

DRAFT

COST Action E 51

Integrating Innovation and Development Policies for the Forest Sector

COUNTRY REPORT Germany PHASE I

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0 Abstract

In regard to the question of integrating innovation and development policies for the forests sector this report about the German situation is part of the COST Action E 51. The paper comprises of different analyses of at least eight documents of German policy in regard to their innovation potential. German policy papers in the sphere of Forest Policy, Forest Based Sector Policy, Innovation Policy, Rural Development Policy, Regional Development Policy, Sustainable Development Policy, Renewable Energy Policy as well as Regional or National Rural Development Programme, Forestry Part are analyzed in the regard to their innovation potential for the forest sector.

No single conclusion in regard to this analysis could be stated. Too different are the approaches and objectives of the analysed policy papers. However, each paper has a high innovation potential for its own and effects on the forest sector from a different perspective and there are a lot of different innovation areas, which are addressed by each policy programme in a specific way.

As a conclusion the authors proposed a next step: a discussion about the possibilities of an integration of the presented six approaches in direction to the German policy frame and integration towards the European level.

On the German level they found it interesting to research the different objectives that seems to be in conflict to other regulations or objectives as well as to identify and analyse different policy papers that mutually strengthen their position.

1 Introduction

In regard to the question of integrating innovation and development policies for the forests sector this report about the German situation is part of the COST Action E 51. The paper comprises of different analyses of at least eight documents of German policy in regard to their innovation potential.

The paper is organized as follows: Section 2 contains the identified innovation areas which seem to be crucial to the German forestry sector. In a tentative method innovation areas are identified in a first step. Based on a first review of specific policy documents, at least eight policy papers are chosen for further analysis (Chapter 3 to 9). Chapter 10 contains a short conclusion to the paper, which was conducted in a more additive process. An integration of the findings is still an open discussion.

2 Innovation areas in forestry in Germany

2.1 Currently important innovation areas in Germany

As a tentative result of the first review of existing programs and legislative acts in regard to innovation areas in Germany, the following overview can be stated:

Area	Territory based services	Value added chain	
Туре			
Product	Niche markets for forest products (examples: Friedwälder (Forest Cemeteries); Climbing forests / Hochseilgärten)	Several modifications of timber (e.g.: Compressed timber [<u>http://www.tu-</u> <u>dresden.de/biwibh/holzbau/start-</u> <u>forschung.html</u>]; Chemical interlacing of wood (e.g. beech) Bio fuel, 2 nd generation Energy Wood (e.g. Wood pellets) low-energy consumption wood houses/passive houses	
Process	Niche markets for forest services (e.g. survival training/team training, forest education /Waldpädagogik)	Radio Frequency Identification (RFID) technology in timber logistics; 2) NAVLOG (GPS Navigation system for forest logistics)	
Marketing method	Sponsoring contracts with forest enterprises (e.g. for nature conservation services of forestry)	"Biomassehöfe" as a new marketing approach for forest products [http://www.holzbrennstoffe.de/index.php]	

Table 1: Innovation areas: Please list the max 6-8 most important innovation areas for your country

Organisational model	Timber selling organisations (e.g. by private forest owners in Uelzen, Lower Saxony)(<u>http://www.waldmaerker.de/</u>) or Bavaria	Innovation in data transfer during timber selling (HolzZentralblatt 45 2006, S. 1314) Cluster management approaches (e.g. Innoregio-Projekt Sächsischer Musikwinkel/Musicon Valley, the Holzforum Allgäu or the Cluster initiative Bavaria)
Institutional innovations	 Integrated rural development / Regional Governance approach (LEADER, Regionen aktiv) 	Integrated rural development / Regional Governance approach (LEADER, Regionen aktiv) low-energy consumption wood house/passive house standards

As shown in table 1, there are a lot of different innovation areas in Germany, especially in the value added chain perspective. Here, we found a lot of potential product innovations, which are connected to other industrial sectors in Germany, e.g. the chemical industry, the mobility sector or the housing sector.

In the fields of organizational models or institutional change, there is a lot of innovation currently on the way. Especially the discussions about cluster management or the standardization of wood products are two examples, which are representative.

2.2 Specification of documents to analyse

The following documents has been analyzed by the German experts:

Table 2: Documents for Task 1: Please list the relevant documents	
Forest Policy (Regional or National Forest Programme):	
Document: Nationales Waldprogramm Deutschland	
Publication Date: October 2003	
Website: http://www.nwp-online.de	
Supplementary documents: Name and ref. number	
Forest Based Sector Policy (Sector Policy Strategy), if any:	
Document: Charta für Holz	
Publication Date: 28.9.2005	
Website: http://www.bmelv.de/cln_045/nn_753674/SharedDocs/downloads/06-	
Forstwirtschaft/ChartaFuerHolz.html	
Supplementary documents: Name and reference number	
Innovation Policy (Regional or National Reform Programme):	
Document: Innovation forcieren - Sicherheit im Wandel fördern - Deutsche Einheit vollenden	
(Nationales Reformprogramm Deutschland, 2005-2008)	
Publication Date: 7.12.2005	
Website: <u>http://www.bundesregierung.de/Content/DE/Artikel/2005/12/_Anlagen/nationales-</u>	
reformprogramm-deutschland-pdf-datei-929900,property=publicationFile.pdf	
Supplementary documents: Name and reference number	
Rural Development Policy (Regional or National Rural Dev. Programme,	
Forestry Part):	
Document: Nationaler Strategieplan der Bundesrepublik Deutschland für die Entwicklung ländliche	۰r
Räume 2007- 2013	
Publication Date: 19.9.2006	
Website: http://www.bmelv.de/cln_045/nn_751686/SharedDocs/downloads/08-	
LaendlicheRaeume/Strategiepapier.templateId=raw.property=publicationFile.pdf/Strategiepapier.pdf	-
Supplementary documents: rural development programmes at level of the federal states see	
next entry	
Regional Development Policy (Regional or National Regional Dev. Programme)	:
Document: (at national level same as rural development policy; separate plannings for the federa	I
states)	
Publication Date:	
Website: http://ec.europa.eu/agriculture/rur/countries/de/index_de.htm	
Supplementary documents: Name and reference number	
Sustainable Development Policy (Regional or National Sustainable Dev.	
Strategy):	
Document: "Perspektiven für Deutschland -Unsere Strategie für eine nachhaltige Entwicklung"	
Publication Date: 17.2.2002 (June 2004 for the forestry part)	
Website: http://www.nachhaltigkeitsrat.de/n_strategie/strategie_2002/index.html	
Supplementary documents: Empfehlungen des Rates für Nachhaltige Entwicklung an die	
Bundesregierung zum Thema: "Waldwirtschaft als Modell für nachhaltige Entwicklung: ein neuer	
Schwerpunkt für die nationale Nachhaltigkeitsstrategie"	
Renewable Energy Policy (Regional or National (renewable) Energy Strategy):	
Document: (The federal government will produce an energy policy strategy in the second half of	
2007)	
Publication Date: Feb 2007	
Website: http://www.erneuerbare-energien.de/inhalt/37784	
Supplementary documents:	
 Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU): Renewable Energies: Innovations for the future, 2006. 	
 The Renewable Energy Sources Act, in: Federal Law Gazette (Bundesgesetzblatt) 2004 I No 	
40, published in Bonn on 31 July 2004, see also: http://www.erneuerbare-	
energien.de/files/pdfs/allgemein/application/pdf/eeg_en.pdf	
Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU): Lead	
Study 2007" - Update and reassessment of the "Strategy to increase the use of renewable	
energies" up until the years 2020 and 2030, plus an outlook to 2050, see:	
http://www.erneuerbare- energien.de/files/pdfs/allgemein/application/pdf/lead_study_renewable_energy.pdf	
 Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU): 	

 Renewables industry provides work for 235,000 people, http://www.bmu.de/english/current_press_releases/pm/40029.php (approached Nov 2007). Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg (ZSW,
Stuttgart): Impact of the Expansion of Renewable Energy on the German Labour Market, Working Paper 2007.
 Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU): RENEWABLE ENERGY: EMPLOYMENT EFFECTS, Impact of the Expansion of Renewable Energy on the German Labour Market, see also <u>http://www.erneuerbare-</u> energien.de/files/pdfs/allgemein/application/pdf/employment_effects_061211.pdf
 Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU): "Forschung für erneuerbare Energien. Spitzentechnologie aus Deutschland" (Research for Renewable Energy - High Tech from Germany), available only in German

Part C "Appraisal of effects" will be undertaken only for the Rural Development Programme 2000-2006 as far as feasible and where country capacity allows their analysis. The German experts were able to analyze one document of rural development policy, which is in place in NothrhinePlease specify, whether and which evaluation documents exist for the Rural Development Programme 2000-2006 in your country.

Table 3: Evaluation documents for Task 2: Please list available evaluation documents incl. name, reference number and publication date

Rural Development Policy (Regional or National Rural Dev. Programme, Forestry Part):

Evaluation documents: update of the mid-tem-evaluation of the programmes of the federal states (Aktualisierung der Halbzeitbewertung der Länderprogramme Ländlicher Raum), various federal states. (Website, example NRW: <u>http://www.munlv.nrw.de/landwirtschaft/pdf/08_TB_NW.pdf</u>) Publication Date: Nov 2005 (Example NRW)

3 Forest Policy – National Forest Programme

3.1 Part A – General description

The objective of Part A is to provide general information on the policy document shaping the respective policy field in the country. The following table 5 'Part A – General document analysis' guides the collection of the general information.

Please copy this table and fill in one table for each of the documents specified in Step 1 separately

Information should be rather general and give a basic overview on the document. This means you should keep entries rather short (headings, headwords). The filled-in table should not exceed 2 pages.

Name:	National Forest Programme Germany. 2 nd Phase 2001-2003		
Adoption: Please mark by whom and at which level the document is adopted	□ Parliament □ Government ⊠ Ministry: Agriculture, Nutrition & Cons.protect. ⊠ Others: NFP Members □ No formal approval Level: X National □ Regional □ Local Adoption date: n.a. (December 2003)		
Validity period:	open (to be periodically updated)		
Revision:	1st Phase 1999-2000; 2nd Phase 2001-2003; Monitoring Phase 2004-2006; 3 rd Phase since 2006 (current)		
Monitoring/ Evaluation:	 1st Monitoring (Report @ 16th Round Table Nov 2004) [ELSASSER, P.; LISS, BM. (2005): Monitoring für das Nationale Waldprogramm Deutschland (Phase II). Münster-Hiltrup: Landwirtschaftsverlag. Berichte über Landwirtschaft Reihe A (Angewandte Wissenschaft) 506, 97 S.] 2nd Monitoring (Report @ 17th RT Dec 2005) [update by Ministry] 3rd Monitoring (Report @ 18th RT Jun 2006) [update by Ministry] 		
Related documents:	Main source: Nationales Waldprogramm Deutschland, Ergebnisse 2. Phase 2001-2003 Additional sources: Protocols of the Round Table meetings (http://nwp-online.de/)		
Geographical scope:	National Regional; name:		
Budget:	none		
General description	on of contents as written in document		
Objective of the document	1) further development of a careful handling of forests (Umgang mit Wald) 2) coordination multiple use interests by consensus agreements between stakeholders 3) compliance to international obligations		
Priorities	nature protection; timber production		
Structure	action areas (phase II): 1) forests and international cooperation/ internat. trade; 2) biodiversity, forest management and nature protection; 3) forest policy instruments; 4) economic importance of forestry and forest industries; 5) New role of forests		
Measure Areas	1) Legal framework; 2) "process oriented governance instruments" (taxes, subsidies, recompenses, services produced by the state) 3) "voluntary'/cooperative instruments" (certification, nature protection contracts, development of new markets, subnational forest programmes)		
Follow-up / Imple	ementation		
Follow-up measures:	 No follow-up activities so far New or adapted funding programme(s) /budget line; name: New or adapted regulations/laws; name: New or adapted informational campaigns/instruments; name: New or restructured institutions/organisations; name: Implementation in forest policy: guidance for federal forest policy (and for forest policies of the other NFP members). Hard to trace into concrete policy measures. 		
Gen. comment:	ﺎ.		

 Table 4: Part A - General document information

3.2 Part B – Integration of innovation

The guiding question for the analysis of the respective document is: <u>whether and how</u> innovation is taken up and integrated in the respective document.

Part B consists of three sections:

- 1. Overall Innovation Orientation (table 6)
- 2. Innovation Support Measures (table 7)
- 3. Cross-sectoral coordination (table 8)

Please copy the respective tables and fill in one table for each of the documents specified in Step 1 separately

Table 6 'Part B - Overall Innovation Orientation' analysis bases largely on your expert judgement and interpretation of the text in the document. If necessary verify your judgements with other COST E51 participants from your country. The aim is to analyse in how far the document uptakes and is oriented at the topic innovation in general.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings). The filled-in table should not exceed 3 pages.

