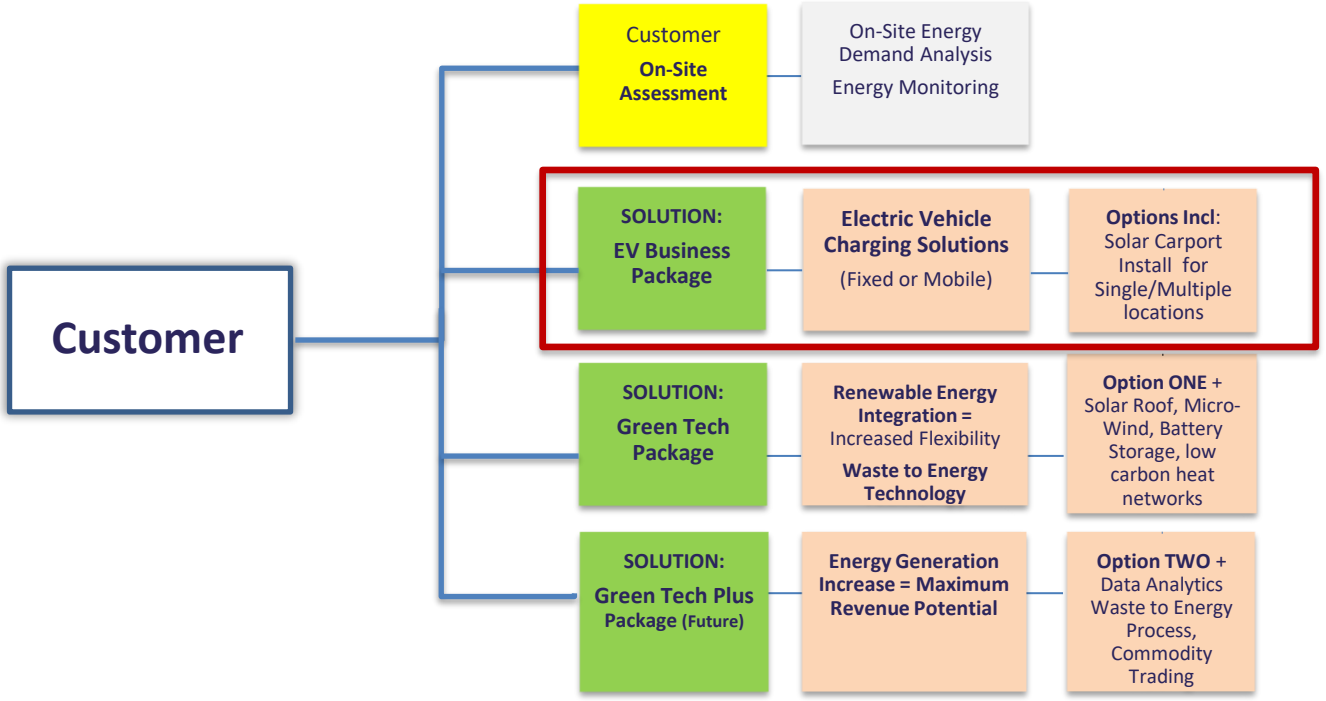
pure energy

Connecting Businesses and our Communities
to a Low Cost Sustainable Future

February 2025

Bespoke Solution or Bundled Option….

