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BACKGROUND INFORMATION

Accompanying document to the

**Draft Green Paper on:
Forest Protection and Information in the EU: Preparing forests for climate change**

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accompanying the

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BACKGROUND INFORMATION

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1. ANNEX A: OVERVIEW OF EU POLICY TOOLS THAT RELATE TO FORESTS AND FORESTRY

1.1. The Forestry Strategy for the EU and the EU Forest Action Plan

The 1998 Council Resolution on a Forestry Strategy for the EU¹ is the basic political charter of the EU forest sector. It sets out multifunctionality as the common principle of EU forestry, and identifies sustainable forest management as the main tool for assuring the fulfilment of all forest functions, i.a. for the conservation and enhancement of the biological diversity as well as one of the measures to combat climate change. It confirms the National Forest Programme as the basic policy tool and lists a series of ongoing international processes and activities to be followed up at national and EU level. It puts responsibility for forest policy with the Member States according to the principle of subsidiarity² and concludes that all common measures affecting forests and forest products should be in line with the aims and recommendations of this strategy. This approach is based on the absence of a specific provision for an EU forest policy in the Treaties establishing the European Union. It implies that the formulation and implementation of forest policy is primarily an internal matter for Member States.

The Forestry Strategy also addresses the need for better integration of forests and forest products in all relevant sectoral common policies, even those generally not being specifically related to forests.

The EU Forest Action Plan³ which builds on the EU Forestry Strategy has been set up in close cooperation of Member States and the Commission. It addresses activities to enhance competitiveness, in improving the environment and contributing to the quality of life and stresses the need for coordination and cooperation. These are grouped around 18 key actions which i.a. focus on forest protection and monitoring. The Forest Action Plan does not setup new policy means but refers to existing sector policies with relevance to forests, which are outlined below.

1.2. The Action Plan on Innovative and Sustainable forest-based industries in the EU

The 2008 Communication on innovative and sustainable forest-based industries in the EU⁴ includes a 19-point action plan to improve the long-term competitiveness of the forest-based sector while integrating climate change and energy objectives into the sector's strategy. The actions it proposes are complementary to the Forest Action Plan regarding the competitiveness of EU FBI, focussing on access to raw material, impact of climate change, innovation, trade and communication.

¹ OJ C 56/1 of 26 February 1999.

² It is the principle whereby the Union does not take action (except in the areas which fall within its exclusive competence) unless it is more effective than action taken at national, regional or local level.

³ Forest Action Plan 2006 COM(2006) 302 final

⁴ COM(2008)113

1.3. Environmental policy

- Policy on nature protection

Natura 2000 is the core element of EU policy to protect nature and biodiversity. It consists of sites designated as required by the Habitats and Birds Directives⁵ and covers around 17% of the total EU land area. Forest habitats constitute almost 30% of the designated terrestrial sites.

A recent assessment⁶ indicates that many habitats (including forests) are in unfavourable conservation status and that in many MS, information about the conservation status of designated Natura 2000 is lacking. The evaluation of the EU contribution to halt the loss of biodiversity by 2010⁷, has shown that this objective will not be met mainly because conservation of biodiversity in the use of natural resources (such as forests, agriculture and fisheries) beyond protected areas has not advanced as expected. Annex 4 gives an overview of Natura 2000 designations of forest habitats by MS.

- Climate policy

EU climate policy focuses on mitigation by reduction of GHG emissions but the need for adaptation to climate change is increasingly recognized. The key instruments are the European Union Emission Trading Scheme (ETS) and the Effort Sharing Decision⁸ (ESD) for reducing emissions, with policies on renewable energy, energy efficiency, etc. playing an additional role.

The EU considers that to achieve its overall targets, all sectors, including the forest sector and land use, land use change and forestry (LULUCF), must make a contribution⁹. According to the ESD and ETS directive¹⁰, the Commission will have to submit a report assessing, inter alia, the appropriate modalities for including emissions and removals related to land use, land use change and forestry in the EU." On the basis of this report, the Commission shall, if appropriate, submit a legislative proposal related to LULUCF in the EU GHG reduction commitment, including provisions on accurate monitoring and accounting according to harmonised modalities. This suggests that forest carbon data should be better harmonised in the EU GHG inventory.

- Water policy

The WFD¹¹ sets a single framework for the protection of all EU waters with the aim of reaching "good ecological status" as a rule by 2015. The originality of the WFD lies in the adoption of the river basin district as the basic water management unit based on natural geography and hydrology, across to administrative boundaries.

