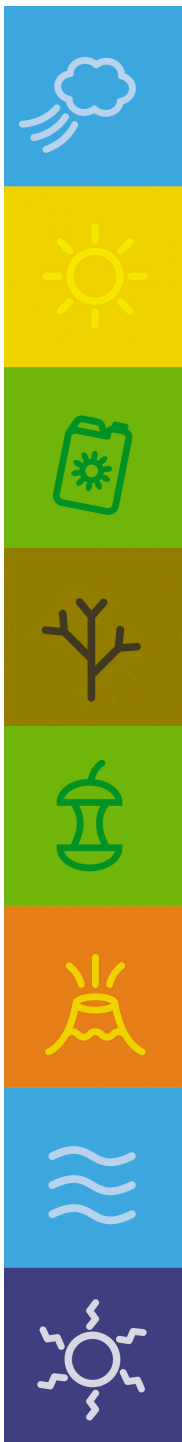


# Data comparison between Eurostat and EurObserv'ER

January 2010



## Comparison EurObserv'ER indicators/Eurostat statistics



The purpose of this work is to compare two kinds of surveys:

- Eurostat statistics: aggregated data from national statistical offices
- EurObserv'ER indicators: very reactive survey of the most updated trends in RES sectors

This comparison was carried out in January 2010 and covers 2007 figures : the following slides compare the most updated figures provided by Eurostat on RES at that time (for year 2007) and the data for the same year published in the 2008 EurObserv'ER barometers (thematic and overview)





## Comparison EurObserv'ER indicators/Eurostat statistics

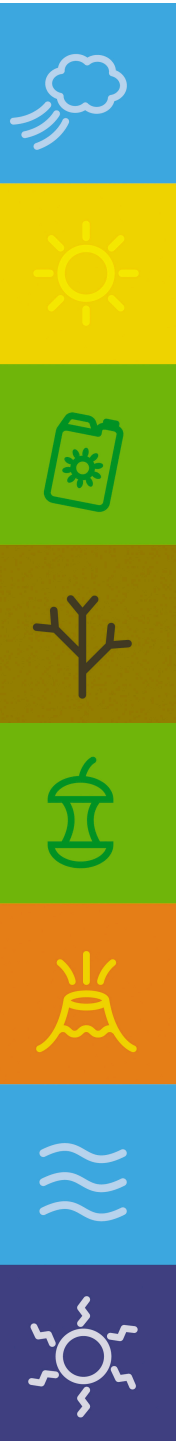


The Eurostat statistics used in the following tables correspond to the aggregation of countries in the EU 27, EU 25, EU 15 and EU 10.



EU 10 corresponds to the 10 new member countries introduced in 2005 (Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia)





## Comparison EurObserv'ER indicators/Eurostat statistics



For electricity production: below a discrepancy of 5 % (for capacity installed and electricity generated), accuracy will be considered high.

For heat and primary energy production: below a discrepancy of 10 % (for capacity installed and/or energy generated), accuracy will be considered high.

Beyond these thresholds, the differences will be analysed by the consortium in order to find out the explanations of the gap

## Capacity installed

- **Small hydropower plants**
- **PV**
- **Geothermal electricity generation**
- **Windpower**
- **Solar thermal collectors**



## Comparison EurObserv'ER indicators/Eurostat statistics



### Small hydropower plants capacity installed (in MW) in 2007



	Eurostat	EurObserv'ER	
EU 27	12 333	12 791	<b>3,7 %</b>
EU 25	11 793	12 241	
EU 15	10 992	11 433	
EU 10	801	808	

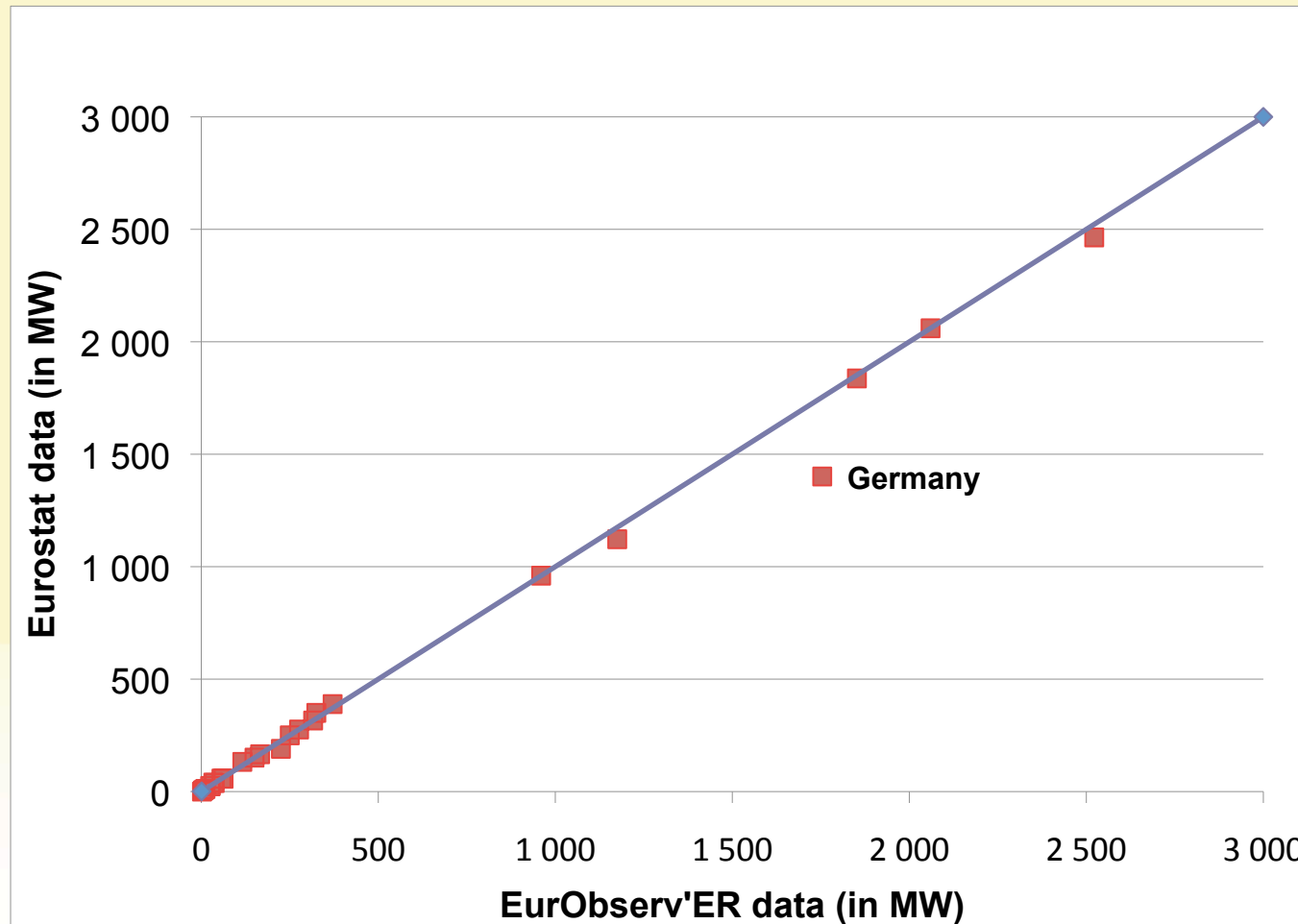
Data are very close except for Germany



## Details of the comparison



### Small hydropower plants capacity installed



For this country, data comes from German hydraulic experts and not from Statistisches Bundesamt Destatis who communicate the data to Eurostat



