	1// // I
Electricity demand (TWh/year): Flexible demand0,00 Fixed demand 7,52 Fixed imp/exp. 3,57 Electric heating + HP 2,93 Transportation 0,06 Electric cooling 0,22 Total 14,30 Capacities MW-e MJ/s CHP 0 1500 0,40 Heat Pump 0 0	3,00 Stabilisation share of CHP 0,00 Elec. Storage MW-e GWh Elec. Ther.
District heating (TWh/year) Gr.1 Gr.2 Gr.3 Sum Group 3: Group 3: CHP 1017 82 0,2 District heating demand 1,13 0,00 0,50 1,62 CHP 1017 82 0,2 Solar Thermal 0,00 0,00 0,00 0,00 Heat Pump 0 0 Industrial CHP (CSHP) 0,00 0,00 0,50 1,62 Condensing 1099 0,38	0,47 3,00 0,90 Minimum CHP gr 3 load
Wind 87 MW 0,16 TWh/year 0,00 STWh/year 0,00 Stabilisities Heatstorage: gr.2: 0 GWh Fixed Boiler: gr.2:0,0 Per cent River Hydro 172 MW 0,44 TWh/year 0,00 sation Electricity prod. from Gr.1: CSHP W Gr.1: 0,00 0,00 0,00 0,00 0,00 0,00 0,00 0,0	Syngas capacity 0 MW Industry 2,47 1,32 0,89 0,20

| Output

_				Dist	trict He	ating					Electricity														Exchange					
_	Demand	<u> </u>			Produ	ction							Consu	umptior	1				F	Producti	ion				Е	Balance			Do.	mont
l	Distr.		Waste							Ва-	ļ	Flex.&		Elec-		Hydro	Tur-		Ну-	Geo-	Waste			Stab-					Pay Imp	ment/ Exp
	heating		CSHP		CHP	HP	ELT	Boiler			l .	dTransp		trolyser		Pump		RES		hermal	CSHF		PP		Imp	Exp	CEEP			
	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	%	MW	MW	MW	MW	Milli	on DKK
January	391	0	0	271	81	0	0	0	0	39	737	7	4	0	701	0	0	100	482	0	0	999	500	100	13	0	0	0	3	0
February	307	0	0	213	75	0	0	0	0	18	769	7	3	0	550	0	0	84	443	0	0	935	294	100	0	1	0	1	0	0
March	283	0	0	197	72	0	0	0	0	14	712	7	3	0	508	0	0	108	456	0	0	894	391	100	5	3	0	3	1	0
April	190	0	0	132	53	0	0	0	0	5	762	7	2	0	341	0	0	61	452	0	0	661	217	100	0	0	0	0	0	0
May	114	0	0	79	35	0	0	0	0	0	833	7	1	0	204	0	0	50	452	0	0	430	300	100	0	7	0	7	0	1
June	70	0	0	49	21	0	0	0	0	0	966	7	1	0	126	0	0	59	486	0	0	267	414	100	0	0	0	0	0	0
July	48	0	0	33	15	0	0	0	0	0	1074	7	1	0	86	0	0	62	515	0	0	182	741	100	0	0	0	0	0	0
August	41	0	0	28	12	0	0	0	0	0	1035	7	0	0	73	0	0	58	522	0	0	153	871	100	0	0	0	0	0	0
Septemb	er 62	0	0	43	19	0	0	0	0	0	1013	7	1	0	111	0	0	67	505	0	0	234	626	100	0	0	0	0	0	0
October	147	0	0	102	45	0	0	0	0	0	936	7	2	0	263	0	0	81	493	0	0	553	424	100	0	0	0	0	0	0
Novembe	er 256	0	0	178	67	0	0	0	0	11	864	7	3	0	459	0	0	85	488	0	0	829	503	100	0	0	0	0	0	0
Decembe	er 315	0	0	219	76	0	0	0	0	20	866	7	4	0	565	0	0	109	450	0	0	945	482	100	14	6	0	6	3	1
Average	185	0	0	129	48	0	0	0	0	9	881	7	2	0	332	0	0	77	479	0	0	589	482	100	3	1	0	1	Aver	age price
Maximun	n 610	0	0	424	82	0	0	0	0	104	1514	13	7	0	1094	0	0	233	556	0	0	1017	1600	100	312	492	0	492	(DI	(K/MWh)
Minimum	9	0	0	6	3	0	0	0	0	0	22	0	0	0	17	0	0	0	0	0	0	35	0	100	0	0	0	0	295	195
TWh/yea	r 1,62	0,00	0,00	1,13	0,42	0,00	0,00	0,00	0,00	0,08	7,74	0,06	0,02	0,00	2,91	0,00	0,00	0,68	4,21	0,00	0,00	5,18	4,23		0,02	0,01	0,00	0,01	7	2
FUEL B	ALANCE	(TWh/\	/ear):							Wa	ste/ C/	AES Bio	Con-E	lectro-		PV an	PV and Wind off Industry Imp/Exp Corrected CC										2 emi	ssion (Mt)		
	DHP	` .	,	23 Bc	oiler2 B	oiler3	PP	Geo/N	u.Hydr	o HT	L El	c.ly. ver	sion F	uel	Wind	CSP	Wave	е Нус	dro So	olar.Th	Transp.	.housel	า.Varioเ	us Tota		np/Exp			otal	, ,
Coal	0,65	_	0,8	 B	_	_	7,00	_	_	_			_	_	_	_	_	_		_	_	1.15	2,64	12,33	3 (0,00	12,33		1,22	4,22
Oil	0.08	_	-		_	_	2.34	_	_	_			-	_	_	_	_	_		- 13		0,41	1,71	17,97	- 1	,	17,97			4,79
N.Gas	0.48	_	_		_	_	2.34	_	_	_			_	_	_	_	_	_			,	0,71	1,96	6,32	- 1),00	6.32		,	1,46
Biomas	- , -	_	_		_	_	2.34	_	_	_				_	_	_	_	_		_	, -	3,47	0,20	16,06	- 1	*	16,06		,	0.00
Renewa	- , -	_	_		_	_	_, .	_	4,21	_			_	_	0.16	0.08	_	4.6	4	_		_	-	4,89	- 1),00	4,89		,	0.00
H2 etc.	_	_	_		_	_	_	_	-,	_			_	_	-	-	_	-,0		_	_	_	_	0.00	- 1),00	0,00		,	0,00
Biofuel	_	_	_		_	_	_	_	_	_				_	_	_	_	_		_	_	_	_	0,00	1 -),00	0,00		,	0,00
Nuclear	/ccs -	-	-		-	-	-	-	-	-			-	-	-	-	-	-		-	-	-	-	0,00	- 1),00	0,00		,	0,00
Total	1,25	_	0,8	 B	_	- 1	4,04	_	4,21	_			_	_	0,16	0,08	_	4,6	4	- 14	,25 1	5,74	6,51	57,56	5 0),04	57,60	10),30 1	0,47
l otal	1,25	-	0,8	8	-	- 1	4,04	-	4,21	_			•	-	0,16	0,08	-	4,6	4	- 14	,25 1	5,74	6,51	57,56	5 0),	04			04 57,60 10,30 1

