



**EFORWOOD**

Sustainability Impact Assessment  
of the Forestry - Wood Chain



Project no. 518128

EFORWOOD

Tools for Sustainability Impact Assessment

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**Intermediate management report**

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<b>RE</b>	Restricted to a group specified by the consortium (including the Commission Services)	
<b>CO</b>	Confidential, only for members of the consortium (including the Commission Services)	

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# **1 Introduction**

## **1.1 Background**

The processes in the latter part of the FWC and the interaction between forest-based industries and consumers/ end-users are the main scopes within Module 5 of Eforwood. The Module is primarily motivated by the observation that further development of the FWC towards sustainability, needs to be well-founded in a market perspective with outlook also beyond the FWC. This perspective includes aspects for both professional intermediaries and consumers, other end-users in the FWC as well as stakeholders in interacting value chains.

## **1.2 Objectives**

The overall objective is to evaluate FWC products functional performance and impact on sustainability in interacting value chains, including also the consumer perspective (being the crucial, final link in the value chain). The overall purpose is to contribute to make it possible to increase pro-activity for the FWC. Both quantitative and qualitative research approaches are to be used in parallel to complement each other.

The development and application of ToSIA is to be supported in several ways. Firstly M5 should be actively involved in the development process, mapping and defining chains and case studies, defining indicators, and deliver M5 process data. Qualitative research results from M5 should be used as a base for ToSIA development, guidance for selecting ToSIA applications and a complement to sustainability impact assessment based on ToSIA results.

A final objective will be to develop and suggest strategies for increased sustainability for significant FWC-products and market sectors. To realise this, a partial objective of M5 is to develop and apply a partial M5 qualitative SIA process tool.

Key objectives/milestones for the project period Month 37-48 are:

In WP5.0:

- Co-ordinate the module work and ensure that the objectives of M5 are reached and activities completed in accordance with time schedule and budget
- Co-ordinate the linkages with the IP management, other modules and external bodies

In WP5.2:

- To lead and contribute to adequate definition of a market driven regional case as basis for further EU FWC
- To contribute in development of Scandinavian and Baden Württemberg case studies and collect data
- To contribute in development of EU FWC and collect corresponding data

- To support ToSIA with data collection on consumption processes
- To develop methodology to be used in consumption scenario building

In WP5.3:

- Develop market driven scenarios to be used as context for further WP5.3 work as well as in ToSIA applications
- Develop response functions (outside ToSIA) to support evaluation of scenario implications and estimation of indicator values
- Decide on methodology and structure of the partial M5 qualitative SIA process tool
- Development of qualitative partial SIA process tool as well as application of it
- SWOT-analysis including identification of significant aspects
- Establishing of Visions for the FWC and interacting value chains
- Creation of Pro-active strategies, in the context of different external scenarios
- Analysis and presentation of implications of WP results for upstream modules and actors

## **2 Work package progress of the period**

A new module partner structure, where FCBA took over many tasks from AIDIMA, was implemented during the third year of the project. This new structure has now become fully operational and the work in M5 has made good progress against targets and objectives for the period. A key task in the module has been the Iberia case coordination. Some delays were experienced during the period, largely originating outside M5. Unforeseen and underestimated difficulties have been experienced in the ToSIA development and application work. The Iberian case study can be used as an example, it was already before reduced and limited to wood fibre products, as it was not feasible to disaggregate and trace backwards M5 wood product consumption into different fractions and origins in M4, M3 and M2 respectively. It was now experienced that also wood fibre products data collection was difficult to manage, especially going upstream towards the forest.

