



**EFORWOOD**

Sustainability Impact Assessment  
of the Forestry - Wood Chain



Project no. 518128

EFORWOOD

Tools for Sustainability Impact Assessment

Instrument: IP

Thematic Priority: 6.3 Global Change and Ecosystems

### **Deliverable D1.1.3**

**Policy data base on FWC SI-relevant policies, and data tables for ToSIA base run on existing relevant policy thresholds for SI indicators, comprehensive data-base of referenced policy document sections to FWC stages and FWC SI indicators as well as thresholds set on indicators**

Due date of deliverable: Month 24 (moved from Month 18)

Actual submission date: Month 22

Start date of project: 011105

Duration: 4 years

Organisation name of lead contractor for this deliverable: University of Natural Resources and Applied Life Sciences, Vienna (BOKU)

Final version

<b>Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)</b>		
<b>Dissemination Level</b>		
<b>PU</b>	Public	X
<b>PP</b>	Restricted to other programme participants (including the Commission Services)	
<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)	

**PD 1.1.3 Policy data base on FWC SI-relevant policies, and data tables for ToSIA base run on existing relevant policy thresholds for SI indicators, comprehensive database of referenced policy document sections to FWC stages and FWC SI indicators as well as thresholds set on indicators.**

AUTHORS:

EWALD RAMETSTEINER

Institute of Forest, Environmental and Natural Resource Policy, Austria

University of Natural Resources and Applied Life Sciences, Vienna – BOKU

HELGA PÜLZL

Institute of Forest, Environmental and Natural Resource Policy, Austria

University of Natural Resources and Applied Life Sciences, Vienna – BOKU

WP 1.1. &

Date: 02 MAY 2007 (draft 1)

**Abstract:**

The purpose of this deliverable is to document the development of a *policy database* for policies relevant to the Forestry-Wood-Chain. The paper shows the structure and preliminary content of the policy database. All relevant documents have been analysed with a view to determine their thresholds that are related to the EFORWOOD Sustainability indicators.

**CONTENT**

1	Introduction/Background .....	3
2	Objectives of the Policy database .....	3
3	Methodology .....	3
4	Results – structure and content of the database .....	4
5	Concluding Remarks .....	8
6	Bibliography .....	8
7	Annex 1 – Draft Set 5 of EFORWOOD Sustainability Indicators .....	9

# 1 Introduction/Background

The purpose of this deliverable is to document the development of a *policy database* for policies relevant to the Forestry-Wood-Chain. The paper shows the structure and preliminary content of the policy database. Relevant documents have been analysed with a view to determine their thresholds that are related to the EFORWOOD Sustainability indicators (see Deliverable D 1.1.1.). A list of the current draft set of sustainability indicators can be found in the annex of this document.

*The current project deliverable will be further elaborated and presented as a Deliverable by month 24.*

## 2 Objectives of the Policy database

The Implementation Plan for months 13-30 of the EFORWOOD project describes the policy database in the following way:

“The data-base of current EU and international policies should contain policies that are deemed to have an effect on SI in the FWC and compile thresholds identified by scientists and set by these policies. This policy data-base will cover all policy areas (biodiversity, trade, forest, climate, and environment), sector-specific policies, and specifications of FWCs (relevant products and production specifications, energy, transport) that are of key relevance to the sustainability performance of the FWC. The data-base will be built up in collaboration with experts from Modules 2-5 and relevant stakeholders through M0. Existing thresholds for the indicators as specified through legislation or international commitments will be identified through a detailed review and screening of existing EU and international policies, to be used in the ToSIA base runs.” (Implementation Plan 2007: 39)

Thus a Policy Database should be generated that serve the needs of the Tool for Sustainability Assessment (ToSIA) that is currently being elaborated in the context of the EFORWOOD project. The Policy Database will contain relevant legislation and policy documents that relate to the Forestry-Wood-Chain and thus to the EFORWOOD Sustainability Indicators.

