



Investing in the Future of Jobs and Skills

Scenarios, implications and options in anticipation
of future skills and knowledge needs

Data Annex
Electricity, Gas, Water and Waste

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Submitted to the European Commission, DG Employment, Social Affairs and Equal Opportunities

Executed by:

TNO Netherlands Organisation for Applied Technological Research
SEOR Erasmus University Rotterdam
ZSI Centre for Social Innovation

May 2009

Lot 10: Electricity, Gas, Water and Waste

This report is published as part of a series of forward-looking sector studies on New Skills and New Jobs in the frame of the project *Comprehensive Sectoral Analysis of Emerging Competences and Economic Activities in the European Union*.

NOTE TO THE READER

The data presented in this annex provides an overall consistent picture of the state of play and developments in the sector. It constitutes the backbone of the quantitative part of the mapping exercise in Part I of the report.

The key data collected in this study are derived from various, mostly comparable sources. The first source concerns the input-output (I/O) tables published by Eurostat. These tables conform to the ESA95 standard; they provide data on value added for sectors, exports and imports (from the respective supply and use tables) and are the only source providing value added data at the 2-digit NACE level. GDP data (country totals) were derived from the OECD. Employment data were also obtained from Eurostat, partly from the National Accounts. The main part of the employment data was provided by the Structural Business Statistics (SBS) from Eurostat, both at the NACE 2 digit and the NACE 3 digit level. This source required estimations for missing values; these were made under responsibility of TNO. Micro-data on developments in the sector by job occupation were derived Eurostat's Labour Force Survey (LFS), as provided by Alphametris and further processed by TNO. Due to sample size restrictions, the representativeness of country LFS data should be interpreted with caution and as indicative only, and presented in italics. Data on country groupings EU, EU 6, EU 9, EU 15 and NMS pool country data together and can be judged to be representative. EU 6 refers to the founding fathers of the then European Community, EU 9 to the Member States that accessed in the years thereafter, and the EU 15 as the sum of the two. The NMS or new Member States include the last wave of accession and includes Romania and Bulgaria, unless otherwise stated. It should however be borne in mind that the Labour Force Survey is based on a sample (n) rather than on the full statistical population (N).

In case a blank space appears in the data tables data are not available, either because the (sub)sector did not exist in a particular country, because of lack of information applied or because the underlying information was statistically insignificant. In general, data is lacking for some of the new Member States. This especially applies to Malta and Cyprus. Some sources did also not provide data for Bulgaria, Romania and Latvia. The aggregation of the countries is roughly based on the length in number of years of EU membership. Besides the entire EU, we distinguish the following sets of country blocks:

- EU-6: Belgium, Germany, France, Italy, Luxembourg, the Netherlands
- EU-9: Austria, Denmark, Finland, Greece, Ireland, Portugal, Spain, Sweden, United Kingdom
- EU-7: Czech Republic, Estonia, Hungary, Lithuania, Poland, Slovenia, Slovakia
- New Member States (NMS): Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovenia, Slovakia.

Data on value added and trade is lacking for Malta, Cyprus, Bulgaria, Romania and Latvia. Data on employment is missing for Malta and Cyprus, and data on skills is lacking for Malta, Cyprus and Poland.

The data is presented in 10 sections. In coherence with the main report this data annex refers throughout to the Electricity, Gas, Water and Waste Sectors (NACE 40+41). The first section presents data on value added, the second on trade, and the third on knowledge intensity. The remaining sections present data on various variables of employment. Section 4 presents absolute numbers of employment and growth rates by country. Section 5 groups employment by firm size and section 6 by entrepreneurial activity. Section 7 up to 10 are based on Labour Force Survey data. Section 7 presents employment by occupation and relative changes over time therein. Section 8 relates occupations to gender, section 9 to the level of education and the last section to age groups.

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1. Value Added

Table 1.1 GDP and GDP growth: overall economy and electricity, gas and water sector (NACE 40+ 41)

	Electricity, gas and water (NACE 40 +41)				Economy			
	GDP 2006	1995- 2000	2000- 2006	1995- 2006	GDP 2006	1995- 2000	2000- 2006	1995- 2006
	m€		%*		m€		%*	
EU	205 416	3.0	-1.5	0.5	11 468 970	2.8	2.0	2.3
EU 6	118 042	3.0	-0.6	1.0	6 480 204	2.2	1.3	1.7
EU 9	64 283	3.2	-4.2	-0.9	4 403 041	3.7	2.8	3.2
EU 15	182 325	3.1	-1.9	0.3	10 883 245	2.8	1.9	2.3
NMS	23 090	2.2	2.1	2.1	585 725	2.7	3.7	3.2
Belgium	6 138	5.1	-1.8	1.3	316 622	2.4	1.8	2.1
France	32 330	6.6	0.8	3.4	1 792 140	2.5	1.8	2.1
Germany	43 293	3.6	-1.8	0.6	2 322 200	2.1	1.0	1.5
Italy	28 493	-0.8	0.7	0.0	1 480 007	1.6	0.7	1.1
Luxemburg	448	4.9	4.7	4.8	33 852	5.9	3.9	4.8
Netherlands	7 340	-0.2	-2.1	-1.3	535 382	3.9	1.7	2.7
Austria	5 485	3.7	2.5	3.1	257 897	3.0	1.8	2.3
Denmark	4 040	1.3	-1.3	-0.1	220 069	2.8	1.9	2.3
Finland	3 127	2.2	1.2	1.6	167 178	4.3	2.8	3.5
Greece	3 325	6.9	-0.2	3.0	214 203	3.5	3.7	3.6
Ireland	1 589	7.3	0.4	3.4	177 281	9.2	6.0	7.4
Portugal	3 712	3.3	0.1	1.5	155 324	3.5	1.1	2.1
Spain	9 922	5.8	-6.8	-1.3	981 777	4.3	3.2	3.7
Sweden	8 110	-0.9	0.0	-0.4	316 435	2.4	3.1	2.8
United Kingdom	24 973	3.1	-7.2	-2.6	1 912 877	3.4	2.5	2.9
Bulgaria								
Cyprus								
Czech Republic	3 550	-4.6	-2.2	-3.3	114 060	-0.3	3.9	2.0
Estonia	426	-0.7	2.1	0.8	13 223	6.3	8.3	7.4
Hungary	2 210	-4.9	-7.4	-6.3	89 908	3.3	3.6	3.5
Latvia								
Lithuania	1 295	12.8	13.8	13.3	23 748	4.4	7.5	6.1
Malta								
Poland	12 791	13.6	5.6	9.2	269 756	3.5	3.0	3.2
Romania								
Slovenia	954	0.0	4.0	2.2	30 455	3.3	4.1	3.7
Slovakia	1 864	-4.2	-0.1	-2.0	44 574	2.9	4.1	3.6

* Percentage is calculated as the cumulative annual average growth rate (CAGR)

Source: Eurostat/TNO

Table 1.2 GDP and GDP growth: electricity, gas, steam (NACE 40)

	Electricity, gas, steam (NACE 40)			
	GDP 2006	1995-2000	2000-2006	1995-2006
	m€		%	
EU	177 038	2.5	-1.5	0.3
EU 6	103 523	2.4	-0.4	0.8
EU 9	54 105	3.0	-4.3	-1.1
EU 15	157 628	2.6	-1.9	0.1
NMS	19 410	1.4	1.9	1.7
Belgium	5 349	4.7	-2.2	0.9
France	29 334	7.2	1.0	3.8
Germany	36 302	2.4	-1.9	0.1
Italy	25 896	-1.3	0.5	-0.3
Luxemburg	406	5.1	5.5	5.3
Netherlands	6 237	-1.3	-1.0	-1.1
Austria	5 072	3.6	2.4	3.0
Denmark	3 899	1.3	-1.0	0.0
Finland	2 828	1.8	1.8	1.8
Greece	2 990	7.2	0.4	3.4
Ireland	1 494	7.3	0.2	3.4
Portugal	3 172	2.8	-0.1	1.2
Spain	7 282	4.9	-9.1	-3.0
Sweden	7 321	-0.9	0.5	-0.1
United Kingdom	20 046	2.9	-7.4	-2.9
Bulgaria				
Cyprus				
Czech Republic	2 901	-6.3	-2.9	-4.5
Estonia	370	0.4	3.1	1.9
Hungary	1 824	-5.4	-8.0	-6.9
Latvia				
Lithuania	1 210	15.7	15.2	15.4
Malta				
Poland	10 625	13.1	5.2	8.7
Romania				
Slovenia	803	0.6	4.5	2.7
Slovakia	1 675	-4.2	0.5	-1.7

* Percentage is calculated as the cumulative annual average growth rate (CAGR)

Source: Eurostat/TNO

Table 1.3 GDP and GDP growth: waterwinning and production (NACE 41)

	Waterwinning and production (NACE 41)			
	GDP 2006	1995-2000	2000-2006	1995-2006
	m€		%*	
EU	28 378	6.4	-1.5	2.0
EU 6	14 518	7.5	-1.4	2.6
EU 9	10 178	4.9	-3.1	0.4
EU 15	24 697	6.3	-2.1	1.6
NMS	3 681	7.3	3.4	5.2
Belgium	789	8.6	0.9	4.3
France	2 996	1.9	-1.6	0.0
Germany	6 991	11.8	-1.6	4.3
Italy	2 597	6.1	2.4	4.0
Luxemburg	42	3.7	-1.6	0.8
Netherlands	1 103	4.9	-7.3	-1.9
Austria	414	6.0	4.0	4.9
Denmark	141	1.6	-8.0	-3.8
Finland	299	5.3	-3.4	0.5
Greece	335	4.8	-4.6	-0.4
Ireland	94	6.5	2.7	4.4
Portugal	540	6.1	1.4	3.5
Spain	2 640	12.1	3.2	7.2
Sweden	790	-0.6	-4.1	-2.5
United Kingdom	4 926	3.9	-6.0	-1.6
Bulgaria				
Cyprus				
Czech Republic	649	13.0	1.6	6.6
Estonia	56	-5.0	-3.5	-4.2
Hungary	387	-1.5	-3.6	-2.6
Latvia				
Lithuania	85	0.4	1.4	0.9
Malta				
Poland	2 166	16.7	7.6	11.7
Romania				
Slovenia	151	-2.3	1.3	-0.4
Slovakia	189	-3.9	-4.6	-4.3

* Percentage is calculated as the cumulative annual average growth rate (CAGR)

Source: Eurostat/TNO

Table 1.4 Share of electricity, gas and water sector (NACE 40+41) in GDP, share in sectoral GDP EU and concentration index*

	Share in national GDP		Share in EU		Concentration index	
	2006	1995-2006 (change)	2006	1995-2006 (change)	2006	1995-2006 (change)
	%	%	%	%	%	%
EU	2.0	-0.2	100	0	100	0
EU 6	2.0	0.0	58	3	101	11
EU 9	1.7	-0.6	32	-4	84	-19
EU 15	1.9	-0.2	89	-1	94	-1
NMS	4.2	-0.2	11	1	210	10
Belgium	2.0	-0.2	3	0	102	1
France	2.0	0.4	16	4	99	25
Germany	2.2	0.0	22	0	107	10
Italy	2.0	-0.1	13	0	102	7
Luxemburg	0.0	0.0	0	0	0	0
Netherlands	1.6	-0.5	4	-1	78	-15
Austria	2.3	0.3	3	1	115	26
Denmark	2.0	-0.4	2	0	98	-10
Finland	2.0	-0.3	1	0	99	-5
Greece	1.6	0.0	2	0	81	8
Ireland	0.9	-0.4	1	0	47	-13
Portugal	2.6	0.0	2	0	130	14
Spain	1.2	-0.6	5	-1	59	-22
Sweden	2.8	-0.7	4	0	140	-18
United Kingdom	1.6	-0.8	13	-4	80	-30
Bulgaria	0.0	0.0	0	0	0	0
Cyprus	0.0	0.0	0	0	0	0
Czech Republic	3.5	-2.0	2	-1	174	-72
Estonia	3.5	-2.9	0	0	173	-117
Hungary	2.6	-4.0	1	-1	132	-167
Latvia	0.0	0.0	0	0	0	0
Lithuania	5.0	2.0	1	0	253	120
Malta	0.0	0.0	0	0	0	0
Poland	4.8	2.0	6	3	240	114
Romania	0.0	0.0	0	0	0	0
Slovenia	3.1	-0.5	0	0	155	-8
Slovakia	6.2	-1.6	1	0	302	-50

