

## IN THIS ISSUE...

EFORWOOD Year 3 evaluation

Final EFORWOOD Conference:  
**Shape your Sustainability Tools - let your tools shape you, Uppsala 23-24 September**

Latest on Project:  
**WebToSIA**

EFORWOOD Road shows:  
**From Riga to Washington**

New initiatives:  
**Northern ToSIA**  
**ToSIA in Latvia**

EFORWOOD Events  
**Workshop IFER 2008**  
**EU-FWC meeting Espoo**  
**Events of interest**

Meet our Modules:  
**M3—From forestry to industry: Interactions between the forest resource and forest products**



## EFORWOOD: Year 3 Evaluation

The last annual project evaluation (January 2009), carried out by independent evaluators appointed by the European Commission, scored the project 'good to excellent,' showing that EFORWOOD is well on track to delivering the expected results.

The Commission evaluation highlighted the positive impact the project will have on the development of the forest-based sector in the EU by providing policy makers, industry and stakeholders with a tool to strengthen the contribution of the forest-based sector to a more sustainable Europe. It will also provide new information necessary to bring together forest management and wood production with multiple wood processing flows, including wood energy, in a single, market-oriented value chain.

A minor recommendation made by the evaluators related to the provision of more detailed plan for post-project exploitation of the results and the presentation of more real user stories. This would give the EFORWOOD project every opportunity to contribute to the wider social and political objectives of the EU's sustainable development strategy.

For information about the EFORWOOD Project please contact:

Skogforsk, The Forestry Research Institute of Sweden  
Prof. Kaj Rosen,  
Project coordinator

Uppsala Science Park  
S-751 83 UPPSALA  
Sweden  
Tel: +46 18-18 85 00  
Fax: +46 18-18 86 00  
email: kaj.rosen@skogforsk.se

[www.eforwood.org](http://www.eforwood.org)



## EFORWOOD FINAL CONFERENCE



### CONFERENCE AIM

The EFORWOOD Final Conference will be held in **Uppsala, Sweden, from 23-24 September 2009**. The conference will bring together researchers, policy makers and practitioners from all over the world to discuss Sustainability Impact Assessment for the forest-based sector. Across the globe, tools to analyse sustainability are being developed in order to help us make better choices.

One of the conference focus areas will be on the main EFORWOOD project outcome, the Tool for Sustainability Impact Assessment (ToSIA), a dynamic sustainability impact assessment model that analyses the environmental, economic, and social impacts of changes in forestry-wood production chains, using a consistent and harmonised framework from the forest to the end-of-life of final products.

It will also be an opportunity to combine the experiences and expertise of other integrated EU projects (SENSOR, SEAMLESS and PLUREL) that are developing similar tools to support decision making on policies related to various areas of science, such as land use, environmental economics, socio-economics and landscape research.

Welcome to Uppsala.

### CONFERENCE THEMES

**THEME 1 | SUSTAINABILITY IMPACT ASSESSMENT IN A KNOWLEDGE-BASED BIO-ECONOMY**

**THEME 2 | METHODS FOR EVALUATION OF SUSTAINABILITY IMPACT FROM PROCESS TO SECTOR LEVEL**

**THEME 3 | CASE STUDY APPLICATIONS IN SUSTAINABILITY IMPACT-ASSESSMENT**

**THEME 4 | GREENHOUSE GAS BALANCE OF THE FOREST-BASED SECTOR**

**THEME 5 | SCENARIO ANALYSIS OF THE FOREST-BASED SECTOR AND PARTS THEREOF**

### REGISTRATION

On line registration system will be available from **May 20, 2009**. ([visit www.eforwood.org](http://www.eforwood.org)).

