



EUROPEAN FOREST INSTITUTE

ANNUAL REPORT 2009

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**SUPPLEMENT**

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# ASSOCIATE AND AFFILIATE MEMBERS OF THE EUROPEAN FOREST INSTITUTE

December 2009

## **Austria**

- Austrian Federal Research and Training Centre for Forests, Natural Hazards and Landscape
- University of Natural Resources and Applied Life Sciences, Department of Forest- and Soil Sciences

## **Belgium**

- Gembloux Agricultural University, Forest and Nature Management
- Research Institute for Nature and Forest

## **Bosnia and Herzegovina**

- Faculty of Forestry, University of Banja Luka
- University of Sarajevo, Faculty of Forestry

## **Bulgaria**

- Bulgarian Academy of Sciences, Forest Research Institute
- University of Forestry, Sofia

## **Canada**

- Natural Resources Canada, Canadian Forest Service\*

## **Croatia**

- Forest Research Institute, Jastrebarsko
- University of Zagreb, Faculty of Forestry

## **Czech Republic**

- Czech University of Life Sciences Prague, Faculty of Forestry and Wood Sciences
- Forest Management Institute
- Forestry and Game Management Research Institute
- Forests of the Czech Republic
- Institute of Forest Ecosystem Research Ltd.
- Mendel University of Agriculture and Forestry Brno, Faculty of Forestry and Wood Technology

## **Denmark**

- Danish Centre for Forest, Landscape and Planning, University of Copenhagen

## **Estonia**

- Estonian University of Life Sciences

## **Finland**

- Finnish Environment Institute (SYKE)
- Finnish Forest Research Institute
- Forestry Development Centre Tapio
- Indufor Oy
- Metsähallitus
- Metsämiesten Säätiö
- Metsäteho Oy – R&D operations in forestry
- North Karelia University of Applied Sciences
- Pellervo Economic Research Institute PTT
- Stora Enso Wood Supply
- University of Helsinki, Faculty of Agriculture and Forestry
- University of Joensuu

## **France**

- AgroParisTech – ENGREF, The Nancy Centre
- Cemagref

- ECOFOR
- European Institute for Cultivated Forests (IEFC)
- French Institute of Technology for forest based and furniture sectors (FCBA)
- INRA, Dept of Forests and Forestry Products
- Institute for Forestry Development (IDF)
- Office National des Forêts (ONF)

## **Germany**

- Center of Forestry, Weihenstephan
- Department of Forest Sciences, Dresden University of Technology
- Federal Research Institute of Rural Areas, Forestry and Fisheries, Johann Heinrich von Thünen Institute
- Forest Research Institute of Baden-Württemberg
- Landesbetrieb Wald und Holz NRW – Forschungsbereich
- Potsdam Institute for Climate Impact Research
- University of Applied Sciences Eberswalde
- University of Freiburg, Faculty of Forest and Environmental Sciences
- University of Göttingen, Faculty of Forestry

## **Greece**

- Aristotelian University of Thessaloniki, Faculty of Forestry and Natural Environment
- Technological Educational Institute of Kavala, Department of Forestry and Natural Environment Management at Drama

## **Hungary**

- Forest Research Institute, Budapest
- University of West Hungary, Faculty of Forestry

## **Iceland**

- Iceland Forest Service

## **Ireland**

- COFORD – National Council for Forest Research and Development
- Coillte
- Forest Service, Department of Agriculture, Fisheries and Food
- UCD School of Biology and Environmental Research, Agriculture and Food Science Centre

## **Italy**

- Department of Agro-forestry Systems and Land Use, University of Padova
- Forest and Range Management Research Institute
- Institute of Agro-environmental and Forest Biology
- Italian Academy of Forest Sciences
- University of Molise
- University of Tuscia

## **Japan**

- Forestry and Forest Products Research Institute\*

## **Latvia**

- Latvian State Forest Research Institute “Silava”

**Moldova**

- Forest Research and Management Institute

**The Netherlands**

- Alterra
- Ministry of Agriculture, Nature and Food Quality, Department of Knowledge, Nature Division
- Wageningen University, Forestry groups

**Norway**

- Norwegian Forest and Landscape Institute
- Norwegian University of Life Sciences, Department of Ecology and Natural Resource Management

**Poland**

- Faculty of Forestry, Poznan University of Life Sciences
- Forest Research Institute, Sekocin Stary
- Institute of Wood Technology
- Warsaw University of Life Sciences, Faculty of Forestry

**Portugal**

- Instituto Superior de Agronomia, Department of Forestry
- National Forest Research Station (EFN)
- School of Agricultural and Forest Sciences of Coimbra
- Universidade Católica Portuguesa

**Romania**

- Forest Research and Management Institute

**Russian Federation**

- All-Russian Research Institute of Silviculture and Mechanization of Forestry
- Centre of Sustainable Forest Management, Mari State Technical University
- Institute of Physicochemical and Biological Problems in Soil Science, Russian Academy of Sciences
- Moscow State Forest University
- Petrozavodsk State University
- Saint Petersburg State Forest Technical Academy

**Serbia**

- Faculty of Forestry, University of Belgrade
- Institute of Forestry, Belgrade
- Institute of Lowland Forestry and Environment

**Slovakia**

- National Forest Centre – FRI
- Technical University in Zvolen

**Slovenia**

- Slovenian Forestry Institute
- University of Ljubljana, Department of Forestry

**South Africa**

- University of KwaZulu-Natal, Forestry Programme\*

**Spain**

- CREAM, Centre for Ecological Research and Forestry Applications

- Escuela Tecnica Superior de Ingenieros de Montes (Forestry School)
- ForEco Technologies, S.L.
- Forest Research Centre (CIFOR-INIA)
- Forest Technology Centre of Catalonia
- Politechnical University of Valencia, Escuela Técnica Superior de Ingenieros Agrónomos
- University of Santiago de Compostela, Higher Polytechnic School of Lugo
- University of Valladolid, School of Agriculture, Food Technology and Forestry

**Sweden**

- Federation of Forest Owners
- Holmen Skog AB
- Skogforsk – The Forestry Research Institute of Sweden
- Sveaskog
- Swedish Forest Agency
- Swedish University of Agricultural Sciences
- Växjö University

**Switzerland**

- ETH Zürich, Institute for Terrestrial Ecosystems ITES
- Swiss Federal Institute for Forest, Snow and Landscape Research

**Turkey**

- Istanbul University, Faculty of Forestry
- Poplar and Fast Growing Forest Trees Research Institute

**Ukraine**

- Ukrainian Research Institute of Forestry and Forest Melioration

**United Kingdom**

- Bangor University, School of the Environment and Natural Resources
- Forestry Commission Research Agency

**United States**

- Pacific Northwest Research Station, USDA Forest Service\*
- University of Georgia, Center for Forest Business\*
- USDA Forest Service, Research & Development, Washington D.C.\*

**International bodies**

- Confederation of European Forest Owners
- Confederation of European Paper Industries
- European Confederation of Woodworking Industries – CEI-Bois
- European Landowners' Organisation
- International Forestry Students' Association
- Nordic Forest Research Co-operation Committee (SNS)
- Union of Foresters of Southern Europe

\*Affiliate Members

126 member organisations

# BOARD OF THE EUROPEAN FOREST INSTITUTE IN 2009

Dr. José Antonio Bonet Lledós	Spain
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Prof. Jim Lynch OBE	United Kingdom
Dr. Harald Mauser	Austria
Dr. Liisa Saarenmaa	Finland
Prof. Dr. Andrey Selikhovkin	Russian Federation
Prof. Dr. Birger Solberg	Norway (until 3 <sup>rd</sup> of September 2009)
Prof. Dr. Jørgen Bo Larsen	Denmark (from 3 <sup>rd</sup> of September 2009)
Prof. Konstantin von Teuffel	Germany
<i>Chairman of the Board</i>	

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# SCIENTIFIC ADVISORY BOARD OF THE EUROPEAN FOREST INSTITUTE IN 2009

Prof. Dr. Bas Arts	the Netherlands
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Dr. Emil Cienciala	Czech Republic
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<i>Chairman of the SAB</i>	
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Prof. Michael Köhl	Germany
Prof. Marco Marchetti	Italy
Prof. Leena Paavilainen	Finland
Prof. Jean-Luc Peyron	France
Dr. Victor Teplyakov	Russian Federation

# STAFF IN 2009

In 2009 76 staff members from 18 countries worked at EFI headquarters and Regional Offices EFIATLANTIC, EFICENT and its OEF and EFIMED, thus contributing a total of 54 person-years to the Institute's activities.

