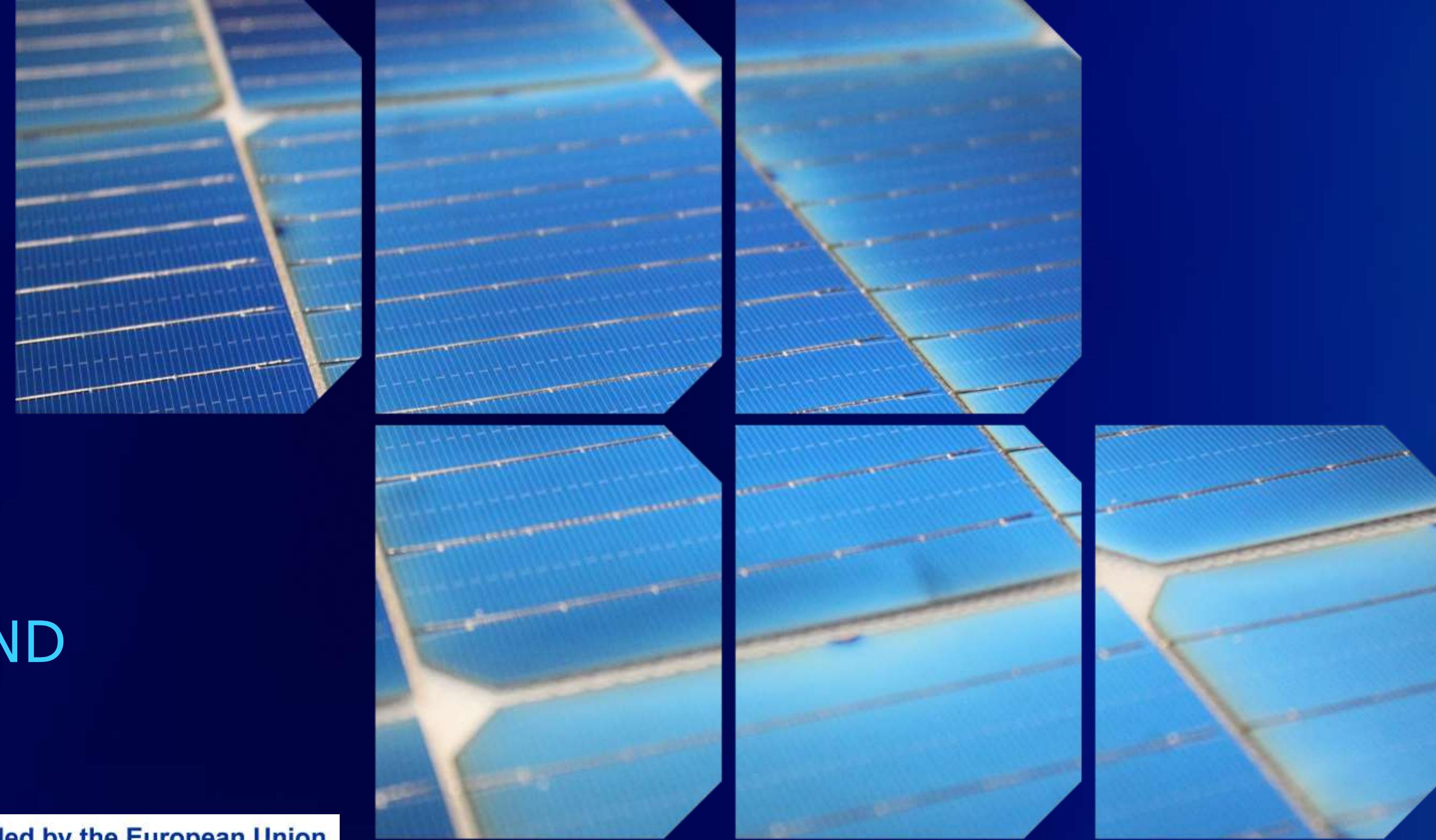




SHEEFT PROJECT INNOVATION FOUND



 **Funded by the European Union**
Emissions Trading System
Innovation Fund



Integration of Photovoltaic Solar Systems on Commercial, Industrial, and Logistics Buildings



INDUSTRIAL
GREEN TECH COMPANY

CREATION
09.2022

SPIN-OFF
OF



DEVELOPMENT & FABRICATION

of lightweight solar PV
solutions dedicated to
existing building rooftops
with low-bearing capacities

INDUSTRIAL SOVEREIGNTY



GREEN & LOCAL ENERGY PRODUCTION



REDUCED ENVIRONMENTAL IMPACT



BACKGROUND

A POTENTIAL OF

400 GWp

Over 4.000 millions m² of available large rooftops in Europe



EU Regulation

Solar Roof Initiative. PV obligation on new buildings from 2027 and existing buildings from 2028 (EPBD)

