

**Baseline Carbon Emission Factor of
Bulgarian Electricity and Heat Power System**

	Unit	2000	2001	2002	2003	2004		
1. Total system power generation	GWh	41 805	44 785	41 943	41 990	43 621		
2. Total system heat generation	MW _{th} h	14 398 244	17 092 947	17 104 183	18 945 487	15 622 107		
3. Total CO2 emissions of power generation	kt/a	20 686,07	24 186,09	21 130,37	23 502,96	26 141,93		
4. Total CO2 emissions of energy transformation	kt/a	25 364,83	29 868,93	27 206,40	29 968,99	31 566,24		
Baseline Emission Factor - BEF								
Fossil Fuels								
1. Dispatch Data_OM_EF	tonne/MWh	1,215	1,287	1,214	1,226	1,199		
2. Dispatch Data Adjusted_OM_EF	tonne/MWh	1,159	1,222	1,150	1,160	1,138		
3. Average Dispatch Data_OM_EF	tonne/MWh	1,269	1,307	1,231	1,237	1,239		
HPP included								
1. Dispatch Data_OM_EF	tonne/MWh	1,144	1,184	1,106	1,160	1,165		
2. Dispatch Data Adjusted_OM_EF	tonne/MWh	1,065	1,106	1,032	1,067	1,078		
3. Average Dispatch Data_OM_EF	tonne/MWh	1,101	1,149	1,040	1,073	1,108		
Fossil Fuels								
1. Dispatch Data_OM_EF	kg/GJ	106,38	109,57	110,86	111,24	110,03		
2. Dispatch Data Adjusted_OM_EF	kg/GJ	106,93	109,05	110,68	111,09	109,91		
3. Average Dispatch Data_OM_EF	kg/GJ	109,43	108,79	109,00	109,47	110,63		
Forecast								
Minimum demand	Unit	2006	2007	2008	2009	2010	2011	2012
1. Total system power generation	GWh	45 051	43 115	44 156	47 490	48 212	51 139	52 291
2. Total system heat generation	MW _{th} h	17 875 519	18 057 503	18 320 175	18 746 936	19 028 565	19 744 974	19 358 651
3. Total CO2 emissions of power generation	kt/a	28 035,37	31 810,38	31 245,76	33 538,31	33 547,47	33 863,20	31 248,73
4. Total CO2 emissions of energy transformation	kt/a	34 447,38	38 304,71	37 832,72	40 154,36	40 358,39	40 560,20	37 758,36
Baseline Emission Factor - BEF								
Fossil Fuels								
1. Dispatch Data_OM_EF	tonne/MWh	1,215	1,158	1,144	1,022	0,984	0,963	0,953
2. Dispatch Data Adjusted_OM_EF	tonne/MWh	1,154	1,100	1,078	0,956	0,917	0,902	0,899
3. Average Dispatch Data_OM_EF	tonne/MWh	1,243	1,190	1,146	1,026	0,986	0,974	0,983
HPP included								
1. Dispatch Data_OM_EF	tonne/MWh	1,176	1,175	1,110	0,995	0,959	0,940	0,918
2. Dispatch Data Adjusted_OM_EF	tonne/MWh	1,111	1,102	1,017	0,894	0,858	0,849	0,838
3. Average Dispatch Data_OM_EF	tonne/MWh	1,138	1,153	1,057	0,947	0,909	0,898	0,889
Fossil Fuels								
1. Dispatch Data_OM_EF	kg/GJ	111,997	106,693	106,484	100,340	97,288	95,088	96,152
2. Dispatch Data Adjusted_OM_EF	kg/GJ	111,976	106,621	106,402	100,566	97,871	95,946	96,570
3. Average Dispatch Data_OM_EF	kg/GJ	111,622	106,175	106,640	100,646	98,217	96,578	97,026
Forecast								
Maximum demand	Unit	2006	2007	2008	2009	2010	2011	2012
1. Total system power generation	GWh	46 739	43 572	46 588	48 351	49 455	51 368	53 194
2. Total system heat generation	MW _{th} h	20 360 486	19 909 333	20 240 498	21 206 857	22 170 354	23 026 991	23 407 576
3. Total CO2 emissions of power generation	kt/a	27 152,04	31 508,75	32 821,32	33 044,62	33 387,00	32 807,31	30 531,04
4. Total CO2 emissions of energy transformation	kt/a	34 405,23	38 713,17	40 181,87	40 770,13	41 342,14	40 706,37	38 615,88
Baseline Emission Factor - BEF								
Fossil Fuels								
1. Dispatch Data_OM_EF	tCO2/MWh	1,204	1,215	1,124	1,014	0,973	0,947	0,884
2. Dispatch Data Adjusted_OM_EF	tCO2/MWh	1,143	1,156	1,059	0,947	0,908	0,884	0,833
3. Average Dispatch Data_OM_EF	tCO2/MWh	1,233	1,252	1,127	1,018	0,977	0,953	0,917
HPP included								
1. Dispatch Data_OM_EF	tCO2/MWh	1,158	1,168	1,101	0,990	0,947	0,928	0,865
2. Dispatch Data Adjusted_OM_EF	tCO2/MWh	1,091	1,095	1,006	0,888	0,850	0,834	0,791
3. Average Dispatch Data_OM_EF	tCO2/MWh	1,118	1,144	1,052	0,940	0,899	0,879	0,840
Fossil Fuels								
1. Dispatch Data_OM_EF	kg/GJ	109,651	111,991	105,315	100,011	95,929	94,604	93,043
2. Dispatch Data Adjusted_OM_EF	kg/GJ	109,571	111,876	105,263	100,226	96,498	95,130	93,524
3. Average Dispatch Data_OM_EF	kg/GJ	109,126	111,908	105,550	100,273	96,821	95,676	94,056