures and strategic directions of the document. Another priority is the diffusion of innovation, in this case the strengthening of the value-added wood chain and in general creating more efficient structures in the forest sector.</p>	
Assessment of overall relevance	<p>Innovation support in the sense of a structural change or a paradigm shift in the forest sector has a very high relevance in this document.</p>	
Promotion of innovation	<p>The relevance and furthering of innovation within the document is high; the relevance of the "National forest programme" for the forest policy area is very high (central document).</p>	
General comment:	-	

Table 4: Part B - Cross-sectoral coordination

Policy formulation	
<p>Co-ordination with other processes and documents</p>	<ul style="list-style-type: none"> - During the development of the Swiss NFP particular attention was paid to compatibility with the various other ongoing SAEFL processes and projects. Thus, the insights from the “Redesign of Fiscal Equalization and Distribution of Tasks” (Neugestaltung des Finanzausgleichs und der Aufgabenteilung/NFA), the effor2 project (new impact-oriented subsidy policy) and the ongoing findings of the <i>Lothar</i> basic research programme (aimed at improving the management of storm damage in the forest) and PROFOR (future-oriented forest education policy) were integrated into the Swiss NFP process. The “Swiss Landscape Concept” (Landschaftskonzept Schweiz), the “Landscape 2020 Strategy” (Strategie Landschaft 2020) and planned revision of the Law on Nature and Landscape Protection (NHG) were also taken into account during the development of the programme’s objectives and measures. Findings from other federal projects such as the State Secretariat for Economic Affairs’s “New Regional Policy” (Neue Regionalpolitik/NRP), the Federal Office for Agriculture’s “Agricultural Policy 2007” (Agrarpolitik 2007) and the Federal Office for Spatial Development’s “Rural Area Network” (Netzwerk ländlicher Raum) were also incorporated into the discussions. - Support programmes to promote the use of wood and energy: Wood 21 and Energy Switzerland - Federal message to revise the Federal Law on Forests and the public initiative “Save the Swiss Forest”.
<p>Administrative Co-ordination:</p>	<p><input checked="" type="checkbox"/> between different sections/departments within the same ministry; specify: Within the Department of the Environment, Transport, Energy and Communications (DETEC):</p> <ul style="list-style-type: none"> - Swiss Agency for the Environment, Forests and Landscape (SAEFL) - Federal Office for the Environment (FOEN) - Swiss Federal Office of Energy (SFOE) - Federal Office for Spatial Development (ARE) <p>Within the Federal Department of Economic Affairs (FDEA):</p> <ul style="list-style-type: none"> - Federal Office for Agriculture (FOAG) - State Secretariat for Economic Affairs (SECO) - Federal Housing Office (FHO), - Federal Office for Professional Education and Technology (OPET) <p>Within the Federal Department of Home Affairs (FDHA)</p> <ul style="list-style-type: none"> Swiss Federal Institute for Forest, Snow and Landscape Research (WSL)- an Institute of the ETH Board - Empa – Materials Science & Technology (EMPA) an Institute of the ETH Board <p>Within the Federal Department of Finance (FDF)</p> <ul style="list-style-type: none"> - Federal Office for buildings and logistics (FOBL) <p><input checked="" type="checkbox"/> between different ministries, specify: <input checked="" type="checkbox"/> between ministries and other public organizations / agencies, specify: Forest and wood organizations, forest owners, forest operation companies, forest managers, sectoral associations, environmental organizations, nature conservation organizations, specialist institutions, universities (universities of applied sciences, technical universities), ETH, scientific institutes, different interest groups, consultancies and stakeholders, planners, standardization organizations, insurance companies, cantons, municipalities, etc.</p>

	<p><u>Comments:</u> The forest programme represents the outcome of an intensive participatory process that took place during 2002 and 2003 and involved numerous reputable experts, practitioners, scientists and politicians from the forest and wood sector. The participants developed the programme content in thematic working groups and monitored the process closely in a forum representing the various political interests.</p>
Stakeholder involvement	<p><input checked="" type="checkbox"/> Forestry: name most important organisations: ____ <input checked="" type="checkbox"/> Forest-based industries: name most important organisations: ____ <input checked="" type="checkbox"/> Agriculture: name most important organisations: ____ <input checked="" type="checkbox"/> Tourism: name most important organisations: ____ <input checked="" type="checkbox"/> Energy: name most important organisations: ____ <input checked="" type="checkbox"/> Environment: name most important organisations: ____ <input type="checkbox"/> Other sector: ____: name most important organisations: ____ <input type="checkbox"/> Other sector: ____: name most important organisations: ____</p> <p><u>Comments:</u> -</p>
Coordination mechanisms:	<p><input checked="" type="checkbox"/> Formal (central) coordination body; name: A Project Directorate within the SAEFL was appointed to oversee the project. The Project Management, which was located within the Swiss Forest Agency, was responsible for the operative management of the process and reported to the Project Directorate <input checked="" type="checkbox"/> Formal coordination process <input checked="" type="checkbox"/> Inter-sectoral working groups <input type="checkbox"/> Inter-sectoral advisory body <input checked="" type="checkbox"/> Formal mandatory consultation process <input type="checkbox"/> Formal voluntary consultation process <input type="checkbox"/> Informal consultations (please describe ____) <input type="checkbox"/> Others: ____</p>
Policy Implementation	
Responsible actors and their roles:	<p>Interaction of all levels of the administration with regard to the implementation of national forest policy.</p> <ul style="list-style-type: none"> • Decentralized coherent organization of the forest sector. • Greater emphasis will be placed on horizontal coordination within the federal administration. • Collaboration between the different public and private actors. <p>Division of tasks and responsibilities:</p> <ul style="list-style-type: none"> • The Confederation will concentrate on strategy and strategic control and largely withdraw from the provision of operative support at the level of individual companies/ operators. It will also promote communication, cooperation and coordination between all actors and, to this end, create a forum which will act as a platform for the exchange of information and views • The cantons are responsible for the operative implementation of forest policy. In future, they will act as the partners of the Confederation rather than implementing bodies. The cooperation and co-financing processes between the Confederation and cantons will be regulated in the form of programme agreements to be developed in partnership for a duration of several years (cf. Chapter 5.4). Thus, this joint task necessitates good organization between the Confederation and cantons. To this end, the Confederation will foster political and expert exchange and cooperation with the Conference of Forest Directors (FoDK) and the Conference of Head Cantonal Foresters (KOK). • Forest owners and the forest sector will be given greater scope for action and hence greater responsibility, and as the cantons' partners they will enter into service agreements with them. They are, therefore, being called on to think more strategically with respect to their own future options and the socially desirable forest services to

	<p>be provided for the future.</p> <p>*Target-oriented programme agreements between the Confederation and cantons, such as improving the Swiss Confederation's subsidy policy in terms of the application of the Federal Law on Forests). The cantons assume operative responsibility for the implementation of the programme whose actual services are provided by the forest owners. The cantons can also enter into service agreements with the forest owners. The Confederation and cantons are jointly responsible for its funding.</p>
Level of delegation	<input checked="" type="checkbox"/> Decentralized, e.g. <input checked="" type="checkbox"/> Central, e.g. ministry, public agency <input checked="" type="checkbox"/> Outsourced to private actors <input checked="" type="checkbox"/> Local, e.g. by municipalities <input checked="" type="checkbox"/> Regional, e.g. by regional public actors <input type="checkbox"/> Others: _____
General comment	-

4. Forest-Based Industries Policy

Though no special policies or documents for the forest based industries can be identified, there are a couple of projects and new invented networks in this field.

In 2000 "Netzwerkholz" was created as a national competence network of the Universities of Applied Sciences. "KMU Zentrum Holz" initiated three years later strengthens the connection between the research sector and commercial enterprises. A substantial further step took place 2004 with the corporate occurrence of the "KMU Zentrum Holz" and the umbrella organisation Lignum (timber economy Switzerland) as an interface to the European Forest-Based Sector Technology Platform (FTP). Switzerland announced its participation as a „National Support Group“ ("Netzwerkholz" took over this function) and is officially represented by the "KMU Zentrum Holz" and Lignum. In 2005 Lignum and "Netzwerkholz" united and launched the initiative "Innovation Roadmap 2020" for Swiss wood industry. The major task of the "Innovation Roadmap 2020" is to compare and evaluate the ranges of topics and contents of the European Strategic Research Agenda (SRA; outcome of the FTP to strengthen the value added wood chain) with available Swiss studies and to frame a task list for an innovation development of the Swiss wood chain and to coordinate its implementation. At the same time the Federal Office for the Environment (FOEN) launched an action plan for the further stabilization of the wood resources at the beginning of 2006. (Source: Gonin 2006, Schweizer Holzwirtschaft 2020 – Innovations Roadmap)

5. Innovation Policy – National Reform Programme

Message on the Promotion of Education, Research and Innovation for the period 2008–2011

In the Federal Council's Dispatch on the Promotion of Education, Research and Innovation (ERI) for the period 2008–2011, the Federal Council was guided by the new constitutional provisions on education approved by a substantial majority of the Swiss population in May 2006. These provisions oblige the Confederation and the cantons to ensure Switzerland's continued development as a location for high-quality, pioneering education, research and innovation. In the ERI Dispatch, the Federal Council formulates on the one hand the policy guidelines and measures in those areas of the Swiss education, research and innovation system for which it has responsibility under the constitution and in legislation: the Federal Institutes of Technology (FIT), vocational education and training, the Universities of Applied Sciences, the promotion of research and innovation, and international cooperation. On the other, the Dispatch also demonstrates the federal government's commitment to those parts of the system for which the cantons are primarily responsible: the universities and grants. The goal of all planned measures is to enable the players and institutions of the ERI sector to help extend the capacities of Switzerland as a location for thought and work. (State Secretariat for Education and Research (SER), Federal Office for Professional Education and Technology (OPET) 2007: Education, research and innovation 2008-2011)