40 TO 80%

Of existing buildings are not compatible with current solar solutions due to low bearing capacities



INDUSTRIAL



COMMERCIAL



LOGISTIC



PUBLIC

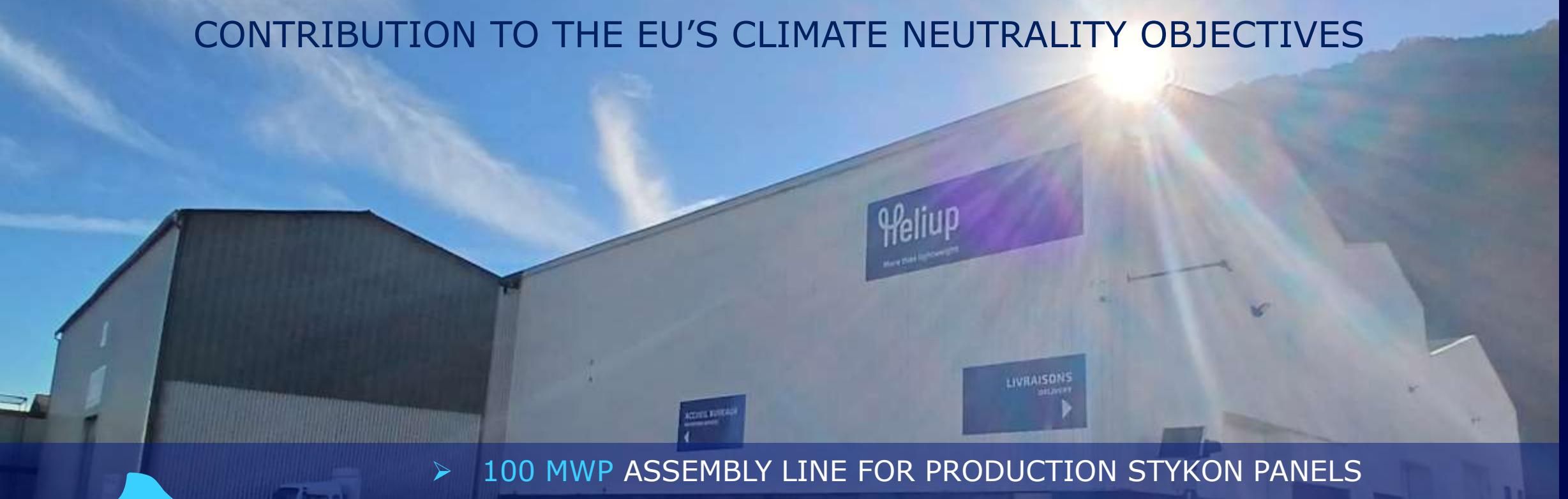


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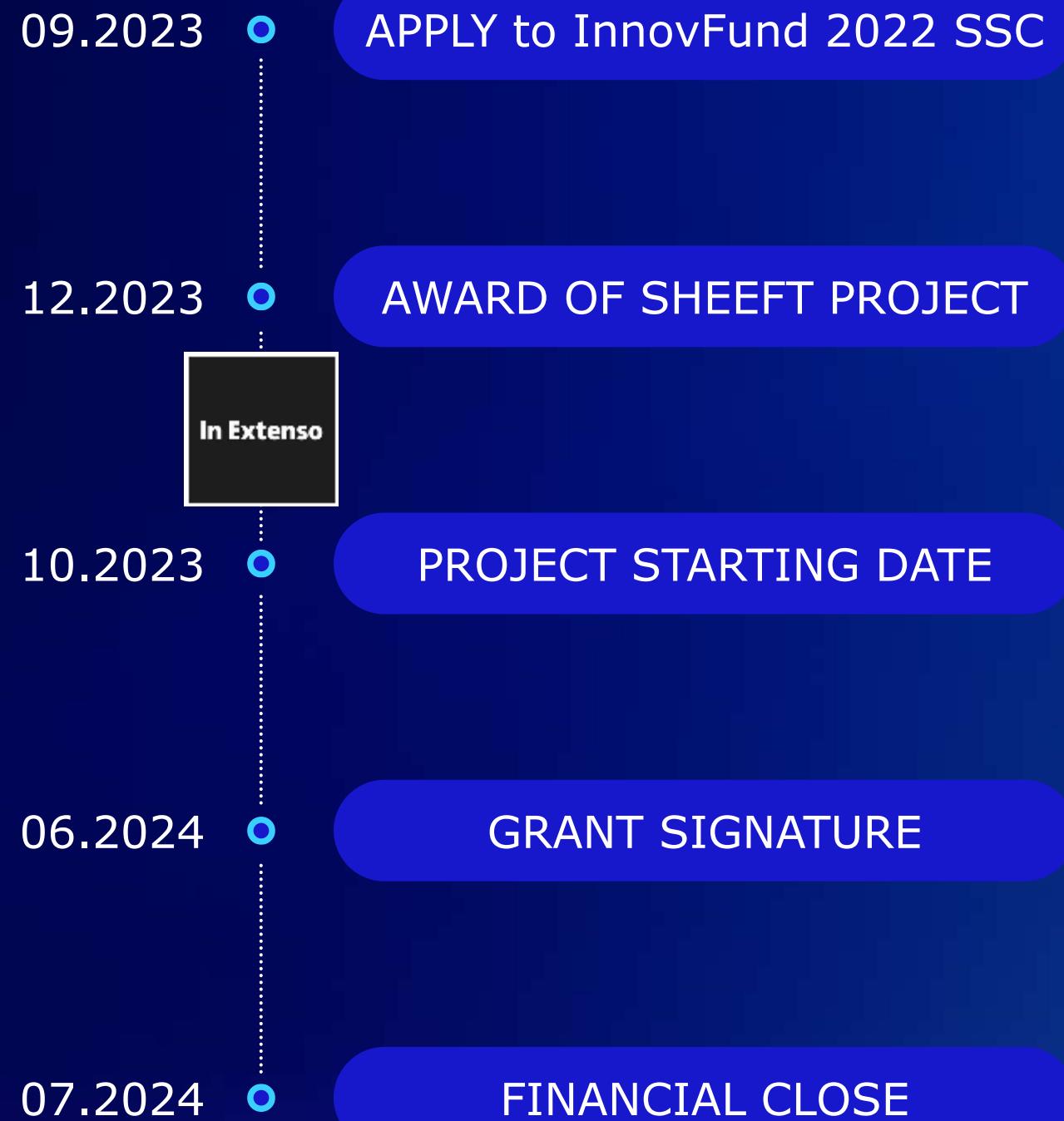
Solar Heliup Energy for Flat roofTop

LARGE-SCALE DECENTRALIZED DEPLOYMENT OF LOW C ENERGY PRODUCTION

CONTRIBUTION TO THE EU'S CLIMATE NEUTRALITY OBJECTIVES



- 100 MWP ASSEMBLY LINE FOR PRODUCTION STYKON PANELS
- 3,76 TWH OF ENERGY PRODUCTION OVER 10 YEARS OF OPERATION
- 360 000 T CO2 EQ. EXPECTED GHG EMISSIONS AVOIDED
- 100 DIRECT JOBS
- HIGH POWER EFFICIENCY, HIGH RELIABILITY, LOW CARBON & COMPETITIVE





PRODUCTION LINE

WORKSHOP

4000 m²

SLS Actiparc – Le Cheylas

CAPACITY

100 MWp /year

350.000 modules /year

OPERATIONAL NOV 2024



STYKON® PANEL FOR FLAT ROOFTOPS

- ✓ LOW WEIGHT (5 KG/M²)
- ✓ HIGH EFFICIENCY > 20%
- ✓ HIGH DURABILITY & RESISTANCE
