Eco New Build Home Backwell, South West England

Technologies:

Solar panels, battery storage, heat pump

System size: 7.2kWp Annual Output: 15,118kWh Annual CO2 savings: 4,188kg

Fully integrated solar, energy storage and heat pump technologies have been combined to create a low carbon house that provides the occupants with a lower cost, eco-friendly lifestyle.

A Viridian Clearline Fusion solar roofing system was specified in order to provide a flush fitting to the surrounding roof, improving aesthetics and offsetting the cost of a standard roof covering. The 7.2kWp solar array is comprised of 24 PV modules and will generate in excess of 15,118kWh of clean energy per year.

As solar panels typically generate more clean energy than your house can immediately use, Solarsense has installed a Tesla Powerwall in each property. The home battery will allow the occupants to store any excess solar power to use in the evening and when needed, maximising their use of clean solar energy and reducing their reliance on buying electricity in from the grid.

A Mitsubishi Ecodan air source heat pump was specified to provide heating for each property alongside a 200L thermal store. Ecodan offers an ideal solution for new build properties, where strict building regulations drive down the space heating demand, making the production of hot water the dominant load.

