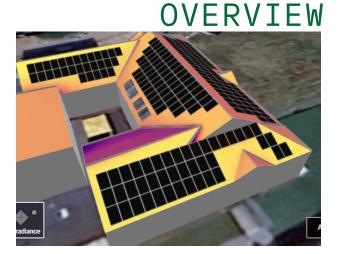


# CASE STUDY

Solar Installation on a School in Stotfold, Bedfordshire

the green Way



The Department of Education has invested in a large solar array for St Mary's Church of England Academy in Stotfold, Bedfordshire, as part of its energy efficiency scheme which includes installing a Heat Pump to replace the oil powered boiler. Designed and delivered by The Green Way Solar Ltd, the 98.44kWp installation harnesses high-efficiency solar panels and advanced inverter technology to supply the school with clean, renewable energy while significantly cutting its carbon footprint.

## THE CHALLENGE

The Academy was keen to reduce its energy costs and environmental impact, while ensuring the installation process did not disrupt students or staff during term time. With a large roof space available, the challenge was to design and deliver a system that maximised solar production, achieved long term savings, and was installed within the short summer holiday period.



### **OUR SOLUTION**

The Green Way Solar team engineered and installed a system tailored to the school's needs. This comprised:

- 214x Aiko 460W solar panels mounted on the roof a SolarEdge Synergy 90kW three phase inverter with optimisers
- Installation of a screen dedicated to the monitoring in reception to aid awareness of the benefits amoung students and parents alike.

The setup ensures maximum energy generation, robust system monitoring, and long-term reliability. By carefully coordinating scaffolding, surveys, and logistics ahead of the school holiday, we completed the project on time and without disruption to the school's operations.

#### **RESULTS**

The system is projected to generate 95.09 MWh of clean electricity each year, with around 65% directly powering the school and the remaining 35% exported to the grid. This translates into an annual saving of 18.39 tonnes of  $CO_2$  emissions, equivalent to planting 845 trees every year. These results ensure the school benefits not only from long-term cost reductions, but also from a lasting positive environmental impact.

The Green Way Solar delivered the installation with accuracy, efficiency, and a strong focus on safety. The system now provides St Mary's Academy with a reliable supply of renewable energy, offsetting a significant share of its electricity needs while cutting operational costs. Despite the tight summer holiday schedule, the project was completed on time and within budget, ensuring zero disruption to staff or pupils.

Carbon Emissions
Saved Annually



Renewable Energy
Production

**1**65%

From the outset, the project was guided by a methodical, safety-first approach. A full structural assessment confirmed the roof's suitability for hosting the 215 high-performance panels. All cabling, inverter connections, and protection devices were installed to the highest



standards of compliance and quality. Once operational, the system was integrated with SolarEdge's advanced monitoring platform, giving the Academy real-time insights into energy generation, onsite consumption, and exports to the grid.

# WHY CHOOSE THE GREEN WAY SOLAR?

The Green Way Solar delivers smart, reliable energy solutions tailored to your home or business. We combine expert system design, high quality components, and professional installation to maximise performance and long-term value.

From initial consultation to final handover, our team ensures a smooth experience with minimal disruption. Every system is carefully designed to reduce energy costs, lower carbon emissions, and increase your energy independence.



With advanced monitoring, responsive support, and future ready technology, we make going solar simple, effective, and built to last.

#### CONCLUSION

The St Mary's Academy solar installation demonstrates how schools can lead the way in sustainability, combining financial savings with environmental responsibility. By delivering a carefully planned, high performing solar PV system, The Green Way Solar has provided the Academy with a long term energy solution that benefits both its community and the planet.