Output specifications	B_H_REFv1.3	_demand_	tab_supply.txt
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The EnergyPLAN model 1	16.
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											Dist	rict He	ating F	roducti	on													1 TI	>
•	Gr.1 Gr.2														RES specification														
,	District				District								Stor-	Ва-	District								Stor-	Ва-	RES1	RES2	RES3	RES 1	otal
	heating	Solar	CSHP	DHP	heating	Solar	CSHF	CHP	HP	ELT	Boiler	EH	age	lance	heating	Solar	CSHF	CHP	HP	ELT	Boiler	EΗ	age	lance	Wind	Photo I	River I	4-7 ɔ	
	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MV
January	271	0	0	271	0	0	0	0	0	0	0	0	0	0	119	0	0	81	0	0	0	0	0	39	18	7	75	0	10
February	213	0	0	213	0	0	0	0	0	0	0	0	0	0	94	0	0	75	0	0	0	0	0	18	23	8	54	0	84
March	197	0	0	197	0	0	0	0	0	0	0	0	0	0	86	0	0	72	0	0	0	0	0	14	29	8	71	0	108
April	132	0	0	132	0	0	0	0	0	0	0	0	0	0	58	0	0	53	0	0	0	0	0	5	19	11	31	0	61
May	79	0	0	79	0	0	0	0	0	0	0	0	0	0	35	0	0	35	0	0	0	0	0	0	21	10	20	0	50
June	49	0	0	49	0	0	0	0	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	0	12	12	35	0	59
July	33	0	0	33	0	0	0	0	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	10	13	38	0	62
August	28	0	0	28	0	0	0	0	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	12	12	34	0	58
Septemb	er 43	0	0	43	0	0	0	0	0	0	0	0	0	0	19	0	0	19	0	0	0	0	0	0	15	10	42	0	67
October	102	0	0	102	0	0	0	0	0	0	0	0	0	0	45	0	0	45	0	0	0	0	0	0	16	8	57	0	8′
Novembe	er 178	0	0	178	0	0	0	0	0	0	0	0	0	0	78	0	0	67	0	0	0	0	0	11	17	7	61	0	85
Decembe	er 219	0	0	219	0	0	0	0	0	0	0	0	0	0	96	0	0	76	0	0	0	0	0	20	27	3	79	0	109
Average	129	0	0	129	0	0	0	0	0	0	0	0	0	0	56	0	0	48	0	0	0	0	0	9	18	9	50	0	7
Maximum	1 424	0	0	424	0	0	0	0	0	0	0	0	0	0	186	0	0	82	0	0	0	0	0	104	87	35	172	0	233
Minimum	6	0	0	6	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	(
Total for t	the whol	e year																											
TWh/yea		-	0,00	1,13	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		0,00	0,50	0,00	0,00	0,42	0,00	0,00	0,00	0,00		0,08	0,16	0,08	0,44	0,00	0,68