⁵ Directive 92/43/EC <http://www.europa.eu.int/comm/environment/nature/legis.htm>; Directive 79/409/EC <http://www.europa.eu.int/comm/environment/nature/legis.htm>
⁶ Ref. to Art. 17 HD - http://ec.europa.eu/environment/nature/knowledge/rep_habitats/index_en.htm
⁷ Ref. to EEA report & Athens conference press comm
⁸ ESD: Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009
⁹ COM(2007)2 "Limiting climate change to 2° ..." & COM(2005)35 "Winning the Battle ..."
¹⁰ Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009
¹¹ Directive 2000/60/EC of the EP and the Council

Practically, the WFD could allow MS to support forest protection in order to assure water quality, although there is no specific support for water related forestry (managing forest soils to enhance groundwater quantity and quality) at EU level.

The introduction of schemes for payment of ecosystem services (PES)¹² that remunerate forest owners and managers for taking a water-conscious approach is a promising development.

- Forest fire management/disaster prevention

The European Forest Fire Information System (EFFIS), in operation since 2000, is based on the scientific work developed at the EC Joint Research Centre in cooperation with DG Environment. It collects fire statistics on fire occurrence from the European (EU and neighbour) countries(are provided on the basis of voluntary co-operation)In addition to the information received from the countries, daily fire danger forecasts and fire damage assessments are generated through the use of GIS and remote sensing technologies. The information provided to and generated by EFFIS feeds the European Forest Data Centre (EFDAC)¹³. Information in EFFIS supports decision-making for fire prevention and preparedness for fires, assists in urgent action during active fires, allows to better evaluate the effects of fires as well as to assess post-fire damages. The operational part of EFFIS is currently financed from the LIFE+ budget on an ad hoc basis.

1.4. Agricultural policy

The **Rural Development Regulation** (RDR / 2007-2013¹⁴) of the **Common Agricultural Policy** (CAP) offers a wide range of EU co-financing measures for managing forest land, which have become the main EU financial instrument for the forest sector in the EU. The measures address the improvement of the competitiveness of farm and forest holdings, giving grants for improvement of the environment including prevention actions and co-financing activities to maintain the quality of life and diversification of incomes in rural areas. The aid given therefore also contributes to job creation and income maintaining vital rural societies. It also plays a prominent role when financing measures for adapting forests to climate change. MS have spent between 5 and 10 % of their EU co funded Rural Development budget on forests since 2000¹⁵. From 2000-2006, 10 % of the RD budget (4,8 bn €) went for forestry support, split 50/50 between afforestation and other measures.

According to recent Commission reporting¹⁶, during the period 2007 – 2013, programming of forest measures has decreased compared to the previous budget period and afforestation has lost importance compared to other measures. According to the programming before the modification due to the CAP Health Check and

¹² "The Economic Value of Groundwater in European Forests – IUCN/EC 2009

¹³ See <http://timber.unece.org/fileadmin/DAM/meetings/05-jrc-gaigalas.pdf> for detailed description

¹⁴ RDR: Council Regulation (EC) 1698/2005 on support for rural development by the EAFRD

¹⁵ EU Forestry Strategy report COM (2005) 84 (working paper) and the recent "Report on implementation of Forestry Measures under the Rural Development Regulation 1698/2005 for the period 2007-2013", available at http://ec.europa.eu/agriculture/fore/publi/index_en.htm

¹⁶ http://ec.europa.eu/agriculture/fore/publi/index_en.htm

Recovery Package the EAFRD will spend € 8 billion (from a total RD commitment 2007-2013 of € 90.8 billion) for forests and forestry-related measures. This includes € 2.8 billion for planting approximately 890,000 ha of new forests, support for managing 400,000 hectares of Natura 2000 forest areas and forest- environment measures covering 2 million hectares, as well as support for implementing fire prevention measures.

The additional funding related to the Health Check¹⁷ and the Recovery Package also allows providing more support for climate change, renewable energy, water management and biodiversity measures. Part of the total additional funding of € 4.4 billion is likely to be directly related to forestry measures.

1.5. Energy policy

Wood for heating or electricity generation and combined heat and power (CHP) based on biomass (from waste, forest and agriculture) remain the main renewable energy source (RES) in the EU. After a number of earlier initiatives¹⁸, the Council and the EP adopted the EU Climate and Energy Package on 23 April 2009, including a **Directive on the promotion of energies from renewable sources (RES-D)**¹⁹ that set an overall binding target for the European Union to achieve a 20% renewable energy share by 2020 and a 10 % target for renewable energy used in transport.

