

## **Poland**

# Integration of innovation and development in selected policy areas

**Country Report for COST Action E 51** 

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## **COST Action E 51**

### **Country Report - Poland**

The Country Report - Poland was completed by:

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- (4) Rural Development Policy
- (6) Sustainable Development Policy
- (7) Renewable Energy Policy

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- (1) Forest Policy
- (3) Innovation Policy

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- (2) Forest Based Sector Policy
- (5) Regional Development Policy

Chapter 1. Introduction is based on a template version of the report.

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#### 1. Introduction

#### 1.1 Background and objective

The following document presents analysis and data collection in the first phase of the COST Action E51 "Integrating Innovation and Development Policies for the Forest Sector". The two tasks in the first phase are:

Task 1: Analysis of existing EU as well as national strategies and programmes and their implementation mechanisms on: innovation, rural development, regional development and sustainable development policies, and

Task 2: Appraisal of effects of these programmes on forestry and forest sector enterprises.

The guidelines for document analysis in phase I consist of three parts (Part A, Part B, Part C) covering tasks 1 'Analysis of relevant programmes and their implementation' and task 2 'Analysis of effects' of the Scientific Programme. The following figure sketches the structure of the guidelines.

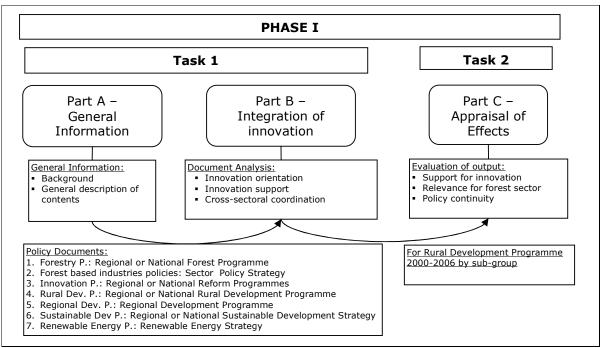


Figure 1: Structure of guidelines for phase 1

Altogether seven policy areas and respectively seven key policy documents (see figure 1) were analysed. In 'Part A' a short overall description of the concerned policy documents were given. In 'Part B' the concerned policy documents were analysed along the questions how innovation is integrated, how forestry or the forest sector is integrated and how cross-sectoral coordination takes place. In 'Part C' the effects of policy were appraised on the basis of existing monitoring data and evaluation reports.

The guidelines serve to prepare the Country Reports and to facilitate work in the second phase of the Action.

#### 1.2 Definitions

#### 1.2.1 Innovation

In the 1<sup>st</sup> Joint WG and MC meeting the participants agreed to use the OECD definition of innovation as the reference definition for the work within the COST Action. The OECD (2005) defines innovation in its Oslo Manual<sup>1</sup> as "[...] the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations."

The minimum requirement for an innovation is that the product, process, marketing method or organisational method must be *new (or significantly improved) to the firm*. This includes products, processes and methods that firms are the first to develop and those that have been adopted from other firms or organisations (OECD 2005). Besides being new to the firm innovations may be new to a country or new to the world.

A common feature of an innovation is that it must have been *implemented*. A new or improved product is implemented when it is introduced on the market or when it is taken into use by customers<sup>2</sup>. New processes, marketing methods or organisational methods are implemented when they are brought into actual use in the firm's operations (OECD 2005). In addition to the definition by the OECD we will also include institutional innovations in our classification of innovation to cover important changes on the organizational level, changes in laws and policies, etc.

Innovation types: classification

The Oslo Manual distinguishes four main types of innovation - product, process, marketing and organisational innovations - which are further sub-divided (Figure 2).

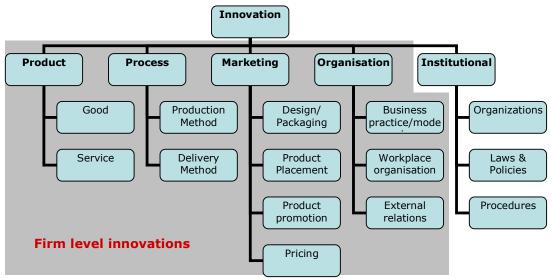


Figure 2: Typology of Innovation - modified from OECD 2005

A **product innovation**<sup>3</sup> is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics.

<sup>1</sup> Source: OECD 2005: Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data, 3rd Edition.

<sup>&</sup>lt;sup>2</sup> This includes also innovations in public goods that are not marketed goods and services. Further it includes such goods and services that are offered by for example public entities, are used but are not paid for by consumers. For example mountain bike routes in some countries are paid for in others they are offered for free.

<sup>&</sup>lt;sup>3</sup> More detailed specifications of these definitions can be downloaded from the Intranet of the COST Action E51-website: http://www.boku.ac.at/coste51.

A **process innovation** is the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software.

A **marketing innovation** is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing.

An **organisational innovation** is the implementation of a new organisational method in the firm's business practices, workplace organisation or external relations. An organisational innovation is the result of strategic decisions taken by management.

Organisational innovations in *business practices* involve the implementation of new methods for organising routines and procedures for the conduct of work. Innovations in *workplace organisation* involve the implementation of new methods for distributing responsibilities and decision making among employees for the division of work within and between firm activities (and organisational units), as well as new concepts for the structuring of activities, such as the integration of different business activities. New organisational methods in a firm's *external relations* involve the implementation of new ways of organising relations with other firms or public institutions, such as the establishment of new types of collaborations with research organisations or customers, new methods of integration with suppliers, and the outsourcing or subcontracting for the first time of business activities. As <u>business model innovation</u> is not an explicit category in the OECD definition and classification, it should be included under this category.

Besides the above classified types of innovation that refer to innovations on a firm level, the concept of **institutional innovations** is of increasing relevance when analysing policies and institutions. Institutions are understood here to denote "the rules of the game". Institutional innovations refer to innovations in the public/policy sphere. Institutional innovations may include new or adaptation of existing organizations, new or significantly modified rules as laid down in laws, decrees or policies as well as new or significantly modified procedures in developing and implementing policies.

#### 1.2.2 Innovation policy and innovation support

#### 1.2.2.1 Innovation policy approaches: classification

The understanding of innovation policy has considerably changed over the last decades and varies from country to country. The two dominating approaches are the traditional Science and Technology policy approach as it was prevailing in most OECD countries in the post war period and the systemic innovation policy approach that has gained increasing importance during the last two decades.

- 1. **Traditional S&T policy approach:** The traditional Science and Technology policy approach is ideal typically characterised by the following elements:
  - A basic understanding of innovation processes as being linear, starting with laboratory science and moving through successive stages until new knowledge is built into commercial applications that diffuse in economic systems.
  - Innovation is seen as the end of research and development processes (solely).
  - Policy focuses on fostering critical directions of scientific and technological advance, and enhancing the flow of knowledge down along the innovation chain (Lengrand et al. (2002)).
  - There is a distinct role for education/university ministries and economy/industry ministries dealing with innovation as a tool for encouraging investment and modernizing firms.
  - Main policy instruments include:
    - public financing of research in universities and public research institutions.
    - subsidies to industrial R&D, and
    - securing intellectual property rights through more embracing and enforceable patents.

- 2. **Systemic innovation policy approach** is ideal typically characterised by the following elements:
  - Understanding of innovation as a complex process, taking place in an environment of interacting actors and institutions (innovation system); having multiple sources (apart from research activities); and running through multiple feedback loops between the different stages.
  - Policy approaches the systemic environment in which innovation take place in ways that can better inform decisions about research, commercialisation, technology adoption and implementation, etc.
  - The role of policy is to solve problems that occur within innovation systems, e.g. by supporting the creation and development of institutions and organisations, supporting network development, facilitate transition and avoid lock-in (Edquist and Johnson 1997).
  - Policy instruments are not only directed to individual organisations (e.g. research and development subsidies, management support) or bilateral relations (e.g. knowledge transfer), but also to the innovation system as a whole (e.g. managing interfaces and organising learning platforms) (Goorden 2004).
  - The scope, scale and actors of innovation policy are widened. Innovation policy is no longer limited to the economic domain but is placed on the agenda of various policy domains, such as industrial policy, policies for science and technology, education, health, ICT and other sectoral policies.

#### 1.2.2.2 Innovation support: classification

Innovation support can take many forms from direct funding of research and development activities to the support of the diffusion of innovations, to improving the knowledge base and interaction of actors, to adapting framework conditions. Some of these support measures are targeted directly at fostering concrete innovation activities, others are of structural character. These measures may be introduced without the explicit aim of fostering innovation. In the analysis of the documents measures along the following six categories of 'innovation support' were distinguished:

- 1. Research and Development: This includes innovation support in a narrower sense, i.e. financing of basic and applied research, development of new products or processes, pilot projects, demonstration projects and support for the commercialization of innovations. Support for Research and Development generally aims at innovations new to the sector (forest sector), i.e. products, processes, marketing and organisational methods that have not been introduced to a particular sector in a particular country before. Throughout the document analysis the following sub-categories of Research and Development were applied:
  - Enterprise research, i.e. support for applied research in the enterprise or in cooperation of enterprise and science organisations,
  - Development of new products, processes, marketing methods, organisational models by enterprises,
  - Pilot projects and demonstration projects,
  - Commercialization of new products by enterprises.
- 2. **Diffusion of innovation:** This includes support for the early and broad adoption of named, already known goods, services and processes by enterprises in a sector in a specific country. It <u>excludes</u> support to standard managerial processes or late adoption (e.g. species diversity support or road building in forestry or standard IT in SMEs). Throughout the document analysis the following sub-categories of diffusion support were applied:
  - Diffusion of products (for example subsidies for bio-energy installations; support of the introduction of recreational facilities),
  - Diffusion of processes (for examples investment support for the acquisition of significantly new machineries/technologies, incl. advanced information technology for production or logistics, etc.),

