

11 April 2024 Brussels, Belgium

CLEANTECH CONFERENCE: DRIVING SUSTAINABLE INNOVATION

How to boost cleantech
manufacturing in the EU



INNOVATION FUND

Funded by the EU Emissions Trading System

DAWN – 200 MW SUSTAINABLE SOLAR PANELS



midsummer



SVEN LINDSTRÖM
Midsummer



INNOVATION FUND

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SCALING THIN FILM SOLAR PANEL PRODUCTION

**90%
lower weight**

**50% faster
installation**

**Competitive cost &
LCOE**

**90%
lower CO₂**

**No roof
penetration**



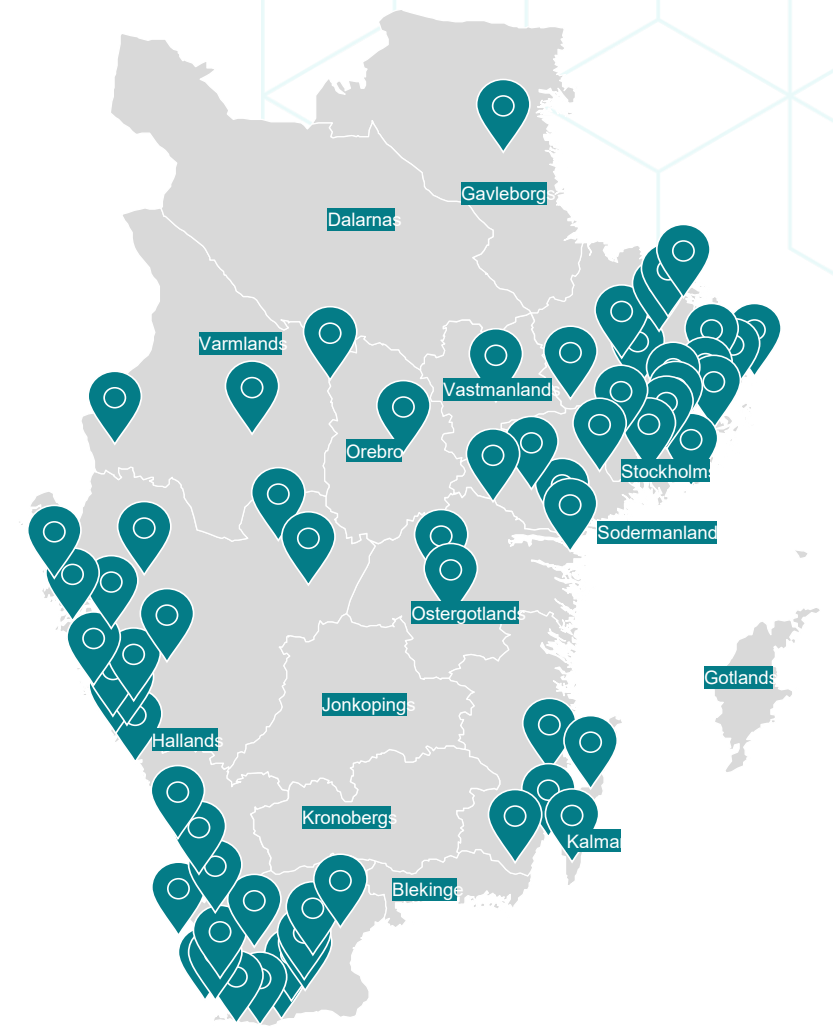
400+ INSTALLATIONS WITH HAPPY CUSTOMERS TO DATE ON midsummer MULTIPLE TYPES OF BUILDINGS AND ROOF TYPES ACROSS SWEDEN



As well as US, France, Jordan, Spain, Portugal, Finland, etc.



