

DISTRICT HEATING AND COOLING - 2009 STATISTICS

	Unit	Austria	China	Croatia	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece (2007)	Iceland	Italy	Japan	Korea	Latvia	Lithuania	Netherlands	Norway	Poland	Romania	Russia	Slovakia	Slovenia	Sweden	Switzerland	United Kingdom	USA		
TOP District Heating and Cooling Indicators																														
Energy supply composition for District Heat generated																														
- Recycled heat	%	68%		71.90%	66%	64.35%	38.60%	74.96%	46%	91.32%	99%	20%				55%	57.50%		50.7%	63.7%	91.62%	43.94%	38%	86%	67%	56.1%				
- Direct Renewables	%	14%			2%	24.83%	14%	5.92%	6%	0.21%		79.01%				14.30%	13.85%		25.5%	1.4%	0.27%		4%	1%	24%	22.6%				
- Others	%	18%		28.1%	32%	10.82%	47.40%	19.11%	48%	8.47%	1%	0.09%				30.96%	28.65%		23.8%	34.9%	8.11%	56.06%	58%	13%	9%	21.3%				
Total District Heat sales in 2009	TJ	63,549	263,188,000	9,550	93,114	99,569	24,725	116,690	86,472	284,386	1,879	25,272	227 Mm ³	22,997	201,389	22,042	27,900	26,708	13,300	239,000	50,600	6,891,293	57,600	7,742	181,612.00	16,060		365,818		
Total District Heat sales in 2005 (if not available 2007)	TJ	56,644	211,035,000	10,781	95,624	99,664	27,496.80	105,411	85,716			22,820	156 Mm ³	25,072	195,109	25,020	28,742	20,744	8,580	295,000	61,105			8,268	174,274.40	16,010				
Annual District Heat sales turnover 2009	Mio. Euro	1,014		85.47		2,500	302.9	1,493.6	1,437			66		2,444	306.16	491.04		276.64	2,486	710.42			1,115	96.33	3,005.60			5,037		
Annual District Heat sales turnover 2005 (if not available 2007)	Mio. Euro	723				2,300	180.1	990.9	1,270			47		1,557	319.26	261.56		141.60	2,150	647.71				90.35	2,425.90					
Share of citizens served by District Heating	%	20%		10%	38%	61.20%		53%	49%	14%		99%	4%		12%	64%		100%	50%	23%			41%	17%	42%			<1%		
Trench length of District Heating pipeline system 2009	km	4,201	110,490	460	7,554		1,447	12,210	3,321	19,538	658	6,950	2,404	736	2,268	1,000	2,535		1,100	19,286	7,000	173,100	3,471	704.9	21,100	1,090		3,206		
Trench length of District Heating pipeline system 2005 (if not available 2007)	km	3,563	71,338	460	7,740		1,410	10,020	2,970	18,438		4,390	1,667	710	1,849	1,000	2,506.70		780	18,577	8,148			622.7	16,000	920				
Average District Heating price	Eur/ GJ	15.96		8.95	17.1	25.03	12.25	12.8	16.61	19.55		2.58			12.14	13.89	17.6		20.8	10.4	14.04	4.48 (for residential sector)	18.08 for households / 20.2 for others	12.44	16.55			8.64		
Number of District Heating utilities		730		11	449		200	ca. 150	418 (systems)	228	5	18	55	86	67	40	30		70	499	91		365	58	439 (systems)	41		132		
Total installed District Heating capacity	MWth	8,200	286,106 + 93,193 (t/h) steam	1,800			5,586	20,790	16,460	51,506	445	2,075	2,204 only in CHP	4,250	12,956	7,308	9,621	5,552	2,305	59,790	53,200	541,028 (2007)	27,896	2,242	15,000	2,150		87,734		
Total investment in District Heating for 2009	Mio. Euro	261.96					600										32			500	25				850					
Estimated employment figures in District Heating sector		2,514		1,366 (2007)	14,170	10,900	6,000	1,700			141	335		2,295		2,500	4,700		1,100	40,565	36,450		7,871		5,000			32,000		
District heated floor space	m ²	43,000,000	3,795 Mio.		144 Mio.		30,500,000	256 Mio.		517.8 Mio	4,611,254	13,759,000		48,886,000	1,207,076,000	38,160,000	35,300,000			472,000,000	63,200,000		146,684,000	8,288,700	678,000,000		63,000,000	388,687,924		
New connections to District Heating		48,000 new dwellings					1,800 new dwellings	10,000 households				898 new households			188,000 households					64,000 households										
Heat sales volume for new connections to District Heating	GJ						140,000	4,200				170,000	1,717,000			270	530,000		1,440,000	2,100,000					23,500					
CO ₂ emissions per TJ of District Heat generated	Ton CO ₂ /TJ	22.9			39		56	0.19 kg CO ₂ / kWh				0.0003	61.4		58.02 (heat and el)	53	50			103 Mg/TJ	83.3								82.89	
Total heat demand 2009	TJ	305,057		124,278	148,759		29,030	261,610				27,292			265,330				234,000	606,000			62,760 (residential only)		305,638					
Total share of CHP of national electricity production	%	18.8%		19.5%	13%	55%	9.2%	35.6%	3.1%	12.5%	1.9%	24.5%	9.5%		5.1%	33.6%	12.7%		33.6%	0.1%	16.3%	9.6%		2.4%	6.7%	4.0%	1.1%	6.4%		
CHP heat autoproduction	TJ			14,850			23,709	144,300			4,226 TJ													4,129.9						
Average energy use of buildings per m ²	kWh/m ²						133			171			200		904.35 kJ/m ²					90-110					116.6			4,830 BTU/m ²		
District Cooling																														
District Cooling capacity 2009	MWth	28						117	630	176			153.4	3,916	1,123.20					89.7					0.97	650			14,063	
District Cooling capacity 2005 (if not available 2007)	MWth	15						41	423											75.29										
District Cooling sales 2009	MWh	24,500						79,050	925,000	187,556 (work)				3,864,167						108,054	46			0.026	828,700			22,417,315		
District Cooling sales 2005 (if not available 2007)	MWh	6,751						25,990	661,000											80,810						662,000				
Trench length of District Cooling pipeline system 2009	km	6						58	131	56					20					58	20					326			587	
Trench length of District Cooling pipeline system 2005 (if not available 2007)	km							23	90											48						182.4				