- Diffusion of marketing methods (e.g. addressing new customer groups, market segments),
- Diffusion of organisational models (e.g. financial or informational support for the establishment of co-operations).
- 3. **Strengthening the knowledge base:** The innovation capabilities of a firm, a sector or an economy among others strongly depend on the availability and quality of human capital, i.e. individual know-how, skills and motivation of entrepreneur and employers, level of qualification and competencies of employers. Further, the access to and exchange of information and knowledge influences the innovation propensity as well. The following activities are examples of how to strengthen the knowledge base for innovation:
  - Integrating innovation in education, e.g. new educational curricula,
  - Strengthening further/vocational training,
  - Addressing shortages of scientists and engineers in particular fields,
  - Integrating innovation in extension services,
  - Promoting mobility of high-skilled personnel,
  - Promoting mobility between science and practice.
- 4. **Promoting interaction/ managing interfaces:** Firms do not innovate in isolation. Rather a range of other actors/ organizations contribute in different ways to innovations, e.g. other firms/competitors, research organisations, extension services, interest groups, etc.. Policy may foster innovation by strengthening the interaction between different key actors in the forest sector, among others through:
  - Promoting horizontal co-operation between forest holdings,
  - Promoting vertical co-operation along the forestry wood chain,
  - Promoting public private partnerships,
  - Promoting cooperation across sectors,
  - Promoting university/research institutions enterprise cooperation,
  - Promoting interaction with users (customers and consumers).
- 5. **Public demand creation for innovation:** The demand side is crucially important for the promotion of innovations. Policy may not only promote innovations by supporting the input side but also by inducing demand for innovation. This is often applied in the case of environmental/sustainable innovations. The following activities may be implemented to strengthen the demand for innovation:
  - Reorientation of public procurement policy (creating consumer demand),
  - Support for lead users, or public agencies acting as lead user,
  - Clear demand expression through communication.
- 6. **Improving frame conditions:** General framework conditions including institutions such as laws, regulations, standards, taxes or the access to financing have a crucial influence on firms' decisions to innovate. Changing framework conditions is often not in the responsibility of sectoral policies. The following list comprises a selection of policy activities to improve framework conditions for innovation:
  - Institutional reforms, e.g. change of forest law, property rights reform, support for the establishment of new organisations,
  - Adaptation of tax laws, e.g. corporate taxes,
  - Improving access to financing, e.g. by providing guarantees,
  - Adaptation of standards and norms, e.g. in the construction sector.

#### 1.2.3 Policy co-ordination

Besides the integration of innovation in different policies the COST Action aims at analysing the co-ordination of different policy areas and different sectors. Cross-sectoral co-ordination were analysed along the following categories:

1. **Co-ordination of processes and documents:** The documents that were analysed may be linked and co-ordinated with other policy processes and documents. This

might be in a very formal way, e.g. a particular document has to follow the rules set by another document, or by harmonization and mainstreaming processes or by formal or informal coordination of actors (see below).

- 2. **Co-ordination of actors:** Co-ordination of actors may take place on the administrative level or between administration and stakeholders of different sectors:
  - Administrative co-ordination:
    - Intra-ministerial coordination: Refers to the co-ordination of different sections or departments within the same ministry, for example the coordination of the agriculture and the forestry department within the respective ministry.
    - o Inter- ministerial coordination: Refers to the coordination between different ministries, for example the ministry for environment and the ministry for economy.
    - o Coordination between ministry(ies) and other public organizations: Other organizations may include public agencies and councils, such as research councils, etc.
  - Participation of stakeholders: Refers to the involvement of private, mostly organized, actors in political processes. Stakeholder involvement can take various forms from consultation processes via written statements to the inclusion of stakeholders in formal bodies and decision making processes. For example the National Forest Programme is elaborated in most European countries with the participation of stakeholders.
- 3. **Mechanisms of co-ordination:** Co-ordination may be formalized or take place on an informal level. Since the analysis of informal co-ordination can not be done from document analysis, we will focus on formal coordination mechanisms:
  - Formalized co-ordination may manifest in the following elements:
    - Formal (central) coordination body
    - Formal coordination process between key organizations
    - o Inter- institutional working groups
    - Existence of advisory body
    - Formal consultation process
  - Informal co-ordination.

## 2. Analysis of documents

### 2.1 Currently important innovation areas in the country

The following table shows the most important product, process, marketing, organisational and institutional innovations in the forest sector in Poland separately for the two areas territory-based services and value added chain.

Table 1: Innovation areas

Table 1: Innovation areas			
Area	Territory based services	Value added chain	
Туре			
Product		modern products: furniture, wood panels; use of biomass	
Process	mechanised forest operations; afforestation of agricultural and non-agricultural land	timber production, harvesting, logistics and processing	
Marketing method		new marketing, new channels taking EU into account	
Organisational model	implementation of cooperation projects;  FPC – Forest Promotional Complexes	introducing appropriate prevention instruments to avoid the damage of forest by natural disasters	
Institutional innovations		establishment of new institutions such as PARP (Polish Agency For Enterprise Development), development of education for wood industry specialists; national network of rural areas	

#### 2.2 Specification of analysed documents

The following table specifies the documents analysed for each of the seven policy areas: the publication date, the website from which the document was available and whether and which specification documents exist.

Generally, the latest available programmes and documents were used for the analysis.

#### Table 2: Documents for Task 1

#### 1. Forest Policy (Regional or National Forest Programme):

Document: National Policy on Forests

Publication Date: 1997

Website:

http://www.mos.gov.pl/2materialy informacyjne/raporty opracowania/polityka les na 1997.pdf (in Polish, printed version in English)

Supplementary documents: no

#### 2. Forest Based Sector Policy (Sector Policy Strategy), if any:

Document: Concept of horizontal industrial policy in Poland

Publication Date: 2007 Website: no (hard copy) Supplementary documents: no

#### 3. Innovation Policy (Regional or National Reform Programme):

Document: Innovative Economy Operational Programme

Publication Date: 27 July 2007

Website: http://www.mg.gov.pl/NR/rdonlyres/98F30360-4D36-4777-B9D7-

849CE45ABB08/36278/POIG\_po\_negocjacjach\_ENG\_27072007.pdf

Supplementary documents: Qualification of Exspenses in Innovative Economy

Operational Programme; MRR/POIG/1(1)10/2007

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

Document: RURAL DEVELOPMENT PROGRAMME for 2007-2013

Publication Date: July 2007

Website:

http://www.minrol.gov.pl/DesktopDefault.aspx?TabOrgId=1210&LangId=1 Supplementary documents: National Strategic Plan of Rural Development Programme for 2007-2013.

## 5. Regional Development Policy (Regional or National Regional Dev. Programme):

Document: National Cohesion Strategy 2007-2013 - Draft (approved by the Council

of Ministers on 14 February 2006)

Publication Date: 2006 Website: hard copy

Supplementary documents: no

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

Document: Poland 2025 Long-term Strategy for Sustainable Development

Publication Date: 26 July 2000

Website: www.rec.hu/sdconference/doc/PL strategia.doc

Supplementary documents: no

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

Document: Energy Policy of Poland until 2025

Publication Date: 4 January 2005

Website:

http://www.mq.gov.pl/GOSPODARKA/Energetyka/Polityka+energetyczna+Polski+d

o+2025+roku.htm

Supplementary documents: no

## **Table 3: Evaluation documents for Task 2**

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

Evaluation documents: Rural Development Plan

Publication Date: 2004

#### 2.3 Selected policy documents

Tables presentation of policy areas

#### 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 table 'Part A – General document analysis' guides the collection of the general information.

#### Part B - Integration of innovation

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

#### Part B consists of three sections:

- 1. Overall Innovation Orientation
- 2. Innovation Support Measures
- 3. Cross-sectoral coordination

Table 'Part B - Overall Innovation Orientation' analysis bases largely on expert judgement and interpretation of the text in the document. The aim was to analyse in how far the document uptakes and is oriented at the topic innovation in general.

Table "Part B - Innovation support measures" below helps to gather and organize information on the support measures that are introduced by the document.

Table "Part B - Cross-sectoral coordination mechanisms" below collects information on cross-sectoral co-ordination mechanisms.

#### Part C - Appraisal of effects

Part C "Appraisal of effects" was undertaken only for the Rural Development Programme 2004-2006.

## 2.3.1 Forest Policy

The Forest Policy is represented by the National Policy on Forests. The main issue in terms of innovation is a new approach to forest resources management in which the most principal aspects are ecological issues. This is rather innovative in philosophical and ethical approach than in technological.

Part A - General document information

Name:	National Policy on For	rests	
Adoption:	☐ Parliament	☐ Government	
Please mark by whom	Ministry:		_
and at which level the document is adopted	Others:		☐ No formal
	approval		
	Level:	□ Designal	
	National Adoption date:	Regional	Local
Validity period:	-		
	Valid from 1997		
Revision:			ere established upon NPF.
Monitoring/ Evaluation:	Implementation is mo year	onitored, evaluation i	n various aspects is done every
Related documents:	National Policy on For on Ecology	ests and National Fo	rest Programme; National Policy
Geographical scope:	⊠ National ☐ Reg	jional; name:	Local, name:
Budget:	Not stated in the doci essential	uments, but addition	al budget plan is recognised as
General description	on of contents as wr	itten in document	
Objective of the	The overriding aim of	policy concerning fo	rests is to designate the complex
document			ankind and forests, with the aim ocio-economic circumstances –
			nce of the multifunctionality of
			ection and their role in the
	shaping of the natural expectations of societ		e with the present and future
Priorities	-	-	
Filorities	Increasing of country	forest resources, the	eir stability and sustainability
Structure	Contents:		
	1. Introduction		
	2. Ideas behind pol	licy	
	3. Aims and prioriti	es	
		economic and legal co	_
		tation: anticipated ef	fects and timetable
	Annexes	W 6	
	1. The state of Pola		waterties of favort versus
	l	tne comprenensive p nditioning of national	rotection of forest resources
	4. Glossary	iditioning of flational	policy off forests
Measure Areas	,	ion and increase of h	proadleaved species by 2050
	increase or allorestat	ion and increase of D	proadleaved species by 2050.
Follow-up / Impl	ementation		
Follow-up	■ No follow-up activ	ities so far	

measures:	New or adapted funding programme(s) /budget line; name: increasing of forest area in Poland – afforestation; planned €1000 per ha and €375 per ha on state and private land respectively
	<ul> <li>New or adapted regulations/laws; name:</li> <li>New or adapted informational campaigns/instruments; name:</li> <li>New or restructured institutions/organisations; name:</li> <li>Implementation in forest policy:</li> </ul>
General comment:	-

comment:			
	Part B - Overall Innovation O	rientation	
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	ion orientation of the document: -	
Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)	<ul> <li>No relevance at all</li> <li>Marginal issue</li> <li>One issue among others</li> <li>Important issue</li> <li>Central issue</li> <li>Comments: -</li> </ul>		
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	<ul> <li>☑ 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)</li> <li>☐ rather general (innovation is addressed in overall goals, needs are identified but no specification of measures)</li> <li>☐ rather specific (innovation is addressed in concrete goals, measures are formulated)</li> <li>☐ very specific (quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist)</li> <li>Comments: innovation is understood as a mean to reach other goals, especially in terms of better forest management and its</li> </ul>		
innovation policy Please assess what overall understanding of	Predominantly systemic innovation policy		
Goals and objectives:  Innovation in this documents is related to different, pro-ecological forest management as well as afforestation process			
<b>Issues, problems and related topics:</b> Innovation in forestry is developed in accordance with ecological issues and sustainable co-operation with wood sector			
Innovation areas: Pro-ecological forest resources management			