Risto Päivinen	Director	Finland
Gert-Jan Nabuurs	Assistant Director	the Netherlands

## Forest Ecology and Management

Marcus Lindner	Head of Programme	Germany
Vadim Goltsev	Researcher	Russia
Pirjo Kakkonen	Project Administrator	Finland
Marja Kolström	Senior Researcher	Finland
Taru Palosuo	Senior Researcher	Finland
Matias Pekkanen	Project Assistant	Finland
Mikko Savolainen	Programming Assistant	Finland
Tommi Suominen	Programmer/Developer	Finland
Hans Verkerk	Researcher	the Netherlands
Diana Vötter	Senior Researcher	Germany
Wendelin Werhahn-Mees	Researcher	Germany

Total person years: 8.25

## Markets and Socio-economics

Markku Husso	Researcher	Finland
Alexander Moiseyev	Senior Researcher	Russia

Total person years: 1.75

## Policy and Governance

Ilpo Tikkanen	Head of Programme	Finland
Doni Blagojević	Project Officer	Bosnia and Herzegovina
Päivi Pelli	Researcher	Finland
Mari Pitkänen	Vice Coordinator	Finland
Sabaheta Ramcilovic	Project Assistant	Macedonia
Markku Rouvali	Researcher	Finland
Margaret Shannon	Project Coordinator	USA
Tomi Tuomasjukka	Senior Expert	Finland

### *Support to EFI EU FLEGT Facility Team*

Ralph Ridder	Manager	Germany
Anne Anantom	Office Assistant	Malaysia
Tiina Joutsenvaara	Administrative Officer	Finland
Hanna-Kaisa Jussila	Administrative Assistant	Finland
Aimi Lee	Policy Analyst	Malaysia
Jussi Lounasvuori	Legality Assurance System Expert	Finland
Melissa Othman	Forest Governance and Timber Trade Expert	USA
Jade Saunders	Policy Analyst	UK
Felix Seidel	Wood Tracking Expert	Switzerland
Vincent van den Berk	Programme Coordinator	the Netherlands
Niina Verkerk	Project Officer	Finland
Lena Yadlapalli	Communication Expert	Germany

Total person years: 13.44

## Forest Resources and Information

Tuula Nuutinen	Head of Programme	Finland
Jeannette Eggers	Researcher	Germany
Tim Green	Researcher	UK
Katja Gunia (Tröltzsch)	Researcher	Germany
Tim Richards	Senior Researcher	UK
Jo Van Brusselen	Senior Researcher	Belgium
Simo Varis	Programmer	Finland
Terhi Vilén	Researcher	Finland
Sergey Zudin	Senior Programmer	Russia
Elena Zudina	Programming Assistant	Russia

Total person years: 7.61

**Atlantic European Regional Office – EFIATLANTIC**

Christophe Orazio	Head of Office	France
Claudia Antoniotti	Administrative Assistant	Portugal
Marie Pierre Reviron	Research Assistant	France
Francisco Ureña Lara	Junior Researcher	Spain

Total person years: 2.13

**Central European Regional Office – EFICIENT and its Observatory for European Forests**

Andreas Schuck	Head of Office	Germany
Aljoscha Requardt	Observatory Manager	Germany
Paul Rougieux	Research and Administrative Assistant	France
Michaela Spielmann	Research Assistant	Germany
Karoline Öhler	Research Assistant	Germany
Adrian Valerius	Research Assistant	Germany

Total person years: 2.69

**Mediterranean Regional Office – EFIMED**

Marc Palahi	Head of Office	Spain
Elena Gorriz	Administrative Officer	Spain
Robert Mavsar	Senior Researcher	Slovenia
Mercedes Rois	Administrative Officer	Spain

Total person years: 4

**Administration team**

Kirsi Loisa	Finance and Personnel Manager	Finland
Anssi Auvinen	Accounting Assistant	Finland
Jarkko Heikkinen	Administrative Officer	Finland
Petri Hukka	IT Support Officer	Finland
Mari Lepikkö	Administrative Officer	Finland
Emi Pesonen	Human Resources Officer (on leave)	Japan
Paula Ratinen	Accounting Assistant	Finland
Leena Roihuvuo	Research Administrator	Finland
Riitta Sorri	Office Assistant	Finland
Tiia Viitamäki	Human Resources Officer	Finland

Total person years: 8.8

**Communications team**

Anu Ruusila	Communications Manager	Finland
Satu Ikonen-Williams	Communications Officer	Finland
Minna Korhonen	Managing Editor	Finland
Brita Pajari	Conference Manager (on leave)	Finland
Henna Snellman	Membership Liaison Officer	Finland
Vänttinen Ulla	Event & Project Officer	Finland

Total person years: 3.66

**EFI Scholars**

Miguel Fabra-Crespo	Markets and Socio-economics	Spain
Sergey Lezhnin	Forest Resources and Information	Russia

**Trainees**

Carol Biechele	EFICIENT	Columbia
Sanni Bomberg	Forest Ecology and Management	Finland
Todd Bush	Forest Ecology and Management	USA
Maria Karjalainen	Forest Resources and Information	Finland
Tarja Leppäkumpu	Forest Ecology and Management	Finland
Sophie Lewis	Forest Ecology and Management	UK
Victoria Mazaeva	Administration team	Finland
Arttu Viljakainen	Forest Ecology and Management	Finland

# EFI PROJECTS 2009

## ■ FOREST ECOLOGY AND MANAGEMENT

*Research Programme 1*

### **EFORWOOD – Tools for Sustainability Impact Assessment of Forestry-Wood Chain** (CONTRACT NUMBER 518128-2)

The EFORWOOD project aims to produce a decision support tool that can be used to evaluate the contribution made to sustainable economic, environmental and social development by and through the European forestry and forest-products sector. Both programmes Forest Ecology and Management and Forest Resources and Information are involved in the project. The task of EFI's programme Forest Ecology and Management is to co-ordinate the central module of the project, "Sustainability Impact Assessment", in which the common framework and tool for the Sustainability Impact Assessment (ToSIA) will be developed. Programme Forest Resources and Information is active in the "Knowledge Transfer Module" of the project and one of its tasks is to produce a user-friendly version of the ToSIA tool.

EFI'S ROLE: PARTNER. | 2005–2010 |

### **EXIOPOL – A New Environmental Accounting Framework Using Externality Data and Input-Output Tools for Policy Analysis** (CONTRACT NUMBER GOCE 037033)

EXIOPOL is an Integrated Project that aims to develop estimates of external costs of a broad set of economic activities for Europe and to set up a detailed environmentally extended (EE) Input-Output (I-O) framework including these estimates, in order to apply the results of this analysis to address policy questions. EFI is coordinating the identification of sources of forest externalities and is responsible for estimating linkages between these sources and their final impacts. Programme Forest Ecology and Management and Regional Office EFIMED are involved in this project.

EFI'S ROLE: PARTNER. | 2007–2011 |

### **Northern ToSIA – Assessing Sustainability of Forest-based Activities in Rural Areas of the Northern Periphery**

(CAV NUMBER 304-6811-2008)

The aim of the project is to investigate options for improving the sustainable use of forest resources in selected regions of the Northern Periphery Programme (NPP) area in Finland, Sweden, Scotland and Norway by using an innovative sustainability impact assessment tool, ToSIA.

EFI'S ROLE: CO-ORDINATOR. | 2008–2011 |

### **AquaTerrE – Integrated European Network for Biomass and Waste Reutilisation for Bio-products**

(GRANT AGREEMENT NUMBER 212654)

The main aim of the AquaTerrE project is to make an inventory of existing biomass feedstocks in Europe, quantify the potential and identify the best feedstocks. EFI will collaborate in the qualification and quantification of the biomass sources. In the second phase, EFI will play a role in the determination of sustainable production, identifying the main aspects to be considered for the implementation of sustainable biomass production.

EFI'S ROLE: PARTNER. | 2008–2010 |

### **FOBIT – Forest-based Bioenergy and Its Climatic and Economic Viability – an Integrated Analysis**

The aim of the project is to generate knowledge on forest industries and wood use cycles as an integral part of the national energy system, and to develop sustainable solutions for the utilisation of forest bioenergy and for the mitigation of climate change. EFI will be involved in the work on project's forest-resource model by further developing the EFISCEN model and analyses.

EFI'S ROLE: SUBCONTRACTOR. | 2008–2010 |

### **EuWood – Real Potential for Changes in Growth and Use of EU Forests** (CONTRACT NUMBER TREN/D2/491-2008/S.1.2.522381)

The project seeks to combine improved data quality on wood flows with complete information on wood resources in Europe. The objective is to provide an impartial estimate of "real supply potentials for changes (normally increases)" of woody biomass in Europe that could be made available to satisfy arising regional material and energy demands from areas of energy (household, municipal, industrial, etc.) and wood processing (including bio-chemicals and bio-materials). EFI's tasks include state-of-the-art reviews and projections of biomass and resource availability under different climate, management and policy scenarios. Programmes Forest Ecology and Management and Forest Resources and Information are involved in the project.

EFI'S ROLE: PARTNER. | 2008–2010 |

### **Analysis of Potential and Costs of LULUCF (Land use, Land use Change and Forestry) use by EU Member States**

(CONTRACT NUMBER 07.0307/2009/SI2.541003/SER/C5)

The aim of the project is to analyze the implications of various policy options of how to deal with emissions and removals from Land Use, Land-Use Change and Forestry (LULUCF) activities by considering the potential (net) emissions reductions and the associated costs. EFI's tasks in the project include providing EFISCEN model projections for a baseline scenario and a number of alternative policy options. EFI also contributes to the assessment of the efficiency and effectiveness of the individual policy options.

EFI'S ROLE: PARTNER. | 2009–2010 |

### **FLOW – Modeling Fiber Flows: Bioenergy Potential and Carbon Footprint Mitigation**

The objective of this project is to give information on how to take into account CO<sub>2</sub> sequestered in the forest in calculation of carbon footprint of forest products. This information will help the industry sector's Research and Development to optimize the use of biomass proactively in terms of EU's climate change policy. The project will also increase knowledge on fiber based product's carbon economy through several case studies that furthermore give scientifically based results to be used in environmental communication to the authorities and customers. EFI contributes to the forest carbon budget calculation method and quantifies scenario results by using EFISCEN for Southern Finland and Baden-Württemberg (Germany).