#### Registration fee

Early-bird registration	€150.00
Regular registration	€200.00
Authors of papers	€150.00
Student registration	€95.00

### DATES AND DEADLINES

Abstract submission **April 30, 2009 (extended May 10)**

Abstract notification of acceptance **May 20, 2009**

Early registration **July 31, 2009**

Regular registration **August 21, 2009**

(including accommodation arrangements)

Regular registration **September 7, 2009**

(excluding accommodation arrangements)

Final programme announcement **July 31, 2009**

### VENUE

**Uppsala Concert & Congress Hall** (Uppsala Konsert & Kongress), Website: [www.ukk.se](http://www.ukk.se)

More information on conference on [www.eforwood.org](http://www.eforwood.org)  
Register your interest at [office@innovawood.com](mailto:office@innovawood.com)



## LATEST ON PROJECT

### WebToSIA

The full version of the Tool for Sustainable Impact Assessment (ToSIA) is rather complex and not suitable for demonstration purposes. A lack of the simple but high quality data required can also make it difficult to understand the applicability of ToSIA and the niche it occupies. Therefore, a version designed to provide a clear and concise presentation of the ToSIA method is being developed for the benefit of unfamiliar users – WebToSIA.

The main purpose of WebToSIA is to provide potential users an understanding of how the full tool might be used, based on a presentation of a set of pre-designed example runs using simplified scenarios. WebToSIA will give users insights into how the comprehensive ToSIA works, and allow for an understanding of its potential applications, as well as its strengths and limitations.

WebToSIA will be comprised of the following components: support content – explaining what ToSIA is and providing a user guide; examples of simple forest-wood chains (FWCs) for demonstration purposes, including the topology and all required (realistic) data; predefined results of ToSIA runs for these FWCs; an online database to store predefined FWCs, scenarios and results of ToSIA calculations. Where resources allow, parts of ToSIA may also be converted to run within WebToSIA, enabling a more lively and interactive demonstration.

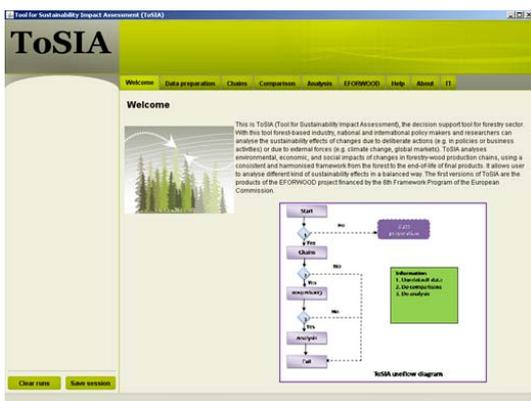


Figure 1. The first screen of ToSIA. From here the user can proceed to the desired functionality by clicking the appropriate tab.

WebToSIA will have two main applications:

i) to serve as 'marketing material' for the ToSIA approach, raising awareness and interest amongst prospective users. It is the intention of the EFORWOOD project that ToSIA will become a widely adopted cross-sectoral method and tool. In order to achieve

widespread acceptance, new users will need to be able to grasp the ToSIA concept readily and be convinced of its applicability to their specific needs.

ii) to be a user guide of sorts. In ToSIA the user is offered context-help, and a wealth of meta-information. However, as the data collection process can be a time consuming and costly task, the users should have the option to familiarise themselves with ToSIA and plan the analysis process prior to undertaking extensive data collection. In order to implement such a 'test phase,' user induction-type material is required. WebToSIA can be designed to accommodate this.

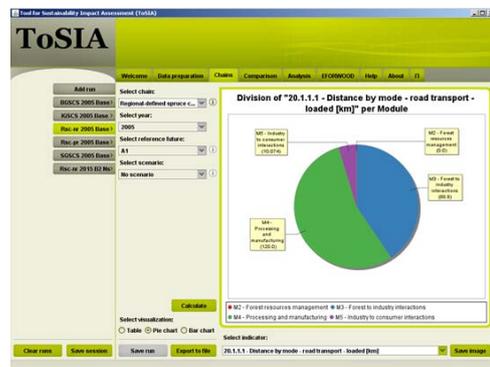


Figure 2. The results of an analysis can be displayed using different graphical visualizations.



Figure 3. Where visualisation is appropriate, multiple runs can be compared side-by-side using a table or graphic display.

The major task still to be addressed is how exactly to reduce the complexity and size of the application. Reducing the amount of indicators used in WebToSIA can be carried out as part of the work involved in specifying the sample chains. Cost benefit analysis and multi criteria analysis are likely to be employed using preset parameters and preference values.

The WebToSIA will be developed at EFI by a team composed of Tim Green, Tommi Suominen, Arttu Viljakainen and Sergey Zudin.