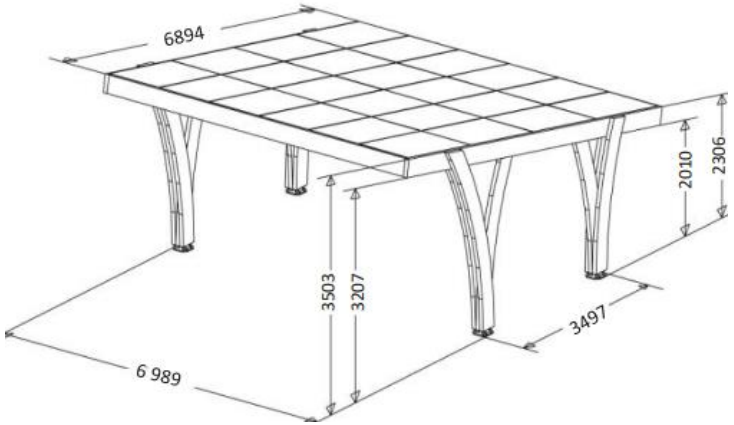


Core Technology – Solar Carport

Strategy: Housing/Business Sector

Product Innovation

- The SOLAR CARPORT combines the protection of a regular carport with the production of solar energy to power a home or charge electric vehicles
- Our SOLAR CARPORT incorporates a wooden tower, recycled metal screws foundation, and eye-catching design
- The SOLAR CARPORT is built according to regulatory building standards to withstand the environment, including snow load and wind speed, and is waterproof via solar PV rail structure
- The SOLAR CARPORT is compatible with all charging solutions and battery storage systems currently available on the market to enable both transfer and energy storage



	Modules	Power	Yearly Energy
Carport 1 car (5.58x5.39x3.41m)	15	6 kWp	6000-6600 kWh
Carport 2 cars (6.64x5.39x3.49m)	18	7.2 kWp	7200-8750 kWh
Carport 2 cars (6.86x7.24x3.6m)	24	9.6 kWp	9600-11000 kWh
	Materials	**CO2 saved**	**Panels**
Structure	Glue Laminated Larch	4 tons	Bi-Facial transparent

Solar Canopy – Technical Features

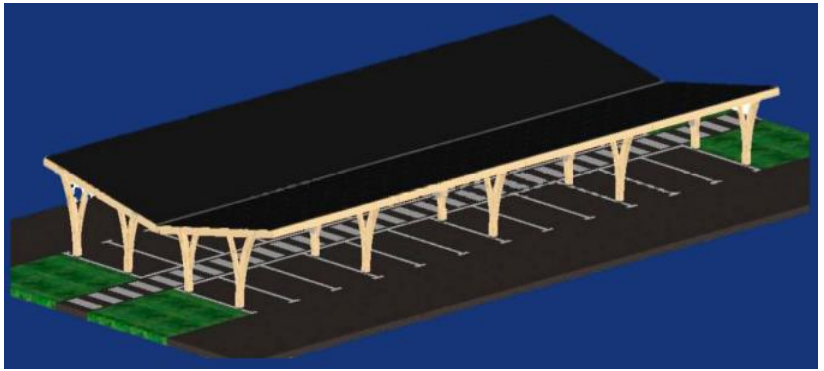
- **Bifacial Solar Panels** – Increased energy production via direct and indirect sunlight improves product efficiency
- **Solar PV Mounting System** provides a sealed waterproof roof structure
- **Ground Screw foundations** – Easy installation without excavation or concrete pouring. Ground screws made from recycled metal
- **"Build-It" Magazine** Best Sustainable Technology or Product 2024 award shortlist

Solar Carport – Commercial Sector

Strategy: Commercial Sector

Product Innovation

- Design flexibility enables optimisation of existing parking areas
- Modular design fully scalable to suit commercial customer needs
- Customised installations maximise solar gain available on-site
- Our solution offers solar carport designs to suit required number of car spaces for your business
- A sustainable solution demonstrating the benefits of on-site energy generation using a natural carbon absorption material



Solar Carport – Wood Frame Benefits

- When trees are harvested from an FSC managed forest, most CO2 captured during their growth continues to be stored within the resulting wood finished products throughout their useful life
- Laminated wood products continue to store CO2 throughout their useful life, providing a renewable and sustainable alternative to steel frame equivalent structures
- Glue laminated structures contributes to reduced carbon footprint and promotes a sustainable future
- Our Solar Carports have 1.4 tons of stored CO2 in the construction of each section.

Two ways to reduce atmospheric CO2:

1. Reduce emissions - decreasing “carbon sources”
2. Remove CO2 and store it - increasing “carbon sinks”

Wood has the unique ability to capture and store CO2 while reducing carbon sources.