EFI'S ROLE: PARTNER. | 2009–2010 |

## **MOTIVE – Models for Adaptive Forest Management**

(GRANT AGREEMENT NUMBER 226544)

The aim of the MOTIVE project is to provide insights, data and tools to improve policymaking and adaptive forest resource management in the face of rapidly changing climatic and land-use conditions. EFI's tasks include leading the dissemination and stakeholder interactions, co-ordinating model developments and applications, and contributing to the review of climate change impacts and their implications for adaptive forest management strategies. In addition, EFIMED will conduct one regional case study in Spain as a contribution to the project work. Programme Forest Ecology and Management and Regional Office EFIMED are involved in this project.

EFI'S ROLE: PARTNER. | 2009–2013 |

### **Forest Resource Outlook Modelling**

The EFISCEN model is a crucial cornerstone of the new European Forest Sector Outlook Study (EFSOS II) and will be employed to provide answers to some of the major policy questions. EFI's task in this project, which is partly funded by EFSOS II, is to update and review input data of EFISCEN, run the EFISCEN model and to contribute to the joint analysis of the results.

EFI'S ROLE: SOLE PARTNER. | 2009–2010 |

## **MARKETS AND SOCIO-ECONOMICS**

*Research Programme 2*

### **Estimating Economic and Technical Availability of Wood for Energy Production in Northwest Russia**

This study aims to estimate economic and technical production availability of energy wood in the Leningrad region by describing the area from different viewpoints (e.g. economical, political and production). This project is supported by the Ponsse Foundation.

EFI'S ROLE: SOLE PARTNER. | 2007–2009 |

### **Sawmill Industry and Changing Forest Management**

The aim of this project is to evaluate economic impacts of different types of forest management practices and sawn wood market scenarios in the case of hypothetical sawmills in Finland. EFI's tasks in the project include developing a company-level economic model simulating economic performance of a sawmill company under different types of operating environment scenarios and gathering and pre-analysing existing data for joint future operating environment scenario.

EFI'S ROLE: PARTNER. | 2008–2010 |

### **Modelling Future Forest Products Trade with EFI-GTM**

The EFI-Global Trade Model (EFI-GTM) is a tool, which the UNECE/FAO Team of Specialists has recommended to be employed in the future European Forest Sector Outlook Study (EFSOS II). EFI's tasks in the project include modelling two baseline scenarios and a wood energy scenario with EFI-GTM and analysing the results.

EFI'S ROLE: SOLE PARTNER. | 2009–2010 |

## **POLICY AND GOVERNANCE**

*Research Programme 3*

### **FOPER I – Strengthening Capacities of Education and Training for Forest Policy Development in Western Balkan Region**

(CONTRACT NUMBER HEL0634-36)

Strengthened capacity established for modern forest economics and policy education, training and research in Southeast Europe (Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Former Yugoslavian Republic of Macedonia and Albania).

EFI'S ROLE: CO-ORDINATOR. | 2004–2009 |

### **Support to EU Forest Law Enforcement Governance and Trade (FLEGT) Process in Developing Countries**

(CONTRACT NUMBER EUROPEAID/ENV/2006-124886/TPS)

The overall objective of the project – of which this Action is a part – is to implement the EU Action Plan for Forest Law Enforcement, Governance and Trade (FLEGT), through entering into voluntary partnership agreements to combat illegal logging and strengthen forest sector governance.

EFI'S ROLE: CO-ORDINATOR. | 2006–2010 |

### **PRIFORT – Research into the Organization of Private Forest Owners in the Western Balkan Region**

The main objective of the project is to clear the pre-conditions for the formation of self-supporting interest associations of private forest owners in the Western Balkan region.

EFI'S ROLE: CO-ORDINATOR. | 2006–2009 |

### **Evaluation of the Implementation of the European Union Forest Action Plan**

(CONTRACT NUMBER 30-CE-0227729/00-59)

The aim of the project is to evaluate the implementation of the Key Actions of the EU Forest Action Plan thus far. It will be analysed if the implementation of the Action Plan is on track for meeting the objectives, whether these objectives have been met thus far, if the Action Plan has led to any side effects and whether the instruments used are relevant, effective and efficient. Programmes Policy and Governance and Forest Resources and Information are involved in the project.

EFI'S ROLE: CO-ORDINATOR. | 2008–2009 |

### **Regional Support Programme for the EU FLEGT Action Plan in Asia**

(CONTRACT NUMBER DCI-ASIE/2008/154-192)

The overall objective of the Action is to improve forest governance, contributing to poverty eradication and sustainable management of natural resources in Asia, through direct support to the implementation of the EU FLEGT Action Plan.

EFI'S ROLE: CO-ORDINATOR. | 2008–2012 |



**FOPER II – Consolidation of the Human Capacities in Forest Policy and Economics Education and Research in the South-East Europe Region** (CONTRACT NUMBER HEL8127-13)

The aim of this project is to consolidate the capacities created in the FOPER I -project, which has been strengthening the capacities of higher forestry education and research in the fields of forest policy and forest economics since 2004. The project focuses on work to be done in South-East Europe Region, namely in Albania, Former Yugoslav Republic of Macedonia, Serbia, Montenegro, Bosnia and Herzegovina, as well as in Croatia. The central problem to be addressed is limited human capacities in the field of forest policy and economics. EFI's tasks in the project include coordination, management and facilitation. The project is financed by the Ministry for Foreign Affairs of Finland.

EFI'S ROLE: CO-ORDINATOR. | 2009–2011 |

**Review of the MCPFE Process**

The aim of the project is to conduct a review of the Ministerial Conference on the Protection of Forests in Europe (MCPFE) process and produce a report on the findings of the review, including a set of concrete recommendations for action based on the findings.

EFI'S ROLE: PARTNER. | 2009 |

■ **FOREST RESOURCES AND INFORMATION**

*Research Programme 4*

**SENSOR – Sustainability Impact Assessment: Tools for Environmental, Social and Economic Effects of Multifunctional Land Use in European Regions**

(CONTRACT NUMBER 003874 GOCE)

The aim of the SENSOR project is to develop *ex-ante* Sustainability Impact Assessment Tools to support decision making on policies related to multifunctional land use in European regions. EFI's role is, *inter alia*, to project European scale multifunctional forest sector land management scenarios. Programmes Forest Resources and Information and Forest Ecology and Management are involved in the project.

EFI'S ROLE: PARTNER. | 2004–2009 |

**BioScore – Biodiversity Impact Assessment Using Species Sensitivity Scores** (CONTRACT NUMBER 022661)

The aim of the project is to develop a tool for linking pressures from policy sectors to the (change of) state of biodiversity as measured by the presence and abundance of individual species. EFI has been involved in the analysis of forest policy and the identification of potential pressures and it has been responsible for testing and utilising the project's species sensitivity database to create a number of case studies focusing on the forest sector.

EFI'S ROLE: PARTNER. | 2006–2009 |

**Fire Paradox – An Innovative Approach of Integrated Wildland Fire Management Regulating the Wildfire Problem by the Wise Use of Fire: Solving the Fire Paradox**

(CONTRACT NUMBER FP6-018505)

The results of this 6<sup>th</sup> Framework Programme Integrated Project aim at responding to the societal needs of reducing the impacts of disastrous wildfires by setting their limits with prescribed and suppression fires. EFI's main task is the elaboration of the Fire Paradox information management platform. EFI is responsible for producing a review of CO<sub>2</sub> emissions mitigation through prescribed burning and assists in reviewing policies and practices at European scale with emphasis on prescribed burning/suppression fire. Regional Office EFICIENT assists Programme Forest Resources and Information in the finalisation of the information management platform called 'Fire Intuition' and is also a co-organiser of the final conference.

EFI'S ROLE: PARTNER. | 2006–2010 |

**BEE – Biomass Energy Europe**

(GRANT AGREEMENT NUMBER 213417)

The objective of the project is the harmonisation of biomass resource assessments with focus on the biomass potential for energy in order to improve the consistency, accuracy and reliability of biomass assessments. EFI is contributing to a state-of-the-art overview, review of biomass resource assessments, harmonization of biomass resource assessments, EU-27 and Pan-European illustration cases as well as dissemination and networking. EFI's tasks in all the Work Packages are connected to forestry and forestry residues. Programmes Forest Resources and Information and Forest Ecology and Management are involved in the project.

EFI'S ROLE: PARTNER. | 2008–2010 |

**GSE Forest Monitoring (Stage 2)**

Stage 2 in the development of the GMES Service Element for Forest Monitoring is focused on the implementation and further development of the services developed in Stage 1 (2003–2004) and targets the roll-out and expansion of policy-relevant services derived from a stable service portfolio to users worldwide.

EFI'S ROLE: PARTNER. | 2005–2009 |

**GNU – GMES: Network of Users** (CONTRACT NUMBER 030956)

Currently, the user communities of the EC programme 'Global Monitoring for Environment and Security' (GMES) are fragmented and incoherent and hence unable to issue common and consolidated views and statements. GNU project intends to initiate a structuring of the GMES demand side by setting up an independent platform that will become the focal point and mouthpiece of European environmental GMES user needs, and, likewise, the project will foster a systematic dialogue between the stakeholder communities including users, decision makers, and data providers.