*defined as share in country divided by share in EU, times 100

Source: Eurostat/TNO

2. Trade

Table 2.1 Exports, export growth, share of exports in value added, and change over time: electricity, gas and water sector (NACE 40+41)

	Exports 2006	Annual growth rate* 1995-2006	Exports as share in of value added, 2006	Change of share in value added, 1995 -2006
	m€	%	%	%
EU	24 900	16.1	12	7
EU 6	18 621	16.7	16	10
EU 9	3 927	16.8	6	2
EU 15	22 548	16.7	12	7
NMS	2 352	11.8	10	1
Belgium	4 637	32.7	76	91
France	3 277	2.1	10	2
Germany	9 575	33.5	22	14
Italy	532	11.4	2	0
Luxemburg	176	0.0		
Netherlands	423	33.8	6	5
Austria	2 293	20.3	42	21
Denmark	368	12.6	9	0
Finland	245	43.6	8	3
Greece	1	-0.7	0	0
Ireland	0	-8.6	0	1
Portugal	53	-2.1	1	3
Spain	239	23.9	2	0
Sweden	429	6.8	5	0
United Kingdom	299	47.3	1	-1
Bulgaria	0	0.0		0
Cyprus	0	0.0		0
Czech Republic	841	16.8	24	2
Estonia	63	1.0	15	2
Hungary	43	-13.0	2	10
Latvia	0	0.0		0
Lithuania	138	12.8	11	-2
Malta	0	0.0		0
Poland	654	12.0	5	1
Romania	0	0.0		0
Slovenia	223	14.4	23	9
Slovakia	389	45.2	21	-2

* calculated as the cumulative annual average growth rate (CAGR)

Source: Eurostat/TNO

Table 2.2 Imports, import growth, exports/imports ratio, and change over time: electricity, gas and water sector (NACE 40+41)

	Import	Annual growth rate*	Exports/imports ratio	Change of exports/imports ratio
	2006 m€	1995-2006 %	2006 %	1995-2006 %
EU	25 648	12.1	97	27
EU 6	20 695	14.3	90	16
EU 9	3 834	6.9	102	58
EU 15	24 529	12.7	92	27
NMS	1 119	4.1	210	85
Belgium	7 747	20.0	60	41
France	932	18.6	352	-1279
Germany	8 945	25.1	107	45
Italy	2 057	-0.8	26	16
Luxemburg	250	0.0	71	55
Netherlands	765	9.4	55	49
Austria	1 927	22.2	119	-12
Denmark	89	2.3	414	237
Finland	377	9.0	65	35
Greece	51	10.1	2	-2
Ireland	23	24.3	1	-32
Portugal	227	8.0	23	-37
Spain	106	-1.1	225	115
Sweden	568	10.5	76	18
United Kingdom	466	-6.5	64	57
Bulgaria	0	0.0		0
Cyprus	0	0.0		0
Czech Republic	207	5.1	406	283
Estonia	13	29.2	475	-4033
Hungary	375	9.0	11	-118
Latvia	0	0.0		0
Lithuania	3	-8.9	4236	3912
Malta	0	0.0		0
Poland	173	38.1	377	-2578
Romania	0	0.0		0
Slovenia	135	28.0	165	-194
Slovakia	211	-6.3	184	169

* calculated as the cumulative annual average growth rate (CAGR)

Source: Eurostat/TNO

3. Knowledge intensity

Table 3.1 Knowledge intensity* in electricity, gas and water sector (NACE 40+ 41) and total economy

	Electricity, gas, water and waste (NACE 40+41)		Economy		Difference	
	% high educated	Change 2000-2006	% high educated	Change 2000-2006	% high educated	Difference in Change
EU	26	1	26	3	0	-2
EU 6	29	6	35	0	-7	6
EU 9	35	1	46	3	-11	-2
EU 15	31	4	27	3	4	1
NMS	19	-3	32	2	-13	-6
Belgium						
Germany	31	1	26	0	6	2
France	31	7	30	4	2	3
Italy	15	10	15	3	-1	7
Luxembourg	16	-9	27	6	-12	-15
Netherlands	34	14	30	6	4	8
Denmark	36	-3	33	8	3	-11
Ireland	33	17	33	8	0	9
Greece			25	5		
Spain	48	8	32	5	15	3
Austria	19	0	18	3	1	-3
Portugal	12	6	14	4	-2	2
Finland	42	8	35	2	6	6
Sweden	29	-7	30	0	-1	-7
United Kingdom	36	-4	32	3	4	-8
Bulgaria	22	7	25	3	-4	4
Czech Republic	15	7	15	2	0	5
Estonia	38	-11	35	3	3	-14
Cyprus						
Latvia	21	4	23	2	-2	2
Lithuania	25	-30	31	-15	-6	-16
Hungary	17	5	21	4	-4	1
Malta						
Poland	20		22		-2	
Romania	17	-13	13	5	4	-18
Slovenia	33	14	23	6	10	8
Slovakia	15	4	17	5	-2	0

*High educated as percentage of all employment in the sector / Source: Alphametrics/Eurostat/TNO

4. Employment, employment growth and concentration

Table 4.1 Employment* of electricity, gas and water sector (NACE 40+ 41) electricity, gas, steam and warm water (NACE 40) and production of water (NACE 41) (persons), 2006

	40+ 41	40	41
EU	1 698 789	1 297 075	401 714
EU 6	664 526	544 718	119 808
EU 9	335 766	253 855	81 910
EU 15	1 000 291	798 573	201 718
NMS	698 498	498 502	199 996
Belgium	22 712	15 419	7 293
Germany	293 574	249 452	44 122
France	203 536	166 029	37 507
Italy	117 847	92 238	25 609
Luxembourg	842	767	75
Netherlands	26 015	20 812	5 203
Denmark	17 503	14 108	3 395
Ireland	10 581	10 581	
Greece	0		
Spain	69 616	36 911	32 705
Austria	33 406	30 236	3 170
Portugal	23 057	10 588	12 469
Finland	14 932	12 365	2 567
Sweden	32 715	31 518	1 197
United Kingdom	133 956	107 549	26 407
Bulgaria	57 612	39 327	18 284
Czech Republic	88 157	58 539	29 618
Estonia	10 312	8 415	1 897
Cyprus	0		
Latvia	16 356	13 129	3 227
Lithuania	30 099	22 918	7 181
Hungary	52 592	32 259	20 333
Malta	0		
Poland	230 722	178 104	52 618
Romania	143 830	99 558	44 271
Slovenia	11 260	7 347	3 914
Slovakia	57 558	38 905	18 653

*employees and self-employed

Source: Eurostat/TNO

Table 4.2 Employment* of electricity, gas, steam and warm water (NACE 40) and subsectors, production and distribution of electricity (NACE 401), gas; distribution of gaseous fuels through mains (NACE 402), steam and hot water supply (NACE 403) (persons), 2006

	40	401	402	403
EU	1 297	903	167	196
EU 6	545	416	75	33
EU 9	254	202	30	11
EU 15	799	618	104	45
NMS	499	285	62	151
Belgium	15	14	2	-
Germany	249	218	25	7
France	166	118	24	24
Italy	92	66	24	3
Luxembourg	1	1	-	-
Netherlands	21	-	-	-
Denmark	14	9	2	3
Ireland	11	-	-	-
Greece	-	-	-	-
Spain	37	31	5	1
Austria	30	25	3	2
Portugal	11	10	1	0
Finland	12	12	0	1
Sweden	32	27	-	4
United Kingdom	108	88	19	-
Bulgaria	39	32	3	5
Czech Republic	59	29	6	24
Estonia	8	-	-	8
Cyprus	-	-	-	-
Latvia	13	6	1	6
Lithuania	23	13	2	8
Hungary	32	20	6	6
Malta	-	-	-	-
Poland	178	102	24	52
Romania	100	53	20	26
Slovenia	7	6	0	1
Slovakia	39	23	-	16

*employees and self-employed

Source: Eurostat/TNO

Table 4.3 Employment* growth** in electricity, gas and water sector (NACE 40+41) electricity, gas, steam and warm water (NACE 40) and production of water (NACE 41), 2000-2006

	40	41	41
	<i>CAGR 2000-2006 (%)</i>	<i>CAGR 2000-2006 (%)</i>	<i>CAGR 2000-2006 (%)</i>
EU	-0.9	-1.4	0.9
EU 6	-1.0	-1.5	1.5
EU 9	0.1	-0.3	1.6
EU 15	-0.6	-1.1	1.5
NMS	-1.3	-1.8	0.2
Belgium	-2.9	-4.1	0.2
Germany	-0.1	0.0	-0.2
France	0.2	-0.2	1.9
Italy	-3.5	-5.4	7.2
Luxembourg	0.0	0.0	0.0
Netherlands	-4.8	-4.7	-5.1
Denmark	0.2	0.2	0.1
Ireland	1.3	1.3	
Greece			
Spain	1.5	-2.7	8.5
Austria	-0.6	-1.2	7.3
Portugal	-3.0	-5.9	0.1
Finland	-2.4	-3.6	5.4
Sweden	4.4	4.4	4.2
United Kingdom	-0.4	0.6	-4.1
Bulgaria	-0.5	-0.3	-0.9
Czech Republic	3.1	2.4	4.6
Estonia	2.4	2.8	0.8
Cyprus	0.0	0.0	0.0
Latvia	-1.4	-4.2	26.3
Lithuania	-3.4	-4.5	0.6
Hungary	-5.2	-6.6	-2.5
Malta	0.0	0.0	0.0
Poland	-0.3	-1.0	2.2
Romania	-4.5	-4.7	-4.1
Slovenia	-2.1	-2.4	-1.5
Slovakia	3.7	3.4	4.4

* employees and self-employed **calculated as the cumulative annual average growth rate (CAGR) Source: Eurostat/TNO

Table 4.4 Employment* growth** in electricity, gas, steam and warm water (NACE 40) and subsectors, production and distribution of electricity (NACE 401), gas; distribution of gaseous fuels through mains (NACE 402), steam and hot water supply (NACE 403), 2000-2006

