



COST Action E 51

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

**COUNTRY REPORT
Austria**

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Abstract

In the forest country Austria, forestry and the forest-based industries make an important contribution to the Austrian economy in terms of GDP and foreign trade balance. The sector particularly are important for the development of rural areas. Therefore, the issue of innovation in the sector and the related policy support are of high relevance. This report describes and analyses the following six policy areas (with one central policy document for each) that might have an important impact on the development of the sector (out of the seven policy areas that were suggested by the COST Action E51):

1. Austrian Forest Programme (forest policy)
2. For the forest based industries sector, no policy process nor document exists.
3. Austrian National Reform Programme (innovation policy)
4. Austrian Programme for Rural Development 2000-2006, only forestry related measures (rural development policy)
5. National Strategic Reference Framework (Nationaler Strategischer Rahmenplan, STRAT.AT) (regional development policy)
6. Austrian Strategy for Sustainable Development (sustainable development policy)
7. Draft Austrian Biomass Action Plan (renewable energy policy).

Three main questions were analysed in the collected policy documents: in how far and in which way is innovation dealt with in the different policy areas, which kind of support measures are envisaged and in how far are the policy areas coordinated?

The relevance of innovation is highest in the regional development policy (central issue), followed by the innovation policy (important issue), sustainable development policy (issue among others), and forest, rural development and renewable energy policies (marginal issue). The policy issue of innovation support is dominantly approached in a traditional understanding of science and technology policy, with the exception of the sustainable development and regional development policies that explicitly emphasize systemic elements.

Innovation support measures are evenly distributed in the innovation and renewable policy, diffusion is emphasised within forest policy and the related rural development policy, improving frame conditions are particularly mentioned in the regional development and sustainable development policies.

Innovation related policy documents are generally poorly coordinated in Austria, for instance regarding NRP, STRAT.AT and the rural development programme. They are more indirectly coordinated by the policy targets required on the EU level, particularly the Lisbon agenda. The well coordinated documents: NFP and SD strategy can be seen as exemptions from the rule.

In sum, the forest sector appears not to place much attention to the issue of innovation and to view innovation policy rather in a traditional technology-oriented way. Similar to this policy field is the forestry chapter in the rural development programme which is developed by the forestry department of the ministry, and the biomass action plan which is also coordinated by the same ministry. Interestingly, not the National Reform Programme but the regional development strategy seems to be the most advanced policy document in terms of systemic understanding of innovation policy and also the sustainable development strategy formulates a more systemic approach to innovation policy. The coordination between the policy fields is very poor both in the formulation and the implementation phase.

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1 Introduction

With about half of the territory covered by forests, Austria can be called a forest country and the forest-based sector has an important contribution to the Austrian economy in terms of GDP and foreign trade balance. While the direct contribution of forestry to the GDP is below 0.5%, the contribution of the whole wood-based industry is 3,9% (in 2002). Within the production sector the wood industry could increase its share from 16,3% in 1976 to 19,8% in 2002 (Schwarzbauer 2004, 7). Wood processing industries in Austria are competitive on a world market in a range of commodity products, including sawn wood, paper and panels, amongst others. Typical barriers to innovation and entrepreneurial behaviour are that the majority of firms are small-scale family firms, that there is a low knowledge generation and application capacity within firms, a lack of venture capital, etc. Austrian forests also have been producing important non-wood forest products and services (NWFPS) since history, some of which are still important today (hunting and fishing, cattle grazing, gravel digging). New products and services that are marketed are particularly forest education services to the public, environmental services and the erection of biomass-based village heating systems. The examples of nature conservation services and village heating systems show that forest owners find ways to market new services from the forest. In the case of district heating, in Austria especially farm forest owners' co-operatives do not only provide wood chips but run the plants themselves and thus benefit directly from the value added produced. Although the income from NWFPS in Austria is still almost negligible (without considering bio-energy), there seem to be high latent potentials. Barriers to innovativeness and entrepreneurship in the field of new products and services are found as follows: timber-dominated education, missing entrepreneurial orientation in education, mental barriers of forest owners to new forest uses (services), farmers' focus on agricultural production, missing income interests of „new“ or urban forest owners, and a generally limited entrepreneurial orientation of owners (most owners are only interested in secure capital investment; hunting etc.) (see also the Austrian country report in course of COST Action E30).

It can be said that the innovativeness of the Austrian forest sector has improved in the past. Within forestry, the larger forest holdings are innovative comparable to other sectors in Europe, but smaller forest holdings lack strongly behind. Rationalisation was a big theme in the recent decades but particularly radical innovations are hardly found. The institutional system does not effectively support radical innovations, however, is strong in supporting the diffusion of certain selected innovations such as bio-energy or forest educational services (Rametsteiner and Kubezko, 2003). The wood-processing industries have gone through a consolidation phase, with decreasing numbers of mills and larger production volumes. Recent efforts by these traditional industries have focused on opening up new markets and new sources for raw material. A range of product concepts was developed to a more industrial and standard type of production, including laminated beams by sawmills and prefabricated houses.

The forestry and forest-based industry sectors are very weakly connected to the Austrian innovation system (regarding the forestry innovation system see Rametsteiner and Weiss, 2006a) and so are the related policy documents of the sector, including the field of renewable energy.

This country report was elaborated following the common guidelines for the COST E51 Phase I Country Reports and following step 1 (important innovation areas and relevant documents) and step 2 (document analysis). The documents were analysed by Anja Bauer (Forest Policy, Innovation Policy and Rural Development Policy), Gerald Berger (Sustainable Development Policy), Gerhard Weiss (Regional Development Policy), and Klaus Kubezko (Renewable Energy Policy). The final editorial responsibility lay with G. Weiss.

Six of the envisaged seven policy areas are covered in the report:

Policy area	Document
1 Forest policy	Austrian National Forest Programme
2 Forest Based Sector Policy	- <i>not analysed</i> -
3 Innovation Policy	Austrian Reform Programme
4 Rural Development Policy	Austrian Programme for Rural Development – Guidelines for Forestry Measures
5 Regional Development Policy	Austrian Strategic Reference Framework
6 Sustainable Development Policy	Austrian Strategy for Sustainable Development
7 Renewable Energy Policy	Draft Austrian Biomass Action Plan

8. For the forest policy area, as suggested for all countries, the NFP document (Austrian Forest Programme) was analysed which was finalised in 2005.
9. For the forest sector, no policy process nor document exists, this is why there is no analysis included in this report. There is an ongoing process led by the industry as part of the Forest-Based Sector Technology Platform, within the Austrian Support Group, but still without document.
10. As suggested for each country, for analysis of the innovation policy in Austria, the NRP which was elaborated in 2005 was chosen as the central document.
11. For analysis of the Austrian rural development policy the guidelines for the forestry measures in scope of the Austrian Programme for Rural Development 2000-2006 was chosen (only forestry related measures).
12. For Austria, the National Strategic Reference Framework (Nationaler Strategischer Rahmenplan, STRAT.AT) from 2006 is analysed. This plan sets the frame for the implementation of the EU Structural Funds in Austria.
13. For analysis of the sustainable development policy in Austria, the Austrian Strategy for Sustainable Development document from 2002 was analysed, as suggested for those countries that already do have such a strategy.
14. In the policy field of renewable energy, the draft Biomass Action Plan, dating from 2006, was analysed.

Austria has a federal structure with nine provinces/federal countries. All documents have been prepared on and are valid for the national level. The federal countries have been involved in the preparation of the documents to different degrees and, according to the definition of competences in the Austrian constitution, the policies are implemented partly by the federal, partly by the provincial governments.

Public forest policy has a strong history and is firmly institutionalised in terms of policy documents and public institutions. The central policy document is the Forest Act with a number of ordinances. The so-called Forest Dialogue, a national forest programme (NFP) process, was carried out with broad participation of stakeholder groups in the years 2003 – 2005 and produced the Austrian Forest Programme (analysed in this report). This document gives a broad picture of the current status of the discourse in the policy field.

In the field of forest industries, current processes are under way, lead by the privately initiated Forest Technology Platform. A public policy document might eventually come out from these processes, however, until today no specific public policy exists for the sector.

The national policy process in the field of innovation is embedded in the European processes around the Lisbon agenda for jobs and growth. The Austrian Reform Programme for Growth and Employment (NRP), issued in 2005, was elaborated in a reform dialogue process in which also the social partners and the federal countries were included.

The Austrian Programme for Rural Development is an agricultural subsidy programme and is oriented at the EU Programme for Rural Development. Forestry support measures that were financed nationally before, have been included into this programme after Austria joining the EU. With its new orientation the CAP besides of traditional market measures places emphasise on measures for the development of rural areas.

The regional development policy of Austria is also well incorporated into the EU policies that largely co-finance measures that aim at this purpose. The Austrian document, called STRAT.AT (Nationaler Strategischer Rahmenplan Österreich), is prepared for EU co-financed measures but also include considerations for larger infrastructural measures that are financed solely on national basis. The regional development policy is oriented at the Lisbon strategy and the STRAT.AT has been coordinated with the NRP and with the social partners and the federal countries. The policy field of regional development is, in Austria, largely in the competency of the federal countries. The elaboration of the document was coordinated by the ÖROK, the coordination platform for regional planning and policy that exists on federal level.

The Austrian Sustainable Development Strategy is an attempt to approach sustainable development policy strategically: The strategy defines long-term policy goals, includes measures for vertical and horizontal integration and outlines a monitoring and review process. The SD Strategy process is coordinated by the Federal Ministry of Agriculture, Forestry, Environment and Water Management. Because sustainable development requires horizontal integration efforts, all ministries are requested to include sustainable development policy into their public policy-making. The policy coordination process for sustainable development in Austria comprises several committees and councils that not only involve societal stakeholders, but also inform the federal government and parliament about the implementation of the SD Strategy: “Committee for a Sustainable Austria”, “Forum Sustainable Austria” and “Austrian Council for Sustainable Development”.

Currently, like in many other countries, climate change policy is the most intensively discussed topic regarding SD policy-making. As climate change mitigation cuts not only across many policy fields (e.g. energy, transport, industry, agriculture, waste, etc.) but also involves long-term planning, strategic policy approaches play an important role. Therefore, Austria has also developed a climate change strategy with the main goal to meet its Kyoto targets.

Renewable energy is a policy field that is mainly dealt with by the ministry of agriculture, forestry and environment in its various fields of competences from agricultural policy to environmental policy. Energy as a general topic is mostly dealt with in the ministry of economics and labour. Technological issues related to renewable resources are in the competences of the ministry of transport, telecommunication and innovation. Recent developments show that there still is a lack of clear division of labour and additional complexity is added by setting up a climate fund, which will also include issues related to renewable energy.

2 Important innovation areas and policy documents

2.1 Currently important innovation areas in the country

The assessment of the most important innovation areas was done by the national COST E51 team and was oriented at currently important research or practice projects.

Table 2: Innovation areas - Austria

Type \ Area	Territory based services	Value added chain
Product	<ul style="list-style-type: none"> o Forest education for public (BA), esp. for special target groups, e.g. seminars for managers, team building seminars o Outdoor activities, e.g. adventure trips, Mountain Bike Routes (EA) 	<ul style="list-style-type: none"> o Bio-energy (BA) – biogas/ biofuel (EA) o Wood composites (EA) o Speciality products from chemical substances (lignin) (EA)
Process		<ul style="list-style-type: none"> o Logistics optimization (EA) o Prefabricated and modular construction (BA); additional components: regional value added chains and ecological orientation, trend towards solid wood panels
Marketing method	<ul style="list-style-type: none"> o Marketing of nature conservation services o Internet platforms for marketing services 	<ul style="list-style-type: none"> o Certification o "Laubholz-Submission" – Joint auctioning of high-quality hard-wood timber (BA)
Organisational model	<ul style="list-style-type: none"> o Forest owners' cooperation for nature conservation 	<ul style="list-style-type: none"> o Biomass cooperatives Cooperation of forest owners with saw-milling (EA) o Cooperation of farmers with large energy suppliers (EA)

2.2 Specification of documents to analyse

The following documents were chosen by the national COST team for analysis, following the recommendations of the COST guidelines.