EFI'S ROLE: PARTNER. | 2007–2010 |

## Geoland2 – Towards an Operational GMES Land

### Monitoring Core Service (GRANT AGREEMENT NUMBER 218795)

The joint EC and ESA programme, Global Monitoring for Environment and Security (GMES), targets the consolidation of Earth Observation methods and products and an outreach to users of such products. Geoland2 intends to constitute a major step forward in the implementation of the GMES Land Monitoring Core Service (LMCS) with local, continental and global components. The goal of Geoland2 is firstly to prepare, validate and demonstrate pre-operational service chains and products that will underpin the LMCS, and secondly to propose and demonstrate a concrete functional organisation of the LMCS. EFI will contribute to Forest User Interface and Forest Service Consolidation parts of the project and to project communication, training and dissemination of materials. EFI'S ROLE: PARTNER. | 2008–2012 |

## EURO-FOREST – European Forest Information Portal

In the first stage a user-friendly, comprehensive web portal on European forests was established (October 2006–December 2007). The service was launched on 1 October 2007 and is further developed (e.g. a news section was launched in March 2008), maintained and kept up-to-date by EFI. The portal offers easy access to information resources about forests and the forest sector in Europe. The core of the portal is a metadata base containing descriptions and links to resources. During 2009, the portal has received 6200–7000 unique visitors per month. In news section, 1–5 items on European forest sector are noticed per week.

EFI'S ROLE: SOLE PARTNER. | 2008– |

## European Forestry Information and Data Analysis System (EFIDAS)

The project aims at providing comprehensive European forestry information and data thus promoting improved utilisation and analysis of European forestry statistics for conducting high quality pan-European forestry research. EFI takes care of technical support and contents maintenance of information products and services as well as related development of components (e.g. databases, models, analyses and visualization tools). In 2009, both EFIMED Database and Forest Biodiversity in Europe Database were launched. EFIMED Database was developed in cooperation with EFIMED Regional Office.

EFI'S ROLE: SOLE PARTNER. | 1993– |

## REGIONAL OFFICES

### ■ EFIMED

#### MASIFF – Development of a Methodology for the Analysis of Socio-economic Impact of Forest Fires and Economic Efficiency of Fire Management (CONTRACT NUMBER 384398)

The aim of this project is to develop a model for estimating the socio-economic impacts of forest fires. The model will aim to account for both market (e.g. timber, cork, berries, and mushrooms) and non-market goods and services (e.g. recreation and tourism, carbon sequestration, biodiversity protection, watershed services). Regional Office EFIMED and Programme Forest Resources and Information are involved in this project.

EFI'S ROLE: CO-ORDINATOR. | 2008–2010 |

#### Modelling and Optimising Forest Management or Wild Mushrooms Production in Catalonia

The project aims at developing different models to predict the yield of mushrooms in Catalonia and to optimise the joint production of timber and mushrooms in a Mediterranean context.

EFI'S ROLE: PARTNER. | 2008–2010 |

#### COST Action FP603: “Forest Models for Research and Decision Support in Sustainable Forest Management”

This project involves modelling forest dynamics and the aim is to identify and collect available growth models in Europe and to discuss new modelling approaches and models needed to address future forest management objectives, data and model interactions and scaling problems in models.

EFI'S ROLE: PARTICIPANT. | 2008–2011 |

#### Development of Capacities and Scientific Tools for Managing Forests in Lebanon and Syria

The project aims to develop the first simulation forest model for the Middle East and train Lebanese and Syrian foresters in forest inventory and modelling practices.

EFI'S ROLE: PARTNER. | 2008–2010 |

#### Mediterranean Forest Research Agenda

The aim of the project is to agree on a common vision and strategic agenda for Mediterranean forest research and produce an agenda for Mediterranean forest research.

EFI'S ROLE: CO-ORDINATOR. | 2008–2009 |

## ■ EFICIENT

### **Economic Effects of Climate Change to Central European Forests**

This project, which is one of EFICIENT core project activities, evaluates the impact of climate change on the economic performance of major forest types in Central Europe by using different climate change scenarios. Special focus is given to the changing value of forest land under climate change conditions and the question at what point forestry may become economically unattractive in particular for private forest owners. Main emphasis of the economic evaluation is on timber production due to its overriding economic importance in Central Europe. The project is implemented as a PhD dissertation.

EFI'S ROLE: SOLE PARTNER. | 2009–2012 |

### **Integrative Nature Protection in Forests and Maintenance of Various Forest Functions**

The aim of this project, which is one of EFICIENT core project activities, is to depict to which degree multifunctional forest management approaches and strategies make a contribution to nature/biodiversity protection while fulfilling also other functions and services. These results will stimulate the discussion on the topic of forest utilisation and protection on the whole forest resource. This project activity is the initial phase and experts will be consulted to concretise the project tasks. First activities on collecting background information were initiated during late 2009.

EFI'S ROLE: SOLE PARTNER. | 2009–2012 |

## ■ EFIATLANTIC

### **Destructive Storms in European Forests; Past and Forthcoming Impacts**

(CONTRACT NUMBER 07.0307/2009/SI2.540092/ETU/B.1)

The aim of the project is to understand the nature of the wind damage risk to European forest, how this risk might change, the social, environmental and economic impacts of that change and the role that policy instruments can play in reducing the risk and speeding up recovery following storm events. EFI's tasks include analysis of the effects of the past ten major storms, analysis of the trends of storm and damages frequency with climate change and making recommendation of effective policies for storm impacts reduction. Regional Offices EFIATLANTIC and EFICIENT are involved in this project.

EFI'S ROLE: CO-ORDINATOR. | 2009–2010 |

## **REINFFORCE – Resource Infrastructures for Monitoring, Adapting and Protecting European Atlantic Forests under Changing Climate**

The aim of the project is to set up a network of infrastructures to monitor climate change impact and adaptation from United Kingdom to Portugal. This project will provide its members with harmonised protocols, databases and more than 30 arboretum and 30 demonstration sites to assess adaptation of forests to climate change. It will also contribute to the inventory of long term monitoring trials in the Atlantic area.

EFI'S ROLE: CO-ORDINATOR. | 2009–2012 |

## ■ ADMINISTRATION TEAM

The EFISION project is an organisational development project within EFI. Its aims are to improve work motivation and commitment towards common goals, as well as to provide training in a number of principal skills. The project is co-funded by the Finnish Ministry of Labour's TYKES programme aiming at development of working environments in Finland.

EFI'S ROLE: SOLE PARTNER. | 2007–2009 |

## ■ COMMUNICATIONS TEAM

### **BECOTEPS – Bio-Economy Technology Platforms Join Forces to Address Synergies and Gaps between Their Strategic Agendas** (GRANT AGREEMENT NUMBER 226526)

The project will help to link science and application by addressing synergies and gaps i) between the Strategic Research Agendas of the European Technology Platforms (ETPs) and ii) with respect to the research preparedness of the scientific community by topical workshops on cross-cutting Knowledge-Based Bio-Technology (KBBE) issues. The first workshop will address trust and collaboration in the food and feed chain, the second the integration of the non-food chains, and the third cross-cutting sustainability issues. The workshop recommendations on research and policy will be summarised in a White Paper.

EFI'S ROLE: PARTNER. | 2009–2011 |

# LIST OF EVENTS 2009

## **Forest Policy and Economics in Support of Good Governance**

- 3–4 April, Dubrovnik, Croatia
- Organisers: EFI, Forest Research Institute Jastrebarsko (Croatia), IUFRO
- Number of participants and countries: 82/18

## **EFICIENT Information Event**

- 3 April, Freiburg, Germany
- Organisers: EFICIENT, FVA
- Number of participants and countries: 43/6

## **EFIMED Summer School: Forest Fires – Impacts and Post-Fire Management**

- 13–18 April, Antalya, Turkey
- Organisers: PHOENIX, COST Action FP0701, SAFRI, EFIMED
- Number of participants and countries: 25/9

## **EFIMED Annual Progress Meeting and Scientific Seminar: Mediterranean forests in the context of integrated management of land resources: soil, water and fodder**

- 29 April–1 May, Marrakech, Morocco
- Organisers: EFIMED, ENFI, FAO
- Number of participants and countries: 76/11

## **Short Scientific Seminar: Reinforce 2009 – Stand stability and climate change**

- 20 May, Edinburgh, Scotland, UK
- Organisers: Forestry Commission (UK), EFIATLANTIC
- Number of participants and countries: 19/5

## **Joensuu Forestry Networking Week 2009: Fighting Climate Change by adapting Forest Policy and Forest Management in Europe**

- 24–29 May, Joensuu, Finland
- Organisers: METLA, EFI, University of Joensuu
- Number of participants and countries: 55/17

## **EFI 2009 Annual Conference**

- 3 September, Dublin, Ireland
- Organisers: EFI, Forest Service; Department of Agriculture, Fisheries and Food (Ireland), COFORD, University College Dublin, Coillte
- Number of participants and countries: 176/32

## **Scientific Seminar in the connection to the EFI Annual Conference: Forest Ecosystem Management in the 21<sup>st</sup> Century**

- 4–5 September, Dublin, Ireland
- Organisers: EFI, Forest Service; Department of Agriculture, Fisheries and Food (Ireland), COFORD, University College Dublin, Coillte
- Number of participants and countries: 144/28

## **Reinforce 2009 Seminar: Climate Change – New Threats for Atlantic Forests, Biotic Aspects**

- 30 September, Lisbon, Portugal
- Organisers: ISA, EFIATLANTIC
- Number of participants and countries: 29/4

## **Opportunities, challenges and limitations of genomics-based technologies in forest tree breeding and forest genetics**