Table 5: Part B - Overall Innovation Orientation				
Overall innovation orientation (use word search function).	entation of the more generic terms 'innovation' or synonyms ('new products', 'new			
	Please mark the frequency of occurrence of the forest sector <u>'innovation frontier'</u> – innovation areas identified in Chapter 3 - in the document	 □ never ⊠ sometimes □ frequently 		
	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	 never sometimes frequently Terms used: 0 Unternehmer*; 0 Diversif*; 0 Wettbewerb; 1 modern* (Informationstechnologie); 12 Invest* 		
	Further comments on overall innovation orientation of the document: Very much focussed on public goods of forestry (nature protection etc.) rather than productivity conditions			
Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)	 No relevance at all Marginal issue One issue among others Important issue Central issue Central issue Comments: explicit innovation orientation mainly in chapter 5, "new role of forests": however, this chapter deals mainly with new forms of governance, new landscape planning approaches, "waldpädagogik" (forest education), stakeholder integration, and the like. Competitiveness aspects are mentioned, but predominantly in 			
Degree of	the vain of "avoid competitiveness distorti			
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	no related goals, measures, identified needs or similar are addressed by the document) rather general (innovation is addressed in overall goals, needs are identified but no specification of measures) rather specific (innovation is addressed in concrete goals, measures are formulated) very specific (quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist) Comments: ./.			
Understanding of	Predominately traditional science a			
innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1	 Traditional S&T policy with systemic elements Systemic innovation policy with S&T policy elements Predominantly systemic innovation policy Comments: systemic elements and traditional S&T policy compete in the NFP, often contradicting each other 			
Goals and objectives	::			
First 2 Chapters, containing 111 Proposals for action (total: 182) deal mainly with international and national forest protection / nature protection issues. Only "innovative" instrument mentioned here is usage of nature protection treaties as a "new" instrument" (among others) to secure nature protection goals. Chapter 3 (pfa-s 112 to 142) deal with a hierarchy of usable policy instruments: Voluntary instruments to be used first; "process oriented" measures only if voluntary instr. fail; etc. Mentions the neccessity of futhering forestry associations for a more rational forest management (pfa 133); development of forest-wood-chain and clusters (pfa 134) ; skill enhancement measures for usage of modern information technology (pfa 141); vocational training and information measures (139-141) Chapter 4 contains structural proposals for a professionalisation of forest associations (pfa 146-150); wood energy				
propagation (151-158; specifically promotion of wood energy technology (pfa 153) Chapter 5 ("new role"; pfa 169-182): contains rather general statements about the changed perception of forests as a part of the cultural landscape, including suggestions for an exchange with urban forest administrators (173), with other sciences (174), and with other pedagogical institutions (179)				

Issues, problems and related topics:

Competitiveness issues are mentioned several times, mostly in order to restrict distortions due to subsidisation (based on the central idea of avoiding a subsidisiation regime in forestry which would be analogous to the agrarian subsidisation system): Reducing direct and indirect subsidisation for wood substitutes (pfa 122, 164); equalising the competitive situation of private and public forest enterprises in the production of non wood services (124, 130) and of vocational training (146); Reducing distortions in the subsidisation of wood as a renewable energy source (pfa 166-168)

Innovation areas:

Concerning Territory Based Sevices innovations, the first 4 tyes of table 2 are shortly mentioned (Niche markets; sponsoring contracts; timber selling organisation), but not the institutional one (integrated rural development approach).

In the value added chain, none of the entries in table 2 is concretely mentioned (because the NFP deals with such issues at a more abstract level). The only innovation area which is mentioned more than cursorily is "wood as a renewable raw material and energy source" (pfa 161-168); and "new role of the forests (comments see above; pfa 169-182).

General comment:

./.

Table 7 "Part B - Innovation support measures" below helps to gather and organize information on the support measures that are introduced by the document. *Also when no concrete measures are included, please analyse proposed activity areas/measures/needs within the document.*

Please list the identified support measures according to the **six main support categories introduced in chapter 2.2.2**.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings, examples). The filled-in table should not exceed 3 pages.

	Tabl	e 6: Part B - Innovation Support Measures
Innovation support measures Consult classification in chapter 2.2.2	Research and Development	The need for more "research" is addressed in a separate sub-chapter in part 4.2 (Biodiversity/nature protection) of the NWP but not in other parts of it. More enterprise-oriented research measures mentioned somewhere in the text are: Support for the development of a EU forest sector concept in order to coordinate better the forest related elements of other policy areas (pfa 115); the demand for a study on the impact of wood energy usage for employment (pfa 151) and on the potential raw wood supply for energy as well as for material use (pfa 160); the demand for a separate R&D programme in order to surmount structural disadvantages of SMEs within forest industry and to adapt to a changing raw material base of the economy (pfa 161).
	Diffusion of innovation	All in all, the NWP text is one level too general to fit well into this specific question - i.e. although there is a general demand e.g. for innovative products and processes or for a better vocational training e.g. in connexion with forest cooperatives, the objects of these measures are rarely specified. The most specific measures mentioned are the cooperation between the forest sector and educational institutions (e.g. schools; pfa 179) and the development of vocational training modules for forest pedagogics (but with unspecified content; pfa 181).
	Strengthening the knowledge base	With respect to the knowledge base, the main stress is on vocational training and on extension services; educational needs are also mentioned, but without mentioning more specific measures (such as curricula etc.). Specifically mentioned measures are: Strenghtening forest cooperatives for securing and developing forest management, havesting and marketing (pfa 133); developing vocational training concepts for further qualifying forest owners and employees; developing respective concepts for service enterprises (pfa 139); vocational training for transmitting new products and new uses of products to practitioners (pfa 140); supplying and supporting training courses for modern information technologies (141); enlarging the vocational training supplies for the heads of forestry cooperatives (and including this in the list of measures subventioned by the federal state) (pfa 148); evaluating offers for forest pedagogics (180) and developing vocational training concepts for forest pedagogics (181).
	Strengthening interaction	Again, this is dealt with mostly at some general level; participative approaches are often mentioned, but mainly at the level of setting general targets for forestry (e.g. nature protection targets) and of managing use conflicts. More concrete measures with regard to innovation oriented interactions are: the claim for a mutual toleration of the competing two main forest certification systems in Germany, FSC and PEFC, based on joint minimum standards (pfa 127); the claim for strategic alliances between forestry and forest industry, optimisation of logistics along the forestry wood chain and furthering of clusters (pfa 134); surmounting legal problems (caused by antitrust laws) concerning joint wood marketing by forest cooperatives (150); cooperations between public and private forest enterprises in the domain of forest education (177) and cooperation with schools for this purpose (179).

Table 6: Part B - Innovation Support Measures

ГГ	T
Demand creation	Some emphasis is put on the development of contractual approaches to forest policy instead of command-and-control measures, notably nature protection contracts. This would induce public demand for (nature protection) services of forests, but not in the sense of "demand for new products/services". Likewise, forest certification is stressed as a market oriented instrument which could support some demand for products of forest enterprises, but the idea is obviously more on avoiding "antinatural" forestry than on furthering demand for forest products. However, the whole NWP has a supply side approach rather than a demand side approach. The only concrete demand furthering measures seem to be in connection with wood as renewalble energy, where it is demanded: enlarging government aids for wood from forests (Waldholz) in the framework of the Act on Renewable Energies (EEG) in order to strenghten the demand for wood energy for an energetic usage (154, 166). This might be the main point for the NWP, specifically the reduction of competitiveness distortions due to direct or indirect subsidisation in other areas, and the furtherance of subsidisation in the forestry sector itself. Specifically mentioned issues are: reduction of command-and-control measures together with strenghtening subsidisation as well as market based instruments (whole chapter 4, specifically pfs 112-114 & 125 on the general principle, pfas 115-121 & 129 on priciples for forestry subsidisation); reduction of subsidisation for wood subsitutes (122, 164) and of legal restrictions for wood utilisation (in the construction sector; pfa 165); exclusion of internal subsidisation of the free supply of basically marketable non market goods of forestry by state forest enterprises (124 & 130); improving (financial) frame conditions for extension services for forest cooperatives (146-149); improving conditions for using wood as a energy resource (mainly focussed on subsidisation measures; 151-158 & 161). Legal reforms are not explicitly called for, even though the
Priorities Assessment of overall relevance	At least quantitatively the priority of the NWP is on integrating (nationally & internationally) nature protection into ("commercial") forestry (111 out of 182 pfas). Here, the accent is more on restrictions for forestry operations rather than on allowing for new products & services. In the remaining text, most emphasis is put on the framework conditions for forestry; moreover, in this respect the text is sometimes more concrete than in the other innovation support measures (as e.g. visible by the fact that sometimes concrete legal regulations are mentioned here). In the remaining parts, innovative measures (including better conditions for innovations) are sometimes called for, but mostly in a rather general way. However, this has also to do with the restricted competences of the federal level concerning forestry in Germany (forestry is mostly in the Länder competence). Innovation support measures in a narrower sense have a lower relevance for the nwp than subvention measures in general. The weight of single innovation promoting measures (which indeed are mentioned in the text) is further
Promotion of innovation	reduced by the fact that quite some contradictions exist between the single parts (chapters) of the NWP, and also between some of the pfas (especially those which are more concretely formulated). The overall relevance of innovation within the document is restricted by the rather low overall relevance of the document for the policy area. First, there are quite some similar policy documents available, so that the NWP stands in competition with other similar policy elements. Seconds, the NWP is far too voluminous for practically guiding policy measures and principles; no "short version for policy makers" is available. Third, there are quite some contradictions between the individual measures proposed in the NWP, making the whole document somewhat discretionary. And last, most of the involved actors seem to have stopped putting any relevance to the NWP results (see also general comment below).
General comment:	Due to low overall relevance, no research needs identified. main additional sources: own experience & Elsasser/Liss 2005 (Monitoring report for the NFP Germany, phase II)

Table 9 "Part B - Cross-sectoral coordination mechanisms" below helps to collect information on cross-sectoral co-ordination mechanisms see guidelines chapter 2.3.

	Table 7. Tart B - Cross-sectoral coordination		
Policy formulation			
Co-ordination with other processes and documents	no formal coordination with other processes (although there are informal links to quite a lot of other processes, like the "First German Forest Summit", the goovernmental Charta for Wood", the national sustainable development strategy, just to mention a few).		
Administrative Co- ordination:	between different sections/departments within the same ministry; specify: <u>none</u>		
	 ☑ between different ministries, specify: <u>BMELV (forestry); BMU (environment);</u> <u>BMZ (development aid); BMF (treasury); BMWA (economics), BMVBW (transport)</u> ☑ between ministries and other public organizations / agencies, specify: 		
	<u>13 (out of 16) state forest ministries; public research from research centre and universities</u> <u>Comments:</u> (relates to presence in the NWP process & discussions)		
Stakeholder involvement	 Forestry: name most important organisations: <u>AGDW (union of forest owners associations)</u>, ANW (close-to-nature forest organisation), DFUV (forest service enterpreneurs), BvFF (free lance forest experts), DFV (forest professionals association), DFWR (forestry council), HAF (forest products marketing) Forest-based industries: name most important organisations: BDH/VDH (professional ass.), DBMV (biomass), HDH (trading), VDF (veneers), VDP (paper), VDSH (sawn timber), DHWR (forest products industry council), VHI 		
	Agriculture: name most important organisations: <u>DBV (agricultural union)</u> Tourism: name most important organisations: <u>DStGB (cities &</u> <u>communities)</u> , <u>SDB (sports)</u>		
	Energy: name most important organisations:		
	Environment: name most important organisations: <u>BHU, BUND,</u> <u>Greenpeace, Klima-Bündnis, NABU, PEFC, RpoRegenwald, SDW, Stiftung Wald in Not,</u> <u>WWF</u>		
	 Other sector: <u>hunting</u>: name most important organisations: <u>DJV</u>, <u>ÖJV</u> Other sector: <u>other</u>: name most important organisations: <u>BDF</u> (<u>professional</u>), <u>IG Bau (trade union for forest workers</u>), <u>Frauen im Forstbereich (gender aspects</u>), 		
	<u>Comments:</u> (relates to presence in the NWP process & discussions)		
Coordination mechanisms:	 Formal (central) coordination body; name: <u>Ministry for Nutrition, Agriculture</u> and Consumer Protection; Department of International Forest Policy Formal coordination process 		
	Inter-sectoral working groups		
	Inter-sectoral advisory body		
	Formal mandatory consultation process		
	Formal voluntary consultation process		
	Informal consultations (please describe) Others:		
Policy Implementatio			
Responsible actors and their roles:	Although most participants expect the ministry (BMELV) to be mainly responsible for implementation, the ministry is only resp. for the discussion process itself, i.e. the policy implementation is up to those actors which have the respective competence for action. It is agreed that this should be mentioned in the NWP text (associated to each proposal for action). In fact, some pfa's contain a (more or less concrete) hint to the organisation responsible for implementation, but most of the pfa's do not.		
Level of delegation	 Decentralized, e.g. Central, e.g. ministry, public agency Outsourced to private actors Local, e.g. by municipalities Regional, e.g. by regional public actors Others: 		
General comment	The political "value" of the NWP Germany has been expected more		
L			

 Table 7: Part B - Cross-sectoral coordination

in the mutual learning & discussion process, concrete actions are not in the main focus of most participants (Elsasser & Liss 2005).
Moreover, since an attempt to condense the (very large) policy texts, includings its >300 pfa's, to a manageable short version has finally failed in 2006, the NWP seems to have lost most of its initial relevance to most (if not all) of the involved actors.

