



CASE STUDY

Solar Installation in Littlehampton, West Sussex

the **greenway**
Solar

OVERVIEW



A 4 bedroom, residential property in Littlehampton, West Sussex, partnered with The Green Way Solar to install a bespoke solar and battery system designed to cut energy bills, future proof the home, and provide power security in all conditions. The system comprised 14x Aiko 510W panels, a Tesla Powerwall 3, and Gateway, forming a highly efficient 7.14 kWp solution tailored to meet the home's growing energy demands and deliver long-term savings.

THE CHALLENGE

This homeowner came to us with high electricity bills and a clear goal: improve the energy efficiency of their new home without compromising its appearance. With electric heating, an EV motorcycle being charged from a standard socket, and both clients working from home full time, keeping the power on at all times was non-negotiable. They weren't yet on a time of use tariff, and there was no EV charger installed, so smart energy use wasn't being fully realised. As part of a wider upgrade to the property, they wanted a system that looked as good as it performed, with zero impact on kerb appeal.



OUR SOLUTION

We designed and delivered a 7.14 kWp solar PV system supported by Tesla Powerwall 3 battery storage, giving the homeowners the flexibility and resilience they were looking for. The bifacial Aiko panels maximised every inch of usable roof space, capturing sunlight from both sides to increase output. The Tesla Powerwall 3 provided smart energy storage, allowing the home to store excess generation for use during the evening or in the event of a power cut, essential for protecting home technology, refrigeration, and other critical systems.

Before any equipment arrived on site, we carried out a full structural and electrical assessment to ensure the property could support the system safely and effectively. Our installation team completed the project cleanly and efficiently, installing panels, running cabling, and setting up the battery system, all with minimal disruption to the homeowners, in a property that remained fully occupied throughout the process.

RESULTS

The system now supplies 34% of the home's annual energy needs through solar and 39% through battery storage. The homeowners benefit from reduced reliance on the grid, lower energy bills, and enhanced energy independence, particularly during peak tariff periods or local outages.

The result is a smarter, greener home that is more resilient, more cost-efficient, and better equipped for the future. With real-time performance monitoring and automated alerts in place, the homeowners can easily track their energy savings, assess system performance, and respond quickly to any faults or issues. This not only maximises energy efficiency but also ensures long-term reliability and ease of use.

**Carbon Emissions
Saved Annually**

↓ 1389 kg CO₂

**Renewable Energy
Consumption**

↑ 73%

The Green Way Solar completed the installation with precision and professionalism. The system now delivers consistent renewable energy generation, reducing the household's reliance on the grid and significantly cutting electricity bills. Even with the challenge of working in a fully occupied home, the project was delivered on time and on budget, with minimal disruption. The homeowners were highly satisfied with both the performance of the system and the care taken throughout the installation process.

From day one, the project followed a methodical, safety-first approach. A full structural assessment confirmed the roof's suitability for solar PV. Once approved, our team designed and installed a high-efficiency system that combined Aiko 510W bifacial panels, a Tesla Powerwall 3 battery, and a Tesla Gateway. Every element was carefully integrated to ensure maximum generation, safe energy storage, and long-term reliability.

All wiring, inverters, and protection devices were installed with precision and compliance in mind. Once operational, the system was equipped with advanced monitoring tools that provide real-time data, instant fault alerts, and performance dashboards. These tools allow the homeowner to keep a close eye on energy usage, grid interaction, and long-term cost savings, while ensuring continued compliance with grid regulations.

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

This project in Littlehampton stands as a strong example of how a well-designed solar and battery system can transform a home into an energy-efficient, low-carbon property. The Green Way Solar delivered a tailored solution that met the homeowner's unique energy needs while offering long-term financial and environmental benefits.

By addressing technical challenges with care and ensuring a seamless installation experience, we reinforced our commitment to providing premium, dependable renewable energy systems. This home is now prepared for the demands of tomorrow, with clean, reliable power available day and night.