



ForestValue

ForestValue Research Programme Kick-Off Seminar

Thursday 23rd – Friday 24th May, 2019
The National Museum of Finland
(Helsinki)

ForestValue

Welcome to Finland!



The Finnish hosts MMM, YM, AKA and Business Finland are proud and glad to offer a venue for the first annual seminar of the ForestValue Research Programme. And not least, due to the fact that *"The Finnish soul has always been linked with the forest"* like described on the website www.visitfinland.com. Moreover, as generally known, besides of all other values the forest offers, the forest sector - forestry and forest industries combined - is of key importance to Finland.

The seminar is held in the premises of the National Museum of Finland, and thus you will have not only a chance to enjoy the interesting seminar programme, but also the most fascinating stories of Finnish history. As a seminar participant, you will have a free access to the exhibitions of the museum during your stay in Helsinki, and one of the temporary exhibitions happens to be Lauri Nykopp's *In the Birch Park* with his colourful works inspired by the national tree of Finland, the silver birch. Besides, the permanent exhibition *Story of Finland* will hopefully provide you with some insights to why for so many Finns the "soul landscape" is linked to forest and water.

The main idea behind the seminar programme is in the first place to offer a networking possibility both for the 17 projects selected for funding under the 1st trans-national ForestValue Joint Call and for all other seminar participants, too. The projects will be not only presented in a pitch talk format but also during the breaks in the poster exhibition, and this should help you to get into deeper discussions especially with the ones most of interest to yourself.

And since – after all – research is about making impact at some level, we are honoured to introduce Rhonda Smith, a Founder Director and Team Leader at Minerva Communications UK Ltd, as one of our keynote speakers to give us a talk on stakeholder engagement, C&D strategy and impact creation. Regarding the stakeholder engagement, we are also honoured to introduce two more keynote speakers to you, Johan Elvnert, Managing Director at the Forest-based Sector Technology Platform, and Robert Mavsar, Deputy Director at the European Forest Institute. From Johan you will learn about the recent developments in the forest-based sector and Robert will discuss the role of the European Forest Institute in helping to build an ambitious European forest research and innovation area.

There is also an interesting site visit waiting for you since in the afternoon of Day 1. We will visit Oodi, Helsinki's new Central Library which was opened in December 2018. The building itself is a fascinating combination of glass, steel and wood, and during our visit we will have a chance to meet representatives both from the library itself but also from ALA Architects, responsible for the architectural planning, and from YIT, the building contractor.

There is something magical about the forest. The green colour is calming; the gentle rustling of the leaves and pine needles is like music. Finns feel good in the forest. Not alone, not lost – the forest provides protection and peace. Hiking in summer, cross-country skiing in winter, gathering berries and mushrooms or simply a gentle walk in the woods: these are popular leisure activities in Finland. The forest is simply a part of everyday life in Finland. - www.visitfinland.com

Somehow, I feel that the above description partly explains why Finland is ranked as the happiest country in the world. Hopefully we will be able to pass you this feeling during your visit and one of your souvenirs to bring back home from Finland would be a piece of this happiness.

Enjoy your stay in Finland!

Mika Kallio
ForestValue Project Coordinator

ForestValue

About Forest Value

ForestValue builds on the success of three previous forest-based ERA-NETs: WoodWisdom-Net, SUMFOREST and FORESTERRA. The aim of ForestValue is to comprise the joint implementation of trans-national call for proposals for research, development and innovation in the forest-based sector.

In total, these three ERA-NETs behind ForestValue have had national investments of around 67 MEUR to a variety of trans-national co-funded RDI projects (64 funded projects), the total volume of these projects being around 86 MEUR.

Now, after the joint effort under the ForestValue ERA-NET Cofund, since the first ERA-NET in 2004, the total national investments into forest research through these networks of national funders will be up to more than 100 MEUR.

The primary purpose of the present **ForestValue** joint call is to contribute to **transforming the global economy from a dependence on fossil and non-renewable raw materials to a sustainable “bio-based economy”**.

The call contributes to the overall objectives of ERA-NETs - including the mobility of researchers and practitioners between the countries and intensify researcher training, thereby increasing the quality of European research & innovation actions and their implementation in the market.