4 Forest-Based Sector Policy

	Table 8:	Part A	- General d	locument	information
Name:	Charter for	Wood	Promotio	on in Ge	ermany (Charta für Holz)
Adoption: Please mark by whom and at which level the document is adopted	Parliament Others: Level: National		Gover		Ministry: No formal approval Local
	Adoption date				
Validity period:	October 200				
Revision:	The charter	was e ions le	ndorsed by ed to a nev	y the for w goveri	nt planned? Has it already taken place, when? rmer governing coalition. In 2005 nment which committed itself to the rter.
Monitoring/ Evaluation:	Is an evaluation The document	n forese provide: e docur	en? s for an ongo ment. The ste	ing stewa eering gro	mally monitored? Has an evaluation taken place? ardship process by a steering group (as named in oup is supposed to review the implementation
Related documents:	Please list further specifications or amendments of the document and documents that are closely related, i.e. have a direct reference to the document. This might include working programmes, annexes, etc. These documents should be analysed together with the main document. WEBSITE: BMVEL – ongoing update of the programme with actual press releases, funding schemes announcements, a disclaimer, that the Charta, endorsed by Governing Parties in 2002 was reconfirmed by the new Government and its coalition parties in 2005				
Geographical scope:	National	Re	gional; nan	ne:	Local, name:
Budget: General descripti	the source for t The Charter itse motivate politic initative, bringin e.g. Chapter 7, programmes ar Charter docume The Charter We	he budg elf has r al, ecor ng toge where e name ent this ebsite of	get, i.e. state no direct fund omy and soot ther actors, j the measure d and their r is figures for ffers links to	e, EU, regi ding lines cial actors cointing o s to imple espective the time related re	er year or for whole document period); indicate ions, co-financed, etc. and budgets. While it is a political document to to enhance the use of wood it is an umbrella but funding schemes for related topics. ement the Charter are named, relevant funding annual/programme budget is named (in the of endorsing the document). esearch programmes, obviously up to date.

Objective of the document	Name shortly the main objective of the document (as written down in preamble, introduction part, vision or mission statements).		
	The German Federal Government together with relevant social stakeholders stands up for the increased use of the renewable resource wood, because of its benefits for climate, energy and environment, and for the forestry and woodworking enterprises to improve their economic situation and foster employment.		
	The Government invites experts nominated by interested stakeholders to contribute to the development of the Charter for Wood.		
Priorities	Name the thematic priority areas of the document.		
	Promotion of wood as a renewable and sustainable resource Contribution to CO ² mitigation policies Contribute to renewable energy policies		
Structure	Shortly sketch the basic structure of the document, i.e. different thematic parts, basic elements (e.g. action areas, indicators, etc.) 1. Mandate 2. Background, justification that wood is a renewable resource		
	 Background, Wood trade Promotion of Wood Utilisation in Germany; listing of infrastructure and political tools Objectives 		
	 Measures for competitive production and sustainable use of wood products 		
	 a. to increase demand for domestic products b. to optimise wood supply c. RTD d. Charter management 		
Measure Areas	Name measure areas as described by the documents and general types of measures the document introduces.		
	Measures for competitive production and sustainable use of wood products o to increase demand for domestic products o to optimise wood supply		
	 o to optimise wood supply RTD Charter management 		
Follow-up / Impl			
Follow-up	No follow-up activities so far		
measures:	New or adapted funding programme(s) /budget line; name: most recent Förderbereich Holz/Lignocellulose des Förderprogramms "Nachwachsende Rohstoffe" des BMELV, Resaerch programmes under the German Ministry of Science programmes are tied in with the "Charter"		
	 New or adapted informational campaigns/instruments; name: Use of existing promotion tools and entities, eg. Holzabsatzfonds, Fachagentur Nachwachsende Rohstoffe New or restructured institutions/organisations; name: Fachagentur 		
	Nachwachsende Rohstoffe a preexisting organisation was adopted as the agency for Programme related reseach activities ☐ Implementation in forest policy: even if not mentioned in the document 's main body, it is evident that the Charter is tied in with national forest programme, this becomes visible in Chapter 7.1, where one of the objectives is named as enhancing the use of wood from sustainable forestry; Other references can be indentified		
General	List research needs you identified, they might be taken up in phase II of COST E51		
	<u> </u>		

comment:	Name further reference sources used
	The focus of the Charter is mainly promoting wood and to a smaller extend product innovation, mainly in the field of bioenergy and its implementation. Organisational innovation is not considered here as a field for innovation policies, even if organisational development in SMS und networking of regional actors is a key to success for wood utilisation.

4.1 Part B – Integration of innovation

The guiding question for the analysis of the respective document is: <u>whether and how</u> innovation is taken up and integrated in the respective document.

Part B consists of three sections:

- 1. Overall Innovation Orientation (table 6)
- 2. Innovation Support Measures (table 7)
- 3. Cross-sectoral coordination (table 8)

Please copy the respective tables and fill in one table for each of the documents specified in Step 1 separately

Table 6 'Part B - Overall Innovation Orientation' analysis bases largely on your expert judgement and interpretation of the text in the document. If necessary verify your judgements with other COST E51 participants from your country. The aim is to analyse in how far the document uptakes and is oriented at the topic innovation in general.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings). The filled-in table should not exceed 3 pages.

Table 9: 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	 ☐ never ⊠ sometimes ☐ frequently 	
	Please mark the frequency of occurrence of the forest sector <u>'innovation frontier'</u> – innovation areas identified in Chapter 3 - in the document	 □ never ⊠ sometimes □ frequently 	
	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	 never sometimes frequently Terms used: 	
	Further comments on overall innovati product innovation particularly for named but just along some exam	r the increased use of bioenergy is	
Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)	to reach the objectives, even if th tackled. E.g. the background desc	cription closes with a phrase that	
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	 competences for innovation have to be developed. very general (innovation is named in general parts, e.g. preamble, but no related goals, measures, identified needs or similar are addressed by the document) rather general (innovation is addressed in overall goals, needs are identified but no specification of measures) rather specific (innovation is addressed in concrete goals, measures are formulated) very specific (quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist) Comments: Please specify further in which context innovation is addressed (Is innovation a goal, underlying rationale, a strategy or means to reach other goals, unrelated, etc.?) Some examples are named in the field of product innovation particularly in the field bioenergy. However, these examples given are not specific but name few areas of development which are generally known in the scientific communities 		
Understanding of innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1	 Predominately traditional science a Traditional S&T policy with system Systemic innovation policy with S8 Predominantly systemic innovation Comments: in general terms the docume policy 	nic elements &T policy elements n policy	
Goals and objectives: Please specify further what objectives and goals (quantitative and qualitative) are formulated in relation to innovation?			
Reseach and Development to enhance the use of wood and wood based products – A quantitative goal is only named for the increase of wood consumption per capita of 20% over a period of 10 years. Based on this the Charter names the most relevant already implemented measures which may contribute towards this goal.			

Issues, problems and related topics:

Please describe shortly what main issues and problems are formulated in relation to innovation? Does the programme address other issues that are related to innovation, e.g. competitiveness of the sector, diversification etc.? Please describe shortly

The operational part of the document addresses two subgoals:

1. To raise the demand for domestic timber and

2. Optimise wood supply

While the first field is namely for market research and promotion activities, requiring joint forces from all actors in the marketing chain, the second field sums up a couple of fields for action to overcome barriers for wood mobilisation, ranging from increased management skills of forest owners to advanced logistical and technical concepts for optimising the wood supply chain. The innovative aspect of this document (if this can be interprepted that way) is that the Charter intends to bring together the core actors in the chain and and to assign responsibilities for different actions.

Innovation areas:

Please name the most important innovation areas named by the document and compare with the results gathered in table 3.1.

Products:

- Biomass to Liquid, Alcohol as a renewable energy
- Call for increased use of wood products as industrial raw material

Marketing

- promoting by reference products (construction)

Organisation

not named specifically

Institutional:

- Joint initiatives from various actors in the wood chain are requested (but not yet described in operational terms)

Table 7 "Part B - Innovation support measures" below helps to gather and organize information on the support measures that are introduced by the document. *Also when no concrete measures are included, please analyse proposed activity areas/measures/needs within the document.*

Please list the identified support measures according to the **six main support categories introduced in chapter 2.2.2**.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings, examples). The filled-in table should not exceed 3 pages.

	Table	e 10: Part B - Innovation Support Measures
	Research and Development	List support measures proposed or implemented by the document that target research and development activities by enterprises.
Innovation support measures Consult classification in chapter 2.2.2		 The document makes reference to existing programmes and outlines the respective relevance for the Charter´s objectives: introduction of new products (bioenergy and industry) into markets Research on CO2-bilances: always considering the positive characteristics of wood Innovative sources of income
	Diffusion of innovation	List support measures proposed or implemented by the document that target the diffusion of known products, processes, marketing methods, and organisational methods. Specify for which products, processes, marketing methods, and organisational methods support is given. Refer to and compare with the list gathered under 3.1.
		Support and diffusion is namely foreseen in the Charter Management. However, even if the structure with its named organisational members seems clear, the document (and website) analysis can not verify the efficiency of the management and its usefulness for the broader objectives of the goals of the Charter. It seems as if the diffusion of the objectives is falling back on the traditional activities of the individual actors (e.g. Holzabsatzfond and others)
	Strengthening the knowledge base	List support measures proposed or implemented by the document that aim at strengthening the knowledge base for innovation. <u>not evident</u>
	Strengthening interaction	List support measures proposed or implemented by the document that aim at strengthening the interactions between key actors.
	-	see remarks under diffusion
	Demand creation	List support measures proposed or implemented by the document that aim at promoting the demand for innovation.
		The demand for innovation is named as a rationale but the measures named do not address innovations specifically.
		Under research there is a call for innovative sources of income, mainly in forest related services

Table 10: Part B - Innovation Support Measures

r		
	Improving	List initiatives/ policy actions proposed or implemented by the document that aim at improving the framework conditions for innovation.
	frame	
	conditions	Not evident
	Comments	
	comments	
	Generally the do	cument makes reference to existing measures, which support
		bjectives. For the document itself it can be assumed that it
		ate actors to further develop initiatives either under the
		Charter or as subsequent industry initiatives.
Priorities		Please assess qualitatively which of the above mentioned category(ies) is a
Filonties		priority area for innovation support within the document. Please give short reasoning for your judgement
		Bio-energy is prioritised, firstly because in the energetic use of
		wood is the highest potential for a fast increase of wood
		consumption, secondly because the endorsement of the
		document falls in a governing period where renewable energy
		policy became a priority area on the political agenda.
		poncy became a priority area on the political agenua.
Assessment	of overall	Please assess qualitatively the overall relevance of innovation support
relevance	or overall	measures compared to other support measures proposed or introduced by the
		document. Give short reasoning for your judgement.
		While there are no direct innovation support measures based
		on the Charter, the direct relevance can be estimated as being
		rather low. But of course, the measures named in the
		document – being the most important research and
		development programmes at the time of endorsement of the
		document have a high innovative potential. Here a follow up
		of each measure might give more insight into the relevance of
		the innovative potential of the forest wood sector policy in
		Germany
Promotion o	of innovation	Please assess qualitatively how much innovation is furthered by the document. This would include the assessment of the overall relevance of innovation within the document as well as the relevance of the document for the policy area.
		While the document mainly focuses on increase use of wood, innovation has a serving character – eg. it is named that innovation is important towards the goals.
General com	nment:	List research needs you identified, they might be taken up in phase II of COST E51
		Name further reference sources used
		The document as it stands does not raise subsequent reseach needs.
		Further references:
		Research Programme:
		Bundesministerium für Bildung und Forschung: "Forschung zur nachhaltigen Waldwirtschaft" (research for sustainable Forestry) Programme and Call for proposals.
		http://www.nachhaltige-waldwirtschaft.de/

Table 9 "Part B - Cross-sectoral coordination mechanisms" below helps to collect information on cross-sectoral co-ordination mechanisms see guidelines chapter 2.3.

	Table 11. Fart B - Cross-sectoral coordination
Policy formulation	
Co-ordination with other processes and documents	Please list other processes or documents with which the considered document is formally co-ordinated
	The document is based on the National Sustainability Strategy and is coordinated with the National Forest Programme. However the update of the documents policy (i.e. documentation on the website maintained by the Ministry of Agriculture) does not show clear links to other policy areas.
Administrative Co- ordination:	between different sections/departments within the same ministry; specify:
or unnation.	between different ministries, specify:
	between ministries and other public organizations / agencies, specify:
	The Steering Group consists of a wide range of actors incl. different
	federal ministries, organisations, agencies and industry actors
	<u>Comments:</u> not clearly evident in the document
Stakeholder involvement	Forestry: name most important organisations: German Forestry Board, Forest owners association,
	Agriculture: name most important organisations:
	Tourism: name most important organisations:
	Energy: name most important organisations: <u>Agency for renewable</u> <u>energies</u>
	Environment: name most important organisations:
	Other sector:: name most important organisations:
	Other sector:: name most important organisations:
	<u>Comments</u> : Shortly describe the type of stakeholder involvement
	List of stakeholders is Annex to the document.
	Stakeholders are supposed to take over responsible roles in various activities for the implementation of the programme.
Coordination	Formal (central) coordination body; name:
mechanisms:	Formal coordination process
	Inter-sectoral working groups
	Inter-sectoral advisory body
	Formal mandatory consultation process
	Formal voluntary consultation process
	Informal consultations (please describe) Others:
Policy Implementatio	
Responsible actors and their roles:	Shortly explain the role of the main actors in the implementation of the document
Level of delegation	 Decentralized, e.g. Central, e.g. ministry, public agency Outsourced to private actors Local, e.g. by municipalities Regional, e.g. by regional public actors Others:
General comment	List research needs you identified, they might be taken up in phase II of COST E51
	Name further reference sources used

 Table 11: Part B - Cross-sectoral coordination

5 Innovation Policy – National Reform Programme

5.1 Part A – General description

The objective of Part A is to provide general information on the policy document shaping the respective policy field in the country. The following table 5 'Part A – General document analysis' guides the collection of the general information.

