

GSHP Renewable Heat Incentive Calculation Tool

Explanation

This tool is designed to estimate the number of KW of heat that will be delivered into a building across an annual heating season and provide an indication of the potential financial incentive available.

Estimated run hours and loading percentages (Based upon BS:EN14825)

Ambient Temperature	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
No of Hours	1	25	23	24	27	68	91	89	165	173	240	280	320	357	356	303	330	326	348	335	315	215	169	151	105	74	4910
Percentage Loading	100	96	92	88	84.23	80.46	76.69	72.92	69.15	65.38	61.61	57.84	54	50.2	46.4	42.6	38.8	35	31	27	23	19	15	10	5	0	
Volume Required m3	50	48		44	42.12	40.23	38.35	36.46	34.58	32.69	30.81	28.92	27	25.1	23.2	21.3	19.4	17.5	15.5	13.5	11.5	9.5	7.5	5	2.5	0	m3
Total Seasonal Volume m3	50	1200	1058	1056	1137	2736	3489	3245	5705	5655	7393	8098	8640	8961	8259	6454	6402	5705	5394	4523	3623	2043	1268	755	262.5	0	103109

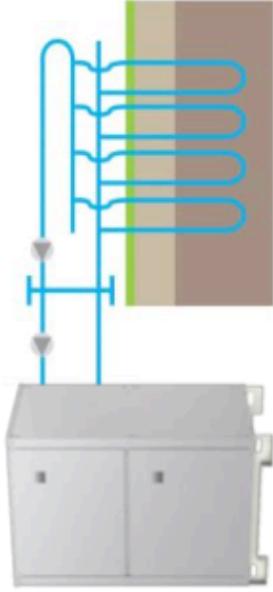
Project Specific Heating Calculation

Name Of Project	Black Rock Farm		
Application Type	UFH 2 x Broiler Houses		
Proposed System	6 x CRHV-P600		
Building Heat Loss at -10oC	400	KW	
Capacity of GSHP	360	KW	
System Design SCOP	3.6		

Load to be calculated to MCS Standards for <45KWh

Information to be taken from CRHV Technical Proposal document available upon request

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Required Capacity	400	384	368	352	336.9	321.8	306.8	291.7	276.6	261.5	246.4	231.4	216	200.8	185.6	170.4	155.2	140	124	108	92	76	60	40	20	0
KW Thermal Delivered	400	9600	8464	8448	9097	21885	27915	35960	45630	45243	59146	64781	69120	71686	66074	51631	51216	45640	43152	36180	28980	16340	10140	6040	2100	0