Sustainability and modernisation of forestry systems and downstream value chains, including innovative business concepts and production technologies, will be needed to develop the forestry sector and the European bioeconomy, of which forestry accounts for a large share.

The consortium consists of 30 partners representing different programmes in the bioeconomy funding sector, coming from different regions and countries inside/outside Europe.

Core Partners

Finland

Ministry of Agriculture and Forestry (MMM), the Coordinator
Academy of Finland (AKA), Finland
Innovation Funding Agency Business Finland (Business Finland), Finland
Ministry of the Environment (YM), Finland

Austria

Federal Ministry of Sustainability and Tourism (BMNT)

Czech Republic

Ministry of Agriculture of the Czech Republic (MoA)
Forestry and Game Management Research Institute (FGMRI)

France

The French Environment and Energy Management Agency (ADEME)
The French National Research Agency (ANR)

Germany

Federal Ministry of Food and Agriculture (BMEL)
Agency for Renewable Resources (FNR)
Federal Office for Agriculture and Food (BLE)

Ireland

Department of Agriculture, Food and the Marine (DAFM)

Latvia

Latvian Academy of Agricultural and Forestry Sciences (LAAFS)
State Education Development Agency (VIAA)

Poland

National Science Centre (NCN)

Slovenia

Ministry of Education, Science and Sport (MIZS)

Spain

Agencia Estatal de Investigación (AEI)
The Centre for the Development of Industrial Technology (CDTI) E.P.E.

Sweden

The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS)
Swedish Energy Agency (SWEA)
Swedish Governmental Agency for Innovation Systems (Vinnova)

United Kingdom

The Forestry Commissioners (FC)

Norway

The Research Council of Norway (RCN)

Switzerland

Swiss Innovation Agency (Innosuisse)
Federal Office for the Environment (FOEN; in the Federal Department of the Environment, Transport, Energy and Communications DETEC)

Tunisia

Institution of Agricultural Research and Higher Education (IRESA)

Turkey

The Scientific and Technological Research Council of Turkey (TUBITAK)

Argentina

Secretaría de Gobierno de Ciencia, Tecnología e Innovación Productiva (SGCTeIP)

Egypt

Academy of Scientific Research & Technology (ASRT)



Funded projects.

Session 1. Advanced Forest Management strategies

MultiForest – Management for multifunctionality in European forests in the era of bioeconomy

Coordinator

Mikko Mönkkönen, University of Jyväskylä, Finland
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Other partners

AT, DE, NO, SE

Project objective

This project aims to provide novel insights to forest policy, forest management and land-use planning by quantitatively analysing impacts of policies, management practices and developing large scale forest programs that can simultaneously maintain or increase timber production and ensure the sustainability and resilience of multifunctionality in forests.

ValoFor – Small Forests – Big Players: Valorising small scale forestry for a bio-based economy

Coordinator

Silvio Schueler, Austrian Research Centre for Forests (BFW), Austria
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Other partners

DE, FI, SE, SI

Project objective

The objective of ValoFor is to understand the contribution of small forest owners in the transition to a wood based bioeconomy by considering the perception and management strategies of small forest owners. This includes analysing and comparing forest management strategies with respect to potential timber supply, ecosystem services and forest resilience in climate change.

MULTIFOREVER – Towards intensification of conifer production through multi-varietal forestry based on somatic embryogenesis

Coordinator

Jean-François Trontin, FCBA – The French Institute of Technology for Forest-based and Furniture Sectors, France
jean-francois.trontin@fcba.fr

Other partners

AR, DE, ES, FI, FR, SE

Project objective

The project's ambition is to apply novel approaches to clone a genotype, not only from juvenile, but also from mature tissues, and to develop a value added chain and joint strategy to bring high-quality somatic trees at acceptable costs towards multi-varietal forestry (MVF) of economically relevant conifers (pine, spruce, larch, Douglas-fir).



Funded projects.

Session 2. Advanced Forest Management & valorization

I-MAESTRO – Innovative forest MANagEmEnt STRategies for a resilient bioecOnomy under climate change and disturbances

Coordinator

Patrick Vallet, National Research Institute of Science and Technology for Environment and Agriculture (IRSTEA), France
patrick.vallet@irstea.fr

Other partners

DE, FR, PL, SI

Project objective

The main aim of I-MAESTRO is to improve the scientific basis for developing management strategies that increase resilience of the bioeconomy to future natural disturbances and climate change, while also maintaining a high level of wood production, carbon storage, and habitat quality for biodiversity.

