

Cranbrook - East Devon New Community Initial Energy Strategy for on-site renewables - Draft

Building Type	Space Heating MWh	Hot Water MWh	Electricity MWh	Total MWh	
Residential	9744	7656	10150	27550	
Office	1479	493	2571	4543	
Commercial	798	96	1576	2470	
Community (incl schools)	5373	2017	1419	8809	
Total	17394	10262	15716	43372	
Energy saving measures					
Improved insulation by 15%	14785				15%
Energy efficient lights and appliances from Part L to full energy efficiency - 12% reduction			13830		12%
Hot water saving measures (from 20% reduction in water use) approximately 5%		9749			5%
Revised total energy including energy savings	14785	9749	13830	38364	12%
Residential	8282	7273	8932	24487	
Non-residential	6503	2476	4898	13877	
10% renewables target	1478	975	1383	3836	
Relevant options to meet 10% target (Awaiting client approval)					
Solar water to 750 homes (evacuated tubes-3m2 providing 1800kWh each)		1350		1350	
Secondary space heating to 20% homes with wood burning stoves	160			160	
Wind turbines - 3X50kW @ 110 MWh			330	330	
Biomass heating to 80% office	1005	335		1340	
Solar water heating and PV panels to 50% of community buildings to meet 50% of energy load in those buildings		479	312	791	
Totals	1165	2164	642	3971	10%
30% renewables target	5218	3079	4715	13012	