- 7–9 October, Freiburg, Germany
- Organisers: FVA, EFICIENT, University of Freiburg
- Number of participants and countries: 50/7

## **Opportunities for new business concepts with the combined non-food biomass chains under the KBBE umbrella**

- 7–8 October, Brussels, Belgium
- Organisers: FTP, EFI
- Number of participants and countries: 34/9

## **Forest Based Sector – towards progressive future**

- 8–10 October, Krtiny, Brno, Czech Republic
- Organisers: Mendel University of Agriculture and Forestry, EFI, FAO
- Number of participants and countries: 97/15

## **1<sup>st</sup> Koli Forum on Natural Resources**

- 22–24 October, Koli, Finland
- Organisers: METLA, EFI, University of Joensuu
- Number of participants and countries: 70/16

## **Future forest monitoring in the European Union: Providing information for multifunctional forest management**

- 11–12 November, Uppsala, Sweden
- Organisers: Swedish EU Presidency, MCPFE, SLU, FAO, Ministry of Agriculture (Sweden), UNECE, Skogstyrelsen (Sweden), ICP Forests, Naturvårdsverket (Sweden), EFI, JRC (European Commission), ENFIN, EEA, IUFRO
- Number of participants and countries: 82/18

## **Regional Workshop: Mediterranean Forest Genetic Resources and Climate Change**

- 24–26 November, Chania, Crete, Greece
- Organisers: FAO, CIHEAM, EFIMED, EUFORGEN, IUFRO and Ministry of Rural Development and Food (Greece)
- Number of participants and countries: 27/10

## **Workshop: Market-based instruments and Payments for Environmental Services in forestry: a real solution?**

- 17 December, Barcelona, Spain
- Organisers: Ministry of the Environment and Rural and Marine Affairs (Spain), EFIMED, CTFC
- Number of participants and countries: 58/12

#### **EFI ASSOCIATED EVENTS:**

EFI gives the status of EFI Associated Event to international events that are organised by EFI member organization(s). In some cases EFI can consider giving the status also to national events reaching wide range of target groups and to events organised by others than EFI member organization(s). EFI Associated event is a status, and EFI cannot be considered as one of the organizers of the event.

#### **Forestry, Wildlife and Wood Sciences for Society**

##### **Development**

- 16–18 April, Prague, Czech Republic

##### **International cooperation in the forest sector: balancing education, science and industry**

- 2–5 June, Yoshkar-Ola, Russia

##### **Role and Significance of Forest Seed in Forest Regeneration**

- 28–29 October, Zagreb, Croatia

#### **Acronyms:**

CIHEAM	International Centre of Advanced Mediterranean Agronomic Studies
COFORD	the National Council for Forest Research and Development (Ireland)
Cost Action FP0701	Post-Fire Forest Management in Southern Europe
CTFC	Forestry Technological Centre of Catalonia
EEA	European Environmental Agency
EFI	European Forest institute
EFIATLANTIC	EFI's Atlantic European Regional Office
EFICENT	EFI's Central European Regional Office
EFIMED	EFI's Mediterranean Regional Office
ENFI	National Forestry Engineering School (Marocco)
ENFIN	European National Forest Inventory Network
EUFORGEN	European Forest Genetic Resources Programme
FAO	Food and Agriculture Organization of the United Nations
FTP	Forest-Based Sector Technology Platform
FVA	Forest Research Institute Baden-Württemberg
ICP Forests	International Co-operative Programme on Assessment and Monitoring of Air Pollution Effects on Forests
ISA	Instituto Superior de Agronomia (Portugal)
IUFRO	International Union of Forest Research Organisations
JRC	Joint Research Centre, European Commission
KBBE	the Knowledge-Based Bio-Economy
MCPFE	Ministerial Conference on the Protection of Forests in Europe
METLA	Finnish Forest Research Institute
SAFRI	South West Anatolia Forest Research Institute
SLU	Swedish University of Agricultural Sciences
UNECE	United Nations Economic Commission for Europe

# LIST OF EFI PUBLICATIONS 2009

## EFI PUBLICATIONS

### ■ Research Reports

Research Report 22. Valuable Broadleaved Forests in Europe. Heinrich Spiecker, Sebastian Hein, Kaisu Makkonen-Spiecker and Michael Thies (eds). 256 p.

### ■ Proceedings

Proceedings 57. Modelling, Valuing and Managing Mediterranean Forest Ecosystems for Non-Timber Goods and Services. Marc Palahí, Yves Birot, Felipe Bravo and Elena Gorriz (eds.) 196 p.

### ■ Policy Briefs

Policy Brief 3. What is a Voluntary Partnership Agreement? – The European Union Approach. EU FLEGT Facility. 12 p. (Available also in French, Spanish and Bahasa Indonesian)

### ■ Discussion Papers

Discussion Paper 15. Living with Wildfires: What Science Can Tell Us. Yves Birot (ed.) 82 p.

### ■ Technical Reports

Technical Report 28. Exploring the Emerging Governance Principles: Tracing the Evolution of the Alpine Convention, the Carpathian Convention and the South East European Mountain Initiative. Sabaheta Ramcilovic. 93 p.

## PUBLICATIONS BY EFI RESEARCHERS 2009

### ■ Peer-reviewed

Blasco, E., González-Olabarria, J.R., Rodríguez-Veiga, P., Pukkala, T., Kolehmainen, O., Palahí, M. Predicting scenic beauty of forest stands in Catalonia (North-east Spain). *Journal of Forestry Research* 20(1): 73–78

Bolte, A., Ammer, C., Löf, M., Madsen, P., Nabuurs, G.J., Schall, P., Spathelf, P., Rock, J. Adaptive forest management in central Europe: Climate change impacts, strategies and integrative concept. *Scandinavian Journal of Forest Research* 24(6): 473–482

Eggers, J., Tröltzsch, K., Falcucci, A., Maiorano, L., Verburg, P. H., Framstad, E., Louette, G., Maes, D., Nagy, S., Ozinga, W., Delbaere, B. Is biofuel policy harming biodiversity in Europe? *GCB Bioenergy* 1: 18–34

Gallaun, H., Zanchi, G., Nabuurs, G.J., Hengeveld, G., Schardt, M., Verkerk, P.J. EU-wide maps of growing stock and above-ground biomass in forests based on remote sensing and field measurements. *Forest Ecology and Management*. doi: 10.1016/j.foreco.2009.10.011

Karjalainen, T., Leinonen, T., Gerasimov, Y., Husso, M., Karvinen, S. (eds.) Intensification of forest management and improvement of wood harvesting in Northwest Russia – Final report of the research project. Working Papers of the Finnish Forest Research Institute 110.

Kint, V., Lasch, P., Lindner, M., Muys, B. Multipurpose conversion management of Scots pine towards mixed oak-birch stands – A long term simulation approach. *Forest Ecology and Management* 257: 199–214.

Luyssaert, S., Ciais, P., Piao, S.L., Schulze, E.-D., Jung, M., Zaehle, S., Schelhaas, M.J., Reichstein, M., Churkina, G., Papale, D., Abril, G., Beer, C., Grace, J., Loustau, D., Matteucci, G., Magnani, F., Nabuurs G.J., Verbeeck, H., Sulkava, M., van der Werf, G.R., Janssens, I.A. The European carbon balance. Part 3: forests. *Global Change Biology*. doi: 10.1111/j.1365-2486.2009.02056.x

Matala, J., Kärkkäinen, L., Härkönen, K., Kellomäki, S., Nuutinen, T. Carbon sequestration in the growing stock of trees in Finland under different cutting and climate scenarios. *European Journal of Forest Research* 128(5): 431–529. doi: 10.1007/s10342-009-0299-x

Moiseyev, A., Solberg, B., Michie, B., Kallio, A.M.I. Modeling the impacts of policy measures to prevent import of illegal wood and wood products. *Forest Policy and Economics* 12(1): 24–30.

Nabuurs, G.J., Hengeveld, G.M., Van de Werf, D.C., Heidema, A.H. European forest carbon balance assessed with inventory based methods – An introduction to a special section. *Forest Ecology and Management* DOI: 10.1016/j.foreco.2009.11.024

Nuutinen, T., Husso, M., Toppinen, A., Kärkkäinen, L. & Rautanen, M. Trends and scenarios related to the turbulent operating environment of the Finnish sawmills. *Futura* 3/2009: 31–45.

Nuutinen, T., Kilpeläinen, A., Hirvelä, H., Härkönen, K., Ikonen, V.-P., Lempinen, R., Peltola, H., Wilhelmsson, L. & Kellomäki, S. Future wood and fiber resources in the region of North Karelia. *Silva Fennica* 43(3): 489–505.

Palahi, M., Pukkala, T., Bonet, J.A., Colinas, C., Fischer, C.R., Aragón, J.M. Effect of the Inclusion of Mushroom Values on the Optimal Management of Even-Aged Pine Stands of Catalonia. *Forest Science* 55(6): 503–511

Pussinen, A., Nabuurs, G.J., Wieggers, R., Reinds, G.J., Wamelink, G.W.W., Kros J., Mol-Dijkstra, J. P. and de Vries, W. Modelling long term impacts of environmental change on mid- and high-latitude European forests and options for adaptive forest management. *Forest Ecology and Management* 258: 1806–1813.

Päivinen, R., Van Brusselen, J., Schuck, A., The growing stock of European forests using remote sensing and forest inventory data. *Forestry* 82(5): 479–490.