NOBEL – Novel business models and mechanisms for the sustainable supply of and payment for forest ecosystem services

Coordinator

Harald Vacik, University of Natural Resources and Life Sciences Vienna, Austria
harald.vacik@boku.ac.at

Other partners

DE, ES, FR, NO, PT, SE

Project objective

The objectives of the project are (i) to develop business models and mechanisms to internalise the socio-economic value of forest ecosystems, (ii) combine public policy tools with business models for implementing payments for forest ecosystem services (FES) at multiple levels, and (iii) demonstrate and compare alternative approaches for payments in case studies in Europe.

FunEnzFibres – From fundamentals to valorization: Enzymatic oxidation of cellulosic fibres and underlying mechanisms

Coordinator

Kristiina Kruus, VTT Technical Research Centre of Finland Ltd, Finland
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Other partners

AT, NO

Project objective

This project will explore the potential of lytic polysaccharide monooxygenases (LPMOs) in oxidative modification of cellulosic fibres. The research aims at developing sustainable refining and dissolving processes.



Funded projects.

Session 3. Innovative harvesting techniques

AVATAR – Advanced Virtual Aptitude and Training Application in Real Time

Coordinator

Dirk Jaeger, Georg-August
Universität Göttingen, Germany
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Other partners:

NO, SE

Project objective

The objective of AVATAR is to complement operator training programmes, such as the Rational Efficient Cost Optimization (RECO), through the development of quantitative support tools. These tools will analyse harvester and forwarder operator's pre- and post-training work through machine control systems and sensor technology, and compile directed feedback to guide the operator towards more balanced working methods and techniques.

SMALLWOOD – Small diameter wood utilization with innovative stand management for multifunctional forests and a growing sustainable bio-economy

Coordinator

Tomas Nordfjell, Swedish
University of Agricultural Sciences (SLU)/ Department of Forest Biomaterials and Technology, Sweden
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Other partners:

ES, FI, SI

Project objective

The overall objective is to develop and evaluate new technologies and business and operational models that can support a sustainable management and utilization of different types of small diameter wood, and further boost new SMEs and work opportunities in particular in rural areas.

GreenLane – Fast-tracking value and resilience for industrial wood supply

Coordinator

Dag Fjeld, Norwegian Institute of Bioeconomy Research (NIBIO), Norway
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Other partners

AT, SE

Project objective

The overall goal of the project is to develop a virtual supply chain laboratory environment enabling value-tracking and interactive testing of harvesting and transport responses to challenging climate scenarios. The focus is on implementing weather-driven models for wood quality and availability.



Funded projects. Session 4. Wood as a building material (I)

InFutUReWood – Innovative Design For the Future – Use and Reuse of Wood (Building) Components

Coordinator

Karin Sandberg, RISE Research
Institutes of Sweden, Sweden
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Other partners

ES, DE, FI, IE, SI, UK

Project objective

The project focuses on the reuse of current reclaimed wood in the circular economy as structural material but also on creating a “design for deconstruction” for future building. The main objective is to develop a method for ensuring future possibility of circulation of timber products with true consideration of whole life-cycle, and practical industry issues at design, construction and deconstruction phases.

CLICK DESIGN – Delivering fingertip knowledge to enable service life performance specification of wood

Coordinator

Ed Suttie, Building Research
Establishment (BRE), United
Kingdom
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Other partners

CA, DE, FI, FR, NO, SE, SI

Project objective

CLICK DESIGN will develop a performance based specification protocol to enable provision of a software tool for architects and specifiers to embed service life performance specification for wood.

Funded projects. Session 5. Wood as a building material (II)

Hardwood_joint – Innovative joints in hardwoods

Coordinator

Carmen Sandhaas, Karlsruhe
Institute of Technology/
Timber Structures and Building
Construction (KIT), Germany
carmen.sandhaas@kit.edu

Other partners

AT, FR, SE

Project objective

The overall project objective is to foster high-performance hardwood structures in the European building sector by developing economic, reliable and innovative joint technologies for hardwood members and the design thereof. The objective is to pave the way for using more hardwood products in the building industry by giving added value to hardwood species which are currently mainly used as fuelwood.

