



CASE STUDY

**St Helens School,
Northwood, Greater
London**

**Solar PV modules
mounted on inclined
ballasted framework
with external
inverters.**

Providing power for a community building

This school is set on 21 acres of land and as part of a 15-20 year masterplan for the school a new junior school was built.

The aim was to install as much solar PV as the roof space would allow to the new building which is part of the 'Eco-Schools' global programme.

Chelsfield Solar were employed by the main contractor and the resulting PV installation feeds energy into the three phase communal power supply to the school. The system was commissioned in October 2016.

Chelsfield Solar Project Role

Specialist PV system contractor employed by the main contractor, LifeBuild Solutions Ltd. Detailed PV system electrical and mechanical design, supply, installation and commissioning.

Technical Specifications

- Single PV array comprising of 133 x 285W monocrystalline JA Solar PV modules with a surface area of 217.5m².
- 37.905kWp system connected to 2 x Samil 17000TL grid-connected inverters.
- System faces south and is tilted at 10°.
- G59 three phase mains connection into the main fuse board with excess energy exported back to the grid.
- The system is expected to generate approximately 32,522kWh of electricity per year, saving annual emissions of 16,870kg of CO₂.
- PV modules mounted on ballasted inclined framework to the new roof space.