	40	401	402	403
	<i>CAGR 2000-2006</i>	<i>CAGR 2000-2006</i>	<i>CAGR 2000-2006</i>	<i>CAGR 2000-2006</i>
	(%)	(%)	(%)	(%)
	%	%	%	%
EU	-1.4	-1.3	-2.6	-0.2
EU 6	-1.5	-1.5	-2.5	4.0
EU 9	-0.3	-0.1	-2.9	2.9
EU 15	-1.1	-1.1	-2.6	3.7
NMS	-1.8	-1.9	-2.7	-1.2
Belgium	-4.1	-4.6	1.0	
Germany	0.0	-0.2	1.1	-0.3
France	-0.2	-0.6	-2.3	4.6
Italy	-5.4	-5.8	-5.7	14.0
Luxembourg	-6.5	-6.5		
Netherlands	-4.7			
Denmark	0.2	-1.5	5.5	3.0
Ireland	1.3			
Greece				
Spain	-2.7	-3.3	0.9	3.3
Austria	-1.2	-1.3	-1.0	0.1
Portugal	-5.9	-6.2	-3.4	7.3
Finland	-3.6	-3.8	-16.9	1.5
Sweden	4.4	4.4		4.4
United Kingdom	0.6	2.0	-4.5	
Bulgaria	-0.3	0.0	106.9	-8.2
Czech Republic	2.4	2.1	-2.5	4.5
Estonia	2.8			2.8
Cyprus				
Latvia	-4.2	-4.3	0.1	-4.8
Lithuania	-4.5	-2.2	-7.4	-6.8
Hungary	-6.6	-7.9	-4.6	-4.0
Malta				
Poland	-1.0	-1.2	-4.2	1.2
Romania	-4.7	-3.8	-2.0	-8.1
Slovenia	-2.4	-3.1	36.2	-2.8
Slovakia	3.4	0.1		10.2

* employees and self-employed **calculated as the cumulative annual average growth rate (CAGR) Source: Eurostat/TNO

Table 4.5 Share of sector employment* of Member States in EU sector employment. Electricity, gas and water sector (NACE 40+41), electricity, gas, steam and warm water (NACE 40) and production of water (NACE 41), 2006

	40+ 41	40	41	40+ 41	40	41
	<i>Share 2006</i>			<i>Change in share 2000-2006</i>		
EU	100	100	100	0	0	0
EU 6	39	42	30	3	3	3
EU 9	20	20	20	3	3	3
EU 15	59	62	50	5	6	6
NMS	41	38	50	-5	-6	-6
Belgium	1	1	2	0	0	0
Germany	17	19	11	1	2	0
France	12	13	9	2	2	1
Italy	7	7	6	0	-1	3
Luxembourg	0	0	0	0	0	0
Netherlands	2	2	1	0	0	-1
Denmark	1	1	1	0	0	0
Ireland	1	1	0	0	0	0
Greece	0	0	0	0	0	0
Spain	4	3	8	1	0	4
Austria	2	2	1	0	0	0
Portugal	1	1	3	0	0	0
Finland	1	1	1	0	0	0
Sweden	2	2	0	1	1	0
United Kingdom	8	8	7	1	2	-2
Bulgaria	3	3	5	0	1	0
Czech Rep.	5	5	7	1	1	2
Estonia	1	1	0	0	0	0
Cyprus	0	0	0	0	0	0
Latvia	1	1	1	0	0	1
Lithuania	2	2	2	0	0	0
Hungary	3	2	5	-1	-1	-1
Malta	0	0	0	0	0	0
Poland	14	14	13	2	1	2
Romania	8	8	11	-1	-1	-3
Slovenia	1	1	1	0	0	0
Slovakia	3	3	5	-7	-6	-7

* employees and self-employed Source: Eurostat/TNO

Table 4.6 Share of sector employment* of Member States in EU sector employment. Electricity, gas, steam and warm water (NACE 40) and subsectors, production and distribution of electricity (NACE 401), gas; distribution of gaseous fuels through mains (NACE 402), steam and hot water supply (NACE 403), 2006

	40	401	402	403	40	401	402	403
	<i>Share 2006</i>				<i>Change in share 2000-2006</i>			
EU	100	100	100	100	0	0	0	0
EU 6	42	46	45	17	0	0	0	4
EU 9	20	22	18	6	1	2	0	1
EU 15	62	68	63	23	1	1	0	5
NMS	38	32	37	77	-1	-1	0	-5
Belgium	1	2	1	0	0	0	0	0
Germany	19	24	15	4	2	2	3	0
France	13	13	15	12	1	1	0	3
Italy	7	7	14	1	-2	-2	-3	1
Luxembourg	0	0	0	0	0	0	0	0
Netherlands	2	0	0	0	0	0	0	0
Denmark	1	1	1	2	0	0	0	0
Ireland	1	0	0	0	0	0	0	0
Greece	0	0	0	0	0	0	0	0
Spain	3	3	3	0	0	0	1	0
Austria	2	3	2	1	0	0	0	0
Portugal	1	1	1	0	0	0	0	0
Finland	1	1	0	0	0	0	0	0
Sweden	2	3	0	2	1	1	0	1
United Kingdom	8	10	12	0	1	2	-1	0
Bulgaria	3	4	2	3	0	0	1	-2
Czech Republic	5	3	3	12	1	1	0	3
Estonia	1	0	0	4	0	0	0	1
Cyprus	0	0	0	0	0	0	0	0
Latvia	1	1	1	3	0	0	0	-1
Lithuania	2	1	1	4	0	0	0	-2
Hungary	2	2	4	3	-1	-1	0	-1
Malta	0	0	0	0	0	0	0	0
Poland	14	11	14	27	0	0	-1	2
Romania	8	6	12	13	-2	-1	0	-8
Slovenia	1	1	0	0	0	0	0	0
Slovakia	3	3	0	8	1	0	0	4

* employees and self-employed

Source: Eurostat/TNO

Table 4.7 Share of sector employment in total employment of electricity, gas, steam and warm water (NACE 40) and subsectors, production and distribution of electricity (NACE 401), gas; distribution of gaseous fuels through mains (NACE 402), steam and hot water supply (NACE 403), 2006

	40	401-402	403	40	401-402	403
	<i>As % share in national employment . 2006</i>			<i>Total change of share 2000-2006</i>		
EU	0.59	0.42	0.16	-0.08	-0.06	-0.02
EU 6	0.53	0.43	0.11	-0.07	-0.06	-0.01
EU 9	0.33	0.28	0.05	-0.04	-0.03	-0.01
EU 15	0.45	0.36	0.08	-0.06	-0.05	-0.01
NMS	1.20	0.69	0.51	-0.14	-0.09	-0.05
Belgium	0.36	0.32	0.04	-0.13	-0.13	0.00
Germany	0.64	0.56	0.08	0.00	0.00	0.00
France	0.66	0.47	0.19	-0.03	-0.04	0.00
Italy	0.37	0.27	0.11	-0.19	-0.14	-0.05
Luxembourg	0.24	0.24	0.00	-0.19	-0.19	0.00
Netherlands	0.25	0.25	0.00	-0.09	-0.09	0.00
Denmark	0.50	0.33	0.18	0.00	-0.04	0.03
Ireland	0.52	0.52	0.00	-0.06	-0.06	0.00
Greece	na	na	na	na	na	na
Spain	0.18	0.16	0.03	-0.08	-0.08	0.00
Austria	0.72	0.59	0.13	-0.07	-0.07	-0.01
Portugal	0.21	0.19	0.02	-0.10	-0.09	0.00
Finland	0.51	0.48	0.03	-0.16	-0.16	0.00
Sweden	0.71	0.61	0.10	0.14	0.12	0.02
United Kingdom	0.35	0.28	0.06	0.00	0.02	-0.02
Bulgaria	1.10	0.89	0.21	-0.14	-0.09	-0.05
Czech Republic	1.15	0.57	0.58	0.13	0.05	0.07
Estonia	1.33	0.00	1.33	0.08	0.00	0.08
Cyprus						
Latvia	1.22	0.59	0.63	-0.57	-0.29	-0.29
Lithuania	1.54	0.88	0.66	-0.61	-0.19	-0.42
Hungary	0.83	0.51	0.32	-0.44	-0.34	-0.10
Malta						
Poland	1.33	0.76	0.57	0.07	0.03	0.04
Romania	1.08	0.58	0.50	-0.47	-0.20	-0.27
Slovenia	0.79	0.67	0.12	-0.15	-0.16	0.01
Slovakia	1.80	1.08	0.72	0.22	-0.07	0.29

* employees and self-employed

Source: Eurostat/TNO

Table 4.8 Share of sector employment in total employment and changes in share (in %)

	41	41
	<i>As % share in national employment, 2006</i>	<i>Total change of share 2000-2006</i>
EU	0.18	0.00
EU 6	0.12	0.01
EU 9	0.11	0.00
EU 15	0.11	0.00
NMS	0.48	0.01
Belgium	0.17	-0.01
Germany	0.11	0.00
France	0.15	0.01
Italy	0.10	0.03
Luxembourg	0.02	-0.06
Netherlands	0.06	-0.03
Denmark	0.12	0.00
Ireland	na	na
Greece	na	Na
Spain	0.16	0.04
Austria	0.07	0.02
Portugal	0.24	0.00
Finland	0.11	0.02
Sweden	0.03	0.01
United Kingdom	0.09	-0.03
Bulgaria	0.51	-0.08
Czech Republic	0.58	0.12
Estonia	0.30	-0.02
Cyprus		
Latvia	0.30	0.22
Lithuania	0.48	-0.01
Hungary	0.52	-0.10
Malta		
Poland	0.39	0.09
Romania	0.48	-0.18
Slovenia	0.42	-0.06
Slovakia	0.86	0.15

Source: Eurostat/TNO

5 Firm size

Table 5.1 Employment by firm size. Share and changes in share of employment by firm size in electricity, gas and water sector (NACE 40+41), 2005

	Shares 2005			Change in share 1999-2005		
	<49	50-249	>249	<49	50-249	>249
	<i>Number of employees</i>			<i>Number of employees</i>		
EU	9.9	13.1	77.0	1.9	1.1	-3.1
EU 6	11.6	7.0	81.4	1.1	1.6	-2.7
EU 9	11.2	11.9	76.9	0.9	-2.6	1.7
EU 15	11.4	9.2	79.4	1.0	-0.2	-0.9
NMS	7.4	19.6	73.0	3.5	3.3	-6.8
Belgium						
France	2.4	3.8	93.8	-0.1	0.5	-0.4
Germany						
Italy	10.9	14.2	74.9	3.9	6.1	-10.0
Luxemburg						
Netherlands	2.9	10.3	86.8	2.4	1.1	-3.5
Austria						
Denmark	49.0	5.6	45.4	0.1	-17.5	17.4
Finland						
Greece	43.6	56.4				
Ireland						
Portugal	9.3	27.7	63.0	3.1	10.4	-13.5
Spain	15.7	15.2	69.1	4.9	2.2	-7.1
Sweden	19.7	25.3	55.0	-1.6	-5.9	7.5
United Kingdom	0.8	3.3	95.9	-1.0	-7.3	8.3
Czech Republic	9.8	22.7	67.5	4.3	7.6	-12.0
Hungary	5.9	17.3	76.8	2.5	4.6	-7.1
Latvia	15.0	19.1	65.9			
Lithuania	8.8	18.4	72.8	4.5	2.9	-7.4
Poland	6.6	21.4	72.0	3.0	3.4	-6.4
Slovenia	8.9	29.8	61.3			
Slovakia	5.7	7.0	87.4			
Estonia						
Romania	1.6	11.1	87.2	1.0	2.9	-3.8
Bulgaria	3.2	6.6	90.2			
Cyprus						
Malta						

Source: Eurostat/TNO

Table 5.2 Number of firms by firm size. Share and changes in share of employment by firm size in electricity, gas and water sector (NACE 40+41), 2005