Table 1: Documents for Task 1: Please list the relevant documents

<p>Forest Policy (Regional or National Forest Programme): Document: <u>Österreichisches Waldprogramm (Austrian National Forest Programme)</u> Publication Date: 2006 (adopted 5 Dezember 2005) Website: http://www.walddialog.at/filemanager/list/16026/ Supplementary documents:</p> <ul style="list-style-type: none"> o Arbeitsprogramm zum Österreichischen Waldprogramm 2005 (Nov. 2005) (Working Programme for the Austrian Forest Programme 2005) o Arbeitsprogramm zum Österreichischen Waldprogramm 2006 (Oct. 2006) (Working Programme for the Austrian Forest Programme 2006)
<p>Forest Based Sector Policy (Sector Policy Strategy), if any:</p>

<p>Document: - Publication Date: - Website: - Supplementary documents: -</p>
<p>Innovation Policy (Regional or National Reform Programme): Document: <u>Das Österreichische Reformprogramm (Austrian Reform Programme) (Part I, Part II, Part III)</u> Publication Date: October 2005 Website: http://www.austria.gv.at/site/4889/default.aspx Supplementary documents: No</p>
<p>Rural Development Policy (Regional or National Rural Dev. Programme, Forestry Part): Document: <u>Sonderrichtlinie für die Umsetzung der „Sonstigen Maßnahmen“ des Österreichischen Programms für die Entwicklung des ländlichen Raums 21.200/50-II/00</u> Publication Date: 27 July 2000 Website: http://land.lebensministerium.at/article/articleview/43757/1/4960 Supplementary documents: Name and reference number</p>
<p>Regional Development Policy (Regional or National Regional Dev. Programme): Document: STRAT.AT – Nationaler Strategischer Rahmenplan Österreich 2007-2013 Publication Date: 27.10.2006 Website: http://www.oerok.gv.at/ Supplementary documents: Name and reference number</p>
<p>Sustainable Development Policy (Regional or National Sustainable Dev. Strategy): Document: <u>Die Österreichische Strategie zur Nachhaltigen Entwicklung (Austrian Strategy for Sustainable Development)</u> Publication Date: April 2002 Website: http://www.nachhaltigkeit.at/strategie/pdf/strategie020709_de.pdf Supplementary documents: Indikatorenbericht 2006</p>
<p>Renewable Energy Policy (Regional or National (renewable) Energy Strategy): Document: <u>Nationaler Biomasseaktionsplan für Österreich (?) (Begutachtungsentwurf)</u> Publication Date: 21.9.2006 Website: http://umwelt.lebensministerium.at/filemanager/download/17863/ Supplementary documents: Name and reference number</p>

Table 3: Evaluation documents for Task 2

<p>Rural Development Policy (Regional or National Rural Dev. Programme, Forestry Part): Evaluation documents: Up-dated Mid-term Evaluation Publication Date: 2005</p>
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3 Austrian Forest Policy

The Austrian Forest Programme is analysed for the forest policy area. This document is the outcome of the two-years NFP process in Austria, so-called “Walddialog”. Besides of the central policy document in Austria – the Forest Act – it is the newest comprehensive policy document, being elaborated by a broad participation process and covering all possibly relevant areas and issues. It mirrors well the current policy discourse, gives a general guidance for the public administration but of course is not binding. In Austria, forestry is in federal level competence. In practice, the legislation is done on federal level, the implementation is decentralised on provincial level.

3.1 Part A – General description

Part A - General document information

Name:	Austrian Forest Programme (Österreichisches Waldprogramm)
Adoption: Please mark by whom and at which level the document is adopted	<input type="checkbox"/> Parliament <input type="checkbox"/> Government <input type="checkbox"/> Ministry: _____ <input checked="" type="checkbox"/> Others: Round Table – the decision-making body of the forest dialogue process <input type="checkbox"/> No formal approval Level: <input checked="" type="checkbox"/> National <input type="checkbox"/> Regional <input type="checkbox"/> Local Adoption date: 5 December 2005
Validity period:	From 2006 on, no end specified
Revision:	Revision is generally foreseen but process and date is undetermined Regular revision of Working Programme
Monitoring/ Evaluation:	Evaluation is generally foreseen but process and date is undetermined
Related documents:	Arbeitsprogramm zum Österreichischen Waldprogramm (Working Programme for the Austrian Forest Programme) 2005 (11/2005) Arbeitsprogramm zum Österreichischen Waldprogramm (Working Programme for the Austrian Forest Programme) 2006 (10/2006)
Geographical scope:	<input checked="" type="checkbox"/> National <input type="checkbox"/> Regional; name: _____ <input type="checkbox"/> Local, name: _____
Budget:	€ 50.000 for the process (formulation phase) No own budget for the implementation There are three categories of financing for measures: <ul style="list-style-type: none"> ▪ Financing by current budget of leading or cooperating actors ▪ Financing has to be clarified ▪ Financing is open
General description of contents as written in document	
Objective of the document	The overall aim of the Forest Programme is to give guidance for the work of forest policy and all forest relevant institutions in order to balance ecological, economic and societal components of Austria's forests. Altogether the Programme identifies 52 goals.
Priorities	The Programme defines 7 action areas (Handlungsfelder): <ol style="list-style-type: none"> 1. contribution of the Austrian forest to climate protection; 2. health and vitality of Austria's forests; 3. productivity and economic aspects in Austria's forests; 4. biological diversity in Austria's forests; 5. protection functions of Austria's forests; 6. social and economic aspects of Austria's forests; 7. Austria's international responsibility for sustainable forest management

Structure	<p>The Programme consists of 5 chapters: 1. Context, 2. Action Areas (Handlungsfelder); 3. Indicators; 4. Working Programme; 5. The Austrian Forest Dialogue, and an Annex.</p> <p>The most important part is chapter 2 'Action Areas'. Altogether 7 action areas are defined (see above 'priorities'). The first six action areas are deducted from the Paneuropean criteria for sustainable forest management of the MCPFE.</p> <p>Each Action Area starts with a description of the 'current status' (Ist-Zustand) including trends and challenges. Further, 'principles and goals' (Prinzipien und Ziele) are declared, and 'measure areas and measure bundles' (Maßnahmenbereiche und Maßnahmenbündel) are formulated. Concrete measures for each measure area and measure bundle are formulated in the regularly updated Working Programmes.</p>
Measure Areas	<p>The Forest Programme itself defines measure areas and measure bundles (see above under priorities), which are rather general. Concrete measures are then formulated in the Working Programmes. Measures are of very different nature, some measures are concrete individual projects, others are more guidelines and recommendations for other processes and programmes.</p>
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: Partly integration in the new Rural Development Programme 2007-2013: some measures will /are determined to be financed through the RDP 2007-2013 <input type="checkbox"/> New or adapted regulations/laws; name: <input checked="" type="checkbox"/> New or adapted informational campaigns/instruments; name: e.g. Public relation campaigns for wood <input checked="" type="checkbox"/> New or restructured institutions/organisations; name: newly established: Waldforum; Österreichische Bündnisplattform zur Stärkung des internationalen forst- und holzwirtschaftlichen Know-how Transfers (Sommerauer); Forest-based Sector Technology Platform – National Support Group Austria <input checked="" type="checkbox"/> Implementation in forest policy
General comment:	<p>Further sources: Consultation with Ralf Nordbeck (ongoing EU FP6 project GoFor)</p>

3.2 Part B – Integration of innovation

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: competitiveness

	<p>Further comments on overall innovation orientation of the document: Also such parts of the document that deal with economic and social issues and other societal demands towards the forest, hardly include the terms or concepts of innovation and market-orientation. When it comes, for instance, to tourism, the conflicts are more strongly discussed than the market opportunities. (p. 110f) (GW)</p>
<p>Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)</p>	<p> <input type="checkbox"/> No relevance at all <input checked="" type="checkbox"/> Marginal issue <input type="checkbox"/> One issue among others <input type="checkbox"/> Important issue <input type="checkbox"/> Central issue </p> <p>Comments: If considering that innovation and related aspects are mentioned here and there in the document, it could be seen as an issue among others; however, as at no place in the document it is discussed explicitly as an issue, the mark is set to "marginal" here (GW).</p>
<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>) <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>) </p> <p>Comments: Innovation is rather seldom mentioned in the document. The term is used in context of the economic development of the forestry sector and the increase of the value added of the sector. Directly addressed is innovation within Action Area 3 as an issue that is of special interest for forest enterprises. One paragraph rather generally tackles the following aspects concerning innovation: relation between innovation, value added and the exploration of new markets; potential for value added is influenced by the spectrum of forest resources oriented thinking; orientation at the needs and interests of consumers and experiences from other sectors and knowledge areas. The development of services is mentioned as an important issue in relation to innovation. The paragraph is very general, does not identify concrete problems or proposes any measures (p.72f).</p> <p>Innovation is mentioned shortly in other contexts:</p> <ul style="list-style-type: none"> o Innovation and the long silvicultural and cultural traditions in Austria; resp. modern forest management and forest traditions are complementary elements of political strategies: The knowledge of past generations is an important base for further developments in the sustainable forest management (Action area 6, p.113). o High importance of applied research and product research (p.121) o It is important for the competitiveness to invest in innovative products, esp. concerning the EU eastern enlargement. <p>Some goals relate to innovation (see below) One principle concerns innovation:</p> <ul style="list-style-type: none"> o Principle P24: Use of all relevant sources of knowledge including forest historical experiences as essential element of innovations of forest-related policy areas <p>Three indicators are related to innovation:</p> <ul style="list-style-type: none"> o Indicator 55: Number and area of cross-sectoral pilot

	<p>projects</p> <ul style="list-style-type: none"> ○ Indicator 56: Gross domestic expenditures for research and development (% of GDP) ○ Indicator 60: Description of strategies and pilot projects with integrative approach for employment and economic optimization (rural development) per region (Bundesland)
<p>Understanding of innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1</p>	<ul style="list-style-type: none"> <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 <p>Comments: This question is hard to answer because innovation is seldom mentioned and not specifically discussed in the document. As there are no specific measures elaborated that belong to a systemic understanding, it is assumed that the text follows a traditional understanding. For instance, in the part on education and training, practically no reference is made to knowhow and innovation transfer. Systemic elements are here and there mentioned in the text, such as "frame conditions for innovative forest sector" or "modern knowledge management", p. 122. However, also from the practical knowledge of the sector, and from knowledge about the sector's policy on research and development, the mark is set "traditional S&T with systemic elements". (GW)</p>
<p>Goals and objectives: The following goals relate to innovation:</p> <ul style="list-style-type: none"> ○ Goal 20 (Action area 3): Development of local strategies on the basis of public-private partnerships for employment security and innovation (p.76) ○ Goal 39: Improving the frame conditions for an innovative forest sector ○ Goal 45: Forest culture: Innovative use of traditional and historical knowledge as well as social and cultural aspects of sustainable forest management,... 	
<p>Issues, problems and related topics: While innovation is addressed very generally, the document more often takes the issue of new markets, what can be connected to innovation:</p> <ul style="list-style-type: none"> ○ New markets (Hoffnungsmärkte) for niche products and new services (e.g. supply of drinking water; specific management of special biotops, recreation facilities; specific tourism offers; protection against natural hazards; marketing of hunting rights): The main problem identified is that there is hardly economic benefit out of these products and services, partly there is the problem of public goods <p>Due to administrative reforms, restructuring measures and the establishing of new organisational forms (forest owners' associations, etc.) there is innovation potential for the marketing of forest products and services. However so far hardly attractive business models are developed or specific markets identified (p.68).</p> <p>The use of traditional forest knowledge as element for innovations is addressed several times in the document.</p> <p>Related topics: The Programme identifies the following problems and challenges concerning the economic dimension of forestry:</p> <ul style="list-style-type: none"> ○ Decreasing value added - Increasing the value added in forestry as a challenge ○ Decline of the economic potential of forestry ○ Pressure for rationalization ○ Increasing demand by society for multifunctional purposes; but no or little economic benefit out of these demands; challenge to develop valuation and payment models for those services/goods ○ Increasing the use of wood /substitution of fossil sources <p>Several principles and goals concern the economic development /competitiveness of the sector:</p>	

- o Principle 10 calls for an increase of the competitiveness of the wood-, pulp and paper industry as well as value added firms
- o Principle 22: Optimization of sustainable forest management as well as wood processing
- o Principle 23: Improvement of the value added through cooperations between forestry and tourism and related sectors
- o Goal 15: Optimization of the value added chain
- o Goal 17: Improvement of the value added by diversification, new markets and promotion of new income sources

Innovation areas:

The document names various innovation areas although it does not directly refer to innovation, but to potential for higher value added of the sector, securing income and employment, etc.:

- o Biomass as energy source is named quite often in various contexts; e.g. contribution to climate protection, economic aspects of forestry...; biomass as energy source is an issue of high relevance
- o Cooperation: increasing horizontal cooperation; lack of vertical cooperations; vertical cooperation as mean to improve innovation capabilities identified (p.75)
- o Water services (Wasserdienstleistungen)
- o Potential in hunting
- o Potential in recreational services
- o Nature protection services
- o Mechanisation (Rationalisation)
- o Potentials in using forest by-products, e.g. branches, leafs, needles, bark for the development of materials and chemicals
- o Regional use of large diameter wood / over mature timber (Starkholz)
- o Potential in touristic value added
- o Services and non-wood forest products (p.113)

As possible research priorities the intensified use possibilities for wood, use of wood differentiated to wood types, new solid wood products and wood refinement are named.

