

Input B_H_REFv1.9a_demand_and_supply_tab.txt

The EnergyPLAN model 16.1

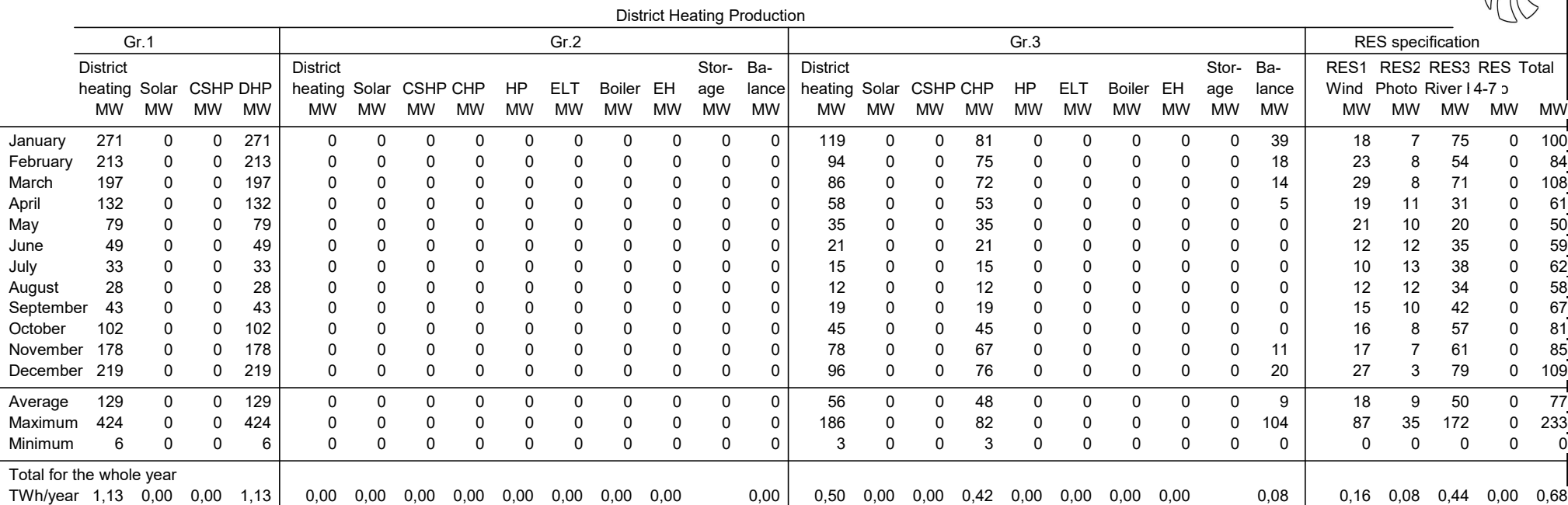


Electricity demand (TWh/year): Flexible demand0,00 Fixed demand 7,95 Fixed imp/exp. 4,05 Electric heating + HP 2,93 Transportation 0,06 Electric cooling 0,22 Total 15,21						Capacities Efficiencies Group 2: MW-e MJ/s elec. Ther COP CHP 0 1500 0,40 0,50 Heat Pump 0 0 3,00 Boiler 0 0,90 Group 3: CHP 443 82 0,21 0,47 Heat Pump 0 0 3,00 Boiler 0 0,90 Condensing 1058 0,29				Regulation StrategyTechnical regulation no. 1 CEEP regulation 000000000 Minimum Stabilisation share 0,00 Stabilisation share of CHP 0,00 Minimum CHP gr 3 load 0 MW Minimum PP 0 MW Heat Pump maximum share 1,00 Maximum import/export 3100 MW				Fuel Price level: Basic Capacities Storage Efficiencies Elec. Storage MW-e GWh Elec. Ther. Charge 1: 0 0 0,80 Discharge 1: 0 0,90 Charge 2: 420 3 0,80 Discharge 2: 420 0,90 Electrolysers: 0 0 0,80 0,00 Rockbed Storage: 0 0 1,00 CAES fuel ratio: 0,000			
District heating (TWh/year) Gr.1 Gr.2 Gr.3 Sum District heating demand 1,13 0,00 0,50 1,63 Solar Thermal 0,00 0,00 0,00 0,00 Industrial CHP (CSHP) 0,00 0,00 0,00 0,00 Demand after solar and CSHP 1,13 0,00 0,50 1,63						Heatstorage: gr.2: 0 GWh gr.30 GWh Fixed Boiler: gr.2:0,0 Per cent gr.0,0 Per cent				Distr. Name : Hour_nordpool.txt Addition factor 0,00 EUR/MWh Multiplication factor 2,00 Dependency factor 0,00 EUR/MWh pr. MW Average Market Price227 EUR/MWh Gas Storage 0 GWh Syngas capacity 0 MW Biogas max to grid 0 MW				(TWh/year) Coal Oil Ngas Biomass Transport 0,00 13,43 0,01 0,00 Household 1,15 0,41 0,71 13,47 Industry 2,47 1,32 0,89 0,20 Various 5,83 1,87 1,07 0,39			
Wind 87 MW 0,16 TWh/year 0,00 Grid Photo Voltaic 35 MW 0,08 TWh/year 0,00 stabili- River Hydro 172 MW 0,44 TWh/year 0,00 sation River Hydro 0 MW 0 TWh/year 0,00 share Hydro Power 1685 MW 4,17 TWh/year Geothermal/Nuclear 0 MW 0 TWh/year						Electricity prod. from CSHP Waste (TWh/year) Gr.1: 0,00 0,00 Gr.2: 0,00 0,00 Gr.3: 0,00 0,00											