5.1 General information

Table 5: Part A - General document information

Name:	Message on the Promotion of Education, Research and Innovation for the period 2008–2011. Respective: Education, research and innovation 2008-2011. Sustainably securing and improving quality. Increasing competitiveness and growth. The Federal Council's proposed guidelines, goals and funding.
Adoption: Please mark by whom and at which level the document is adopted	<input type="checkbox"/> Parliament <input checked="" type="checkbox"/> Government <input type="checkbox"/> Ministry: _____ <input type="checkbox"/> Others: _____ <input type="checkbox"/> No formal approval Level: <input checked="" type="checkbox"/> National <input type="checkbox"/> Regional <input type="checkbox"/> Local Adoption date: 24 January 2007
Validity period:	2008-2011
Revision:	The Federal Council formulates the goals and measures within the domain of education, research and innovation (BFI) every four years.
Monitoring/ Evaluation:	Prospective agenda: Adoption of the message by the Federal Council: end of January 2007 Attendance in The Council of States: Summer session 2007 Attendance in the Federal Council: Autumn session 2007 Coming into force: 1.1.2008
Related documents:	1. Federal Council. 29 November 2002. Message on the Promotion of Education, Research and Technology for 2004–2007. 2. Federal Department of Home Affairs. Education, Research, and Technology: promoting investment in Switzerland's excellence. Switzerland's education, research, and technology policy between 2004 and 2007. An overview. Bern 2002.
Geographical scope:	<input checked="" type="checkbox"/> National <input type="checkbox"/> Regional; name: _____ <input type="checkbox"/> Local, name: _____
Budget:	For the planned measures within the entire BFI range and the participation of Switzerland at the European Union programs research and education the Federal Council requests approx. 12.914 billion Euros (21.205 billion CHF) for 2008-2011.
General description of contents as written in document	
Objective of the document	Promotion of education, research and innovation: Ensure Switzerland's continued development as a location for high quality, pioneering education, research and innovation. -> Continuation and enhancement of the development of an international, competitive research and education system.
Priorities	The Federal Council's policy is oriented along two overarching guidelines. 1. Education guideline: Sustainably securing and improving quality 2. Research and innovation guideline: Increasing competitiveness and growth
Structure	1. Main features of the draft (The education -, research and innovation policies of the federation 2008-2011 in general terms; Statement of the Swiss Science and Technology Council) 2. Different support areas. Rationale for the credit requests (vocational education; Universities; Research and innovation; Co-operation of the Federation and the cantons within the area of education; Scientific co-operation in education and research in Europe; World-wide bilateral scientific co-operation; Horizontal measures) 3. Overview finances (The development of the BFI credits 2004-2011; The payment credits 2008-2011 in the overview) 4. Annotations concerning the amendments and the new federal law 5. Effects (Effects on the Federation; Financial and personnel effects; Effects within the field of computer science; Effects on the environment and the economy; Estimation of regulation consequences) 6. Relationship to the planning of the legislature 7. Legal aspects

Measure Areas	<p>The following measures come under the remit of the Education Guideline:</p> <p>Sustainably securing and improving quality:</p> <ul style="list-style-type: none"> • The Confederation and the cantons are committed to a public education system that is up to date and forward-looking, and which meets the changing needs of society. • The Confederation and the cantons are committed to providing a diverse range of educational opportunities, in accordance with the principle of individually tailored, lifelong learning that is accessible to all. • The Confederation and the cantons are committed as partners to ensuring that the quality and diversity of educational opportunities remains a trademark of Switzerland as a place of education, and that all young people should be able to obtain a qualification in post-compulsory education. • Young people who are weaker at school or socially disadvantaged will have increased chances for integration through low-threshold opportunities. • The players in the field of Swiss education will further expand the international exchange of people and ideas. <p>The following measures come under the remit of the Research and Innovation Guideline: increasing competitiveness and growth:</p> <ul style="list-style-type: none"> • The Confederation will invest in basic research to foster the successful further development of Switzerland as a centre of creative thought. • It will promote knowledge transfer from universities to business. • It will support particularly promising application-oriented research and development projects. • It will fund specific measures to promote young scientists. • It will support the universities and research institutes in the FIT sector, as their quality and performance set the standard for the whole education, research and innovation (ERI) system. • It will support vocational education and training and the Universities of Applied Sciences, and thus create a strongly practice-oriented subject basis, whose graduates will form the backbone of the Swiss economy. • It will create the best possible framework conditions for the actors of the Swiss ERI sector through membership of strategically important funding organisations and programmes at international level. <p>Political priorities and measures within the BFI area</p> <p>Following strategies are decisive for the use of the funds to reach the stated goals for the years 2008-2011:</p> <ul style="list-style-type: none"> • Stabilization and adjustment of the expenditures within the field of education • Enhancement of the competitiveness of research and innovation by a clear increase of the funds which are given in the competition in favour of national research and innovation activities, introduction of the Overhead at the Swiss national fund • Additional funds for the universities, overall supporting measures for an intensified monitoring of the BFI area • Additional funds for new initiatives of bilateral co-operation between Switzerland and countries outside Europe • Additional funds for the participation of Switzerland at the education -, vocational education and youth programmes of the European Union
Follow-up / Implementation	
Follow-up measures:	<input type="checkbox"/> No follow-up activities so far <input checked="" type="checkbox"/> New or adapted funding programme(s) /budget line; name: <input checked="" type="checkbox"/> New or adapted regulations/laws; name: 1. Federal resolution on the financing of vocational education and training

	<p>from 2008-2011.</p> <ol style="list-style-type: none"> 2. Federal resolution on the financial frame for the sector of the Swiss Federal Institutes of Technology (ETH) from 2008-2011 and on the approval of the support assignment of the Federal Council to the ETH sector from 2008-2011. 3. Federal resolution on the financial frame and the spending obligations according to the University Support Act for 2008-2011 (12th contribution period). 4. Federal resolution on the financing of the Universities of Applied Sciences from 2008-2011. 5. Federal resolution on credits for the institutions of research promotion from 2008-2011. 6. Federal resolution on the financing of the Innovation Promotion Agency (CTI) in a national and international frame from 2008-2011. 7. Federal resolution on credits according to article 16 of the Research Act for 2008-2011. 8. Federal resolution on the financing of contributions to the cantons for educational contributions from 2008-2011. 9. Federal resolution on the financing of grants for foreign students and artists in Switzerland from 2008-2011. 10. Federal resolution on the financing of scientific cooperation in education and research in Europe and worldwide from 2008-2011. 11. Federal resolution on the financing of joint projects of the Confederation and the cantons for the steering of the Swiss education sector from 2008-2011. <p>Suggested law revisions:</p> <ol style="list-style-type: none"> 1. Revision of the ETH statutes 2. Renewal of the University Support Act 3. Changes of the research law 4. Revision of the Federal law of the international cooperation within the field of education, vocational education, youth and mobility support <p>Suggested new law:</p> <ol style="list-style-type: none"> 1. Federal law about contributions to common projects of Federation and cantons for the controlling of the education area Switzerland. <p><input type="checkbox"/> New or adapted informational campaigns/instruments; name:</p> <p><input type="checkbox"/> New or restructured institutions/organisations; name:</p> <p><input type="checkbox"/> Implementation in forest policy:</p>
General comment:	-

5.2 Integration of innovation

Table 6: Part B - Overall Innovation Orientation

Overall innovation orientation (use word search function).	Please mark the frequency of occurrence of the <u>more generic terms</u> 'innovation' or synonyms ('new products', 'new services', 'new processes', new marketing methods', 'new business models') in the document	<input type="checkbox"/> never <input type="checkbox"/> sometimes <input checked="" type="checkbox"/> frequently
	Please mark the frequency of occurrence of the forest sector ' <u>innovation frontier</u> ' – innovation areas identified in Chapter 3 - in the document	<input checked="" type="checkbox"/> never <input type="checkbox"/> sometimes <input type="checkbox"/> frequently

	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	<input type="checkbox"/> never <input type="checkbox"/> sometimes <input checked="" type="checkbox"/> frequently Terms used: entrepreneurship, entrepreneurial autonomy, structural adjustment, reorganisation, competitiveness,
Further comments on overall innovation orientation of the document: -		
Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)	<input type="checkbox"/> No relevance at all <input type="checkbox"/> Marginal issue <input type="checkbox"/> One issue among others <input type="checkbox"/> Important issue <input checked="" type="checkbox"/> Central issue Comments:	
Degree of specification: Please mark how general or specific innovation is addressed by the document (one answer) Please use comments section to describe if the degree of specification varies for different parts of the document, esp. when concerning forestry	<input type="checkbox"/> very general (<i>innovation is named in general parts, e.g. preamble, but no related goals, measures, identified needs or similar are addressed by the document</i>) <input type="checkbox"/> rather general (<i>innovation is addressed in overall goals, needs are identified but no specification of measures</i>) <input type="checkbox"/> rather specific (<i>innovation is addressed in concrete goals, measures are formulated</i>) <input checked="" type="checkbox"/> very specific (<i>quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist</i>) Comments: Innovation is a goal in itself (as you can already see in the title of the document) Education, research and innovation are also seen to be key factors to Switzerland's social development and economic prosperity.	
Understanding of innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1	<input type="checkbox"/> Predominately traditional science and technology policy <input checked="" type="checkbox"/> Traditional S&T policy with systemic elements <input type="checkbox"/> Systemic innovation policy with S&T policy elements <input type="checkbox"/> Predominantly systemic innovation policy Comments: Innovation is seen in the context of education and research and is fostered by incentives.	
Goals and objectives: Extend the capacities of Switzerland as a location for thought and work. Sustainably securing and improving quality of the educational system in Switzerland. Increasing competitiveness and growth through research and innovation (also see measure areas).		
Issues, problems and related topics: -		
Innovation areas: The type of innovation is an institutional one. Through the suggested revision of four laws and the making of a new one the document tries to improve the framework for innovation. With an explicit funding programme the Message tries to foster education and research and thus also innovation in Switzerland.		
General comment: -		