Across entire southern Sweden



WITH ROOFING MATERIAL



All panels UL/IEC certified

Midsummer BOLD



For larger facility roofs, particularly with weight limitations

No penetration needed – panels fixed with adhesive

Lightweight 3kg/m² or 5kg/panel



Midsummer SLIM

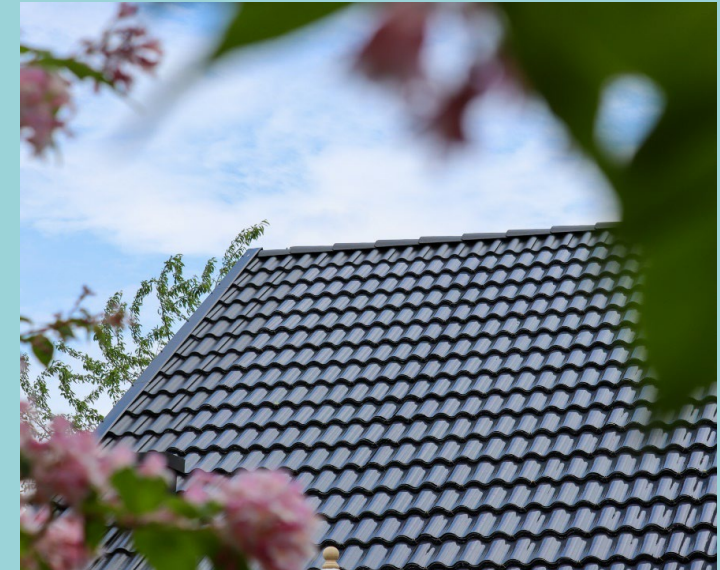


Integrated in tin metal roofs

Panel with a length up to 4 m and possible to serial connect up to 12 m

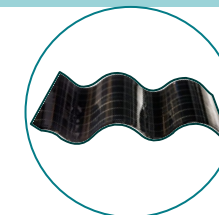


Midsummer WAVE



World's first solar panel adapted for roof tiles

Weight <2 kg per solar panel





MIDSUMMER BOLD
on Bitumen



MIDSUMMER BOLD
on corrugated steel



MIDSUMMER SLIM

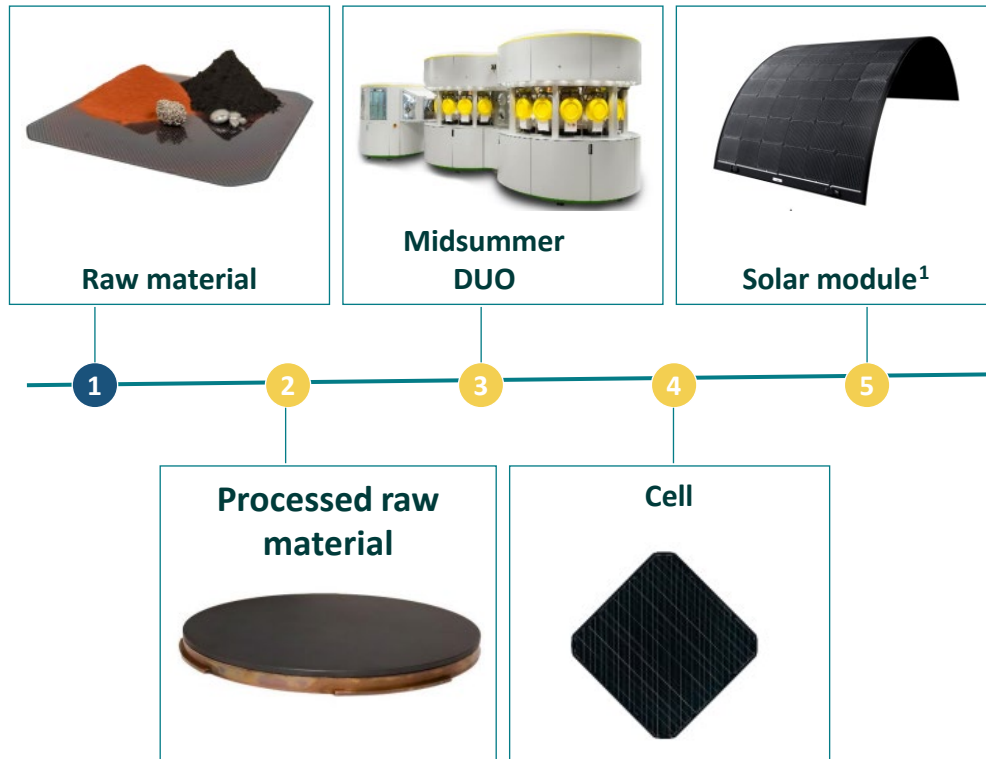


MIDSUMMER WAVE

TECHNOLOGY DEVELOPED IN EU-PROJECT HIGHSPEEDCIGS 2006-2008

Midsummer controls the whole value chain from raw-material to finished products

 Made in Europe



Solar Roofs



DUO - the leading production system for flexible thin-film solar cells



Patented and produced in-house by Midsummer



Compact design aimed at **high capacity, reliability and excellent materials utilization**



