



 CrowdHouse[™]
ENERGY

About Us

- Incorporated in 2019, CrowdHouse Energy is an innovator within the clean technology space with over 35 years of combined experience in the renewable industry.
- We offer premium on-site renewable energy solutions, engineered for the urban environment.
- In late 2022, we launched our patent-pending bifacial solar parking canopy, Helios Volt®.
- Nominated as a finalist for Product of the Year 2023 by Edie Awards and finalist in the London Construction Awards 2024.





HELIOS VOLT[®]

CREATING POWERFUL SPACES™

What is Helios Volt®?

- Helios Volt® is a bespoke, watertight Bi-Facial PV Parking Canopy, designed to deliver low-cost, low-carbon, and reliable energy.
- It is modular, fully factory-assembled, and delivered as a plug-and-play system, reducing build time by 70% and costs by 25%.
- It integrates seamlessly into battery storage, grid connection, and EV charging



FS – Free Standing



The free-standing, self-ballasted variant can be moved and transported when needed, giving the client **maximum asset mobility** and a **lower project cost** due to the **lack of civil works**.

PF – Permanent Foundation



The permanent foundation variant is our **most popular design**. The civil foundation ensures **stability and security** even in windier, coastal locations.

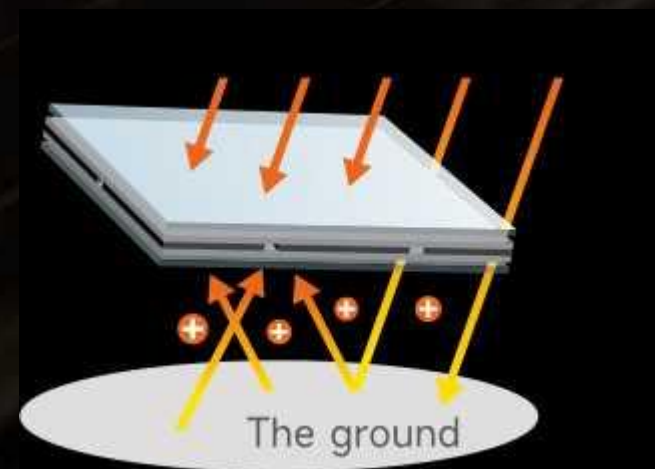
MSR – Multi Story Roof



The multi-story variant allows clients to **monetise the roof-top** of their multi-storey car park, **exploiting the underutilised space** and opening new revenue streams.