	Shares 2005			Tortal change of shares 1999-2005		
	<49	50-249	>249	<49	50-249	>249
	<i>Number of employees</i>			<i>Number of employees</i>		
EU	92.3	5.4	2.3	1.9	-0.8	-1.0
EU 6	95.2	3.1	1.7	0.2	0.0	-0.3
EU 9	95.8	2.9	1.3	0.9	-0.4	-0.5
EU 15	95.6	3.0	1.4	0.6	-0.2	-0.4
NMS	78.3	15.9	5.8	10.0	-5.6	-4.4
Belgium						
France	95.9	2.6	1.4	0.9	-0.3	-0.6
Germany						
Italy	91.8	5.9	2.4	-0.4	0.4	0.0
Luxemburg	93.6	4.3	2.1	2.0	-1.3	-0.7
Netherlands	90.3	4.9	4.9	13.9	-6.1	-7.9
Austria	95.5	2.7	1.8	4.2	-2.7	-1.5
Denmark	99.4	0.4	0.2	0.1	-0.1	0.0
Finland	95.0	3.9	1.1	2.3	-1.8	-0.5
Greece	75.6	24.4				
Ireland						
Portugal	89.3	8.0	2.7	11.2	-5.3	-5.9
Spain	96.3	2.5	1.2	5.0	-3.7	-1.3
Sweden	93.8	5.4	0.8	1.9	-1.0	-0.9
United Kingdom	86.4	5.9	7.7	9.7	-1.3	-8.3
Czech Republic	84.9	10.3	4.9	9.6	-4.1	-5.5
Hungary	77.1	14.4	8.4	29.5	-17.4	-12.1
Latvia	87.0	10.7	2.3	9.1	-7.9	-1.2
Lithuania	72.2	20.2	7.6	17.8	-15.9	-1.9
Poland	74.8	19.2	6.0	3.7	-1.3	-2.4
Slovenia	85.7	10.5	3.8	30.0	-21.3	-8.6
Slovakia	65.1	27.2	7.7	28.1	-1.6	-26.5
Estonia	89.7	7.6	2.7			
Romania	50.0	28.3	21.7			
Bulgaria	71.7	11.5	16.8			
Cyprus						
Malta						

Source: Eurostat/TNO

6. Employment and entrepreneurs

Table 6.1 Share of employees, entrepreneurs and part-time employment in electricity, gas, steam (NACE 40), 2006

	Employment in sector	Share of employees	Share of entrepreneurs	Share of part-time workers
EU	1 298 335	0.89	0.11	0.05
EU 6	544 718	0.93	0.07	0.07
EU 9	253 855	0.89	0.11	0.07
EU 15	798 573	0.91	0.09	0.07
NMS	499 762	0.86	0.14	0.01
Belgium	15 419	1.00	0.00	0.06
Germany	249 452	0.90	0.10	0.09
France	166 029	0.96	0.04	0.06
Italy	92 238	0.89	0.11	0.03
Luxembourg	767	0.92	0.08	0.02
Netherlands	20 812	0.95	0.05	0.17
Denmark	14 108	0.84	0.16	0.16
Ireland	10 581	0.58	0.42	0.00
Greece	0			
Spain	36 911	0.88	0.12	0.00
Austria	30 236	0.88	0.12	0.09
Portugal	10 588	0.93	0.07	0.00
Finland	12 365	0.93	0.07	0.04
Sweden	3 518	0.83	0.17	0.06
United Kingdom	107 549	0.95	0.05	0.09
Bulgaria	39 327	0.99	0.01	0.00
Czech Republic	58 539	0.65	0.35	0.02
Estonia	8 415	0.67	0.33	0.02
Cyprus	1 260	0.00	1.00	0.00
Latvia	13 129	0.95	0.05	0.02
Lithuania	22 918	0.75	0.25	0.01
Hungary	32 259	0.95	0.05	0.01
Malta	0			
Poland	178 104	0.85	0.15	0.00
Romania	99 558	1.00	0.00	0.00
Slovenia	7 347	0.94	0.06	0.00
Slovakia	38 905	0.70	0.30	0.01

Source: Eurostat/TNO

Table 6.2 Share of employees, entrepreneurs and part-time employment in waterwinning and production (NACE 41), 2006

	Employment in sector	Share of employees	Share of entrepreneurs	Share of part-time workers
EU	402 086	0.90	0.10	0.05
EU 6	119 808	0.92	0.08	0.09
EU 9	81 910	0.93	0.07	0.04
EU 15	201 718	0.92	0.08	0.07
NMS	200 368	0.87	0.13	0.02
Belgium	7 293	0.95	0.05	0.07
Germany	44 122	0.90	0.10	0.16
France	37 507	0.96	0.04	0.06
Italy	25 609	0.88	0.12	0.02
Luxembourg	75	0.80	0.20	0.09
Netherlands	5 203	0.95	0.05	0.17
Denmark	3 395	0.85	0.15	0.45
Ireland	0			
Greece	0			
Spain	32 705	0.93	0.07	0.02
Austria	3 170	0.89	0.11	0.06
Portugal	12 469	0.93	0.07	0.00
Finland	2 567	0.93	0.07	0.02
Sweden	1 197	0.82	0.18	0.06
United Kingdom	26 407	0.95	0.05	0.02
Bulgaria	18 284	0.99	0.01	0.02
Czech Republic	29 618	0.67	0.33	0.05
Estonia	1 897	0.81	0.19	0.08
Cyprus	372	0.00	1.00	0.00
Latvia	3 227	0.74	0.26	0.01
Lithuania	7 181	0.87	0.13	0.04
Hungary	20 333	0.94	0.06	0.04
Malta	0			
Poland	52 618	0.88	0.12	0.00
Romania	44 271	0.98	0.02	0.01
Slovenia	3 914	0.85	0.15	0.04
Slovakia	18 653	0.71	0.29	0.02

Source: Eurostat/TNO

7. Employment and occupations

Table 7.1 Employment by occupation in electricity, gas and water sector (NACE 40+41), 2006
(absolute numbers times 1,000)

	Total	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers
EU	1699	112	37	315	77	152	225	24	168	101	184	8	133	80	84
EU6	665	40	15	148	34	72	104	10	61	28	68	3	33	26	23
EU9	336	34	10	56	21	25	58	5	33	12	29	1	24	8	20
EU15	1000	73	25	199	52	96	169	15	94	40	98	3	56	34	45
NMS	698	38	12	111	21	55	64	9	73	61	87	4	77	45	40
Belgium	23	2	0	6	1	1	6	0	2	0	1	0	0	1	1
Germany	294	19	7	55	14	31	47	3	41	16	23	2	15	10	10
France	204	10	4	58	13	21	22	5	7	4	33	0	9	11	5
Italy	118	5	2	25	6	16	22	1	8	6	9	1	8	4	5
Luxemb.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Netherl.	26	4	1	4	1	2	7	1	2	1	1	0	1	0	1
Denmark	18	1	1	4	1	2	2	0	3	1	2	0	1	0	0
Ireland	11	1	0	2	0	0	2	0	0	0	2	0	0	0	1
Greece	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spain	70	3	2	9	2	11	11	2	10	3	4	0	7	1	5
Austria	33	2	0	4	3	2	4	0	5	2	4	0	2	2	2
Portugal	23	1	0	2	1	2	4	0	1	0	7	0	1	2	1
Finland	15	1	0	3	0	2	1	0	1	1	2	0	1	0	1
Sweden	33	2	1	9	3	2	4	1	2	0	3	0	4	1	1
UK	134	22	5	23	10	4	29	2	12	3	5	0	7	2	9
Bulgaria	58	4	1	8	3	2	5	1	6	4	8	0	6	6	6
Czech Rep.	88	5	3	22	2	11	4	1	6	6	8	1	9	7	3
Estonia	10	2	0	1	0	0	0	0	1	1	2	0	1	1	0
Cyprus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Latvia	16	1	0	2	0	1	2	0	1	1	3	0	2	2	1
Lithuania	30	2	0	4	2	3	1	0	2	6	1	1	3	2	1
Hungary	53	4	1	6	2	3	7	0	9	3	2	1	8	2	3
Malta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poland	231	15	4	29	11	15	28	4	25	15	31	1	25	13	15
Romania	144	2	2	26	0	9	10	1	15	17	28	1	14	9	9
Slovenia	11	1	0	3	1	1	1	0	1	1	1	0	0	0	0
Slovakia	58	3	1	11	1	9	3	1	7	6	4	0	8	3	1

Source: Alphametrics/Eurostat/TNO

Table 7.2 Share of employment by occupation in in electricity, gas and water sector (NACE 40+41), 2006 (in %)

	Total	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers
EU	100	7	2	19	5	9	13	1	10	6	11	0	8	5	5
EU6	100	6	2	22	5	11	16	2	9	4	10	0	5	4	3
EU9	100	10	3	17	6	7	17	1	10	4	9	0	7	2	6
EU15	100	7	3	20	5	10	17	1	9	4	10	0	6	3	4
NMS	100	5	2	16	3	8	9	1	10	9	12	1	11	6	6
Belgium	100	10	2	28	2	5	25	1	10	2	4	0	1	3	6
Germany	100	6	2	19	5	11	16	1	14	6	8	1	5	4	4
France	100	5	2	28	6	10	11	2	4	2	16	0	5	5	2
Italy	100	4	2	21	5	14	19	1	7	5	8	1	7	3	5
Luxemb.	100	3	1	24	2	3	24	0	6	1	26	2	2	3	1
Netherl.	100	14	5	14	5	9	27	2	8	4	5	0	2	1	3
Denmark	100	6	4	21	7	10	10	1	16	6	13	0	3	1	2
Ireland	100	14	2	18	3	3	18	1	3	4	19	0	3	5	8
Greece															
Spain	100	5	3	13	2	15	16	3	14	4	6	0	10	2	7
Austria	100	7	1	13	9	7	13	1	14	7	11	0	5	5	6
Portugal	100	3	0	10	3	8	19	1	6	2	31	0	6	8	3
Finland	100	8	3	23	3	10	9	0	8	8	13	0	7	1	6
Sweden	100	5	3	27	10	7	12	3	5	1	9	0	12	2	4
UK	100	16	4	17	8	3	22	1	9	2	3	0	6	1	7
Bulgaria	100	6	1	13	5	4	9	2	10	7	13	0	10	11	10
Czech Rep.	100	5	3	25	2	13	5	1	7	7	9	1	10	8	4
Estonia	100	18	1	11	5	5	5	0	6	9	20	0	11	8	3
Cyprus															
Latvia	100	8	2	13	2	5	12	0	4	8	18	0	11	10	6
Lithuania	100	7	1	15	5	11	5	1	7	21	4	2	11	6	3
Hungary	100	8	1	11	4	6	14	1	18	6	3	2	16	3	7
Malta															
Poland	100	6	2	12	5	7	12	2	11	6	13	0	11	6	6
Romania	100	2	1	18	0	6	7	1	10	12	19	1	10	6	7
Slovenia	100	9	1	28	7	7	11	2	12	8	7	0	3	2	2
Slovakia	100	5	2	19	1	16	5	1	12	10	7	0	14	6	2

Source: Alphametrics/Eurostat/TNO

Table 7.3 Change in share of employment by occupation in electricity, gas and water sector (NACE 40+41), 2000-2006 (in %)