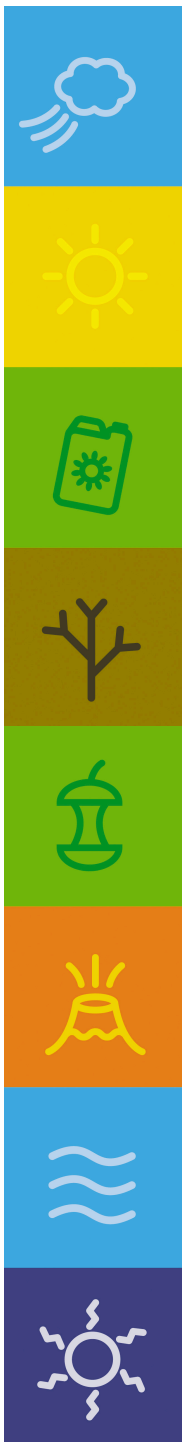
## Comparison EurObserv'ER indicators/Eurostat statistics



### PV capacity installed (in MW) in 2007

	Eurostat	EurObserv'ER
EU 27	4 753	4 689,5
EU 25	4 749	4 689,5
EU 15	4 749	4 682,8
EU 10	4	6,7

**1,3 %**

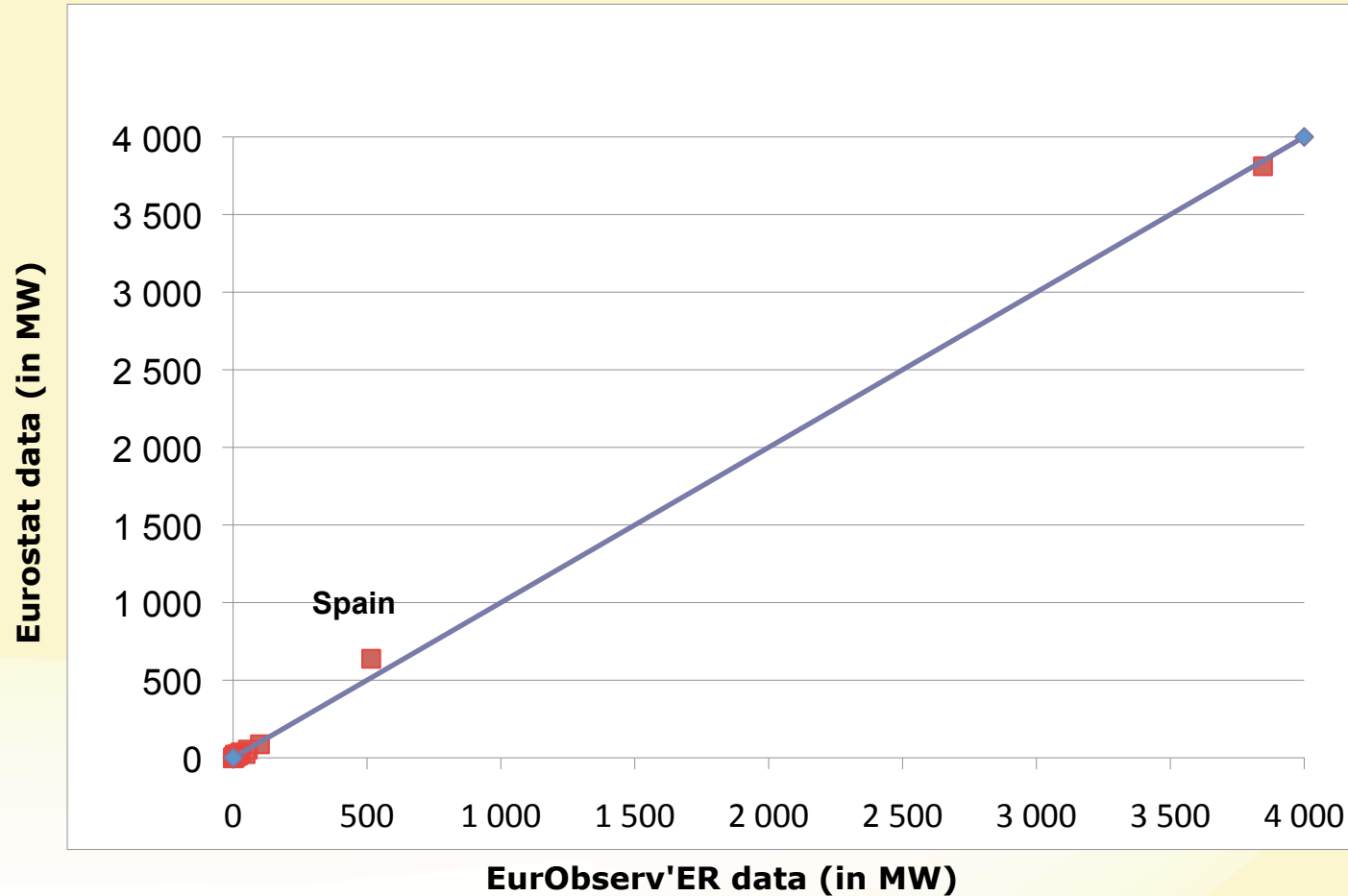






## Details of the comparison

### PV capacity installed



- Main difference comes from Spain where the market has risen sharply during this year. EurObserv'ER data comes from preliminary data of IDAE. This data was consolidated afterwards with additional capacities that had not been.