#### General comment:-

Part B - Innovation Support Measures

Part B - Innovation Support Measures				
	Research and Development	Carried out with use of the State Forests founds, national and international sources including EU founding		
	Diffusion of innovation	Support of forest contractors by the State Forests to improve technological means for forest operations		
Innovation support measures	Strengthening the knowledge base	strengthening further training and promoting mobility between science and practice		
Consult classification	Strengthening interaction	Promoting co-operation between forest holdings and forestry wood chain, public and private partnership, university and research institutions with the State Forests		
in chapter 2.2.2	Demand creation	Through education of society, the State Forests invest in education to improve society knowledge in pro-ecological new attitudes and positive role of forestry on society and environment		
	Improving frame conditions	Supporting change of property ownership to private ownership, some changes to forest law		
	Comments -			
Priorities		Ecological, societal and productive priorities, practical application of research and development findings		
Assessment of overall relevance		Innovative support measures are vital in the documents, other measures help in fulfilling innovative measures		
Promotion of innovation		Priority innovations are implemented as well as promoted via printed materials and special society education systems		
General comment:		-		

#### **Part B - Cross-sectoral coordination**

Policy formulation			
The NDE to allow the			
Co-ordination with other processes and documents	<ul> <li>National Policy on Ecology (NPE) approved by Sejm (Polish Parliament) in 1991</li> <li>Forest Principles and Agenda 21 approved at the UNCED conference in Rio de Janeiro in 1992</li> </ul>		
	<ul> <li>European Declaration of Ministers of Forestry for Forest Protection (Strasburg 1990 and Helsinki 1993)</li> </ul>		
Administrative Co- ordination:	<ul> <li>□ between different sections/departments within the same ministry; specify:</li> <li>□ between different ministries, specify: Ministry of Environment and Ministry of Agriculture</li> <li>□ between ministries and other public organizations / agencies, specify:</li> </ul>		
	<u>Comments:</u> Shortly explain the role of the main administrative actors		
Stakeholder involvement	☐ Forestry: name most important organisations:		
Coordination mechanisms:	<ul> <li>☐ Formal (central) coordination body; name: the State Forests</li> <li>☐ Formal coordination process</li> <li>☐ Inter-sectoral working groups</li> <li>☐ Inter-sectoral advisory body</li> </ul>		

	☐ Formal mandatory consultation process ☐ Formal voluntary consultation process ☐ Informal consultations (please describe)		
Policy Implementation	Others:		
Policy Implementation	/II		
Responsible actors and their roles:	Employees oft he State Forests administration, forest managing and carrying educational processes		
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: managerial positions in administration of the State Forests		
General comment	-		

#### 2.3.2 Forest Based Sector Policy

The Forest Based Sector Policy is analysed on basis of Concept of horizontal industrial policy in Poland. The document presents an integrated approach to policies horizontally affecting Polish industry: innovation, trade, environmental protection and human development policies. The document also indicates areas in which it is planned to undertake actions aimed at enhancing the economic growth in the industry through increasing its competitiveness.

Part A - General document information

Name:	Concept of horizontal industrial policy in Poland		
Adoption:	☐ Parliament ☐ Government	X Ministry: Ministry	
Please mark by whom and at which level the	of Economy		
document is adopted	Others:	☐ No formal	
	approval Level:		
	X National Regional	☐ Local	
	Adoption date: DRAFT	Local	
Validity period:	2007-2013		
Revision:	if needed		
Monitoring/ Evaluation:	envisaged		
Related	National Programme of Reforms 2005-2008		
documents:	National Development Strategy 2007-2015		
	National Strategic Reference Framework		
Geographical scope:	X National Regional; name: Loc	cal, name:	
Budget:	In the period of 2007-2008 PLN 1 M in the budget of the Ministry of Economy have been allocated for carrying out competitiveness analyses.		
General description	on of contents as written in document		
Objective of the document	Determination of execution conditions of the concept of horizontal industrial policy in Poland. The document containing the concept of horizontal industrial policy presents conditions and the current state of and challenges to the Polish industry as well as the aim of the horizontal industrial policy. The document presents an integrated approach to policies horizontally affecting Polish industry such as: innovation policy, trade policy, environmental protection policy, and human development policy. The document also indicates areas in which it is planned to undertake actions aimed at enhancing the economic growth rate in the industry through increasing its competitiveness.		
Priorities	The horizontal policy will concern following sectors:		
	- chemistry		
	- wood		
	- furniture		
	- building materials		

Structure	1. Introduction
	2. Conditions
	3. The aim of horizontal industrial policy
	4. Challenges to the Polish industry
	5. Areas of horizontal actions
	R&D and innovations
	Human capital
	Simplification and improvement of legislation
	Environment protection- sustainable development
	Access to capital
	Ready markets
	IT
	Industrial property protection
	6. Implementation of horizontal industrial policy
	7. Summary
	8. The place <i>Concept of horizontal industrial policy in Poland</i> among European and national strategic documents
Measure Areas	Guidebooks to competitiveness analysis and analysis of technological trends (technology foresight).
	Increasing innovation and technological advance.
	Improvement of the quality of human resources, removing of legislative and administrative barriers, guidebooks on available instruments.
Follow-up / Imple	ementation
Follow-up measures:	XNo follow-up activities so far  New or adapted funding programme(s) /budget line; name:  New or adapted regulations/laws; name:
	New or adapted regulations/laws, fiame.  New or adapted informational campaigns/instruments; name:
	New or restructured institutions/organisations; name:
	Implementation in forest policy:
General	Research on competitiveness of the wood sector in different EU countries.
comment:	

#### 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 X 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 X sometimes ☐ frequently
	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	☐ never  Xsometimes ☐ frequently  Terms used: innovation level assessment, knowledge-based economy, R&D, knowledge, education, global innovations, added valued, efficiency, competitive advantage, sustainable development, implementation, intelligent organisation, innovation changes, innovation pressure, innovation diffusion, investment

	Further comments on overall innovation orientation of the document: A chapter devoted to innovations.		
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  X 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	<ul> <li>□ 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)</li> <li>□ rather general (innovation is addressed in overall goals, needs are identified but no specification of measures)</li> <li>X rather specific (innovation is addressed in concrete goals, measures are formulated)</li> <li>□ very specific (quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist)</li> <li>Comments:</li> </ul>		
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 and technology policy ☐ Traditional S&T policy with systemic elements X Systemic innovation policy with S&T policy elements ☐ Predominantly systemic innovation policy Comments:		
<b>Goals and objectives:</b> The document is based on another document of September 2006 prepared by the Council of Ministers: "Lines of enhancing the innovation level of the economy in the period of 2007-2013".			
<b>Issues, problems and related topics:</b> New initiatives encompassing use of new highly innovative solutions, especially technological solutions, in production and service sectors including solutions leading to the reduction of negative impact on the environment.			
<b>Innovation areas:</b> New investments in the production sector encompassing use of innovative solutions of great importance to wood management: national R&D and import, mainly in respect of wood-based panels and furniture industry companies.			
General comment:			
Research on innovation implementation.	n barriers encountered in individual processes of research and		

**Part B - Innovation Support Measures** 

Fait D - Innovation Support Measures				
Innovation support	Research and Development	Permanent cooperation between business and R&D, tightening of science-industry cooperation, cooperation between research centres and the industry (on national and regional level), new companies oriented at knowledge transfer.		
measures Consult classification	Diffusion of innovation	Dissemination of new technologies such as: flooring materials, OSB, particleboards, sawnlogs, wood machining tools, coniferous timber for special applications, wood engineering.		
in chapter 2.2.2	Strengthening the knowledge base	<ul> <li>development of private implementation companies</li> <li>development of R&amp;D units in larger companies</li> <li>using R&amp;D units in foreign capital companies seated in Poland</li> <li>stabilisation of national research potential</li> </ul>		

Strengthening interaction  Demand creation		Cooperation between R&D units and the industry through staff exchange – internships and foreign scholarships.		
		<ul> <li>higher demand of the economy for products</li> <li>export possibilities (furniture and sawnwood)</li> <li>increase in the society's wealth</li> <li>favourable export conditions (currently PLN/€ exchange rate is unfavourable)</li> </ul>		
fra	proving me nditions	- "Technology Fishing Rod" is an initiative aimed at increasing innovation undertakings co-financed by the government - "Innovative Economy" is a programme focused on creating preferential conditions conducive to take up R&D innovative projects		
For a fact but	<b>Comments</b> For a long time import of western technologies was the main source of innovation. It was due to the fact that the national economy system was weak. This model became inherent in the Polish society but a change has been noticed in time.			
Priorities		Innovation issue is an important item in the document.		
Assessment of overall relevance		Based on previous practice it can be said that the scope of undertakings aimed at innovation in the forestry-wood sector id differentiated in various industries – wood-based panels industry is the most innovative due to the fact that it is owned by foreign capital and imports technologies. The sawmill industry is the least developed industry because lack of raw material limits possibility of execution of larger innovation projects connected with foreign capital.		
Promotion of innovation		Since two years it is noticeable in the Polish forestry-wood sector that the government has played an active part in innovation promotion including its support for foreign cooperation. An important role in this area is played by industry self-government units and finally companies started to see the necessity of innovation promotion. In the wood industry an important event is annual DREMA International Fair organised by Poznan International Fair Company. It is a chance to present furniture, machines, and other wood products.		
General comment:		Research on the influence of innovation promotion institutions/events, for instance fair, markets etc., on innovation effectiveness.		