Table 7: Part B - Innovation Support Measures

Innovation support measures <i>Consult classification in chapter 2.2.2</i>	Research and Development	The Confederation will promote knowledge transfer from universities to the business sector. It will support particularly promising application-oriented research and development projects and stress a strongly practice-oriented subject basis.
	Diffusion of innovation	-
	Strengthening the knowledge base	See " <i>Measure areas</i> " (all measures)
	Strengthening interaction	<ul style="list-style-type: none"> • Cooperation between Swiss universities: strategic cooperation projects launched by several universities, sometimes across all areas of higher education (SFIT, universities, Universities of Applied Sciences) and an increased participation in network projects. • The players in the field of Swiss education will further expand the international exchange of people and ideas (increasing bilateral international co-operations) • Promotion of knowledge transfer from universities to business (Cooperation with industry) • Fostering dialogue between science and society in partnership and mutual understanding. • Strengthened coordination between the SNSF, the CTI and the private sector for applied research. • As part of the internationalisation of research & development, the worldwide networking of the Swiss players in innovation will be extended -> European and worldwide cooperation of Swiss players and institutions in the ERI sector.
	Demand creation	Today education, research and innovation (ERI) are considered worldwide as the most important motors of economic growth and social development. Significant international indicators show that Switzerland offers high-quality services in education, research and innovation. At the same time it is clear that, as a highly developed country, Switzerland is coming under pressure not just from its European neighbours, but also from the new EU member states and the ambitious non-European nations that until recently counted as emerging countries.
	Improving frame conditions	Substantial budget increases are planned in the fields of research and innovation; i.e. for the Swiss National Science Foundation (SNSF) to encourage scientific research, and the Innovation Promotion Agency (CTI). Improving the frame conditions by the suggested revision of four existing laws and the creation of a new one (see " <i>Follow-up measures</i> ")
	Comments The documents main target is to foster education and research, which are considered to be basic requirements for innovation.	
Priorities	The whole document is about fostering and strengthening the knowledge base, research and development. Within the area of education and research "Strengthening interaction" is also very important.	
Assessment of overall relevance	Innovation support is one of the main targets of this document (highest relevance).	
Promotion of innovation	The relevance of innovation within the document is very high; the message is a central document for supporting innovation.	
General comment:	-	

Table 8: Part B - Cross-sectoral coordination

Policy formulation	
Co-ordination with other processes and documents	Federal Council. 29 November 2002. Message on the Promotion of Education, Research and Technology for the period 2004–2007.
Administrative Co-ordination:	<input checked="" type="checkbox"/> between different sections/departments within the same ministry; specify: <input checked="" type="checkbox"/> between different ministries, specify: At the level of the Swiss federal administration the key players involved are the Swiss Department of Economic Affairs (DEA) with its Office for Professional Training and Technology (OPET), and the Swiss Federal Department of Home Affairs (DHA) together with the State Secretariat for Education and Research (SER). <input checked="" type="checkbox"/> between ministries and other public organizations / agencies, specify: There are two funding agencies for research in Switzerland. The Swiss National Science Foundation (SNSF) funding university-based scientific research (under the authority of the DHA) and CTI – the Innovation Promotion Agency funding mainly applied research (under the authority of the DEA). <u>Comments:</u> The Swiss ERI (education, research and innovation) area is based on the cooperation between numerous public and private forces. As within all policy fields the cantons have "all rights which are not transferred to the Confederation" (art. 3 FC). Within the federal developed BFI sector the Confederation has the following tasks: The guidance of the sector of the Swiss Federal Institutes of Technology, the regulation and the co-financing of the Universities of Applied Sciences and the vocational education and training, the promotion of the Cantonal universities as well as the support of the cantons within the field of grants. In its exclusive responsibility lies the promotion of the scientific research and innovation as well as the international cooperation in education and science.
Stakeholder involvement	<input type="checkbox"/> Forestry: name most important organisations: ____ <input type="checkbox"/> Forest-based industries: name most important organisations: ____ <input type="checkbox"/> Agriculture: name most important organisations: ____ <input type="checkbox"/> Tourism: name most important organisations: ____ <input type="checkbox"/> Energy: name most important organisations: ____ <input type="checkbox"/> Environment: name most important organisations: ____ <input type="checkbox"/> Other sector: ____: name most important organisations: ____ <input type="checkbox"/> Other sector: ____: name most important organisations: ____ <u>Comments:</u>
Coordination mechanisms:	<input checked="" type="checkbox"/> Formal (central) coordination body; name: Federal Council <input checked="" type="checkbox"/> Formal coordination process <input type="checkbox"/> Inter-sectoral working groups <input type="checkbox"/> Inter-sectoral advisory body <input type="checkbox"/> Formal mandatory consultation process <input type="checkbox"/> Formal voluntary consultation process <input type="checkbox"/> Informal consultations (please describe ____) <input type="checkbox"/> Others: ____
Policy Implementation	
Responsible actors and their roles:	The 04-07 ERT Message is implemented in cooperation with the cantons (represented by the Swiss Conference of Cantonal Ministers of Education - EDK), business and numerous other national and international partners.
Level of delegation	<input type="checkbox"/> Decentralized, e.g.

	<input checked="" type="checkbox"/> Central, e.g. ministry, public agency <input type="checkbox"/> Outsourced to private actors <input type="checkbox"/> Local, e.g. by municipalities <input type="checkbox"/> Regional, e.g. by regional public actors <input type="checkbox"/> Others: _____
General comment	-

6. Rural Development Policy – Rural Development Programme

Message of the Federal Council on Agricultural Policy 2011

Agriculture has to continue to improve its competitiveness so that it is able to fulfil the defined common economical achievements in future. With the Agricultural Policy 2011 the agriculture policy framework conditions are to be developed further in such a way that in the agriculture and up- and downstream stages the existing potential for reduction of costs as well as for the improvement of the market achievements and the ecology are used. The adjustments are to precede only as fast as the development remains socially compatible. The core element of the AP 2011 is the strong reduction of the actual prices supporting funds and their transfer into product-independent direct payments (Source Federal Office of Agriculture, see: <http://www.blw.admin.ch/themen/00005/00044/index.html?lang=de>). With the policy change from income policy to a more product oriented policy. A better coordination between forest and agricultural production is to be expected.

6.1 General information

Table 9: Part A - General document information

Rural Development Policy (Regional or National Rural Dev. Programme, Forestry Part):	Document: Message of the Federal Council on Agricultural Policy 2011
Adoption: Please mark by whom and at which level the document is adopted	<input type="checkbox"/> Parliament <input checked="" type="checkbox"/> Government <input type="checkbox"/> Ministry: _____ <input type="checkbox"/> Others: _____ <input checked="" type="checkbox"/> No formal approval Level: <input type="checkbox"/> National <input type="checkbox"/> Regional <input type="checkbox"/> Local Adoption date:
Validity period:	Perspectives in agricultural policy until 2011
Revision:	n.a.
Monitoring/ Evaluation:	n.a.
Related documents:	<ul style="list-style-type: none"> ▪ Report on the Results of the Consultation on the Development of Agricultural Policy ▪ Federal Law on Agriculture ▪ Federal Law on Farmers' Property Rights Over Soil ▪ Federal Law on Family Allowances in Agriculture ▪ Federal Law on Food ▪ Law on Epizootics ▪ Federal Resolution on the Financial Means in Agriculture for 2008-2011
Geographical scope:	<input checked="" type="checkbox"/> National <input type="checkbox"/> Regional; name: _____ <input type="checkbox"/> Local, name: _____
Budget:	Ca. CHF 3.5 billion/a (federal state)
General description of contents as written in document	
Objective of the document	Reform of the federal agricultural policy in order to guarantee the competitiveness of Swiss agriculture in the future in a socially and ecologically acceptable way

Priorities	<ul style="list-style-type: none"> ▪ Reduction of financial support of prices for agricultural goods ▪ Concentrate on product-independent direct payments ▪ Abolishment of export subsidies
Structure	<ul style="list-style-type: none"> ▪ starting position ▪ challenges ▪ goals, strategies ▪ effects
Measure Areas	<ul style="list-style-type: none"> ▪ Introduction of product-independent payments ▪ General measures to lower costs ▪ Direct payments for common good services ▪ Foster creation of value and sustainable development of rural areas through investment assistance and support of collective project initiatives ▪ Strengthening of cooperation in controls between federation, cantons and private organizations ▪ Simplification of administration procedures and data collection ▪ Accompanying social measures to absorb impacts of structural changes
Follow-up / Implementation	
Follow-up measures:	<input type="checkbox"/> No follow-up activities so far <input checked="" type="checkbox"/> New or adapted funding programme(s) /budget line; name: Programme on "Sustainable Use of Resources" (Programm zur "Nachhaltigen Ressourcennutzung") <input type="checkbox"/> New or adapted regulations/laws; name: <input type="checkbox"/> New or adapted informational campaigns/instruments; name: <input type="checkbox"/> New or restructured institutions/organisations; name: <input checked="" type="checkbox"/> Implementation in forest policy: Policy change from income policy to a more product oriented policy. A better coordination between forest and agricultural production is to be expected.
General comment:	-

6.2 Integration of innovation

Table 2: Part B - Overall Innovation Orientation

Overall innovation orientation (use word search function).	Please mark the frequency of occurrence of the <u>more generic terms</u> 'innovation' or synonyms ('new products', 'new services', 'new processes', 'new marketing methods', 'new business models') in the document	<input type="checkbox"/> never <input checked="" type="checkbox"/> sometimes <input type="checkbox"/> frequently
	Please mark the frequency of occurrence of the forest sector ' <u>innovation frontier</u> ' – innovation areas identified in Chapter 3 - in the document	<input checked="" type="checkbox"/> never <input type="checkbox"/> sometimes <input type="checkbox"/> frequently
	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	<input type="checkbox"/> never <input checked="" type="checkbox"/> sometimes <input type="checkbox"/> frequently Terms used: competitiveness, creation of value added, productivity, lowering of costs, efficiency