A number of module interface problems have been addressed together with M4, M3 and M2, and there has been very close collaboration with M1 related to ToSIA. Cross-module work has been realised largely through coordination of and active participation in working groups, cross-module events and e-mail discussions. Interface issues, particularly with M4, have been discussed and largely solved, although there are still some unsolved problems, mainly as regards wood products. Some key tasks and related progress during the reporting period:

- Maintaining and developing a strong M5 team. Module partners have communicated frequently in telephone conferences and by e-mail. Staff changes at partners have made it necessary to introduce and integrate new researchers at various stages. This period, several new Innventia researchers have been involved in the project

- ToSIA related tasks such as; Case study and EU FWC chain definitions, topology and data collection, working groups' coordination and participation (energy, waste, transport, import-export issues etc.)
- Development of a Module internal partial SIA tool, including a SWOT analysis with a sustainability perspective for selected FWC-based products such as furniture, packaging, books and pellets products

In WP5.0, module management, co-ordination and interfacing with other modules have been executed. The annual report for year three was prepared together with Management reports. A new implementation plan for month 37-51 was prepared. Activities also include organisation and documentation of module meetings and cross-module meetings as well as participation in IPB and evaluation meetings. The preparation work for the Eforwood week in Month 43 was also significant.

The major activities and related progress in WP5.2:

- Co-ordination of the market driven regional Iberian case study for ToSIA. Further major difficulties were experienced with disaggregated products upstream in the chain towards the forest. This has already before lead to a boundary restriction of the case study, to only encompass fibre based paper products
- Major effort in the transport working group including development of a tool to calculate/ estimate transport related indicators in a uniform way in the project
- Contribution in development of Iberia, Scandinavian and Baden Württemberg case studies as well as in many working groups.
- Topology and flows (including split factors, shares and conversion factors), and data collection for 2005, 2015 and 2025 in case studies have been partially completed. (Completion in Month 44)
- Contribution in development of EU FWC
- Data collection on consumption processes has been executed to support ToSIA and EFI-GTM
- In close cooperation with WP5.3 have Market scenarios for the Iberia case study been developed. Also evaluation of implications for M5 of technology and bio-energy scenarios in the other ToSIA case studies have been performed

The major activities and related progress in WP5.3:

- Scenario development in close collaboration with M1 and other modules
- Development of response functions (outside ToSIA) for scenario implications assessment and indicator value estimation. One examples is the transport tool
- A plan for further work relating to development and decisions on structure and methodologies to be applied in the partial SIA process tool. Creation of a qualitative M5 SIA process tool
- Market driven consumption scenarios have been developed successfully. They are to be used as context for further WP5.3 work as well as in ToSIA

applications. Special focus on Newsprint, packaging, furniture and bio-energy previously dealt with in internal case studies. The feasibility assessment, development and use of response functions have started but are still in progress

- Development and decisions on methodology and structure of the partial M5 qualitative SIA process tool has been largely completed
- SWOT-analysis on significant aspects for sustainability performance. The opportunities and threats part relate to scenario work and the strength and weaknesses part relate to M5 internal case studies

## 2.1 Deliverables summary

<b>Del No.</b>	<b>Deliverable name</b>	<b>WP No.</b>	<b>Due date</b>	<b>Actual/Forecast delivery date</b>	<b>Lead contractor</b>
			<b>Mth</b>	<b>Mth</b>	
D5.0.5	Annual Management report	5.0	37	38	Innventia
D5.3.1	Intermediate progress report – M5 Partial SIA process tool. Report containing scenarios, response functions, methodology and plans for further work in WP5.3 as well as summarised data related to attitudes on sustainability in the context of FWC-based products in interacting final product value chains.	5.3	39	47	Innventia
D5.2.9	Final Report on Iberian Case study	5.2	42	48	FCBA
PD5.0.6	Intermediate management report (42 months)	5.0	42	47	Innventia
PD5.2.10	Experiences from ToSIA data collection	5.2	42	48	FCBA
PD 5.3.3	Report on M5 Sustainability Process Tool	5.3	42	48	Innventia

