

OFF-GRID SOLAR CARPORTS

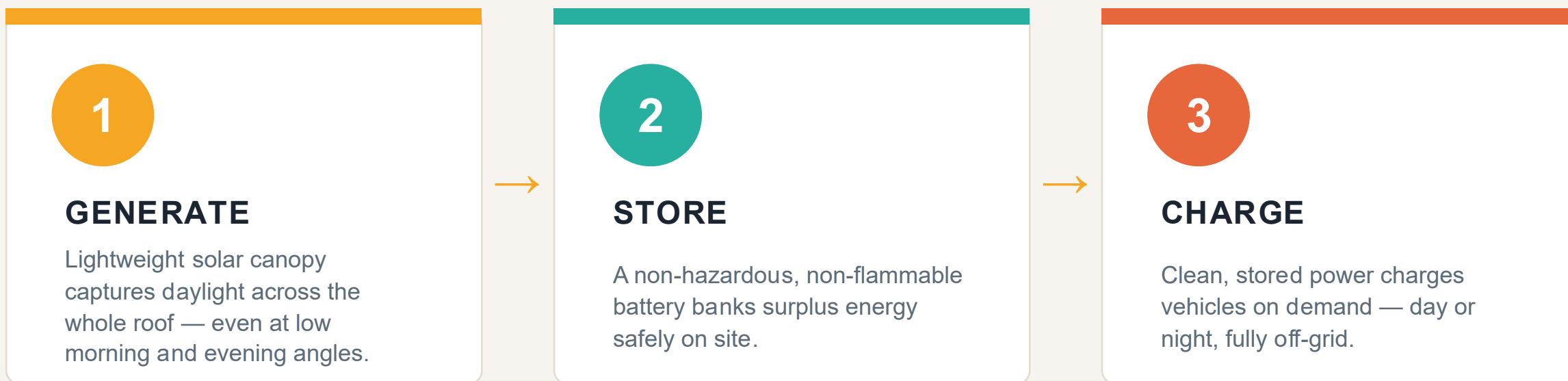
Solar carports that charge themselves

Lightweight solar canopies and safe battery storage combine into a self-sustaining, off-grid EV charging point.



Charging that doesn't wait for the grid

The canopy generates its own power, stores what it doesn't use, and delivers it back to vehicles — no trenching, no grid upgrade, no utility bill for the energy it makes.



Fully off-grid • No trenching • No grid connection required

THE SOLAR CANOPY

ENERGYRA DynamiQ L lightweight PV module

■ Mono-black MWT PERC cells

Metal-Wrap-Through back-contact design with a matt anti-reflective surface for higher, more even yield.

■ Frameless, glass-free

A no-frame, glass-free build in special plastics keeps the panel sleek and simple to mount.

■ Up to 21.6% efficiency

Wider spectral sensitivity captures more kWh, including early morning and late evening light.

■ Microcrack-safe by design

60 active contact points per cell (3,660 per panel) keep output resilient to cracks and hotspots.

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Built light, so the whole structure can be

Glass-free construction cuts panel weight dramatically — which means lighter carport frames, smaller foundations and faster installs.