	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers
EU	1	1	4	1	-7	-3	0	0	1	0	0	2	0	-1
EU 6	0	1	4	2	0	0	0	-3	0	-2	0	-2	0	0
EU 9	1	0	2	1	1	-3	0	2	0	-6	0	1	0	0
EU 15	1	1	4	1	1	-1	0	-1	0	-3	0	-1	0	0
NMS	1	1	7	2	-24	-5	-1	3	2	6	0	6	1	-4
Belgium	-1	2	8	1	-2	4	1	-3	-5	-1	0	-4	0	-6
Germany	0	1	2	2	1	2	0	-3	-1	-2	0	-1	-1	0
France	0	0	4	2	-2	-3	2	-1	1	-1	0	-2	-1	-1
Italy	1	2	11	0	5	-2	-2	-4	0	-8	1	-4	0	2
Luxemb.	3	-1	-7	0	-3	5	-3	-6	-9	16	2	2	1	0
Netherl.	3	2	-3	1	-5	8	-1	-2	0	0	0	-3	1	-5
Denmark	-8	0	-13	7	11	4	1	-8	0	8	0	-1	0	-22
Ireland	7	1	5	1	1	-4	-2	0	1	-4	0	-7	0	-1
Greece														
Spain	1	-2	-1	-1	3	5	0	-2	0	-2	0	1	-2	-6
Austria	2	0	1	7	2	-4	0	4	1	-21	0	4	2	3
Portugal	2	-2	-1	2	2	0	0	2	0	-12	0	0	7	-2
Finland	-3	2	3	1	5	-4	0	3	2	-3	0	-4	0	-3
Sweden	-1	-3	-3	1	-1	6	1	-6	0	3	0	1	2	0
U. K.	4	2	5	1	-1	-7	-1	4	0	-5	0	1	-1	6
Bulgaria	1	1	-1	5	-3	-3	0	3	-3	-3	0	1	3	-1
Czech R.	1	0	8	1	1	-2	-1	-3	-5	-2	1	2	-1	-2
Estonia	2	-1	-4	-4	0	-2	0	0	2	6	0	-6	8	-2
Cyprus														
Latvia	0	1	-2	0	0	2	-2	0	-4	2	0	0	4	-4
Lithuania	1	-1	2	6	3	-1	-1	1	4	-9	1	1	-7	-14
Hungary	0	1	0	-1	2	0	-3	-1	-1	1	-1	10	-7	2
Malta														
Poland														
Romania	0	1	19	0	-68	-14	-1	11	13	21	1	11	7	-5
Slovenia	4	0	3	2	5	-8	2	-1	-3	4	0	0	-5	-7
Slovakia	-1	0	5	-1	1	0	0	-3	1	-5	0	3	0	-5

Source: Alphametrix/Eurostat/TNO

8. Occupations and gender

Table 8.1 Share of males in employment by occupation in electricity, gas and water sector (NACE 40+41), 2006 (in %)

	Total	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers
EU	73	83	78	88	54	47	37	58	90	81	83	26	84	87	67
EU6	78	84	86	91	69	52	44	40	99	97	96	72	98	99	71
EU9	77	82	75	91	49	61	35	63	99	97	98	100	97	99	84
EU15	78	83	81	92	61	55	43	50	99	98	97	91	98	99	79
NMS	65	82	70	82	37	33	27	75	80	71	67	55	73	77	57
Belgium	80	86	100	94	79	59	48	100	100	100	100		100	100	80
Germany	76	87	87	87	64	48	37	58	98	96	97	82	96	98	62
France	78	78	81	92	72	48	38	16	98	100	95	0	100	100	55
Italy	85	81	86	97	71	63	65	72	100	98	98	100	99	98	97
Luxemb.	87	100	100	85	100	100	66		100	100	100	100	100	100	0
Netherl.	74	89	91	95	73	55	38	76	100	100	95	100	100	91	84
Denmark	77	100	74	68	53	64	31	0	96	100	100		100	100	73
Ireland	79	81	46	96	49	85	37	35	100	100	97	100	100	87	84
Greece															
Spain	82	93	82	93	62	62	49	74	99	96	100	100	100	98	89
Austria	82	95	100	95	58	69	41	60	100	92	100	100	93	100	64
Portugal	80	67	100	78	28	59	52	100	100	100	99		89	100	83
Finland	77	100	58	96	20	31	0	100	100	100	94	100	94	100	75
Sweden	72	100	79	90	44	26	9	42	98	100	100	100	98	100	67
UK	73	76	72	93	48	78	32	67	99	100	96	100	98	100	89
Bulgaria	75	85	59	89	25	26	18	58	100	93	96	19	83	96	52
Czech Rep.	78	84	92	86	26	45	15	78	100	100	100	75	87	94	48
Estonia	82	92	100	78	44	34	33		100	100	100		65	100	51
Cyprus															
Latvia	76	83	75	92	0	47	22	0	100	100	100		71	100	44
Lithuania	71	95	0	77	21	23	21	48	100	100	75	0	75	100	73
Hungary	72	88	79	84	16	27	11	100	100	100	100	100	91	100	55
Malta															
Poland	77	78	78	83	50	28	33	76	100	100	98	100	95	98	63
Romania	22	63	10	71	100	28	29	83	0	0	0	0	0	0	54
Slovenia	78	92	77	95	44	20	20	71	100	100	100		100	100	59
Slovakia	81	83	100	86	22	42	34	89	100	99	98		98	88	50

Source: Alphametrics/Eurostat/TNO

Table 8.2 Change in share of male employment by occupation in electricity, gas and water sector (NACE 40+41), 2000-2006 (in %)

	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers	Total
EU	-4	5	-3	-8	-17	-3	-24	-7	-14	-15	-2	-12	-9	7	-4
EU 6	1	11	-3	-2	-8	-6	-40	0	2	-1	24	-2	1	11	-3
EU 9	-7	4	1	-17	2	-5	-17	0	-3	-1	0	-2	8	2	-2
EU 15	-3	7	-1	-7	-5	-3	-31	1	1	-1	12	-2	3	8	-2
NMS	-8	-2	-1	8	-32	5	-9	-17	-23	-29	-8	-13	-16	4	-4
Belgium	15		-6	38	-5	-14		0	0	0		0	0	27	-1
Germany	-2	5	-4	-5	-15	-6	-3	0	-1	-1	33	-4	-1	-1	-6
France	6	18	-4	-8	-6	-7	-27	-2	0	0		0	4	9	-2
Italy	-3	-14	-2	5	-8	1	-24	5	9	-1		-1	-2	29	-1
Luxemb.	0	0	-15	0	100	-18		0	0	0			0	0	-3
Netherl.	-6	-9	21	13	23	-7	-24	0	0	-5		0	-9	7	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Denmark	0	74	-32			-49		-4	0	0		0	0	-27	-19
Ireland	29	-54	1	-1	-15	-4	-23	13	0	-3	0	0	-13	-5	0
Greece															
Spain	6	15	-4	-25	0	2	-26	-1	-4	0		0	1	2	-4
Austria	-5	29	-5	-3	-28	-7	-40	0	-8	4		-7	0	57	-4
Portugal	-33	31	-11	-72	19	-28	46	0	0	-1		-11	0	-17	-10
Finland	14	-42	7	-46	2	-8		0	0	-6		-1	0	9	1
Sweden	46	-21	16	-7	13	9	42	-2	0	0		-2		31	5
U. K.	-15	-2	4	-15	13	-3	-20	3	0	-4	0	-2	18	0	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulgaria	-10	-41	8	25	-5	-5	26	3	0	4		6	4	2	2
Czech R.	2	18	-3	-28	7	4	-2	2	0	6		-5	7	-4	1
Estonia	-8	0	21	44	34	-19		0	0	0		-19		51	12
Cyprus															
Latvia	-17	15	34	-100	11	17	-51	0	5	3		-11	0	17	6
Lithuania	11	0	23		18	21	1	29	19	-25	0	1	0	40	9
Hungary	2	-21	-6	2	-25	-13	4	0	7	7	26	-1	7	-18	-4
Malta															
Poland															
Romania	-37				-44	7	-17							2	-39
Slovenia	33	-23	-5	-34	20	-28	-29	8	0	0		0	0	-5	-4
Slovakia	-11	0	-1	-28	-8	27	-11	2	-1	-2		4	-12	-31	-3

Source: Alphametrix/Eurostat/TNO

Table 8.3 Share of females in employment by occupation in electricity, gas and water sector (NACE 40+41), 2006 (in %)

	Total	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers
EU	27	17	22	12	46	53	63	42	10	19	17	35	16	13	33
EU6	22	16	14	9	31	48	56	60	1	3	4	28	2	1	29
EU9	23	18	25	9	51	39	65	37	1	3	2	0	3	1	16
EU15	22	17	19	8	39	45	57	50	1	2	3	9	2	1	21
NMS	35	18	30	18	63	67	73	25	20	29	33	45	27	23	43
Belgium	20	14	0	6	21	41	52	0	0	0	0	0	0	0	20
Germany	24	13	13	13	36	52	63	42	2	4	3	18	4	2	38
France	22	22	19	8	28	52	62	84	2	0	5	100	0	0	45
Italy	15	19	14	3	29	37	35	28	0	2	2	0	1	2	3
Luxemb.	13	0	0	15	0	0	34	0	0	0	0	0	0	0	100
Netherl.	26	11	9	5	27	45	62	24	0	0	5	0	0	9	16
Denmark	23	0	26	32	47	36	69	100	4	0	0	0	0	0	27
Ireland	21	19	54	4	51	15	63	65	0	0	3	0	0	13	16
Greece															
Spain	18	7	18	7	38	38	51	26	1	4	0	0	0	2	11
Austria	18	5	0	5	42	31	59	40	0	8	0	0	7	0	36
Portugal	20	33	0	22	72	41	48	0	0	0	1	0	11	0	17
Finland	23	0	42	4	80	69	100	0	0	0	6	0	6	0	25
Sweden	28	0	21	10	56	74	91	58	2	0	0	0	2	0	33
UK	27	24	28	7	52	22	68	33	1	0	4	0	2	0	11
Bulgaria	25	15	41	11	75	74	82	42	0	7	4	81	17	4	48
Czech Rep.	22	16	8	14	74	55	85	22	0	0	0	25	13	6	52
Estonia	18	8	0	22	56	66	67	0	0	0	0	0	35	0	49
Cyprus															
Latvia	24	17	25	8	100	53	78	100	0	0	0	0	29	0	56
Lithuania	29	5	100	23	79	77	79	52	0	0	25	100	25	0	27
Hungary	28	12	21	16	84	73	89	0	0	0	0	0	9	0	45
Malta															
Poland	23	22	22	17	50	72	67	24	0	0	2	0	5	2	37
Romania	78	37	90	29	0	72	71	17	100	100	100	100	100	100	46
Slovenia	22	8	23	5	56	80	80	29	0	0	0	0	0	0	41
Slovakia	19	17	0	14	78	58	66	11	0	1	2	0	2	12	50

Source: Alphametrics/Eurostat/TNO

Table 8.4 Change in share of female employment by occupation in electricity, gas and water sector (NACE 40+41), 2000-2006 (in %)

	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers	Total
EU	4	-5	3	8	17	3	24	7	14	15	2	12	9	-7	4
EU 6	-1	-11	3	2	8	6	40	0	-2	1	-24	2	-1	-11	3
EU 9	7	-4	-1	17	-2	5	17	0	3	1	0	2	-8	-2	2
EU 15	3	-7	1	7	5	3	31	-1	-1	1	-12	2	-3	-8	2
NMS	8	2	1	-8	32	-5	9	17	23	29	8	13	16	-4	4
Belgium	-15		6	-38	5	14		0	0	0		0	0	-27	1
Germany	2	-5	4	5	15	6	3	0	1	1	-33	4	1	1	6
France	-6	-18	4	8	6	7	27	2	0	0		0	-4	-9	2
Italy	3	14	2	-5	8	-1	24	-5	-9	1		1	2	-29	1
Luxemb.		0	15	0	-100	18		0	0	0			0	0	3
Netherl.	6	9	-21	-13	-23	7	24	0	0	5		0	9	-7	-1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Denmark	0	-74	32			49		4	0	0		0	0	27	19
Ireland	-29	54	-1	1	15	4	23	-13	0	3	0	0	13	5	0
Greece															
Spain	-6	-15	4	25	0	-2	26	1	4	0		0	-1	-2	4
Austria	5	-29	5	3	28	7	40	0	8	-4		7	0	-57	4
Portugal	33	-31	11	72	-19	28	-46	0	0	1		11	0	17	10
Finland	-14	42	-7	46	-2	8		0	0	6		1	0	-9	-1
Sweden	-46	21	-16	7	-13	-9	-42	2	0	0		2		-31	-5
U. K.	15	2	-4	15	-13	3	20	-3	0	4	0	2	-18	0	-1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulgaria	10	41	-8	-25	5	5	-26	-3	0	-4		-6	-4	-2	-2
Czech R.	-2	-18	3	28	-7	-4	2	-2	0	-6		5	-7	4	-1
Estonia	8	0	-21	-44	-34	19		0	0	0		19		-51	-12
Cyprus															
Latvia	17	-15	-34	100	-11	-17	51	0	-5	-3		11	0	-17	-6
Lithuania	-11	0	-23		-18	-21	-1	-29	-19	25	0	-1	0	-40	-9
Hungary	-2	21	6	-2	25	13	-4	0	-7	-7	-26	1	-7	18	4
Malta															
Poland															
Romania	37				44	-7	17							-2	39
Slovenia	-33	23	5	34	-20	28	29	-8	0	0		0	0	5	4
Slovakia	11	0	1	28	8	-27	11	-2	1	2		-4	12	31	3