The increase in biomass use generated by the RES-D brings opportunities for the EU forest sector but leads also to increased competition between other users of the raw material (e.g., pulp, building material, furniture). This situation may justify additional efforts to improve forest information in the EU.

The RES-D includes sustainability criteria²⁰ for biomass used for biofuels and bioliquids, which concerns feedstock mainly coming from agricultural crops and residues but also from forests and waste.. By the end of 2009, the Commission is required by Article 17(9) of RES-D to present a report on the need for sustainability criteria for other types of biomass used for energy purposes, namely solid and gaseous biomass used for heat and electricity generation.

1.6. Industrial, Trade and Market Policies

The Action Plan on Sustainable Consumption and Production and Sustainable Industrial Policy (SCP/SIP) establishes a framework for the integrated implementation of a mix of instruments aims at improving the energy and environmental performances of products. It includes, a voluntary green public procurement policy covering environmental criteria for use in tendering procedures for products and services commonly purchased by public bodies, including specific environmental criteria for wood and wood products²¹, and the revised EU Ecolabel²² which also sets specific criteria for wood and wood products.

¹⁷ http://ec.europa.eu/agriculture/healthcheck/index_en.htm

¹⁸ RES-E 2001/77 - Directive 2003/30/EC on the promotion of biofuels – Biomass Action Plan COM(2005)628

¹⁹ RES-D : Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009

²⁰ Art 17 RES-D , related only to counting against the 10 % biofuels target

²¹ More information at http://ec.europa.eu/environment/gpp/index_en.htm

The possible differences between different sustainability criteria for wood as a bio-energy source and as a building material have raised concerns in the forest sector about:

- Efficient trading of forest products as green and renewable materials;
- National public procurement systems possibly not complying with EU sustainability criteria and EU procurement rules as well as discriminating forest products compared to competing materials.

The Commission recently adopted a communication reflecting the concerns of the EU industry regarding access to raw materials, including wood from EU forests²³.

1.7. Plant Health Policy

The Community plant health regime (CPHR), deals with organisms harmful to plants and plant products. It regulates the trade of plants and plant products within the EU as well as imports from the rest of the world. It also implements preventive measures to guard against the introduction and spread of harmful organisms with quarantine status harmful to plants and ensures quality conditions, including the health status, for the sale multiplication of propagating material in agriculture and forestry within the EU through certification schemes.

Nevertheless these schemes do not contain provisions to manage and control the natural spread of organisms below a quarantine threshold, or provisions for insects, fungi and plants normally found in forest ecosystems that do not always cause damage, but could become harmful and/or invasive with the changes due to global warming.

1.8. Research policy

In the 7th Framework Programme (FP7 2007-2013) forest research in a broader sense, falls mainly under the “Cooperation” programme. During the former Framework Programme and with the goal of developing the European Research Area and reaching the Lisbon objectives, the EC promoted the creation of "technology platforms", and launched the ERA-Net programme to improve the coordination of national research programmes. The forest sector succeeded in establishing a technology platform and in building an ERA-Net project that is currently running.

The JRC has always been active on issues related to forests, such as remote sensing, climate change, forest monitoring, forest fragmentation, forest fires and forest information systems. The intergovernmental framework for European Co-operation in the field of Scientific and Technical Research (COST) has supported important projects²⁴ such as COST E27 on harmonization of Protected Forest Areas and COST E43 on Harmonization of National Forest Inventories.

²² More information at: http://ec.europa.eu/environment/ecolabel/index_en.htm

²³ COM(2008)699

²⁴ COST E27: harmonization of Protected Forest Areas and COST E43: Harmonization of National Forest Inventories

In 2005 major EU forest based industries decided to co-fund a European Technology Platform²⁵ to ensure their contribution for a globally competitive EU economy.

The recent call under FP7 on the functional significance of forest biodiversity, including soil biodiversity²⁶ should provide improved scientific information for the management and sustainable use of forest ecosystems.

1.9. Cohesion policy

- Regional policy

In the current programming period 2007-2013, the environment is a key priority of Cohesion Policy with more than 30 % of the total planned allocations to be spent on environmental actions.

Even though forests are only directly addressed in the frame of forest fire prevention, a number of priority themes affect forests and forest management in a much broader perspective.