1.7

kg / m²

Glass-free panel weight

3 kg

per module

Handy size for one-
person installs

Glue

mount

Bonds to any flat, rigid
substrate

0

frame / ribbons

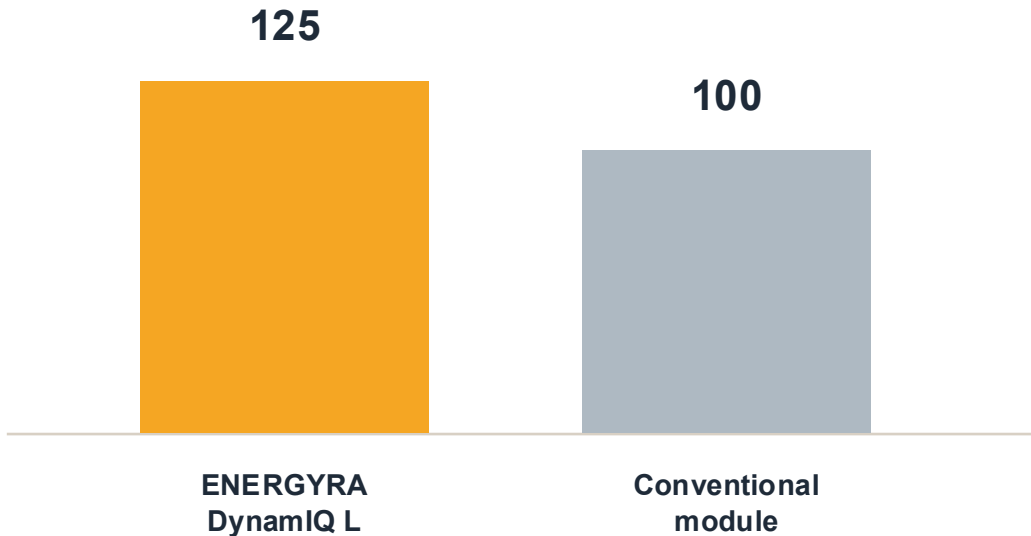
Frameless, lead-free
interconnection

Lower structural load → lighter frames, cheaper foundations, quicker deployment.

Up to 25% more yield per module

MWT back-contact cells, minimal light-induced degradation and low-angle capture add up to more energy over the module's life.

Relative annual kWh yield (indexed)



330 – 365 Wp

Maximum power (Pmax) per module, M4–M6

341 – 377 kWh

Energy generated per module, per year

≤2.5% then 0.4%

Degradation: first year, then each following year

3,660 contacts

Active MWT contact points per panel for resilience

SUSTAINABLE BY DESIGN

Clean power, cleanly made

● Cadmium-free & lead-free

A cleaner cell compound with lead-free cell interconnection.

● Fluorine-free & PFAS-free

The Endurans climate-barrier back-sheet avoids fluorine and PFAS.

● Recycled & recyclable

Lightweight components use 100% recyclable high-grade PET.

● Made in Europe

Produced in the Netherlands to Industry 4.0 quality standards.

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SAFE ENERGY STORAGE

A battery you can safely site next to people

The solar canopy is paired with a non-hazardous, non-flammable battery — the storage layer that turns generation into round-the-clock charging.

■ Non-hazardous chemistry

No toxic or aggressive materials to manage on site.

■ Non-flammable & stable

Engineered against thermal runaway and fire risk.

■ Safe in public spaces

Suited to enclosed and busy car-park environments.

■ Completes the off-grid loop

Stores daytime solar to charge vehicles around the clock.



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ENERGYRA DynamIQ L — at a glance

Specification	M4 version	M6 version
Module size (L×W×t, mm)	1678 × 1010 × 1.8	1710 × 1037 × 1.8
Weight	3.0 kg	3.1 kg
Cells	60 × (161.7 mm)	60 × (166 mm)
Maximum power (Pmax)	330 – 350 Wp	355 – 365 Wp
Module efficiency	up to 21.6%	up to 20.6%
Energy per module / year	341 – 362 kWh	367 – 377 kWh
Cell type	Mono-Si PERC, MWT	Mono-Si PERC, MWT
Frame / back-sheet	Frameless / recyclable PET	Frameless / recyclable PET
Max system voltage / wind-snow	1000 V / 2400 Pa	1000 V / 2400 Pa

The background of the advertisement is a photograph of a modern solar parking garage. The structure features a large, dark, sloped roof covered in solar panels, supported by wooden pillars. Several electric cars are parked in the bays, each with a charging station integrated into the structure. The scene is set during sunset or sunrise, with a warm, golden light illuminating the sky and the cars. The overall aesthetic is clean, modern, and eco-friendly.

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SELF-SUSTAINING EV CHARGING

Park. Plug in. Powered by the sun.

A lightweight solar canopy and a safe, non-flammable battery — one off-grid car port that makes and delivers its own clean power.

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