A fundamental approach on collecting information to answer the question: How much wood is burnt?

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Content

1. Introductory remark
2. Segmentation of the wood burning sector
3. Data collection
4. Funding
Introductory remark

The beginnings

- Start in the early 2000s
- Project to cover the wood consumption of the forest industry
- Extended to the energy sector
Segmentation of the sector

Basic approach

- Private households
- Small-scale firing plants (< 1MW)
- Large-scale firing plants (≥ 1MW)
Data collection

Private Households

- Representative survey of population
- Particular focus on:
  - Residential units (not households!)
  - Assortments:

<table>
<thead>
<tr>
<th>Fuel wood assortments (2010)</th>
<th>1,000 m³</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Split logs (forest)</td>
<td>21,935</td>
<td>64,7%</td>
</tr>
<tr>
<td>Split logs (garden)</td>
<td>1,937</td>
<td>5,7%</td>
</tr>
<tr>
<td>Landscaping residues</td>
<td>0,698</td>
<td>2,1%</td>
</tr>
<tr>
<td>Bark</td>
<td>1,842</td>
<td>5,4%</td>
</tr>
<tr>
<td>Timber residues (Private &amp; Sawmills)</td>
<td>2,857</td>
<td>8,4%</td>
</tr>
<tr>
<td>Wood briquettes</td>
<td>1,426</td>
<td>4,2%</td>
</tr>
<tr>
<td>Wood pellets</td>
<td>1,627</td>
<td>4,8%</td>
</tr>
<tr>
<td>Chips / Saw dust</td>
<td>0,209</td>
<td>0,6%</td>
</tr>
<tr>
<td>Other</td>
<td>1,388</td>
<td>4,1%</td>
</tr>
<tr>
<td>Total</td>
<td>33,919</td>
<td>100,0%</td>
</tr>
</tbody>
</table>

Source: Mantau (2012)
Data collection

Small-scale firing plants (< 1 MW)

- Thermal firing capacity less than 1 megawatt (MW)
- Annual statistics of Federal Association of Chimney Sweepers differentiated by:
  - Type of measurement (first – periodic – repeated)
  - Thermal capacity (<50 / 50-100 / … / 150-500 / >500 kW)
  - Fuel
- Sample survey
Data collection

Large-scale firing plants (≥ 1 MW)

- Thermal firing capacity ≥ 1 megawatt (MW)
- Annual statistics of Federal Association of Chimney Sweepers differentiated by:
  - Thermal capacity >500 kW
  - Fuel
- Sample survey ↔ Full survey
- Special issue: black liquor
Data collection

Surveys of firing plants (full survey)

- Enquiry of all potential addresses and address sources
- Consolidation of address stock
- Questionnaire:
  - Does the plant use wood?
  - Verification of plant location
  - Thermal firing capacity / legal permission
  - Annual consumption (tons) and assortments
- Mail and subsequent telephone survey
- Target persons: operators of the plants
Funding

First studies (early 2000s) partly funded by:
- German Timber Promotion Fund (HAF)
- German Pulp and Paper Association (VDP)

Actual wood resource monitoring:
- Federal Ministry of Agriculture
- Associations of the forest industry and related sectors

Developed and carried out by:
→ Prof. Udo Mantau and his team, University of Hamburg
Thank You!

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