



SolarTech Ltd.

Providing Energy for Today, Protecting the Environment for Tomorrow.

SolarTech's Role as the Renewable Energy Partner

Unique Multi-Technology Approach

SolarTech are proud to be the renewable energy partner on the Mendip Place project. Our team worked closely with the design and construction teams to help deliver the first new-build multi occupancy Code for Sustainable Homes Level 6 project in the UK.

Our unique multi-technology and independent approach enabled us to design a scheme that achieved the requirements of the Code while considering whole-life cost, ease of operation and ease of use for tenants.

Our solution included a dedicated PV system to each property so that all tenants would benefit from reduced fuel bills, helping reduce fuel poverty. Our design used a number of leading PV brands to optimise the available roof areas and ensure the requirements of Code were achieved.

Each array is monitored remotely *via* a site-wide monitoring system, GSM linked to the clients office. This enables the client to automatically monitor PV generation. This data is 'bill gradable' and can be used for obtaining payments under the Governments 'Feed-in-Tariff' scheme. In the first year, we estimate that the development will make savings of £12,000 under this scheme, with a 25-year whole life benefit of £390,000.

In Addition to the PV systems, we installed a centralised bio-mass boiler room, linked to a heat distribution unit in each property. The heat distribution units were supplied *via* a distribution network of pre-insulated pipework.

The site monitoring system is also linked to heat meters within each property. Again these units are linked back to the landlord *via* the GSM connection, enabling each tenant to be billed based on the energy they use.

The central boiler house includes 100% standby of all critical components, including boilers, pumps and fuel augers. To maximise energy savings the primary circulation pumps include variable speed control dependant on heating load.

The boiler system will qualify for an annual payment under the Governments 'Renewable Heat Incentive' scheme, again providing a low carbon solution and a significant income stream.

The boiler house is monitored remotely for critical and low fuel alarms, enabling condition based maintenance to be used across the site on key systems. The boilers were fitted with an automatic ash extraction system to minimise maintenance visits.

This integrated, multi-technology approach has helped provide an industry leading integrated solution on this prestigious project.