Please copy this table and fill in one table for each of the documents specified in Step 1 separately

Information should be rather general and give a basic overview on the document. This means you should keep entries rather short (headings, headwords). The filled-in table should not exceed 2 pages.

Name:	Nationales Reformprogramm Deutschland	
Adoption: Please mark by whom and at which level the document is adopted	Parliament Government Ministry: Others: No formal approval Level: XX National Regional Local	
	X National Regional Local	
Validity period:	2005-2008	
Revision:	Nationales Reformprogramm Deutschland 2005-2008: Umsetzungs- und Fortschrittsbericht 2006. 15.8.2006. 91 S.	
Monitoring/ Evaluation:	yes - monitoring is part of above mentioned update	
Related documents:	- none -	
Geographical scope:	National Regional; name: Local, name:	
Budget:	none	
General description of contents as written in document		
Objective of the document	basis: applying to Lisbon strategy of the EU central objective: further evolution of the knowledge society; additional: competitive framing of markets; improvement of framework conditions for enterprises by reducing obstacles agains private initiatives; improvement of an economic structure adapted to competition; support for small business (mittelstand)	
Priorities	 6 priority areas ("as a strategy for more growth and employment"): 1. extension of the knowledge society as a central precondition for "future fitness" of a modern society 2. organisation of markets in a way adapted to competitive needs 3. further improvement of the framework conditions for entrepreneurial activities 4. consolidation of public finances (restriction: "konjunkturgerecht"=adapted to economic situation) 5. Usage of ecological innovations as a competitive advance 6. orientation of economic, financial and employment policy towards more employment. 	

Table 12: Part A - General document information

	T
Structure	original structured along the 6 priority areas.
	update has a related, but shorter and deeper structure. 3 main chapters:
	1. status quo of the economy (status quo description; main problem issues: consolidation of public budgets incl. social security; finalising German unification; reform of federal system)
	2. furthering structural change (knowledge society, opening of markets, frame conditions for entrepreneurship, ecological innovations as a competitive advantage)
	3. employment situation (structural reforms, migration, demografical aspects, family integration etc.)
	additionally a list of indicator tables about measures related to program; these make up about half of the whole text (45 pp.) and are quite detailed & informative (including concrete measures, legal acts, time planning etc.
Measure Areas	120 rather detailed measures of several kinds listed in the second ("tables") part of the update, following the above structure.
	No measure directly related to forestry. One measure related to forestry wood chain (measure 98: market incentive program for renewable energy, subsidisation of solar collectors and modern wood heating).
	Some measures related to rural areas development (National Strategy plan, plus related measures of the laender; biomass action plan at laender level; foundation of "competence agencies" in order to integrate disadvantaged younger people at social problem areas and in rural areas
Follow-up / Impl	lementation
Follow-up	No follow-up activities so far
measures:	New or adapted funding programme(s) /budget line; name: se tables of update New or adapted regulations/laws; name:
	New or adapted informational campaigns/instruments; name:
	New or restructured institutions/organisations; name:
	Implementation in forest policy: none (no direct relation to forest policy)
General	Forestry not mentioned throughout whole document. Wood not mentioned in original, but
comment:	once in text of update (modern wood radiation). Even if forestry /forestry-wood-chain is embodied in "rural areas", only 8 occurences of "r.a." in original plus 17 in update.
	This is the most concrete source (in comparison with sust. dev. strat. and NWP)

5.2 Part B – Integration of innovation

The guiding question for the analysis of the respective document is: <u>whether and how</u> innovation is taken up and integrated in the respective document.

Part B consists of three sections:

- 1. Overall Innovation Orientation (table 6)
- 2. Innovation Support Measures (table 7)
- 3. Cross-sectoral coordination (table 8)

Please copy the respective tables and fill in one table for each of the documents specified in Step 1 separately

Table 6 'Part B - Overall Innovation Orientation' analysis bases largely on your expert judgement and interpretation of the text in the document. If necessary verify your judgements with other COST E51 participants from your country. The aim is to analyse in how far the document uptakes and is oriented at the topic innovation in general.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings). The filled-in table should not exceed 3 pages.

Table 13: 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	☐ never ☐ sometimes ☑ frequently	
	Please mark the frequency of occurrence of the forest sector <u>'innovation frontier'</u> – innovation areas identified in Chapter 3 - in the document	⊠ never □ sometimes □ frequently	
	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	 never sometimes frequently Terms used: 110 entrepreneur (untern*), 80 competitiveness (wettb*)etc 	
	Further comments on overall innovation	tion orientation of the document:	
Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)	 No relevance at all Marginal issue One issue among others Important issue 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	no related goals, measures, identifie the document) rather general (innovation is addi identified but no specification of mea rather specific (innovation is addi are formulated) very specific (quantified goals relation	ressed in overall goals, needs are asures) ressed in concrete goals, measures ated to innovation are formulated, ed budget and timetable exist) c, for others specific (eg. timetable and	
Understanding of	Predominately traditional science	and technology policy	
innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1	 ☐ Traditional S&T policy with system ☑ Systemic innovation policy with S ☐ Predominantly systemic innovation Comments: ./. 	&T policy elements	
Goals and objective	s:		
general focus is very much on hightech innovation and on environment-friendly technology innovation, both with a view towards international competitiveness of the German economy (export orientation) among the goals associated with individual measures dominate: furtherance of high tech and cross-sectional technology; furtherance of innovative SMEs; stronger application orientation in publicly funded research; furtherance of knowledge and technology transfer;			
with regard to environmental technology the goals are climate protection, energy efficiency and export orientation (quantitative goals not reported here since no direct relation to forestry; see tables part of update here, especially pp.53 onwards and pp.82-84)			

Issues, problems and related topics:

Some main issues are the high level of unemployment, specifically in the eastern federal states; the size of the public budget deficit; the wish to establish internationally competitive university research ("Exzellenzinitiative"); the problems of German school education as revealed in the bad results of the PISA tests, especially for migrant children; deregulation necessities; the financial frame conditions for enterprises (tax system, subsidisation system, legal framework for founders of new business); adaptation to aging society; reform of the federal system; energy issues; adaptation of work situation to needs of families

Innovation areas:

Many innovation areas mentioned (see above), but none of these directly related to forest sector. Most closely indirectly related areas are the construction sector (measure 58 in update ["research initiative future of construction"]), some accents on SMEs (several measures), the development of rural areas (measure 85 [National Strategy Plan]), and the focus on renewable energy (measures 88 [several Laender measures], 89 [renewable raw materials/biomass], 97 [EEG=Act on (Subsidisation of) Renewable Energies], 98 [market incentive programme ren. energy], 99 [Export initiative renewable energies]

General comment:

./.

Table 7 "Part B - Innovation support measures" below helps to gather and organize information on the support measures that are introduced by the document. *Also when no concrete measures are included, please analyse proposed activity areas/measures/needs within the document.*

Please list the identified support measures according to the **six main support** categories introduced in chapter 2.2.2.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings, examples). The filled-in table should not exceed 3 pages.

	Research and	e.g. framework programme "Forschung für Nachhaltigkeit" (research for
	Development	sustainability; budget 160 Mio EUR for 5 years). [This programme has a part on "Nachhaltige Waldwirtschaft" (sustainable forest management, including funding also for forestry-wood-chain) which is not mentioned in the national reform programme, however it is there; total 20 Mio EUR)]
	Diffusion of innovation	 -measure 15: innovation competition for knowledge transfer science- businesses, specially addressed to research & SMEs - measure 24: several measures of the federal states for business/university cooperations - measure 25: pact on research and innovation (increased funding for big research organisations, incl. transfer funding)
Innovation support measures Consult	Strengthening the knowledge base	several measures for - university education & research (restricted competence of the central state here!) - school education as a prerequisite for knowledge development
<i>classification in chapter 2.2.2</i>	Strengthening interaction	 measure 13: initiation of cooperative networks and cluster management projects in the framework of Gemeinschaftsaufgabe Verbesserung regionale Wirtschaftsstruktur measure 24 (see above) strengthening PPP (specifically in road construction)
	Demand creation	- eg. measure 97 (subsidisation of renewable energy consumption by Act on Renewable Energy)
	Improving frame conditions Comments	many measures addressing reduction of bureaucracy; financing and banking system;
	comments	
Priorities		priority is rather clearly given to high tech innovations and to securing the framework conditions for an export oriented economy.
Assessment of overall relevance		hard to assess the relevance of innovation relative to other support measures due to the rather comprehensive character of the document. So, innovation is one important aspect among several others.
Promotion of innovation		Even though the document collects several measures which have been already underway (i.e. to some degree it is still descriptive rather than revolutionary), it also sets some future directions (much more than e.g. NWP or sustainability strategy) in a rather operational and concrete manner. Even though forestry is not even a marginal aspect in the national reform strategy, the document's indirect effects will probably be much more relevant for forestry than more concretely specified measures contained in other sector specific documents.
General com	nment:	./.

 Table 14: Part B - Innovation Support Measures

Table 9 "Part B - Cross-sectoral coordination mechanisms" below helps to collect information on cross-sectoral co-ordination mechanisms see guidelines chapter 2.3.

	Table 15: Part B - Cross-sectoral coordination
Policy formulation	
Co-ordination with other processes and documents	both sources (original and update) collect many other processes in an overview
and documents	formal coordination with (or rather, reaction to) Lisbon strategy of EU
Administrative Co- ordination:	 between different sections/departments within the same ministry; specify: between different ministries, specify: government between ministries and other public organizations / agencies, specify: <u>Comments:</u> ./.
Stakeholder	Forestry: name most important organisations:
Coordination	 Forest-based industries: name most important organisations: Agriculture: name most important organisations: Tourism: name most important organisations: Energy: name most important organisations: Environment: name most important organisations: Other sector: Federal states : name most important organisations: Other sector:: name most important organisations: Other sector:: name most important organisations: Other sector:: name most important organisations: Mother sector:: name most important organisations: Other sector:: name most important organisations: Mother sector:: name most important organisations: Other sector:: name most important organisations: Mother sector:: name most important organisations:
mechanisms:	Formal coordination process Inter-sectoral advisory body Formal mandatory consultation process Formal voluntary consultation process Informal consultations (please describe) Others:
Policy Implementation	
Responsible actors and their roles:	federal government (and laender governments according to competence distribution of the federal constitution)
Level of delegation	 Decentralized, e.g. Central, e.g. ministry, public agency Outsourced to private actors Local, e.g. by municipalities Regional, e.g. by regional public actors Others:
General comment	<i>J</i> .
L	1

Table 15: Part B - Cross-sectoral coordination

6 Rural Development Policy – Rural Development Programme

Information should be rather general and give a basic overview on the document. This means you should keep entries rather short (headings, headwords). The filled-in table should not exceed 2 pages.

	Table 16: Part A - General document information
Name:	National Strategic Plan of the Federal Republic of Germany for the development of rural areas 2007-2013
Adoption: Please mark by whom and at which level the document is adopted	□ Parliament □ Government □ Ministry: Ministry for Food, Agriculture, and Consumer Protection □ □ Others: □ No formal approval Level: □ ☑ National ☑ Regional □ Local Adoption date: 19 September 2006 □
Validity period:	2007-2013
Revision:	Is (regular) revision/ update of the document planned? Has it already taken place, when? Yes, the document will be revisioned at the beginning of the next funding period (2014) at the latest.
Monitoring/ Evaluation:	Is the implementation of the document formally monitored? Has an evaluation taken place? Is an evaluation foreseen? Yes, measures described in this document and implemented through the federal states have to be evaluated formally (ex ante, mid-term, and ex-post)
Related documents:	The document is part of the national implementation system of the European support for rural development by the European Agricultural Fund for Rural Development (EAFRD) (second pillar of the European Structural Funds' policy for the development of rural areas 2007-2013, Council Regulation 1698/2005). As common national framework, the document contains priorities for the development of rural areas which reflect the EAFRD. Closely related is the national frame regulation for the development of rural areas that serves as instrument for the coordination and financing of the rural development programmes of the 16 German federal states. Each German federal state has to formulate an own program for the development of rural areas under the EAFRD background since Germany is a federal state in which the federal states are the implementation level for policies for rural development.
Geographical scope:	National Regional; name: all federal states 🗌 Local, name:
Budget:	 8.112.517.055 € (for whole document period) Source for the budget: EU / the budget have to be co-financed by different national state levels during implementation period Amount of budget in € (indicate whether per year or for whole document period); indicate the source for the budget, i.e. state, EU, regions, co-financed, etc.
-	on of contents as written in document
Objective of the document	Name shortly the main objective of the document (as written down in preamble, introduction part, vision or mission statements). The national strategic plan analyses the economic, the structural, the ecologic, and the social situation of rural areas in Germany and their development potentials. It contains a common strategic concept and priorities for every focal point and a quantification of main goals and indicators for accompanying and evaluation. Furthermore the coherence of funding measures with other policies on the national and European level is ensured as well as the regional distribution (proportions of the different federal states) of the EU funds for Germany is described. The national strategic plan has been formulated in cooperation with the federal states and under participation of different societal stakeholders.
Priorities	Name the thematic priority areas of the document. Priority 1: Improvement of the competitiveness of agriculture and forestry Priority 2: Improvement of environment and landscape Priority 3: Life quality in rural areas and diversification of rural economy Priority 4: LEADER

Structure	Shortly sketch the basic structure of the document, i.e. different thematic parts, basic elements (e.g. action areas, indicators, etc.)		
	The different parts of the document are:		
	 a description of the current economic, structural, ecologic, and social situation of the agricultural sector and rural areas in Germany (pp5-25) 		
	2) the common strategy (pp26-33)		
	 the thematic priority-based special strategies (pp 34-43) with a quantification of main goals and indicators (p 44) 		
	4) regional programmes and distribution of the funds (pp45-47)		
	5) mechanisms for consistency and coherence (pp48-49)		
	6) and the description of the national network (p50)		
Measure Areas	Name measure areas as described by the documents and general types of measures the document introduces.		
Follow-up / Impl	ementation		
Follow-up measures:	 No follow-up activities so far New or adapted funding programme(s) /budget line; name: each federal state has adopted an own funding programme according to the national strategy in order to implement the EU EAFRD regulation New or adapted regulations/laws; name: New or adapted informational campaigns/instruments; name: conference series on "the future of rural areas", organised by the national ministry (BMELV) – has been started in 2006; new national network unit as "interface" between the different state-levels during the EAFRD implementation and as information source for the actors involved New or restructured institutions/organisations; name: national network unit LEADER+ will become national network unit EAFRD (see above) 		
General comment:	List research needs you identified, they might be taken up in phase II of COST E51 Name further reference sources used		

6.1 Part B – Integration of innovation

The guiding question for the analysis of the respective document is: <u>whether and how</u> innovation is taken up and integrated in the respective document.