Cohesion Policy supports investments in renewable energies such as biomass and co-finances as well programmes and projects that preserve and promote natural areas and biodiversity, including in forests. In addition, the significant funding for natural risk prevention or the rehabilitation of contaminated land leads to projects dealing with forest management. In this framework, it is up to the Member States to make the actual selection and implementation of the co-financed projects. Therefore Cohesion Policy is one of the policies available to MS and regions to develop forest protection measures.

In addition, in the frame of European Territorial Cooperation (ETC), a number of cross-border, transnational and interregional projects deal with forestry and forest management, such as the impact of climate change on forests²⁷. The goal is to exchange good practices, transfer know-how and/or to set up and implement shared management strategies across borders.

- The EU Solidarity Fund

The EU Solidarity Fund (SF)²⁸ assists MS in coping with damage caused by major natural disasters including storms and forest fires. Financial assistance²⁹ from the EUSF may however only be used for a limited types of remediation and restoration measures carried out by the public authorities. France, Germany, Greece, Slovakia, Spain and Sweden have recently received its support to address large forest damages.

²⁵ See <http://www.forestplatform.org/> for detailed information

²⁶ ENV.2010.2.1.4.1

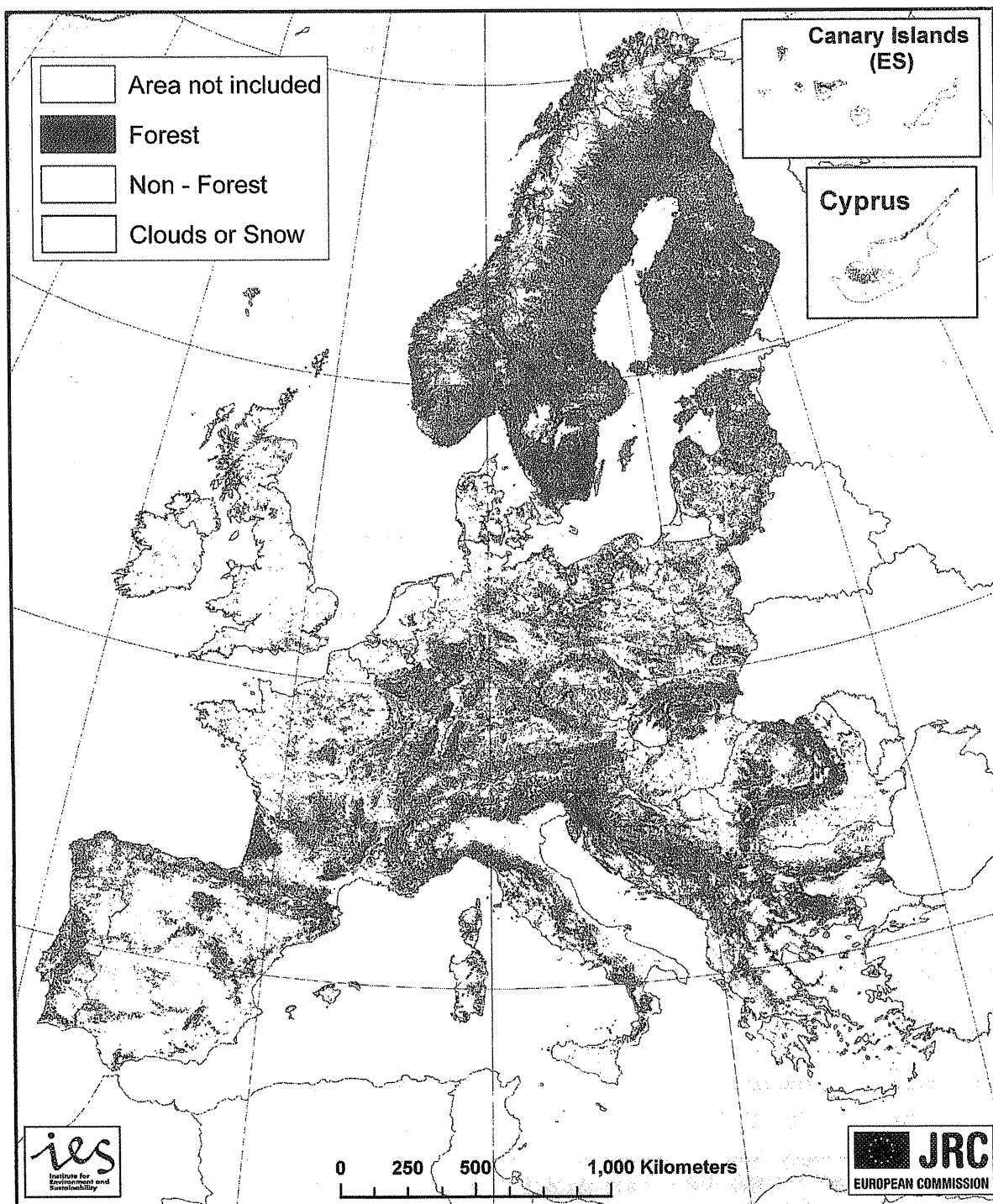
²⁷ A current project example in this area is 'ForestClim': <http://www.forestclim.eu/>. Another ETC project example is the 'Balticforest' project: <http://www.balticforest.net/>