## Comparison EurObserv'ER indicators/Eurostat statistics



### Geothermal installed capacity for electricity generation (in MW) in 2007

	Eurostat	EurObserv'ER
EU 27	698	856,8
EU 25	698	856,8
EU 15	698	856,8
EU 10	0	0

- For Italy (the main European country involved), EurObserv'ER used official data from Terna (gross maximum capacity). Eurostat uses net installed capacity.
- French overseas departments are not included in Eurostat figures

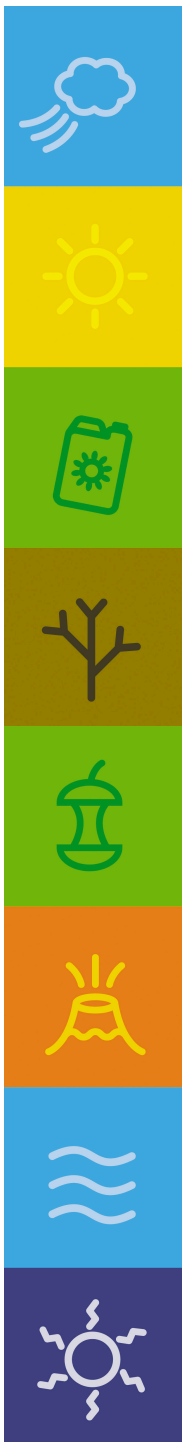
## Comparison EurObserv'ER indicators/Eurostat statistics



### Windpower capacity installed (in MW) in 2007

	Eurostat	EurObserv'ER
EU 27	56 270	56 347
EU 25	56 237	56 307
EU 15	55 625	55 731
EU 10	612	576

**0,1 %**

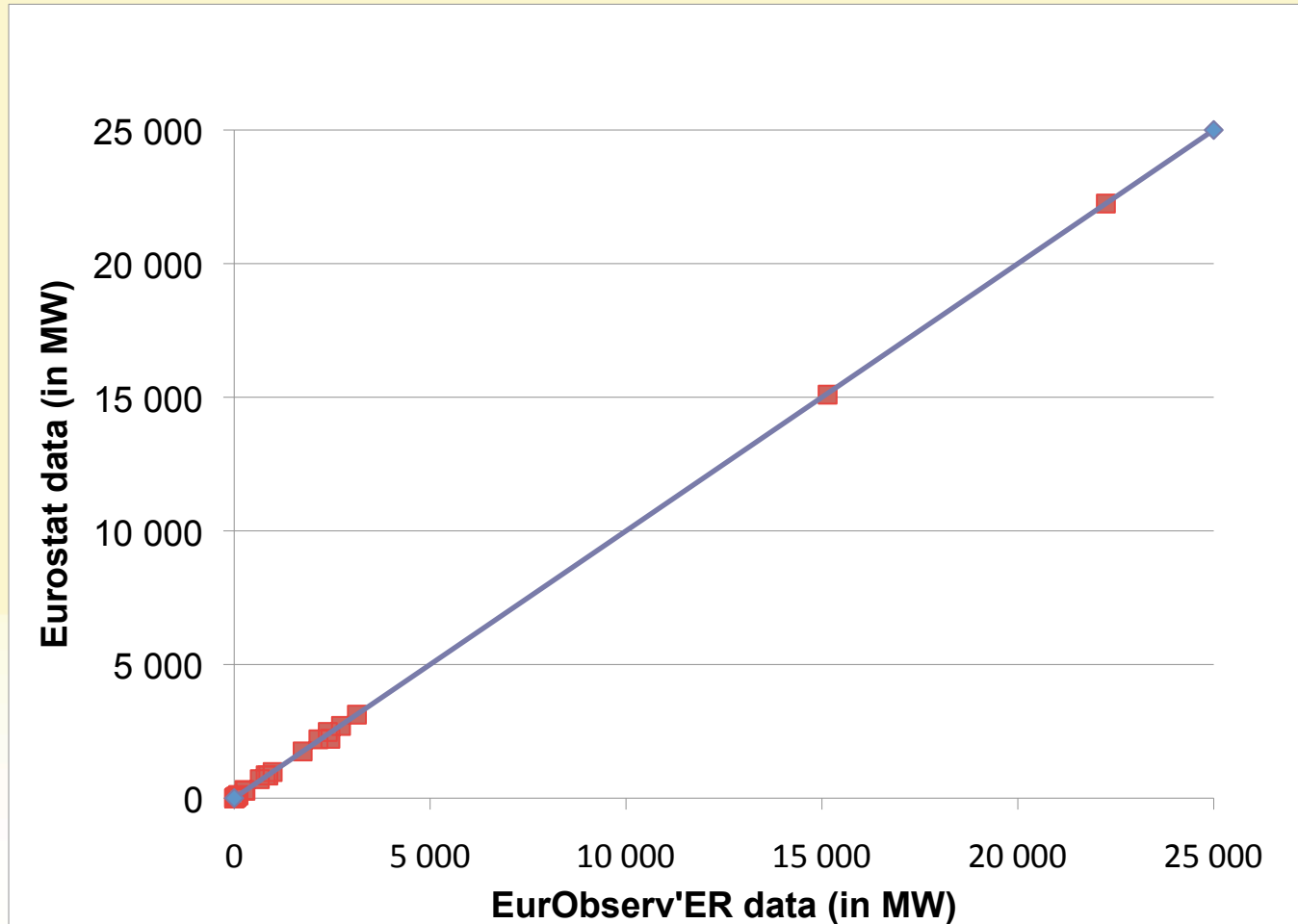




## Details of the comparison



### Windpower capacity installed



## Comparison EurObserv'ER indicators/Eurostat statistics



### Solar thermal capacity installed (in 1000 m2) in 2007

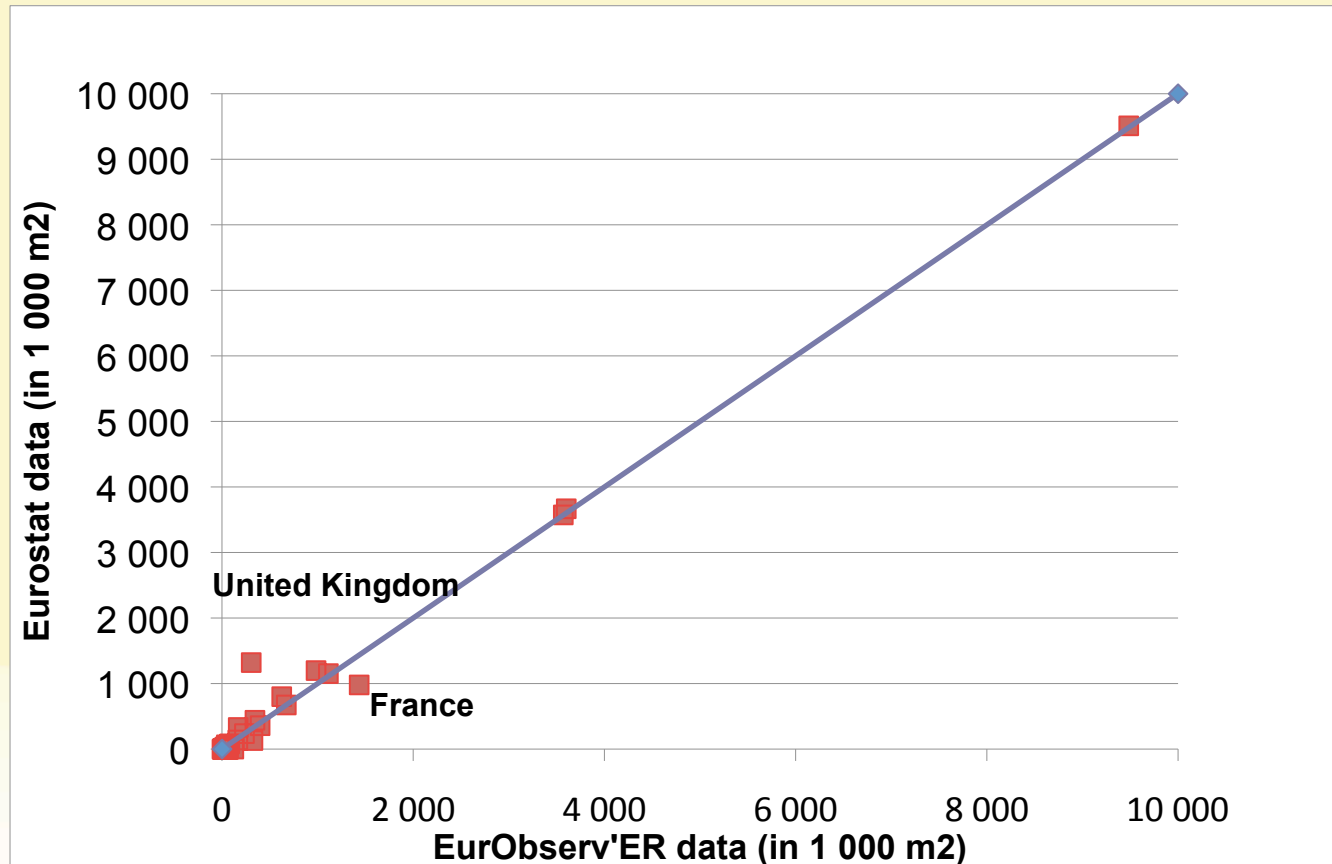
	Eurostat	EurObserv'ER	
EU 27	24 708	23 928	<b>3,1 %</b>
EU 25	24 708	23 803	
EU 15	23 397	22 325	
EU 10	1 311	1 478	



## Details of the comparison



### Solar thermal capacity installed



- EurObserv'ER figures include oldest solar panels decommissioning. If the country doesn't use a decommissioning rule, EurObserv'ER uses 12 years for unglazed panel and 20 years for glazed panel.
- Main difference comes from UK. EurObserv'ER data concerning the total solar thermal capacity in operation for UK came from our internal solar thermal database, annual market data coming from Solar Trade Association or ESTIF.



## Energy production

- **Primary energy from biomass**
  - From solid biomass
  - From biogas
  - From municipal solid wastes
- **Primary energy from solar energy**
- **Primary energy from geothermal sector**
- **Electricity generation from windpower**
- **Electricity generation from hydropower**
- **Biofuels production**
- **Primary energy from RES**

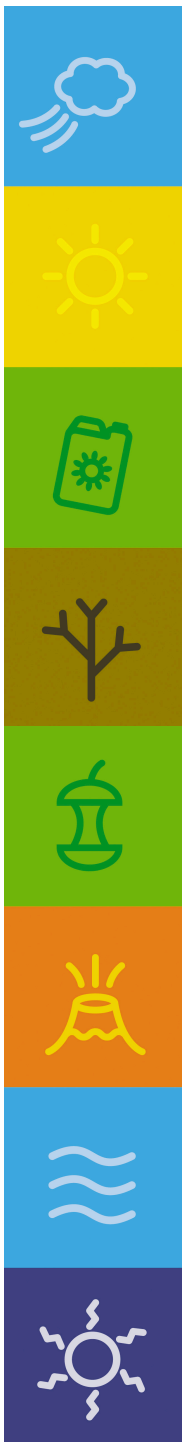
## Comparison EurObserv'ER indicators/Eurostat statistics



### Primary energy from solid biomass (ktoe) in 2007

	Eurostat	EurObserv'ER
EU 27	68 218	66 358
EU 25	64 205	62 279
EU 15	52 643	49 961
EU 10	11 563	12 318

**2,7 %**



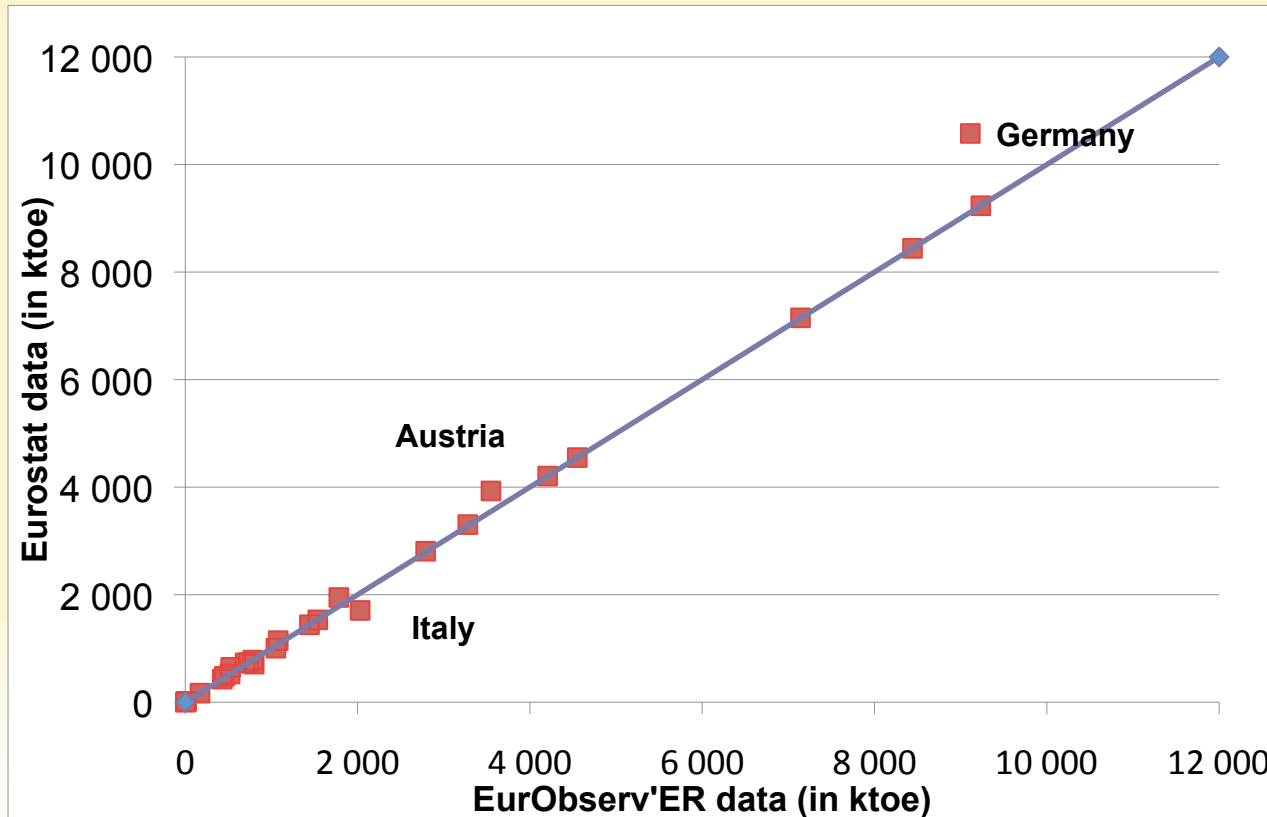




## Details of the comparison



### Primary energy from solid biomass



Main differences are for Germany, Austria and Italy

These three countries have done late statistical corrections on their national figures

## Primary energy from wastes (ktoe) in 2007

	Eurostat (all municipal waste)	EurObserv'ER (only renewable municipal waste)
EU 27	13 415	6 144
EU 25	13 415	6 144
EU 15	13 129	6 017
EU 10	286	127

- Eurostat figures cover primary energy **from renewable and non-renewable waste**.
- EurObserv'ER figures are only covering the energy from **renewable municipal solid waste**. The common rate to identify renewable part is 50 % of the total primary energy produced

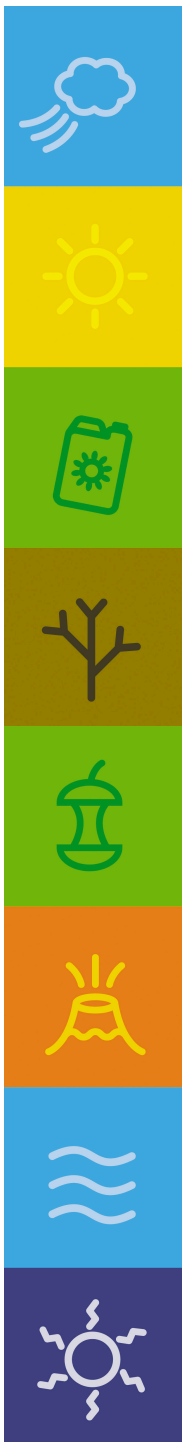
## Comparison EurObserv'ER indicators/Eurostat statistics



### Primary energy from biogas (ktoe) in 2007

	Eurostat	EurObserv'ER
EU 27	5 737	5 901
EU 25	5 735	5 901
EU 15	5 544	5 712
EU 10	191	189

**2,8 %**

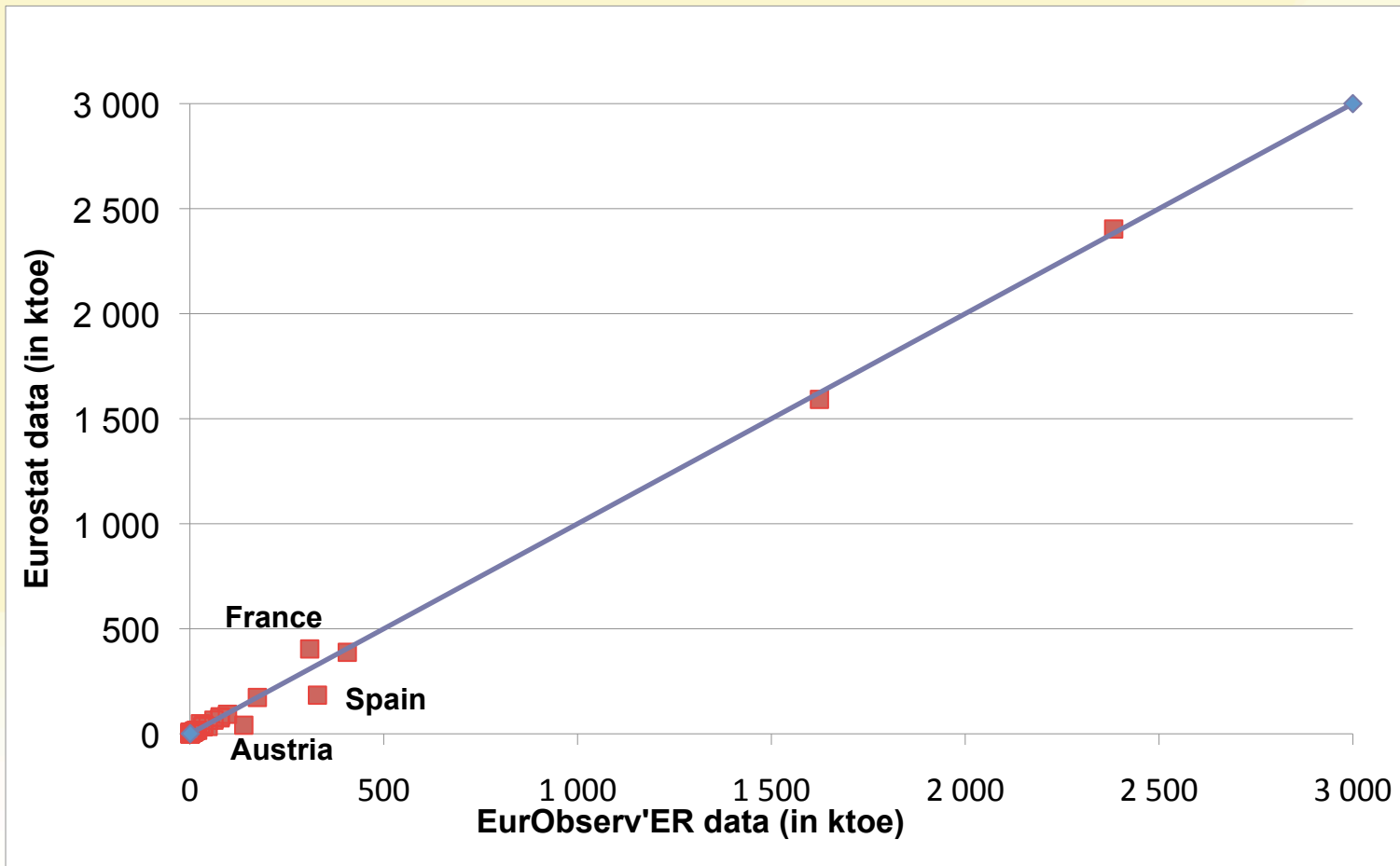




## Details of the comparison



### Primary energy from biogas



Main difference came from Spain. EurObserv'ER data comes from preliminary data of IDAE. France has consolidated their data.

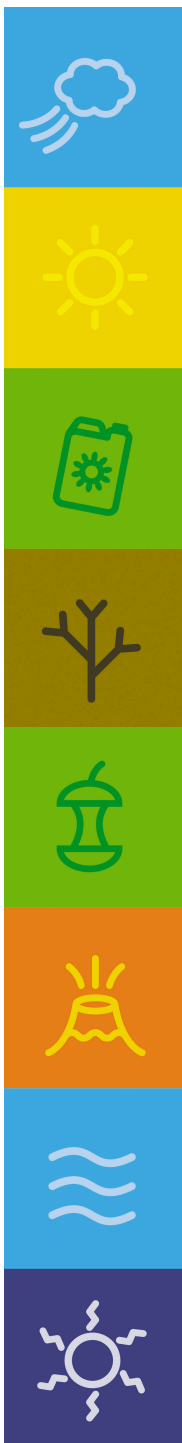
# Comparison EurObserv'ER indicators/Eurostat statistics



## Biofuels consumption (in ktoe) in 2007

	<b>Eurostat Cons. for transport</b>	<b>EurObserv'ER</b>
EU 27	7 878	7 694
EU 25	7 835	7 581
EU 15	7 523	7 357
EU 10	312	224

**2,3 %**

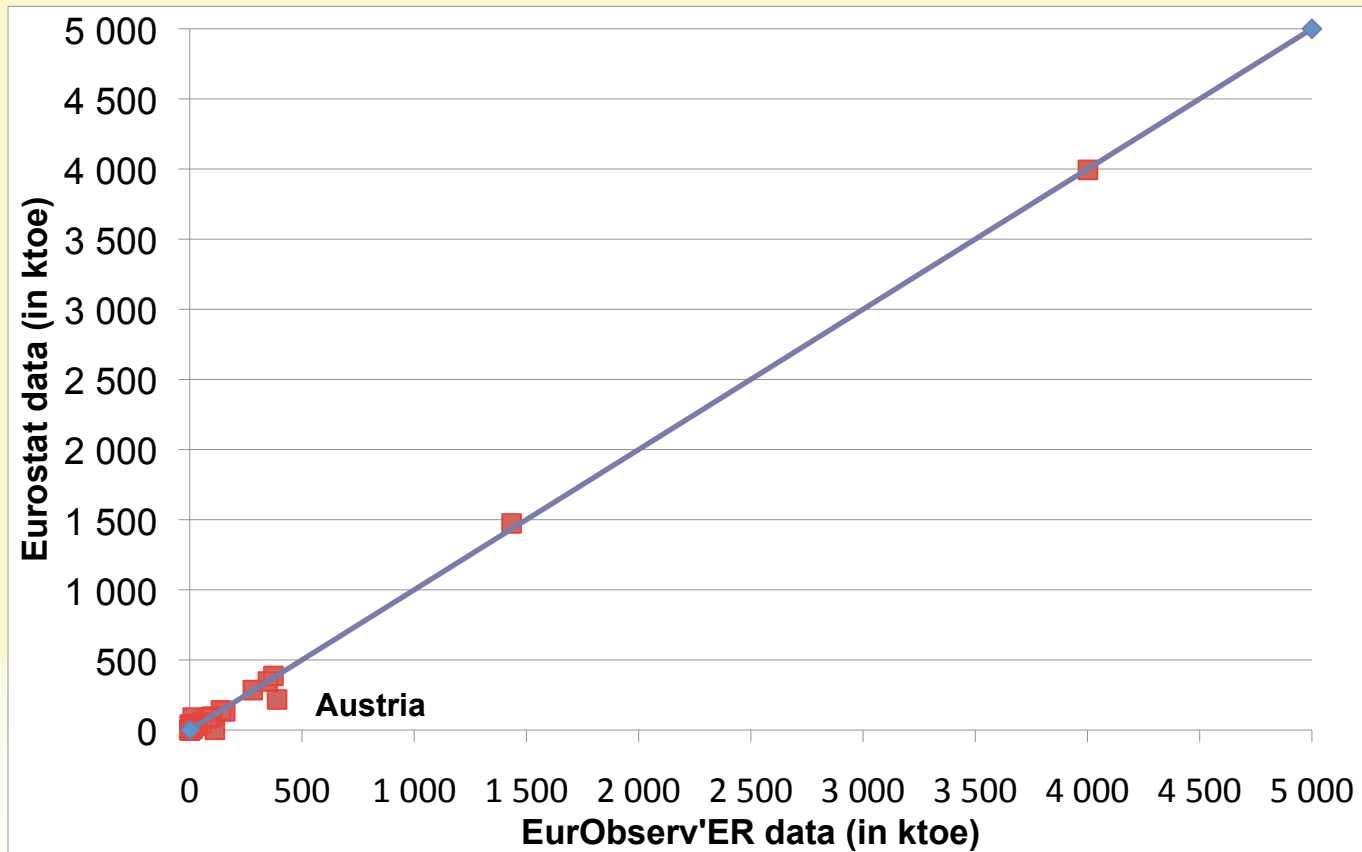




## Details of the comparison



### Biofuels consumption



Main difference came from Austria. EurObserv'ER data is a preliminary figure of Statistics Austria. Netherlands estimations were not available at the date of publication.

## Comparison EurObserv'ER indicators/Eurostat statistics



### Electricity from geothermal sector (GWh) in 2007

	Eurostat	EurObserv'ER	
EU 27	5 773	5 845	<b>1,2%</b>
EU 25	5 773	5 845	
EU 15	5 773	5 845	
EU 10	-	-	

- EurObserv'ER statistics include French overseas departments (not included in Eurostat figures)

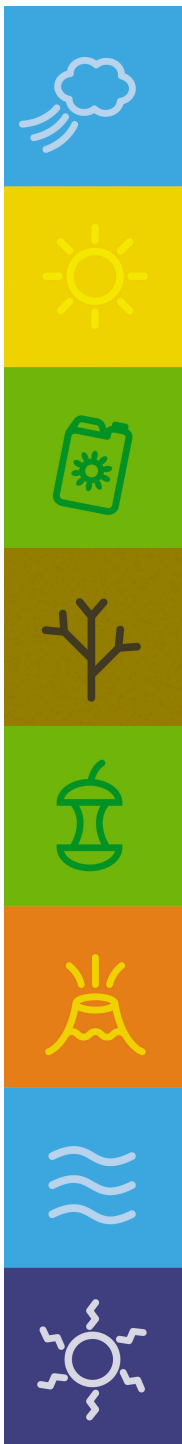
## Comparison EurObserv'ER indicators/Eurostat statistics



### Electricity generation from windpower (GWh) in 2007

	Eurostat	EurObserv'ER
EU 27	104 259	98 005
EU 25	104 259	97 951
EU 15	103 194	97 056
EU 10	1 015	895

6 %



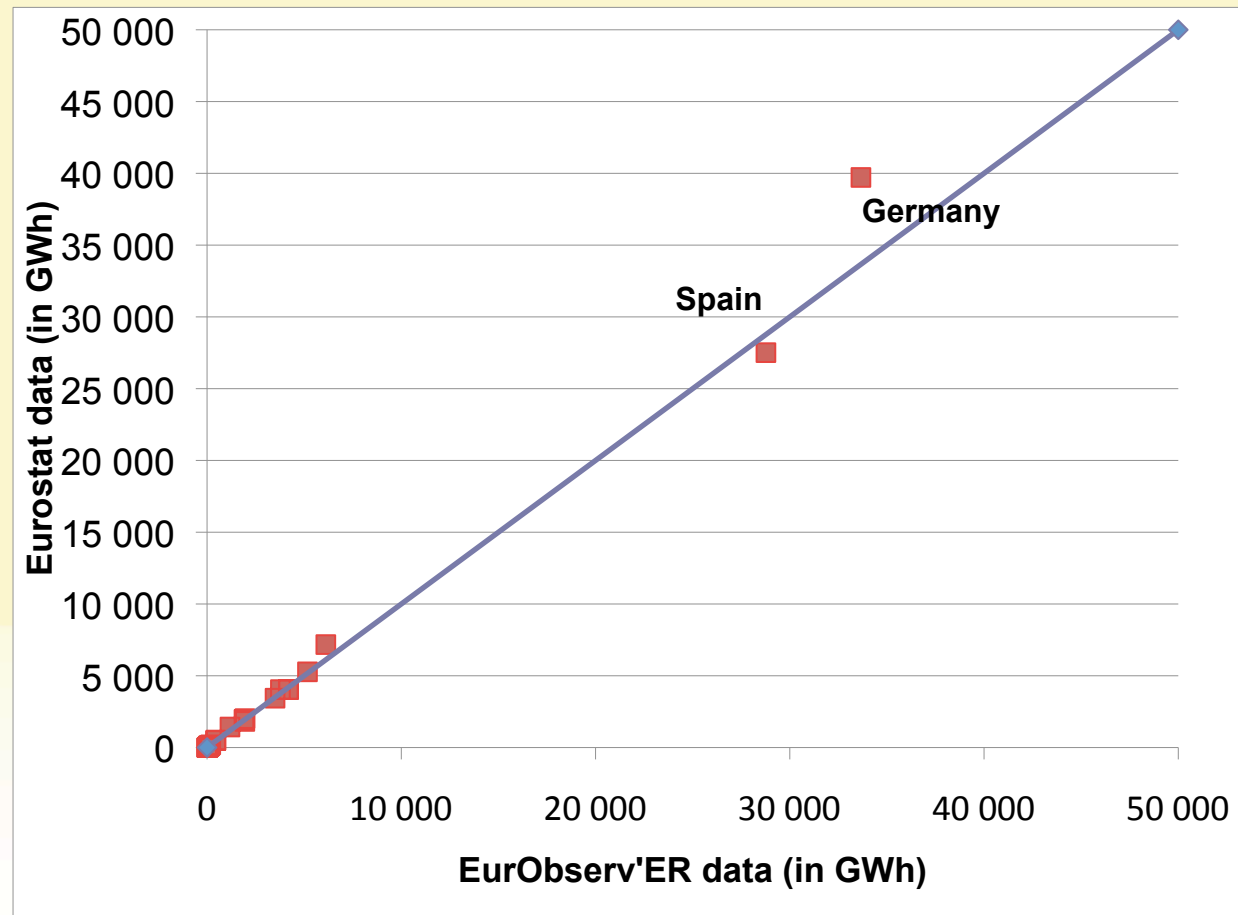




## Details of the comparison



### Electricity generation from windpower



Main difference came from Germany. Load factor underestimated by EurObserv'ER

## Comparison EurObserv'ER indicators/Eurostat statistics

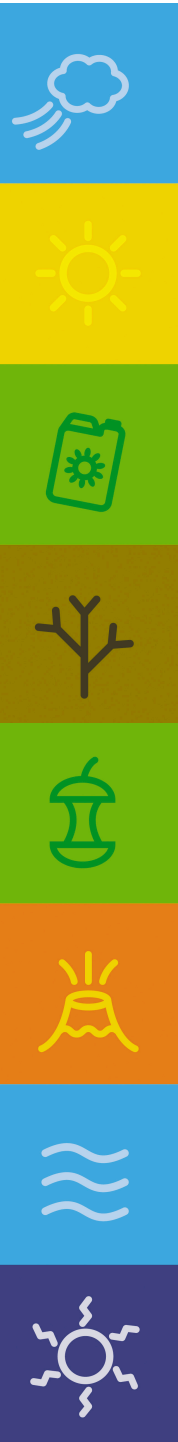


### Electricity generation from hydropower plants\* (GWh) in 2007

	Eurostat	EurObserv'ER
EU 27	309 972	308 140
EU 25	291 132	289 003
EU 15	275 589	273 500
EU 10	15 543	15 503

**< 0,1 %**

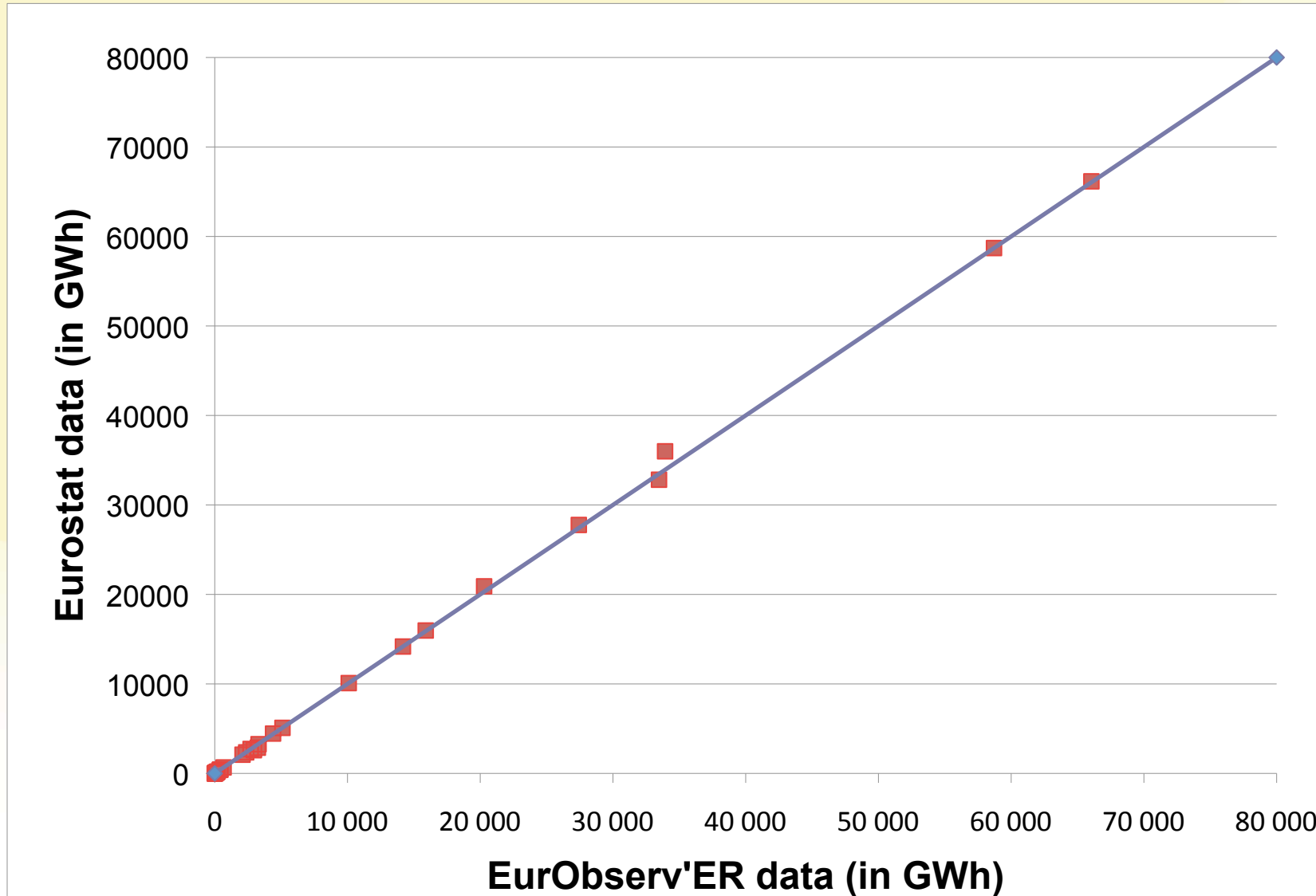
\* Including large plants, SHP and excluding pump & storage plants



# Details of the comparison



## Electricity from hydropower plants



## RES-E in gross electricity consumption (in %) in 2007

	Eurostat	EurObserv'ER	
EU 27	15,6 %	14,9 %	4 %

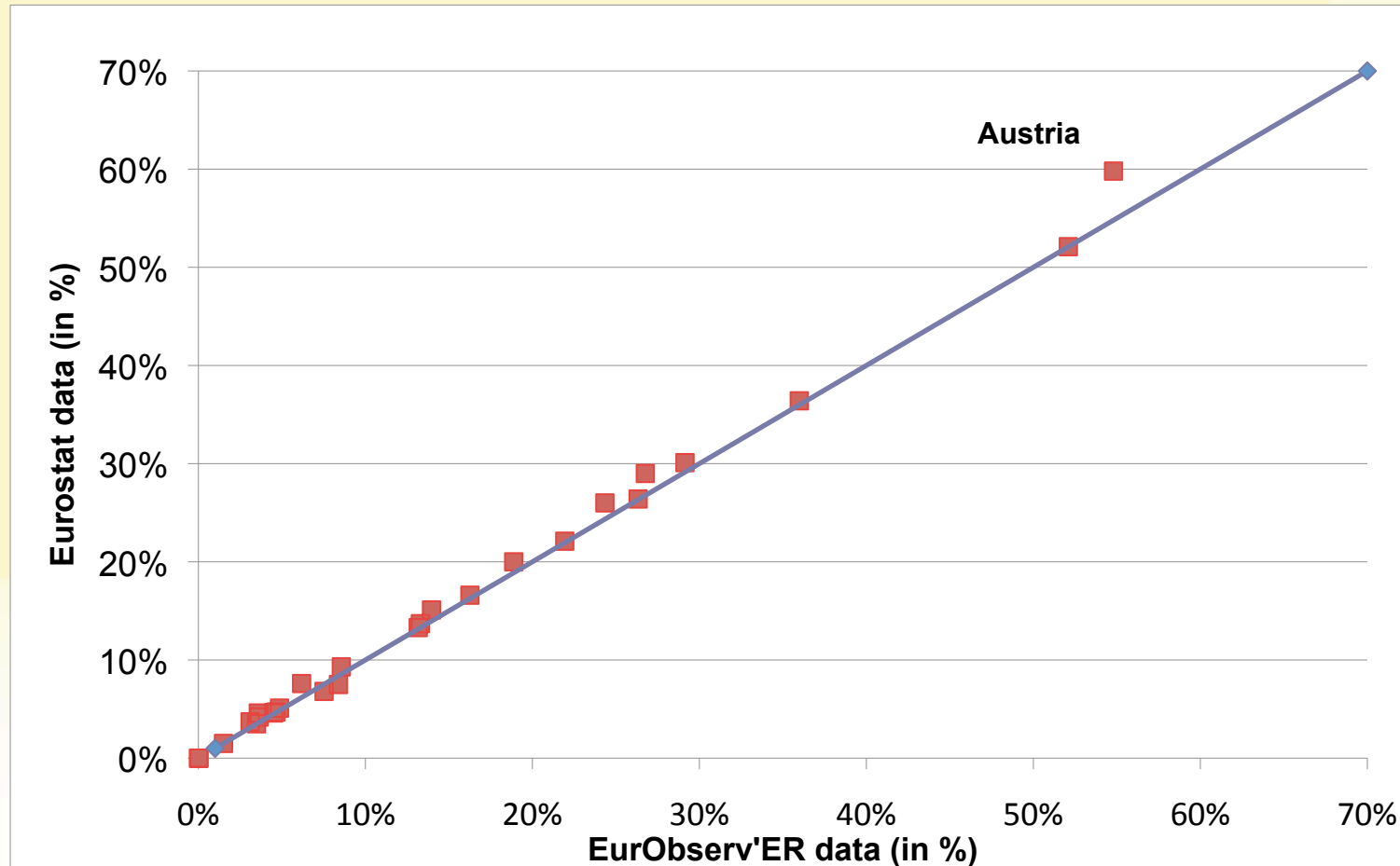
\* Including solar, geothermal, biomass, hydropower and windpower



## Details of the comparison



### RES-E in gross electricity consumption (in %) in 2007



Difference came from an overestimation of the gross electricity consumption in Austria

## Comparison EurObserv'ER indicators/Eurostat statistics



### Share of RES in gross inland energy consumption (in %)

	Eurostat	EurObserv'ER	
EU 27	7,8 %	7,53 %	3 %



## Details of the comparison



### Share of RES in gross inland energy consumption (in %)