#### **Table 1: Part B - Cross-sectoral coordination**

Policy formulation	
Co-ordination with other processes and documents	National Programme of Reforms 2005-2008 National Development Strategy 2007-2015 National Strategic Reference Framework
Administrative Co- ordination:	□ between different sections/departments within the same ministry; specify: □ between different ministries, specify: □ X between ministries and other public organizations / agencies, specify: Ministry of Economy, Polish Agency for Enterprise Development (PARP), universities, R&D units  Comments:  The Ministry creates economic policy PARP is responsible for implementation Universities and R&D units (around 100, including 2 univ. + Wood Technology Institute in the Polish forestry-wood sector) are the scientific base
Stakeholder involvement	☐ Forestry: name most important organisations:
Coordination	X Formal (central) coordination body; name: Ministry of Economy

mechanisms:	☐ Formal coordination process ☐ Inter-sectoral working groups  X Inter-sectoral advisory body ☐ Formal mandatory consultation process  X Formal voluntary consultation process  X Informal consultations (please describe: consultations with Ministry of Economy, chambers and associations, industry self-government) ☐ Others:	
Policy Implementation		
Responsible actors and their roles:	Ministry of Economy – preparation of appropriate regulations R&D institutions (including Wood Technology Institute) – innovation dissemination companies - implementation	
Level of delegation	☐ Decentralized, e.g.  X Central, e.g. ministry, public agency ☐ Outsourced to private actors  X Local, e.g. by municipalities ☐ Regional, e.g. by regional public actors ☐ Others:	
General comment	Research on effectiveness of different support methods.	

#### 2.3.3 Innovation Policy

The Innovation Policy is characterised with use of the Innovative Economy Operational Programme (IE OP), 2007-2013. It is one of the instruments for the implementation of the National Strategic Reference Framework for the years 2007-2013 (NSRF)1. The NSRF sets out the national framework for intervention within the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the Cohesion Fund, as well as the rules for coordination of the EU cohesion policy and respective national, sectoral and regional policies. Furthermore, it defines the mechanism for coordination of the programmes cofinanced from the ERDF, the ESF and the Cohesion Fund, programmes co-financed from the European Agricultural Fund for Rural Development (EAFRD), the European Fisheries Fund (EFF) and the European Investment Bank (EIB), as well as with the use of other financial instruments.

Part A - General document information

	Tare A General accument information		
Name:	Innovative Economy Operational Programme (IE OP)		
Adoption: Please mark by whom and at which level the document is adopted	☐ Parliament ☐ Government ☐ Ministry: of   Regional development ☐ Others: ☐   ☐ No formal approval ☐   Level: ☐ National ☐ Local   Adoption date: 27 July 2007		
Validity period:	2007 - 2013		
Revision:	Dokument updated on 25 Oct 2007 with information concerning qualifying of expenses		
Monitoring/ Evaluation:	SWAT analysis was done, implementation of the document is monitored and will be monitored.  Monitoring is done on the basis of financial indicators set out in the IE OP as well as of output and outcome indicators quantifying the objectives of individual priority axes. Wherever possible, appropriate statistical data shall be broken down by sex and size of the projects implemented by beneficiaries. The data for monitoring purposes shall be submitted to the EC electronically, in accordance with the requirements.  Evaluation is foreseen, as a tool are proposed audit and control procedures:  1. Audits of management and control systems 2. Controls of projects		
Related documents:	Instruction for expenses qualification for Innovative Economy Operational Programme, 2007 - 2013		
Geographical scope:	✓ National    ☐ Regional; name:      ☐ Local, name:		
Budget:	For implementation in years: 2007-2013, in Euro: 8 254 885 280; from: European Regional Development Fund		
General description of contents as written in document			

#### Objective of the All priority axes of the IE OP aim at: document support for innovativeness and measures that support innovativeness. In the IE OP, innovativeness should be understood as introduction of novelties to economic practice. the diagnosis of the situation of the science and enterprise sectors and the description of the cooperation between these two summarised in the SWOT analysis, as well as the analysis of strategic documents, allowed for formulation of the detailed objectives contributing to the development of the Polish economy based on innovative enterprises. **Priorities** The detailed objectives of the IE OP fit in with the two priorities: 1. entrepreneurship development and 2. improvement of competitiveness of enterprises. The priorities and support instruments operating within the IE OP are a reply to the challenges identified in the National Reform Programme with regard to support for the R&D area, development of innovation market and institutional environment assisting in cooperation between the R&D area and the economy, with regard to improvement of the external financing system for innovative undertakings, support system for economic promotion of Poland and ICT development in the economy and administration. At the same tame, they constitute a complement to the measures of the strategy with regard to improvement of regulations quality, simplification of administrative procedures and reduction of economic activity costs, improvement of economic judiciary and completion of the main privatisation processes. Structure 1. Diagnosis of selected areas aimed at establishing and developing a knowledge-based economy 2. SWOT analysis 3. Assessment of the effectiveness of domestic and foreign support for the enterprise sector in the years 2000-2006 4. Strategy 5. Priority axes implemented within the programme 6. System for the Implementation of the Innovative Economy Operational Programme 7. Draft financial plan 8. Categories of structural funds intervention in the years 2007-2013 9. Annexes 1. Research and development of new technologies **Measure Areas** 2. R&D infrastructure 3. Capital for innovation 4. Investments in innovative undertakings 5. Diffusion of innovation 6. Polish economy on the international market 7. Information society – establishment of electronic administration 8. Information society increase of innovativeness of economy 9. Technical assistance Follow-up / Implementation Follow-up No follow-up activities so far New or adapted funding programme(s) /budget line; name: measures: ☐ New or adapted regulations/laws; name: New or adapted informational campaigns/instruments; name: New or restructured institutions/organisations; name: ☐ Implementation in forest policy: only related to environmental issues: Effects of Certain Plans and Programmes on the Environment, assessment

	of effects on the environment is an important tool for including environmental aspects in the process of development and adoption of programmes that may potentially have significant effects on the environment in Member States, as it ensures that such effects of plans and programmes are considered while these documents are developed and prior to their adoption.
General comment:	-

	Part B - Overall Innovation O	rientation	
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: entrepreneurship, competitiveness	
	Further comments on overall innovation orientation of the document: innovation policy is focused on IT and sciences; implementation in fast developing sectors, but not in forestry; there is and impact on environment considered, but in terms of "ecological costs" of innovation implementation		
Relevance of innovation: Please mark how much relevance is given to innovation in the document (one answer)	<ul> <li>No relevance at all</li> <li>Marginal issue</li> <li>One issue among others</li> <li>Important issue</li> <li>Central issue</li> <li>Comments:</li> </ul>		
Degree of specification: Please mark how general or specific innovation is	<ul> <li>□ very general (innovation is named no related goals, measures, identified document)</li> <li>□ rather general (innovation is addressed)</li> </ul>	I needs or similar are addressed by the	
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	identified but no specification of meass  ☐ rather specific (innovation is addreformulated)  ☐ very specific (quantified goals relationship concrete measures introduced, a fixed Comments: innovation is a strategory.	essed in concrete goals, measures are ted to innovation are formulated, d budget and timetable exist)	
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		
Goals and objectives:			
<ol> <li>Improvement of innovativeness of enterprises</li> <li>Improvement of competitiveness of Polish science</li> <li>Strengthening of the role of science in economic development</li> </ol>			

4. Increasing the share of innovative products of the Polish

economy in the international market

- 5. Creation of permanent and better workplaces
- 6. Growth of the use of information and communication technologies in the economy.

#### Issues, problems and related topics:

Diffusion of innovation in Poland is hampered due to poor cooperation between the science sector and the economy. On the one hand, the supply of new technological solutions that would match the needs of the economy is very low. On the other hand, enterprises rarely seek for solutions to their technological or organisational problems in Polish scientific entities52. Although in some sectors, such as, for example biotechnology and economyation, cooperation has been developing, the economy in general still lacks such tendencies. Moreover, entities acting in favour of cooperation between the science sector and the economy in Poland are relatively poorly developed, and their activities are often aimed at the incubation phase rather then at increasing and improving cooperation.

#### Innovation areas:

"improvement of knowledge and innovativeness level in favour of growth" through implementing the undertakings in the scope of enhancement of investments in <u>research and development</u> works, facilitation of innovations and promotion of <u>entrepreneurship</u>, building of informative society and improvement of access to external sources of financing

#### General comment: -

## Part B - Innovation Support Measures

esearch and	support instruments of the IE OP for entrepreneurs
evelopment	(especially SMEs) to establish, transfer and popularise new solutions, both among entrepreneurs and business support institutions (implementation of innovative projects)
iffusion of novation	Diffusion of innovation in the economy is possible due to intense and constant cooperation between authors and beneficiaries of innovative solutions. On the basis of developed countries, it may be stated that cooperation often facilitates achievement of results that would be inaccessible for entities acting on their own.
	Cooperation between entrepreneurs (also at the start-up stage), as well as between entrepreneurs and business support institutions, mainly scientific entities, creates conditions that facilitate development and diffusion of new solutions (technological, product and organisational), know-how exchange as well as better utilisation of their resources.
trengthening ne knowledge ase	Stimulate the development of digital economy through supporting the creation of new, innovative eServices, innovative electronic solutions for business and the reduction of technologic, economic and mental barriers for using the services in the society.
	Projects directed to trainings and enhancement of citizen skills related to use of modern technologies and infrastructure projects related to information society.
trengthening iteraction	Support of various types of interaction between the industrial sector and the scientific and research sector and with the administration, which is characteristic of clusters.
	However, the level of clustering development in Poland is still relatively low. At present, studies are carried out aimed at diagnosing the state of clustering in Poland. The best developed cluster initiatives are the following:
	Aviation Valley cluster in the Podkarpackie Voivodship,     Industrial automation and control cluster in Gdańsk,     Printing cluster in Warsaw,
_	4). Construction cluster in the Świętokrzyskie Voivodship 5). Furniture cluster (Wielkopolskie and Zachodniopomorskie Voivodships).
emand reation	Stimulating demand for digital services and other information technologies uses in the economy and social life (disseminating the broadband Internet access and promoting information technology skills as well as shaping the awareness of the social and economic benefits brought by the information technologies).
	Generating a demand for products and digital services among citizens, enterprises and public institutions as an important element of creating an digital economy based on knowledge and transformation into a information society.
mproving ame onditions	In 2004, there were 537 centres dealing with support for innovation in Poland. Although since 2000 their number has increased by as much as 91%, still over half of these centres (55%) offers mainly training, counselling and information services.
	Only one out of ten innovation centres was able to support innovative activities of enterprises within technology transfer. As a result, their impact is still limited. Moreover, in every second self-government of <i>poviats</i> (counties) as well as in 75% of self-governments of <i>gminas</i> (municipalities), none of the innovation support institutions are operating.
omments -	
	Stimulate the development of digital economy
	Actual development of technology is not possible without its application among society members
overall	The documents focuses on innovations and most support measures and sub- measures are related to innovations. Other support measures are additional tools to enhance innovations or are strongly linked to innovations.
	rengthening e knowledge ase crengthening teraction emand eation