General comment:

List research needs you identified, they might be taken up in phase II of COST E51
Name further reference sources used

Part B - Innovation Support Measures

Innovation support measures <i>Consult classification</i>	Research and Development	Measure bundle 3.3.5 Promotion of research and development related to the use of wood Working Programme 2006: Mobilisation of raising and use of biomass under economic aspects: Implementation of pilot projects (Waldverbände, BOKU, BFW, L&FBÖ) (107)
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<p><i>in chapter 2.2.2</i></p>	<p>Diffusion of innovation</p>	<p>A clear focus on the promotion of the diffusion of biomass for energy production is identifiable: The following measures related to biomass for energy productions are proposed:</p> <ul style="list-style-type: none"> o Extending financial support (BMLFUW, L&FBÖ) (110) o Consulting service (LK, Waldverbände, L&FBÖ, FHP,Länder; BMLFUW)(111) o Event on biomass from forestry o Information and consultation regarding improving logistics in the area energy from wood biomass (collecting information, information folder, giving information material to extension services, information on regional contracting partnerships, financial support for logistic improvements) (FHP and others) (313, 314, 315, 316, 317) o Investigation of potential (3.2.1) o Improvements in logistics (research, consulting service, financial support) (3.2.2) <p>Further support measures are proposed for the diffusion of two service areas - nature protection and tourism services. Nature protection contracting (Vertragsnaturschutz):</p> <ul style="list-style-type: none"> o Extending existing programmes for nature protection contracts, information on best practices, product development , marketing, acquisition, criteria for assessing nature protection services (404) <p>Tourism - Improving and increased use of tourism relevant infrastructures by forest owners:</p> <ul style="list-style-type: none"> o Collection of best-practice examples, list of advisers (603) o Market analysis (604) o Product development (605) o Awareness raising in tourism sector (606) <p>Consulting service</p>
	<p>Strengthening the knowledge base</p>	<p>In Action Area 3, measure bundle 3.1.1 calls for the analysis and adaptation of the job description (Berufsbild), education and further training in the sector</p> <p>For measure bundle 3.1.6: Education and further education of forest owners and employees the following measures are specified in the Working Programme:</p> <ul style="list-style-type: none"> o Advanced training course at the HBLA for forestry (BMLFUW, Länder) (301) o Coordination of current additional training courses concerning management, technology, environment, etc. and possibly new offers (Ausschuss forstlicher ArbeitnehmerInnen; BMLFUW) (302) <p>Information activities for academic and non-academic education for increasing the attractiveness of jobs in forestry and forest sector; specific campaigns for wood mobilisation esp, for new forest owners (FHP, BMLFUW) (309)</p>

	<p>Strengthening interaction</p>	<p>In the forest programme the following measure bundles aim at strengthening interactions within the sector and with other sectors:</p> <ul style="list-style-type: none"> ○ 3.1.4 Securing and increasing of existing sources of income: names among other measures the promotion of forest owners' co-operations (Waldbesitzervereinigungen) ○ 3.1.6 Securing and increasing of wood production and supply names among others the promotion of forest co-operations (forstliche Zusammenschlüsse), of joint marketing of wood ○ 6.2.1 Development and support of partnerships/co-operations and contractual agreements with regard to touristy use of forests. <p>In the Working Programme 2006 the following concrete measures are proposed:</p> <ul style="list-style-type: none"> ○ Financial support for dynamically developing cooperations from the budget of the Rural Development Programme 2007-2013 (BMLFUW) (305) ○ Analysis of cooperation projects with role model character (BMLFUW, LKÖ, Länder) (306) ○ Establishing a competency network (Kompetenznetzwerk) "forestry" consisting of Waldverbänden and forest enterprises (WV, L&FBÖ) (308) ○ Development of a tourism-forestry network (609) <p>Further development of co-operations of all actors along the value added chain</p>
	<p>Demand creation</p>	<p>Demand creation for the use of wood is addressed by the following measure bundles:</p> <ul style="list-style-type: none"> ○ 3.3.1 Supportive regulations /rules in the procurement and biddings ○ 3.3.4 Promotion of wood sales, marketing and public relation for wood and marketing of wood products with certificates <p>In the Work Programme 2006 one measure aims at demand creation for wood in general: Marketing and public relation for wood: extending existing image campaigns and marketing projects for wood; strengthening of wood in contracting and procurement.</p>

	Improving frame conditions	<p>The Working Programme aims at improving frame conditions for biomass use for energy production on the one side and for the commercialization of forest services on the other side.</p> <p>Measures supporting energy from biomass:</p> <ul style="list-style-type: none"> o Influencing the negotiation process for a green electricity regulation (Energieagentur; BMLFUW) o Support of existing programmes for energy wood demand (information, awareness raising, education and further education of all actors in the value added chain) <p>Measures concerning the commercialization of services:</p> <ul style="list-style-type: none"> o Market observation and comparison of valuation methods (for e.g. nature protection services above the legal rules) (601) <p>Development of economic valuation approaches for services of forest management (universities, others) (602)</p> <p>For the increasing use of wood in general the following measure bundles aim at improving the frame conditions:</p> <ul style="list-style-type: none"> o 3.3.2 Evaluation of building regulations and improvements for the use of wood o 3.3.3 Adaptation of support rules, esp. in housing aids, incentives for the use of wood
Comments		
Priorities	<ul style="list-style-type: none"> • Priorities can be seen in the diffusion of innovations, e.g. biomass for energy productions; services (in a very general sense) and cooperations • In general the promotion of the use of wood is of high relevance but with no reference to innovations in the area 	
Assessment of overall relevance	<p>Innovation support measures generally are of low importance in the document, especially regarding innovations new to the sector. Other measures might contribute to the strengthening of the capabilities of the sector but are not intended to do so.</p>	
Promotion of innovation	<p>As innovation support is not very much promoted by the document, the relevance for the overall promotion of innovation is not very high. ...</p>	
General comment:	-	

Part B - Cross-sectoral coordination

Policy formulation	
Co-ordination with other processes and documents	Other processes such as the sustainable development strategy are mentioned but there is no formal coordination mechanism.
Administrative Co-ordination:	<input checked="" type="checkbox"/> between different sections/departments within the same ministry; specify: ____ <input checked="" type="checkbox"/> between different ministries, specify: <u>BMLFUW, BMWA, BMF</u> <input checked="" type="checkbox"/> between ministries and other public organizations / agencies, specify: <u>e.g. provinces, research organisations, etc.</u> <u>Comments:</u> Three bodies were involved in the formulation: 1. The coordination group (involving different sections of the Federal Ministry of Agriculture, Forestry, Environment and Water Management); role: overall coordination of the process; de facto overall coordination was only done by the forestry section of the Ministry 2. Round Table (Runder Tisch) (involving administrative

	<p>representants from forestry section of ministry, other sections of the ministry and other ministries, different stakeholders, representants from regions (Länder) and communes, altogether: 35 institutions); role: adoption of the content of the Forest Programme</p> <p>3. Three Modules (Fachmodule) (Waldschutz/Schutzwald); Wirtschaft; Gesellschaft und Umwelt) (involving representants from forestry section of ministry, different stakeholders, representants from regions (Länder) and communes; altogether over 80 institutions; involvement to different degrees); role: discussion and formulation of the content of the Forest Programme)</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: <u>Energy agency</u></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> Stakeholders were active in the Round Table and the three modules (see above) of the Forest dialogue. The process was open to ALL interested groups (GW).</p>
Coordination mechanisms:	<p><input checked="" type="checkbox"/> Formal (central) coordination body; name: <u>Round Table</u></p> <p><input checked="" type="checkbox"/> Formal coordination process: forest dialogue</p> <p><input type="checkbox"/> Inter-sectoral working groups</p> <p><input checked="" type="checkbox"/> Inter-sectoral advisory body: Coordination group ?</p> <p><input type="checkbox"/> Formal mandatory consultation process</p> <p><input type="checkbox"/> Formal voluntary consultation process</p> <p><input checked="" type="checkbox"/> Informal consultations (please describe <u>between administration and stakeholders</u>)</p> <p><input type="checkbox"/> Others: ____</p>
Policy Implementation	
Responsible actors and their roles:	<ul style="list-style-type: none"> ▪ Round Table (involving administrative representants from forestry section of ministry, other sections of the ministry and other ministries, different stakeholders, representants from regions (Länder) and communes); role: monitoring of the implementation of the Forest Programme ▪ Forest Forum (Waldforum) (involving administrative representants from forestry section of ministry, other sections of the ministry and other ministries, different stakeholders, representants from regions (Länder) and communes); role: update and further specification of the Working Programme; monitoring of the implementation of the Forest Programme) ▪ Implementation is decentralised <p>Responsibles for the measures (Maßnahmenverantwortliche): The Working Programme assigns to each measure one leading responsible and one contributory responsible; role: implementation of the measures; Responsibles may include public and private organisations, e.g. ministry, interest groups, agencies (e.g. energy agency), research organisations (e.g. University of Natural Resources and Applied Life Sciences, Vienna)</p>
Level of delegation	<p><input checked="" type="checkbox"/> Decentralized, e.g.</p> <p><input checked="" type="checkbox"/> Central, e.g. ministry, public agency</p> <p><input checked="" type="checkbox"/> Outsourced to private actors</p> <p><input type="checkbox"/> Local, e.g. by municipalities</p> <p><input type="checkbox"/> Regional, e.g. by regional public actors</p>

	<input checked="" type="checkbox"/> Others: also to any other actor, also private, on voluntary basis. Practically to ALL participating actors. (GW)
General comment	-

4 Forest Sector Policy

There is no explicit public policy for the forest sector in Austria, nor does such a policy exist by the industry. In spite of the process around the Forest Sector Technology Platform (FTP), which is an active process in Austria, there is no specific document that could be regarded a central policy document for or of the sector. A national support group for the FTP has been formed recently.

5 Innovation Policy

As suggested for each country, for analysis of the innovation policy in Austria, the NRP was chosen as the central document. Besides of the various support programmes for the financing of R&D, the so-called Strategie 2010 of the Austrian Council for Research and Development and other policy documents dealing with research, development and innovation, the NRP is understood as a central document of the Austrian innovation policy, and economic development policy in general. Implementation is documented in annual progress reports – a First Implementation Report for 2006 exists.

5.1 Part A – General description

Part A - General document information

Name:	Austrian Reform Programme for Growth and Employment
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: 18 October 2005
Validity period:	2005-2008
Revision:	Yes, regularly revision is foreseen
Monitoring/Evaluation:	Annual Implementation Report – Monitoring of Progress, Evaluation by national actors and by European Commission; Accompanying evaluation by the Austrian Institute for Advanced Studies
Related documents:	Austrian Reform Programme for Growth and Employment – First Implementation Report 2006 National Action Plan for Innovation: http://www.bmwa.gv.at/BMWA/Themen/Wirtschaftspolitik/Technologie/Innovationspolitik/111_plattform_innovation.htm European Charter for Small and Medium Enterprises: http://europa.eu.int/comm/enterprise/enterprise_policy/charter/charter2005.htm National Action Plan for Social Inclusion: www.bmsg.gv.at (see chapter on „Fachbereiche/Sozialpolitik/Soziale Eingliederung (NAP)“ Pension Strategy Report 2005: www.bmsg.gv.at (see chapter on „Fachbereiche/Sozialversicherung/Strategieberichte“) European Pact for Youth: www.jugend.bmsg.gv.at Implementing Strategy „i2010“: http://www.bka.gv.at/informationsgesellschaft Austrian Research and Technology Report http://www.rat-fte.at/UserFiles/File/Strategie2010.pdf Position Paper 2010 of the Council for Research and Technological Development http://www.bmbwk.gv.at/medienpool/12586/ftb2005.pdf
Geographical scope:	<input checked="" type="checkbox"/> National <input type="checkbox"/> Regional; name: _____ <input type="checkbox"/> Local, name: _____
Budget:	There is no specific budget for this programme, as the programme lists/summarizes measures from different resorts /coordinates actions.
General description of contents as written in document	
Objective of the document	The overall objective of the document is to present a coherent sustainable growth and employment strategy for Austria on the basis of the EU Lisbon strategy and the EU integrated guidelines.