Own use of heat from industrial CH0,00 TWh/year

									NATU	JRAL GA	S EXCH	ANGE						
ANNUAL COSTS (Million DK	K)		DHP &	CHP2	PP	Indi-	Trans	Indu.	Deman	d Bio-	Syn-	CO2Hy	SynHy	SynHy	Stor-	Sum	lm-	Ex-
Total Fuel ex Ngas exchange :	= 0		Boilers	CHP3	CAES	vidual	port	Var.	Sum	gas	gas	gas	gas	gas	age		port	port
Uranium = 0			MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW
Coal = 0		January	116	0	64	171	1	236	589	0	0	0	0	0	0	589	589	0
FuelOil = 0		February	91	0	66	134	1	256	548	0	0	0	0	0	0	548	548	0
Gasoil/Diesel= 0		March	84	0	107	124	1	238	555	0	0	0	0	0	0	555	555	0
Petrol/JP = 0		April	57	0	139	83	1	190	471	0	0	0	0	0	0	471	471	0
Gas handling = 0		May	34	0	241	50	1	170	496	0	0	0	0	0	0	496	496	0
Biomass = 0		June	21	0	333	31	1	138	524	0	0	0	0	0	0	524	524	0
Food income = 0		July	14	0	575	21	1	157	768	0	0	0	0	0	0	768	768	0
Waste = 0		August	12	0	656	18	1	111	798	0	0	0	0	0	0	798	798	0
Total Ngas Exchange costs =	0	September		0	488	27	1	154	689	0	0	0	0	0	0	689	689	0
Total Ngas Exchange costs =	O	October	44	0	272	64	1	378	759	0	0	0	0	0	0	759	759	0
Marginal operation costs =	0	November	76	0	168	112	1	263	620	0	0	0	0	0	0	620	620	0
Total Electricity exchange =	-826	December		0	84	138	1	386	703	0	0	0	0	0	0	703	703	0
Import = 7	-020	December	34	U	04	130	'	300	703	U	U	U	U	U	U	703	703	U
Export = -2		Average	55	0	267	81	1	223	628	0	0	0	0	0	0	628	628	0
Bottleneck = 0		Maximum	182	0	834	268	1	728	1178	0	0	0	0	0	0	1178	1178	0
Fixed imp/ex= -830		Minimum	3	0	0	4	1	0	22	0	0	0	0	0	0	22	22	0
Fixed IIIIp/ex= -030		Total for th	o wholo	voor														
Total CO2 emission costs =	0			•	2.24	0.71	0.01	1.06	E E 1	0.00	0.00	0.00	0.00	0.00	0.00	E E 1	E E1	0.00
Total variable costs =	-826	TWh/year	0,40	0,00	2,34	0,71	0,01	1,96	5,51	0,00	0,00	0,00	0,00	0,00	0,00	5,51	5,51	0,00
Fixed operation costs =	0																	,

-826 RES Share: 36,4 Percent of Primary Energy 51,0 Percent of Electricity

0

Annual Investment costs =

TOTAL ANNUAL COSTS =

5,4 TWh electricity from RES

09-mart-2022 [10:53]