## 3 Methodology

All relevant European and international legislative and policy documents relevant to the Forestry-Wood-Chain as well as to the EFORWOOD Sustainability Indicators are to be systematically included in the Policy database. For identifying all relevant documents a three step-approach will be followed:

### Step 1) Identification and analysis of relevant documents via the web

For this reason the homepage of the European Union is to be screened with a view to identify all relevant legislative texts (via EUROLEX) as well as all relevant policy documents (via individual homepages of

relevant General Directorates). Furthermore policy documents generated in the European context (e.g. Ministerial Conference on the Protection of Forests in Europe) and in the international context (e.g. United Nations Forum on Forests) are to be analysed and included in the policy database if deemed relevant. Besides including the relevant documents in the database, all documents are to be analysed with a view to determine (quantitative and qualitative) thresholds that relate to the EFORWOOD Sustainability Indicators. Those thresholds will be systematically included in the database.

#### Step 2) Identification and analysis of relevant documents together with members of Modules 2 to Modules 5 of the EFORWOOD project

For the further identification and analysis of relevant documents members of the Modules 2, 3, 4 and 5 of the EFORWOOD project will be contacted and asked for the provision of relevant documentation as well as for providing information on (possible) thresholds that relate to the EFORWOOD Sustainability Indicators.

#### Step 3) Identification and analysis of relevant documents together with stakeholders

Stakeholders will be contacted and asked for their input regarding information on documents as well as on thresholds that those documents contain.

*Step 1 has nearly been concluded, while Step 2 and Step 3 need to be taken up within the upcoming months.*

## **4 Results – structure and content of the database**

A database with a web-interface has been programmed using the software “K-context”. The Policy database is thus web-based and can be used by a multiple number of users. The database can be accessed at [www.eforwood.at](http://www.eforwood.at) (see Graph 1). So far only some members of the Work Package 1.1 of the EFORWOOD Project have gained access rights as those are in the process of including data.

All data can be exported into XML or Excel Format.

Graph 1: Login at [www.eforwood.at](http://www.eforwood.at)



The database contains four tabs, namely tab 1 “document”, tab 2 “Indicators”, tab 3 “Indicator use” and tab 4 “thresholds”.

Under tab 1 “document” all relevant documents (legislation and policy documents) are stored in the database (see graph 2). Those documents can be directly accessed in the database. They are classified according to the following criteria:

- Status of the document (in force or not in force)
- Type of legislation (e.g. decision, regulation, directive, etc.)
- Type of policy document (e.g. action programme, action plan, working programme, implementation report, policy strategy, etc.)
- Organisation that issued the document (e.g. European Union, United Nations Forum on Forests etc.)
- Year when the document was issued
- Geographical scope (e.g. global, European, national, provincial, municipal)
- Date of inclusion
- Inclusion by whom (author)
- Document itself (word, excel, pdf etc. possible)
- Reference number of the document

Graph 2: Tab 1 “document”

EFORWOOD Publ, Helga LOGOUT

Document Indicators Indicator Use Targets/Thresholds

New Search List Refresh Check All Export Additional Toolbar Indicators

Show Search XML Import XML Print selection

Document Document (400) 10 Entries/Page

0 selected Page 1 / 40

Action	Reference number	Title	Status	Type of legislation	Type of policy document	Organisation	Year	Geographical scope	Media File	Created on
→	00/0022	Commission Decision on the allocation of quantities of controlled substances allowed for essential uses in the Community in 2000 under Council Regulation 94/3093 on substances that deplete the ozone layer	In force	Decision (EU)			2000			05.01.2007 14:23
→	00/0053	Directive of the European Parliament and of the Council on end-of-life vehicles	In force				2000			05.01.2007 14:23
→	00/0076	Directive of the European Parliament and of the Council on the incineration of waste	In force				2000			05.01.2007 14:23
→	00/0334	Commission Regulation amending Regulation 99/1547 as regards the control procedures to apply to shipments of certain types of waste to Malaysia	In force				2000			05.01.2007 14:23
→	00/0340	Council Decision concerning the approval, on behalf of the Community, of the next Annex V to the Convention for the North-East Atlantic on the protection and conservation of the ecosystems and biological diversity of the maritime area and corresponding Appendix 3 (OSPAR Convention)	In force				2000			05.01.2007 14:23
→	00/0354	Commission Regulation amending Regulation 99/1547 as regards the control procedures to apply to shipments of certain types of waste to China	In force				2000			05.01.2007 14:23
→	00/0413	Commission Decision modifying Decision 98/94 establishing the ecological criteria for the award of the Community eco-label to tissue paper products	In force				2000			05.01.2007 14:23
→	00/0479	Commission Decision on the implementation of a European pollutant emission register (EPER) according to Article 15 of Council Directive 96/61/EC concerning integrated pollution prevention and control (IPPC)	In force				2000			05.01.2007 14:23
→	00/0532	Commission Decision replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste	In force				2000			05.01.2007 14:23
→	00/0541	Commission Decision on criteria for assessing national plans according to Article 6 of Council Directive 99/13/EC	In force				2000			05.01.2007 14:23

0 7 8 9 C D W Page 1 / 40

Under tab 2 “Indicators” all indicator names (see currently EFORWOOD Sustainability Indicator Draft Set 5) are stored. The indicator classes, subclasses as well as those indicators that have been selected for the ToSIA are stored in the database (see Graph 3).

Graph 3: Tab 2 “Indicators”

EFORWOOD Publ, Helga LOGOUT

Document Indicators Indicator Use Targets/Thresholds

New Search List Refresh Check All Export Additional Toolbar Indicators

Show Search XML Import XML Print selection

Indicators Indicators (20)

0 selected Page 1 / 2

Action	Title
→	(01) Gross value added and gross domestic product: Gross value added (GVA) at factor cost and...
→	(02) Production costs: Cost of inputs of raw material, labour, energy, corporate tax and...
→	(03) Trade Balance: Imports and exports of wood and products derived from wood
→	(04) Resource / material use: Use of resources (including wood, recovered material, other material)
→	(05) Enterprise structure: Number of enterprises and forest holdings classified by size classes...
→	(06) Investment and Research & Development: Investment (gross fixed capital formation) and R&D...
→	(07) Innovation: New products and new technological processes
→	(08) Total Production: Production of marketed goods and services
→	(09) Employment: Number of persons employed classified by gender, age class and education
→	(10) Wages and salaries: Wages and salaries (gross earnings) classified by gender and type of...
→	(11) Occupational safety and health: Frequency of occupational accidents and occupational diseases
→	(12) Education and Training: Education and training expenditure per employee as % of turnover...
→	(13) Energy generation and use: Energy generation (from renewables) and energy use classified by...
→	(14) Greenhouse gas balance: Greenhouse gas balance including greenhouse gases uptake and...
→	(15) Transport: Transport distance and volume of freight per mode of transport
→	(16) Water: Water use classified by origin and class
→	(17) Forest resources: Area of forest and other wooded land and related growing stock classified...
→	(18) Recycling and recovery: Recycling and recovery of wood products, by-products and waste and...
→	(19) Emissions to soil, water and air: Emissions to soil and water classified by organic...
→	(20) Tree species composition and forest protection status: Area of forest and other wooded land...
→	(21) Corporate responsibility: Consumption of goods and services from third party certified...
→	(22) Generation of waste: Generation of waste classified by type
→	(23) Compliance costs
→	(24) Quality of work
→	(25) Other services to the public including the recreational use of forests

Under tab 3 “Indicator Use” some information on the use of indicators is made available: The list shows which indicators, respectively which sub classes and/or ToSIA classes have been referred to by which document that has been included in the Policy Database (see Graph 4).