	Further comments on overall innovation orientation of the document:
Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)	<input type="checkbox"/> No relevance at all <input type="checkbox"/> Marginal issue <input type="checkbox"/> One issue among others <input checked="" type="checkbox"/> Important issue <input type="checkbox"/> Central issue Comments: If substantial change and adjustments in governance are seen as innovation (e.g. abandonment of some sort of federal support, its transformation into another form) the issue is important. However there is nothing absolutely "new" to those measures.
Degree of specification: Please mark how general or specific innovation is addressed by the document (one answer) Please use comments section to describe if the degree of specification varies for different parts of the document, esp. when concerning forestry	<input type="checkbox"/> very general (<i>innovation is named in general parts, e.g. preamble, but no related goals, measures, identified needs or similar are addressed by the document</i>) <input checked="" type="checkbox"/> rather general (<i>innovation is addressed in overall goals, needs are identified but no specification of measures</i>) <input type="checkbox"/> rather specific (<i>innovation is addressed in concrete goals, measures are formulated</i>) <input type="checkbox"/> very specific (<i>quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist</i>) Comments: -
Understanding of innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1	<input type="checkbox"/> Predominately traditional science and technology policy <input type="checkbox"/> Traditional S&T policy with systemic elements <input checked="" type="checkbox"/> Systemic innovation policy with S&T policy elements <input type="checkbox"/> Predominantly systemic innovation policy Comments: Structural change is seen as vital to strengthening competitiveness in agriculture; it concerns the societal system and is more than focused just on technological innovation. There is also change in administrative processes
Goals and objectives: <ul style="list-style-type: none"> ▪ more efficient use of natural resources ▪ optimization of nature protection ▪ measures should aim precisely at creating value added agricultural products 	
Issues, problems and related topics: <ul style="list-style-type: none"> ▪ Innovation shall be promoted through the unleashing of market forces. This should also lead to more efficiency in the use of resources ▪ Structural change might cause social harshness – this should be avoided ▪ Administration should be simplified and at the same time controls improved 	
Innovation areas: <ul style="list-style-type: none"> ▪ Milk industry ▪ Live stock ▪ Agriculture ▪ Viticulture ▪ Sustainable resource management ▪ Structural improvements ▪ Research and consulting 	
General comment:-	

Table 3: Part B - Innovation Support Measures

Innovation support measures <i>Consult classification in chapter 2.2.2</i>	Research and Development	The need for financial support is identified
	Diffusion of innovation	Support of regional actors (e.g. associations) is foreseen
	Strengthening the knowledge base	The federation massively supports research, consulting and education. With the new regulation consultation projects shall be coordinated by one administrative office
	Strengthening interaction	<ul style="list-style-type: none"> ▪ A central database concerning controls of standard in agriculture is to be established ▪ Possibly there will be the creation of a single ministry for food security and consumer protection
	Demand creation	Much is expected from a liberalization of markets for agricultural products
	Improving frame conditions	<ul style="list-style-type: none"> ▪ More room for market forces through minimization of general subsidies ▪ Support of regional programmes ▪ Fostering of energy production from biomass
	Comments	
Priorities		Liberalization of markets for agricultural good is seen as the main driver for innovation.
Assessment of overall relevance		The focus is not so much on support measures (although they do exist, e.g. direct payments for ecological services) but more on the trust in market forces that should drive innovation once public measures that distort markets are largely given up.
Promotion of innovation		There is quite some impact on procedural innovation (simplification of federal administration processes etc.). Regarding product and services innovation it seems to be too early to make a judgment.
General comment:		-

Table 4: Part B - Cross-sectoral coordination

Policy formulation	
Co-ordination with other processes and documents	<ul style="list-style-type: none"> ▪ Environment protection policy ▪ Food and consumer protection policy ▪ Spatial planning
Administrative Co-ordination:	<input type="checkbox"/> between different sections/departments within the same ministry; specify: ____ <input checked="" type="checkbox"/> between different ministries, specify: <u>ministries involved in food security and consumer protection</u> <input checked="" type="checkbox"/> between ministries and other public organizations / agencies, specify: <u>Cantons, European Union, sectoral organizations</u> <u>Comments:</u>
Stakeholder involvement	<input type="checkbox"/> Forestry: name most important organisations: ____ <input type="checkbox"/> Forest-based industries: name most important organisations: ____ <input checked="" type="checkbox"/> Agriculture: name most important organisations: <u>Swiss Farmers' Association, Swiss Milk Producers, ...</u> <input type="checkbox"/> Tourism: name most important organisations: ____ <input type="checkbox"/> Energy: name most important organisations: ____ <input checked="" type="checkbox"/> Environment: name most important organisations: <u>WWF, Pro Natura, Swiss Animal Protection, ...</u>

	<input checked="" type="checkbox"/> Other sector: <u>Economy</u> : name most important organisations: <u>economiesuisse</u> <input checked="" type="checkbox"/> Other sector: <u>retail</u> : name most important organisations: <u>Coop, Migros</u> <u>Comments:</u> involved in consultation process (Vernehmlassung)
Coordination mechanisms:	<input type="checkbox"/> Formal (central) coordination body; name: _____ <input type="checkbox"/> Formal coordination process <input type="checkbox"/> Inter-sectoral working groups <input type="checkbox"/> Inter-sectoral advisory body <input type="checkbox"/> Formal mandatory consultation process <input type="checkbox"/> Formal voluntary consultation process <input checked="" type="checkbox"/> Informal consultations (please describe <u>Vernehmlassung</u>) <input type="checkbox"/> Others: _____
Policy Implementation	
Responsible actors and their roles:	-
Level of delegation	<input type="checkbox"/> Decentralized, e.g. <input checked="" type="checkbox"/> Central, e.g. ministry, public agency <input type="checkbox"/> Outsourced to private actors <input type="checkbox"/> Local, e.g. by municipalities <input type="checkbox"/> Regional, e.g. by regional public actors <input type="checkbox"/> Others: _____
General comment	-

7. Regional Development Policy

Message by the Federal Council on the New Regional Policy

With the acceptance of the Federal law about the regional policy, the Swiss federal counsellors decided the "New Regional Policy" of the Federation on October 6th 2006. The Federation together with the cantons prepare a first perennial program, which is to be implemented from 2008. (Source Federal Office of Spatial Development, see: <http://www.are.admin.ch/themen/laendlich/00804/00805/index.html?lang=de>)

The new regional policy aims to strengthen the regional value added chain and competitiveness. Growth impulses are to be created by the improvement of regional location factors. The goal of the New Regional Policy is to be achieved on the basis of three strategic adjustments. In the first place stands the promotion of initiatives, programs and projects to strengthen innovation, the value added chain and the competitiveness of the regions. To support this central aim there are also other efforts like the strengthening of cooperation and the utilisation of synergies between regional policy and space effective sector policies of the Federation. The build up and operating of an integral knowledge system about the regional development, the training and further education of the regional actors and the systematic evaluation of the effectiveness are accompanying measures on the agenda.

For the implementation of the New Regional Policy the Federal Council suggests in a first step to bring the previous instruments together (as it is appropriate) and align them to the new challenges. Beyond that with a scarce law framework the public authorities should be enabled to react rapidly to the quickly changing societal challenges. (translated from the "Message by the Federal Council on the New Regional Policy")

Interlinkages between the forestry sector and regional policies are difficult to predict. The intensity of cooperation between the forestry sector and regional enterprises will depend on the subsidy policy in the forestry sector on the one hand and on the success of regional and local initiatives and enterprises on the other hand.

7.1 General information

Table 10: Part A - General document information

Regional Development Policy (Regional or National Regional Dev. Programme):	Document: Message by the Federal Council on the New Regional Policy
Adoption: Please mark by whom and at which level the document is adopted	<input type="checkbox"/> Parliament <input checked="" type="checkbox"/> Government <input type="checkbox"/> Ministry: _____ <input type="checkbox"/> Others: _____ <input type="checkbox"/> No formal approval Level: <input type="checkbox"/> National <input type="checkbox"/> Regional <input type="checkbox"/> Local Adoption date:
Validity period:	Starting 06 October 2006
Revision:	Yes (first phase: 2008-2015)
Monitoring/Evaluation:	Implementation is monitored by parliament. Evaluation is to be undertaken by the federal administration.
Related documents:	<ul style="list-style-type: none"> ▪ Federal Law on Regional Policy ▪ Federal Law on the Support of Swiss Participation in the Common Initiative on Cross-border, Transnational and Interregional Cooperation (INTERREG III) in the years 2000-2006. (Modification as of 23 June 2006).

	<ul style="list-style-type: none"> ▪ Federal Law on the Modification of the Federal Resolution on the Support of Structural Change in Rural Areas (as of 23 June 2006). ▪ Federal Law on the Modification of the Federal Resolution in favour of economic renewal areas (As of 23 June 2006).
Geographical scope:	<input checked="" type="checkbox"/> National <input type="checkbox"/> Regional; name: _____ <input type="checkbox"/> Local, name: _____
Budget:	Ca. 30 mio / a
General description of contents as written in document	
Objective of the document	The general objective is the advancement of regions, the strengthening of their market position.
Priorities	The geographical focus is laid on mountain regions, other rural areas and border regions (economic centres). The policy focuses on the creation of jobs, a decentralized settlement pattern and the diminishing of regional disparities.
Structure	General structure: Definitions, measures, implementation, financing The New Regional Policy is structured in three parts: 1) direct support of strengthening innovation, value creation, competitiveness 2) cooperation and synergies between regional policy and other sector policies 3) Knowledge network on regional development
Measure Areas	<ul style="list-style-type: none"> ▪ Foster economic growth of rural and mountainous areas through improvement of regional location factors ▪ Create new attractive jobs in those regions ▪ Support of initiatives, programmes, projects and regional actors ▪ Strengthening of cross-border cooperation ▪ Loans for projects in infrastructure ▪ Tax alleviation
Follow-up / Implementation	
Follow-up measures:	<input type="checkbox"/> No follow-up activities so far <input checked="" type="checkbox"/> New or adapted funding programme(s) /budget line; name: to be defined <input type="checkbox"/> New or adapted regulations/laws; name: <input checked="" type="checkbox"/> New or adapted informational campaigns/instruments; name: to be defined <input type="checkbox"/> New or restructured institutions/organisations; name: <input type="checkbox"/> Implementation in forest policy:
General comment:	-

7.2 Integration of innovation

Table 2: Part B - Overall Innovation Orientation

Overall innovation orientation (use word search function).	Please mark the frequency of occurrence of the <u>more generic terms</u> 'innovation' or synonyms ('new products', 'new services', 'new processes', new marketing methods', 'new business models') in the document	<input type="checkbox"/> never <input type="checkbox"/> sometimes <input checked="" type="checkbox"/> frequently
	Please mark the frequency of occurrence of the forest sector ' <u>innovation frontier</u> ' – innovation areas identified in Chapter 3 - in the document	<input checked="" type="checkbox"/> never <input type="checkbox"/> sometimes <input type="checkbox"/> frequently