## EFORWOOD ROADSHOW

### EFORWOOD increasing interest: From Riga to Washington

In order for the EFORWOOD project to be successful, it is important that there is support for the results among industry and other stakeholders not responsible for the outcomes of the project, but who are sure to be the very people to use them in the future.



Fig. Map of stakeholders visited during the road shows.

Intensive dialogue with future users of the project results will open up the possibility for improvements and adjustments during the course of the project, but may also provide ideas for a continuation of the project in the future.

In the period from November 2007 to September 2008, the EFORWOOD team headed by project coordinator Kaj Rosen (Skogforsk), researcher Christian Gamborg (University of Copenhagen) and supported by other leading expert members of the project, ran the road show presentations, visiting approx. twenty stakeholder organisations in seven countries. The target groups of the road shows were the EU Commission, large industrial organisations, other industry and associations in the forest-based sector, decision/policy makers, as well significant non-industrial NGOs. The aim of the road show meetings was to increase awareness and understanding of project impacts, and get input/feedback on project developments (general and specific).

Some of the issues that commonly raised interest among stakeholders were the use of ToSIA and its limitations; data collection and the selection of indicators as input information for ToSIA; the design of the different levels the tool will operate on, from single forest-wood chains (FWC) to regional case studies; the selection of scenarios and development of modules designed to analyse impacts, such as multi-criteria analysis (MCA) and cost benefit analysis (CBA).

The stakeholders generally demonstrated an interest in the EFORWOOD project, but also expressed difficulties obtaining an overview of the project, and voiced some reservations regarding the use of the tool. The 'results' of the road show meetings are being put to use internally, as input and feedback to the project's expert teams, and externally, for example, as FAQs on the project portal. The redesigned FAQ section of the website now provides the answers to the many questions, issues and concerns that came up more or less consistently during the road show meetings. The general opinion is that the road show idea produced the desired outcome, which was to provide key target groups with a better understanding of the EFORWOOD project and its achievements, and to allow them to present their knowledge and views.

#### USA stakeholders

In addition to visits to European stakeholder organisations, EFORWOOD was also presented to and discussed with a number of American organisations to get a non-European view of the approach taken by EFORWOOD. The project was quite positively accepted by American stakeholders who showed particular interests in Multi criteria analysis (MCA) and its application.

It is hoped that as a result of the open consultations, potential users of the tool(s) developed by EFORWOOD will understand the limitations of the tool(s). The meetings with stakeholders have been successful in helping to (i) communicate the project to key stakeholders, (ii) explore concerns and views related to EFORWOOD, and (iii) get feedback on key project elements, in particular ToSIA, the indicators, MCA and the scenarios.



Topic	Questions, issues and concerns
ToSIA	What will ToSIA look like – and what is it planned to do? Can you compare different chains? How well does ToSIA reflect reality?
Indicators	What kind of indicators are used? How does the indicator set used in EFORWOOD compare with other sets (e.g. MCPFE)?
MCA	How do you compare/aggregate different indicators? Who is determining the importance of indicator values?
Scenarios	What are scenarios, which areas? FBS is global, not only European, how to take into account?
Other issues	How is renewability reflected? Misuse of results to discredit FBS (e.g. by locating "hot spots")

Fig .Examples of questions raised during the road shows

More information and answers to questions raised during the road shows can be found on the EFORWOOD portal [www.eforwood.org](http://www.eforwood.org) (particularly in the FAQ section).

## New possibilities for ToSIA application on local level in Latvia

At the end of August 2008, the EFORWOOD team organised an additional road show in Latvia, hosted by EFORWOOD partner SILAVA. The road show targeted the Latvian stakeholders, including certain key national players in the forest-based sector such as the Ministry of Agriculture (Forest Policy Department), forest owner associations, the state forest service, the Latvian forest industry federation, the Latvian University of Agriculture, the forest faculty and the Forest and Wood Products Research and Development Institute.

The event raised great interest amongst representatives of the Latvian forest sector, especially in relation to the potential application of ToSIA under Latvian conditions. It was agreed that SILAVA, in cooperation with and supported by EFI (Marcus Linder), would prepare a proposal for the application of ToSIA at the local level.