Solar Carport – Screw Foundation Design

- Quick and Easy Installation:
  Screw Foundations installed without excavation or concrete pouring
- Environmentally Friendly:
  Produced from recycled metal - eliminates concrete use
- Stable and Secure:
  Provides a strong and stable carport structure foundation
- Cost-effective:
  Reduced installation cost - no maintenance required post installation
- Reduced Site Disturbance:
  Reduced installation times given most ground conditions

Solar Carport - Bi-Facial Solar PV Benefits

- **Bi-facial panels** - additional energy production obtained from both direct and indirect sunlight
- Our hyper-reflective bi-facial solution provides maximised energy efficiency and increased return on investment
- Glass-glass panels today have a longer warranty than traditional solar panels
- Solar panels come with 30-year warranty

Solar Canopy - Wood Options

Pine	Swedish Spruce
	
Douglas Fir	**Oak**
	

Wood contains the unique ability to capture and store CO2 reducing carbon sources.

Solar Canopy – Optional Services

- Planning and Grid Network Approval
- Ground Screw Supply and Pre-Installation
- Battery Storage Supply
- Electric Vehicle Charging Unit Supply
- LED PIR (Motion Sensing) Lighting
- CCTV Security System
- Music System
- Blinds
- Installation and Maintenance

SOLAR CARPORT Application Example 1:
Installation at Private House

INNOVENTUM has installed the Solar Carport, 24 panels and a hyper-reflective surface to optimise production and provide clean energy for eMobility

SOLAR CARPORT Application Example 2:
Enkla Elbolaget

The Swedish utility company Enkla Elbolaget installed multiple carports to influence the inhabitants of Ronneby to buy an EV next time they buy a car

SOLAR CARPORT Application Example 3:
Private Client, Wiltshire, UK

Client requested a microgrid carport solution for their property including EV Charging and Battery Storage

The project was completed in May 2024 and the property is now 80% energy self-sufficient.

Solar Carport Installation – Private Client, Wiltshire UK

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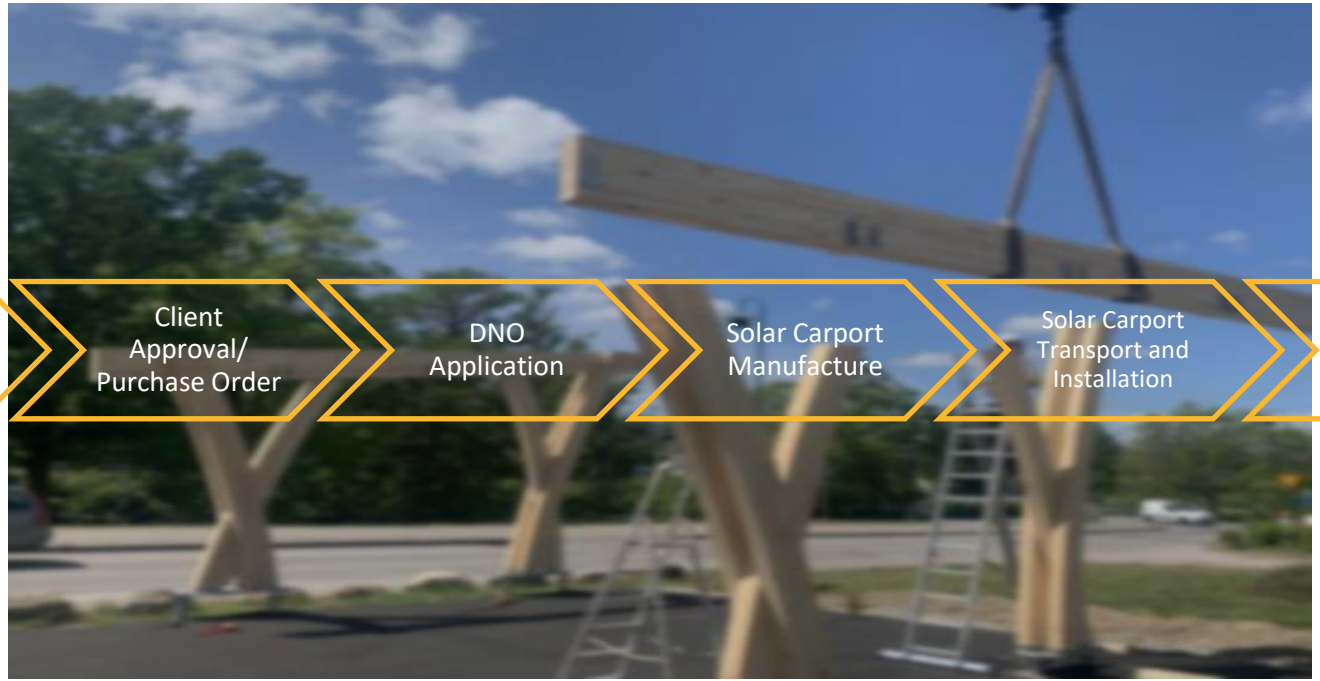
Solar Carport Installation – Commercial Client, Grenoble, France (In Progress)