Part B consists of three sections:

- 1. Overall Innovation Orientation (table 6)
- 2. Innovation Support Measures (table 7)
- 3. Cross-sectoral coordination (table 8)

Please copy the respective tables and fill in one table for each of the documents specified in Step 1 separately

Table 6 'Part B - Overall Innovation Orientation' analysis bases largely on your expert judgement and interpretation of the text in the document. If necessary verify your judgements with other COST E51 participants from your country. The aim is to analyse in how far the document uptakes and is oriented at the topic innovation in general.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings). The filled-in table should not exceed 3 pages.

Table 17: 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	 □ never □ sometimes ⊠ frequently
	Please mark the frequency of occurrence of the forest sector <u>'innovation frontier'</u> – innovation areas identified in Chapter 3 - in the document	 never sometimes* frequently Innovation areas are described more detailed in special programmes (e.g. programmes of the federal states, the LEADER program, Regionen Aktiv) – the national strategic plan describes such areas more general
	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	 never sometimes frequently Terms used: diversification, competitiveness
		AFRD implementation (detailed s) or in pilot programmes like uch innovation areas are
Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)	 No relevance at all Marginal issue One issue among others Important issue 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	 □ very general (innovation is named in general parts, e.g. preamble, but no related goals, measures, identified needs or similar are addressed by the document) □ rather general (innovation is addressed in overall goals, needs are identified but no specification of measures) □ rather specific (innovation is addressed in concrete goals, measures are formulated) (→ partly in the appendix) □ very specific (quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist) Comments: innovation seems to be a general underlying goal of the national strategic plan. Due to its characteristic as "general common statement" and the German political system in which the federal states are responsible for the implementation of rural development the national strategy is rather general – on the implementation level of the federal states the plans are much more specific, nevertheless also in the national strategy there are some quantified goals (appendix 4, pp56-59) like the labour productivity in agriculture and forestry which should be improved in comparison to the default value or the amount of farms producing organic products. Another example is the "forestry production of renewable energies" which should be increased broadly (p 56) 	

Understanding of innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1	 Traditional S&T policy with systemic elements Systemic innovation policy with S&T policy elements Predominantly systemic innovation policy Comments: The current rural development policy in Germany seems to understand innovation as result of a complex interaction of different actors (multi- level network of rural development) and is based to a certain degree on feedback loops integrating knowledge from evaluations of former funding periods. With the support of actor networks in pilot programmes like LEADER and REGIONEN AKTIV and the establishment of a national network unit the German government rather supports an innovation system of rural development instead of supporting just linear innovation transfer. The current debate on rural development is also based on an inter-sectoral understanding of rural development which means that different policies relevant for rural areas shall be integrated in future (agricultural policy,

Goals and objectives:

Please specify further what objectives and goals (quantitative and qualitative) are formulated in relation to innovation? (\rightarrow selection !!!)

- improvement of the productivity of agriculture and forestry

Training and education in agriculture - increase

Labour productivity in agriculture and forestry - increase

Gross value added in agriculture and forestry – increase

Increase of income in funded agricultural and forestry companies – growth broadly above average of all companies

- improvement of sales and market structure

average felling in private-owned forests - broad increase

- improvement of product quality

farms which produce organic food - increase

- Improvement of environmental, nature and animal protection

- Production of renewable energies
- a) from agriculture broad increase
- b) from forestry broad increase

- LEADER

- improved mobilisation of endogenous development potentials of rural areas
- Improvement of regional cooperation and strengthening of participation of important actors
- Development and dissemination of innovative approaches

Issues, problems and related topics:

Please describe shortly what main issues and problems are formulated in relation to innovation? Does the programme address other issues that are related to innovation, e.g. competitiveness of the sector, diversification etc.? Please describe shortly

In general:

Improvement of knowledge-transfer, modernisation, innovation, and quality in the food (and wood) chain Main Problems: General decrease of farms, decrease of farming as main income source in rural areas; new understanding of agriculture as not longer just being the source of food production alone (multifunctionality of agriculture)

Economic situation of forestry is tense, partly with diminishing returns (p 9, app III), problem is especially the concentration in timber production, small amounts of timber are hardly marketable (p9),

There are high potentials for the energetic use of wood for which demonstration and research activities are necessary (p10) / innovation potentials lie also in concepts of integrated rural development in which agriculture and forestry are understood in a multifunctional way (related to energy production, tourism, recreation activities, educational measures, nature protection, etc...)

Innovation areas:

Please name the most important innovation areas named by the document and compare with the results gathered in table 3.1. *

- Innovative measures improving quality and competitiveness of forest sector
- Renewable primary products
- production of energy (Biomasse)
- timber marketing (small scale private owned forests)
- sustainable forestry

LEADER:

- mobilisation of endogenous development potentials of a rural area, improvement and strengthening of intersectoral cooperation in rural regions, development and dissemination of innovative approaches and measures of rural development
- stimulation of synergies and networking

*please keep in mind that due to its characteristic as common general statement not many innovation areas are described in detail – this is a task of the federal states' detailed programmes

General comment:

List research needs you identified, they might be taken up in phase II of COST E51

Name further reference sources used

- most innovative approaches seem to be implemented by integrated rural development programmes like LEADER or REGIONEN AKTIV it seems to be fruitful to investigate such programmes in detail
- the programmes of the federal states are important nevertheless it was not possible to analyse these programmes in this phase it might be fruitful to choose one or two federal states' programmes as examples for the implementation level of the EAFRD in Germany and to see which kind of innovation is applied

Table 7 "Part B - Innovation support measures" below helps to gather and organize information on the support measures that are introduced by the document. *Also when no concrete measures are included, please analyse proposed activity areas/measures/needs within the document.*

Please list the identified support measures according to the **six main support** categories introduced in chapter 2.2.2.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings, examples). The filled-in table should not exceed 3 pages.

 \rightarrow these special issues are not in a way addressed in the document that makes it possible to fill out the table.

The most innovative aspect of the national strategic plan is its existence itself. Up to now there has not been a document / instrument on the national level for rural development. It is the first time that the goals of rural development are formulated and that indicators for assessment and evaluation on the national level are provided.

- most innovative aspects are driven by the EAFRD framework of the EC:
- \rightarrow the enlargement of LEADER
- \rightarrow the strengthening of evaluation
- \rightarrow and an improvement in participation of stakeholders

	Research and Development	List support measures proposed or implemented by the document that target research and development activities by enterprises.
	Diffusion of innovation	List support measures proposed or implemented by the document that target the diffusion of known products, processes, marketing methods, and organisational methods. Specify for which products, processes, marketing methods, and organisational methods support is given. Refer to and compare with the list gathered under 3.1.
Innovation support measures Consult classification in chapter 2.2.2	Strengthening the knowledge base	List support measures proposed or implemented by the document that aim at strengthening the knowledge base for innovation.
	Strengthening interaction	List support measures proposed or implemented by the document that aim at strengthening the interactions between key actors.
	Demand creation	List support measures proposed or implemented by the document that aim at promoting the demand for innovation.
	Improving frame conditions	List initiatives/ policy actions proposed or implemented by the document that aim at improving the framework conditions for innovation.
	Comments	
Priorities		Please assess qualitatively which of the above mentioned category(ies) is a priority area for innovation support within the document. Please give short reasoning for your judgement
Assessment relevance	of overall	Please assess qualitatively the overall relevance of innovation support measures compared to other support measures proposed or introduced by the document. Give short reasoning for your judgement.
Promotion o	f innovation	Please assess qualitatively how much innovation is furthered by the document. This would include the assessment of the overall relevance of innovation within the document as well as the relevance of the document for the policy area.
General com	nment:	List research needs you identified, they might be taken up in phase II of COST E51 Name further reference sources used

Table 18: Part B - Innovation Support Measures

Table 9 "Part B - Cross-sectoral coordination mechanisms" below helps to collect information on cross-sectoral co-ordination mechanisms see guidelines chapter 2.3.

Table 19: Part B - Cross-sectoral coordination		
Policy formulation		
Co-ordination with other processes and documents	 The document is part of the national implementation system of the European support for rural development by the European Agricultural Fund for Rural Development (EAFRD) (second pillar of the European Structural Funds' policy for the development of rural areas 2007-2013, Council Regulation 1698/2005). As common national framework, the document contains priorities for the development of rural areas which reflect the EAFRD. Closely related is the national frame regulation for the development of rural areas that serves as instrument for the coordination and financing of the rural development programmes of the 16 German federal states. Each German federal state has to formulate an own program for the development of rural areas under the EAFRD background since Germany is a federal state in which the federal states are the implementation level for policies for rural development. The national strategy is coordinated with the EAFRD (2nd pillar of the CAP 2007-2013) And the accordant federal states' programmes The NATURA 2000 network (EU nature conservation policy, Habitats directive) (p15) The EU Water Framework directive (p16) 	
Administrative Co- ordination:	 between different sections/departments within the same ministry; specify: between different ministries, specify: federal ministry of food, agriculture and consumer protection and the accordant ministries on the federal states' level between ministries and other public organizations / agencies, specify: 	
	<u>Comments:</u> Shortly explain the role of the main administrative actors The document has been formulated under responsibility of the national ministry (BMELV) in cooperation with representatives of the federal states ministries and representatives of the EC. A working group consisting of representatives of the "Bund" and the "LÄNDER" has been established in 2005. There has been three hearings for societal stakeholders and numerous written statements of different interested actors which have been examined by the BMELV. It seems that the federal states influenced the formulation of the strategy at the most. The influence of the stakeholders has been rather little.	
Stakeholder involvement	 Forestry: name most important organisations: <u>Deutscher</u> <u>Forstwirtschaftsrat</u> Forest-based industries: name most important organisations: <u>AGDW</u> Agriculture: name most important organisations: <u>DBV (German Association of Farmers)</u> Tourism: name most important organisations: <u>Verband deutscher</u> <u>Naturparke (partly tourism-oriented)</u> Energy: name most important organisations: <u>BUND, WWF</u> Other sector: <u>labour unions</u>: name most important organisations: <u>BUND, WWF</u> Other sector: <u>labour unions</u>: name most important organisations: <u>LG BAU</u> Other sector: <u></u>: name most important organisations: <u></u> 	
Coordination mechanisms:	 Formal (central) coordination body; name: <u>BMELV</u> Formal coordination process Inter-sectoral working groups Inter-sectoral advisory body Formal mandatory consultation process 	

Table 19: Part B - Cross-sectoral coordination

	Formal voluntary consultation process Informal consultations (please describe) Others:	
Policy Implementation		
Responsible actors and their roles:	Shortly explain the role of the main actors in the implementation of the document See above	
Level of delegation	Decentralized, e.g.	
Level of delegation	Central, e.g. ministry, public agency Outsourced to private actors	
	 Local, e.g. by municipalities Regional, e.g. by regional public actors 	
	Others:	
General comment	List research needs you identified, they might be taken up in phase II of COST E51	
	Name further reference sources used	

7 Regional Development Policy

7.1 Part A – General description

The objective of Part A is to provide general information on the policy document shaping the respective policy field in the country. The following table 5 'Part A – General document analysis' guides the collection of the general information.

Please copy this table and fill in one table for each of the documents specified in Step 1 separately

Information should be rather general and give a basic overview on the document. This means you should keep entries rather short (headings, headwords). The filled-in table should not exceed 2 pages.