Source: Alphametrix/Eurostat/TNO

9. Occupations and level of education

Table 9.1 Share of low educated* in employment of employees by occupation in electricity, gas and water sector (NACE 40+41), 2006 (in %)

	Total	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers
EU	11	3	5	4	8	5	13	15	16	11	11	11	17	20	30
EU6	14	4	9	7	11	8	15	17	22	21	15	30	28	25	39
EU9	20	5	6	4	10	7	23	33	31	24	31	13	37	49	42
EU15	17	5	7	6	11	7	18	24	30	25	21	30	34	35	43
NMS	4	0	0	0	0	0	2	2	4	3	2	5	6	13	18
Belgium	16	13	0	13	13	12	7	30	18	44	18		50	47	41
Germany	8	3	7	3	2	5	12	12	9	11	12	0	5	20	31
France	17	3	18	8	24	9	21	10	55	39	12	47	65	13	43
Italy	23	2	2	14	2	12	18	45	57	33	31	95	24	58	44
Luxemb.	13	0	0	15	0	0	24	0	0	0	6	0	47	0	100
Netherl.	14	10	4	4	8	3	12	48	24	22	1	38	13	100	65
Denmark	9	0	0	7	0	0	8	100	0	21	19		17	0	53
Ireland	28	10	0	14	0	15	25	65	40	57	30	0	41	69	64
Greece															
Spain	31	5	0	3	8	5	22	53	56	57	29	100	50	76	71
Austria	7	3	0	3	3	3	6	36	4	9	3	0	0	30	29
Portugal	64	65	0	25	18	39	54	73	82	72	82		83	81	96
Finland	14	5	11	0	0	6	9	100	32	7	15	0	27	100	54
Sweden	10	0	0	2	11	0	11	0	26	10	13	0	27	12	25
UK	14	3	10	2	13	4	24	14	22	0	6	0	31	23	24
Bulgaria	7	0	0	1	0	0	0	0	13	6	2	0	4	24	15
Czech Rep.	2	0	0	0	0	0	0	0	0	0	0	25	8	8	17
Estonia	3	0	0	0	0	0	0		20	13	0		8	0	0
Cyprus															
Latvia	11	0	0	4	0	0	0	0	0	19	0		37	26	37
Lithuania	2	0	0	0	0	0	0	0	6	5	0	0	0	6	11
Hungary	6	0	0	1	2	0	3	0	1	5	0	3	9	27	40
Malta															
Poland	3	0	0	0	0	0	0	0	4	3	4	0	7	16	10
Romania	4	0	0	1	0	1	5	9	2	2	1	3	5	3	26
Slovenia	6	0	0	0	0	0	8	21	0	10	31		0	0	54
Slovakia	2	0	0	0	0	0	6	0	5	1	0		2	6	0

* low education (ISCED level 1+2) / Source: Alphametrics/Eurostat/TNO

Table 9.2 Change in share of low educated* employees by occupation in electricity, gas and water sector (NACE 40+41), 2000-2006 (in %)

	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers	Total
EU	-1	-2	-1	-5	1	-4	-8	-10	-11	-16	5	-8	-6	-11	-6
EU 6	-1	-1	0	-1	-4	-5	-20	-6	-15	-18	30	4	3	-9	-6
EU 9	1	-4	-1	-11	-1	0	16	-5	2	-3	9	-13	2	-16	-4
EU 15	0	0	0	-5	-3	-3	-8	-4	-7	-12	27	1	3	-12	-5
NMS	0	0	0	0	0	-5	-12	-7	-6	-1	-8	-4	-12	-11	-3
Belgium	13		-6	13	-14	-20		-9	-56	-32		17	-16	-29	-18
Germany	-3	7	0	2	-1	1	-4	-5	-6	-14	0	-2	12	3	-3
France	0	8	-1	-5	-1	-4	-47	12	-7	-13		40	-1	-17	-2
Italy	-7	2	0	-7	-10	-5	-16	-6	-26	-20		-16	-22	-22	-15
Luxemb.		0	15	0	0	-23		-78	-59	-12			0	0	-15
Netherl.	-1	-51	2	8	-11	-18	48	-6	-33	-28		4	100	17	-7
Denmark	0	0	7			8		-21	21	19		-83	0	33	-3
Ireland	2	0	5	0	-32	5	30	-8	41	3	-100	-23	-8	-3	-3
Greece															
Spain	-9	0	0	0	-2	-5	4	-1	24	-9		-2	0	-16	-6
Austria	3	-36	3	3	3	-6	36	-9	9	-7		0	5	-29	-2
Portugal	65	-100	-11	18	11	3	-27	-18	-28	-8		-17	-19	32	-7
Finland	-5	11	-12	0	-4	-3		9	-12	-7		-2	0	14	-6
Sweden	0	0	-2	11	0	-11	0	-23	10	-39		-3		2	-5
U. K.	0	10	0	-19	-1	2	14	12	-23	0	0	-13	-4	-15	-2
Bulgaria	0	0	1	0	0	-4	-48	-29	-13	0		-3	-14	-25	-8
Czech R.	0	0	-1	0	0	0	0	-11	-5	0		-2	-1	-12	-3
Estonia	0	0	0	0	0	-23		20	13	0		-2		0	0
Cyprus															
Latvia	-8	0	4	0	0	-1	0	-22	-15	-23		12	2	37	-3
Lithuania	0	0	0		0	0	0	6	5	0	0	0	-25	-2	-3
Hungary	0	0	1	2	0	-8	-36	-8	-4	0	-11	-3	-10	-17	-7
Malta															
Poland															
Romania	0				1	-1	9							0	0
Slovenia	0	0	0	0	0	2	21	-6	10	31		-23	0	-31	-4
Slovakia	0	0	0	0	0	-1	0	5	-7	-3		-10	6	-25	-3

* low education (ISCED level 1+2) / Source: Alphametrics/Eurostat/TNO

Table 9.3 Share of medium educated* employees by occupation in electricity, gas and water sector (NACE 40+41), 2006 (in %)

	Total	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers
EU	63	28	38	47	47	55	70	79	78	86	79	78	75	75	67
EU6	57	22	38	47	52	52	66	76	70	74	72	65	63	64	59
EU9	46	31	36	34	43	40	57	53	56	64	53	39	41	46	48
EU15	52	26	36	43	48	48	63	66	60	67	66	57	51	56	51
NMS	77	31	40	54	41	65	86	97	95	96	94	93	90	86	81
Belgium	45	20	1	40	8	34	50	30	78	56	48		28	53	59
Germany	61	24	45	33	51	56	77	84	79	83	66	92	78	73	65
France	51	9	13	53	52	41	41	81	42	56	77	53	32	67	57
Italy	63	28	65	66	66	63	73	52	43	67	69	5	72	42	56
Luxemb.	71	34	100	38	0	100	76		100	100	94	100	53	100	0
Netherl.	52	41	53	44	25	28	66	43	73	65	94	62	56	0	35
Denmark	55	36	28	37	29	46	92	0	94	60	52		53	100	47
Ireland	39	27	23	27	29	51	47	25	52	34	56	59	59	31	25
Greece															
Spain	22	4	18	6	5	34	36	35	18	14	30	0	20	12	19
Austria	74	48	82	55	76	86	89	64	82	89	75	100	58	70	69
Portugal	24	0	100	9	28	53	46	27	18	28	14		17	19	4
Finland	45	2	48	25	44	30	42	0	68	85	85	100	45	0	46
Sweden	61	54	85	53	36	52	82	96	72	90	74	100	49	88	57
UK	50	33	30	39	46	17	58	59	68	94	84	0	57	66	63
Bulgaria	72	40	27	53	12	34	84	100	77	87	94	100	90	75	77
Czech Rep.	83	53	67	75	67	69	96	100	100	100	100	75	92	92	83
Estonia	58	33	22	36	27	48	17		67	87	59		89	100	100
Cyprus															
Latvia	69	41	100	70	0	59	49	100	100	62	100		60	74	63
Lithuania	73	9	0	45	52	94	47	100	88	95	57	100	85	94	89
Hungary	77	29	38	47	66	61	92	100	99	92	100	97	88	73	60
Malta															
Poland	76	29	12	51	41	64	87	100	96	97	90	100	89	81	90
Romania	80	4	58	40	0	44	93	80	98	98	99	84	93	97	74
Slovenia	61	9	100	45	32	45	88	79	98	80	69		100	100	46
Slovakia	84	33	42	63	12	82	92	100	95	99	100		98	94	100

* medium educated (ISCED level 3+4) / Source: Alphametrics/Eurostat/TNO

Table 9.4 Change in share of medium educated* employees by occupation in electricity, gas and water sector (NACE 40+41), 2000-2006 (in %)

	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers	Total
EU	-2	3	2	-4	-3	-2	16	10	15	20	-6	12	6	11	5
EU 6	-6	8	2	-2	-5	-4	25	4	14	16	-35	-5	-9	7	0
EU 9	6	6	3	8	6	-1	2	3	3	6	-16	10	2	12	3
EU 15	-1	8	3	3	-2	-3	17	1	8	13	-10	-3	-7	10	1
NMS	-9	-17	-7	-36	4	-1	16	10	13	10	5	13	16	15	7
Belgium	-14		18	-51	7	6		13	56	-2		-4	53	29	11
Germany	8	3	3	0	2	-1	18	3	6	14	-8	9	-19	-7	1
France	-15	-4	0	19	-16	-21	38	-12	2	12		-43	-10	17	-5
Italy	-36	-35	-10	-18	-3	1	18	6	26	20		13	22	22	4
Luxemb.		100	6	-100	33	23		78	59	12			0	0	24
Netherl.	-7	23	-11	-18	-31	-4	-25	3	20	37		-35	-100	-17	-7
Denmark	36	-72	-6			-8		52	-40	52		53	0	-33	6
Ireland	-12	23	-24	-4	13	-21	-40	-1	-41	-11	59	28	8	-8	-14
Greece															
Spain	-22	16	1	-17	-6	-9	17	-15	-17	7		1	-12	12	-2
Austria	-10	18	-13	2	44	8	-36	2	-2	7		-16	-5	26	3
Portugal	0	100	-27	-72	-19	6	27	18	28	4		17	19	-32	1
Finland	2	-52	-7	44	-10	-10		2	4	10		-10	0	-14	-2
Sweden	54	19	8	-39	24	5	37	21	-10	26		14		-20	12
U. K.	6	3	14	20	2	1	-5	-11	39	20	-57	14	12	27	6
Bulgaria	11	27	-8	12	-46	-2	48	19	6	12		-3	17	21	1
Czech R.	-7	-5	-1	-33	-22	-4	0	11	5	2		2	1	12	-4
Estonia	7	-78	36	13	48	-32		-33	-13	-30		49		0	11
Cyprus															
Latvia	3	100	12	-100	-14	-37	30	22	-4	23		-4	-2	-32	-1
Lithuania	-11	0	12		70	8	47	47	45	17	0	64	54	35	34
Hungary	-32	-1	-3	-26	-5	4	42	8	1	4	11	1	10	19	2
Malta															
Poland															
Romania	4				-15	4	-20							0	14
Slovenia	9	100	-10	-54	45	-5	-21	5	-20	-18		23	0	31	-10
Slovakia	-21	-58	-19	-33	13	-1	0	-5	7	3		14	-6	25	-1

