

# Bilag 3: Samfundsøkonomiske beregninger



Samfundsøkonomi		Diskonteringsrente	3.5%																				
		Nuværdi	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
<b>Eksisterende fjernvarme</b>																							
<b>Investeringer</b>		[ kr. ]	-																				
<b>Varmebehov</b>	Varmebehov	[MWh]	904.483	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640
<b>Varmetab</b>	Varmetab i nettet	[MWh]	100.498	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071
<b>Brændselsomkostninger og D&amp;V</b>																							
	Fjernvarme	[ kr. ]	476.047.436	32.188.346	32.110.504	32.351.791	32.559.662	32.790.840	32.973.327	33.166.797	33.171.627	32.793.816	32.693.513	36.479.781	36.339.787	35.751.664	35.139.959	34.547.621	33.953.466	33.366.916	33.366.916	33.366.916	33.366.916
	Varmetransmissionsomkostninger	[ kr. ]	9.211.160	761.641	743.320	734.596	715.402	697.081	660.438	604.602	604.602	604.602	604.602	604.602	604.602	604.602	604.602	604.602	604.602	604.602	604.602	604.602	604.602
<b>Elsalg</b>	Elsalg	[ kr. ]	-206.990.474	-19.938.531	-18.770.724	-18.582.266	-18.006.480	-17.394.234	-16.036.072	-13.930.277	-13.798.754	-13.834.637	-14.015.105	-12.287.463	-11.843.331	-11.751.543	-11.657.416	-11.560.951	-11.462.147	-11.361.004	-11.361.004	-11.361.004	-11.361.004
<b>Miljøomkostninger</b>		[ kr. ]	30.751.248	2.597.189	2.360.707	2.358.164	2.359.045	2.359.842	2.363.207	2.365.803	2.372.436	2.335.403	2.522.806	1.139.638	1.160.356	1.372.355	1.598.214	1.841.780	2.104.799	2.386.998	2.386.998	2.386.998	2.386.998
<b>Forvridningstab</b>		[ kr. ]	-3.539.153	-239.478	-219.759	-215.439	-211.119	-206.799	-202.479	-198.159	-193.481	-185.181	-192.675	-314.295	-292.894	-297.051	-301.207	-305.364	-309.520	-313.677	-313.677	-313.677	-313.677
<b>Samlede omkostninger</b>		[ kr. ]	305.480.217	0	15.369.167	16.224.048	16.646.846	17.416.510	18.246.730	19.758.422	22.008.767	22.156.430	21.714.002	21.613.141	25.622.263	25.968.519	25.680.027	25.384.151	25.127.688	24.891.199	24.683.834	24.683.834	24.683.834
<b>Projekt, overskudsvarme</b>																							
<b>Investeringer</b>																							
	Varmepumpe	[ kr. ]	33.600.000	33.600.000																			
	Scrapværdi, varmpumpe	[ kr. ]	-3.377.243	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-6.720.000
<b>Varmebehov</b>	Varmebehov	[MWh]	904.483	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640	63.640
<b>Varmetab</b>	Varmetab i nettet	[MWh]	100.498	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071	7071
<b>Brændselsomkostninger og D&amp;V</b>																							
	Varmepumpe, el	[ kr. ]	54.185.227	4.619.412	4.489.501	4.420.769	4.290.857	4.160.946	3.901.123	3.503.835	3.503.835	3.503.835	3.503.835	3.503.835	3.503.835	3.503.835	3.503.835	3.503.835	3.503.835	3.503.835	3.503.835	3.503.835	3.503.835
	Fjernvarme, brændsel og D&V	[ kr. ]	304.718.462	20.603.794	20.553.967	20.708.415	20.841.474	20.989.451	21.106.261	21.230.102	21.233.193	20.991.356	20.927.152	23.350.746	23.261.135	22.884.678	22.493.124	22.113.968	21.733.649	21.358.198	21.358.198	21.358.198	21.358.198
	El til pumper	[ kr. ]	272.878	19.200	19.200	19.200	19.200	19.200	19.200	19.200	19.200	19.200	19.200	19.200	19.200	19.200	19.200	19.200	19.200	19.200	19.200	19.200	19.200
	Varmetransmissionsomkostninger, fjernvarme	[ kr. ]	5.896.073	487.527	475.800	470.215	457.930	446.202	422.747	387.006	387.006	387.006	387.006	387.006	387.006	387.006	387.006	387.006	387.006	387.006	387.006	387.006	387.006
<b>Drift og vedligehold</b>	D&V varmpumpe	[ kr. ]	8.508.584	598.673	598.673	598.673	598.673	598.673	598.673	598.673	598.673	598.673	598.673	598.673	598.673	598.673	598.673	598.673	598.673	598.673	598.673	598.673	598.673
<b>Elsalg</b>	Elsalg	[ kr. ]	-132.494.819	-12.762.675	-12.015.160	-11.894.528	-11.525.967	-11.134.067	-10.264.706	-8.916.785	-8.832.597	-8.855.566	-8.971.084	-7.865.218	-7.580.929	-7.522.175	-7.461.924	-7.400.177	-7.336.932	-7.272.191	-7.272.191	-7.272.191	-7.272.191
<b>Miljøomkostninger, fjernvarme</b>		[ kr. ]	19.683.906	1.662.464	1.511.091	1.509.463	1.510.027	1.510.537	1.512.691	1.514.353	1.518.599	1.494.894	1.614.851	729.484	742.745	878.446	1.023.018	1.178.925	1.347.284	1.527.920	1.527.920	1.527.920	1.527.920
<b>CO2 omkostninger, elvarmpumpe</b>		[ kr. ]	982.882	176.899	140.622	119.277	91.905	47.244	37.856	39.019	40.182	41.504	42.878	44.306	45.892	47.584	49.329	51.232	53.294	55.462	55.462	55.462	55.462
<b>NOx, SO2, PM 2,5 omkostninger, elvarmpumpe</b>		[ kr. ]	142.733	17.885	16.292	14.011	12.183	10.484	9.184	7.999	7.953	7.953	7.953	7.953	7.953	7.953	7.953	7.953	7.953	7.953	7.953	7.953	7.953
<b>Forvridningstab, fjernvarme</b>		[ kr. ]	-2.265.416	-153.290	-140.668	-137.903	-135.137	-132.372	-129.607	-126.842	-123.847	-118.535	-123.331	-201.181	-187.482	-190.142	-192.803	-195.464	-198.124	-200.785	-200.785	-200.785	-200.785
<b>Forvridningstab, varmpumpe</b>		[ kr. ]	-630.274	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347	-44.347
<b>Samlede omkostninger</b>		[ kr. ]	289.222.994	33.600.000	15.225.543	15.604.971	15.783.246	16.116.798	16.471.950	17.169.076	18.212.213	18.307.851	18.025.974	17.962.787	20.530.458	20.753.683	20.570.711	20.383.065	20.220.806	20.071.491	19.940.925	19.940.925	13.220.925
<b>Samfundsøkonomisk fordel for projekt vs. alternativ</b>		[ kr. ]	16.257.224																				