	<p>Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness</p>	<input type="checkbox"/> never <input type="checkbox"/> sometimes <input checked="" type="checkbox"/> frequently Terms used: entrepreneurship, competitiveness, added value
	Further comments on overall innovation orientation of the document:	
<p>Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)</p>	<input type="checkbox"/> No relevance at all <input type="checkbox"/> Marginal issue <input type="checkbox"/> One issue among others <input type="checkbox"/> Important issue <input checked="" type="checkbox"/> Central issue Comments: The regional policy is directly aimed at fostering innovations (in a technical as well as procedural sense)	
<p>Degree of specification: Please mark how general or specific innovation is addressed by the document (one answer) Please use comments section to describe if the degree of specification varies for different parts of the document, esp. when concerning forestry</p>	<input type="checkbox"/> very general (<i>innovation is named in general parts, e.g. preamble, but no related goals, measures, identified needs or similar are addressed by the document</i>) <input type="checkbox"/> rather general (<i>innovation is addressed in overall goals, needs are identified but no specification of measures</i>) <input checked="" type="checkbox"/> rather specific (<i>innovation is addressed in concrete goals, measures are formulated</i>) <input type="checkbox"/> very specific (<i>quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist</i>) Comments: innovation is seen as strategy to further economic development	
<p>Understanding of innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1</p>	<input type="checkbox"/> Predominately traditional science and technology policy <input type="checkbox"/> Traditional S&T policy with systemic elements <input checked="" type="checkbox"/> Systemic innovation policy with S&T policy elements <input type="checkbox"/> Predominantly systemic innovation policy Comments: The understanding combines traditional product innovation as well as aspects of systemic innovation (fostering coordination, cooperation processes)	
<p>Goals and objectives:</p> <ul style="list-style-type: none"> ▪ Strengthening of entrepreneurial self-initiative ▪ Foster cooperation between centre(s) and periphery (-ies) ▪ Promote easier access to federal measures ▪ Enhance access to know-how 		
<p>Issues, problems and related topics:</p> <ul style="list-style-type: none"> ▪ Strengthening of entrepreneurship ▪ Management of structural adjustments ▪ Coping with cross-cantonal problems (implementation of measures will be a cantonal task) ▪ Development of mountainous regions 		
<p>Innovation areas:</p> <ul style="list-style-type: none"> ▪ sectors with spatial relevance: traffic, research, agriculture, employment, economic competition, foreign policy, tourism ▪ science and education policy 		
<p>General comment: -</p>		

Table 3: Part B - Innovation Support Measures

Innovation support measures <i>Consult classification in chapter 2.2.2</i>	Research and Development	<ul style="list-style-type: none"> ▪ Creation of regional reception centres of federal education, science and technology policy ▪ Establishment of technology centres ▪ Create research networks
	Diffusion of innovation	<ul style="list-style-type: none"> ▪ tax alleviations ▪ Identification of regional value added systems ▪ Horizontal and vertical integration
	Strengthening the knowledge base	<ul style="list-style-type: none"> ▪ Fostering of knowledge transfer between state and public as well as among private actors ▪ Closer coordination of regional know-how infrastructure with need of economic actors ▪ Professionalisation of knowledge-management on a regional and cantonal level ▪ Fostering of continued education for regional actors
	Strengthening interaction	<ul style="list-style-type: none"> ▪ Strengthening of interdepartmental interaction ▪ Create a network service at federal level ▪ Establishment of a national communication and knowledge portal
	Demand creation	<ul style="list-style-type: none"> ▪ Creation of regional economic clusters
	Improving frame conditions	<ul style="list-style-type: none"> ▪ Strengthening of Fund for Regional Development ▪ Financial help for investments in infrastructure
	Comments	
Priorities		research and development, diffusion of innovation, strengthening of the knowledge base, strengthening interaction
Assessment of overall relevance		The document has a high relevance since it is adopted policy and mentions rather detailed measures aimed at fostering innovation
Promotion of innovation		Innovation has a very high importance in this document. It is a holistic approach on innovation that is seen as allowing economic development in rural/mountain/border regions
General comment:		-

Table 4: Part B - Cross-sectoral coordination

Policy formulation	
Co-ordination with other processes and documents	In order to implement the multi-year federal programme cantonal programmes and measures have to be defined.
Administrative Co-ordination:	<input type="checkbox"/> between different sections/departments within the same ministry; specify: _____ <input checked="" type="checkbox"/> between different ministries, specify: <u>economy, agriculture, environment</u> <input checked="" type="checkbox"/> between ministries and other public organizations / agencies, specify: <u>Federal administration, cantonal administrations, regional economic actors, research institutions</u> <u>Comments:</u> -

Stakeholder involvement	<input checked="" type="checkbox"/> Forestry: name most important organisations: <u>Federal forest directorate</u> <input type="checkbox"/> Forest-based industries: name most important organisations: ____ <input checked="" type="checkbox"/> Agriculture: name most important organisations: <u>Swiss Farmers' Association</u> <input checked="" type="checkbox"/> Tourism: name most important organisations: <u>Swiss Tourism Federation</u> <input checked="" type="checkbox"/> Energy: name most important organisations: <u>Federation of Swiss Water Suppliers and Distributors</u> <input checked="" type="checkbox"/> Environment: name most important organisations: <u>BAFU, WWF, Pro Natura</u> <input type="checkbox"/> Other sector: ____: name most important organisations: ____ <input type="checkbox"/> Other sector: ____: name most important organisations: ____ Comments: „regional actors“; not further specified
Coordination mechanisms:	<input type="checkbox"/> Formal (central) coordination body; name: ____ <input type="checkbox"/> Formal coordination process <input type="checkbox"/> Inter-sectoral working groups <input type="checkbox"/> Inter-sectoral advisory body <input type="checkbox"/> Formal mandatory consultation process <input type="checkbox"/> Formal voluntary consultation process <input checked="" type="checkbox"/> Informal consultations (please describe <u>Federal administration takes a cooperative stance towards economic actors</u>) <input checked="" type="checkbox"/> Others: <u>cantons together with regional actors ensure coordination of cross-regional projects</u>
Policy Implementation	
Responsible actors and their roles:	<u>Implementation lies with cantons</u>
Level of delegation	<input type="checkbox"/> Decentralized, e.g. <input type="checkbox"/> Central, e.g. ministry, public agency <input type="checkbox"/> Outsourced to private actors <input type="checkbox"/> Local, e.g. by municipalities <input checked="" type="checkbox"/> Regional, e.g. by regional public actors <input type="checkbox"/> Others: ____
General comment	-

8. Sustainable Development Policy

Sustainable Development Strategy 2002

The Federal Council's sustainable development policy is based on a broad conception of the process. Sustainable development is perceived as a political agenda which is concerned with ensuring that development is viable in the long term, addressing environmental, economic and social challenges equally. The present strategy thus faces challenges from a broad range of fields: industry and competitiveness, financial policy, research, technology and education, social cohesion, health, environment and natural resources, spatial planning, mobility and international relations.

The «Sustainable Development Strategy 2002» is based on – but refines and extends – the policy formulated in 1997. The new strategy adopts a more wide-ranging approach and aims to integrate the principles of sustainable development across the board, in every sector of policy. In order to buttress this integrated approach, the new Federal Constitution calls for sustainable development to be duly considered in all laws, programmes, concepts and projects. (Source: Swiss Federal Council (Ed.), 2002: Sustainable Development Strategy 2002.)

8.1 General information

Table 1: Part A - General document information

Name:	Sustainable Development Strategy 2002
Adoption: Please mark by whom and at which level the document is adopted	<input type="checkbox"/> Parliament <input checked="" type="checkbox"/> Government für Raumentwicklung (ARE) <input checked="" type="checkbox"/> Ministry: Bundesamt <input type="checkbox"/> Others: _____ <input type="checkbox"/> No formal approval Level: <input checked="" type="checkbox"/> National <input type="checkbox"/> Regional <input type="checkbox"/> Local Adoption date: 2002
Validity period:	2002-2007
Revision:	Revision of „Sustainable Development Strategy 2002“ at the end of 2007
Monitoring/ Evaluation:	The “Strategy sustainable development 2002“ is regularly examined and adapted. 1. Annual abridged report 2. Detailed preliminary report, 2004 3. „Balance and recommendations for the renewal“, 2007
Related documents:	1. Interdepartmental Sustainable Development Committee (ISDC) (Ed.), 2007. Sustainable Development Strategy 2002. Balance and recommendations for the renewal. 2. Federal Office for Spatial Development (ARE), Federal Department of the Environment, Transport, Energy and Communications (DETEC) (Eds.), 2006.: Balance and renewal. Sustainable Development Strategy put to test. 3. Interdepartmental Rio Committee (IDARio) (Eds.), 2004: Swiss activities for sustainable development: Balance and perspectives 2004. 4. Working group Interface and Evaluanda (Eds.), 2006. Evaluation of the Sustainable Development Strategy 2002. Final report to the attention of the Federal Office for Spatial Development, section sustainable development. Lucerne and Geneva. 5. Federal Office for Spatial Development (ARE) (Ed.), 2005: Support programme for sustainable development; Summary 2001-2005.
Geographical scope:	<input checked="" type="checkbox"/> National <input type="checkbox"/> Regional; name: _____ <input type="checkbox"/> Local, name: _____
Budget:	No decisions on financing are associated with the present report. Essentially, sustainable development is to be achieved not by expanding government

	<p>activities but primarily through the prioritization and reallocation of existing resources. Details of the costs and financing of measures are to be elaborated for individual cases as the work progresses. Financing of individual measures must be secured via ordinary budgetary processes.</p> <p>Budget for the "Support programme for sustainable development (see related document "Support programme for sustainable development; Summary 2001-2005.") is specified as approx. 250.000 CHF per year (state funding) but considerably fluctuating over the years (for exact numbers see "table 5: Part C").</p> <p>The support programme pursues the goal of supporting actions which contribute to the implementation of sustainable development on local, regional or cantonal level. Thus the support program corresponds to the principles of the "Sustainable Development Strategy 2002" of the Swiss Federal Council, which aiming to support local projects.</p>
General description of contents as written in document	
Objective of the document	The new strategy adopts a more wide-ranging approach and aims to integrate the principles of sustainable development across the board, in every policy sector.
Priorities	<p>The cornerstones of the 2002 strategy are:</p> <ul style="list-style-type: none"> • Emphasis on an equilibrium between the three pillars of sustainable development (economy, society, environment). • A fundamentally wide-ranging strategy, i.e. not confined to a small number of policy areas. • Practical and results-oriented measures, in the sense of a specific action plan. • Involvement of cantons, communes, civil society and the private sector.
Structure	<p>Structure:</p> <p>Part 1 Background Part 2 Guidelines for sustainable development policy Part 3 Action areas and measures Part 4 Implementation and supporting measures</p> <p>Action areas:</p> <ol style="list-style-type: none"> 1. Economic policy and public services 2. Financial policy 3. Education, research, technology 4. Social cohesion 5. Health 6. Environment and natural resources 7. Spatial and settlement development 8. Mobility 9. Development cooperation and the promotion of peace 10. Methods and instruments