Output

	District Heating										Electricity																Exchange			
	Demand		Production							Balance	Consumption						Production						Balance					Payment Imp Exp Million EUR		
	Distr. heating MW	Solar MW	Waste- CSHP MW	DHP MW	CHP MW	HP MW	ELT MW	Boiler MW	EH MW		Elec. demand MW	Flex.& Transp MW	Elec- trolyser MW	EH MW	Hydro Pump MW	Tur- bine MW	RES MW	Hy- dro MW	Geo- thermal MW	Waste- CSHP MW	CHP MW	PP MW	Stab- Load %	Imp MW	Exp MW	CEEP MW	EEP MW			
January	391	0	0	271	81	0	0	0	0	39	795	7	4	0	701	0	0	100	478	0	0	435	1124	100	101	0	0	0	28	0
February	307	0	0	213	75	0	0	0	0	18	822	7	3	0	550	0	0	84	477	0	0	407	885	100	12	0	0	0	2	0
March	283	0	0	197	72	0	0	0	0	14	761	7	3	0	508	0	0	108	475	0	0	389	971	100	39	0	0	0	7	0
April	190	0	0	132	53	0	0	0	0	5	806	7	2	0	341	0	0	61	476	0	0	288	645	100	2	0	0	0	0	0
May	114	0	0	79	35	0	0	0	0	0	874	7	1	0	204	0	0	50	461	0	0	187	593	100	0	0	0	0	0	0
June	70	0	0	49	21	0	0	0	0	0	1010	7	1	0	126	0	0	59	475	0	0	116	636	100	0	0	0	0	0	0
July	48	0	0	33	15	0	0	0	0	0	1121	7	1	0	86	0	0	62	477	0	0	79	972	100	0	0	0	0	0	0
August	41	0	0	28	12	0	0	0	0	0	1079	7	0	0	73	0	0	58	478	0	0	67	1111	100	1	0	0	0	0	0
September	62	0	0	43	19	0	0	0	0	0	1058	7	1	0	111	0	0	67	476	0	0	102	873	100	0	0	0	0	0	0
October	147	0	0	102	45	0	0	0	0	0	984	7	2	0	263	0	0	81	477	0	0	241	845	100	1	0	0	0	0	0
November	256	0	0	178	67	0	0	0	0	11	917	7	3	0	459	0	0	85	478	0	0	361	1084	100	27	0	0	0	5	0
December	315	0	0	219	76	0	0	0	0	20	924	7	4	0	565	0	0	109	474	0	0	412	1034	100	97	0	0	0	19	0
Average	185	0	0	129	48	0	0	0	0	9	930	7	2	0	332	0	0	77	475	0	0	257	899	100	24	0	0	0	Average price	
Maximum	610	0	0	424	82	0	0	0	0	104	1577	13	7	0	1094	0	0	233	478	0	0	443	1827	100	704	111	0	111	(EUR/MWh)	
Minimum	9	0	0	6	3	0	0	0	0	0	65	0	0	0	17	0	0	0	0	0	0	15	0	100	0	0	0	0	298	191
TWh/year	1,63	0,00	0,00	1,13	0,42	0,00	0,00	0,00	0,00	0,08	8,17	0,06	0,02	0,00	2,91	0,00	0,00	0,68	4,17	0,00	0,00	2,25	7,90		0,21	0,00	0,00	0,00	62	0

FUEL BALANCE (TWh/year):										Waste/ CAES BioCon-Electro-		PV and Wind off				Industry				Imp/Exp Corrected			CO2 emission (Mt):	
DHP	CHP2	CHP3	Boiler2	Boiler3	PP	Geo/Nu.Hydro	HTL	Elc.ly.	version	Fuel	Wind	CSP	Wave	Hydro	Solar.Tr	Transp.househ.	Various	Total	Imp/Exp	Net	Total	Net		
Coal	0,38	-	0,84	-	-	26,55	-	-	-	-	-	-	-	-	-	-	1,15	8,29	37,21	0,71	37,91	14,51	14,78	
Oil	0,38	-	-	-	-	0,81	-	-	-	-	-	-	-	-	-	13,43	0,41	3,18	18,21	0,00	18,21	4,77	4,77	
N.Gas	0,28	-	-	-	-	0,78	-	-	-	-	-	-	-	-	-	0,82	0,71	1,99	4,59	0,00	4,59	0,89	1,04	
Biomass	0,22	-	0,04	-	-	0,76	-	-	-	-	-	-	-	-	-	-	13,47	0,59	15,09	0,00	15,09	0,00	0,00	
Renewable	-	-	-	-	-	-	4,17	-	-	-	0,16	0,08	-	4,61	-	-	-	-	4,85	0,00	4,85	0,00	0,00	
H2 etc.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0,00	0,00	0,00	0,00		
Biofuel	-	-	0,00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0,00	0,00	0,00	0,00		
Nuclear/CCS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0,00	0,00	0,00	0,00		
Total	1,25	-	0,88	-	-	28,91	-	4,17	-	-	-	0,16	0,08	-	4,61	-	14,25	15,74	14,06	79,95	0,71	80,66	20,17	20,59

[illegible]