- ✓ PATENTED TECHNOLOGY MADE IN FRANCE
- ✓ IEC CERTIFICATION & LOW CARBON FOOTPRINT



60%
lighter



TEST - CERTIFICATION PHOTOVOLTAIQUE

CERTIFICATE OF CONFORMITY
IEC 61215 & 61730 (Certification & Safety)
IEC 61701 (Salt Spray)

Low glaring

EVALUATION CARBONE SIMPLIFIEE
ECS



12 Years Product Warranty
25 Years Linear Power Output Warranty
1st year degradation less than 2%
80% of initial power guaranteed after 25 years



Heliup

HIGH EXPERTISE

> 20 YEARS EXPERIENCE
IN PV R&D & MANUFACTURING

INNOVATIVE TECHNOLOGY

3 YEARS OF DEVELOPMENT

PATENTED

INNOVATION FROM



A COMPLETE INTEGRATED & CERTIFIED SOLUTION



COMPLIANT WITH PHOTOVOLTAIC STANDARDS

- IEC 61215 Terrestrial PV modules - Design qualification and type approval
- IEC 61730 PV module safety qualification
- IEC 61701 PV modules - Salt mist corrosion testing (C5)
- Low carbon footprint (ECS - Evaluation Carbone Simplifiée)
- Low glaring technology for airfield areas