Measure Areas	Measure Areas: <ol style="list-style-type: none"> 1. WTO and sustainable development 2. Concept for public services in the infrastructure sector 3. Fiscal incentives for the economical use of resources 4. Introduction of an integrated product policy 5. Raising public awareness via the education system 6. Promotion of scientific cooperation with developing and transitional countries 7. Counter-balancing new poverty risks 8. National «Health Diet Exercise» programme 9. Refinement of energy and climate protection policy 10. Support for clean-fuel vehicles 11. Incentive strategy for nature and the countryside 12. Strengthening the system of international environmental governance 13. Sustainable spatial planning programme 14. New regional policy strategy 15. Guiding principles for sustainable mobility 16. Strengthening public transport 17. New policy on road safety 18. Participation in the formulation and implementation of a multilateral sustainability policy 19. New forms of development funding 20. Civilian peace promotion, conflict prevention and reconstruction 21. Monitoring of sustainable development 22. Sustainability assessment
Follow-up / Implementation	
Follow-up measures:	<p>(see „Sustainable Development Strategy 2002. Balance and recommendations for the renewal.“ chapter 3.)</p> <p><input type="checkbox"/> No follow-up activities so far</p> <p><input checked="" type="checkbox"/> New or adapted funding programme(s) /budget line; name: - Impulse program for the creation of family-supplementing positions in day nurseries (introduced 2003). Equipped with a credit of 120 million CHF for the period 2007-2011</p> <p><input checked="" type="checkbox"/> New or adapted regulations/laws; name: 1.Message about the continuation of technical co-operation and financial aid in support of developing countries 2004-2007. 2.Renewal of scientific co-operation with countries of the Commonwealth of Independent States (CIS), and Eastern Europe for two years. 3.Federal law about the family income supplement (26 November 2006) 4.Revision of the law of nature and homeland conservation (NHG) 5.Resolution on International Environmental Governance 6. "Federal law for measures for the civilian peace promotion and stabilization of the human rights", as well as a frame credit for measures for civilian treatment of conflicts. (Federal law coming into force on 1 May 2004.)</p> <p><input checked="" type="checkbox"/> New or adapted informational campaigns/instruments; name: 1. Report "Basic supply in the infrastructure" (public service) 2. - National congress of education "Nachhaltige Entwicklung macht Schule" (2002) - Coordination platform "Education and Sustainability" 3. Program AMEPA" Positive reciprocal effects of nutrition, exercise and agricultural production " 4. Emphatic and effective conversion of the existing equipment ("program energy Switzerland", energy and CO2-law) - on the basis of the energy perspectives up to the year 2035 the "vision 2050" is compiled in 2007. 5. – First "Regional development report 2005" - Development of a "Space concept Switzerland" together with cantons, cities and municipalities since 2006 6. "Mission statement sustainable mobility" (guidance and coordination instrument for the mobility policies, which considers the three goal dimensions of sustainable development equivalently. 7. Action program "New road traffic safety politics"</p>

	<p>8. Internet platform MONET (Monitoring of sustainable development). -> in use since November 2003</p> <p>9. Framework concept for the evaluation of sustainability (NHB) -> evaluation instrument for politics (methodology)</p> <p>10. - Sustainability evaluation of the agricultural policy 2011 - "Agricultural report 2005" (overview of the development of the sustainability indicators since beginning of the 1990's)</p> <p><input checked="" type="checkbox"/> New or restructured institutions/organisations; name:</p> <p>1. Interdepartmental Sustainable Development Committee (ISDC) 2004 (formed for the conversion of the strategy within the federal administration).</p> <p>2. IPP network (Internal Federal network for the introduction of an integrated product strategy). Several activities were started: - international working group for sustainable procurement - new ecological product criteria for persons in charge of procurement - new concepts for further education for persons in charge of procurement - Data base for eco-inventory - Platform of public constructors in the federation, cantons and cities (recommendations for sustainable planning, building and managing of buildings and grounds)-> publication: SIA recommendation 112/1 - Central evaluation of eco balances (eco balances are provided from 100 agricultural enterprises for the first time in 2006)</p> <p><input checked="" type="checkbox"/> Implementation in forest policy:</p> <p>Revision of the law of "nature and homeland conservation" (NHG) - With a revision of the law of "nature and homeland conservation" (NHG) the Federal Council intends to set up an incentive strategy for the intensive support of nature and countryside parks in Switzerland, which produces a surplus value in an integrating way for all three dimensions of sustainable development. On 23 February 2005 the Federal Council adopted the message. The "Eidgenössische Räte" (Parliament) decided the law revision including a financial participation of the federation on 6 October 2006. The coming into force of law and regulation is intended for 2007</p>
General comment:	-

8.2 Integration of innovation

Table 2: Part B - Overall Innovation Orientation

<p>Overall innovation orientation (use word search function).</p>	<p>Please mark the frequency of occurrence of the <u>more generic terms</u> 'innovation' or synonyms ('new products', 'new services', 'new processes', new marketing methods', 'new business models') in the document</p>	<p><input type="checkbox"/> never <input checked="" type="checkbox"/> sometimes <input type="checkbox"/> frequently</p>
	<p>Please mark the frequency of occurrence of the forest sector '<u>innovation frontier</u>' – innovation areas identified in Chapter 3 - in the document</p>	<p><input type="checkbox"/> never <input checked="" type="checkbox"/> sometimes <input type="checkbox"/> frequently</p>
	<p>Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness</p>	<p><input type="checkbox"/> never <input checked="" type="checkbox"/> sometimes <input type="checkbox"/> frequently Terms used: sustainable development, competitiveness, structural change, modernisation,</p>

	Further comments on overall innovation orientation of the document:
Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)	<input type="checkbox"/> No relevance at all <input type="checkbox"/> Marginal issue <input checked="" type="checkbox"/> One issue among others <input type="checkbox"/> Important issue <input type="checkbox"/> Central issue Comments: Sustainability is the central issue in this document. But to look upon several different policy areas under the perspective of sustainability maybe could be seen as well as an innovation in the sense of a paradigm shift.
Degree of specification: Please mark how general or specific innovation is addressed by the document (one answer) Please use comments section to describe if the degree of specification varies for different parts of the document, esp. when concerning forestry	<input type="checkbox"/> very general (<i>innovation is named in general parts, e.g. preamble, but no related goals, measures, identified needs or similar are addressed by the document</i>) <input checked="" type="checkbox"/> rather general (<i>innovation is addressed in overall goals, needs are identified but no specification of measures</i>) <input type="checkbox"/> rather specific (<i>innovation is addressed in concrete goals, measures are formulated</i>) <input type="checkbox"/> very specific (<i>quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist</i>) Comments: - Innovation and innovative measures as a goal (in the context of sustainability) - Innovation as an instrument to develop new technologies (goal is sustainability) - Innovation as a strategy to reach other goals (in the context of sustainability)
Understanding of innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1	<input type="checkbox"/> Predominately traditional science and technology policy <input type="checkbox"/> Traditional S&T policy with systemic elements <input checked="" type="checkbox"/> Systemic innovation policy with S&T policy elements <input type="checkbox"/> Predominantly systemic innovation policy Comments: Formation of networks, improvement of institutional basis and framework conditions and providing incentives are considered important for innovation. But also to support innovation for the development of new technologies to achieve ecologic, social and economic improvements.
Goals and objectives: - Improving competitiveness and innovation potential of the economy - Developing new technologies by the encouragement of innovation and innovative forces - Sustainable development (ecologic, social, economic) national and global by innovative measures - Promoting innovation network	
Issues, problems and related topics: Agglomerations as drivers of innovation, ecological potential of innovation	
Innovation areas: Renewable energies and resources are targeted by the document.	
General comment:	

Table 3: Part B - Innovation Support Measures

Innovation support measures <i>Consult classification in chapter 2.2.2</i>	Research and Development	<ul style="list-style-type: none"> Partnership of national and private institutions "Public-Private Partnership-Schools in the internet (PPP-Sin)" creates synergies between private sector, federation and cantons.
	Diffusion of innovation	<ul style="list-style-type: none"> Introduction of an integrated product policy. Throughout their life cycle (planning, production, use and disposal), products and services are to comply with stringent economic, environmental and social requirements. -> IPP network (Internal Federal network for the introduction of an integrated product strategy)

	Strengthening the knowledge base	<ul style="list-style-type: none"> • The reforms on university level, the introduction of universities of applied sciences, the creation of the “Berufsmittelschulen” (schools for advanced vocational training), the discussion on the application of information technologies in as many subjects as possible, and also the creation of two main researches in the field of climatic sciences and north-south cooperation are examples of current sustainability oriented efforts • Promotion of scientific cooperation with development and transition countries (e.g. credits for students and young scientists from developing countries for a higher or further education in Switzerland).
	Strengthening interaction	<ul style="list-style-type: none"> • A strengthened coordination and systematic evaluation of education initiatives • Creating discussion forums and platforms (between federation and cantons with inclusion of schools, companies and further interested persons) • Partnership-based approach and communication.-> <ul style="list-style-type: none"> ◦ involving all the interested parties at the national, cantonal, regional and local level ◦ Sustainable Development Forum established in June 2001. (Enhancement of the cooperation within the Federal State) ◦ Strengthening the cooperative partnership with industry and the general public ◦ Close dialogue between the federal government, other public sector bodies, civil society and the private sector
	Demand creation	<ul style="list-style-type: none"> • Raising public awareness via the education system • National «Health Diet Exercise» programme. A network comprising all relevant governmental and non-governmental organizations is to be established to coordinate existing measures and the introduction and evaluation of new, innovative programmes. In addition, the public is to be comprehensively informed about the positive interaction between a healthy diet, sustainable agricultural production and adequate physical exercise. This will necessitate continuing education and motivation programmes for teaching staffs, as well as improvements in product labelling.
	Improving frame conditions	<ul style="list-style-type: none"> • In future negotiations with the WTO, the Federal Council intends to focus primarily on the economic and development-specific dimensions of sustainability, with the aim to optimize the use of economic resources in particular by further abolishing non-sustainable subsidies and barriers to trade and investment. • Fiscal incentives for the economical use of resources • Introduction of an integrated product policy
	Comments To reach the goals aligned with sustainability and the “Sustainable Development Strategy 2002” innovations in every defined category and on all levels are necessary.	
Priorities	Strengthening interaction and the knowledge base are represented in various measures for sustainable development proposed in the document.	
Assessment of overall relevance	Innovation support is one among other approaches towards fostering sustainable development (moderate relevance). While sustainability as a concept and measure for all areas of life could be seen as an innovation in itself.	
Promotion of innovation	The relevance of innovation in the document is moderate; the relevance of the document for the sustainable development policy area is high (central document).	
General comment:	Relationship between sustainable development and innovation in the forest sector is of high interest.	