Priorities	The programme identifies seven strategic key areas for Austria 1. Sustainability of public finances 2. Labour market and employment 3. Research and development, Innovation 4. Infrastructure (including broadband) 5. Competition and SME action plan 6. Education and further training 7. Environmental technologies and efficient management of resources
Structure	The National Reform Programme comprises three parts: Part I describes the strategic orientation of the Austrian Reform Programme for Growth and Employment. Part II gives an overview of new measures to be implemented, mainly in 2005 and 2006. Part III provides detailed information on the individual measures.
Measure Areas	Section II of the Austrian National Reform Programme defines measures along the 24 Integrated Guidelines of the European Commission. These Guidelines and measures are not linked to the seven strategic key areas within this document. The linkages between the strategic key areas and the guidelines and consequently the measures are illustrated only in the First Implementation Report 2006 (page 6). This was used to structure explicit priorities, high level goals and measures of the Austrian Reform Programme. In Section II of the Austrian Reform Programme no indicators are used as only measures are listed. Altogether the Programme lists 93 measures (after analysis EUROSTAT) in the areas macroeconomic policy, microeconomic policy and employment policy. Macroeconomic measures include for example the 2005 Tax Reform, the Harmonisation of the pension system, the Administration Innovation Programme. Microeconomic measures include among others the research billion, the reform of the Austrian research incentive system, technology-transfer programmes, adjustments in vocational training, the broadband initiative, promotion of renewable energy, revision of competition law, administrative procedures offensive, infrastructure initiative. Employment policy measures are for example Employment Promotion Act, programme on female employment, measures for youth employment, Labour-Market Reform Act, fight against pseudo-companies and undeclared work, measures to adapt the educational system.
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 type="checkbox"/> New or adapted informational campaigns/instruments; name: <input type="checkbox"/> New or restructured institutions/organisations; name: <input type="checkbox"/> Implementation in forest policy: No
General comment:	Measures in the Reform Programme were already planned and consequently they were followed-up. So the implementation of these measures is not distinctly ascribable to the Reform Programme. Increased budgets for infrastructure, research and broadband (p. 3) were initiated already before or parallel to the NRP process (GW).

5.2 Part B – Integration of innovation

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
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	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: competitiveness, entrepreneurship
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: One strategic key area is specifically named "Research and Development, Innovation", another key area "Infrastructure" deals with innovation relevant issues including ICT. Also other issues that are not directly innovation relevant – such as public finance, employment, competitiveness, education and environment – are tackled in other key areas.	
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 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: It is one goal of the Austrian Reform Programme to increase the research and innovation performance of the Austrian economy. A range of measures are introduced. The main action is the increased investment in research (Forschungsmilliarde) to reach the 3% goal in 2010. Further goals refer to infrastructure, education, LLL, etc.	

<p>Understanding of innovation policy</p> <p>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 <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 </p> <p>Comments: It is not so easy to decide here between point 2 or 3. The document says under "Core Area 3: Research and Development, Innovation" that not only technical innovations are important, but research and innovation is particularly important: "For growth in advanced industrial countries, innovations, not only technical but also social and organisational innovations, play a key role. For Austria, reinforcing research and innovation is particularly important ...". (...) "The launch by the Federal Government of the Research billion initiative (Forschungsmilliarde) in the spring of 2005 underscores the determination of economic policymakers to further develop Austria as a location for innovation. The focus of research and innovation policy is generally on improving research and innovation performance and increasing the effectiveness of the overall national research and innovation system. (p. 11). Research and innovation are closely connected in the last sentence as being part of one system, but research has the most prominent role here. Under "Core Area 6: Education and Further Training" the text starts as following: "The quality of human capital has a direct influence on competitiveness and is also the basis for the ability to carry out technical, social and organisational innovations. Knowledge, qualifications and innovative action are - together with research and development and infrastructure - the most essential factors in achieving a long-term dynamically growing economy." (p. 15) This is an important part of the innovation system but the education chapter is then rather oriented towards full employment than towards innovation. The document in sum does not cover all areas relevant for a systemic innovation support such as institutional framework, extension services etc. In sum, the strongest signal is in R&D. (GW)</p>
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Goals and objectives:

It is one goal of the Austrian Reform Programme to increase the research and innovation performance of the Austrian economy. A range of measures are introduced. The main action is the increased investment in research (Forschungsmilliarde) to reach the 3% goal in 2010.

Issues, problems and related topics:

The most prominent issues are, according to the text, the following:

"For Austria, reinforcing research and innovation is particularly important since, until now, the share of value added accounted for by technology- and knowledge-intensive products and services has been relatively small for a high-income country. Such products and services are not only the best basis for creating long-lasting competitive advantages but are also associated with above-average growth potential and give impetus to productivity trends in other areas of the economy. Devoting 2.5% of GDP to research in 2006 and 3% in 2010 is a quantitative objective that performs an enormously important signalling function for the status of Austria as a business location. The launch by the Federal Government of the Research billion initiative (Forschungsmilliarde) in the spring of 2005 underscores the determination of economic policymakers to further develop Austria as a location for innovation. The focus of research and innovation policy is generally on improving research and innovation performance and increasing the effectiveness of the overall national research and innovation system. The aim is to step up research and innovation activities in the university and non-university research sector and in the business sector, to extend technology and know-how transfers, to promote national and international research, technology and innovation cooperation, to increase the number of technology-oriented start-ups, to improve innovation output and to exploit firms' development and growth potential" (p. 11).

5 Action Areas are given under the core area:

- The Research Billion/ Research Offensive
- Designing Portfolios of direct funding and programmes; co-operation between science and business and supporting business in the innovation process

<ul style="list-style-type: none"> - Tax incentives for R&D and framework conditions for innovation funding - Human resources and education system - Market conditions conducive to innovation
Innovation areas: No specific innovation areas are named in the document
General comment: -

Part B - Innovation Support Measures

Innovation support measures <i>Consult classification in chapter 2.2.2</i>	Research and Development	<p>The Research Billion: Appropriation of an additional €1 billion by the Federal Government for research in Austria; these funds will be employed in accordance with the principles of efficiency and effectiveness. (not only for enterprises but also a lot of funding for public research)</p> <p>SME offensive: Tax concessions for contract research to enable a wide SME base to take up research activities (2005 Growth and Employment Act): retroactive to 1 January 2005, an allowance or, alternatively, a tax bonus for research work contracted may be claimed as well as for experimental development work that meets the Frascati definition up to a contract value or €100,000 per year.</p> <p>Harmonisation, increasing the efficiency and flexibilisation of the system of subsidies as well as facilitating access to FTI assistance (harmonised subsidy guidelines, consolidation of programmes, co-ordination of instruments).</p> <p>Enhancement of strategic programmes. To support the structural change of the economy, special subsidies are provided for research and development of forward-looking technologies. Relevant programmes and platforms have already been initiated in the areas of embedded systems, nano-technologies, alternative propulsion systems, sustainability and security.</p> <p>Promotion of SMEs and technology-driven business start-ups. Special aid for highly ambitious innovations with high risk and technological "breakthrough potential".</p>
	Diffusion of innovation	No such diffusion measures are named in the programme

<p>Strengthening the knowledge base</p>	<p><u>Promotion of young scientists</u>: A key requirement in this context is the concentration of relevant promotion instruments including scholarship and trainee programmes, excellence programmes and awards in a small number of organizations, and the development of structured career planning for qualified researchers. In addition, the promotion of doctoral students is to be improved.</p> <p><u>Increase in the proportion of women in research</u>: This includes, among other things, the integration of equal opportunity in all relevant programmes and specific improvement of the ability to combine a research career with a family.</p> <p><u>Development of interactive relationships between research careers in science and in business</u>: This will be achieved, for example, by action aimed at more flexibility in the management of human resources as well as better combination of contents, e.g. in curricula.</p> <p><u>Enabling mobility for research workers externally and internally</u> (reduce barriers for international researchers): This involves better comparability of academic qualifications, improvement of relevant information and measures relating to bilateral social insurance agreements.</p> <p><u>Adjustments in vocational training</u>: Modularisation of the Austrian dual education system (apprenticeship plus school education), introducing more flexibility to trades requiring apprenticeship training and the qualification of the vocational trainers as a supplement to the measures named in Guidelines 23 and 24.</p>
<p>Strengthening interaction</p>	<p><u>Improved co-ordination and harmonisation of subsidies</u>, especially by federal actors (Federal Government, <i>Länder</i>). This includes, for example, the transnational promotion of activities (co-operation among businesses, education, counselling and coaching services).</p> <p><u>Enhancing competence where science and business interact</u>: This includes the promotion of strategic, multi-annual partnerships between science and business (centres, networks, laboratories; application-oriented basic research and industrial research) with the goal of a sustainable joint development of competencies.</p> <p><u>Technology transfer benefiting primarily SMEs</u>; encouraging co-operation between science and business and/or among businesses (with a main focus on SMEs) with the aim of improving the RTDI competence of Austrian enterprises, including especially SMEs.</p>
<p>Demand creation</p>	<p>Rigorous inclusion of the innovation aspect in the awarding of <u>public contracts</u>. This also includes more flexibility in the definition of requirements by public buyers with a view to allowing more innovative solutions and strengthening competence and the legal framework for innovative PPP Models (private public partnership models) in public administration.</p>

	Improving frame conditions	<p>Promotion of the <u>international integration of the Austrian innovation system</u>. This includes a greater international presence of Austrian cluster initiatives and active assistance for enterprises, especially SMEs, in preparing and participating in relevant EU projects.</p> <p><u>Continuing promotion of SMEs and innovative enterprises and/or business start-ups</u>.</p> <p>Improvement of the framework conditions for <u>venture capital markets</u> and increasing the share of investment in private equity and venture capital. This includes, above all, improved financing facilities as well as supporting the development of a "PE/VC culture".</p> <p><u>Ongoing co-ordination of direct and indirect promotion instruments</u>. This includes increasing the transparency and traceability of tax incentives for R&D.</p> <p><u>Raising competition intensity in markets for goods and services</u> while fundamentally maintaining consistency with other socio-political goals. This includes the removal of market access barriers in individual markets, simplification of the regulatory system and increasing market transparency.</p>
Comments: These measures are taken from core area 3 "RDI". More measures that might have an influence the innovation performance can be found in other measures areas of the Programme such as infrastructure or education.		
Priorities	Financing for both public and private research and development and innovation seems to be in the centre of the measures	
Assessment of overall relevance	Innovation is quite prominent in the document as it is one of the seven strategic key areas. As was shown above, a range of measures target at improving the innovation performance of the Austrian economy. Also other key areas are highly relevant for innovation such as infrastructure (e.g. ICT) or education.	
Promotion of innovation	The Promotion of innovation is an important goal of the document. The goal of the R&D rate and the research billion are explicitly supposed to have also symbolic value ("signalling", "underscores"): "Devoting 2.5% of GDP to research in 2006 and 3% in 2010 is a quantitative objective that performs an enormously important signalling function for the status of Austria as a business location. The launch by the Federal Government of the Research billion initiative (Forschungsmilliarde) in the spring of 2005 underscores the determination of economic policymakers to further develop Austria as a location for innovation. (p. 11)	
General comment:	-	

Part B - Cross-sectoral coordination

Policy formulation	
Co-ordination with other processes and documents	The text states the close coordination with the parallel process on formulating the strategic framework plan STRAT.AT (p. 8).
Administrative Co-ordination:	<input type="checkbox"/> between different sections/departments within the same ministry; specify: ____ <input checked="" type="checkbox"/> between different ministries, specify: ____ <input checked="" type="checkbox"/> between ministries and other public organizations / agencies, specify: Comments: Länder (federal countries)
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 checked="" type="checkbox"/> Other sector: <u>Science</u> : name most important organisations: _____ <input checked="" type="checkbox"/> Other sector: <u>Business</u> : name most important organisations: _____ Comments: -
Coordination mechanisms:	<input type="checkbox"/> Formal (central) coordination body; name: _____ <input checked="" type="checkbox"/> Formal coordination process: Reformdialog <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:	Implementation is undertaken by different ministries and agencies on a decentralized basis.
Level of delegation	<input checked="" 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	Monitoring is provided for; implementation is documented in the First Implementation Report 2006.

6 Rural Development Policy

For analysis of the Austrian rural development policy the guidelines for the forestry measures in scope of the Austrian Programme for Rural Development was chosen. This means, only forestry measures are included in the analysis, not all measures of the rural development programme. In fact, most of the former national subsidies for forestry were included in the rural development programme, when Austria joined the EU. The measures were adapted to the guidelines and further developed, however, still strongly mirror the former structure of forestry subsidies.

