



Centregreat Power Port Research & Development

Case Study



Background

The Power Port is a fully factory built and tested, modular EVSE solution, designed to deliver fast and rapid EV charging.

This innovative development was initiated through our business foresight to address the needs for carbon reduction in infrastructure solutions, capitalising on the multi-disciplinary skillset and adaptive capacity of Centregreat and our associated businesses.

Development of the initial concept was achieved through a close working partnership between Centregreat, SOLARWATT and Swansea University's SPECIFIC Solar Innovation and Knowledge Centre, to develop the perfect combination of overhead solar generation, integrated battery storage and EV charging.

Delivery

Working in collaboration with our supply chain partners, we developed a complete working prototype of the Power Port in our Cardiff Depot, inviting our clients to a site visit as an initial launch.

Centregreat undertook the following using our in-house capability and expertise:

- Steel fabrication to CE Execution Class 4
- Erection of steel structure
- PV installation
- All electrical connections; Lloyd's Register NERS Accredited to undertake DNO supply connections using our qualified electrical operatives
- Associated Civil Engineering Works

The prototype is also equipped with SOLARWATT Glass-Glass Panels, which acts as a roof covering whilst offering a unique 20%

panel transparency, which delivers good visibility under the carport.

An integrated hybrid inverter and optional battery storage within the structure's central column allows for multi-flow technology that maximises PV output for EV charging.

Outcome

Our team has since presented the Power Port at the 'Decarbonising our Infrastructure', CECA Wales, ACE & CSS Cymru Joint Annual Conference 2021. This was followed by being featured in the CECA report 'Decarbonising our Infrastructure', as a tangible demonstration of innovation in the industry.

Through this R&D project we have cultivated ongoing meaningful conversations with clients about how we can use our adaptive capacity to meet their bespoke, integrated, structural and renewable energy requirements.