²⁸ Established by Council Regulation (EC) No 2012/2002

²⁹ http://ec.europa.eu/regional_policy/funds/solidar/solid_en.htm

2. ANNEX B: FOREST MAP OF EUROPE

Source: JRC



Note: This image has a resolution of 600 dpi and should be expanded to several times the size shown so as to reveal its level of detail.

3. ANNEX C: KEY FACTS AND FIGURES ON EUROPEAN FORESTS

	Forest & OWL (1)		Forest available for wood supply	Fellings in % of net annual increment	% of Forests (not including OWL) with a protective function (4)		Forest under public ownership area as % of forest area (5)
	1000 ha	% of land area	% of forest		% 2000	% 2005	
Austria	3.980	48	84	60	22	25	20
Belgium	698	23	96	85	22	26	44
Bulgaria	3.678	34	70	41	17	16	92
Cyprus	388	42	11	16	-	-	61
Czech Republic	2.647	34	95	84	15	15	77
Denmark	636	15	61	35	7	7	28
Estonia	2.358	56	89	52	12	11	38
Finland	23.311	77	86	69	3	3	32
France	17.262	31	85	55	3	3	26
Germany (2)	11.076	32	99	50	27	34	53
Greece	6.532	51	53	48	-	-	78
Hungary	1.948	22	86	56	12	9	61
Ireland	710	10	92	-	-	-	64
Italy	11.026	37	81	26	5	5	35
Latvia	3.150	51	90	68	4	4	54
Lithuania	2.198	35	83	73	15	16	77
Luxembourg	88	34	98	38	1	1	46
Malta	0	1	-	-	-	-	-
Netherlands	365	11	81	70	-	-	50
Poland (2)	9.200	30	91	55	38	35	83
Portugal	3.867	42	52	103	1	6	7
Romania	6.649	29	70	46	-	29	94
Slovakia	1.932	40	91	75	16	18	52
Slovenia	1.308	65	88	44	7	9	28
Spain	28.214	57	37	67	15	13	30
Sweden	30.929	75	69	86	12	11	20
United Kingdom	2.865	12	83	48	-	-	36
EU27 (3)	177016	42	73	60	11	13	39

- (1) OWL: Other wooded land (2) Data do not cover OWL
- (3) Totals exclude Ireland for net annual increment and fellings
- (4) According to MCPFE assessment guidelines
- (5) Includes forests owned by the state, provinces, regions and municipalities.

- : no data or very small value / *Italics* show estimates using pre-2005 data

Ecological aspects							
Forest Cover	Species Composition	Age Structure	Growing Stock	Carbon Budget	Biodiversity; Naturalness	Protected Areas	Growth; Vitality
<i>EU (or Pan-European) average</i>							
40% (177 million ha) 7% increase since 1990	50% Coniferous 25% Broadleaved 25% Mixed 30% single tree species dominated forests; 50% forests of 2-3 tree species; 17% forests of 4-5 tree species; 3% forests of 6-10 tree species (MCPFE region) Slowly increasing percentage of multi-species forests (MCPFE region) 8,1 million ha (5%) (Pan-Europe, excl. Russia) dominated by introduced species; 10% (0.5% of the total forest area) of that area are dominated by invasive species	87% Even-aged forests	151 m ³ /ha (Pan-Europe, excluding Russia) Increasing total growing stock	9,8 billion tons of C stored (2005, EU-27) 137 Mio. tons annual storage of C between 1990-2005 (MCPFE Region) From 2000 to 2005, annual increase in C store in EU forests was less than 10% of CO ₂ equivalent emissions of MS (EU-27)	87% Semi-natural forests 5% undisturbed by man (natural forests) 8% plantations over 60% of forest habitats under Natura 2000 present and unfavourable conservation status 11 forest mammal species threatened	8% forest biodiversity and landscape conservation area 13% of forest surface designated Habitats Directive sites (EU-27) Below 2% are strictly protected forest areas	Site productivity and tree growth: Increasing in Northern and Central Europe; Decreasing in Southern Europe 22% damaged or dead forests (crown conditions) Stable crown conditions; defoliation of oak and spruce, improvements of pine and beech
<i>Exemplary regional patterns</i>							
Increase in rural and mountain areas Decrease in densely populated regions	Predominantly coniferous forests: Scandinavian and Baltic states Predominantly broadleaved forests: Southern and Western Europe	2/3 of the forests in Central Europe are younger than 60 years Forests aged 1-20 years cover an area twice as large as forests aged 81-100 years in North Europe	Record volume increase of growing stock per hectare in Central Europe		Forest birds populations: Decline in North and South Europe; Stable populations in Western and Eastern Europe	Strictly protected areas in North/Baltic and South-East Europe Areas actively managed for conservation in Central, North-Western and South Europe	