This proposed project will be funded by the Latvian Ministry of Agriculture. The evaluation of the proposal is ongoing and the partners are hoping to receive a positive answer in the near future.

## Northern ToSIA

**A three year project in the northern periphery region (Northern ToSIA) started in November 2008, supported by the European Regional Development Fund (ERDF)**



The 'Assessing the Sustainability of Forest-Based Activities in Rural Areas of the Northern Periphery (Northern ToSIA)' project will test and develop the applications of the Tool for Sustainability Impact Assessment (ToSIA) together with regional development bodies and forest industry companies in Finland, Sweden, Norway and Scotland. The project objective is to develop and disseminate the tool for use in the whole northern periphery region. This tool will enable public bodies and (private) companies from northern countries to improve their corporate social responsibility as a part of the whole forestry-wood value chain and improve business activities across the three dimensions of sustainability. The total project budget for the years 2008-2011 is €1.3 M, and the kick-off meeting took place at EFI in Joensuu in mid-November.

The Northern ToSIA project is led by EFI. The partners are Forest Research (FR), the Swedish University of Agricultural Sciences (SLU), the Forestry Centre of North Karelia in Finland and the County Governor of Nordland in Norway, as well as forest industry companies.

For additional information on Northern ToSIA contact [marcus.lindner@efi.int](mailto:marcus.lindner@efi.int)



## EFORWOOD EVENTS—WORKSHOPS

### EFORWOOD Workshop on Chain Designing , 24-26 September, Jilové u Prahy

The workshop on chain designing was held from 24-26 September 2008 at IFER, Jilové u Prahy, Czech Republic. The main purpose of the workshop was to build the topology of the European Forest Wood Chain (FWC) in the EFORWOOD database, using the EFORWOOD database client application. The EU-FWC chain includes 27 countries (EU-25 + Norway and Switzerland).

The workshop presentations included an overview of the database client chain designer and the topology parameters, working with the EFORWOOD database client and a short introduction to and demonstration of ToSIA.



The main workshop focus was on creating sub-chains for the EU-FWC. Several of the sub-chains created during the workshop will be merged into one big chain, and the country group sub-chains will be copied for each country.



The workshop also provided colleagues from the various modules with an opportunity to discuss a range of other scientific matters.

*Reported by Martina Roubalova, IFER*

More on this workshop can be found on [www.eforwood.org](http://www.eforwood.org), in the Project Meeting section of the restricted partner area.

### The European Forest Wood Chain meeting Espoo, Finland 12-13th January 2009

The main aims of the meeting were to accelerate the final phase of the work on chain topology, to discuss and clarify open questions and to plan the activities that should take place in the final months of the project. The meeting was for the benefit of all EFORWOOD partners actively involved in the EU-FWC.

Some of the main issues raised during this meeting related to the following: research questions identified by the EU-FWC task forces and the possibility to turn these questions into report chapters and scientific articles, scenario implementation (questions related to the implementation of Natura 2000), building of the chain topology (update and planning of the last steps), and material flow determination and its use in the EU-FWC.

It was agreed that a chapter dedicated to the research questions and goals will be added to the final document on the EU-FWC.



The EU-FWC Roadmap was fixed and an agreement on the procedure for deciding upon the titles and writing teams for scientific papers and report chapters was put in place.

During the questions and answers session, Jean-Baptiste Chesneau (FCBA) gave a presentation on a tool developed by FCBA to estimate various values for transport processes. This tool will be made available for registered project partners on the EFORWOOD portal.

*Reported by Taru Palosuo*



## EFORWOOD EVENTS



### EFORWOOD at The International Conference “The European Forest-Based Sector: Bio-Responses to Address New Climate and Energy Challenges?”

The EFORWOOD project was presented at the International Conference ‘The European Forest-Based Sector: Bio-Responses to Address New Climate and Energy Challenges?’ held from 6-8 November 2008, in Nancy, France. The conference brought together around 230 representatives of the forest-based sector, the European member states and the European Commission, as well as non-governmental organisations and academia.

The participants addressed the role of the forest-based sector in relation to two critical issues of our time: climate change and the energy crisis.

The conference aim was to provide information regarding the role of the forest-based sector in relation to the physical processes of the carbon cycle, the competition between wood and other materials, and the energy market.