Name:	Update mid-term evaluation of the RDP of North Rhine-Westphalia	
Adoption: Please mark by whom	Parliament Government Ministry:	
and at which level the document is adopted	Others: European Commission No formal approval	
	National Regional Local Adoption date: Image: Comparison of the second	
Validity period:	2000-2004	
Revision:	The final revision of the program will be carried out as ex-post evaluation of the Rural Development Program (RDP) in 2006. It will be evaluated by extern evaluators, financed by regional governments and the EU.	
Monitoring/ Evaluation:	Is the implementation of the document formally monitored? Has an evaluation taken place? Is an evaluation foreseen? No	
Related documents:		
Geographical scope:	□ National	
Budget:	Amount of budget in € (indicate whether per year or for whole document period); indicate the source for the budget, i.e. state, EU, regions, co-financed, etc. No answer possible	
General description of contents as written in document		

Table 20: Part A - General document information

Objective of the document	Name shortly the main objective of the document (as written down in preamble, introduction part, vision or mission statements).
	Evaluation of Rural Development Program in North Rhine Westphalia aims
	- to give an financial overview about the operations carried out
	- to examine the impacts of forest activities
	- to examine the efficiency of forest measures
Priorities	Update mid-term evaluation
Structure	- Administration of forest subsidization
	- Financial overview about operations carried out in the period
	- Answers to the indicators given by the EC
	- Recommendations for further implementations of forest subsidies
Measure Areas	- Silvicultural activities
	- Restoring operations in damaged forests
	- Forest road rehabilitation
	- Encouragement of protections of forests with high nature value
	- Increasing the natural stability of forests
Follow-up / Impl	ementation
Follow-up	No follow-up activities so far
measures:	New or adapted funding programme(s) /budget line; name: Rural
measures.	Development Program 2007-2013
	New or adapted regulations/laws; name:
	New or adapted informational campaigns/instruments; name:
	New or restructured institutions/organisations; name:
	Implementation in forest policy:
General	- Ex-post evaluation of Rural Development Program 2000-2006.
comment:	

7.2 Part B – Integration of innovation

The guiding question for the analysis of the respective document is: <u>whether and how</u> <u>innovation is taken up and integrated in the respective document.</u>

Part B consists of three sections:

- 1. Overall Innovation Orientation (table 6)
- 2. Innovation Support Measures (table 7)
- 3. Cross-sectoral coordination (table 8)

Please copy the respective tables and fill in one table for each of the documents specified in Step 1 separately

Table 6 'Part B - Overall Innovation Orientation' analysis bases largely on your expert judgement and interpretation of the text in the document. If necessary verify your judgements with other COST E51 participants from your country. The aim is to analyse in how far the document uptakes and is oriented at the topic innovation in general.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings). The filled-in table should not exceed 3 pages.

Table 21: 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 Please mark the frequency of occurrence of the forest sector	 ☐ never ☐ sometimes ☐ frequently ☑ never
	<u>'innovation frontier'</u> – innovation areas identified in Chapter 3 - in the document	☐ sometimes ☐ frequently
	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	 ☐ never ⊠ sometimes ☐ frequently Terms used:
	Further comments on overall innova	tion orientation of the document:
Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)	 No relevance at all Marginal issue One issue among others Important issue Central issue Comments: 	
Degree of specification: Please mark how general or specific innovation is addressed by the	 very general (innovation is named in general parts, e.g. preamble, but no related goals, measures, identified needs or similar are addressed by the document) rather general (innovation is addressed in overall goals, needs are identified but no specification of measures) 	
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	 rather specific (innovation is addressed in concrete goals, measures are formulated) very specific (quantified goals related to innovation are formulated, 	
Understanding of	Predominately traditional science	and technology policy
innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1	 Traditional S&T policy with system Systemic innovation policy with S Predominantly systemic innovation Comments: Please describe further the 	&T policy elements n policy
Goals and objective	s:	
Please specify further what innovation?	at objectives and goals (quantitative and q	ualitative) are formulated in relation to
Issues, problems and related topics: -		
Innovation areas: Please name the most imp gathered in table 3.1.	portant innovation areas named by the doc	ument and compare with the results

General comment:

- Ex-post evaluation of Rural Development Program 2000-2006 should be taken up in phase II of COST E51.

Table 7 "Part B - Innovation support measures" below helps to gather and organize information on the support measures that are introduced by the document. *Also when no concrete measures are included, please analyse proposed activity areas/measures/needs within the document.*

Please list the identified support measures according to the **six main support** categories introduced in chapter 2.2.2.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings, examples). The filled-in table should not exceed 3 pages.

	Research and Development	
	Diffusion of innovation	
Innovation support measures	Strengthening the knowledge base	
Consult classification	Strengthening interaction	
in chapter 2.2.2	Demand creation	
	Improving frame conditions	
	Comments	
Priorities		
Assessment of overall relevance		
Promotion of innovation		
General comment:		The document which is evaluated does not include relevant information about innovation. For this reason it is not possible to fill in the missing data.

Table 22: Part B - Innovation Support Measures

Table 9 "Part B - Cross-sectoral coordination mechanisms" below helps to collect information on cross-sectoral co-ordination mechanisms see guidelines chapter 2.3.

	Table 23. 1 art D - Cross-sectoral coordination
Policy formulation	
Co-ordination with other processes and documents	Please list other processes or documents with which the considered document is formally co-ordinated
Administrative Co- ordination:	 between different sections/departments within the same ministry; specify: between different ministries, specify: between ministries and other public organizations / agencies, specify: comments: Shortly explain the role of the main administrative actors
Stakeholder involvement	 Forestry: name most important organisations: Forest-based industries: name most important organisations: Agriculture: name most important organisations: Tourism: name most important organisations: Energy: name most important organisations: Environment: name most important organisations: Other sector:: shortly describe the type of stakeholder involvement
Coordination mechanisms:	 Formal (central) coordination body; name: Formal coordination process Inter-sectoral working groups Inter-sectoral advisory body Formal mandatory consultation process Formal voluntary consultation process Informal consultations (please describe) Others:
Policy Implementation	on
Responsible actors and their roles:	Shortly explain the role of the main actors in the implementation of the document
Level of delegation	 Decentralized, e.g. Central, e.g. ministry, public agency Outsourced to private actors Local, e.g. by municipalities Regional, e.g. by regional public actors Others:
General comment	The document which is evaluated does not include relevant information about innovation. For this reason it is not possible to fill in the missing data.

Table 23: Part B - Cross-sectoral coordination

7.3 Part C – Appraisal of effects: Rural Development Programme 2000-2006

Most of documents that will be analysed in Part A and Part B are rather new, and effects will not be separately appraised. Task 2 "Appraisal of effects" will therefore be implemented only for the Rural Development Programme 2000-2006 wherever country capacities allow.

Sources to be used are monitoring data, mid-term evaluation and final evaluation reports.

Please insert in table 9 general information on the programme output for the whole Rural Development Programme and the forestry part of the programme separately.

	Whole document (RDP) North Rhine Westphalia	Forestry Part
Total amount of funding	268,57 Mio Euro	60,37 Mio Euro
Total number of projects		Not available
Total number of beneficiaries		9838
Average amount of funding per project	in €	Not available
Median of project funding	in €	Not available
Average amount of funding per beneficiary	in €	6136 Euro
Median of funding per beneficiary	in €	Not available

Table 24: Part C - Appraisal of Effects - General Infor	mation
---------------------------------------------------------	--------

General comment:

data needed to fill in the table are not available

a comparison of projects of the whole RDP and Forestry Part is not possible due to quite different definitions of these projects

8 Sustainable Development Policy

8.1 Part A – General description

The objective of Part A is to provide general information on the policy document shaping the respective policy field in the country. The following table 5 'Part A - General document analysis' guides the collection of the general information.

Please copy this table and fill in one table for each of the documents specified in Step 1 separately

Information should be rather general and give a basic overview on the document. This means you should keep entries rather short (headings, headwords). The filled-in table should not exceed 2 pages.

Table 25: Part A - General document information

Name:	Perspektiven für Deutschland (Sustainable development policy)
-------	---------------------------------------------------------------

Adoption:	🗌 Parliament 🖾 Government 🗌 Ministry:				
Please mark by	Others: No formal approval				
whom and at	Level:				
which level the document is	🛛 National 🔹 🗌 Regional 🔹 🗌 Local				
adopted	Adoption date: 17.4.2002				
•					
Validity period:	open				
Revision:					
Revision.	Updates: 1) BUNDESREGIERUNG (2004): Fortschrittsbericht 2004 zur nationalen Nachhaltigkeitsstrategie,				
	http://www.nachhaltigkeitsrat.de/service/download/strategie_2004/Fortschrittsbericht_2004.pdf				
	2) BUNDESREGIERUNG (2005): Wegweiser Nachhaltigkeit 2005: Bilanz und Perspektiven.				
	Kabinettsbeschluss vom 10. August 2005. Berlin: Presse- und Informationsamt der				
	Bundesregierung, 129 S., http://www.bundesregierung.de/Content/DE/Anlagen/wegweiser- nachhaltigkeit,property=publicationFile.pdf				
Monitoring/	regularly (biennial). Most recent Monitoring Report from April 2007 [Statistisches Bundesamt (2207): Nachhaltige Entwicklung in Deutschland. Indikatorenbericht 2006.				
Evaluation:	(http://www.destatis.de/download/d/ugr/Internet_Nachhaltigkeit.pdf)]				
Related	1) Empfehlungen des Rates für Nachhaltige Entwicklung an die Bundesregierung zum				
documents:	Thema: "Waldwirtschaft als Modell für nachhaltige Entwicklung: ein neuer Schwerpunkt für die				
documents.	nationale Nachhaltigkeitsstrategie",				
	http://www.nachhaltigkeitsrat.de/service/download/publikationen/broschueren/ Broschuere_Wald_in_der_Nachhaltigkeitsstrategie.pdf				
C					
Geographical	National Regional; name: Local, name:				
scope:					
Budget:	none				
General descr	iption of contents as written in document				
Objective of	1) Compliance with Agenda 21 (Germany as a signatory state);				
the	2) founding a general principle (i.e. sustainability) for the policy of the federal government				
document	3) identifying important trends in economy and society; setting targets for sustainable				
	development				
Priorities	7 areas explicitly mentioned as "priority areas" (Chapter E): 1) Efficient energy usage and				
	climate protection; 2) securing mobility while preventing environmental damages; 3) health oriented nutritient production and nutrition 4) framing the demographic change and aging				
	society 5) Educational reforms and university reform [reduced priority because of later				
	federalism reform which restricted the competences of the federal level in this area] 6)				
	innovation (within enterprises) as a driving force for sustainability (and vice versa) 7) reducing				
	land consumption in settlement development; additionally: accepting responsibility for global sustainable development				
Structure	document is organised along 4 "lead thematic areas" which are underpinned by 21 key				
Siluciale	indicators (with concrete targets & time horizon each; Chapter D):				
	A) justice between generations: 1) resource protection (energy and raw material productivity);				
	2) climate protection (reduction of greenhouse gases) 3) renewable energies (share at total				
	energy consumption) 4) land consumption (increase in settlement and traffic area) 5) species				
	diversity (bird species as an indicator) 6) public debt (national deficit) 7) economic future precautions (relation of investment and GDP) 8) innovation (private and public expenditures in				
	R&D) 9) education (formation situation of 25-year-old; university beginners)				
	B) quality of life: 10) economic welfare (GDP per inhabitant); 11) mobility (transport intensities				
	of passenger and goods traffic; share of rail and ship inland water transportation at goods				
	traffic) 12) nutritient production (N-excess of agriculture; share of organic farming area) 13) air quality (contaminant loads; premature mortality) 14) health (satisfaction with health state) 15)				
	criminality (burglary)				
	C) social coherence: 16) employment (employment rate); 17) perspectives for families (full day				
	child care offers); 18) equal opportunities (average wages of women in relation to men); 19)				
	integration of migrants (foreign school leavers without school leaving certificate)				
	D) global responsibility: 20) development cooperation (share of development aid at GNP) 21) opening of markets (imports of EU from developing countries)				
Moasuro					
Measure Areas	specific masures mainly formulated for the priority areas alsready mentioned under "priorities" (Chapter E of Nationale Nachhaltigkeitsstrategie). Broad range of measures and				
AI 603	instruments, from legal regulations and subsidisation to educational and public relations				
	measures				
Follow-up / I	mplementation				

Follow-up measures:	 No follow-up activities so far New or adapted funding programme(s) /budget line; name: New or adapted regulations/laws; name: New or adapted informational campaigns/instruments; name: New or restructured institutions/organisations; name: Implementation in forest policy:
General comment:	long document (343 pages), >700 pp including follow-ups (1 st update 240 pp, 2 nd update 132 pp., recent moitoring: 61 pp). No clue whether this can have any effect, politically follow-up measures would not be directly traceable to the Nachhaltigkeitsstrategie. Forestry and forest products are completely left out of the original Nachhaltigkeitsstrategie, but one chapter in 2 nd update. No implementation in forest policy so far (at least in the monitoring report 2007 none of the topics forest (wald/forst) or timber/wood (holz) is mentioned.

8.2 Part B – Integration of innovation

The guiding question for the analysis of the respective document is: <u>whether and how</u> innovation is taken up and integrated in the respective document.

Part B consists of three sections:

- 1. Overall Innovation Orientation (table 6)
- 2. Innovation Support Measures (table 7)
- 3. Cross-sectoral coordination (table 8)

Please copy the respective tables and fill in one table for each of the documents specified in Step 1 separately

Table 6 'Part B - Overall Innovation Orientation' analysis bases largely on your expert judgement and interpretation of the text in the document. If necessary verify your judgements with other COST E51 participants from your country. The aim is to analyse in how far the document uptakes and is oriented at the topic innovation in general.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings). The filled-in table should not exceed 3 pages.