FIRENWOOD – Improved fire design of engineered wood systems in buildings

Coordinator

Karolina Sturesund, RISE Fire
Research, Sweden
karolina.sturesund@rise.fr.no

Project objective

The main project goal is to ensure a fire safe use of innovative, engineered wood systems in taller and larger buildings, by providing (i) improved fire design models, validated by small- and full-scale fire tests, and (ii) classification and test methods for adhesives with regard to elevated temperatures and fire. The main focus will be the effect of structural joints and adhesives in cross-laminated timber (CLT), glue-laminated timber (GLT) and wood-based I-joists.



Funded projects.

Session 5. Wood as a building material (II)

InnoCrossLam – Innovative Solutions for Cross Laminated Timber Structures

Coordinator

Tomaz Pazlar, Slovenian National Building and Civil Engineering Institute (ZAG), Slovenia
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Other partners

AT, DE, ES, SE

Project objective

InnoCrossLam aims at increasing even further the competitiveness of cross laminated timber (CLT) as a versatile engineered product, by increasing its predictability in demanding design situations not covered by the guidelines of today, or codes and standards foreseeable in a near future. In addition, the project will further develop a previously suggested (proof-of-concept) multi-functional use of CLT in terms of its thermal activation.

Funded projects.

Session 6. Wood as a building material (III)

DynaTTB – Dynamic Response of Tall Timber Buildings under Service Load

Coordinator

Marie Johansson, RISE Research Institutes of Sweden, Sweden
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Other partners

FR, NO, SE, SI, UK

Project objective

The overall objective is to identify experimentally a number of full-scale Tall Timber Building (TTB) structures within Europe and, based on these results, develop representative Finite Element (FE) models for predicting the vibration response of TTBS exposed to wind-induced dynamic loading.

READiStrength – Resource-Efficient And Data-driven integrated log and board Strength grading

Coordinator

Olle Hagman, Luleå University of Technology, Sweden
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Other partners

AT, DE

Project objective

Making use of the latest technological developments in round timber scanning, the project READiStrength aims to improve the current concept of sawn timber strength grading towards earlier, more flexible and adaptive approaches prior to conversion at the raw material stage to make the best use of Europe's wood resources.



Funded projects. Session 6. Wood as a building material (III)

StrongComposite – A novel material concept for high strength cellulose composites

Coordinator

Ingo Burgert, ETH Zurich,
Switzerland
iburgert@ethz.ch

Other partners

AT, FI, SE

Project objective

This project will explore invention originating from a material concept, which unifies delignification and densification of wood while retaining the beneficial fibre directionality, thus enabling a “green” high performance product. One of the technological objectives is to develop and upscale such industrial processes that enable large enough prototype geometries for the addressed fields of application.

Keynote speakers



Rhonda Smith
Founder & Director
Minerva Communications
UK Ltd

Rhonda is an experienced strategist and practitioner with particular expertise in reputation, crisis & issues management including media and as a trainer and mentor across academia in Europe, commerce, not-for-profit and charitable sectors.



Johan Elvnert
Managing Director
Forest-based Sector
Technology Platform
(FTP)

His role is to coordinate the European research and innovation efforts in the forest-based sector as expressed by the FTP's Strategic Research and Innovation Agenda. Elvnert is also a member of the European Bioeconomy Panel. Previously, Johan Elvnert worked at the European Commission DG Research & Innovation and he has a Master of Science in Molecular Biotechnology Engineering from Uppsala University.



Dr. Robert Mavsar
Deputy Director
European Forest Institute
(EFI)

Dr. Mavsar holds a PhD in Economics and MSc degrees both in Forest Sciences and Economics from the University of Maribor, Slovenia. His expertise lies in environmental economics, in particularly related to the valuation of non-market goods and services. He is also experienced in the forest and fire economics, forest and environmental policy, forest planning and management, forest inventories and forest risks. In the past 5 years he has coordinated three EU funded research projects on non-marketed goods and services, on fire management economics and on non- wood forest products.



Maa- ja metsätalousministeriö



SUOMEN AKATEMIA



Ympäristöministeriö
Miljöministeriet
Ministry of the Environment

BUSINESS
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ForestValue



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Designed by:

