## **Environment and energy**

Author: Pekka LOESOENEN



# Combined Heat and Power (CHP) in the EU, Turkey, and Norway – 2008 data

	CHP			Share of	CHP			
	electricity	Main		CHP in total	Electrical	CHP Heat	Main	
	generation,	activity	Auto-	electricity	capacity,	production,	activity	Auto-
	TWh	producers	producers	generation	GW	PJ	producers	producers
European Union (EU-27)	370.1	:	:	11.0%	100.2	3041.7	:	:
EU-25	359.4	•	:	11.0%	94.1	2911.3	:	:
Euro area	252.1	•	:	10.6%	62.1	2008.9	:	:
Belgium <sup>a</sup>	11.09	78.7%	21.3%	12.5%	2.09	77.0	33.5%	66.5%
Bulgaria	4.49	81.3%	18.7%	10.0%	1.37	58.9	83.9%	16.1%
Czech Republic	11.88	67.5%	32.5%	14.2%	4.82	127.6	58.7%	41.3%
Denmark	16.78	:	:	46.1%	5.37	110.3	:	:
Germany	79.49	67.7%	32.3%	12.5%	21.99	641.8	24.0%	76.0%
Eston ia <sup>b</sup>	0.92	0.0%	10.4%	8.6%	1.61	9.1	77.4%	22.6%
Ireland <sup>c</sup>	1.84	0.0%	100.0%	6.2%	0.28	13.5	0.0%	100.0%
Greece	1.20	100.0%	0.0%	1.9%	0.40	9.0	100.0%	0.0%
Spain	21.98	0.0%	100.0%	7.0%	3.59	180.6	0.0%	100.0%
France	18.04	49.4%	50.6%	3.1%	5.11	181.9	36.3%	63.7%
Italy	30.45	58.7%	41.3%	9.5%	6.73	198.4	40.7%	59.3%
Cyprus	0.01	0.0%	100.0%	0.3%	0.01	0.1	0.0%	100.0%
Latvia	1.77	97.6%	2.4%	33.6%	0.53	8.2	96.8%	3.2%
Lithuania	1.77	93.0%	7.0%	12.7%	1.08	15.2	88.3%	11.7%
Luxembourg <sup>d</sup>	0.42	0.0%	100.0%	11.9%	•	2.4	0.0%	100.0%
Hungary	8.43	96.1%	3.9%	21.1%	0.19	45.9	89.0%	11.0%
Malta	0.00	-	-	0.0%	0.00	0.0	-	-
Netherlands	36.21	:	:	33.6%	8.97	246.3	:	:
Austria	10.30	:	:	15.3%	3.65	96.4	:	:
Poland	26.41	76.4%	23.6%	16.9%	8.78	259.7	58.4%	41.6%
Portugal	5.45	67.5%	32.5%	11.9%	1.09	61.7	48.6%	51.4%
Romania <sup>b</sup>	6.21	84.3%	15.7%	9.6%	4.69	71.5	82.0%	18.0%
Slovenia	1.11	77.9%	22.1%	6.7%	0.34	12.0	59.6%	40.4%
Slovakia	6.96	64.2%	35.8%	24.0%	2.15	26.1	86.8%	13.2%
Finland	27.57	64.6%	35.4%	35.6%	5.68	261.9	46.6%	53.4%
Sweden	14.35	52.1%	47.9%	9.6%	4.11	164.9	44.7%	55.3%
United Kingdom	25.00	0.9%	99.1%	6.4%	5.53	161.6	1.4%	98.6%
Norway	0.18	100.0%	0.0%	0.1%	:	3.5	100.0%	0.0%
Turkey <sup>b</sup>	8.34	32.3%	67.7%	4.2%	4.66	95.2	23.4%	76.6%

 : data not available
 Source: Eurostat

 TWh = 1000 GWh
 GW = 1000 MW
 PJ = 1000 TJ



<sup>&</sup>lt;sup>a</sup> - 2007 figures

b - CHP electrical capacity reported equal to gross capacity

 $<sup>^{\</sup>rm c}$  - CHP electrical capacity and electricity generation reported equal to gross capacity and generation

d - no capacities reported

	Fuel input into	Solid fossil	Oil and oil			
	CHP PJ	fuels	products	Natural gas	Renewables	Other fuels
European Union (EU-27)	8246.2	34.8%	5.5%	39.4%	11.0%	9.3%
Euro area	4983.9	15.6%	7.1%	52.8%	12.3%	12.1%
Belgium <sup>a</sup>	147.0	1.5%	2.5%	65.0%	8.9%	22.2%
Bulgaria	109.1	59.1%	2.6%	35.0%	0.0%	3.2%
Czech	398.2	83.1%	1.6%	5.0%	4.2%	6.1%
Denmark	300.3	52.2%	3.6%	23.8%	14.9%	5.4%
Germany	1200.8	27.1%	4.7%	51.9%	6.7%	9.7%
Estonia	18.0	50.5%	0.5%	41.5%	7.1%	0.5%
Ireland	21.5	3.8%	0.1%	93.7%	0.7%	1.7%
Greece	104.0	83.4%	3.1%	3.3%	1.4%	8.9%
Spain	394.4	1.9%	7.8%	76.3%	5.0%	9.0%
France	371.3	4.4%	2.8%	57.2%	23.5%	12.0%
Italy	940.4	0.3%	18.7%	69.0%	4.9%	7.1%
Cyprus	0.3	0.0%	100.0%	0.0%	0.0%	0.0%
Latvia	19.7	1.6%	0.8%	94.4%	3.1%	0.0%
Lithuania	35.6	0.0%	16.8%	78.5%	4.3%	0.3%
Luxembourg	5.3	0.0%	0.0%	80.1%	9.5%	10.4%
Hungary	99.4	5.8%	0.6%	80.9%	5.4%	7.3%
Malta	0.0	=	-	-	-	-
Netherlands	662.8	11.5%	2.0%	70.3%	1.8%	14.4%
Austria	245.8	10.3%	7.8%	40.4%	32.5%	8.9%
Poland	1508.4	91.1%	2.9%	2.5%	1.9%	1.6%
Portugal	103.1	0.0%	30.4%	25.5%	39.6%	4.6%
Romania	216.8	52.1%	4.9%	42.1%	0.0%	0.9%
Slovenia	64.8	83.3%	0.3%	10.8%	5.4%	0.2%
Slovakia	233.6	22.8%	1.7%	7.5%	2.3%	65.7%
Finland	488.7	26.5%	1.3%	21.6%	46.0%	4.6%
Sweden	247.0	7.3%	5.5%	4.2%	75.3%	7.7%
United Kingdom	309.8	4.3%	1.5%	70.5%	3.7%	20.0%
Norway	4.8	13.1%	0.0%	0.0%	58.3%	28.5%
Turkey	312.9	5.8%	8.2%	76.4%	0.5%	9.2%

<sup>&</sup>lt;sup>a</sup> -2007 figures

# Methodology

- 1. In Malta there is no CHP generation.
- 2. The fuel input is based on Net Calorific Values.
- 3. Category "Other fuels" includes amongst others industrial wastes and coal gases.
- 4. The data collection is based on Directive 2004/8/EC. According to the implementation guidelines of this Directive (Commission Decision 2008/952/EC) the fuel input refers to fuel used for CHP heat and electricity generation, i.e. the fuel for non-CHP electricity and heat is excluded. However, these implementation guidelines were adopted only recently and the reporting practices may differ between Member States.
- 5. The Main activity producers generate electricity and heat for sale as their primary activity. Auto producers generate electricity and heat wholly or partially for their own use as an activity which supports their primary activity.
- 6. The share of CHP electricity generation is calculated as the CHP electricity generation divided by the total gross electricity generation, including the generation in pumped storage power stations.

## **Further information**

#### **European Statistical Data Support:**

Contact details for this support network can be found on our Internet site:

http://ec.europa.eu/eurostat/

### Data on "Energy statistics":

http://epp.eurostat.ec.europa.eu/portal/page/portal/energy/data/database

#### More information about "Energy statistics":

http://epp.eurostat.ec.europa.eu/portal/page/portal/energy/introduction

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