* medium educated (ISCED level 3+4) / Source: Alphametrics/Eurostat/TNO

Table 9.5 Share of high educated* employees by occupation in electricity, gas and water sector (NACE 40+41), 2006 (in %)

	Total	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers
EU	26	70	56	49	46	40	17	6	6	4	9	2	8	5	4
EU6	29	74	53	46	37	40	19	7	8	5	13	5	10	11	2
EU9	35	65	58	62	47	54	20	13	14	12	16	48	22	5	10
EU15	31	70	56	50	42	45	20	10	10	8	13	13	15	9	6
NMS	19	69	60	46	59	35	12	1	1	1	4	3	3	1	1
Belgium	39	68	99	46	79	54	43	41	4	0	34		22	0	0
Germany	31	73	48	64	47	39	12	3	12	6	22	8	17	7	4
France	31	88	69	39	24	49	37	9	3	5	11	0	3	20	0
Italy	15	70	33	20	32	25	9	3	0	0	0	0	3	0	0
Luxemb.	16	66	0	47	100	0	0		0	0	0	0	0	0	0
Netherl.	34	49	43	51	67	70	22	9	3	13	5	0	31	0	0
Denmark	36	64	72	56	71	54	0	0	6	19	29		29	0	0
Ireland	33	63	77	59	71	34	28	10	9	9	15	41	0	0	11
Greece															
Spain	48	91	82	91	87	61	42	13	26	29	41	0	30	12	9
Austria	19	49	18	43	21	11	5	0	14	1	22	0	42	0	2
Portugal	12	35	0	67	54	8	0	0	0	0	4		0	0	0
Finland	42	93	41	75	56	64	49	0	0	8	0	0	27	0	0
Sweden	29	46	15	45	54	48	7	4	2	0	13	0	23	0	18
UK	36	63	60	60	41	78	19	27	10	6	10	100	12	11	13
Bulgaria	22	60	73	46	88	66	16	0	10	7	4	0	6	2	8
Czech Rep.	15	47	33	25	33	31	4	0	0	0	0	0	1	0	0
Estonia	38	67	78	64	73	52	83		13	0	41		2	0	0
Cyprus															
Latvia	21	59	0	26	100	41	51	0	0	19	0		4	0	0
Lithuania	25	91	100	55	48	6	53	0	7	0	43	0	15	0	0
Hungary	17	71	62	52	33	39	5	0	0	3	0	0	2	0	0
Malta															
Poland	20	71	88	49	59	36	13	0	0	0	5	0	5	3	0
Romania	17	96	42	59	100	56	3	11	0	0	0	13	2	0	0
Slovenia	33	91	0	55	68	55	4	0	2	10	0		0	0	0
Slovakia	15	67	58	37	88	18	2	0	0	0	0		0	0	0

* high educated (ISCED level 5+6) / Source: Alphametrics/Eurostat/TNO

Table 9.6 Change in share of high educated* employees by occupation in electricity, gas and water sector (NACE 40+41), 2000-2006 (in %)

	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers	Total
EU	3	-1	-1	10	2	6	-8	-1	-4	-5	1	-4	0	0	1
EU 6	8	-7	-1	2	8	9	-5	2	2	2	5	1	7	2	6
EU 9	-7	-3	-2	3	-4	1	-18	2	-5	-3	7	3	-3	4	1
EU 15	1	-8	-3	2	5	6	-9	3	-1	0	-17	2	4	2	4
NMS	10	17	7	36	-4	6	-4	-3	-7	-9	3	-10	-4	-4	-3
Belgium	1		-12	38	7	14		-4	0	34		-13	-37	0	8
Germany	-5	-10	-3	-2	-1	-1	-14	2	1	0	8	-7	7	4	1
France	15	-4	1	-14	17	25	9	-1	5	1		3	11	0	7
Italy	43	33	10	24	13	5	-2	0	0	0		3	0	0	10
Luxemb.		-100	-21	100	-33	0		0	0	0			0	0	-9
Netherl.	7	28	9	10	41	22	-23	3	13	-9		31	0	0	14
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Denmark	-36	72	-2			0		-32	19	-71		29	0	0	-3
Ireland	10	-23	19	4	19	15	10	9	0	8	41	-5	0	11	17
Greece															
Spain	32	-16	-1	17	8	14	-21	16	-6	2		1	12	3	8
Austria	7	18	10	-5	-47	-2	0	7	-7	-1		16	0	2	0
Portugal	-65	0	38	54	8	-9	0	0	0	4		0	0	0	6
Finland	3	41	19	-44	14	14		-11	8	-3		12	0	0	8
Sweden	-54	-19	-6	29	-24	7	-37	2	0	13		-11		18	-7
U. K.	-6	-13	-14	-2	-1	-3	-9	-1	-16	-20	57	-1	-7	-12	-4
Bulgaria	-11	-27	8	-12	46	6	0	10	7	-12		6	-3	5	7
Czech R.	7	5	2	33	22	4	0	0	0	-2		1	0	0	7
Estonia	-7	78	-36	-13	-48	55		13	0	30		-47		0	-11
Cyprus															
Latvia	5	-100	-16	100	14	38	-30	0	19	0		-8	0	-5	4
Lithuania	11	0	-12		-70	-8	-47	-52	-50	-17	0	-64	-29	-33	-30
Hungary	32	1	2	25	5	4	-5	-1	3	-4	0	2	0	-2	5
Malta															
Poland															
Romania	-4				14	-2	11							0	-13
Slovenia	-9	-100	10	54	-45	4	0	2	10	-13		0	0	0	14
Slovakia	21	58	19	33	-13	2	0	0	0	0		-4	0	0	4

* high educated (ISCED level 5+6) / Source: Alphametrics/Eurostat/TNO

10. Occupations and age

Table 10.1 Share of younger workers (15-39 years) in employment by occupation in electricity, gas and water sector (NACE 40+41),2006 (in %)

	Total	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers
EU	38	29	49	36	47	38	47	42	39	35	39	49	29	33	35
EU6	39	29	44	37	39	39	48	37	40	43	39	67	31	34	39
EU9	42	35	45	40	54	34	57	52	39	37	37	23	25	26	41
EU15	40	32	45	38	45	38	51	42	40	42	38	59	28	33	41
NMS	35	24	60	34	51	40	37	42	38	31	40	40	29	34	29
Belgium	48	53	53	36	39	26	60	70	42	64	54		65	47	55
Germany	38	28	40	34	46	38	49	33	37	43	44	58	21	29	26
France	42	28	50	38	34	44	59	26	68	61	38	100	38	40	58
Italy	35	24	32	40	36	32	31	88	35	27	33	72	38	29	44
Luxemb.	40	0	100	48	100	39	22		21	0	47	0	100	100	0
Netherl.	44	32	59	39	40	54	56	52	26	35	36	38	36	33	42
Denmark	24	0	31	33	40	29	39	0	34	13	0		0	0	0
Ireland	41	27	58	45	54	22	52	65	16	32	46	59	38	42	24
Greece															
Spain	45	21	41	58	66	33	57	40	44	64	41	0	27	45	51
Austria	36	30	25	28	45	27	51	40	55	37	28	100	25	10	27
Portugal	35	65	100	65	61	21	27	13	19	5	31		28	41	39
Finland	28	13	48	24	21	27	30	100	35	18	35	100	24	0	53
Sweden	40	20	47	46	41	59	54	56	16	46	38	0	30	17	26
UK	46	42	48	34	61	41	66	75	38	29	66	0	21	13	43
Bulgaria	34	32	59	35	43	53	38	54	23	34	38	0	28	28	29
Czech Rep.	38	29	57	40	32	44	41	39	51	25	43	0	26	36	24
Estonia	21	19	22	27	56	11	26		25	45	23		2	0	0
Cyprus															
Latvia	32	47	75	47	100	0	50	100	30	34	30		5	23	0
Lithuania	32	52	0	23	53	27	0	48	23	37	63	17	17	62	22
Hungary	37	11	74	41	51	36	35	29	57	17	43	66	21	60	33
Malta															
Poland	32	17	73	29	55	33	34	33	31	22	36	61	28	24	28
Romania	42	33	62	36	0	54	52	44	41	37	45	40	44	44	34
Slovenia	45	27	77	54	66	44	32	0	54	40	28		60	54	26
Slovakia	32	22	16	24	26	39	20	89	34	40	36		29	39	36

Source: Alphametrics/Eurostat/TNO

Table 10.2 Change in share of younger workers (15-39 years) in electricity, gas and water sector (NACE 40+41), 2000-2006 (in %)

	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers	Total
EU	5	-2	-2	-2	3	0	-10	-7	-11	-4	1	-11	-6	-5	-3
EU 6	3	5	-1	-5	3	5	2	-7	-9	-4	67	-11	-7	3	-1
EU 9	9	-6	0	-4	-16	-4	-8	-3	-2	-6	-72	-9	-12	9	-3
EU 15	5	-1	-1	-6	-2	0	-2	-5	-6	-5	1	-11	-7	5	-2
NMS	6	-17	-4	8	6	-5	-20	-8	-12	-6	-6	-13	-5	-15	-4
Belgium	24		-13	-61	-1	52		-16	10	4		29	-53	18	9
Germany	3	-1	1	-13	2	0	-15	-11	-15	-23	58	-26	-8	-7	-7
France	4	14	-8	-8	11	19	-18	14	46	9		-6	0	1	3
Italy	-11	-68	12	9	4	-10	60	-7	-16	-1		0	-18	10	-1
Luxemb.		0	2	100	-61	-36		-6	-18	-14			100	0	-4
Netherl.	4	29	13	-8	-8	-2	36	-4	-31	-2		36	33	28	6
Denmark	0	31	18			20		-7	-71	0		0	0	-22	3
Ireland	-15	0	7	20	0	1	40	-28	-9	-4	59	15	17	0	0
Greece															
Spain	7	-10	18	-23	-12	13	5	-14	49	12		-12	-21	17	2
Austria	11	-46	-13	-40	-2	18	-60	10	11	-23		-1	10	27	-3
Portugal	65	0	22	61	-12	-30	-41	-7	-95	-12		-39	41	-30	-13
Finland	-11	-52	-9	-12	-14	1		1	-29	-3		-2	0	17	-5
Sweden	20	13	15	16	0	-11	-44	16	46	38		20		3	15
U. K.	8	-6	-17	1	-26	-5	9	-3	-15	15	-100	-15	-26	0	-9
Bulgaria	11	-41	-1	-57	27	18	34	-16	-4	2		-21	3	-14	0
Czech R.	4	-22	-1	-19	16	-9	-19	3	-16	8		4	11	-29	-1
Estonia	19	22	8	56	11	26		25	3	-55		-14		0	2
Cyprus															
Latvia	0	15	20	60	-27	16	81	30	-16	-24		-40	-28	-22	-6
Lithuania	44	-100	11		1	-23	-5	-3	1	-5	17	-45	-4	-17	-9
Hungary	-5	-26	-12	2	-2	-6	-3	7	-34	1	12	-27	25	-19	-7
Malta															
Poland															
Romania	33				21	2	-56							-10	4
Slovenia	15	77	11	66	-56	0	0	-7	-25	-72		27	12	-21	0
Slovakia	-9	-55	-17	-46	0	1	10	-15	-5	-9		-19	-19	-16	-13