6.1 Part A – General Description

Part A - General document information

Name:	Sonderrichtlinie für die Umsetzung der „Sonstigen Maßnahmen“ des Österreichischen Programms für die Entwicklung des ländlichen Raums 21.200/50-II/00, Kapitel 6 Forstwirtschaft
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: _____ <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:
Validity period:	2000-2006
Revision:	After the current programme period ends a new Rural Development Programme for the period 2007-2013 will be implemented
Monitoring/ Evaluation:	Yes: mid-term evaluation 2003, update of mid-term evaluation 2005; a final evaluation will take place after the programme period has finished
Related documents:	
Geographical scope:	<input checked="" type="checkbox"/> National <input type="checkbox"/> Regional; name: _____ <input type="checkbox"/> Local, name: _____
Budget:	The total public cost of the Austrian Rural Development Programme is € 6896.074 Mio, including an EU contribution of € 3208.10 Mio from the European Agricultural Guidance and Guarantee Fund, Guarantee Section (EADDF/Guarantee). Only around 2% (€148,61 Mio.) of the total rural development funding is allocated to forestry.
General description of contents as written in document	
Objective of the document	The Rural Development Programme is one pillar of the Common Agricultural Policy of the European Union and aims at the maintenance and development of rural areas. With the reform of the CAP and the wider focus on rural development also forestry was integrated into the Union's rural development policy. Overall the main goal of the rural development policy is to maintain and develop rural areas in economic, social and environmental sense and to secure prosperity in rural areas. The Rural Development Programme targets structural disadvantages of rural areas, in particular of agriculture and forestry. This includes creating new employment possibilities and encouraging rural diversification. The chapter 6 forestry generally aims at maintaining and improving/sustainable development of the multifunctionality of the Austrian forests. Thus, all dimensions of forestry are targeted, including environmental, economic, social and protective functions. A wide range of quite unspecific goals are further formulated.
Priorities	See below measure areas

Structure	The chapter 6 forestry first defines general goals, then describes who is eligible for funding and the premises and execution of the funding. Then it describes in detail the supported measures including goals, funding object, eligible persons for funding, premises, extent and execution of funding.
Measure Areas	<p>The funding for forestry focuses on the essential ecological, economic and social role of forests (recognising their multifunctionality). Aid can cover the following broad measures:</p> <ul style="list-style-type: none"> • Maintenance and improvement of the economic and ecological value of the forests • Maintenance and improvement of the social value of the forests • Maintenance, improvement and rebuilding of forests with advanced protection and welfare effects • Access to forests, construction of forest roads • Processing, marketing of wood and biomass • Innovation and information • Creation of forest owners' associations • Restoring forestry production potential damaged by natural disasters and fire and introducing appropriate prevention instruments. • Maintaining and improving the ecological stability of forests <p>In addition, support may be granted for the afforestation of agricultural and non-agricultural land, provided that plantations are adapted to local conditions and compatible with the environment.</p>
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 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: projects
General comment:	-

6.2 Part B – Innovation orientation

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: diversification
	Further comments on overall innovation orientation of the document:	
Relevance of innovation: Please mark how much relevance is given to innovation in the document	<input type="checkbox"/> No relevance at all <input checked="" type="checkbox"/> Marginal issue <input type="checkbox"/> One issue among others <input type="checkbox"/> Important issue	

(one answer)	<input 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 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: -
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: As this is only one programme, the question cannot be answered fully. The focus of measures are strongly on investments for the diffusion of certain selected innovations. From this is derived that the traditional R&D view dominates. In addition, a range of systemic elements are included, but of minor importance, such as: cooperation, qualification, etc. (GW).
Goals and objectives: Measure 6 (6.2.6) 'Innovation and information' targets innovation in forestry directly. The measure is divided into an information part (Awareness raising and public relations for a multifunctional forestry) and an innovation part (Innovations and pilot projects for a multifunctional forestry). The first part contains no reference to innovations (although diffusion of innovations – indirectly). The second part targets innovation directly. The goals are: <ul style="list-style-type: none"> • Strengthening of the productivity and competitiveness of forestry • Improvement of information transfer, • Improvement of planning for the structuring of forestry in the rural area. Objects of funding are: <ul style="list-style-type: none"> • Development or implementation of regional structural concepts in rural areas • Realisation of demonstration projects aiming at the development and valorisation of forests in rural areas • Increasing the technological and development standards in rural areas. Although the measure is clearly targeted at innovations in forestry, goals and objects of funding are quite vague formulated and not specified. Also specific funding rules are missing. And when analysing the communications of national and regional governments about the funding programme, it is easily realised that the measure is not among the important ones. The measure "funding of demonstration and pilot projects" is hardly mentioned in the official information about the funding possibilities. For example, the governments of Upper Austria and Styria inform on their websites about the funding possibilities for forestry. Under the heading innovation and information only the measures for information are listed and specified. Thus, the programme explicitly includes support for innovations, for demonstration and pilot project, but these measures seem to play only a very minor role compared to the other measures within the overall funding of forestry within the Rural Development Programme. A further observation is that the measure is not further specified while for other measures very detailed funding rules are established and communicated.	
Issues, problems and related topics: Although innovation is not an explicit goal, some of the goals strongly approach the economic dimension and indicate at least an implicit/indirect connection to innovations. In goal 4 the sustainable safeguarding and improvement of rural areas, especially jobs, income, viability of agricultural and forestry firms and of the environment is stated and goal 7 includes improvement of further processing and marketing conditions for forestry	

commodities and their diversification. However, these goals are quite vague formulated and not further quantified.

In the official communication about the funding, the rather vague and unspecified goal "maintenance and sustainable development of the multifunctionality of the Austrian forests" is put in the very foreground.

The forestry chapter is partly targeted at improving the economic situation of forestry and rural areas. The other part is the ecological dimension of forestry. However, innovation does not seem to be considered as a main mean to reach competitiveness, employment and income security for the sector.

Innovation areas:

Besides the measure for innovations in forestry, the programme contains a range of investment measures that support the diffusion of specific products and processes. Within the framework of support of investments, a clear focus is on the diffusion of processes, especially technologies. Among the product innovations it is the diffusion of service innovations that is mainly supported. The supported services include recreational services and educational services. The diffusion of only one good is supported by the programme, namely investments to provide biomass. On the other side, several measures cover support for investments in technological equipment of the forest holdings. The main measure in the category organisational innovations is the support for the creation of forest owners' associations.

General comment:

Further sources: official communications on forestry subsidies, e.g. websites of Upper Austria and Styria on forestry funding opportunities.

Part B - Innovation Support Measures

Innovation support measures <i>Consult classification in chapter 2.2.2</i>	Research and Development	<p>Measure 6 (6.2.6) 'Innovation and information' targets innovation in forestry directly. The measure is divided into an information part (Awareness raising and public relations for a multifunctional forestry) and an innovation part (Innovations and pilot projects for a multifunctional forestry). The first part contains no reference to innovations (although diffusion of innovations – indirectly). The second part targets innovation directly. The goals are:</p> <ul style="list-style-type: none"> • Strengthening of the productivity and competitiveness of forestry • Improvement of information transfer, • Improvement of planning for the structuring of forestry in the rural area. <p>Objects of funding are:</p> <ul style="list-style-type: none"> • Development or implementation of regional structural concepts in rural areas • Realisation of demonstration projects aiming at the development and valorisation of forests in rural areas • Increasing the technological and development standards in rural areas. <p>Although the measure is clearly targeted at innovations in forestry, goals and objects of funding are quite vague formulated and not specified. Also specific funding rules are missing.</p> <p>And when analysing the communications of national and regional governments about the funding programme, it is easily realised that the measure is not among the important ones. The measure "funding of demonstration and pilot projects" is hardly mentioned in the official information about the funding possibilities. For example, the governments of Upper Austria and Styria inform on their websites about the funding possibilities for forestry. Under the heading innovation and information only the measures for information are listed and specified.</p> <p>Thus, the programme explicitly includes support for innovations, for demonstration and pilot project, but these measures seem to play only a very minor role compared to the other measures within the overall funding of forestry within the Rural Development Programme. A further observation is that the measure is not further specified while</p>
	Diffusion of innovation	<p>Besides the measure for innovations in forestry, the programme contains a range of investment measures that support the diffusion of specific products and processes. Within the framework of support of investments, a clear focus is on the diffusion of processes, especially technologies. Among the product innovations it is the diffusion of service innovations that is mainly supported. The supported services include recreational services and educational services. The diffusion of only one good is supported by the programme, namely investments to provide biomass. On the other side, several measures cover support for investments in technological equipment of the forest holdings. The main measure in the category organisational innovations is the support for the creation of forest owners' associations.</p>

	Strengthening the knowledge base	<p>Several measures aim at human resources development in forestry. Although not having the explicit objective of strengthening the capabilities for innovations, these measures contribute to an increase in knowledge and capabilities that may increase the propensity for future innovations in forestry. The measures for strengthening the capabilities of firms include:</p> <ul style="list-style-type: none"> ▪ Measure 6.2.5 - Verarbeitung, Marketing von Holz und Biomasse includes support for the participation in qualification measures for specialists for observation and supervision of wood markets (6.2.5.2.2.3.) (for waldbesitzervereinigungen and agrargemeinschaften) ▪ Measure 6.2.6 – Innovation and Information includes support for awareness raising and public relations, for participation in qualification measures, awareness raising and training for farmers, forest owners and others <p>Under measure 2.7 – ‘forest owners’ associations’ further support for qualification and co-ordinating measures is provided.</p>
	Strengthening interaction	<p>In addition, the programme provides support for the establishment of forest owners associations. Support is provided for the establishment, for planning and consultancy for the members, for qualification and co-ordination measures, for the establishment and execution of centres for intermediation, co-ordination and consultancy.</p>
	Demand creation	<p>Not in the scope of the programme</p>
	Improving frame conditions	<p>Not in the scope of the programme</p>
Comments		
Priorities	<p>Priority is given to the support of known products, services and techniques, i.e. the diffusion of innovations, whereby a lot of the supported products, services and techniques are already widely diffused in the sector</p>	
Assessment of overall relevance	<p>Although innovation is a single measure in the programme, it has not gained very much importance. For instance, it is hardly announced on web-sites or other information material that this measure exists. Much more attention is laid on the other measures.</p>	
Promotion of innovation	<p>Not very much relevance of innovation in the programme (see above). But it is the main funding programme for the sector</p>	
General comment:	-	

Part B - Cross-sectoral coordination

Policy formulation	
Co-ordination with other processes and documents	-
Administrative Co-ordination:	<input checked="" type="checkbox"/> between different sections/departments within the same ministry; specify: <u>Forestry section and Rural Development section</u> <input type="checkbox"/> between different ministries, specify: ____ <input type="checkbox"/> between ministries and other public organizations / agencies, specify: ____ <u>Comments:</u> not strongly coordinated (GW).
Stakeholder involvement	<input checked="" 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> informal consultation of forest owners' representatives.
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>forest owners interest groups</u>) <input type="checkbox"/> Others: ____
Policy Implementation	
Responsible actors and their roles:	Provincial forest authorities and chambers of agriculture.
Level of delegation	<input type="checkbox"/> Decentralized, e.g. <input checked="" type="checkbox"/> Central, e.g. ministry, public agency: BMLFUW <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: Landwirtschaftskammer or Landeshauptmann <input type="checkbox"/> Others: ____
General comment	-

6.3 Part C – Appraisal of effects

Part C - Appraisal of Effects - General Information

	Whole document (RDP)	Forestry Part
Total amount of funding	4.848,9	86,6
Total number of projects		23.958
Total number of beneficiaries		14.734
Average amount of funding per project	in €	3480
Median of project funding	in €	in €
Average amount of funding per beneficiary	in €	5658
Median of funding per beneficiary	in €	in €
General comment: For 2000-2004		

Please fill in table 10 for only for the forestry part of the Rural Development Programme 2000-2006. The categories refer to the classification of innovation support in chapter 2.2.2. Gathering data for these categories includes re-ordering of monitoring data. Participants who undertake this task will receive further special guidance.