Graph 4: Tab 3 “Indicator Use”

Action	Indicator	Indicator class	Corresponds to ToSIA class	Indicator subclass	Corresponds to ToSIA subclass	Document
<input type="checkbox"/>	(01) Gross value added and gross domestic product: Gross value added (GVA) at factor cost and...	1.2. Gross domestic product contribution		total FWC		STRATEGIC OBJECTIVES 2005 – 2009 Europe 2010: A Partnership for European Renewal
<input type="checkbox"/>	(02) Production costs: Cost of inputs of raw material, labour, energy, corporate tax and...	2.1. Average cost in total FWC and by sub-sector		corporate tax	b) other production costs [comprises labour, energy, corporate tax and transport costs] (L12b)	Working together for growth and jobs, A new start for the Lisbon Strategy
<input type="checkbox"/>	(02) Production costs: Cost of inputs of raw material, labour, energy, corporate tax and...	2.1. Average cost in total FWC and by sub-sector		transport	b) other production costs [comprises labour, energy, corporate tax and transport costs] (L12b)	White Paper: European Transport Policy for 2010: time to decide
<input type="checkbox"/>	(02) Production costs: Cost of inputs of raw material, labour, energy, corporate tax and...	2.1. Average cost in total FWC and by sub-sector		energy	b) other production costs [comprises labour, energy, corporate tax and transport costs] (L12b)	An Energy Policy for Europe
<input type="checkbox"/>	(02) Production costs: Cost of inputs of raw material, labour, energy, corporate tax and...	2.1. Average cost in total FWC and by sub-sector		transport	b) other production costs [comprises labour, energy, corporate tax and transport costs] (L12b)	Directive relating to the masses and dimensions of certain categories of motor vehicles and their trailers
<input type="checkbox"/>	(02) Production costs: Cost of inputs of raw material, labour, energy, corporate tax and...	2.1. Average cost in total FWC and by sub-sector		transport	b) other production costs [comprises labour, energy, corporate tax and transport costs] (L12b)	Council Directive laying down for certain road vehicles circulating within the Community the maximum authorized dimensions in national and international traffic and the maximum authorized weights in international traffic
<input type="checkbox"/>	(02) Production costs: Cost of inputs of raw material, labour, energy, corporate tax and...	2.1. Average cost in total FWC and by sub-sector		energy	b) other production costs [comprises labour, energy, corporate tax and transport costs] (L12b)	Directive on restructuring the Community framework for the taxation of energy products and electricity
<input type="checkbox"/>	(02) Production costs: Cost of inputs of raw material, labour, energy, corporate tax and...	2.1. Average cost in total FWC and by sub-sector		energy	b) other production costs [comprises labour, energy, corporate tax and transport costs] (L12b)	Communication on 'Environment 2010: Our future, Our choice' - The Sixth Environment Action Programme
<input type="checkbox"/>	(03) Trade Balance: Imports and exports of wood and products derived from wood					STRATEGIC OBJECTIVES 2005 – 2009 Europe 2010: A Partnership for European Renewal
<input type="checkbox"/>	(04) Resource / material use: Use of resources (including wood, recovered material, other material)	4.3. Use of other materials in total FWC and by sub-sector classified by volume (i.e. chemicals,...	4.3. Volume of material from outside the FWC (not from within the chain) (see L1 4b)			An Energy Policy for Europe
<input type="checkbox"/>	(04) Resource / material use: Use of resources (including wood, recovered material, other material)					EU Forest Action Plan
<input type="checkbox"/>	(04) Resource / material use: Use of resources (including wood, recovered material, other material)	4.1. Use of wood in total FWC and by sub-sector classified by volume	4.1. Volume of wood material from preceding FWC processes			RESOLUTION H1 General Guidelines for the Sustainable Management of Forests in Europe
<input type="checkbox"/>	(04) Resource / material use: Use of resources (including wood, recovered material, other material)	4.1. Use of wood in total FWC and by sub-sector classified by volume	4.1. Volume of wood material from preceding FWC processes			Vienna resolution 5. Climate Change and Sustainable Forest Management in Europe

Under tab 4 “Targets/Thresholds” the database shows all targets and thresholds that have been found in the relevant international and European legislation and policy documents (see Graph 5). The targets and thresholds are classified according to the following criteria:

- Text (full text of the target/ threshold)
- Type (i.e. legally binding, non-legally binding)
- Form (quantitative, quantifiable, non-quantifiable)
- Quantitative target (number of the original text with the measurement unit and the time reference if given)
- In the case of a quantifiable target (increase, decrease, maintain)
- Comments (on the target settings if necessary are included)
- Indicator (current EFORWOOD Indicator that is being referred to)
- Indicator class (current EFORWOOD Indicator class that is being referred to)
- Indicator subclass (current EFORWOOD Indicator subclass that is being referred to)