Source: Alphametrix/Eurostat/TNO

Table 10.3 Share of workers (40-49 years) in employment by occupation in electricity, gas and water sector (NACE 40+41), 2006 (in %)

	Total	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers
EU	33	34	34	32	30	34	27	28	33	31	33	10	39	37	34
EU6	35	31	41	36	35	36	30	37	34	34	32	26	42	45	32
EU9	29	33	36	28	28	34	19	21	30	22	33	50	42	31	25
EU15	33	32	39	34	32	35	27	30	32	31	33	31	42	40	29
NMS	33	38	25	29	22	32	31	22	34	32	33	25	38	34	39
Belgium	30	20	47	39	51	37	16	0	37	28	32		23	26	32
Germany	34	38	43	35	36	33	28	11	33	33	31	36	51	51	32
France	34	21	40	40	37	30	28	61	23	17	31	0	31	42	33
Italy	38	28	38	31	26	48	39	12	44	50	35	15	42	41	35
Luxemb.	36	66	0	35	0	61	42		31	100	28	100	0	0	100
Netherl.	30	30	34	30	40	25	25	21	43	44	30	62	28	44	18
Denmark	28	0	28	25	17	27	24	0	24	24	61		36	100	0
Ireland	27	35	34	27	29	17	23	0	17	20	27	0	32	22	30
Greece															
Spain	29	31	48	15	28	39	21	17	28	14	33	32	44	23	31
Austria	37	37	29	33	27	53	32	60	36	8	38	0	59	44	55
Portugal	31	0	0	12	39	63	31	15	53	55	29		40	13	22
Finland	30	37	0	35	59	21	36	0	23	42	25	0	14	100	20
Sweden	25	23	38	22	26	31	14	26	45	54	22	0	27	32	20
UK	28	36	36	36	29	6	13	19	26	25	34	100	48	33	18
Bulgaria	33	26	33	34	30	35	28	0	36	28	38	73	47	41	18
Czech Rep.	30	41	13	31	19	29	26	53	20	32	26	14	31	39	39
Estonia	33	30	0	30	35	0	23		21	20	53		15	85	0
Cyprus															
Latvia	26	23	25	14	0	43	12	0	0	23	42		14	50	38
Lithuania	32	35	100	23	25	46	67	0	40	26	22	83	23	24	16
Hungary	31	34	16	24	10	30	30	71	25	40	34	23	40	21	38
Malta															
Poland	34	49	23	21	22	36	34	13	39	30	35	0	43	27	45
Romania	33	30	20	31	0	25	23	36	39	37	30	11	37	36	46
Slovenia	27	17	0	19	27	26	35	79	29	31	40		15	0	74
Slovakia	37	31	55	46	25	33	52	0	32	31	41		36	28	44

Source: Alphametrics/Eurostat/TNO

Table 10.4 Change in share of workers (40-49 years) in employment by occupation in electricity, gas and water sector (NACE 40+41), 2000-2006 (in %)

	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers	Total
EU	-7	-5	-1	2	1	-4	0	2	0	-2	-7	4	3	3	-1
EU 6	-12	-5	2	10	-1	-5	-5	2	11	-5	-22	4	6	6	0
EU 9	-8	-4	-4	1	10	-5	6	-1	-17	-1	46	0	4	-5	-2
EU 15	-9	-3	0	6	2	-4	0	0	2	-3	10	3	3	0	-1
NMS	0	3	-4	-15	-1	-1	0	3	-3	1	-14	10	3	5	0
Belgium	-4		23	51	-24	-42		30	2	-18		23	26	32	3
Germany	-3	19	2	13	-7	-1	-20	2	11	9	-12	26	7	1	3
France	-33	-24	4	12	-12	-16	5	-5	-7	-22		-12	4	25	-7
Italy	-6	38	-9	-5	20	4	-25	3	22	3		-5	6	-6	2
Luxemb.		0	24	0	61	23		-3	79	7			-100	100	16
Netherl.	-17	-21	-4	12	20	9	-63	14	32	21		-51	44	-42	-2
Denmark	-34	-72	-18			24		24	7	-39		-64	0	0	-1
Ireland	-15	-9	-1	13	-28	-16	-43	-11	-6	3	-100	-15	-5	9	-7
Greece															
Spain	8	12	-24	17	4	-18	-7	6	-47	-16		6	3	-9	-6
Austria	-16	29	16	19	47	-13	60	5	-45	18		15	25	-6	8
Portugal	0	0	-33	-61	13	10	15	6	55	-14		8	-60	-5	-6
Finland	7	0	0	-8	4	-14		-13	10	-22		-37	48	-15	-9
Sweden	23	-5	-21	-1	22	-21	26	-18	-46	-35		-33		-40	-16
U. K.	-11	-10	13	1	-8	-3	8	-15	-4	10	100	16	6	-4	2
Bulgaria	-24	33	2	30	-15	-16	-50	14	-18	-11		20	2	-13	-6
Czech R.	23	-6	5	-10	6	-10	28	-8	-1	-2		-2	8	10	2
Estonia	4	-100	12	-51	0	23		-50	-14	42		1		-53	4
Cyprus															
Latvia	-4	-15	-24	0	0	-18	0	-20	7	32		4	18	30	4
Lithuania	6	100	-22		-27	51	-47	23	-5	5	-17	5	21	-19	3
Hungary	-12	16	-3	-27	-10	-5	30	-10	8	-12	-6	4	-22	11	-5
Malta															
Poland															
Romania	-25				-7	-5	36							7	2
Slovenia	-46	-100	-22	-38	26	-14	-21	6	-3	40		-26	-19	31	-12
Slovakia	-3	26	2	25	-8	-15	0	-4	-13	-1		6	-3	15	-1

Source: Alphametrix/Eurostat/TNO

Table 10.5 Share of older workers (50+years) in employment by occupation in electricity, gas and water sector (NACE 40+41), 2006 (in %)

	Total	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers
EU	29	37	16	31	24	28	25	31	28	34	28	24	32	29	31
EU6	26	40	15	27	26	26	22	27	26	23	29	6	27	21	29
EU9	30	32	19	31	18	32	24	27	31	41	30	27	33	44	33
EU15	27	36	16	28	23	27	22	27	28	27	29	10	29	27	29
NMS	32	38	16	37	27	28	32	37	28	37	27	34	33	32	32
Belgium	23	27	0	25	11	37	23	30	21	8	14		13	27	13
Germany	28	34	17	31	18	29	22	56	30	23	25	6	28	20	42
France	24	51	10	23	29	26	14	13	9	22	31	0	32	18	9
Italy	28	48	30	29	39	21	29	0	21	24	33	13	20	31	21
Luxemb.	24	34	0	17	0	0	37		49	0	25	0	0	0	0
Netherl.	26	38	7	31	21	20	19	27	31	21	34	0	37	23	41
Denmark	48	100	41	42	43	44	37	100	42	63	39		64	0	100
Ireland	33	38	9	28	17	60	25	35	67	49	27	41	30	36	46
Greece															
Spain	26	48	11	27	6	28	22	43	28	22	27	68	29	32	19
Austria	27	33	46	39	27	20	17	0	10	55	34	0	16	47	18
Portugal	34	35	0	23	0	17	41	73	28	40	40		32	46	40
Finland	42	50	52	41	20	52	34	0	42	40	40	0	63	0	27
Sweden	35	57	15	32	33	9	32	18	39	0	40	100	43	51	54
UK	26	23	16	30	10	53	21	5	36	45	0	0	30	54	38
Bulgaria	33	42	8	31	27	12	34	46	41	38	24	27	24	32	53
Czech Rep.	32	30	30	30	49	28	33	7	29	43	31	86	43	25	38
Estonia	45	50	78	43	9	89	50		54	35	24		83	15	100
Cyprus															
Latvia	42	31	0	39	0	57	38	0	70	43	28		81	26	62
Lithuania	36	13	0	54	23	27	33	52	37	37	15	0	59	14	62
Hungary	32	55	10	34	40	34	35	0	18	43	23	10	38	19	29
Malta															
Poland	35	33	4	50	23	31	33	54	30	48	29	39	29	49	27
Romania	25	36	17	33	100	21	25	20	20	27	25	49	19	20	20
Slovenia	28	56	23	27	6	30	33	21	17	29	31		25	46	0
Slovakia	31	47	29	30	49	28	28	11	34	29	23		34	32	19

Source: Alphametrics/Eurostat/TNO

Table 10.6 Change in share of older workers (50+ years) in employment by occupation in electricity, gas and water sector (NACE 40+ 41), 2000-2006 (in %)

	Managers	Computing professionals	Engineers	Business professionals	Other professionals	Office clerks and secretaries	Service workers	Extraction and building trades	Metal blacksmiths, machinery workers	Electronic and electr. equipment mech.	Other craft and trades workers	Chem. Proc. Powerplant, robot operators	Other plant and machine operators	Labourers	Total
EU	2	7	3	0	-4	4	10	5	11	7	6	8	3	2	4
EU 6	9	0	-1	-4	-2	0	4	5	-2	9	-46	6	1	-8	2
EU 9	-1	10	4	2	6	9	2	4	19	7	27	9	9	-3	6
EU 15	5	4	1	0	0	4	2	6	4	8	-11	7	5	-4	3
NMS	-6	15	9	7	-6	7	20	5	15	5	20	4	2	10	4
Belgium	-19		-9	11	25	-10		-14	-12	14		-52	27	-50	-12
Germany	-1	-18	-3	0	5	1	35	9	4	14	-46	0	1	5	3
France	28	10	4	-4	1	-2	13	-8	-39	13		18	-4	-26	4
Italy	18	30	-3	-4	-24	6	-36	4	-6	-2		5	12	-4	-1
Luxemb.		0	-26	-100	0	13		9	-61	7			0	-100	-11
Netherl.	13	-8	-8	-4	-12	-7	27	-10	-1	-19		15	-77	14	-5
Denmark	34	41	0			-44		-17	63	39		64	0	22	-1
Ireland	30	9	-6	-32	28	14	3	40	15	2	41	-1	-12	-9	6
Greece															
Spain	-14	-2	6	6	8	5	2	8	-2	4		5	18	-8	4
Austria	4	17	-3	20	-45	-5	0	-15	33	5		-13	-34	-21	-4
Portugal	-65	0	10	0	0	20	27	1	40	26		32	19	35	20
Finland	4	52	9	20	10	13		12	18	24		39	-48	-2	14
Sweden	-43	-8	6	-15	-23	32	18	2	0	-3		13		37	1
U. K.	3	16	4	-3	33	9	-17	18	19	-25	0	-1	20	4	7
Bulgaria	13	8	-1	27	-12	-2	16	1	22	8		2	-5	28	6
Czech R.	-27	27	-4	29	-21	19	-9	5	17	-6		-2	-19	19	-1
Estonia	-24	78	-21	-5	-11	-50		25	12	13		13		53	-6
Cyprus															
Latvia	4	0	4	-60	27	2	-81	-10	9	-8		35	10	-8	2
Lithuania	-50	0	12		27	-28	52	-20	3	0	0	39	-17	35	6
Hungary	17	10	15	25	12	11	-28	3	26	11	-6	23	-3	8	12
Malta															
Poland															
Romania	-8				-14	3	20							4	-5
Slovenia	31	23	11	-28	30	14	21	1	29	31		-1	8	-9	12
Slovakia	12	29	16	21	8	14	-10	20	17	10		13	22	1	14

Source: Alphametrix/Eurostat/TNO