## 2.2 Milestones progress

### Major milestones for the final completion of the project

Major milestones	<i>Status</i>
Final topology and product definition for ToSIA case studies and EU FWC	<i>Well in progress with completion expected Month 46</i>
Selection and definition of indicators for ToSIA EU FWC for 2015 and 2025	<i>Completed</i>
ToSIA data collection for case studies and for EU FWC for 2005	<i>Well in progress with completion expected Month 46</i>
Development of response functions and data generation for ToSIA case studies and EU FWC for 2015 and 2025	<i>Well in progress with completion expected Month 46</i>
Market driven scenario development and policy & technology scenario implications for ToSIA and M5 partial SIA process tool	<i>Well in progress with completion expected Month 47</i>
Synthesis of data and SWOT analysis for partial M5 partial SIA tool	<i>Well in progress with completion expected Month 47</i>
Established draft of Vision and Pro-active strategies for FWC	<i>Remaining, completion expected Month 48</i>
Define Methodology and structure for M5 partial SIA tool	<i>Largely completed. Some fine tuning expected Month 47</i>
Input to final report	<i>List of contents drafted. Work remaining, completion expected Month 50</i>

### WP milestones for the reporting period

Milestone No.	Milestone name	WP No.	Date due Mth	Actual/ Forecast delivery date Mth	Lead contractor
M5.0.1	Delivery in time and budget of activities planned for month 36 to 51	5.0	36-51	36-51	Innventia
M5.2.5	Baden Württemberg case data collection 2005	5.2	38	44	FCBA
M5.2.6	Scandinavian case data collection 2005	5.2	39	44	FCBA
M5.2.7	Baden Württemberg case data collection 2015, 2025	5.2	40	44	FCBA
M5.2.8	Iberian case data collection 2005	5.2	37	44	FCBA
M5.2.9	Scandinavian case data collection 2015, 2025	5.2	41	44	FCBA
M5.2.10	Iberian case data collection 2015, 2025	5.2	40	44	FCBA

M5.2.11	EU FWC data collection 2005, 2015, 2025	5.2	42	47	FCBA
M5.2.12	Regional cases scenario analysis, response functions	5.2	42	48	FCBA
M 5.3.4	Result of SWOT analysis	5.3	40	48	Innventia

### 3 Tasks and contributions by partners in the Module work

#### 3.1 Innventia

##### **In WP 5.0 Innventia has worked with the following tasks:**

- Module management and coordination
- Organisation and documentation of module and cross-module meetings
- IP Board and Evaluator meetings participation
- Preparation for Eforwood weeks
- Preparation of annual and intermediate reports
- Preparation of the implementation plan for Mth 36-51
- Commenting the work of other Module 5 partners

##### **In WP 5.2 Innventia has worked with the following tasks:**

In general, all tasks in the WP related to fibre/ paper based products.

- Topology, flows and definitions of all ToSIA case studies and EU FWC case
- Data collection in all ToSIA case studies and EU FWC case
- Supported ToSIA application development and EFI-GTM with data collection on consumption processes
- Working group participation

##### **In WP 5.3 Innventia has worked with the following tasks:**

- WP leadership
- Consumption scenario development
- Development of response functions for reference futures A1, B2 and scenarios
- Evaluation of scenario implications in M5 for scenarios originating in other modules
- Development and decisions on methodology and structure of the partial M5 qualitative SIA process tool
- SWOT-analysis on significant aspects for sustainability performance

#### 3.2 FCBA

##### **In WP 5.0 FCBA has worked with the following tasks:**

- Co-module Management
- Preparation for Eforwood weeks
- Input to annual and intermediate reports
- Input to implementation plan for Mth 36-51
- Commenting the work of other Module 5 partners



**In WP 5.2 FCBA has worked with the following tasks:**

In general, all tasks in the WP related to wood based products in all parts of Europe, including France but excluding Spain and other Mediterranean countries

- Iberia case study coordination and update of topology, flows and conversion factors
- Topology, flows and definitions of all ToSIA case studies and EU FWC case
- Data collection in all ToSIA case studies and EU FWC case
- Supported ToSIA application development and EFI-GTM with data collection on consumption processes
- Working group participation
- Transport tool development