Promotion of innovation	Business support institutions do not employ all potential possibilities for cooperation for diffusion of innovation and services that may enhance innovation in the economy.
	These services are provided in Poland by dispersed institutions and their level and range varies significantly. This situation seems not to have a positive influence on the promotion of innovative activity among the entrepreneurs and hampers effective transfer of innovations.
General comment:	-

#### Part B - Cross-sectoral coordination

Policy formulation	
Co-ordination with other processes and documents	Instruction for expenses qualification for Innovative Economy Operational Programme, 2007 - 2013
Administrative Co- ordination:	<ul> <li>☑ between different sections/departments within the same ministry; specify: Ministry of Regional Development</li> <li>☐ between different ministries, specify:</li> <li>☐ between ministries and other public organizations / agencies, specify:</li> <li>Comments: Shortly explain the role of the main administrative actors</li> </ul>
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: The State Forests   ☐ Other sector:: name most important organisations:   ☐ Other sector:: name most important organisations:   Comments: Shortly describe the type of stakeholder involvement
Coordination mechanisms:	<ul> <li>☐ Formal (central) coordination body; name: Ministry of Regional Development</li> <li>☐ Formal coordination process</li> <li>☐ Inter-sectoral working groups</li> <li>☐ Inter-sectoral advisory body</li> <li>☐ Formal mandatory consultation process</li> <li>☐ Formal voluntary consultation process</li> <li>☐ Informal consultations (please describe)</li> <li>☐ Others:</li> </ul>
Policy Implementatio	n
Responsible actors and their roles:	Politicians making decision about founds flow and directing them for science, research and development and innovation application.
Level of delegation  General comment	□ 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:

#### 2.3.4 Rural Development Policy

Rural Development Policy is analysed upon Rural Development Programme for 2007-2013. The Programme will be implemented across the whole country. Rural area development measures under four priority axes will provide a basis for the implementation of the Programme strategic objectives described in the National Strategic Plan for Rural Development for 2007 – 2013. All these measures will be co-financed from the European Agricultural Fund for Rural Development and from national resources allocated for this purpose in the budget act.

The RDP mainly is created for agricultural projects, but some of its activities support forest sector. The most important innovation measures are:

- advisory services for farmers and forest owners,
- improvement and development of infrastructure related to forestry and
- afforestation of agricultural and non-agricultural land.

Present RDP is a continuation of RDP implemented between 2004-2006.

#### Part A - General document information

	i di c / C	circi ai aocaincirc illioi	mation	
Name:	National Cohesion Strategy 2007-2013 – Draft (approved by the Council of Ministers on 14 February 2006)			
Adoption:	☐ Parliament	Government	X Ministry: Ministry	
Please mark by whom	of Regional Dev	velopment		
and at which level the document is adopted	Others:		No formal	
accament is adopted	approval			
	Level:		_	
	X National	□ Regional	∐ Local	
	Adoption date:	2006		
Validity period:	2007-2013			
Revision:	not envisaged	not envisaged		
Monitoring/	envisaged			
<b>Evaluation:</b>				
Related	National Development Plan 2004-2006			
documents:				
Geographical	X National Regional; name: Local, name:			
scope:				
Budget:	€ 108,292.1 M in the period of 2007-2013			
General description	on of contents	as written in documer	nt	
Objective of the	Diagnosis of social and economic situation and also spatial state of affairs.			
document	SWOT analysis			
	Lines and effects of structural policy in Poland in the period of 2000-2006			
	Strategy of social and economic development of Poland			
Priorities	- Addition	ality		
	- Complei	mentarity		
	- Cohesio	n with other EU policies		
	- Concent	ration		
	- Coordin	ation		
	- Partners	ship		
	- Subsidia	arity		
	- Sustaina	able development		

Structure	1. Diagnosis of social and economic situation	
	<ol><li>SWOT analysis – situation at the start of the National Cohesion Strategy implementation</li></ol>	
	<ol><li>Lines and results of regional policy in the period of 2000-2006 in Poland</li></ol>	
	<ol> <li>Strategy of social and economic development of Poland in the period of 2007-2013</li> </ol>	
	<ol><li>Cohesion with the Community policy and Polish programme documents</li></ol>	
	6. Outline of operational programmes	
	7. Financing	
	<ol> <li>Implementation system of the National Cohesion Strategy 2007- 2013</li> </ol>	
Measure Areas	Areas Operational programmes, for instance:	
	- European Territorial Cooperation	
	- Infrastructure and the Environment	
	- Human Resources	
	- Technical Assistance	
Follow-up / Imple	nentation	
Follow-up	No follow-up activities so far	
measures:	New or adapted funding programme(s) /budget line; name:	
	New or adapted regulations/laws; name:	
	<ul><li>New or adapted informational campaigns/instruments; name:</li><li>New or restructured institutions/organisations; name:</li></ul>	
	Implementation in forest policy:	
General	esearch on competitiveness of the wood sector in different EU countries.	
comment:	•	

### 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 X 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 X sometimes ☐ frequently	
	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	☐ never  Xsometimes ☐ frequently  Terms used: new products, new furniture, competitiveness, entrepreneurship, R&D, regions of knowledge, entrepreneurship incubators	
	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 X Important issue ☐ Central issue Comments:		
Degree of specification:	very general (innovation is named in general parts, e.g. preamble, but no related goals, measures, identified needs or similar are addressed by the		

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	document)  X 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 ar formulated)  \[ \] very specific (quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist)  Comments:  Support for the R&D sector and implementation of new knowledge is of utmost importance to knowledge-based economy.		
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 and technology policy ☐ Traditional S&T policy with systemic elements X Systemic innovation policy with S&T policy elements ☐ Predominantly systemic innovation policy Comments:		
innovations. Therefore there	influenced by employment and increase in work efficiency which depends on is a need to concentrate funds on basic infrastructure, human resources and R&D access to IT and its strategic use.		
Issues, problems an	on of regions through rendering services for companies tess to funding		
	nanagement in the wood industry for industrial purposes ood		

Dart P. Innovation Support Massures

activation of rural areas through location of factories

Determination which needs will occur at this stage of the strategy implementation.

**General comment:** 

	Part B - Innovation Support Measures			
	Research and Development	development of own R&D units within larger companies     greater support for existing R&D units and higher education institutions     development of employee inventiveness  An important measure of innovation level is the share of new and modified		
Innovation support measures Consult classification in chapter 2.2.2	Diffusion of innovation	products in total sold production.  - not enough funds are allocated in research and relatively large sums are invested in purchase of new technologies as intangible assets  - the share of high-value added products in the production is to low compared to EU countries and exports is dominated by furniture and low-processed products  - financial support for Centres of Excellence and Centres of Advanced Technologies (over ten operates in the forestry-wood sector and they were funded partially form EU funds)  - creation of Technology Transfer Centres and Science and Technology Parks		
	Strengthening the knowledge base	Gradual broadening of cooperation between R&D units and business entities – financing of Centres of Excellence and Centres of Advanced Technologies from EU Framework Programmes (5 <sup>th</sup> and 6 <sup>th</sup> ); support for consultancy and education centres		
	Strengthening interaction	Support for innovation through the system of preferential loans – amortization of some of them.		

Demand creation	<ul><li>promotion and information</li><li>competitive prices</li></ul>			
	- profitable sale			
Improving frame conditions	<ul> <li>increase in outlays for innovations (investments)</li> <li>increase in the number of patent applications</li> <li>support for cooperation of R&amp;D units and business entities (financial support for Centres of Excellence and Centres of Advanced Technologies)</li> <li>local loan funds</li> <li>Science and Technology Parks</li> </ul>			
Comments				
Priorities	strengthening science-economy interaction through creation of Centres of Excellence and Technology Platforms (e.g. Polish Technology Platform for the Forestry and Wood Sector determines issues which should be dealt with)     application of IT in management			
Assessment of overall relevance	Actors in the wood industry are aware that innovations influence competitiveness of the industry and are the main driver of development. The lack of implementation is caused by the lack of funds.			
Promotion of innovation	Since two years it is noticeable in the Polish forestry-wood sector that the government has played an active part in innovation promotion including its support for foreign cooperation. An important role in this area is played by industry self-government units and finally companies started to see the necessity of innovation promotion. In the wood industry an important role is played by national and international exhibitions and fairs, e.g. fairs organised by Poznan International Fair Company.			
General comment:	An attempt to suggest new forms of innovation promotion.			

#### Part B - Cross-sectoral coordination

	Part B - Cross-sectoral coordination			
Policy formulation				
Co-ordination with other processes and documents	National Development Plan 2004-2006			
Administrative Co- ordination:	□ between different sections/departments within the same ministry; specify: □ between different ministries, specify: X between ministries and other public organizations / agencies, specify: Ministry of Regional Development , province authorities Comments: The Ministry creates the policy Province authorities are responsible for implementation			
Stakeholder involvement	□ Forestry: name most important organisations:  X Forest-based industries: name most important organisations: industry self- government (Wood Based Panels Producers Association of Poland, The Polish Economic Chamber of Wood Industry, Polish Chamber of Commerce of Furniture Manufacturers), Polish Chamber of Commerce  □ 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: □ Other sector:: name most important organisations:  Comments:			
Coordination mechanisms:	X Formal (central) coordination body; name: Ministry of Economy  Formal coordination process  Inter-sectoral working groups Inter-sectoral advisory body Formal mandatory consultation process Formal voluntary consultation process X Informal consultations (please describe: consultancy agencies)			

	☐ Others:	
Policy Implementation		
Responsible actors and their roles:	Ministry of Regional Development – preparation of appropriate regulations province authorities - implementation	
	R&D institutions, project companies – innovation dissemination	
Level of delegation	☐ Decentralized, e.g.  X Central, e.g. ministry, public agency ☐ Outsourced to private actors  X Local, e.g. by municipalities ☐ Regional, e.g. by regional public actors  X Others: industry self-government	
General comment	-	

## 2.3.4.1 Rural Development Policy

Part C - Appraisal of Effects - General Information

<u> </u>	Whole document (RDP)	Forestry Part
Total amount of funding (in mln)	€ 3 592 ,4	€ 91 ,7
Total number of projects	2816640	10681
Total number of beneficiaries	4671066 <sup>1</sup>	4998
Average amount of funding per project	€ 1275.42	€ 8585.34
Median of project funding	na	na
Average amount of funding per beneficiary	€ 760.07	€ 18347.34
Median of funding per beneficiary	na	na

#### **General comment:**

The above presented data are for years 2004-2006

 $<sup>^{1}</sup>$  no of beneficiaries is bigger than projects as certain actions are not considered as "project" e.g. structural pensions.