Graph 5: Tab 4 “Targets / Thresholds”

EFORWOOD

Pülzl, Helga LOGOUT

kontext®

Document Indicators Indicator Use Targets/Thresholds

Search List Refresh Check All Export Additional Toolbar Delete Cut Copy Indicators

Show Search XML Export XML Print selection Show selected

Targets/Thresholds Targets/Thresholds (58) 10 Entries/Page

58 selected Page 1 / 6

Action	Text	Type of Target/Threshold	Form of Target/Threshold	Quantitative Target/Threshold	Quantifiable Target/Threshold	Comment	Indicator	Indicator class	Indicator subclass
<input checked="" type="checkbox"/>	1. Member States may, without prejudice to paragraph 5, apply an exemption or a reduced rate of...	legally binding threshold	non-quantifiable			Applying a reduced rate of taxation on biofuels (including those derived from forest biomass)...	(08) Total Production: Production of marketed goods and services	8.1. Goods (marketed)	
<input checked="" type="checkbox"/>	Article 1 (of the Council Decision, p. 14) The European Economic Community hereby accedes to...	legally binding target	non-quantifiable			For stationary sources, emission factors are expressed in milligrams of NO <sub>2</sub> per normal (0° C),...	(19) Emissions to soil, water and air: Emissions to soil and water classified by organic...	19.3. Emissions to air of non-greenhouse gases (NO <sub>x</sub> , CO, NMVOC, SO <sub>2</sub> ) in the total FWC and by...	
<input checked="" type="checkbox"/>	Article 1 (p. 21) 1. The Contracting Parties shall cooperate within the International...	legally binding target	non-quantifiable			The text is taken from the Convention on the international Commission for the protection of the...	(19) Emissions to soil, water and air: Emissions to soil and water classified by organic...	19.2. Emission to water in total FWC and by sub-sector	
<input checked="" type="checkbox"/>	Article 1 (p. 3) Objective The aim of this Directive is to limit emissions of acidifying...	legally binding target	non-quantifiable				(19) Emissions to soil, water and air: Emissions to soil and water classified by organic...	19.3. Emissions to air of non-greenhouse gases (NO <sub>x</sub> , CO, NMVOC, SO <sub>2</sub> ) in the total FWC and by...	
<input checked="" type="checkbox"/>	Article 1 (p. 3) Purpose and scope The purpose of this Directive is to prevent or reduce...	legally binding target	quantifiable		decrease		(19) Emissions to soil, water and air: Emissions to soil and water classified by organic...	19.3. Emissions to air of non-greenhouse gases (NO <sub>x</sub> , CO, NMVOC, SO <sub>2</sub> ) in the total FWC and by...	
<input checked="" type="checkbox"/>	Article 1 (p. 56) Objective The general aim of this Directive is to define the basic...	legally binding target	non-quantifiable			Regulation 1882/2003 contains a replacement of Article 12 of Directive 96/62/EC concerning the...	(19) Emissions to soil, water and air: Emissions to soil and water classified by organic...	19.3. Emissions to air of non-greenhouse gases (NO <sub>x</sub> , CO, NMVOC, SO <sub>2</sub> ) in the total FWC and by...	
<input checked="" type="checkbox"/>	Article 1 (p. 61) Directive 1999/32/EC is amended as follows: 1. Article 1(2) shall be...	legally binding target	non-quantifiable				(19) Emissions to soil, water and air: Emissions to soil and water classified by organic...	19.3. Emissions to air of non-greenhouse gases (NO <sub>x</sub> , CO, NMVOC, SO <sub>2</sub> ) in the total FWC and by...	
<input checked="" type="checkbox"/>	Article 1 (p.12) 1. This Directive - pursuant to article 6(1) of Directive 76/464/EEC, lays...		quantitative	see Annex I of Directive 1984/491/EEC		The amendment by Directive 1991/692 of 23 December 1991 on standardizing and rationalizing...	(19) Emissions to soil, water and air: Emissions to soil and water classified by organic...	19.2. Emission to water in total FWC and by sub-sector	
<input checked="" type="checkbox"/>	Article 1 (p.21) The purpose of this Directive is to provide for further measures and...	legally binding target	quantifiable		decrease	The amendment by Directive 91/692/EE of 23 December 1991 refers to reporting to the Commission...	(19) Emissions to soil, water and air: Emissions to soil and water classified by organic...	19.3. Emissions to air of non-greenhouse gases (NO <sub>x</sub> , CO, NMVOC, SO <sub>2</sub> ) in the total FWC and by...	
<input checked="" type="checkbox"/>	Article 1 (p.3) Objective The aim of this Directive is to limit emissions of acidifying...	legally binding target	non-quantifiable				(14) Greenhouse gas balance: Greenhouse gas balance including	14.1. Greenhouse gas emissions in total FWC and by sub-sector	