	Table 26: 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	☐ never ☐ sometimes ⊠ frequently	
	Please mark the frequency of occurrence of the forest sector <u>'innovation frontier'</u> – innovation areas identified in Chapter 3 - in the document	 ☑ never ☑ sometimes ☑ frequently 	
	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	 ☐ never ☐ sometimes ☑ frequently Terms used: 	
	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)	 No relevance at all Marginal issue One issue among others Important issue Central issue Comments: innov. is one among several main indicators as well as one among several main goals. Strong focus at entrepreneurial innovations. 		
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	 very general (innovation is name no related goals, measures, identified the document) rather general (innovation is addle identified but no specification of measures) rather specific (innovation is addle are formulated) very specific (quantified goals relation concrete measures introduced, a fixed Comments: indicator as well as goal 	ressed in overall goals, needs are asures) ressed in concrete goals, measures ated to innovation are formulated,	
Understanding of innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1	 ☐ Traditional S&T policy with syster ☐ Systemic innovation policy with S ☐ Predominantly systemic innovation Comments: Please describe further the 	nic elements &T policy elements on policy	
Cools and objective	C+		

Goals and objectives:

concrete goal for "innovation" as one of 21 sustaibnability indicators: enhancement of R&D expenditures to 3% of the GDP in 2010

Issues, problems and related topics:

(from here onwards, answers refer only to forestry part of 2nd update (Wegweiser nachhaltigkeit 2005, Chapter C III "Zukunftsfähige Waldwirtschaft", pp.103-113)).

Generally rentability of forestry is stressed as a necessary precondition for future orientation. Several issues concerning an augmented wood consumption are mentioned (eg modern wood constructions for low energy houses; new markets for innovative wood products (whatever that is), renovation of old buildings, cooperations necessities among wood construction firms. New forms of income generation for forest owners considered necessary, eg. in sustainable tourism. Multifunctionality stressed as basic principle (including orientation towards nature).

"Fields of action" mentioned: 1) protection of forests (against climate change, air pollution, traffic infrastructure); basic measure here: Close-to nature forestry. 2) Increased use of wood (demand side: wood construction measures; supply side: optimisation of wood supply by better cooperations along forestry-woodchain; organisational reforms; logistics; cluster management) 3) R&D (concretely mentioned: "Holzcharta"; BMBF-Fona [20 Mio.€ 2004-2008]; use of wood as a raw material; life cycle analysis, CO2 balances) 4) Strenghtening awareness & furthering cooperative concepts (soft tourism, eco-sponsoring, health supplies, env. education mentioned as examples for innovative products) 5) forest and environmental education 6) interational responsibility (measures against illegal logging, technical cooperation, a planned German virigin forests protection law, forest certification)

Innovation areas:

see above

General comment:

List research needs you identified, they might be taken up in phase II of COST E51

Name further reference sources used

Table 7 "Part B - Innovation support measures" below helps to gather and organize information on the support measures that are introduced by the document. *Also when no concrete measures are included, please analyse proposed activity areas/measures/needs within the document.*

Please list the identified support measures according to the **six main support** categories introduced in chapter 2.2.2.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings, examples). The filled-in table should not exceed 3 pages.

	Research and Development	No concrete support measures proposed or implemented by the document that target research and development activities by enterprises. (forestry part of the document is at a rather general level, mainly repeats [parts of] the NWP). But hint at the BMBF-Fona program (which includes more concrete targets)
	Diffusion of innovation	only addressed at general level
Innovation support measures Consult	Strengthening the knowledge base	scarcely mentioned, even at general level
classification in chapter	Strengthening interaction	no concrete measures mentioned, but forestry-wood chain as well as copperations in the construction sector mentioned as issues
2.2.2	Demand creation	"innovative constructions for industry and lodging purposes", renovation of old houses, increased wood consumption in constructions by public entities, reducing administrative obstacles for wood usage in construction, marketing and public relations (but all on general level). Hint at "Charta für Holzverwendung" which contains more concrete measures.
	Improving frame conditions	document mentiones several lighhouse projects (public constructions with wood; agricultural constructions with wood; innovative forest products; international: regional cooperation for forest preservation in the Amazon, identification of timber origin)
	Comments	
Priorities		No priorisation visible in the forest part of the document. However, forestry is of rather low priority here (only a small part of the 2 nd amendment to a very large document)
Assessment of overall relevance		If there is any relevance, this would have to be found in the non-forest parts of the documents which have an indirect effect on forestry; the forest part is rather general and mostly hints at already existing initiatives of the government (as opposed to possible new developments).
Promotion of innovation		see above
General comment:		List research needs you identified, they might be taken up in phase II of COST E51 Name further reference sources used

 Table 27: Part B - Innovation Support Measures

Table 9 "Part B - Cross-sectoral coordination mechanisms" below helps to collect information on cross-sectoral co-ordination mechanisms see guidelines chapter 2.3.

	Table 28: Part B - Cross-sectoral coordination
Policy formulation	
Co-ordination with other processes and documents	no formal coordination, but hints at NWP; Charta für Holz
Administrative Co- ordination:	 between different sections/departments within the same ministry; specify: between different ministries, specify: (federal) governmental level between ministries and other public organizations / agencies, specify: <u>Staatssekretärsausschuss für nachhaltige Entwicklung; Rat für nachhaltige Entwicklung;</u> Parlamentarischer Beirat <u>Comments:</u> Shortly explain the role of the main administrative actors
Stakeholder involvement	 Forestry: name most important organisations: <u>none</u> Forest-based industries: name most important organisations: <u>none</u> Agriculture: name most important organisations: Tourism: name most important organisations: Energy: name most important organisations: Environment: name most important organisations: Other sector:: name most important organisations: Solutions by nachhaltigkeitsrat); furthermore, parts of the texts are simply copied from other participatory processes (eg NWP)
Coordination mechanisms:	 Formal (central) coordination body; name: <u>federal government</u> Formal coordination process Inter-sectoral working groups Inter-sectoral advisory body Formal mandatory consultation process Formal voluntary consultation process Informal consultations (please describe) Others:
Policy Implementation	
Responsible actors and their roles:	government
Level of delegation	 Decentralized, e.g. Central, e.g. ministry, public agency Outsourced to private actors Local, e.g. by municipalities Regional, e.g. by regional public actors Others:
General comment	List research needs you identified, they might be taken up in phase II of COST E51 Name further reference sources used

Table 28: Part B - Cross-sectoral coordination

9 Renewable Energy Policy

9.1 Part A – General description

The objective of Part A is to provide general information on the policy document shaping the respective policy field in the country. The following table 5 'Part A – General document analysis' guides the collection of the general information.

Please copy this table and fill in one table for each of the documents specified in Step 1 separately

Information should be rather general and give a basic overview on the document. This means you should keep entries rather short (headings, headwords). The filled-in table should not exceed 2 pages.

gathered in regard to the EEG: "As a result of the EEG, the generation of electricity from renewable sources has more doubled from 30 billion kWh in 1999 to ca 62 billion kWh in 2005. If we subtract the electricity generated by large existing hydropower plants and from biogenic waste, whi not included in the EEG, then the act's impact is even larger: the amount of electricity receiving reimbursement by the EEG nearly quadrupled to ca 43 billion kWh during this time period. The largest share results from electricity generation by wind power (62 % followed by biomass (24 %), the hydropower sources included in the EEG (11 %), sola				
and at which level the document is adopted □ Others:	ļ			
Image: National Adoption date: Open Validity period: End of 2007-? Revision: Is (regular) revision/ update of the document planned? Has it already taken place, when? The discussion about the overall strategy and the different measures is still ongoing. However, there are a lot of different bits and pieces already implemented, which are discussed under the headline "Climate Change and Energy-Issues" in the German Feder Government. The best example for that is the "Renewable Energy Sources Act (EEG)", which was implemented in 2000. The Revision of the EEG came into effect in 2004. Monitoring/ Is the implementation of the document formally monitored? Has an evaluation taken place? Is an evaluation foreseen? As stated above, there are a lot of different legislative acts and campaigns in place und the umbrella of "Climate change and Energy". Reliable information about effects could gathered in regard to the EEG: "As a result of the EEG, the generation of electricity from renewable sources has more doubled from 30 billion kWh in 1999 to ca 62 billion kWh in 2005. If we subtract the electricity generated by large existing hydropower plants and from biogenic waste, whin not included in the EEG, then the act's impact is even larger: the amount of electricity receiving reimbursement by the EEG nearly quadrupled to ca 43 billion kWh during this time period. The largest share results from electricity generation by wind power (62 % followed by biomass (24 %), the hydropower sources included in the EEG (11 %), sola	1			
Validity period: End of 2007-? Revision: Is (regular) revision/ update of the document planned? Has it already taken place, when? The discussion about the overall strategy and the different measures is still ongoing. However, there are a lot of different bits and pieces already implemented, which are discussed under the headline "Climate Change and Energy-Issues" in the German Fede Government. Monitoring/ The best example for that is the "Renewable Energy Sources Act (EEG)", which was implemented in 2000. The Revision of the EEG came into effect in 2004. Monitoring/ Is the implementation of the document formally monitored? Has an evaluation taken place? Is an evaluation foreseen? As stated above, there are a lot of different legislative acts and campaigns in place und the umbrella of "Climate change and Energy". Reliable information about effects could gathered in regard to the EEG: "As a result of the EEG, the generation of electricity from renewable sources has more doubled from 30 billion kWh in 1999 to ca 62 billion kWh in 2005. If we subtract the electricity generated by large existing hydropower plants and from biogenic waste, whin not included in the EEG, then the act's impact is even larger: the amount of electricity receiving reimbursement by the EEG nearly quadrupled to ca 43 billion kWh during this time period. The largest share results from electricity generation by wind power (62 %) followed by biomass (24 %), the hydropower sources included in the EEG (11 %), sola				
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Evaluation: place? Is an evaluation foreseen? As stated above, there are a lot of different legislative acts and campaigns in place und the umbrella of "Climate change and Energy". Reliable information about effects could gathered in regard to the EEG: "As a result of the EEG, the generation of electricity from renewable sources has more doubled from 30 billion kWh in 1999 to ca 62 billion kWh in 2005. If we subtract the electricity generated by large existing hydropower plants and from biogenic waste, whin not included in the EEG, then the act's impact is even larger: the amount of electricity receiving reimbursement by the EEG nearly quadrupled to ca 43 billion kWh during this time period. The largest share results from electricity generation by wind power (62 % followed by biomass (24 %), the hydropower sources included in the EEG (11 %), sola				
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electricity generation (2.3 %), and geothermal sources (0.5 %)." BMU 2006, p 40.	ich is s 5),			
Beside the positive effects in the diffusion of Renewable Energy Technology, the releva of Renewable Industry has also been analysed. It provides work for 235,000 people in 2006 in Germany, a study stated (s.f. BMU 2007; ZSW 2007).				
 Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU): Renewable Energies: Innovations for the future, 2006. The Renewable Energy Sources Act, in: Federal Law Gazette (Bundesgesetzb 2004 I No. 40, published in Bonn on 31 July 2004, see also: http://www.erneuerbare-energien.de/files/pdfs/allgemein/application/pdf/eeg_er Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU): Lead Study 2007" - Update and reassessment of the "Strategy to increat the use of renewable energies" up until the years 2020 and 2030, plus an outlo 2050, see: http://www.erneuerbare-energies" up until the years 2020 and 2030, plus an outlo 2050, see: http://www.erneuerbare-energies. Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU): Renewables industry provides work for 235,000 people, http://www.bmu.de/english/current_press_releases/pm/40029.php (approached 2007). Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg (ZSW, Stuttgart): Impact of the Expansion of Renewable Energy on the German Labour Market, Working Paper 2007. Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU): RENEWABLE ENERGY: EMPLOYMENT EFFECTS, Impact of the Expansion of Renewable Energy on the German Labour Market, see also 	n.pdf ase ook to .pdf d Nov			

Table 29:	Part A -	General	document	information

	http://www.erneuerbare- energien.de/files/pdfs/allgemein/application/pdf/employment_effects_061211.pdf • Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU): "Forschung für erneuerbare Energien. Spitzentechnologie aus Deutschland" (Research for Renewable Energy - High Tech from Germany), available only in German. Please list further specifications or amendments of the document and documents that are closely related, i.e. have a direct reference to the document. This might include working programmes, annexes, etc. These documents should be analysed together with the main document.	
Geographical scope:	National 🗌 Regional; name: all federal states 🗌 Local, name:	
Budget:	Amount of budget in € (indicate whether per year or for whole document period); indicate the source for the budget, i.e. state, EU, regions, co-financed, etc. A specific budget for the overall strategy is not indicated, yet. However, according to the annual report on research funding published by the Federal Environment Ministry, more than 118 new research projects with a total volume of more than 98 million Euro were approved in the renewable energies sector in the year 2006. "33% of the newly approved funding was allocated to photovoltaics, 24% to geothermal energy and approximately 16% to wind power. In addition, projects were approved in the areas of solar thermal power stations (7%) and low temperature solar thermal heating (5%)." (<u>http://www.erneuerbare-energien.de/inhalt/39316/</u>)	
General description of contents as written in document		