Table below presents only the forestry part of the Rural Development Programme 2004-2006.

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

Support for	Research & development	Diffusion of innovation	Strengthening knowledge base	Strengthening interaction	Demand Creation
Volume of funding in €	-	91 700 000	-	-	-
Share of funding in overall funding in %	-	2.6	-	-	-
Number of projects supported	-	4998	-	-	-
Share of projects in all projects in %	-	0.4	-	-	-
Average funding per project in €	-	8585.34	-	-	-
Number of beneficiaries	-	4998	-	-	-
Share of beneficiaries in total number of beneficiaries in %	-	0.1	-	-	-
Average amount of funding per beneficiary in €	-	18347.34	-	-	-
Priorities of funding	-	Diffusion of products (subsidies for afforestation)	-	-	-

#### **Overall assessment:**

Innovation into ecological direction – increasing of forest areas, ecologically very important and profitable

#### **General comment:**

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# 2.3.5 Regional Development Policy

Regional Development Policy is described in a draft document, approved though by the Council of Ministers in 2006. It comprises diagnosis of social and economic situation and also spatial state of affairs. Innovation is foreseen by means of IT, development of rural areas through location of factories and wood-based industry, wide use of solid, recovered and waste wood.

Part A - General document information

Name:	National Cohesion Strategy 2007-2013 – Draft (approved by the Council of Ministers on 14 February 2006)		
Adoption: Please mark by whom	☐ Parliament ☐ Government X Ministry: Ministry of Regional Development		
and at which level the document is adopted	Others: No formal approval		
	Level:		
	X National		
	Adoption date: 2006		
Validity period:	2007-2013		
Revision:	not envisaged		
Monitoring/ Evaluation:	envisaged		
Related documents:	National Development Plan 2004-2006		
Geographical scope:	X National		
Budget:	€ 108,292.1 M in the period of 2007-2013		
General description	n of contents as written in document		
Objective of the	Diagnosis of social and economic situation and also spatial state of affairs.		
document	SWOT analysis		
	Lines and effects of structural policy in Poland in the period of 2000-2006		
	Strategy of social and economic development of Poland		
Priorities	- Additionality		
	- Complementarity		
	- Cohesion with other EU policies		
	- Concentration		
	- Coordination		
	- Partnership		
	- Subsidiarity		
	- Sustainable development		

Structure	O Discossis of action and account attention		
Structure	9. Diagnosis of social and economic situation		
	10. SWOT analysis – situation at the start of the National Cohesion Strategy implementation		
	11. Lines and results of regional policy in the period of 2000-2006 in Poland		
	12. Strategy of social and economic development of Poland in the period of 2007-2013		
	13. Cohesion with the Community policy and Polish programme documents		
	14. Outline of operational programmes		
	15. Financing		
	16. Implementation system of the National Cohesion Strategy 2007- 2013		
Measure Areas	Operational programmes, for instance:		
	- European Territorial Cooperation		
	- Infrastructure and the Environment		
	- Human Resources		
	- Technical Assistance		
Follow-up / Imple	ementation		
Follow-up	X No follow-up activities so far		
measures:	☐ 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	Research on competitiveness of the wood sector in different EU countries.		
comment:			

# 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 X 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 X sometimes ☐ frequently	
	Please mark the frequency of occurrence of the <u>terms</u> that are related to innovation, for example entrepreneurship, diversification, competitiveness	☐ never  Xsometimes ☐ frequently  Terms used: new products, new furniture, competitiveness, entrepreneurship, R&D, regions of knowledge, entrepreneurship incubators	
	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  X Important issue ☐ Central issue Comments:		
Degree of specification:	very general (innovation is named in general parts, e.g. preamble, but no related goals, measures, identified needs or similar are addressed by the		

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	document)  X 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:  Support for the R&D sector and implementation of new knowledge is of utmost importance to knowledge-based economy.		
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 and technology policy ☐ Traditional S&T policy with systemic elements X Systemic innovation policy with S&T policy elements ☐ Predominantly systemic innovation policy Comments:		
Goals and objectives:  Effective economic policy is influenced by employment and increase in work efficiency which depends on innovations. Therefore there is a need to concentrate funds on basic infrastructure, human resources and R&D sphere. Innovations include access to IT and its strategic use.			
- improvement of acc - promotion of disser Innovation areas:	on of regions through rendering services for companies tess to funding nination of new IT		
	<ul> <li>IT connected with management in the wood industry</li> <li>use of wood waste for industrial purposes</li> </ul>		

# General comment:

- use of recovered wood

Determination which needs will occur at this stage of the strategy implementation.

activation of rural areas through location of factories

Part B - Innovation Support Measures

Part B - Innovation Support Measures		
	Research and Development	development of own R&D units within larger companies     greater support for existing R&D units and higher education institutions     development of employee inventiveness  An important measure of innovation level is the share of new and modified
Innovation support measures Consult classification in chapter 2.2.2	Diffusion of innovation	products in total sold production.  - not enough funds are allocated in research and relatively large sums are invested in purchase of new technologies as intangible assets  - the share of high-value added products in the production is to low compared to EU countries and exports is dominated by furniture and low-processed products  - financial support for Centres of Excellence and Centres of Advanced Technologies (over ten operates in the forestry-wood sector and they were funded partially form EU funds)  - creation of Technology Transfer Centres and Science and Technology Parks
	Strengthening the knowledge base	Gradual broadening of cooperation between R&D units and business entities – financing of Centres of Excellence and Centres of Advanced Technologies from EU Framework Programmes (5 <sup>th</sup> and 6 <sup>th</sup> ); support for consultancy and education centres
	Strengthening interaction	Support for innovation through the system of preferential loans – amortization of some of them.

Demand creation	<ul> <li>promotion and information</li> <li>competitive prices</li> <li>profitable sale</li> </ul>
Improving frame conditions	<ul> <li>increase in outlays for innovations (investments)</li> <li>increase in the number of patent applications</li> <li>support for cooperation of R&amp;D units and business entities (financial support for Centres of Excellence and Centres of Advanced Technologies)</li> <li>local loan funds</li> <li>Science and Technology Parks</li> </ul>
Comments	
Priorities	strengthening science-economy interaction through creation of Centres of Excellence and Technology Platforms (e.g. Polish Technology Platform for the Forestry and Wood Sector determines issues which should be dealt with)     application of IT in management
Assessment of overall relevance	Actors in the wood industry are aware that innovations influence competitiveness of the industry and are the main driver of development. The lack of implementation is caused by the lack of funds.
Promotion of innovation	Since two years it is noticeable in the Polish forestry-wood sector that the government has played an active part in innovation promotion including its support for foreign cooperation. An important role in this area is played by industry self-government units and finally companies started to see the necessity of innovation promotion. In the wood industry an important role is played by national and international exhibitions and fairs, e.g. fairs organised by Poznan International Fair Company.
General comment:	An attempt to suggest new forms of innovation promotion.

# Part B - Cross-sectoral coordination

	Part B - Cross-sectoral coordination
Policy formulation	
Co-ordination with other processes and documents	National Development Plan 2004-2006
Administrative Co- ordination:	□ between different sections/departments within the same ministry; specify: □ between different ministries, specify: X between ministries and other public organizations / agencies, specify: Ministry of Regional Development , province authorities Comments: The Ministry creates the policy Province authorities are responsible for implementation
Stakeholder involvement	□ Forestry: name most important organisations:  X Forest-based industries: name most important organisations: industry self- government (Wood Based Panels Producers Association of Poland, The Polish Economic Chamber of Wood Industry, Polish Chamber of Commerce of Furniture Manufacturers), Polish Chamber of Commerce  □ 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: □ Other sector:: name most important organisations:  Comments:
Coordination mechanisms:	X Formal (central) coordination body; name: Ministry of Economy  Formal coordination process  Inter-sectoral working groups Inter-sectoral advisory body Formal mandatory consultation process Formal voluntary consultation process X Informal consultations (please describe: consultancy agencies)

	☐ Others:		
Policy Implementation	Policy Implementation		
Responsible actors and their roles:	Ministry of Regional Development – preparation of appropriate regulations province authorities - implementation R&D institutions, project companies – innovation dissemination		
Level of delegation	☐ Decentralized, e.g.  X Central, e.g. ministry, public agency ☐ Outsourced to private actors  X Local, e.g. by municipalities ☐ Regional, e.g. by regional public actors  X Others: industry self-government		
General comment	-		

### 2.3.6 Sustainable Development Policy

Sustainable Development Policy. It is the third revision of Environmental Policy since 1991. The major objective of New National Environmental Policy is to provide an environmental safety for the Polish society, and to create the basis for elaboration and implementation of the national sustainable development strategy.

New National Environmental Policy should result in stimulation of the following processes in the framework of:

- enhancement and strengthening opportunities to reproduction of renewable resources, and to revitalisation and re-naturalisation of degraded ecosystems;
- rational use of non-renewable resources and activities towards their replacement with substitutes available;
- continuous protection and reproduction, in a scope possible, of biological diversity on landscape, ecosystem, species and gene levels;
- improvement in environmental decision making processes, particularly on local level, including enhancement of public participation in these processes;
- Preservation of forests integrity and improvement of their condition is a prerequisite for the country's environmental security, including preservation of water resources, landscape features and their functions related to recreation and health-protection.