Sources: CEC (2008); EEA (2008); FAO (2007); ICP Forests (2004); MCPFE (2007); UNECE/FAO (2005), MCPFE/ECE/FAO State of Europe's Forests 2007& Habitats Directive Art 17 report (2001-2006)

Europe's forests are, as compared to forests on other continents, growing in area and standing volume, are intensively managed, rather young and dominated by even-aged stands. They are, however, regionally diverse in terms of tree species composition, growth, and biodiversity. While natural forests rarely occur, very intensively used plantations are also rare. Thus, the dominance of semi-natural forests types shaped by a variety of social demands and locally diverse forest management practices is one of the main characteristics of European Union (EU) forests.

Area of forest habitats designated under Natura 2000: (database DG ENV - February 2009)

	N2000 terrestrial area (1.000 ha)	N2000 forest habitats** designated under the N2000 total land area (%)	Natura 2000 forest habitats types in FOWL (%)
Austria	1.153	18	5
Belgium	388	29	16
Bulgaria	3.766	32	33
Cyprus	101	53	13
Czech Republic	1.045	17	7
Denmark	386	9	6
Estonia	799	20	7
Finland	4.864	29	6
France	6.842	10	4
Germany*	4.847	17	7
Greece	2.762	21	9
Hungary	1.956	22	23
Ireland	780	1	2
Italy	5.737	20	10
Latvia	712	9	2
Lithuania	909	5	2
Luxembourg	46	31	14
Malta	4	2	0
Netherlands	579	2	2
Poland*	5.163	12	7
Portugal	1.872	11	5
Romania	4.885	26	20
Slovakia	1.413	23	17
Slovenia	720	34	19

Spain	13.464	18	9
Sweden	6.015	33	6
United Kingdom	1.736	3	2
EU 27	72.943	20	8

* data do not cover OWL

** Sites of community importance for forest habitats

4. ANNEX D: LIST OF ACRONYMS

CBD	Convention on Biological Diversity
COST	European Cooperation in Science and Technology
CHP	Combined heat and power plants
CPHR	Community plant health regime
EEA	European Environment Agency
EFDAC	European Forest Data Centre
EFFIS	European Forest Fire Information System
EFICP	European Forest Information and Communication Platform
EFSOS	European Forest Sector Outlook Study
ETP	European Technology Platforms
ETS	EU Emissions Trading System
FAO	Food and Agriculture Organization of the United Nations
FAP	Forest Action Plan
FBI	Forest Based Industries
FP7	7th Framework Programme for Research and Technological Development
FS	European Forest Strategy
FTP	Forest Technology Platform
GHG	Greenhouse Gas
GIS	Geographic Information Systems
GMES	Global Monitoring for Environment and Security
IACS	Integrated administration and control system

INSPIRE	Infrastructure for Spatial Information in Europe
IUFRO	International Union of Forest Research Organizations
LULUCF	Land Use, Land Use Change and Forestry
MCPFE	Ministerial Conference on the Protection of Forests in Europe
MS	EU Member States
NFI	National Forest Inventories
NFP	National Forest Programmes
OWL	Other Wooded Lands
REDD	Reducing Emissions from Deforestation and forest Degradation
RES D	EU Directive on the promotion of energies from renewable sources
SCP/SIP	Sustainable Consumption and Production and Sustainable Industrial Policy
SEIS	Shared Environmental Information System
SF	EU Solidarity Fund
SFM	Sustainable Forest Management
SME	Small and Medium Enterprises
UN CCD	United Nations Convention to Combat Desertification
UN ECE	United Nations Economic Commission for Europe
UNFCCC	United Nations Framework Convention on Climate Change