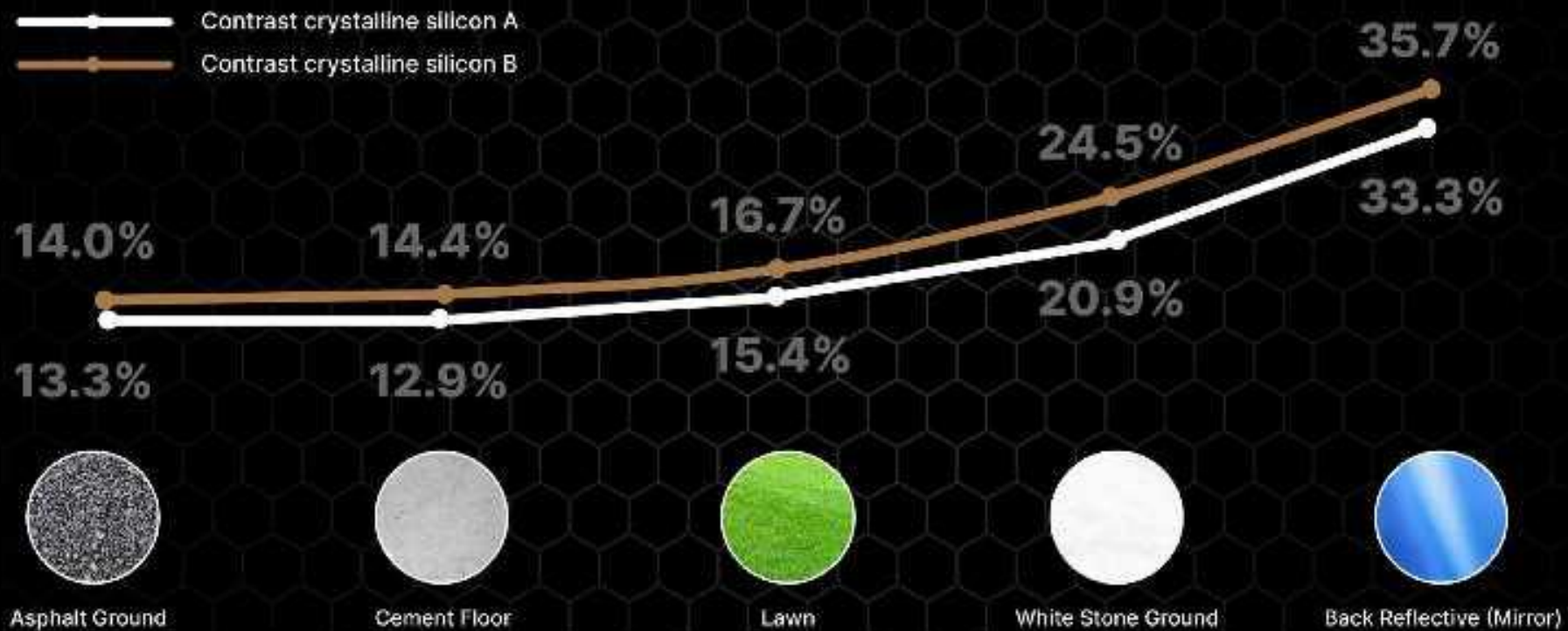
Hypernova

- The power lies in the Hypernova™ module
- Composed of 4 750W bifacial heterojunction panels*, structurally bonded to the aluminium
- Completely watertight with integrated cableways.
- No rear cells being covered by the structure allowing full Albedo harvesting, and an additional energy gain of between 15-35%.
- Factory assembled and quality assured before leaving for your installation site.

