

Hybrid system							
House Type	Estimated heat loss	KWh heating	Kwh DHW	Bi valent point °c	KWh input heat pump	KHz input boiler	Carbon heat pump
1	9.04	22975	4776	6	7125	13914	3174
2	7.96	20230	5731	5	7676	10701	3420
2a	7.92	20129	5731	5	7676	10701	3420
3	10.64	27041	4776	7	7945	14781	3539



House Type
1
2
2a
3

kgCO2			
Carbon boiler	Total Carbon Hybrid	Total Carbon Boiler system	Carbon % difference
2561	5735	5865	2
1969	5389	5539	3
1969	5389	5518	2
2720	6260	6696	7

Electricity	0.44548	kgCO2 per unit
Natural Gas	0.18404	kgCO2 per unit

Heat pump only			
KWh input heat pump only	kgCO2		Carbon % difference
	Total Carbon heat pump	Total Carbon Boiler system	
11321	5043	5865	14
10536	4694	5539	15
10536	4694	5518	15
12418	5532	6696	17