Requardt, A., Schuck, A., Köhl, M. Means of combating forest dieback – EU support for maintaining forest health and vitality. *iForest Journal of Biogeosciences and Forestry* 2: 38–42.

Schulze, E.D., Luyssaert, S., Ciais, P., Freibauer, A., Janssens, I. A., Soussana, J. F., Smith, P., Grace, J., Levin, I., Thiruchittampalam, B., Heimann, M., Dolman, A. J., Valentini, R., Bousquet, P., Peylin, P., Peters, W., Rödenbeck, C., Etiope, G., Vuichard, N., Wattenbach, M., Nabuurs, G. J., Poussi, Z., Nieschulze, J., Gash, J. H. Importance of methane and nitrous oxide for Europe's terrestrial greenhouse-gas balance. *Nature Geoscience*. doi: 10.1038/ngeo686

- Seidl, R., Schelhaas, M.-J., Lindner, M., Lexer, M.J. Modelling bark beetle disturbances in a large scale forest scenario model to assess climate change impacts and evaluate adaptive management strategies. *Regional Environmental Change* 9: 109–119.
- Solberg, B., Moiseyev, A., Kallio, A.M.I., Toppinen, A. Forest sector market impacts of changed roundwood export tariffs and investment climate in Russia. *Forest Policy and Economics* 12(1): 17–23
- Tröltzsch, K., Van Brusselen, J., Schuck, A. Spatial occurrence of major tree species groups in Europe derived from multiple data sources. *Forest Ecology and Management* 257: 294–302.
- Vuletic, D., Krajer, S., Kis, K., Posavec, S., Avdibegovic, M., Blagojevic, D., Maric, B., Paladinic, E. Conflicts Between Forestry and Nature Protection-Case Studies of two Nature Parks in Croatia. *Periodicum Biologorum* 111 (4): 467–478.
- Woodall, C.W., Rondeux, J., Verkerk, P.J., Ståhl, G. Estimating dead wood during national forest inventories: A review of inventory methodologies and suggestions for harmonization. *Environmental Management* 44: 624–631.
- **Other scientific publications in 2009**
- Church, J.M. and Ramcilovic, S. Participation in the Alpine Convention. In Majtényi, B., Tamburelli, G. (eds.) *Sustainable Development and Transboundary Cooperation in Mountain Regions. The Alpine and the Carpathian Conventions.* L'Harmattan, Budapest, Hungary.
- Dai, X., Xu, Y., Jia, G., Fu, C., You, L., Xiong, Z., Yuan, J., Hu, Y. n., Yang, H., Wang, H., Hu, Y., Zhang, Y., Liu, H., Liu, Z., Sun, Y., Chou, J., Werners, S. E., Nabuurs, G.J. Climate change impacts and adaptation strategies in Inner Mongolia. Project Report P3d iii-2. ADAM Project (EU Project no. 018476–GOCE), Norwich, UK. 100 p.
- Dominguez, G. and Shannon, M. A wish, a fear and a complaint: understanding the (dis)engagement of forest owners in forest management. *European Journal of Forest Research* doi: 10.1007/s10342-009-0332-0
- Hulme, M., Neufeldt, H., Richie, A., van Vuuren, D., Klein, R., Knopf, B., Haxeltine, A., Bierman, F., Pattberg, P., Zelli, F., Werners, S.E., Tàbara, J.D., Dai, X., Flachner, Z., Nabuurs, G.J., Eskeland, G., Jochem, E. ADAM final report. ADAM Project, Norwich, UK. 47 p.
- Jochem, E., Schade, W., Barker, T., Scricciu, S., Helfrich, N., Mima, S., Criqui, P., Morel, J., Chateau, B., Kitous, A., Nabuurs, G.J., Schelhaas, M.J., Groen, T., Quandt, L., Reitze, F., Catenazzi, G., Jakob, M., Eichhammer, W., Held, A., Ragwitz, M., Reiter, U., Turton, H., Köhlerv, J. Report of the Reference and 2°C Scenario for Europe. ADAM Project D M1.2, Norwich, UK. 250 p.
- Lindner, M., Verkerk, H., Palosuo, T., Suominen, T., Päivinen, R. *Ex-ante* sustainability impact assessments of policy changes on forests and forestry – recent developments in analytical modeling in Europe. Conference proceedings: Forest Criteria and Indicators Analytical Framework and Report Workshop. May 19–21, 2008, Joensuu, Finland. USDA Forest Service. Gen. Tech. Report WO–81 (August 2009). pp. 81–92.
- Moiseyev, A. Methods for the long term projection of the wood and wood products demand and supply. *Forest economic bulletin*, 2009. NIPIEllesprom, Moscow.
- Pelli, P., Tikkanen, I., Van Brusselen, J., Vilén, T., Weiss, G., Tykkä, S., Domínguez, G., Boglio, D., Kenter, M. Mid-term evaluation of the implementation of the EU Forest Action Plan. A Study for the DG Agriculture and Rural Development. AGRI–2008–EVAL–07.
- Ramcilovic, S., Mavsar, R., and Weiss, G. Governance Perspectives on the Provision of Non-market Forest Goods and Services. Paper presented at the International workshop: Forest Policy and Economics in Support of Good Governance. 03–04 April 2009, Dubrovnik, Croatia.
- Rennolls, K., R. Päivinen, R., San-Miguel-Ayanz, J., Tomé, M., Skovsgaard, J.P., Palahi, M., Matthews, R. Harmonisation of European forest growing stocking data using a model-based conversion approach. *Forest Biometry, Modelling and Information Sciences*, Vol. 1, 1–34.
- Verkaik, E., Moraal, L.G., Nabuurs, G.J. Potential impacts of climate change on Dutch forests: mapping the risks. Alterra report 1761, Wageningen.
- De Vries, W., Wamelink, W., Reinds, G.J., Wieggers, H.J.J., Mol-Dijkstra, J.P., Kros, J., Nabuurs, G.J., Pussinen, A., Solberg, S., Dobbertin, M., Laubhann, D., Sterba, H., van Oijen, M. Assessment of the relative importance of nitrogen deposition. Climate change and forest management on the sequestration of carbon in forests in Europe. Wageningen Alterra Report 1538, 302 p.
- De Vries, Kros, J., Reinds, G.J., Wieggers, H.J.J., Velthof, G.L., Oudendag, D.A., Nabuurs, G.J., Schelhaas, M.J., Perez Soba, M., de Winter, W.P., van den Akker, J., Bakker, M.M., Verburg, P.H., Leip, A., Liski, J., Eickhout, B., Bouwman, A.F. Assessment of nitrogen and green house gas fluxes at the European scale in response to land use and livestock change. Proceedings of the AgSAP Conference 2009, Egmond aan Zee, The Netherlands: 412–413.
- Werners, S.E., Bindi, M., Cots, F., Dai, X., Flachner, Z., Matczak, P., McEvoy, D., Moriondo, M., Luger, N., Nabuurs, G.J., Neufeldt, H., Tàbara, J.D., Trombi, G., West, J. Final results of the regional case studies. Project Report P3d–4. ADAM Project, Norwich, UK. 238 p.
- **Popular in 2009**
- Lohilahti, H., Hokkanen, T., Aho, J., Kolström, T., Mustonen, A. (eds.) *Ilmastomuutos Pohjois-Karjalan mahdollisuutena. Ilmastomuutoksen Pohjois-Karjala projekti.* Pohjois-Karjalan Maakuntaliiton Julkaisu 124: 37–38.
- Pelli, P. Eurooppalainen näkökulma metsäalan ennakointiin. *Futura* 3/2009: 106–111 (A European Perspective on the Forest Sector Foresight in the Futura publication of the Finnish Society of Futures Studies)
- Schuck, A., Das Europäische Forstinstitut fördert grenzüberschreitende Vernetzung und Forschung durch Einrichtung von Regionalbüros. *Mitt. Ver. Forstl. Standortkunde u. Forstpflanzenzüchtung*. Nr. 46.2009. p121.
- Verkaik, E., Nabuurs, G.J., Opwarmend Bos. *Vakblad Natuur Bos Landschap*, Vol 2009 Juni, pp.20–21.