Part A - General document information

Part A - General document information			
Name:	National Environme	ental Policy 2007-2010	with a perspective 2011-2014
Adoption: Please mark by whom	☐ Parliament Ministry:	☐ Government	
and at which level the document is adopted	Others:approval		☐ No formal
	Level:  ⊠ National  Adoption date: 200	☐ Regional	☐ Local
Validity period:	2007 – 2010 with a	perspective 2011-201	4
Revision:	It is the third revison of Environmental Policy since 1991. The second and third Environmental Policy are based on Long-term Strategy of Sustainable Development Poland 2025		
Monitoring/ Evaluation:	Assessment will be carried out from time to time (every 4 years for realization of national environmental policy and every 2 years for evaluation of regional environmental policies) with the use of the indicators of the National Environmental Policy implementation.		
Related documents:	The Second National Environmental Policy, Long-term Strategy of Sustainable Development Poland 2025		
Geographical scope:	National □ R	legional; name:	☐ Local, name:
Budget:	Budget for nature protection, biodiversity and landscape (with enrichment and sustainable management of forest resources) – for 2007-2010 145 mln €, 2011-2014 117 mln €.  Budget for investments in the same field - 2007-2010 183 mln €, 2011-		
	2014 131 mln €.	ents in the same hera -	2007-2010 103 11111 €, 2011-
General description	General description of contents as written in document		
Objective of the document	provide for er the basis for e	nvironmental safety of t	l Environmental Policy is to he Polish society, and to create entation of the national

Priorities	New Environmental Policy creates chance to achieve two following goals:		
	2. further improvement in the state of the environment and good		
	indicators in the scope of rational management of natural resource		
	(low energy, material and water consumption indicators versus the		
	national revenue), inter alia, by means of adoption and		
	implementation of the European Union standards in the field of environmental protection		
	3. higher economic and social benefits, than those in numerous highly developed states, to be caused by managing rational use of		
	significant biodiversity resources (inter alia, by means of development of environmentally sound tourism, and by the growth in agricultural revenue due better utilisation of possessed soil biological		
Churchina	potential		
Structure	1. Contents		
	2. Background assumptions		
	3. Environmental policy objectives related to the rational use of natural resources		
	Environmental policy objectives related to the quality of the environment		
	5. Tools and instruments of the environmental policy		
	6. International co-operation		
	7. Executive programmes and implementation control		
Measure Areas	1. Rationalisation of Water Consumption		
	2. Reduction of material consumption and waste-generation		
	<b>3.</b> Reduction of energy consumption with the national economy		
	and the growth in renewable energy use		
	<b>4.</b> Soil protection		
	<b>5.</b> Enrichment of forest resources and their sustainable management		
<b>6.</b> Protection of mineral resources			
Follow-up / Imple			
Follow-up	□ No follow-up activities so far		
measures:	New or adapted funding programme(s) /budget line; name:		
incusures:	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:			
	Part B - Overall Innovation Orientation		
Overall innovation			
orientation	of the more generic terms 'innovation' or synonyms ('new products', 'new sometimes		
(use word search function	on). services', 'new processes', new		
	marketing methods' , `new business models') in the document		
	Please mark the frequency of occurrence  never		
	of the forest sector <u>'innovation frontier'</u> sometimes		
	innovation areas identified in Chapter 3 - in the document frequently		
	Please mark the frequency of occurrence  never		
	of the <u>terms</u> that are related to innovation, for example		
	entrepreneurship, diversification,		
	competitiveness Terms used: diversification		

	Forest sector activities planned for realisation mainly encompass continuation of former programmes. There are not completely new but present new directions and needs. in some way they are innovative – it is the innovation of different style of thinking about environment and forest resources management.		
Relevance of	☐ No relevance at all		
innovation:	☐ Marginal issue		
Please mark how much	☐ One issue among others		
relevance is given to innovation in the document	☐ Important issue		
(one answer)	☐ Central issue		
	Comments: As it was mentioned the innovation relies on introducing modern view to old activities in forest sector.		
Degree of	very general (innovation is named in general parts, e.g. preamble, but		
specification: Please mark how general	no related goals, measures, identified needs or similar are addressed by the document)		
or specific innovation is addressed by the document (one answer)	$\square$ rather general (innovation is addressed in overall goals, needs are identified but no specification of measures)		
Please use comments section to describe if the	rather specific (innovation is addressed in concrete goals, measures are formulated)		
degree of specification varies for different parts of	very specific (quantified goals related to innovation are formulated, concrete measures introduced, a fixed budget and timetable exist)		
the document, esp. when concerning forestry	Comments: Document lists already known measure areas changed by scintilla of innovation. What is important NEP 2007-2010 ensure realisation of many important environmental projects which for years existed as non-realised ideas.		
Understanding of	☐ Predominately traditional science and technology policy		
innovation policy	☐ Traditional S&T policy with systemic elements		
Please assess what overall	Systemic innovation policy with S&T policy elements		
understanding of innovation policy is	☐ Predominantly systemic innovation policy		
reflected in the document.	Comments: -		
See chapter 2.2.1			
Goals and objectives			
Afforestation of agricultural and non-agricultural land considering environmental-landscape conditions;			
-	d productivity of private forests;		
sustainable use of forest natural resources, including timber, game, undergrowth, introduction of safe techniques and technologies in forestry practices;			
Improvement and introduction of new, state-of-the-art methods of forest inventory and monitoring;			
Maintenance and strengthening of social and economic functions of forests, cooperation and			
communication with the public, development of education and science;			
Conversion of forests.			
Issues, problems an	d related topics:		
One of the issue is using forests for protection of climate. There is also big expectation connected with development of inter-sectoral cooperation.			
Innovation areas:			
At present, Polish forestry is dominated by the model of sustainable use of resources. A gradual move			
can be observed from raw-material based management towards the development of sustainable, multi-function forest management, which includes also protection of forest biodiversity. It was pointed in the table 3.1. It is no surprise because proper forest management is very generally formulated direction of innovation.			
unection of innovation.			

General comment: -

Part B - Innovation Support Measures

Part B - Innovation Support Measures			
Innovation support measures	Research and Development	Elaboration of an effective programme for the improvement of private forests management that will prevent their devastation;	
	Diffusion of innovation	Continuation of education realised by the State Forests which helps presenting f.e. advantages of mechanised timber harvesting.  Vocational training provided for private forest owners which strengthens their knowledge.	
	Strengthening the knowledge base	Vocational trainings provided for private forest owners which strengthen their knowledge and help with receiving UE founds.	
Consult classification	Strengthening interaction	Development of inter-sectoral cooperation. Integration of forest management and water resources management.	
in chapter 2.2.2	Demand creation	-	
	Improving frame conditions	Continuation on National Programme of Afforestation;	
	Comments		
Priorities		Priority area of innovation in this document is improvement of private forests management. Those forests are small and divided, placed among agricultural areas. Conception of its managing would result in enrichment biodiversity and will create a possibility to increase productivity.	
Assessment of overall relevance		Innovation support measures are presented in the small scale in the document.	
Promotion of innovation		Innovation is not clearly underlined, but it is present in major directions and measures revealed in the document.	
General comment:		-	

# Part B - Cross-sectoral coordination

Policy formulation	
Co-ordination with other processes and documents	The Second National Environmental Policy, Long-term Strategy of Sustainable Development Poland 2025; Environment Protection Act
Administrative Co- ordination:	<ul> <li>□ between different sections/departments within the same ministry; specify:</li> <li>□ between different ministries, specify:</li> <li>□ between ministries and other public organizations / agencies, specify:</li> <li>Ministry of Environment, Inspection for Environmental Protection, Sanitary</li> <li>Inspection, Regional water management institutions, Environmental Departments at Voivod Councils</li> <li>Comments: Shortly explain the role of the main administrative actors</li> </ul>
Stakeholder involvement	☑ Forestry: name most important organisations:       The State Forests         ☐ Forest-based industries: name most important organisations:
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	
Responsible actors and their roles:	Minister of Environment – coordinating of the implementation of the NEP
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	-

# 2.3.7 Renewable Energy Policy

Renewable Energy Policy - Energy Policy of Poland until 2025. One of the key principles of the energy policy doctrine are the constitutional principle of progress in the economy based on the idea of sustainable development. This idea has been expressed in the National Development Plan. Support of the development of Renewable Energy Sources (RES) and of cogeneration of sources, including local generation with the use of market mechanisms.

Part A - General document information

Name:	Energy Policy of Poland until 2025
Adoption:	☐ Parliament ☐ Government ☐
Please mark by whom and at which level the document is adopted	Ministry:         □ Others:         □ No formal
document is ddopted	approval
	Level:
	☐ National ☐ Regional ☐ Local
Validity period:	Adoption date:
Revision:	2005-2025
	na
Monitoring/ Evaluation:	The short-term evaluation of implementation of EPP was planned for 2008.
Related documents:	The Assumptions for the National Development Plan for 2007 – 2013
Geographical scope:	✓ National    ☐ Regional; name:      ☐ Local, name:
Budget:	na
General description	on of contents as written in document
Objective of the	Objectives are:
document	to ensure energy security of the country,
	to increase the competitiveness of the economy and its energy efficiency,
	to protect the environment from the negative effects of energy-related activities, concerning generation, transmission, and distribution of energy
	and fuels.
Priorities	The key principles of the energy policy doctrine are [chosen]:
	The Constitutional principle of progress in the economy based on the idea
	of sustainable development. This idea has been expressed in the National Development Plan.
	Full integration of the Polish energy industry with the European and global
	industries, in line with the long-term vision of development of Polish
	economy and with the National Development Plans, and in particular with the NDP for the years 2007 – 2013.
	The basic mechanisms for the functioning of the energy industry are the mechanisms of a competitive market, with the necessary administrative regulation in these areas where the emergence of competition is
	considerably limited at present.
	Support of the development of Renewable Energy Sources (RES) and of cogenerating sources, including local generation with the use of market mechanisms.