Table 4: Part B - Cross-sectoral coordination

Policy formulation	
Co-ordination with other processes and documents	<ul style="list-style-type: none"> - Local Agenda 21 - Regio Plus -
Administrative Co-ordination:	<p><input checked="" type="checkbox"/> between different sections/departments within the same ministry; specify: Water- nature & landscape protection - forest</p> <p><input checked="" type="checkbox"/> between different ministries, specify: Under the leadership of the ARE, the Federal Office of Public Health (FOPH), Federal Office for Agriculture (FOAG), Federal Office for the Environment (FOEN) and the Swiss Agency for Development and Cooperation (SDC) together make up the ISDC (Interdepartmental Sustainable Development Committee) leadership body.</p> <p><input type="checkbox"/> between ministries and other public organizations / agencies, specify: _____</p> <p><u>Comments:</u> The remit of the Federal Office for Spatial Development (ARE) is to broaden the government's sustainable development policy, formulate it in specific terms and support its implementation. Furthermore, it ensures that the committees and processes involved (particularly the Interdepartmental Sustainable Development Committee (ISDC) and the sustainable development strategy process, including monitoring, controlling and implementation) function smoothly and effectively. It fosters systematic collaboration with cantons, towns and cities in the field of sustainable development (in the context of the Forum for Sustainable Development) and promotes the Local Agenda 21 campaign at cantonal, regional and local level. ARE also maintains the momentum of sustainable development through its innovative projects (Sustainable Development Promotion Programme) and targeted information and communication campaigns.</p>
Stakeholder involvement	<p><input checked="" type="checkbox"/> Forestry: name most important organisations: _____</p> <p><input checked="" type="checkbox"/> Forest-based industries: name most important organisations: _____</p> <p><input checked="" type="checkbox"/> Agriculture: name most important organisations: _____</p> <p><input checked="" type="checkbox"/> Tourism: name most important organisations: _____</p> <p><input checked="" type="checkbox"/> Energy: name most important organisations: _____</p> <p><input checked="" type="checkbox"/> Environment: name most important organisations: _____</p> <p><input type="checkbox"/> Other sector: _____: name most important organisations: _____</p> <p><input type="checkbox"/> Other sector: _____: name most important organisations: _____</p> <p><u>Comments:</u> - Systematic cooperation with the cantons and cities in the field of sustainable development ("Forum Sustainable development") - Support of the "Local agenda 21" on cantonal, regional and local level</p>
Coordination mechanisms:	<p><input checked="" type="checkbox"/> Formal (central) coordination body; name: <u>IDANE</u></p> <p><input type="checkbox"/> Formal coordination process</p> <p><input type="checkbox"/> Inter-sectoral working groups</p> <p><input type="checkbox"/> Inter-sectoral advisory body</p> <p><input type="checkbox"/> Formal mandatory consultation process</p> <p><input type="checkbox"/> Formal voluntary consultation process</p> <p><input type="checkbox"/> Informal consultations (please describe _____)</p> <p><input type="checkbox"/> Others: _____</p>
Policy Implementation	
Responsible actors and their roles:	See (chapter, „Administrative Coordination“/ Comments)
Level of delegation	<p><input type="checkbox"/> Decentralized, e.g.</p> <p><input checked="" type="checkbox"/> Central, e.g. ministry, public agency</p> <p><input type="checkbox"/> Outsourced to private actors</p>

	<input type="checkbox"/> Local, e.g. by municipalities <input type="checkbox"/> Regional, e.g. by regional public actors <input type="checkbox"/> Others: _____
General comment	-

8.3 Appraisal of Effects

Table 11: Part C - Appraisal of Effects - General Information

	Whole document (RDP)	Forestry Part
Total amount of funding	1094206 € (1790600 CHF) (2001-2005)	No funding specified
Total number of projects	Innovative implementation projects (Support programme Sustainable Development) within the Local Agenda 21 114 support programmes (2001-2005)	
Total number of beneficiaries	Not specified	
Average amount of funding per project	9598 € (15707 CHF)	
Median of project funding	Median not specified Minimum 1833 € (3000 CHF) Maximum 15277 € (25000 CHF)	
Average amount of funding per beneficiary	Not specified	
Median of funding per beneficiary	Not specified	
General comment: -		

9. Renewable Energy Policy

From 2004 to 2006 the Swiss Federal Office of Energy (SFOE) was concerned in detail with energy scenarios in 2035. The work was co-ordinated to a large extent with the related investigations of the Federal Administration, relied on the model calculations of experts and was accompanied by a working group, which comprised experts from science and energy-industry practice. The main target, namely the security of energy supply was strengthened in the last years. With quantitative models the applied scenario method guarantees that the various elements which determine the energy future are linked to each other. The main question is how energy prices, the economic and population growth (framework developments) as well as regulations, price instruments and promotion instruments (political instruments) affect the energy supply system. (Source Swiss Federal Office of Energy 2007, Energy Perspectives 2035 - Vol. 1 Synthesis)

On February 21th 2007 the Federal Council decided a reorientation of the Swiss energy policy. Based on four columns Switzerland should prepare for the threatening energy gap and the climatic problem: higher energy efficiency, development of the renewable energies, an intensified foreign energy policy and the building of new power stations to the production of electricity. In the context of this reorientation the Department of the Environment, Transport, Energy and Communications (DETEC) compiles action plans for "energy efficiency" and "renewable energies" with concrete, short and medium-term realizable measures (action plans refer to the period of 2007 to 2020).

These should build up on the existing legal foundations and strengthen recent energy policy. Where necessary, this has to take place via regulation or law changes, whereby the new measures are supposed to be economically reconcilable, budget neutral, internationally compatible and co-ordinated with the cantons as well as with the commercial sector. The measures suggested in the action plans affect both, the Federation as well as the cantons and municipalities.

These are the main objectives that are to be achieved by Switzerland until 2020: A reduction of the consumption of fossil energies about 1.5% per year, the stabilization of the current consumption on the level of 2006 and an increase of the rate of renewable energies of the total energy consumption of about 50 per cent. (Source: DETEC, see <http://www.uvek.admin.ch/dokumentation/00474/00492/index.html?lang=de&msg-id=14286>)

9.1 General information

Table 12: Part A - General document information

Renewable Energy Policy (Regional or National (renewable) Energy Strategy):	Document: Energy Perspectives 2035 - Vol. 1 Synthesis
Adoption: Please mark by whom and at which level the document is adopted	<input type="checkbox"/> Parliament <input type="checkbox"/> Government <input checked="" type="checkbox"/> Ministry: _Department <input type="checkbox"/> Others: _____ <input checked="" type="checkbox"/> No formal approval Level: <input checked="" type="checkbox"/> National <input type="checkbox"/> Regional <input type="checkbox"/> Local Adoption date: January 2007
Validity period:	Shows alternative policies with a time horizon until 2035
Revision:	no
Monitoring/ Evaluation:	no
Related	- Swiss Federal Office of Energy SFOE, Bureau of energy efficiency and

documents:	renewable energy, 2007. Action plan renewable energy. Draft, September 3th 2007. - Swiss Federal Office of Energy SFOE, Bureau of energy efficiency and renewable energy, 2007. Action plan energy efficiency. Draft, September 3th 2007. - Swiss Federal Office of Energy SFOE, 2007. Energy perspectives. Volume 1-5.
Geographical scope:	<input checked="" type="checkbox"/> National <input type="checkbox"/> Regional; name: _____ <input type="checkbox"/> Local, name: _____
Budget:	planned budget of about CHF 100 mio
General description of contents as written in document	
Objective of the document	The document defines four different scenarios for future energy policy; the aim is to guarantee energy supply
Priorities	The priority is to define possible political ways of how to avoid lack in energy supply and to sketch out technical solutions
Structure	<ul style="list-style-type: none"> ▪ Development of policy scenarios ▪ Comparison of scenarios ▪ Future challenges
Measure Areas	General: measures to improve energy efficiency or to use new sources of energy. Instruments: minimum standards, incentive taxes, promotion subsidies, voluntary measures, information and consulting, specialized training
Follow-up / Implementation	
Follow-up measures:	<input type="checkbox"/> No follow-up activities so far <input type="checkbox"/> New or adapted funding programme(s) /budget line; name: <input type="checkbox"/> New or adapted regulations/laws; name: <input checked="" type="checkbox"/> New or adapted informational campaigns/instruments; name: In September 2007 the DETEC compiled action plans for "energy efficiency" and "renewable energies". <input type="checkbox"/> New or restructured institutions/organisations; name: <input checked="" type="checkbox"/> Implementation in forest policy: With the "Action plan renewable energy", alternative energy production, for example by means of pellets, wood chips or wood briquettes are supported.
General comment:	-

9.2 Integration of innovation

Table 2: Part B - Overall Innovation Orientation

Overall innovation orientation (use word search function).	Please mark the frequency of occurrence of the <u>more generic terms</u> 'innovation' or synonyms ('new products', 'new services', 'new processes', new marketing methods', 'new business models') in the document	<input type="checkbox"/> never <input checked="" type="checkbox"/> sometimes <input type="checkbox"/> frequently
	Please mark the frequency of occurrence of the forest sector ' <u>innovation frontier</u> ' – innovation areas identified in Chapter 3 - in the document	<input type="checkbox"/> never <input checked="" type="checkbox"/> sometimes <input type="checkbox"/> frequently