### ■ Selected seminar presentations in 2009

- Arets, E., Moiseyev, A., Louman, L., Kanninen K., Roda, J.-M., Marien, J.-N., Solberg, B., Kallio, A. M. I. The EU Wood Chain in a Globalised World – The Impact of Trade and Policy Factors on the Sustainability of Wood Chains between the EU and Developing Countries, in Europe Shape your sustainability tools – and let your tools shape you. EFORWOOD open science conference, Uppsala, Sweden, September 23–24 2009.
- Avdibegović, M., Petrović, N., Shannon, M. A. International Masters Program in Forest Policy and Economics (FOPER), Proceedings from the Conference: Forest Education Towards Pan-European Space, St. Petersburg, Russia.
- Kallio, A. M. I., Moiseyev, A., Nabuurs, G.-J., Schelhaas, M.-J., Solberg, B. Natura 2000 and the Sustainability of the European Forest Sector, in Europe Shape your sustainability tools – and let your tools shape you. EFORWOOD open science conference, Uppsala, Sweden, September 23–24, 2009.
- Kolström, M. ToSIA työkalu ja indikaattorit. Kunnan ratkaisut avainasemassa. Kuntapäätäjien Ilmasto- ja Energiaseminaari, Joensuu, Finland, October 29, 2009.
- Kolström, M. Effects of Climate Change on European Forests and Options for Adaptation. Climate Changes and Forestry, Nicosia, Cyprus, November 13, 2009.
- Lindner, M. Climate change impacts on EU forests and possible adaptation measures. ECHOES first COST Action workshop, Florence, Italy, January 22, 2009.
- Lindner, M. A review of measures to adapt to climate change in forests of EU countries. Climate Change: Global Risks, Challenges & Decisions, Copenhagen, Denmark, March 12, 2009.
- Lindner, M. ToSIA – A Tool for Sustainability Impact Assessment. "The Forest-based Sector – a Key to a Sustainable Society? EFORWOOD event at Swedish Forest Industry Meeting," Stockholm, Sweden, April 23, 2009.
- Lindner, M. Climate change impacts and adaptation in the forestry sector – lessons learnt for mapping vulnerability. EEA vulnerability and disaster risk mapping workshop, Copenhagen, Denmark, July 7, 2009.
- Lindner, M. European perspective for spruce in the context of climate change. Spruce In The Context Of Global Change, Halmstad, Sweden, August 31, 2009.
- Lindner, M., Suominen, T., Savolainen, M., Zudin, S., Vötter, D., Werhahn-Mees, W., Roubalova, M., Kneblík, P., Cerný, M., Verweij P. A Tool for Sustainability Impact Assessment (ToSIA) of forest-wood chains linked with a database of sustainability indicators collected within the EFORWOOD project. "Shape Your Sustainability Tools – and let your tools shape you. EFORWOOD open science conference", Uppsala, Sweden, September 23–24, 2009.
- Moiseyev, A. Wood and Non-Wood Benefits from Forests. Finnish Forests Economics Forum 20 years Jubilee Seminar: "Future Wealth from Forests", Helsinki, Finland, 28 April 2009.
- Moiseyev, A., Solberg, B., Kallio, Arets, E., Michie, B. Impact of the Global Economy and Future Scenarios for the Forest Sector on the EU Wood Chain in Europe Shape your sustainability tools – and let your tools shape you. EFORWOOD open science conference, Uppsala, Sweden, 23–24 September, 2009.
- Moiseyev, A. Future trade flows and global market modeling with the EFI-GTM model. Team of Specialists for Forest Sector Outlook Meeting, Geneva, Switzerland, 23–24 November 2009.
- Nabuurs, G.J. Forestry as a tool for mitigation of climate change: the IPCC assessment and European cases. Presented at Joensuu Forestry Networking week, May 2009.
- Nabuurs, G.J., van den Wyngaert, I., Hengeveld, G., Troeltzsch, K., Van Brusselen, J., Schelhaas, M.J., Verkerk, P.J., Eggers, N., Zanchi, G. Forestry options for carbon sequestration in European forests. Climate Conference, Aarhus, March 5, 2009.
- Nabuurs, G.J., van den Wyngaert, I., Hengeveld, G., Troeltzsch, K., Van Brusselen, J., Schelhaas, M.J., Verkerk, P.J., Eggers, N., Zanchi, G. Adapting European forests to climate change: resource modelling at high resolution, Copenhagen Climate Conference, March 10, 2009.
- Nabuurs, G.J., Zanchi, G., Verkerk, P.J., Lindner, M., van Brusselen, J., Gunia, K., Eggers, J., Schelhaas, M.J., van den Wyngaert, I., Hengeveld, G. European scale forest modeling – challenges for the future. Cost modeling, Helsinki, Finland, September 17, 2009.
- Nabuurs, G.J. Koli Forum Panel discussion. Koli, Finland, October 24, 2009
- Nabuurs, G.J. European and global forests: balancing between wood demand and carbon sequestration. Dutch wood day meeting, Amsterdam, the Netherlands, December 1, 2009.
- Nuutinen, T., Anola-Pukkila, A., Hirvelä, H., Mäkelä, H. Information and communication technology (ICT) connecting mathematical modelling with multipurpose forest management. International conference on multipurpose forest management, Niigata, Japan, September 20–25, 2009.
- Nuutinen, T., Van Brusselen, J. & Gunia, K. Overview of existing monitoring of European forests. Conference Future forest monitoring in the European Union. Providing information for multifunctional forest management, Uppsala, Sweden, November 11–12, 2009
- Nuutinen, T. & Van Brusselen, J. Forest Monitoring in GMES. Conference Future forest monitoring in the European Union. Providing information for multifunctional forest management, Uppsala, Sweden, November 11–12, 2009.
- Verkerk, H., Eggers, J., Nabuurs, G.J., Zanchi, G. and Lindner, M. European forest resource development and carbon stock changes: scenario analysis using the EFISCEN model. Technical workshop on projections of GHG emissions and removals in the LULUCF sector, Ispra, Italy, January 27–28, 2009.
- Verkerk, H., Nabuurs, G.J., Lindner, M., Eggers, J., Vilén, T., Pekkanen, M. How much can European forests compensate for GHG emissions? Side-event at the United Nations Climate Conference (COP15), Copenhagen, Denmark, December 12, 2009.
- Verkerk, H., Giergiczyński, M., Mavsar, R., Wenchao, Z., Lindner, M. Economic valuation of the impacts of intensified biomass production and biodiversity protection on forest land use in Europe Shape your sustainability tools – and let your tools shape you. EFORWOOD open science conference, Uppsala, Sweden, September 23–24, 2009.



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# FINANCIAL STATEMENTS FOR THE YEAR 2009

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The financial statements have been prepared in accordance with the Finnish Accounting Act and according to the other applicable rules governing the preparation of financial statements in Finland (Finnish GAAP).

In 2009 the Subsidies include Government Subsidy from Finland (1 009 000 euros), Subsidies from Spain and Catalonia supporting the Mediterranean Regional Office in Spain (250 000) and Regional Subsidies from Germany (150 000 euros) and France (180 000 euros) supporting the Central European Regional Office in Germany and France and the Atlantic European Regional Office in France.

# PROFIT AND LOSS ACCOUNT

European Forest Institute  
 Profit and loss account  
 1.1.–31.12.2009 (1.1.–31.12.2008)

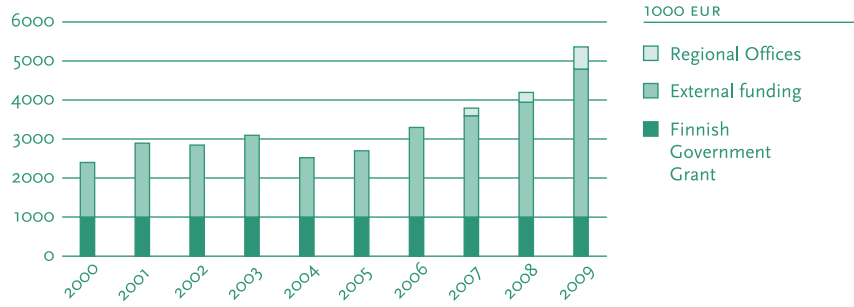
	2009/EUR	2008/EUR
<b>■ ORDINARY OPERATIONS</b>		
Income		
Conference fees	19 941.55	13 630.00
Grants for projects	3 568 941.35	4 235 631.35
Other income	35 505.06	26 227.41
Rents	2 281.50	1 719.00
Income	** 3 626 669.46	4 277 207.76
Expenses		
Staff expenses	-2 857 375.75	-2 423 170.77
Depreciation	-128 463.44	-82 108.07
Other expenses	-2 418 123.30	-1 894 950.24
Expenses	** -5 403 962.49	-4 400 229.08
<b>DEFICIT</b>	** -1 777 293.03	-123 021.32
<b>■ FUND RAISING</b>		
Income	145 375.00	150 000.00
Fund raising	** 145 375.00	150 000.00
<b>DEFICIT</b>	** -1 631 918.03	26 978.68
<b>■ INVESTMENTS AND FINANCIAL ACTIVITIES</b>		
Income	18 706.50	38 578.56
Expenses	-765.63	-2 097.20
Investments and financial activities	** 17 940.87	36 481.36
<b>DEFICIT</b>	-1 613 977.16	63 460.04
<b>■ TRANSFER TO THE MULTI-DONOR TRUST FUND</b>	71 346.55	-1 335 094.56
<b>■ SUBSIDIES</b>	** 1 589 034.56	1 253 523.59
<b>■ SURPLUS (DEFICIT) OF THE FINANCIAL YEAR</b>	*** 46 403.95	-18 110.93

# BALANCE

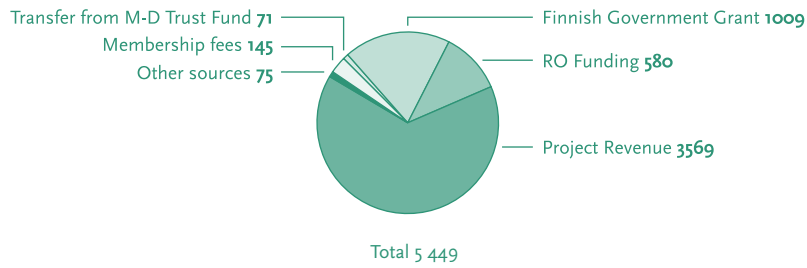
European Forest Institute  
Balance sheet  
31.12.2009 (31.12.2008)