Part C - Appraisal of Effects: Funding for private sector innovation

Support for	Research & development	Diffusion of innovation	Strengthening knowledge base	Strengthening interaction	Demand and Creation
Volume of funding in €	1.006.039	52.406.388	872.022	2.126.147	0
Share of funding in overall funding in %	1,2%	63%	1%	2,55%	0
Number of projects supported	39		935	181	0
Share of projects in all projects in %	0,16%		3,9%	0,76%	0
Average funding per project in €	25.796		933	11.747	0
Number	32		661	131	0

r of beneficiaries					
Share of beneficiaries in total number of beneficiaries in %	0,22%		4,49%	0,89%	0
Average amount of funding per beneficiary in €	31.439		1319	16.230	0
Priorities of funding	<p>High amount of funding for individual innovation projects. Innovation projects include:</p> <ul style="list-style-type: none"> o Pilotprojekt "Vom Harvester / Processorkopf / Waldort bis zum Holzverarbeiter" o Schonende hochmechanisierte Holzernte - Überbetrieblicher Einsatz vom Forstmaschinen o Fachexkursion o Automatisch öffnende Lastaufnahmeverrichtung o Pilotprojekt o Energie-Kleinanlagen o Entwicklung Christbaumfräse o Produktinnovationen für Starkholz o Pilotprojekt - Harvester o Stecklingsversuch o Holzlogistik Salzburg o Forstwettkampfpfunds 2001 o Waldgesichter 	<p>Please state which innovation areas were most often supported in this category (see list in chapter 2.2.2) and in what stage of adoption</p>	<p>Within qualification the following measures were financed:</p> <ul style="list-style-type: none"> - Forstwirtschaftsmeisterkurse - Waldhelferkurse - Kurse Waldpädagogik - Kurse in Waldabau, Baumsteige, Harvester, Bergetechnik, Rückekurs - Forstarbeitertraining - Forstexkursion - EDV-Kurse - Holzmess- und Sortierkurse - Arbeitsorganisation 	<p>Gemeinschaftliche Holzvermarktung/Marketing</p> <ul style="list-style-type: none"> - EDV-Vernetzung - Gründung von Waldwirtschaftsgemeinschaften, Stunden, Arbeitsleistung, Personal- und Sachaufwand - Waldhelfereinsatz - Betreuungsförster - Forstfachkräfte - Maschinen (Krananhänger, Holzhackmaschine, Funkseilwinden, etc.). 	

	<ul style="list-style-type: none"> o Arbeitskreis o Waldpädagogisches Zentrum Niedersulz o Alpensteig Tremmelberg o Innovationsprojekt Junge Waldbauern o Fachstudienreise o Wertholzsub mission o Junge Waldbauern Feldbach o Mengen- und Qualitätssteigerung o Strukturkonzept o Holzenergie-Contracting o Flußorientiertes Mangement in der Holzproduktion o Pilotprojekt, Datenerhebung, Verarbeitung und Logistik o Pilotprojekt Forsteinrichtung 				
<p>Overall assessment: Most funding on diffusion of already established products, services and techniques Very low overall support for innovation (pilot projects) but high average funding per project</p>					
<p>General comment: incl. research needs and further reference sources used</p>					

7 Regional Development Policy

For Austria, the National Strategic Reference Framework (NSRF, Nationaler Strategischer Rahmenplan, STRAT.AT) is analysed. This plan sets the frame for the implementation of the EU Structural Funds in Austria. Within the frame, operational plans (OP) are developed by the implementing authorities, which are, for the EFRE source the provincial governments, for the part of the ESF source the Minister of Economy and Work. The NSRF is the main instrument for the implementation of the structural funds and largely takes over the regional development policy from the time before Austria was part of the EU. The NSRF was developed in coordination with the NRP and understands itself as one important implementation of the NRP, or the European policy for growth and employment, resp. It was further developed in a comprehensive way, encompassing not only EU funds but also national sources (e.g. for larger infrastructure investments) as well as rural development which is implemented through instruments such as LEADER (now as part of rural development policy).

7.1 Part A – General Description

Part A - General document information

Name:	In English
Adoption: Please mark by whom and at which level the document is adopted	<input type="checkbox"/> Parliament <input type="checkbox"/> Government <input type="checkbox"/> Ministry: _____ <input checked="" type="checkbox"/> Others: Öst. Raumordnungskonferenz (ÖROK) <input type="checkbox"/> No formal approval Level: <input checked="" type="checkbox"/> National <input type="checkbox"/> Regional <input type="checkbox"/> Local Adoption date: 27 Oct. 2006 (Decision by the European Commission on 4 April 2007) ÖROK is the Austrian Conference on Spatial Planning
Validity period:	2007-2013
Revision:	With new planning period after 2013
Monitoring/ Evaluation:	Ex-ante evaluation; Strategic environmental assessment (acc. directive 2001/42/EG) Mid-term evaluation 2011 Final evaluation 2016
Related documents:	-
Geographical scope:	<input checked="" type="checkbox"/> National <input type="checkbox"/> Regional; name: _____ <input type="checkbox"/> Local, name: _____
Budget:	Budget of EU structural funds (the strategic plan also comprises the rural development funds and other national funds that are related to the topic): 1.46 bio Euro.
General description of contents as written in document	
Objective of the document	Strengthen the competitiveness of Austria´s regional economies, increase the attractiveness of regions and locations, based on the principles of sustainable development and gender mainstreaming
Priorities	<ol style="list-style-type: none"> 1. Regional competitiveness and innovation (knowledge base) (P1) 2. Attractive regions and quality of location (P2) 3. Adaptability and qualification of the labour force (P3) 4. Territorial co-operation (P4) 5. Governance in implementation strategy (P5)

Structure	<p>I. Strategic part</p> <ol style="list-style-type: none"> 1. Background: Function, framework conditions and formulation process 2. Situation: Chances and challenges for the regional and employment policy in Austria 3. Strategy: The regional development and employment strategy for Austria <p>II Operative part</p>
Measure Areas	<p>Innovation- and knowledge-based economy :</p> <ul style="list-style-type: none"> - Increase R&D-activities, reach Barcelona-Objectives - Increase of innovators, more radical innovations, focus on SMEs; (including tourism) - Increase of productivity of resources, Innovation in eco-technologies and energy technologies <p>Attractive regions and competitive (business) locations</p> <ul style="list-style-type: none"> - High quality business locations (critical size) - International interlocking of business locations - Polycentric, balanced development - Accessibility to new MS, develop logistics, improve modal-split - Protection and sustainable use of natural resources - Prevention of risks (natural hazards), risk-reduction <p>Qualification and adaptability of the work force :</p> <ul style="list-style-type: none"> - Increase adaptability and qualification of employed - Support access to the labour market for unemployed, handicapped - Increase investment in human capital, qualification
Follow-up / Implementation	
Follow-up measures:	<input checked="" 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 type="checkbox"/> New or adapted informational campaigns/instruments; name: <input type="checkbox"/> New or restructured institutions/organisations; name: <input type="checkbox"/> Implementation in forest policy:
General comment:	Implementation will happen through Operational Plans (OP).

7.2 Part B – Integration of innovation

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 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 type="checkbox"/> sometimes <input checked="" type="checkbox"/> frequently Terms used:

	<p>Further comments on overall innovation orientation of the document: All elements of a modern innovation policy and according to the EU Lisbon Strategy for Growth and Employment are comprehensively, coherently and well-structured included in both the status-quo and the strategic part of the document:</p> <p>“The major challenge for the Austrian economy is, from a global perspective, the continued and rising high pressure on productivity, wage levels and energy costs.” (STRAT.AT, p. 18)</p>
<p>Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)</p>	<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</p> <p>Comments: The goal and concept of innovation is certainly one important and one of the central issues of the document, it seems to be THE central issue for reaching competitiveness, growth and employment of regions. „To answer these challenges, the response outlined is that Austria must increase its regional economic competitiveness at a faster rate, with a growth path that provides increasing employment and income levels. Furthermore the growth path has to contribute at the same time to a balanced and sustainable regional development.” ... “Austria seeks to view these challenges positively, expanding the concept of <i>innovation</i> to include social and organisational aspects.” (STRAT.AT, p. 18)</p>
<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>) <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>)</p> <p>Comments: Innovation is the strategy to reach competitiveness, growth and employment. The measures, however, are not so specific as it is only the framework programme.</p>
<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 <input type="checkbox"/> Traditional S&T policy with systemic elements <input type="checkbox"/> Systemic innovation policy with S&T policy elements <input checked="" type="checkbox"/> Predominantly systemic innovation policy</p> <p>Comments: The document follows the EU's policy for growth and employment (Lisbon Strategy) as well as on sustainable development. In the context of the Lisbon strategy, STRAT.AT defines innovation in the following way: “<i>The fundamental theme guiding the strategic approach for Austria is innovation as a complex societal process, which cannot and shall not be reduced to technological dimensions only. Rather, the educational, sociological and regional (policy) implications of this wide definition of innovation will have to be observed and included in the formulation of strategies, measures and tools. This also implies that regions which are less favoured in terms of accessibility and economic structure shall be included in this general modernisation process, which overall shall contribute to reducing regional disparities in Austria.</i>” (STRAT.AT, p. 20-21) Also additional measures such as education are explicitly focused on innovation and economic development.</p>
<p>Goals and objectives: “The general development strategy therefore aims at the widespread introduction of the concept of a</p>	

knowledge-based society and economy. New patterns of growth, using the linkages between knowledge and access to new markets, particularly with new member states will strongly spur economic development in Austria. This strategy is founded on a concept of innovation which strongly supports and includes non-technology aspects (e.g. developments in organisation, logistics, financial services, human resources, marketing, design).

- Widespread regional foundation of an innovation- and knowledge based economy
- Develop attractive regions and competitive enterprise locations
- Increase adaptability and qualification of the work force

(STRAT.AT, p. 21-22)

Issues, problems and related topics:

The following “challenges and opportunities” are mentioned in the challenges part (English abstract):

- From a technology-taking economy towards a knowledge-based economy
- Size of enterprises and regions vs. growing international activities
- Growing pressures on the labour market: Adaptation and skills on all levels
- Active use of economic and natural diversity of regions in Austria
- Integrated development of business locations across borders
- Accessibility and transport as major challenge
- Natural hazards and risk management

(STRAT.AT, p. 19-20)

The document understands itself as a strategy for regional and employment policy. Competitiveness and the consideration of regional disparities is central to the document. It then deals with diversification, knowledge economy and innovation, competitive regions, employment and qualification of the labour force, transport, renewables, environmental protection, etc. It does not specifically address much the primary sectors. Both urban and rural regions are dealt with (as the document understands itself as a comprehensive strategy including also rural development).

Innovation areas:

Topics covered in the STRAT.AT that have been identified nationally in COST E51 as central innovation areas regarding forestry and forest industry:

- Tourism
- Renewable energy sources
- Clusters and networks/cooperation

Topics of the STRAT.AT that do NOT seem directly relevant for the forest sector:

- Creative industries
- Environmental innovations in businesses
- Transport

Topics highly relevant for the forest sector that are NOT covered by the STRAT.AT:

- Forest education/environmental education for the public
- wood auctioning
- wood composites, wood construction, chemical substances from wood
- marketing of nature conservation services, forest/timber certification
- logistics optimization

(following STRAT.AT, p. 85ff)

General comment:

-

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"> - financial support of direct technology, research and development (p. 94) - further development of technology, research and development infrastructure (94)
	Diffusion of innovation	<ul style="list-style-type: none"> - investment support (94) - ICT (95)
	Strengthening the knowledge base	<ul style="list-style-type: none"> - qualification of employees (95) - life-long learning (95)
	Strengthening interaction	<ul style="list-style-type: none"> - networks, clusters and technology transfer organisations (94)
	Demand creation	---
	Improving frame conditions	<ul style="list-style-type: none"> - start-up support (95) - instruments for enterprise financing (95) - regional governance (95) - transport systems (networks, public transport) (100) - gender mainstreaming - cross-border cooperation (117) - transnational cooperation (117)
	Comments: The document does not mention concrete measures because it is only the strategy document.	
Priorities	Priority areas are: <ul style="list-style-type: none"> - R&D (direct support plus development of infrastructure) - diffusion through support of innovation-oriented infrastructure (esp. in high-tech areas) and ICT - improving frame conditions (is mentioned frequently, however, not always concrete measures are given and these measures are often not to be implemented through the programme (e.g. changes of laws, etc.)) 	
Assessment of overall relevance	Measures generally ARE oriented towards innovation support; in addition, also employment is of high relevance. Innovation is seen as main factor for reaching competitiveness, growth and employment – and regional development.	
Promotion of innovation	Innovation is seen as the central pillar for development of regions (besides of employment measures). The policy also significantly contributes to innovation policy, as part of the NRP process, and with particular view on regions.	
General comment:	-	

Part B - Cross-sectoral coordination

Policy formulation	
Co-ordination with other processes and documents	EU level: EUREK/ESDP, EU Strategy for SD, Gender Mainstreaming. National level: ÖREK (AT Spatial Planning and Development Concept), Generalverkehrsplan (General Traffic Plan), Rural Development (ELER), Strategie 2010 (Strategy 2010 – Perspectives for Research, Technology and Innovation in Austria). International Conventions: Kyoto Protocol, Alpine Convention
Administrative Co-ordination:	<input type="checkbox"/> between different sections/departments within the same ministry; specify: ____ <input type="checkbox"/> between different ministries, specify: ____ <input checked="" type="checkbox"/> between ministries and other public organizations / agencies, specify:

	<p><u>Between federal ministries and federal countries (provincial governments), association of municipalities, gender mainstreaming, regional management offices</u></p> <p><u>Comments:</u> The ÖROK coordinates spational planning which is in the competence of the federal countries. Regional development is implemented largely in the federal system, for which reason the central actors – state and federal countries – coordinated the process by using the ÖROK platform.</p>
Stakeholder involvement	<p><input type="checkbox"/> Forestry: name most important organisations: ____</p> <p><input type="checkbox"/> Forest-based industries: name most important organisations: ____</p> <p><input type="checkbox"/> Agriculture: name most important organisations: ____</p> <p><input type="checkbox"/> Tourism: name most important organisations: ____</p> <p><input type="checkbox"/> Energy: name most important organisations: ____</p> <p><input checked="" type="checkbox"/> Environment: name most important organisations: ____</p> <p><input checked="" type="checkbox"/> Other sector: ____: name most important organisations: ____</p> <p><input checked="" type="checkbox"/> Other sector: ____: name most important organisations: ____</p> <p><u>Comments:</u> Environment is mentioned as well as „economic and social partners“ but not specified in detail in the document.</p>
Coordination mechanisms:	<p><input checked="" type="checkbox"/> Formal (central) coordination body; name: <u>ÖROK</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:	<p>On federal level, the State Secretariat (Bundeskanzleramt) is responsible for the process. The implementation is done partly through Operational Plans (OP) developed by the provincial governments (reg. EFRE), and partly through the OP of the Ministry of Economy and Work (reg. ESF).</p> <p>Therefore, the level of delegation is mixed (see below):</p>
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> <p><input type="checkbox"/> Local, e.g. by municipalities</p> <p><input checked="" type="checkbox"/> Regional, e.g. by regional public actors</p> <p><input type="checkbox"/> Others: _____</p>
General comment	-

8 Sustainable Development Policy

For analysis of the sustainable development policy in Austria, the Austrian Strategy for Sustainable Development document was analysed, as suggested for those countries that already do have such a strategy as proposed by the EU. SD policy in Austria is mainly based on the national SD Strategy and the inclusion of SD issues in sectoral policies. The SD Strategy defines the framework for vertical (different political levels) and horizontal (different policy sectors) integration. The official SD Strategy process is coordinated by the Federal Ministry of Agriculture, Forestry, Environment and Water Management. Several committees and councils review the implementation process of the strategy. Austria's strategy dates back to 2002 and a revision process has been started in 2006 to be finalised 2008. The problem with the implementation of the policy is its poor institutionalisation. SD is a cross-cutting issue without further instruments for implementation.

8.1 Part A – General description

Part A - General document information

Name:	Austrian Strategy for Sustainable Development
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: April 2002
Validity period:	No period indicated
Revision:	In June 2006, the Austrian Council of Ministers has confirmed that the federal government should renew its current national SD strategy from 2002 by developing a federal SD strategy together with the regions. The new federal SD strategy and a first action plan should be adopted in the course of 2008.
Monitoring/ Evaluation:	Indicators in order to monitor progress in the implementation of the key objectives of the Austrian SD strategy are included in the strategy itself. So far, two indicators reports (2004, 2006) have been published. Two progress reports (2004, 2006) provide an overview of projects that have been carried out in the context of the SD strategy. Additionally, an external evaluation of the SD strategy was undertaken between April and November 2005.
Related documents:	<ul style="list-style-type: none"> • Progress Report, 2006 • Indicator Report, 2006 • Evaluation Study on the Implementation of Austria's Sustainable Development Strategy, 2005 • Work Programme for the SD Strategy, 2004 • Progress Report, 2004 • Indicator Report, 2004 • Work Programme for the SD Strategy, 2003
Geographical scope:	<input checked="" type="checkbox"/> National <input type="checkbox"/> Regional; name: _____ <input type="checkbox"/> Local, name: _____
Budget:	No budget indicated.
General description of contents as written in document	

Objective of the document	The aim of the SD strategy is to systematically outline an approach for cross-sectoral policy integration in order to reach the goals of the SD concept.
Priorities	Four "fields of action" are defined by the SD strategy: <ul style="list-style-type: none"> • Quality of life in Austria • Austria as a dynamic business location • Living spaces in Austria • Austria's international responsibility
Structure	The SD strategy consists of four sections: The first section, "challenges and basis", illustrates the most important trends that run counter to a sustainable development and a model for a sustainable Austria with thirteen basic principles, which takes into account the country's specific situation. The second section, "fields of action", contains the 20 key objectives of the four fields of action. The third section, "implementation", defines the institutional conditions for achieving the key objectives. The fourth section, "first steps", lists as an annex to the strategy those initiatives, projects and programmes which have already been introduced in order to achieve the key objectives of the SD strategy.
Measure Areas	The Work Programme 2003 defined in total 200 measures for four fields of action. In the Work Programme 2004, 80 new measures were defined. The measures are different according to the key objectives in the four fields of action.
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: "Provision", a research funding programme which builds the scientific basis for the SD strategy. <input type="checkbox"/> New or adapted regulations/laws; name: <input checked="" type="checkbox"/> New or adapted informational campaigns/instruments; name: Website www.nachhaltigkeit.at was established as main information platform for SD in Austria; it provides extensive coverage and background material about the SD strategy. <input checked="" type="checkbox"/> New or restructured institutions/organisations; name: In September 2002, two advisory bodies have been established: <ul style="list-style-type: none"> • "Committee for a Sustainable Austria": high-level group that accompanies and coordinates the implementation of the SD Strategy. • "Forum Sustainable Austria": accompanies the activities of the Committee for a Sustainable Austria and seeks to achieve an external quality assurance of the implementation of the SD strategy. <input type="checkbox"/> Implementation in forest policy:
General comment:	

8.2 Part B – Integration of innovation

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: institutional innovation, social innovation, technical innovation, innovation capacities/capability, innovation policy.
	Further comments on overall innovation orientation of the document: Innovation is mainly used as social, institutional and technical innovation in the context of creativity and a proactive approach towards SD.	
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:	
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: Broader innovation policy understanding, also involving education issues, social discourse and location policy.	
Goals and objectives: Innovation is part of the basic principles of the SD strategy: "creating scope for innovations" refers to social, institutional and technical innovations as well as creativity and a proactive approach.		
Issues, problems and related topics: Innovation is mainly related to economic development and competitiveness. The competitiveness of Austria should be fostered by high innovation capacities in companies. Therefore, technological innovation is important. Innovation potentials can only be exploited optimally if technological innovations are combined with structural and social		

innovations and implemented as system solutions.
<p>Innovation areas:</p> <p>Innovation is part of one of the four fields of action of the SD strategy, "Austria as dynamic business location: Success through innovation and networking". One of the key objectives of this field of action is "innovation structures promote competitiveness". It is argued that the competitiveness of the Austrian economy is very much dependent on innovation capacities of businesses. Therefore, innovation dynamics must be fostered and innovation processes approached in a systemic manner.</p> <p>Other areas where innovation is considered as important: resource and energy consumption, eco-efficient management, transport systems and institutional innovations (including increasing possibilities of stakeholder participation).</p>
<p>General comment:</p>

Part B - Innovation Support Measures

<p>Innovation support measures <i>Consult classification in chapter 2.2.2</i></p>	<p>Research and Development</p>	<p>The SD strategy only includes general references to R&D in the context of innovation. It states that further consolidation of the cooperation between research institutions and businesses would be necessary to improve the implementation of research activities and accelerate the diffusion of research results.</p>
	<p>Diffusion of innovation</p>	<p>It is argued in the strategy that with action programmes, innovations can be promoted, joint ventures and networks between the economy, sciences and consumers or users can be initiated on a voluntary and informal basis, and system solutions can be developed into marketable products. This would require an expansion of the planning horizon and cooperative access for everyone involved in the innovation process.</p>
	<p>Strengthening the knowledge base</p>	<p>Cooperation between various actors in innovations systems such as, e.g. research institutions and enterprises, would support the introduction of innovative products and services on the market, promote the start-up of new companies, and achieve a stronger need-orientation of R&D in the sense of product-service combinations.</p> <p>Moreover, in order to promote the breakthrough of eco-efficient technologies, the advantages of a high degree of flexibility, a regional base, a broadly diversified range, and a strong market position could be combined through joint ventures between small and medium-sized enterprises in the form of clusters. A regional focus is further highlighted by a better exploitation of regional strengths through regional and local cooperation that offers innovation potentials by combining the core competences of several enterprises and consolidating them for a strategic development. This model of mutual provision of services, which is quite common in tourism, could be transferred to other sectors, and refined holistic service packages can be implemented.</p>

	Strengthening interaction	<p>Several interaction and cooperation mechanisms are suggested in the SD strategy with regard to innovation:</p> <ul style="list-style-type: none"> • Cooperation between consumers and producers allows an optimisation of product use and integrated solutions without entailing lower revenues for the manufacturer. Such projects can be oriented towards social needs and problems, such as e.g. housing structure, work, mobility or energy supply. They thus also provide for more customer loyalty and are a guarantee factor for the continued existence of enterprises. • With joint ventures between enterprises in the value added chain and between retailers and producers, the recycling aspects of products can be taken into account as early as in the design phase, research cooperation can be initiated, and the overall production benefit can be regarded in an integrated way. • With the preparation of the SD strategy, new paths in the field of an integrated environmental, economic and social policy were taken. The strategy was prepared with participative elements, process-accompanying moderation, and intensive coordination with the actors. Further institutional innovations are expected to result from its implementation.
	Demand creation	<p>Social, institutional and technical innovations are interdependent. Therefore the power of self-organisation must be reinforced, creative scope must be provided and impulses for automatic processes must be set.</p>
	Improving frame conditions	<p>The SD strategy refers to innovation policy which should comprise</p> <ul style="list-style-type: none"> • further development of framework conditions favourable to innovation and networking with educational, qualification and infrastructure policies; • support that sets a focus in operational research and development; • stronger support for market introductions (e.g. the promotion of financial participation models for start-ups, start-up initiatives); • support for a rapid diffusion of scientific basics and research results; • timely initiation and moderation of a social discourse on the development, use and possible consequences of new technologies; • an attractive location policy that consolidates Austria's role as an economic bridge to the candidates for EU membership.
Comments		
Priorities	<p>Within the SD strategy, innovation is focussed primarily on the business sector. More specifically, innovation is regarded as a means to strengthen the competitiveness of the Austrian economy. Therefore, innovation capacities should be increased in a systemic approach. Apart from that, the SD strategy remains rather vague on the relationship between innovation and SD.</p>	
Assessment of overall relevance	<p>The overall relevance of innovation support measures in the SD strategy is low.</p>	

Promotion of innovation	As innovation is formulated rather vaguely in the SD strategy and only the focus of one key objective (from a total of 20), innovation is not a prominent issue in the SD strategy.
General comment:	

Part B - Cross-sectoral coordination

Policy formulation	
Co-ordination with other processes and documents	-
Administrative Co-ordination:	<input type="checkbox"/> between different sections/departments within the same ministry; specify: ____ <input checked="" type="checkbox"/> between different ministries, specify: The main coordination is undertaken in departments of the Ministry of Environment; however, the coordination in the context of the EU SDS is shared by various ministries. <input type="checkbox"/> between ministries and other public organizations / agencies, specify: ____ <u>Comments:</u> -
Stakeholder involvement	<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: ____ <u>Comments:</u> The "Forum Sustainable Austria" includes stakeholders from all relevant sectors.
Coordination mechanisms:	<input checked="" type="checkbox"/> Formal (central) coordination body; name: Department of Sustainable Development and Environmental Subsidies, Federal Ministry of Agriculture, Forestry, Environment and Water Management <input checked="" type="checkbox"/> Formal coordination process: "Committee for a Sustainable Austria" <input type="checkbox"/> Inter-sectoral working groups <input checked="" type="checkbox"/> Inter-sectoral advisory body: "Forum Sustainable Austria" <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:	<p>The main coordinating body within the federal government is the Ministry of Environment. As SD requires horizontal policy integration, all ministries are requested to include SD issues into their policy-making. The SD strategies defines a coordination process:</p> <ul style="list-style-type: none"> • "Committee for a Sustainable Austria": Federal ministries and interest groups nominate members. This high-level group accompanies and coordinates the implementation of the SD strategy. • "Forum Sustainable Austria": Accompanies the activities of the Committee for a Sustainable Austria and seeks to achieve an external quality assurance of the implementation of the SD strategy. • "Austrian Council for Sustainable Development":

	<p>Responsible for domestic coordination regarding international activities on SD.</p> <ul style="list-style-type: none"> • Federal government: Is informed about the status of strategy implementation in progress reports by the Committee. • Parliament: Is informed by the government about implementation progress.
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	

9 Renewable Energy Policy

In the policy field of renewable energy, a Biomass Action Plan exists for Austria in draft form, dating from 2006. This plan intends to promote the use of renewable energy sources and to coordinate support measures and serves for implementing the European Biomass Action Plan on national level. No further widely agreed policy documents are available. New developments can be expected for 2008, when the newly established climate fund will be effectively in operation.