Objective of the	Name shortly the main objective of the document (as written down in preamble,
document	introduction part, vision or mission statements).
	The German Federal Government is planning to launch a strategy towards the topic "Climate Change and Energy" end of 2007. This strategy will also consider the importance of Renewable Energy aspects.
	The sector is part of the overall EU-Strategy for the expansion of renewable energies, which is related to different EU-summits, e.g. on 8.39.3.2007. Here, the EU-heads of state and governments agreed, that "by 2020 the European Union will reduce its greenhouse gas emissions by 30 percent compared with 1990 levels. It will undertake this commitment provided that other developed countries commit themselves to comparable emission reductions and newly industrialising countries also contribute adequately according to their respective capabilities. The EU will take this reduction target to the international negotiations on a post-2012 climate protection agreement. In order to emphasise the credibility of its engagement, the European Council also agreed on a unilateral EU commitment, irrespective of the course of international negotiations and the commitments of other countries, to reduce greenhouse gas emissions by at least 20%. In order to implement these targets, the European Council has agreed on concrete measures:
	Firstly, increasing energy efficiency by 20 percent by 2020. This means nothing less than an efficiency revolution. In order to achieve this target, we in Germany, for example, must increase energy efficiency by 3 percent per year. Secondly, the share of renewable energies in primary energy consumption in the EU must increase to 20 percent by 2020. () Thirdly, the European Council has determined that a binding target of a 10 percent share in total petrol and diesel consumption by 2020 will also apply to biofuels. This will be achieved in a sustainable way with second-generation biofuels." (Minister Gabriel, http://www.erneuerbare-energien.de/inhalt/38874/36356/)
	In an other publication of the BMU, the objective of the overall strategy are highlighted as following:
	"The German government is anticipating a dynamic expansion of renewable energy – with good reasons. They have therefore set concrete goals for the medium term: – Increase the share of renewable energy in primary energy consumption to at least 10 % by 2020, and afterwards a continuously increasing rate according to the national sustainability strategy. In 2050 renewable energy sources should supply 50 % of the primary energy requirement. – Increase the share of renewable energy in electricity generation to at least 12.5 % by 2010 and to at least 20 % by 2020. – Increase the share of biofuels in the fuel consumption to 5.75 % by 2010.
	In a complementary process, an energy efficiency strategy is also pursued with the goal of increasing the energy efficiency of the national economy by 2020 to twice its value from 1990." (BMU 2006, p43)
Priorities	Name the thematic priority areas of the document.
-	Increase the share of renewable energy in primary energy consumption
	Increase the share of renewable energy in electricity generation
	Increase the share of biofuels in the fuel consumption
Structure	Shortly sketch the basic structure of the document, i.e. different thematic parts, basic elements (e.g. action areas, indicators, etc.) <u>there is not "one" document, which could be described, therefore a basic structure</u>
	does not exist.

Measure Areas	Name measure areas as described by the documents and general types of measures the document introduces. <u>Developing and increasing the market share of the following areas:</u> Wind power Hydropower Photovoltaics Solar thermal power plants Solar collectors Passive use of solar energy Biomass combustion Biofuels Geothermal energy Heat pumps Future supply structures – decentralised grids, combined heat and power generation, virtual power plants, and hydrogen
Follow-up / Impl	ementation
Follow-up measures:	 No follow-up activities so far New or adapted funding programme(s) /budget line; name: expected, different programs in different institutions (BMU, UBA, EU) New or adapted regulations/laws; name: EEG in 2004, "Building passport" in 2007 New or adapted informational campaigns/instruments; name: New or restructured institutions/organisations; name: Implementation in forest policy:
General comment:	List research needs you identified, they might be taken up in phase II of COST E51 Name further reference sources used

9.2 Part B – Integration of innovation

The guiding question for the analysis of the respective document is: <u>whether and how</u> <u>innovation is taken up and integrated in the respective document.</u>

Part B consists of three sections:

- 1. Overall Innovation Orientation (table 6)
- 2. Innovation Support Measures (table 7)
- 3. Cross-sectoral coordination (table 8)

Please copy the respective tables and fill in one table for each of the documents specified in Step 1 separately

Table 6 'Part B - Overall Innovation Orientation' analysis bases largely on your expert judgement and interpretation of the text in the document. If necessary verify your judgements with other COST E51 participants from your country. The aim is to analyse in how far the document uptakes and is oriented at the topic innovation in general.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings). The filled-in table should not exceed 3 pages.

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	 ☐ never ☐ sometimes ☑ frequently

Table 30: Part B - Overall Innovation Orientation

	Please mark the frequency of occurrence of the forest sector <u>'innovation frontier'</u> – innovation areas identified in Chapter 3 - in the document	 never sometimes frequently
	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	 never sometimes frequently Terms used: market development, diversification, competitiveness, technological development
	Further comments on overall innova discussion about expanding rene different levels of innovation, wh and ends in institutional levels (s area").	ich starts in technological levels
Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)	 No relevance at all Marginal issue One issue among others Important issue 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	 □ very general (innovation is named in general parts, e.g. preamble, but no related goals, measures, identified needs or similar are addressed by the document) □ rather general (innovation is addressed in overall goals, needs are identified but no specification of measures) □ rather specific (innovation is addressed in concrete goals, measures are formulated) (→ partly in the appendix) □ very specific (quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist) Comments: An example is the "forestry production of renewable energies" which should be increased broadly 	
Understanding of innovation policy Please assess what overall understanding of innovation policy is reflected in the document. See chapter 2.2.1		nic elements &T policy elements

Goals and objectives:

Please specify further what objectives and goals (quantitative and qualitative) are formulated in relation to innovation?

The following innovation objectives are stated by the German Federal Government, based on the European Union strategy: "firstly, increasing energy efficiency by 20 percent by 2020. Secondly, the share of renewable energies in primary energy consumption in the EU must increase to 20 percent by 2020. (...) Thirdly, the European Council has determined that a binding target of a 10 percent share in total petrol and diesel consumption by 2020 will also apply to biofuels. This will be achieved in a sustainable way with second-generation bio fuels." (Minister Gabriel, http://www.erneuerbare-energien.de/inhalt/38874/36356/), research and development are seen as key elements, along with the market development, for the further deployment of renewable energy.

As a central goal of the German Federal Government's 5th Energy Research Programme from 2005 is therefore to "further reduce the costs of renewable energy and thus to improve the starting conditions for the expansion of renewable energy". The objectives here, are to increase the lifetime and efficiency of the components and systems, but also address the production processes, which should be more efficient and cost effective organized (cf. BMU 2006).

"Germany leads the world-wide research in renewable energy sources – in 2005 a total of 100 new projects with a total volume of 98 million Euros were approved. The focus is on photovoltaic and wind power. Photovoltaic – because the reimbursement rates from the EEG have the highest degression rate and the cost reductions must still be achieved. Here is also the largest potential for innovation. The great importance of wind power research results from the fact that especially in the offshore area, large technical challenges must still be mastered and

also because research is still necessary on the nature-compatible development of the wind power potential. Furthermore, grid integration also plays a decisive role for wind power. The Research funding in the other areas continues at a high level as well. All renewable energy sources will be required in order to achieve the ambitious expansion goals set by the German government. An overview of all supported projects can be found under www.erneuerbare-energien.de." BMU 2006, p42.

Issues, problems and related topics:

Please describe shortly what main issues and problems are formulated in relation to innovation? Does the programme address other issues that are related to innovation, e.g. competitiveness of the sector, diversification etc.? Please describe shortly

To avoid remoteness from the market of the technological innovation programs, the strategy aims to develop also market structures and an institutional change, with a long run perspective:

"The expansion of renewable energy does not materialise on its own. For them to become a supporting pillar of the energy supply, favourable economic conditions must exist along with the technical, legal, and organisational prerequisites. The market introduction phase must therefore be financially supported in such a way that the potential for cost reduction is tapped as soon as possible by means of so-called "market learning". The subsidies can then be trimmed down successively until renewable energy has achieved widespread competitiveness." BMU 2006, p 40

Innovation areas:

Please name the most important innovation areas named by the document and compare with the results gathered in table 3.1. *

"The German Federal Government supports the market development in renewable energy with several different measures. The most important instruments are

- for the electricity market: the Renewable Energy Sources Act
- for the heat market: the federal market stimulation programme and a planned Renewable Heat Sources Act
- in the fuel market: reduction of the mineral oil tax for biofuels as a part of the ecological tax reform and a planned admixture requirement" (BMU 2006, p 40)

*please keep in mind that due to its characteristic as common general statement not many innovation areas are described in detail – this is a task of the federal states' detailed programmes

General comment:

List research needs you identified, they might be taken up in phase II of COST E51

Name further reference sources used

Table 7 "Part B - Innovation support measures" below helps to gather and organize information on the support measures that are introduced by the document. *Also when no concrete measures are included, please analyse proposed activity areas/measures/needs within the document.*

Please list the identified support measures according to the **six main support** categories introduced in chapter 2.2.2.

This table should be filled in in more detail for those documents with a higher relevance for the forest sector, e.g. the National Forest Programme or the Regional Development Programme. For other documents, esp. the National Reform Programme be rather short (use headwords, headings, examples). The filled-in table should not exceed 3 pages.

 \rightarrow these special issues are not in a way addressed in the document that makes it possible to fill out the table.

The most innovative aspect of the national strategic plan is its existence itself. Up to now there has not been a document / instrument on the national level for rural development. It is the first time that the goals of rural development are formulated and that indicators for assessment and evaluation on the national level are provided.

- most innovative aspects are driven by the EAFRD framework of the EC:
- \rightarrow the enlargement of LEADER
- \rightarrow the strengthening of evaluation
- \rightarrow and an improvement in participation of stakeholders

Innovation	Research and	List support measures proposed or implemented by the document that
support	Development	target research and development activities by enterprises.
measures		
Consult		R&D Programs in different fields of renewable energy technologies
<i>classification in chapter 2.2.2</i>	Diffusion of innovation	List support measures proposed or implemented by the document that target the diffusion of known products, processes, marketing methods, and organisational methods. Specify for which products, processes, marketing methods, and organisational methods support is given. Refer to and compare with the list gathered under 3.1. as cited above: "The German Federal Government supports the market development in renewable energy with several different measures. The most important instruments are – for the electricity market: the Renewable Energy Sources Act – for the heat market: the federal market stimulation programme and a planned Renewable Heat Sources Act
		— in the fuel market: reduction of the mineral oil tax for biofuels as a part of the ecological tax reform and a planned admixture requirement"
	Strengthening the knowledge	List support measures proposed or implemented by the document that aim at strengthening the knowledge base for innovation.
	base	Different information-brochures and public information, workshop etc.
	Strengthening interaction	List support measures proposed or implemented by the document that aim at strengthening the interactions between key actors.
	Demand creation	List support measures proposed or implemented by the document that aim at promoting the demand for innovation.
		Changed price structures (EEG)
	Improving frame conditions	List initiatives/ policy actions proposed or implemented by the document that aim at improving the framework conditions for innovation.

 Table 31: Part B - Innovation Support Measures

 Innovation
 Research and

Comments	
Priorities	Please assess qualitatively which of the above mentioned category(ies) is a priority area for innovation support within the document. Please give short reasoning for your judgement
Assessment of overall relevance	Please assess qualitatively the overall relevance of innovation support measures compared to other support measures proposed or introduced by the document. Give short reasoning for your judgement.
Promotion of innovation	Please assess qualitatively how much innovation is furthered by the document. This would include the assessment of the overall relevance of innovation within the document as well as the relevance of the document for the policy area.
General comment:	List research needs you identified, they might be taken up in phase II of COST E51 Name further reference sources used

Table 9 "Part B - Cross-sectoral coordination mechanisms" below helps to collect information on cross-sectoral co-ordination mechanisms see guidelines chapter 2.3.

	Table 32: Part B - Cross-sectoral coordination
Policy formulation	
Co-ordination with other processes and documents	-
Administrative Co- ordination:	 between different sections/departments within the same ministry; specify: between different ministries, specify: Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Federal Ministry of Economics and Technology and the Federal Chancellery between ministries and other public organizations / agencies, specify: <u>Comments:</u> Shortly explain the role of the main administrative actors
Stakeholder involvement	 Forestry: name most important organisations: Forest-based industries: name most important organisations: Agriculture: name most important organisations: Tourism: name most important organisations: Energy: name most important organisations: Industry Environment: name most important organisations: different NGOs Other sector: <u>Reseach bodies</u>: name most important organisations: Fraunhofer Institutes, Universities, Wuppertal Institute, Öko Institute etc. Other sector:: name most important organisations: <u>Comments:</u> Shortly describe the type of stakeholder involvement
Coordination mechanisms:	 Formal (central) coordination body; name: Chancellor Merkel, BMU Formal coordination process BMU Inter-sectoral working groups Inter-sectoral advisory body Formal mandatory consultation process Formal voluntary consultation process Informal consultations (please describe) Others:
Policy Implementation	on
Responsible actors and their roles:	Shortly explain the role of the main actors in the implementation of the document German Federal Government: develops and releases the strategy Other actors are involved in a mandatory process
Level of delegation	 Decentralized, e.g. Central, e.g. ministry, public agency Outsourced to private actors Local, e.g. by municipalities Regional, e.g. by regional public actors Others:
General comment	List research needs you identified, they might be taken up in phase II of COST E51 Name further reference sources used

Table 32: Part B - Cross-sectoral coordination

10Conclusions and Research Needs

A single conclusion in regard to this analysis couldn't be identified. Too different are the approaches and objectives of the analysed policy papers. Each paper has a high innovation potential for its own and effects on the forest sector from a different perspective. As stated in chapter 2, there are a lot of different innovation areas, which are addressed by each policy programme in a specific way.

In the next step, a discussion about the possibilities of an integration of the presented six approaches in direction to the German policy frame and integration towards the European level could be very fruitful.

On the German level it would be interesting to research the different objectives that seems to be in conflict to other regulations or objectives as well as to identify and analyse different policy papers that mutually strengthen their position.

11 References

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