COMPLIANT WITH BUILDING STANDARDS ATEX / ETN

- BRoofT3
- Wind resistance (ETAG 006)
- Adhesion between panel and membrane

ROOFTOP INTEGRATION by direct bonding

01

Easy installation
(3x faster)

02

Very high resistance to
handling, pressure & random
mechanical shocks

03

Compatible with
bituminous & synthetic
membranes



Total weight 5.5 Kg/m² (panel with adhesive system)



Compatible with flat and tilted
surfaces (up to 45°)



Soiling limitation due to frameless
panel design and anti-soiling layer



No grounding required



In the event of snow, uniform load
distribution over the entire surface

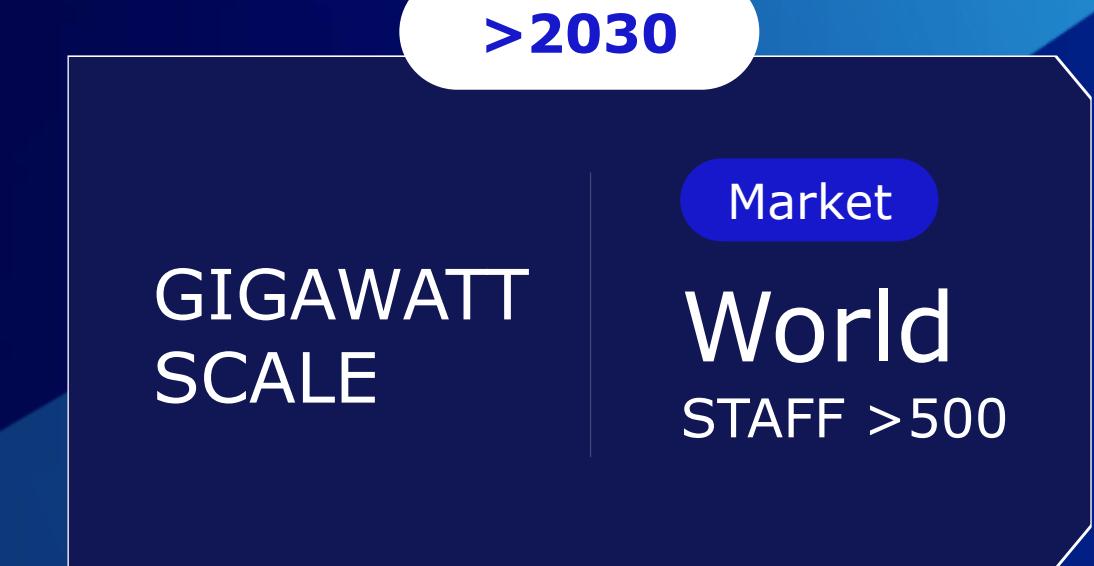


Optimized adhesive distribution to
reduce differential expansion
between sealant and panel



COMPLIANT WITH BUILDING STANDARDS

ROADMAP



- ✓ CONTINUOUS INNOVATION
- ✓ SEVERAL PRODUCTS RANGES
- ✓ INTEGRATION OF LOCAL COMPONENTS
- ✓ ADVANCED CERTIFICATIONS
- ✓ SUSTAINABILITY

LOW CARBON FOOTPRINT



TEST - CERTIFICATION PHOTOVOLTAIQUE

SIMPLIFIED CARBON ASSESSMENTTECS CRE4
N°066-2023_001



450
kg eq CO2/kWp

COMPLIES WITH TARIFF ORDERS S21 & AO PPE2 – CRE
(< 550 KG EQ CO2/KWP)

20
g eq CO2/kWh in 25 years

2.5 TIMES LESS THAN THE ELECTRICITY MIX IN MAINLAND FRANCE
(52 G EQ CO2/KWH ACCORDING TO ADEME 2022 STUDY)



-01. TECHNICAL PV SOLUTION



- Low weight
- High efficiency, durability and resistance
- Innovative technology made in France
- Compliant with PV standard

-02. COMPLETE INTEGRATED SOLUTION



for roofops with low bearing capacity

- Compliant with building standards ATEX / ETN
- Compatible with bituminous & synthetic membranes
- Easy and fast installation

-03. ECONOMICAL SOLUTION



- ROI and TRI
- Government grants and bank loans
- Real estate value development

-04. ENVIRONMENTAL IMPACT



- Green and local energy production
- No land artificialization
- Reduced environmental impact
- Energy transition

Helium

More than lightweight

830 CHEMIN DE LA PLAISSE, 73370, LE BOURGET DU LAC

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