Structure	The Doctrine of Poland's Energy Policy until 2025
	Energy Security Management
	Long-term directions of actions until 2025 and executive tasks until 2008
	Generation capacities of domestic fuels and energy sources
	Volumes and types of fuel stocks
	Transport capacities and cross-border connections
	Energy efficiency of the economy
	Protection of the environment
	Restructuring and ownership changes Directions of scientific research and development
	International co-operation
Manager Agana	·
Measure Areas	Maintaining the stable support mechanisms for the use of renewable
	energy sources
	The use of biomass in electricity and heat generation
	Intensification of use of small-scale water power
	Increased use of wind power
	Increase of share of bio-components in the liquid fuel market
	Development of industry for renewable energy generation
Follow-up / Imple	ementation
Follow-up	☐ No follow-up activities so far
measures:	New or adapted funding programme(s) /budget line; name: activities
	supported by budget
	New or adapted regulations/laws; name:
	New or adapted informational campaigns/instruments; name:
	New or restructured institutions/organisations; name: Implementation in forest policy:
Canaval	in prementation in forest policy.
General	-
comment:	

#### Part B - Overall Innovation Orientation

	Tare B Overall Illinovation Ci	
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	<ul><li>□ never</li><li>□ sometimes</li><li>☑ frequently</li></ul>
	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: diversification, competitiveness
	Further comments on overall innovati	on 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: It is projected that by 20 final energy will grow by 48-55%, of electricity by 80-93%. In each of the structure of domestic energy consumpliquid fuels is forecasted. To fulfil that	forecast variants the change in ption in favour of natural gas and

#### is truly needed. Degree of very general (innovation is named in general parts, e.g. preamble, but specification: no related goals, measures, identified needs or similar are addressed by the Please mark how general document) or specific innovation is ☐ rather general (innovation is addressed in overall goals, needs are addressed by the identified but no specification of measures) document (one answer) ☐ rather specific (innovation is addressed in concrete goals, measures are Please use comments section to describe if the formulated) degree of specification very specific (quantified goals related to innovation are formulated, varies for different parts of concrete measures introduced, a fixed budget and timetable exist) the document, esp. when Comments: concerning forestry Understanding ☐ Predominately traditional science and technology policy innovation policy ☐ Traditional S&T policy with systemic elements Please assess what overall understanding ☐ Predominantly systemic innovation policy innovation policy reflected in the document. Comments: Innovation Policy concerning energy issue depends on: See chapter 2.2.1 Efficient implementation of modern technology and management solutions; Promotion of energy knowledge in the society; Concentration of resources on priority research directions

#### Goals and objectives:

Creating the balanced structure of primary fuels;

Monitoring of the level of energy security by specialized state bodies, along with initiating the improvement of the level of diversification of energy and fuel supply sources, natural gas and crude oil in particular;

Consistent establishing of competitive markets in electricity and gas, in line with the energy policy of the EU, through stimulating competition and effective elimination of barriers

activities directed at the reduction of costs of functioning of the energy sector, ensuring rational prices of energy and fuels to the consumers, and the increase (improvement) of energy efficiency in all areas of generation and transmission, and use of energy;

Strengthening by law of the position of the local government administration towards energy enterprises in order to effectively implement local (gmina) plans of provision of heat, electricity, and gaseous fuels;

Pro-supply modifications in the existing methods of promoting energy from RES and of combined electricity and heat generation, and implementation of the system of trading in certificates of origin of energy, independent of its reception, and in this way allowing its producers to accumulate adequate financial resources, which will consequently contribute to the increase of the generating potential in this respect;

Balancing of the interests of energy enterprises and of final consumers, in correlation with achieving a considerable improvement of the quality of service as regards the supply of fuels and energy;

Active modelling of the organizational and functional structure of the energy sector, both through regulatory tools provided for in the Energy Law Act, and through consistent restructuring (ownership, capital, spatial, and organizational) of energy enterprises overseen by the State Treasury.

### Issues, problems and related topics:

The main problem concerning innovation issue is the need to modernize polish energy sector.

Energy Policy of Poland profoundly addresses issues as competitiveness of the sector as well as diversification.

#### Innovation areas:

Achievement of targets designated by the energy policy doctrine in the perspective of 2025 requires cooperation of state bodies in the individual areas of this policy, especially in those, which are connected with covering the increments of demand for fuels and energy, improvement of competitiveness and energy efficiency of the economy, and with the limitation of energy sector's impact on the natural environment.

For long-term action directions until 2025 concerning:

- generation capacities of domestic fuels and energy sources,
- volume and types of stocks of fuels,
- transport capacities, including cross-border connections,

- energy efficiency of the economy,
- protection of the environment,
- development of use of renewable energy sources,
- restructuring and ownership changes of the fuels and energy sector,
- research and development work,
- international cooperation.

Comparing results gathered in table 3.1. allows to state that the use of biomass as one of the most important innovation areas is also important issue in Energy Policy of Poland and it is included in the development of use of renewable energy sources.

General comment: -

Part B - Innovation Support Measures		
Innovation support	Research and Development  Diffusion of innovation	Ensuring the contribution of Polish science into the global development of energy technologies and economics thanks to the concentration of resources on priority research directions;  Efficient implementation of modern technology and management solutions;  Promotion of energy knowledge in the society;  The most promising research seems to be the search for new energy resources deposits, renewable energy sources development, and the so called clean coal technologies.  Development of assumptions for a system of promotion of energy issues – realized under the leadership of the minister responsible for economy in cooperation with the minister responsible for science and the minister responsible for education
measures Consult classification in chapter	Strengthening the knowledge base	promotion of knowledge on rational use of energy and on the need to include environmental protection costs in energy and fuel prices remains an important area of research activity
2.2.2	Strengthening interaction	Strengthening of interaction by means of cooperation with the other ministries and the EU
	Demand creation	-
	Improving frame conditions	-
	Comments -	
Priorities		Research and Development: the search for new energy resources deposits, renewable energy sources development, and the so called clean coal technologies are the most important priorities.
Assessment of overall relevance		Innovation is recognised and presented as a one of the most important and supporting key, but not overused and is not mentioned too often on the background of other support measures
Promotion of innovation		Multidimensional promotion of innovative energy production and consumption is presented through research and development and international cooperation
General com	ment:	-

# **Part B - Cross-sectoral coordination**

Policy formulation	
Co-ordination with other processes and documents	Assumptions to National Development Plan 2007-2013,  European Energy and Transport, Trends to 2030, European Commission,  Directorate – General for Energy and Transport, Brussels, January 2003
Administrative Co- ordination:	<ul> <li>☑ between different sections/departments within the same ministry; specify:</li> <li>Ministry of Economy/Government administration</li> <li>☐ between different ministries, specify:</li> <li>☐ between ministries and other public organizations / agencies, specify:</li> <li>Comments: -</li> </ul>
Stakeholder	Forestry: name most important organisations:

involvement	☐ Forest-based industries: name most important organisations:
	Agriculture: name most important organisations:
	Tourism: name most important organisations:
	Energy: name most important organisations: network system operators.
	☐ Environment: name most important organisations:
	☐ Other sector: name most important organisations: ☐ Other sector:: name most important organisations:
	Comments: Shortly describe the type of stakeholder involvement
O	Formal (central) coordination body; name: Energy Policy Team appointed by the Prime
Coordination mechanisms:	Minister
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	<u>n</u>
Responsible actors and their roles:	Government administration, within the scope of its constitutional and legal duties, is mainly responsible for:
	<ul> <li>continued forecast and analysis work on the strategy of energy security, including the necessary planning work;</li> </ul>
	<ul> <li>such implementation of the country's energy policy which ensures first of all energy security, and in particular creates conditions for:</li> </ul>
	<ul> <li>the necessary diversification,</li> </ul>
	<ul> <li>maintenance of the stocks of fuels,</li> </ul>
	<ul> <li>maintenance of spare generation capacities,</li> </ul>
	<ul> <li>ensuring transmission capacities allowing for the expedient diversification of sources and/or directions of supply of crude oil and petroleum products, gas, and electricity;</li> </ul>
	<ul> <li>establishing market mechanisms ensuring the development of generation and transmission capacities of the energy system in order to increase the level of reliability of supply and the security of the energy system operation;</li> </ul>
	<ul> <li>preparation of procedures enabling, in the event of unexpected threats, natural disasters, and force majeur, the application of other than market mechanisms for the balancing of the interests of the market actors and co- ordination of the operation of the energy sector;</li> </ul>
	<ul> <li>reduction of political risk in the regulations applied;</li> </ul>
	<ul> <li>monitoring of and reporting to the European Commission on the status of energy security, and undertaking appropriate remedy measures in the event of a threat to the reliability of supply;</li> </ul>
	<ul> <li>analysis of the impact of the activities planned within the framework of energy policy on national security;</li> </ul>
	<ul> <li>co-ordination of and supervision over the activities of transmission systems operators in the field of co-operation with the neighbouring countries and with the European electricity and gas systems.</li> </ul>
	A special area of activity for central government, for the support of all of the above, is the activity for the promotion of competition and elimination of barriers limiting competition, including the rationalization of the rules and the scope of administrative intervention into the energy sector
	operation.  Voivods and voivodship governments are chiefly responsible for ensuring favourable
	conditions for the development of the infrastructure of interregional and intraregional connections, in particular within the area of their voivodeship, and for co-ordinating the development of energy industry in gminas.
	Gmina local governments are responsible for ensuring local energy security, in particular as regards meeting the demand for electricity, heat, and gaseous fuels, making rational use of the local potential of renewable energy sources and of energy obtained from wastes.

	Network systems operators (transmission and distribution), as per respective scopes of their operation, are responsible for:
	ensuring market actors non-discriminatory access to network infrastructure;
	maintaining network infrastructure in operational condition, in line with the technical safety standards, with the domestic and European standards of quality and reliability of supply, and with the terms of intersystem co-operation;
	effective system management and continued monitoring of the reliability of its operation, and ongoing supply/demand balancing;
	optimal implementation of emergency procedures in the conditions when other than market mechanisms are applied for the balancing of interests of market actors, and for co-ordination of energy sector operation;
	planning the development of network infrastructure, corresponding to the projected commercial demand for transmission services and for intersystem exchange;
	monitoring of the availability and reliability of operation of the subsystem of electricity generation, of the system of storage of gaseous fuels, and of the system of storage of liquid fuels.
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: mixed structure – governmental, regional and local
General comment	-

### 2.4 Research needs

Evaluation of seven policy documents allowed to conclude that there are six further research areas to analyse:

- policies for private owners and state forestry;
- competitiveness of the wood sector in different EU countries;
- innovation barriers encountered in individual processes of research and implementation;
- the influence of innovation promotion institutions/events, for instance fair, markets etc., on innovation effectiveness;
- new forms of innovation promotion;
- Research on effectiveness of different support methods.