The EFORWOOD project was presented by Kaj Rosen, who provided an outline of the Tool for Sustainability Impact Assessment (ToSIA). He emphasised that ToSIA deals with the entire sector, from production to end-use and recycling. It was also stressed that the tool serves as a decision-support tool for policy makers at EU and national level, and industry and non-governmental organisations.

### EVENTS OF INTEREST

**May 5-7, 2009: Forest Vegetation Management - Towards Environmental Sustainability: the Final Conference of COST-Action E47**

Vejle, Denmark

web: <http://www2.clermont.inra.fr/cost-e47/>

**May 18-22, 2009: LIGNA HANNOVER – World fair for the forestry and wood industries,**

Hannover, Germany

web: <http://www.ligna.de>

**May 20 2009: REINFFORCE seminar**

Edinburgh, Scotland

web: <http://www.iefc.net>

**May 24-29, 2009: Joensuu Forestry Networking Week • Connecting Young European Experts Topic 2009 • Fighting climate change: adapting forest policy and forest management in Europe**

Joensuu, Finland

web: <http://www.metla.fi>

**May 27-30 2009: 12th European Forum on Urban Forestry: “Working together for green city values”**

Arnhem, The Netherlands

web: <http://www.efuf.org/>

**May 28, 2009: The 4th ICFPA CEO's Roundtable**

London, England

web: <http://www.icfpa.org>

**June 29-30, 2009: International Conference on Continuous Cover Forestry in Europe,**

University College Dublin, Ireland

web: <http://www.ucd.ie/conforest/index.html>

**September 4, 2009: Creating a new prosperity: Fresh approaches to ecosystem services and human well-being - one day symposium,**

London, England

web: <http://www.nottingham.ac.uk/fresh>



## MEET PROJECT MODULES

### MODULE 3: FROM FORESTRY TO INDUSTRY - INTERACTIONS BETWEEN THE FOREST RESOURCE AND FOREST PRODUCTS

Module M3 of EFORWOOD deals with flows of materials between forest stands and the mill gate. Three main areas of activities can be identified: harvesting, transport and allocation.



All three areas have major implications in relation to the sustainability of the forest wood chain.

Harvesting begins with the decision to cut a tree, a group of trees or a whole stand in accordance with silvicultural, ecological and economic considerations. The appropriate harvesting systems are selected according to the physical conditions of a given stand (e.g., terrain, climate, soil conditions), and taking into account the socio-economic environment.

Transport involves a multitude of technical options, which differ in many ways and in the extent to which sustainability requirements are met. Off-road and road transport with different types of trucks, loading devices and logistical back up vary greatly in relation to the impacts they exert in ecological, economic and social terms.

The different harvesting and transport alternatives were evaluated against a set of commonly used indicators, allowing for a comparison of the different forestry-wood chains.

The third M3 activity is allocation, which is an often neglected aspect of the wood flow between the forest and the mill. Allocation means the optimal distribution of the wood coming from the forests to the respective mill.

Allocation decisions can be taken at various points along the forestry-wood chain. Selecting the stand, and the specific trees within this stand, are the first step, followed by intelligent bucking and cross cutting regimes applied by the harvesting machines in the forest and ending with laser or x-ray supported high-tech sorting equipment at the mill gate. Optimal allocation decisions have, as has been pointed out in the past, many technical advantages for production and for the product itself, but are linked to higher costs and very often to longer and more complex transport solutions. The alternative allocation decisions are quantified by sustainability-related social, economic and environmental parameters and are simultaneously evaluated using the related indicators.



Photo. Partners Members of M3 Module

One major objective of the module is to quantify the commonly agreed indicators to be used in ToSIA. A second objective is to develop module-specific models that allow for a more detailed technical, economic and environmental analysis of alternative harvesting, transport and allocation systems.

The results of this exercise will go directly to the decision makers responsible for harvesting, transport and allocation.

*M3 Module leader, Gero Becker,  
Albert-Ludwigs-Universität Freiburg (ALUFR)*

**Comments, suggestions and article ideas from the project partner community are most welcome and should be sent to: [office@innovawood.com](mailto:office@innovawood.com)**