## 5 Concluding Remarks

In the upcoming months the database will be further filled. Documents and related thresholds will be included in the database. In month 24 the preliminary content of the database will be made available in the Deliverable D1.1.3.

## 6 Bibliography

Ramesteiner, E, Pülzl, H, Puustjärvi, E. (2006). Draft FWC indicator set: Detailed review of existing sustainability indicator concepts and sustainability indicator sets of relevance for the FWC, review of potential indicators for selection and their assessment, Deliverable 1.1.1, the EFORWOOD project

EFORWOOD Consortium (2007): Implementation Plan, months 13-30, the EFORWOOD project



## 7 Annex 1 – Draft Set 5 of EFORWOOD Sustainability Indicators

### Draft Set 5 – EFORWOOD Sustainability Indicators

- (01) Gross value added and gross domestic product: Gross value added (GVA) at factor cost and Gross Domestic Product (GDP) contribution
- (02) Production costs: Cost of inputs of raw material, labour, energy, corporate tax and transport costs
- (03) Trade Balance: Imports and exports of wood and products derived from wood
- (04) Resource / material use: Use of resources (including wood, recovered material, other material)
- (05) Enterprise structure: Number of enterprises and forest holdings classified by size classes including ownership of forest and other wooded land
- (06) Investment and Research & Development: Investment (gross fixed capital formation) and R&D expenditure
- (07) Innovation: New products and new technological processes
- (08) Total Production: Production of marketed goods and services
- (09) Employment: Number of persons employed classified by gender, age class and education
- (10) Wages and salaries: Wages and salaries (gross earnings) classified by gender and type of employment
- (11) Occupational safety and health: Frequency of occupational accidents and occupational diseases
- (12) Education and Training: Education and training expenditure per employee as % of turnover classified by gender
- (13) Energy generation and use: Energy generation (from renewables) and energy use classified by origin including the share of self-sufficiency
- (14) Greenhouse gas balance: Greenhouse gas balance including greenhouse gases uptake and emissions from energy use, industrial processes, waste as well as carbon sequestration in woody biomass, in soils of forest and harvested wood products
- (15) Transport: Transport distance and volume of freight per mode of transport
- (16) Water: Water use classified by origin and class
- (17) Forest resources: Area of forest and other wooded land and related growing stock classified by type and by availability of wood supply as well as balance of increment and fellings
- (18) Recycling and recovery: Recycling and recovery of wood products, by-products and waste and share of recycling input
- (19) Emissions to soil, water and air: Emissions to soil and water classified by organic substances, nutrients and hazardous substances and non-greenhouse gas emissions to air
- (20) Tree species composition and forest protection status: Area of forest and other wooded land classified by number of tree species occurring and by forest type and by protection status
- (21) Corporate responsibility: Consumption of goods and services from third party certified sources of sustainable production including from legal origin and enterprises with environmental management systems
- (22) Generation of waste: Generation of waste classified by type

- (23) Compliance costs
- (24) Quality of work
- (25) Other services to the public including the recreational use of forests
- (26) Community participation and communication
- (27) Consumer attitudes on forest management, forestry and forest products
- (28) Use of hazardous chemicals
- (29) Revenue