		2009/EUR	2008/EUR
<b>■ ASSETS</b>			
<b>Non-current assets</b>			
Intangible assets			
Other capitalised long-term expenses		112 363.51	46 685.39
Intangible assets	**	112 363.51	46 685.39
Tangible assets			
Machinery and equipment		115 273.03	78 247.02
Tangible assets	**	115 273.03	78 247.02
Investments			
Other shares and similar rights of ownerships		0.00	84.09
Investments	**	0.00	84.09
<b>Non-current assets total</b>	**	227 636.54	125 016.50
<b>Current assets of the multi-donor trust fund</b>			
Cash at bank		2 430 406.35	2 083 158.29
<b>Current assets of the multi-donor trust fund</b>	**	2 430 406.35	2 083 158.29
<b>Current assets</b>			
Receivables			
Accounts receivable		302 434.11	73 357.27
Accrued income and prepaid expenses		654 998.85	724 085.05
Receivables	**	957 432.96	797 442.32
Cash in hand and at banks	**	272 659.80	357 175.13
<b>Current assets total</b>	**	1 230 092.76	1 154 617.45
<b>■ ASSETS</b>	***	3 888 135.65	3 362 792.24
<b>■ LIABILITIES</b>			
Equity			
EFI 15 <sup>th</sup> anniversary fund		1 400.00	1 400.00
Multi-donor trust fund		1 770 064.70	1 841 411.25
Other reserves		402 152.54	420 263.47
Other equity		108 521.02	108 521.02
Surplus (deficit) for the period		46 403.95	-18 110.93
Equity	**	2 328 542.21	2 353 484.81
<b>Liabilities</b>			
Current liabilities			
Advance payments received		915 314.04	416 161.95
Purchases payables		404 447.09	314 728.85
Accrued liabilities and deferred income		207 107.49	278 164.64
Other liabilities		32 724.82	251.99
Current liabilities	**	1 559 593.44	1 009 307.43
<b>Liabilities</b>	**	1 559 593.44	1 009 307.43
<b>■ LIABILITIES</b>	***	3 888 135.65	3 362 792.24

**EFI Funding in years 2000–2009, 1000 euros**

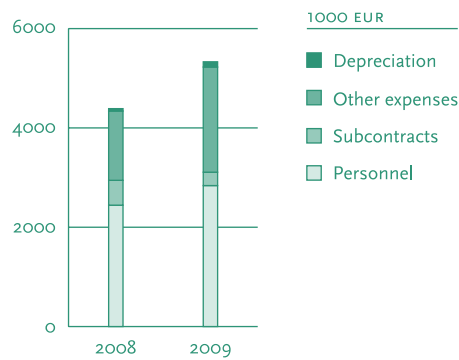


**Sources of funding in 2009, 1000 euros**



**Division of total expenses in years 2009 and 2008, 1000 euros**

Year 2009=5403 and 2008 = 4400



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## PROJECT CENTRES

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## ■ CONTACT PERSON

Cecil C. Konijnendijk, [cck@life.ku.dk](mailto:cck@life.ku.dk)

## ■ HIGHLIGHTS IN 2009:

During its last year, EUFORIC had its main focus on networking and events. The 12<sup>th</sup> European Forum on Urban Forestry was organised in Arnhem, Netherlands, during May 2009. The Forum focused on stakeholder collaboration and promoting values in urban forestry and was attended by about 80 people. During October 2009, an international conference was held in Reykjavik, Iceland, on the topic of forestry serving urban societies in the North Atlantic Region. The event had CARE-FOR-US (the Nordic-Baltic research network on urban forestry connected to EUFORIC). More than 100 participants discussed topics such as nature and health, social values of urban forestry, and innovative woodland management. EUFORIC also continued its collaboration with FAO and co-organised a series of sessions and meetings on urban and peri-urban forestry, poverty alleviation and food security at the World Forestry Congress in Buenos Aires, Argentina (October 2009). Other highlights

included the publication of the book 'Urban Forests and Trees' in Chinese, and an update of the Nordic-Baltic overview of urban forestry research. Four issues of the scientific journal Urban Forestry & Urban Greening were published. Moreover, the journal was included in the Science Citation Index Expanded.

## ■ SOURCE AND AMOUNT OF FUNDING:

The main funding sources in 2009 were the Nordic Forest Research Cooperation Committee (SNS) and the Danish Centre for Forest, Landscape and Planning.

Annual budget in 2009: 100,000€.

■ NUMBER OF STAFF: 5

■ NUMBER OF PROJECTS: 3

■ NUMBER OF EVENTS: 3

■ NUMBER OF PUBLICATIONS: 7

## ■ CONTACT PERSON

Francisco Moreira, [fmoreira@isa.utl.pt](mailto:fmoreira@isa.utl.pt)

## ■ HIGHLIGHTS IN 2009:

- EFI decided to extend the activities until 2012, to take advantage of the running COST Action that financially supports the networking of PHOENIX;
- The 2<sup>nd</sup> Management Committee and Working Group meeting of the COST Action FP0701, 23–25 February, Athens, Greece was an important milestone of our activities
- The new research EC Large-Scale Integrated Project FUME – Forests under climate, social and economic changes in Europe, the Mediterranean and other fire-affected areas of the world, in which several Phoenix partners participate.
- The joining of partners from North African countries (Tunisia and Morocco) in the network.
- The publication of the EFI Discussion Paper 15, contributing to the science-policy dialogue on wildfires, signalling increased collaboration with EFIMED.
- The Training School on Forest Fires: impact and post-fire management, which took place in Antalya, Turkey,

13–19 April 2009. This was a joint organization by SAFRI, COST Action FP0701, EFIMED and PHOENIX.

- In terms of overall productivity, during 2009 we have been involved in 30 projects and have produced 39 publications in international journals with referees.

## ■ SOURCE AND AMOUNT OF FUNDING:

The two sources of funding for the coordination of PHOENIX activities are the Portuguese project "Recuperação de áreas ardidas", funded by Fundo Florestal Permanente, Ministry of Agriculture, and the COST Action FP0701 – Post-fire forest management in Southern Europe

Annual budget in 2009: 120,000 €

■ NUMBER OF STAFF: 9

■ NUMBER OF PROJECTS: 30

■ NUMBER OF EVENTS: 10

■ NUMBER OF PUBLICATIONS: 39

# PROCES

SAINT-PETERSBURG, RUSSIA | [HTTP://FTACADEMY.RU/SCIENCE/INTERNATIONAL/PRECES/](http://ftacademy.ru/science/international/precis/)

## ■ CONTACT PERSON

Olga Shaytarova, [proces.fta@home.ru](mailto:proces.fta@home.ru)

## ■ HIGHLIGHTS IN 2009:

### Main events:

- International seminar “Economics of forestry and forest sector: actual problems and trends” 26–27 of March 2009 Saint-Petersburg, Russia;
- Annual 2009 IAWS Plenary Meeting and Conference “Forests as a renewable source of vital values for changing world” 15–21 of June 2009 Saint-Petersburg – Moscow, Russia.
- TEMPUS FORPEC round-up conference “Forest Education Towards Pan-European Space” 26–27 of November 2009, Saint-Petersburg, Russia

### Main publications:

- International seminar “Economics of forestry and forest sector: actual problems and trends” 26–27 of March 2009 Saint-Petersburg, Russia – seminar proceedings;
- Annual 2009 IAWS Plenary Meeting and Conference “Forests as a renewable source of vital values for changing world” 15–21 of June 2009 Saint-Petersburg – Moscow, Russia – conference proceedings.
- TEMPUS FORPEC round-up conference “Forest Education Towards Pan-European Space” 26–27 of November 2009, Saint-Petersburg, Russia – conference proceedings, 1<sup>st</sup> edition.

### Main project outputs:

- A new 2-year MSc curriculum in forest policy and economics is opened in FTA

### Main research outputs:

- Researches in the field of theory and methods of national forest inventory including assessment of damaging forests by human hazard factors and in the field of forests role in ecological balance of regional ecosystems on the example of Leningrad Region were carried out. Trends of forest growth under the conditions of climate changes on the example of Komi republic were investigated.

## ■ SOURCE AND AMOUNT OF FUNDING:

Ministry of Education and Science of RF, Ministry of Natural Resources of RF, TEMPUS grant and Saint-Petersburg State Forest Technical Academy

Annual budget of 2009: 39,800 €

## ■ NUMBER OF STAFF: 5

## ■ NUMBER OF PROJECTS: 2

## ■ NUMBER OF EVENTS: 7

## ■ NUMBER OF PUBLICATIONS: 12

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# CONFOREST

FREIBURG, GERMANY | [WWW.CONFOREST.UNI-FREIBURG.DE/](http://www.conforest.uni-freiburg.de/)

## ■ CONTACT PERSON

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Heinrich Spiecker, [instww@iww.uni-freiburg.de](mailto:instww@iww.uni-freiburg.de)

## ■ HIGHLIGHTS IN 2009:

The scientific mission statement of ConForest was “The question of CONversion of coniferous FORESTs on sites naturally dominated by broadleaves for sustainable fulfilment of society’s needs”. ConForest was actively working for a total of almost ten years. More than 100 scientists were contributing to the Project Centre,

from more than 20 countries, which produced many publications. Besides the many peer-reviewed articles that were written from within ConForest’s authorship, other publications ranged from the EFI Research Report 18 “Norway spruce Conversion: Options and Consequences”, to the EFI Discussion Paper 13 “Plantation or Conversion – The Debate!”. It is hoped that the network that was established during this time can be of mutual benefit to the establishment of a successful EFI Regional Office network, where the topic of conversion is still relevant in the management of Europe’s forests towards the mitigation of impacts of climate change.

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