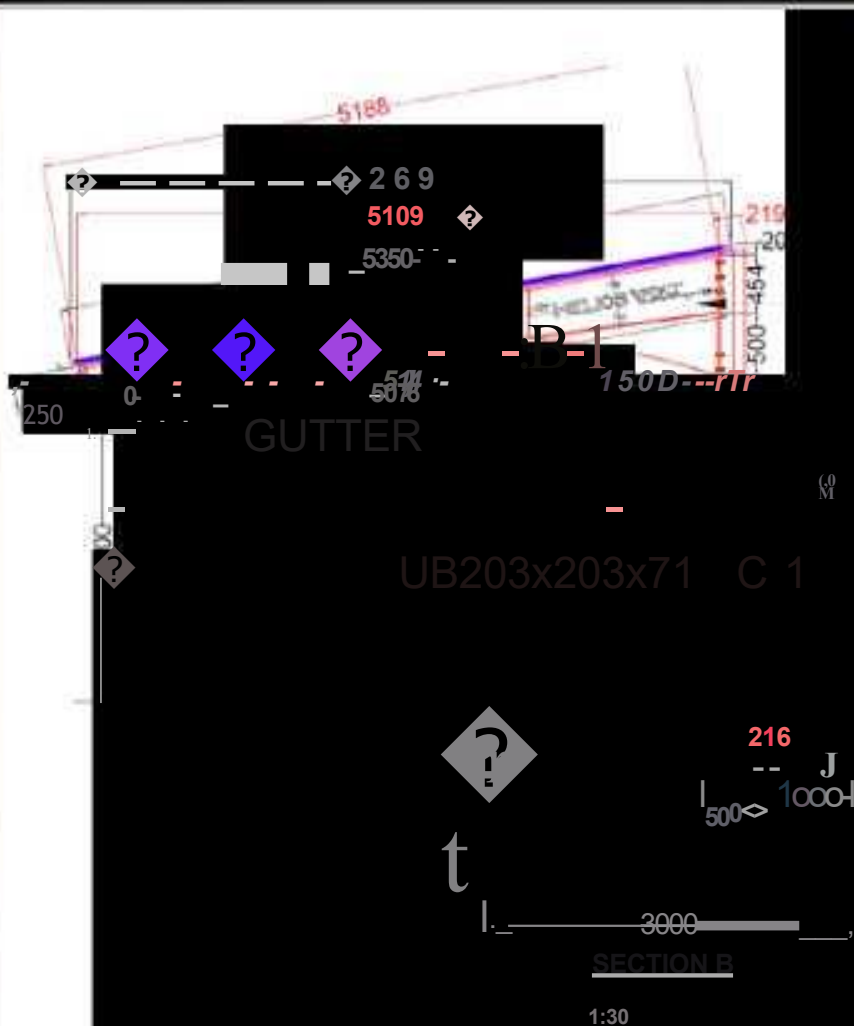


* We reserve the right to change module manufacturer

Power generation gain of HJT bifacial module power station



*According to Huasun data: the output gain of Huasun HJT bifacial modules can reach more than 30%



Laser Cut For Logo

0.000 M

External Ground Level

Haunch plate 200*145*10 mm
(S355);weld to flanges & base plate

2000x3000x900mm

RC Pad Foundation

UNIT:MM

Accenture Business Park

Our First Newcastle PV Canopy Installation





HELIOS VOLT[®]

In conclusion...

UK Manufactured



Factory Assembled



Modular Design



Reduced Installation Time



The Helios Volt[®] PURE Bifacial PV Canopy represents a **transformative advancement** in solar energy harvesting, designed to **maximise power generation** through cutting-edge PURE bifacial module technology.

By capturing both direct and reflected solar irradiance, and optimising for high-albedo environments, this UK manufactured, factory-assembled system offers up to **47% more power per square metre**.

With multiple structural variants and a **modular, watertight design**, it provides an **efficient, future-ready solution** for sustainable energy generation in car parks, rooftops, and beyond.



This is Just the Beginning...

We have over 16 active Rooftop & PV projects ongoing with the biggest healthcare provider in the UK, the NHS!

Highlights Include...

- 1 Freshney Green Primary Care Centre
System Size: 258 kWp
- 2 Fleetwood Health & Wellbeing Centre
System Size: 188.76 kWp
- 3 The Aspen Centre
System Size: 107.83 kWp
- 4 Birkenhead Medical Building
System Size: 98.8 kWp



POTTS PRINT

A CrowdHouse Energy Case Study

System Size

438.6kWp

Annual Generation

366.8 MWh

Carbon Saved Annually

70 tonnes of CO₂e

Panels Installed

DAS Solar – 455W

The solar PV installation at Potts Print (UK) has **delivered outstanding results**, solidifying commitment to **sustainability** while **achieving substantial financial benefits**. With an annual energy output of **369,928 kWh**, the system now **powers a significant portion of Potts Print's operations**, reducing its reliance on grid electricity and **contributing to its energy independence**.

Environmentally, **the system has made a notable impact** by reducing Scope 2 carbon emissions by **70 tonnes of CO₂e annually**, helping Potts Print align with its broader sustainability objectives. This achievement positions the company as a leader in the printing industry's transition **towards cleaner, greener energy practices**.

Financially, the installation has proven to be a **game-changer**, offering **energy savings of up to £16,500 per month**. Over a 30-year period, the **total energy value is projected to reach £4.18 million**, ensuring long-term economic stability. Additionally, the project boasts a **remarkable return on investment (ROI) of 1954%**, with a payback period of 1.8 years. This demonstrates how renewable energy investments can be both **environmentally and financially transformative**.

By adopting this innovative solar solution, **Potts Print has set a benchmark for sustainability** within the printing industry, exemplifying how businesses can **successfully merge environmental responsibility with economic advantage**.



HelioScope Simulation Comparison

Location	Azimuth and tilt °	Canopy comparison (over 1,500m2)		Modules used and PV cell type	Bifacial gain from rear cells	Annual solar production	Reduction in CO2 t/CO2e
Bordeaux Airport	180/10	Helios Volt®		Hypernova 54 TM x 5,920W HJT PV Cells	Up to 35% Average of 24% calculated	475,568 kWh	185
Bordeaux Airport	180/10	Bifacial Modules		Trina Solar Vertex N-Type 432 x 680W	10%	383,129 kWh	149
Bordeaux Airport	180/10	Shed Style		N-Type or Perc Q Cell Duo XL 595 x 590W	N/A	325,904 kWh	127

* HelioScope simulation reports available on request

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