Solar Carport Installations – Commercial Clients

Solar Carport – Order to Completion Sequence



Bid Proposal Submission

Client Approval/ Purchase Order

DNO Application

Solar Carport Manufacture

Solar Carport Transport and Installation

Solar Carport Customer Handover

Solar Carports Add Value

A. On-site Energy Optimisation

Site Optimisation

- Energy generation **maximises ROI**
- Energy cost and carbon savings data generation

B. Option - Electric Vehicle Charging

Clean Energy Leadership

- Smart vehicle charging technology
- Supports low cost mobility

C. Customer Benefits

Financial

- Energy cost savings vs grid supply

Sustainable

- Reduced carbon emissions levels
- Eco-friendly materials
- Environment benefits

Transparent

- Supports a community's sustainability strategy

Project Scope…Integrated Solutions

A. Low Carbon Heat Networks

Client	Project Reference	Description
eQuality Homes Ltd (KS17)	Kirby Stephen Low Carbon Community Development	22 No. Low Carbon New Homes Development - Low Carbon Design: Energy Box, Geotechnical, Project Management
Prospus Group Ltd	Partington Housing	High level energy load assessment, analysis of phase one target zone
Prospus Group Ltd	Chipping Community Energy	Low Carbon Heating Project - Design, Geotechnical, Project Management
Prospus Group Ltd	Skelmersdale Low Carbon Community	Energy Assessment - Housing Estate

B. Sustainability Advisory Services

Client	Project Reference	Description
Cambridge Consultants Ltd	King Abdullah City	Renewable Energy & Waste to Energy Solutions
ALEA Global Group	Kuwait City Sustainable Infrastructure	Development Project (Multi-Year Contract) - Biomass Plant/Vertical Farming/ Plastic Recycling - Waste to Energy
Oru Space	East Dulwich	Concept Study/ Renewable Energy Infrastructure
Aster Village LLP	Eco-Village Renewable Energy/Waste to Energy	Concept Study/ Development Project
European Energy Efficiency Fund	Livland Biomethane	Technical Due-Diligence; Biogas Plant
CISCO Systems	Digital Healthcare, Smart Hospitals and Virtual Wards	On-Site Renewable Generation, Energy Efficiency Measures

C. Electric Vehicle Charging Networks

Client	Project Reference	Description
Chroma Developments Ltd	Level 2 EV Charging Facility	Contactless Payment Technology
Isle of Gigha Community Trust	Level 2 EV Charging Hub Solar PV and Battery Storage Project	On-Site Renewable Generation
ADV Holdings	EV Fast Charging	Contactless Stations
Garrison House, Isle of Cumbrae	Level 2 EV Charging Facility	Monta Back-office System
Private Client - Wiltshire	Solar Carport	With EV charging and BESS

D. Battery Energy Storage Technology

Client	Project Reference	Description
AgriVolta Ltd	Dairy Farming Sector On-Site Energy Generation	Battery Storage Infrastructure Project Phase 1 - 10 MWh Phase 2 - 25 MWh
Isle of Gigha Community Trust	Campsite Office New Build	Battery Storage Installation Phase 1 - 15 kWh
ABB FIA Formula-E	2nd Life Battery Storage Strategy	Proposal for secondary usage of race car battery units
Private Client - Wiltshire	Solar Carport	Microgrid: EV charging and BESS

Find out more...

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