Overview of UNECE activities on wood energy

Florian Steierer
FORESTS

 Who are we?
 Why do we work on wood energy?
 What do we do?
   Data collection
   Capacity building
   Assessment
   Education
 Where do we go?
Who are we?

Why do we work on wood energy?

What do we do?
- Data collection
- Capacity building
- Assessment
- Education

Where do we go?
Economic Commission for Europe

... Established in 1947, first regional commission of the United Nations

... is a multilateral platform which facilitates greater economic integration and cooperation among its fifty-six member States

... promotes sustainable development and economic prosperity
Regional Scope

The forest in the UNECE region covers:

• 41% of the global total

• 85% certified area

• 60% industrial roundwood
 Who are we?

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 Where do we go?
We collect wood energy data, because...

...wood energy is the most important single source of renewable energy in the world – and in the UNECE;

...wood fuels are important for the forest based sector;

...no reliable data available in harmonized form;

...more details required than total consumption only.
Sources and User of wood for energy

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U1 Power & Heat

S2

U2 Industrial

S1

U3 Residential & U4 Other

S3

U1 Power & Heat
JWEE 2015: wood portfolio

- Unknown: 34%
- Post consumer recovered wood: 9%
- Processed wood based fuel production: 5%
- Woody biomass from forest based industry: 17%
- Primary solid biomass: 35%

- Main activity producer: 19%
- Wood processing industry: 5%
- Residential sector: 83%
- Other sector: 28%
Who are we?

Why do we work on wood energy?

What do we do?
- Data collection
- Capacity building
- Assessment
- Education

Where do we go?
Table IV – main structure

Fully complementary and compatible with the energy questionnaires (IEA/Eurostat)

<table>
<thead>
<tr>
<th>SOURCES</th>
<th>U1 Power &amp; heat</th>
<th>U2 Industrial</th>
<th>U3 Residential</th>
<th>U4 Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1 Direct</td>
<td>DQ</td>
<td>DQ</td>
<td>DQ</td>
<td>DQ</td>
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<tr>
<td>S2 Indirect</td>
<td>DQ</td>
<td>DQ</td>
<td>DQ</td>
<td>DQ</td>
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<tr>
<td>S3 Recovered</td>
<td>DQ</td>
<td>DQ</td>
<td>DQ</td>
<td>DQ</td>
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<tr>
<td>S4 Unspecified</td>
<td>DQ</td>
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</tbody>
</table>
Joint Wood Energy Enquiry

Table I: Availability of the raw material (P+I-E)
Table II: Production of processed wood based fuels (P+I-E)
Table III: Raw material used for wood based fuels production
Table IV: Consumption of wood for energy by sectors and source
31 member states reported wood energy consumption in table IV
## EU4Energy coverage 2005-2015

<table>
<thead>
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<td>Uzbekistan</td>
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</tbody>
</table>

**A:** good dataset. Table IV filled  
**B:** partial dataset. Table IV not filled  
**I:** insufficient data  
**NC:** no capacity  
**-:** no response
Relative share of wood energy sources, 2015

Note: JWEE 12: Austria, Cyprus, Finland, France, Germany, Ireland, Luxembourg, Serbia, Slovenia, Sweden, Switzerland and United Kingdom.
Statistical differences

- Wood energy in JWEE 2015
- Solid biofuels from IEA renewable energy questionnaire

Consumption in PJ

*10 x PJ
### Joint Wood Energy Enquiry

**Introduction**

The UNECE/FAO Forestry and Timber Section, with the encouragement of the Joint FAO/UNEP Working Party on Forest Statistics, and in collaboration with the International Energy Agency (IEA), the Food and Agriculture Organization (FAO) and the European Commission (EC) decided in June 2006 to develop and launch a “Joint Wood Energy Enquiry”.

Wood energy data are often scattered or lost within national energy statistics, making it difficult to assess and evaluate the real role of wood as a renewable source of energy.

The Enquiry aims at improving knowledge and understanding of wood energy consumption and tries to shed light on the potential and future perspective of wood energy in the region.

It collects data of both sources and uses of wood and promotes cooperation between the energy and forest sectors, providing a comprehensive framework on the role of wood energy in Member States.

#### 2015 Joint Wood Energy Enquiry

According to the results of the enquiry (40 MB):

**Situation in 2013**

Overall wood energy accounts for 3.5% of the total primary energy supply (+0.2 compared to 2011) and 38.2% of the renewable energy supply (+0.2) in 26 UNECE region countries in 2013, continuing its role as the leading source of renewable energy. Around 47% of all mobilized woody biomass supply (+7.0) is used for energy purposes. 26 countries: Armenia, Austria, Azerbaijan, Bosnia and Herzegovina, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Iceland, Ireland, Luxembourg, Netherlands, Norway, Republic of Moldova, Serbia, Slovenia, Sweden, Switzerland, the former Yugoslav Republic of Macedonia, the United Kingdom and the United States.

**Main trends 2007-2013**

<table>
<thead>
<tr>
<th>Wood Energy Sources (1000 m³)</th>
<th>S1 Direct</th>
<th>S2 Indirect</th>
<th>S3 Recovered</th>
<th>S4 Unspecified</th>
</tr>
</thead>
<tbody>
<tr>
<td>U1 Power and Heat</td>
<td>20%</td>
<td>38%</td>
<td>39%</td>
<td>3%</td>
</tr>
<tr>
<td>U2 Industrial</td>
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<tr>
<td>U3 Residential</td>
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<tr>
<td>U4 Other</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Wood Energy Uses (1000 m³)</th>
<th>S1 Direct</th>
<th>S2 Indirect</th>
<th>S3 Recovered</th>
<th>S4 Unspecified</th>
</tr>
</thead>
<tbody>
<tr>
<td>U1 Power and Heat</td>
<td>43%</td>
<td>48%</td>
<td>8%</td>
<td>1%</td>
</tr>
<tr>
<td>U2 Industrial</td>
<td></td>
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<tr>
<td>U3 Residential</td>
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<tr>
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#### Data access

Weblink: [http://www.unece.org/forests/jwee.html](http://www.unece.org/forests/jwee.html)
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Why do we work on wood energy?

What do we do?
- Data collection
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- Education

Where do we go?
Workshop on Bioenergy from the Forest Sector - Capacity Building for Information

- 45 participants, 21 countries
- Funded by FAO Forestry Department and IRENA
- Supported by FAO Regional Office Europe and participation from IEA and Energy Community
- Small group work (4)

6-8 December 2016, Budapest
weblink: http://www.unece.org/index.php?id=43908
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Where do we go?
(Market) analysis

Weblink: http://www.unece.org/forests/publications.html
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Available in Albaninan, English (Russian subtitle), Georgian, Romanian and Turkish. Serbian is under preparation
Weblink: https://www.youtube.com/watch?v=9z-EGVeKTrc
Fourth Meeting of the UNECE/FAO Team of Specialists on Wood Energy (17 - 19 May 2017), United States, North Carolina, Durham

Main topic discussed: Chapters of the publication on wood energy

More heat with less wood

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Education

+14,000 views in 2 years
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The way ahead

• 24 May 2018 Thematic session on residential heating (http://www.unece.org/index.php?id=45535)

• Issue JWEE 2017

• Further improve cross-sectoral cooperation

• Work with your countries

• Build more capacities
The Global Framework

Sustainable Development Goals - SDGs
Thank you!