	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	<input type="checkbox"/> never <input checked="" type="checkbox"/> sometimes <input type="checkbox"/> frequently Terms used: entrepreneurship, diversification, competitiveness
Further comments on overall innovation orientation of the document: -		
Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)	<input type="checkbox"/> No relevance at all <input type="checkbox"/> Marginal issue <input type="checkbox"/> One issue among others <input checked="" type="checkbox"/> Important issue <input type="checkbox"/> Central issue Comments: Not all scenarios need innovations, but the two most ambitious one certainly do.	
Degree of specification: Please mark how general or specific innovation is addressed by the document (one answer) Please use comments section to describe if the degree of specification varies for different parts of the document, esp. when concerning forestry	<input type="checkbox"/> very general (<i>innovation is named in general parts, e.g. preamble, but no related goals, measures, identified needs or similar are addressed by the document</i>) <input checked="" type="checkbox"/> rather general (<i>innovation is addressed in overall goals, needs are identified but no specification of measures</i>) <input type="checkbox"/> rather specific (<i>innovation is addressed in concrete goals, measures are formulated</i>) <input type="checkbox"/> very specific (<i>quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist</i>) Comments: Technical and political innovations are necessary (in scenarios III and IV) to avoid an energy crisis	
Understanding of innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1	<input type="checkbox"/> Predominately traditional science and technology policy <input checked="" type="checkbox"/> Traditional S&T policy with systemic elements <input type="checkbox"/> Systemic innovation policy with S&T policy elements <input type="checkbox"/> Predominantly systemic innovation policy Comments: Innovation is largely understood as comprising new technical tools (equipment, apparatuses) in order to be able to save energy or to use new source. But there is (in scenario IV) also the aspect of political innovation meaning a substantive change in people's mentality and administrative resolution.	
Goals and objectives: <ul style="list-style-type: none"> ▪ Future energy and climate change policy should create market innovations ▪ To boost innovation the necessity of knowledge transfer to/from other countries is identified 		
Issues, problems and related topics: <ul style="list-style-type: none"> ▪ Diversification of energy sources is necessary ▪ Technical <i>and</i> political innovations are necessary ▪ Social unrest might be possible due to the huge need for innovation ▪ Political change must be socially and environmentally acceptable 		
Innovation areas: <ul style="list-style-type: none"> ▪ Energy efficiency of buildings and apparatuses must be improved ▪ New technologies for energy production have to be developed - related research is necessary ▪ Wood as a renewable energy resource is mentioned ▪ Structural adjustment includes working from home in order to minimize energy consumed by commuting ▪ Spatial development policy must adjust ▪ Political will for change should be generated (esp. in scenario IV) 		

General comment:

-

Table 3: Part B - Innovation Support Measures

Innovation support measures <i>Consult classification in chapter 2.2.2</i>	Research and Development	No concrete measures proposed
	Diffusion of innovation	No concrete measures proposed
	Strengthening the knowledge base	No concrete measures proposed
	Strengthening interaction	Intensified international cooperation and cooperation between the federation and the cantons are proposed
	Demand creation	<ul style="list-style-type: none"> ▪ Introduction of market-based-instruments (MBIs) (e.g. steering tax) should foster innovation ▪ Supporting financial measures for the use of renewable energy sources by federation/cantons are foreseen
	Improving frame conditions	<ul style="list-style-type: none"> ▪ A decentralized power production is seen as fostering innovation in general ▪ In scenario IV strong legislative measures (law and order) are necessary to secure political innovations – for scenario IV the federal constitution would have to be amended in order to allow the federation the necessary competences
	Comments	
Priorities	Creation of demand for innovation is a very important topic. In order for steering via MBIs to work international harmonization of standards is said to be necessary	
Assessment of overall relevance	Scenarios III and especially IV show very high relevance of innovation (and therefore support measures) in order to raise energy efficiency and/or lower energy consumption. However, no detailed measures are proposed. Scenarios I and II do not need real innovation (but concentrate on well known technologies and established political ideas).	
Promotion of innovation	The relevance of innovation is stressed in the document. But it does not say how this can be done in detail. Since it establishes different scenarios for the future it is virtually impossible to judge its relevance in furthering innovation.	
General comment:	-	

Table 4: Part B - Cross-sectoral coordination

Policy formulation	
Co-ordination with other processes and documents	<ul style="list-style-type: none"> ▪ Spatial planning ▪ Research policy ▪ Environmental protection policy ▪ Transport policy
Administrative Co-ordination:	<input type="checkbox"/> between different sections/departments within the same ministry; specify: _____

	<input type="checkbox"/> between different ministries, specify: ____ <input type="checkbox"/> between ministries and other public organizations / agencies, specify: _____ <u>Comments:</u> -
Stakeholder involvement	<input type="checkbox"/> Forestry: name most important organisations: ____ <input type="checkbox"/> Forest-based industries: name most important organisations: ____ <input type="checkbox"/> Agriculture: name most important organisations: ____ <input type="checkbox"/> Tourism: name most important organisations: ____ <input type="checkbox"/> Energy: name most important organisations: ____ <input type="checkbox"/> Environment: name most important organisations: ____ <input type="checkbox"/> Other sector: ____: name most important organisations: ____ <input type="checkbox"/> Other sector: ____: name most important organisations: ____ <u>Comments:</u> in this context every person and organization is a potential stakeholder
Coordination mechanisms:	<input type="checkbox"/> Formal (central) coordination body; name: ____ <input type="checkbox"/> Formal coordination process <input type="checkbox"/> Inter-sectoral working groups <input type="checkbox"/> Inter-sectoral advisory body <input type="checkbox"/> Formal mandatory consultation process <input type="checkbox"/> Formal voluntary consultation process <input checked="" type="checkbox"/> Informal consultations (please describe <u>Experts from industry and science have accompanied and commented on the process of formulating the energy perspectives</u>) <input type="checkbox"/> Others: ____
Policy Implementation	
Responsible actors and their roles:	This document sources as a basis for the federal council (executive) and later on the parliament to draft policies and related measures
Level of delegation	<input type="checkbox"/> Decentralized, e.g. <input type="checkbox"/> Central, e.g. ministry, public agency <input type="checkbox"/> Outsourced to private actors <input type="checkbox"/> Local, e.g. by municipalities <input type="checkbox"/> Regional, e.g. by regional public actors <input type="checkbox"/> Others: ____
General comment	-

10. Conclusions and Research Needs

Various policies which are divided into sectors make up the structural policy of Switzerland. In the analysis we have looked at forest policy, forest-based industries policy, innovation policy, rural development policy, regional development policy, sustainable development policy and renewable energy policy. It is important to recognize in this context that there is an asymmetry as well as an asynchrony between these policies that are partly due to historical developments and partly caused by international involvements and obligations of Switzerland towards other countries. Not all policy domains are relevant for the forestry sector. Furthermore, some sectors are different from each other or one is more developed than the other. Energy policy, for instance, has been opened up much more towards a competing European market since the liberalisation of the electricity trade than Swiss agrarian policy, which has to be adjusted to new standards soon. Traffic and environmental policy have also to be adjusted within their respective sectors to international standards such as air space treaties and the Kyoto protocol. The opening up of the Swiss labour market in the wake of the bilateral treaties with the European Union is a component not to be underrated for regional development planning, which will have unforeseeable effects on the country's economy.

What all the analysed policy sectors have in common is that they are in motion and preliminary driven by financial incentives and compensations (subsidies). The expected changes will be incremental over the next decade, but there are no fundamental changes to be expected. The structural change that is ongoing in the rural areas of Switzerland is on the one hand influenced by the autonomous exertion of the political developments in the European Union towards which Switzerland is orienting its own policies. On the other hand there is an internal innovation potential that aims at structural improvements in some policy sectors with the help of selected promotion measures. Thus, an adjustment and balancing between disfavoured regions and economically weak branches and those which are better off, shall be achieved. The political instruments are the reorganisation of financial equalization ("Finanzausgleich") between the Cantons and various regions of different economic importance; particularly those lying in the vicinity of the large metropolises or close to the Swiss border, or where several Cantons with unequal economic weights are bordering each other. This ongoing process of shifting competences from the Federal to the cantonal administration is an important change. This may lead to organizational innovation and innovations with respect to the products, or a change in the importance of forest products and services. Also cross-sector programmes like "RegioPlus" or INTERREG (that are to promote structural change in rural areas) which do perceive innovations not only as the direct outcome of political

interventions and steering processes and financial incentives, but see them predominantly as synergy effects, are of eminent importance.

With respect to the forest relevant policies, innovation policy will be of minor importance for the policy sector. However, of major importance will be regional rule development and energy policy. The relevance of these policies will depend on the financial incentives allotted to forest programmes on the one hand and the initiatives of the forest enterprises on the other hand. In the second case a lot of coordination and cooperation is needed.

Research questions and research needs:

- How to make supporting policies more efficient at the cantonal level?
- What cross-sector innovation effects are there due to related political support programmes?
- What policy or financial instruments have been proved positive incentives in cross sector support measures?
- What instruments being applied in non-forestry sectors have been hampering or blocking influences on developments in the forestry sector?
- What position will the forestry sector take in future programmes to promote regional development?
- Do sector policies still make sense in a future rural regional development policy, or will issues centred on forest and landscape have to be cross- sector oriented to play a more proactive role and to avoid to be driven and/or superseded by other policies?
- Are there strategically advantageous linkages between policy instruments of the forest sector and those of other policy sectors (e.g. tourism, energy, environment, nature conservation) regarding rural regional development?
- What disadvantageous effects are there in rural regional development concerning various policy instruments on different sectors?
- In which sectors can be seen more active or more passive (due to cross-sector policies and instruments) rural regional developments?
- What impact do other sector policies have on the forest sector?

The analysis has shown a lot of interlinkages between forest and other sector policies. The impacts of these policies and optimal coordination between forest and other policies are research issues still to be continued. All these research topics contain fundamental institutional, organizational and financial questions to be tackled as cross-cutting issues in forest policy research.

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Weblinks:

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