9.1 Part A – General Description

Part A - General document information

Name:	Austrian Biomass-Action-Plan <i>Nationaler Biomasseaktionsplan für Österreich</i>
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: _BMLFUW Environment__ <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: draft only, 21.9.2006
Validity period:	2010
Revision:	No revision
Monitoring/ Evaluation:	n.a.
Related documents:	none
Geographical scope:	<input checked="" type="checkbox"/> National <input type="checkbox"/> Regional; name: _____ <input type="checkbox"/> Local, name: _____
Budget:	No budget indicated
General description of contents as written in document	
Objective of the document	The objective of the document is to outline the possibilities to use biomass as energy source for heating, electricity and fuels to satisfy the requirements of the European Biomass Action Plan to be implemented in a national action plan.
Priorities	<ul style="list-style-type: none"> • Biomass for heating • Biomass for combined heating and power supply (CHP) • Biofuels
Structure	The document outlines the potential for the use of biomass in Austria (chapter 2). For each of the three priority areas (see above), the paper (in chapter 3-5) describes development paths for 2010 and 2020 and roughly suggest measures for implementation. In chapter 6 the plan estimates the demand for biomass. Chapter 7 describes the elementary challenges.
Measure Areas	The document presents in a very general manner measure from regulations on European level, to subsidies, to R&D activities.
Follow-up / Implementation	
Follow-up measures:	<input checked="" 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 type="checkbox"/> New or adapted informational campaigns/instruments; name: <input type="checkbox"/> New or restructured institutions/organisations; name:

	<input type="checkbox"/> Implementation in forest policy:
General comment:	There is no need for further research identified for the forestry sector and wood industry in this plan. Only in agricultural use of plants there is research need identified in one case and a research programme suggested (in respect to bio-fuels from celluloses or hemi-celluloses)

9.2 Part B – Integration of innovation

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 checked="" type="checkbox"/> never <input type="checkbox"/> sometimes <input type="checkbox"/> frequently Terms used:
	Further comments on overall innovation orientation of the document: The paper is more oriented towards technology push, public procurement, marketing labels, and new regulatory measures rather than innovation orientation. Only in one case the improvement of logistic services for the supply of energy wood is mentioned in the program klima: aktiv	
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 checked="" type="checkbox"/> Marginal issue <input type="checkbox"/> One issue among others <input type="checkbox"/> Important issue <input 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 checked="" 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 type="checkbox"/> very specific (<i>quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist</i>) Comments: Actually the word "innovation" does not appear in the text. Reference to research & development and to research policy is made only one time for each in a rather general way term. However this is only included in parts that cite an existing R&D programme (klima: aktiv)	
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: The above mentioned citation of the klima: aktiv programme includes also systemic elements of an understanding of an innovation system as it explicitly addresses the need for improvement of networking and coordination between actors.	

Goals and objectives:

The existing programme, klima:aktiv (2005-2008), includes the goal of improvement of R&D activities by means of coordinated information transfer between research policy, potential customers and researchers.

Issues, problems and related topics:

The problem addressed within klima:aktiv is the lack of coordination and information exchange on the level of the innovation system on a policy level. In only one other case the plan addresses a problem of lack of research results in a specific field. The plan addresses this in a straight forward way, i.e. to solve the problem by more research on that specific problem. Other issues, competitiveness or diversification are not addressed.

Innovation areas:

In only one area, use of cellulose for fuel, the plan asks for a new technology. In that sense it is a process innovation the later part of the value chain.

General comment:

The plan is not very concrete in its recommendations and does not include much aspects which are related to innovation, research and development. This might be partly explained by the division of labour between ministries. The topic of energy technologies is mainly situated in another ministry (BM:VIT) which has its research programmes that already address innovation related issues.

Part B - Innovation Support Measures

Innovation support measures <i>Consult classification in chapter 2.2.2</i>	Research and Development	In one case the development of a technology is suggested that should help to better use cellulose for energy use.
	Diffusion of innovation	In klima:aktiv the establishment of an educational program is suggested for supply of wood for energy use.
	Strengthening the knowledge base	See above
	Strengthening interaction	In klima:aktiv, strengthening of interaction between actors on different levels is seen as a support measure.
	Demand creation	No measures foreseen
	Improving frame conditions	Several measures are suggested to improve the regulatory framework for the use of biomass, which could also indirectly improve the framework conditions for innovation.
	Comments	
Priorities	Changing regulatory frameworks seems to be the main strategy of the plan, Fostering innovation, is not the main intention behind the strategy.	
Assessment of overall relevance	Innovation support is not the main strategy of the plan to reach the goals described in the plan. There are at least two reasons that might help to explain this. 1) Innovation and entrepreneurship are not well established concepts in the primary sector. 2) On the administrative level, concepts and terms are related to the division of labour between ministries. They are sometimes determining the competences of the administration. This can become a problem when coordination between ministries is difficult.	

Promotion of innovation	The use of biomass for energetic use is generally to be seen as a field that requires much innovation. However, the plan does not address innovation, research and development in a pro-active way. In one case where clear R&D demand is needed it is addressed clearly and directly.
General comment:	It would be interesting to investigate the causes for an unexpectedly rare reference to research, technology and innovation in a problem area which is expected to be highly in transformation.

Part B - Cross-sectoral coordination

Policy formulation	
Co-ordination with other processes and documents	The plan refers to a already existing research programme klima: aktiv
Administrative Co-ordination:	<input checked="" type="checkbox"/> between different sections/departments within the same ministry; specify: <u>not specified</u> <input type="checkbox"/> between different ministries, specify: <u>not specified</u> <input type="checkbox"/> between ministries and other public organizations / agencies, specify: <u>not specified</u> <u>Comments:</u> The ministry has internal coordination teams. However, it does not become clear how inter- and cross ministerial coordination takes place.
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 checked="" type="checkbox"/> Energy: name most important organisations: <u>OMV</u> <input checked="" type="checkbox"/> Environment: name most important organisations: <u>Energy Agency</u> <input type="checkbox"/> Other sector: ____: name most important organisations: ____ <input type="checkbox"/> Other sector: ____: name most important organisations: ____ <u>Comments:</u> -
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 ____) <input type="checkbox"/> Others: ____
Policy Implementation	
Responsible actors and their roles:	Only one ministry seems to be involved in the process. Eventually the Austrian Energy Agency which provided a study on the topic was involved in the development of the plan.
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	-

10 Conclusions

The main questions to be analysed in the collected policy documents are threefold: in how far and in which way is innovation dealt with in the different policy areas, which kind of support measures are envisaged and in how far are the policy areas coordinated?

The topic of innovation appears to be only a marginal issue within forest policy in Austria, as it is addressed rather general in the Austrian Forest Programme and the goal of innovation in forestry sector is named only vaguely. Concretely, besides of rationalisation and cooperation, new emerging markets for niche products and services are mentioned in the document, such as: bio-energy, water, nature conservation, etc. In several places, the use of traditional knowledge for innovation is mentioned. Systemic elements of innovation policy appear in the document frequently, namely when it refers to the frame conditions for competitiveness and innovation and names many measures in the fields of strengthening the knowledge base and interaction. However, it largely draws on traditional approaches of science and technology policy when the support of innovations through diffusion is concerned. The document itself – since being the result of a dialogue process – is strongly coordinated between public and private stakeholders across sectors, however, this does not reflect the main patterns of policy processes in the sector which are dominated by traditional forestry actors (compare Rametsteiner and Weiss, 2006b).

Within the NRP, as can be expected, innovation represents an important (however not central) issue and is dealt with rather specifically. The understanding of innovation policy can be described as traditional with systemic elements, as it still has a strong focus on research and development as well as technology. The support measures that are envisaged reach from research and development, strengthening the knowledge base and interaction to improving the frame conditions; diffusion measures are not mentioned as the document does not name specific product areas. Financing activities, in sum, seem to be the most important measures seen in the document. Innovation and related terms, naturally, appear very often, the innovation frontiers of the forestry and forest industry sector are however never mentioned. This goes along with the fact that also other sectors are not dealt with specifically but it also reflects the poor integration of the sector in the national innovation policy.

The rural development policy – forestry measures – does not divert much from the forest policy field as this policy is formulated also by the forest policy makers. Innovation itself is a marginal issue although it should be much more strongly addressed as it aims at the development of rural areas. It is less connected with regional development thinking than with sector development. The policy places a strong importance on diffusion measures. Cross-sectoral coordination appears to be very poor, both with regard to public and private actors. The coordination between the forestry and the rural development section within the ministry is necessary, however, does not seem to be strong when looking at the traditional kind and structure of the supported measures. Coordination with interest groups of the sector is done informally.

The Austrian regional development policy, at least when looking at the National Strategic Reference Framework, seems to be the policy area which is most advanced in terms of a systemic approach to innovation policy. Innovation as such is described as the central issue of the policy: regional development needs innovation activities. The strategy explicitly calls its fundamental theme to approach “innovation as a complex societal process, which cannot and shall not be reduced to technological dimensions only.” The strategy is founded “on a concept of innovation which strongly supports and includes non-technology aspects.” It consequently focuses on measures to improve frame conditions for innovation (however, these measures are mostly not to be implemented by the policy itself). A number of innovation areas are mentioned

that are relevant for forestry, namely: tourism, renewable energy sources and clusters, networks and cooperation. Coordination is not described in detail in the document but environment and economic and social partners are mentioned besides of the municipalities and federal provinces. A strong coordination is needed in the policy area because spatial planning is in the competency of the provincial governments.

Within the SD strategy, innovation is focussed primarily on the business sector. More specifically, innovation is regarded as a means to strengthen the competitiveness of the Austrian economy. Apart from that, the SD strategy remains rather vague on the relationship between innovation and SD. Therefore, the overall relevance of innovation support measures in the SD strategy is low. As innovation is formulated rather vaguely in the SD strategy and only the focus of one key objective (from a total of 20), innovation is not a prominent issue in the SD strategy.

The policy area of renewable energy is currently under construction. Due to unclear division of labour and competences between ministries, the policy area suffers from a lack of clear and widely accepted strategy. This is specifically true as the newly established climate fund, which is supposed to contribute to the field has not been put into operation and it is to be expected that a strategy related to renewable resources will only become clear in 2008.

The analysis reveals that the issue of innovation is included in the investigated policy areas to a very changing degree in different ways: The relevance of innovation is highest in the regional development policy (central issue), followed by the innovation policy (important issue), sustainable development policy (issue among others), and forest, rural development and renewable energy policies (marginal issue). The policy issue of innovation support is dominantly approached in a traditional understanding of science and technology policy, with the exception of the sustainable development and regional development policies that explicitly emphasize systemic elements.

Innovation support measures show different foci among the 6 different types that were predefined in the analysis: they are evenly distributed in the innovation and renewable policy, diffusion is emphasised within forest policy and the related rural development policy, improving frame conditions are particularly mentioned in the regional development and sustainable development policies.

It seems that innovation related policy documents are generally poorly or only indirectly coordinated in Austria. They mention coordination processes but the specific mechanisms and involved actors are only seldom given. This typical pattern concerns the central innovation-oriented documents: NRP, STRAT.AT and the rural development programme. The stronger coordination mechanism seems to be the policy targets required on the EU level, particularly the Lisbon agenda. The well coordinated documents: NFP and SD strategy, for both of which formal coordination and participation processes were conducted, can be seen as exemptions from the rule. Also within the forest policy field itself, the NFP process – the Forest Dialogue – was an exception that does not represent the typical policy processes in the sector. The coordination between the policy fields hardly exists and also in the implementation it can be said that almost all of the analysed policy areas are implemented separately (an exemption are the forestry measures of the rural development programme which are implemented within forest policy, but on the other hand the forestry measures are hardly coordinated with the rest of the programme).

In sum, the forest sector appears not to place much attention to the issue of innovation and to view innovation policy rather in a traditional technology-oriented way. Similar to this policy field is the forestry chapter in the rural development programme which is developed by the

forestry department of the ministry, and the biomass action plan which is also coordinated by the same ministry. Interestingly, not the National Reform Programme but the regional development strategy seems to be the most advanced policy document in terms of systemic understanding of innovation policy and also the sustainable development strategy formulates a more systemic approach to innovation policy. The coordination between the policy fields is very poor both in the formulation and the implementation phase.

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