

# Working party on Forest Economics and Statistics

**FAO/UNECE**

**3rd May, 2006**

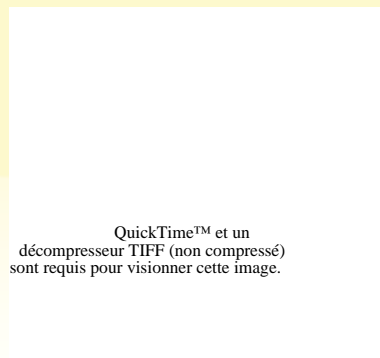
**Frédéric Tuillé**



# About Observ'ER

- Non for profit association
- Founded in 1980
- Statutory mission : promoting RES through better knowledge of the markets

## → Publishing activity



## → Monitoring activity



EurObserv'ER barometers

# EurObserv'ER Consortium

The EurObserv'ER project is supported by



## Project Leader

Observ'ER (Observatoire des énergies renouvelables - France)

## Co-contractants

- Erec (European renewable energy council - Belgium) - *market survey*
- Eurec Agency (Belgium) - *Policy survey*
- "Jozef Stefan" Institute - Energy Efficiency Centre (Slovenia) - *energy data collection*
- Eufores (European forum on renewable energy source - Spain) - *communication*

# Context and objectives

- **Since 1999 :**
  - 50 barometers done
- **Objectives :**
  - Measure and analyse the progress of RES in the E.U.
    - ✓ Wind power
    - ✓ PV
    - ✓ Biofuels
    - ✓ Biogas
    - ✓ Solar thermal
    - ✓ Wood energy
    - ✓ SHP or Geothermal
  - Evaluate the current trend with respect to the EU objectives
  - Disseminate the results

# A particular framework for data collection

- High reactivity: data on year  $n$  to be collected during year  $n+1$
- Aim is to give an idea of trends, not consolidated and exact figures
- Quantitative data **and** qualitative analysis
- All 25 member states

The main questions :

- Who counts what and when?
- Who has the most reliable information?

→ **Best available information**

# Wood energy sector

- **Statistics needed on energy production**
  - Consumption of primary energy from wood
  - Gross electricity generation from wood energy
- **Information about the sector growth**
  - Market survey about yearly capacity installed
  - Evaluation of the total capacity installed
  - Description of the industrialists
  - Support scheme
  - ...
- **Data sources**
  - National energy agencies
  - IEA
  - Ministry departments
  - Consultancies
  - TSO

# Wood energy sector

## Example of statistic indicators

### T1 CONSOMMATION D'ÉNERGIE PRIMAIRE PROVENANT DU BOIS- ÉNERGIE DANS LES PAYS DE L'UNION EUROPÉENNE EN 2004 (EN MILLIONS DE TEP)

#### CONSUMPTION OF PRIMARY ENERGY FROM WOOD ENERGY IN THE EUROPEAN UNION IN 2004 (IN MILLION OF TOE)

(en Mtep)	2003	2004 (estimation)	Croissance en %
France/France	9,002	9,180	2,0
Suède/Sweden	7,927	8,260	4,2
Finlande/Finland	6,903	7,232	4,8
Allemagne/Germany	5,191	6,263	20,7
Espagne/Spain	4,062	4,107	1,1
Pologne/Poland	3,921	3,927	0,2
Autriche/Austria	3,222	3,499	8,6
Portugal/Portugal	2,652	2,666	0,5
Lettonie/Latvia	1,240	1,300	4,8
Royaume-Uni/United Kingdom	1,084	1,231	13,6
Danemark/Denmark	1,071	1,113	3,9
Italie/Italy	1,015	1,083	6,7
Rép. tchèque/Czech Rep.	0,895	1,007	12,5
Grèce/Greece	0,909	0,927	1,9
Hongrie/Hungary	0,777	0,805	3,6
Pays-Bas/Netherlands	0,561	0,720	28,2
Lituanie/Lithuania	0,672	0,697	3,7
Slovénie/Slovenia	0,422	0,422	0,0
Belgique/Belgium	0,346	0,382	10,4
Slovaquie/Slovakia	0,300	0,303	1,1
Estonie/Estonia	0,150	0,150	0,0
Irlande/Ireland	0,145	0,144	-0,6
Luxembourg/Luxembourg	0,015	0,015	0,0
Chypre/Cyprus	0,006	0,006	0,0
Malte/Malta	0,000	0,000	-
<b>Total Europe à 25/E.U. 25</b>	<b>52,488</b>	<b>55,439</b>	<b>5,6</b>

EUROSERV'ER 2005

# Wood energy sector

## Example of economical indicators

### T3 INDUSTRIELS DU SECTEUR BOIS-ÉNERGIE EN 2004 WOOD ENERGY SECTOR INDUSTRIALISTS IN 2004

SOURCE : EUR-OBSERV'ER 2005

Entreprise Company	Pays Country	Type de produit Type of product	Gamme de puissance Power Range (kW)	Chiffre d'affaires 2004 Turnover 2004 (millions d'euros)
Kvaerner Power	Norvège/Suède Norway/Sweden	Solutions for municipalities & industrial sites, i.e. for large buildings & (small) DH systems	20 – 300 MWth 50 – 600 MWth up to 550 MWe	350
Fröling Heizkessel und Behälterbau GesmbH	Autriche/Austria	Boilers & burners for homeowners & small enterprises	5 – 1 000 kWth	62
Wärtsilä Biopower Oy	Finlande/Finland	Solutions for municipalities & industrial sites, i.e. for large buildings & (small) DH systems	3 – 17 MWth up to 5,3 MMe	30,5
HDG Bavaria GmbH	Allemagne/Germany	Boilers & burners for homeowners & small enterprises	10 – 200 kWth	23
KWB	Autriche/Austria	Boilers & burners for homeowners & small enterprises	10 – 150 kWth	20,5
ETA Heiztechnik GmbH	Autriche/Austria	Boilers & burners for homeowners & small enterprises	20 – 90 kWth	14
Ökofen Heiztechnik GmbH	Autriche/Austria	Boilers & burners for homeowners & small enterprises	2 – 64 kWth	13
TPS Termiska Processer AB	Suède/Sweden	Boilers & burners, specialty in retrofit, complete solution for DH	up to 25 MWth/ 300 – 12 000 kWth	11,2
Thermia Oy	Suède/Finlande Sweden/Finland	Boilers & burners for homeowners & small enterprises	10 – 3 000 kWth	10
Schmid AG Holzfeuerungen	Suisse/Switzerland	Boilers & burners for homeowners & small enterprises	15 kWth – 20 MWth	9
Weiss France	France/France	Solutions for municipalities & industrial sites, i.e. for large buildings & (small) DH systems	0,5 – 20 MWth	6,2
Nolting	Allemagne/Germany	Boilers & burners for homeowners & small enterprises	10 – 3 000 kWth	3,5



# Energy production monitoring

## Problems encountered

- Some changes in statistical series for countries
- Different national nomenclatures (according to the countries, agricultural residues are included or not in the solid biomass topic)
- TSOs do not all publish technology specific figures
- Few figures about heat production (as final energy) - Mix of wood burn for heat production and heat production from wood energy

# Market and total capacity monitoring

## Problems encountered

- Sectors are mostly monitored through the support they are given
- Figures of supported and not installed capacities
- Problem of years 1985-1995 : difficulty to piece together total installed capacities

## Futur improvements for wood energy barometers

- Include information about CHP (biomass)
- Use energetic factors of wood used to make crossed analyses
- Include information about the origin of the wood used

[www.energies-renouvelables.org](http://www.energies-renouvelables.org)