**In WP 5.3 FCBA has worked with the following tasks:**

- Consumption scenario development
- Development of response functions for reference futures A1, B2 and scenarios
- Evaluation of scenario implications in M5 for scenarios originating in other modules
- Input to methodology and structure of the partial M5 qualitative SIA process tool
- SWOT-analysis on significant aspects for sustainability performance

### **3.3 AIDIMA**

**In WP 5.0 3.3 AIDIMA has worked with the following tasks:**

- Co-module Management
- Preparation for Eforwood weeks
- Input to annual and intermediate reports
- Input to implementation plan for Mth 36-51
- Commenting the work of other Module 5 partners

**In WP 5.2 AIDIMA has worked with the following tasks:**

In general, all tasks in the WP related to wood based products in Spain and other Mediterranean countries (excluding France)

- Topology, flows and definitions in Scandinavian case study and EU FWC case
- Data collection in Scandinavian case study and EU FWC case
- Supported ToSIA application development and EFI-GTM with data collection on consumption processes
- Working group participation

**In WP 5.3 AIDIMA has worked with the following tasks:**

- Consumption scenario development
- Development of response functions for reference futures A1, B2 and scenarios

- Evaluation of scenario implications in M5 for scenarios originating in other modules
- Input to methodology and structure of the partial M5 qualitative SIA process tool
- Providing methodology and training for module partners for M5 scenario building
- SWOT-analysis on significant aspects for sustainability performance

### **3.4 Pöyry**

#### **In WP 5.0 Pöyry has worked with the following tasks:**

- Preparation for Eforwood weeks
- Input to annual and intermediate reports
- Input to implementation plan for Mth 36-51
- Commenting the work of other Module 5 partners

#### **In WP 5.2 Pöyry has worked with the following tasks:**

In general, all tasks in the WP related to bio-energy products.

- Topology, flows and definitions of all ToSIA case studies and EU FWC case
- Data collection in all ToSIA case studies and EU FWC case
- Supported ToSIA application development and EFI-GTM with data collection on consumption processes
- Working group participation

#### **In WP 5.3 Pöyry has worked with the following tasks:**

- Consumption scenario development
- Development of response functions for reference futures A1, B2 and scenarios
- Evaluation of scenario implications in M5 for scenarios originating in other modules
- Input to methodology and structure of the partial M5 qualitative SIA process tool
- SWOT-analysis on significant aspects for sustainability performance

### **3.5 CEPI**

CEPI have not been active in M5 during the reporting period

### **3.6 CEI-Bois**

CEI-Bois have not been active in M5 during the reporting period

## **4 Conclusions**

Despite considerable difficulties in ToSIA related tasks, the work in M5 has made good progress against targets and objectives for the reporting period year. FCBA have become fully operational in its new role taking on responsibilities from AIDIMA related to some key tasks, e.g. WP5.2 and Iberia case coordination. Some module internal delays have been experienced, but most of the delays experienced during the period originate outside M5.

Delays largely relate to unforeseen and underestimated difficulties in defining and implementing ToSIA case studies and the EU FWC case. It is expected that M5 can manage to catch up and complete the project tasks within the final months of the project to accomplish the project goals within the 48 Month project period.

The complexity and integrated structure of Eforwood has been clearly recognised during the period. A number of module interface problems have been addressed together with M4, M3 (and M2), and there has been very close collaboration with M1 related to ToSIA. Cross-module work has been realised largely through coordination of and active participation in task forces and cross-module events. Interface issues, particularly with M4, have been discussed and largely solved, although there are still some unsolved problems, mainly as regards wood products. In general wood products seem to be more difficult to handle in the project, and one reason is that the wood-working sector is more SME-based and less consolidated than pulp and paper. The difficulties have largely been overcome by development of some tools to support indirect estimates of indicators.