70-80% lower energy usage per m² panel produced

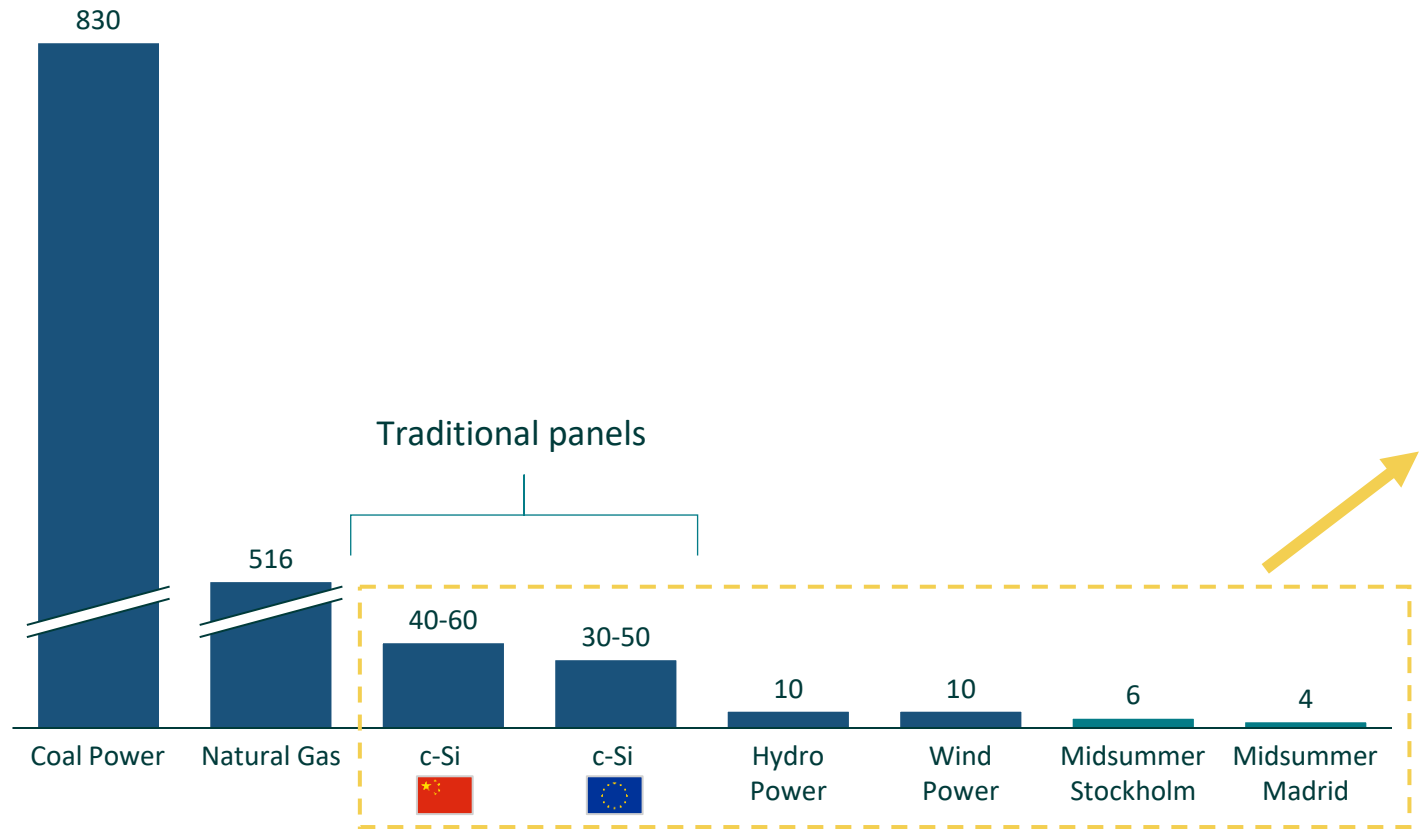


Easy to scale in modular build out and no clean room required

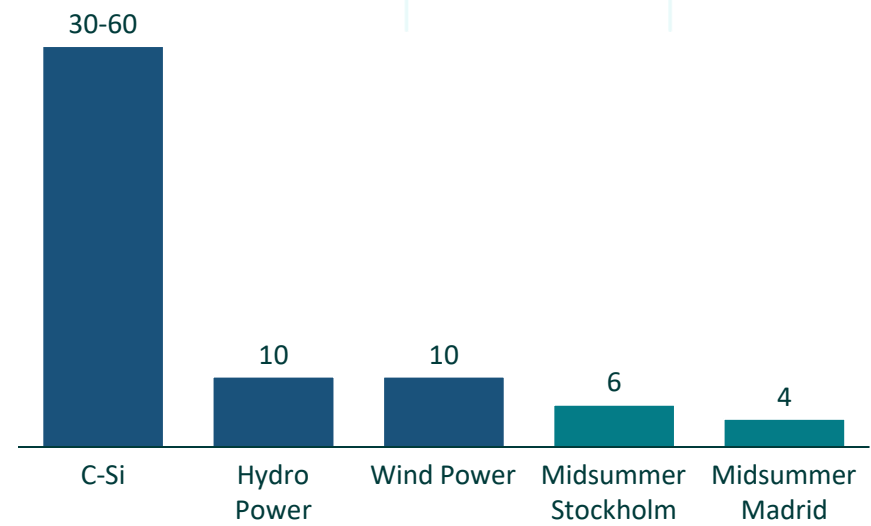
1. TÜV IEC 61215 and IEC 61730 certified

SUSTAINABILITY: SOLAR PANELS WITH ULTRA-LOW CARBON FOOTPRINT AT ~90% LOWER LIFE CYCLE CO₂ VS. TRADITIONAL PANELS

Life cycle CO₂e, g/kWh¹




- ✓ Midsummer's production in Sweden is powered by 100% renewable energy
- ✓ The 2 mm thin panels enable integration into many different roofing material
- ✓ +98% recyclability
- ✓ No glass, no racks, no aluminum frame and no Si enables production unrivalled energy and CO₂ payback (7-8x quicker)



1. PV technologies compared under average US irradiation
 Source: UNEP, Miljögraff, IPCC Technology -specific Cost and Performance Parameters Annex III

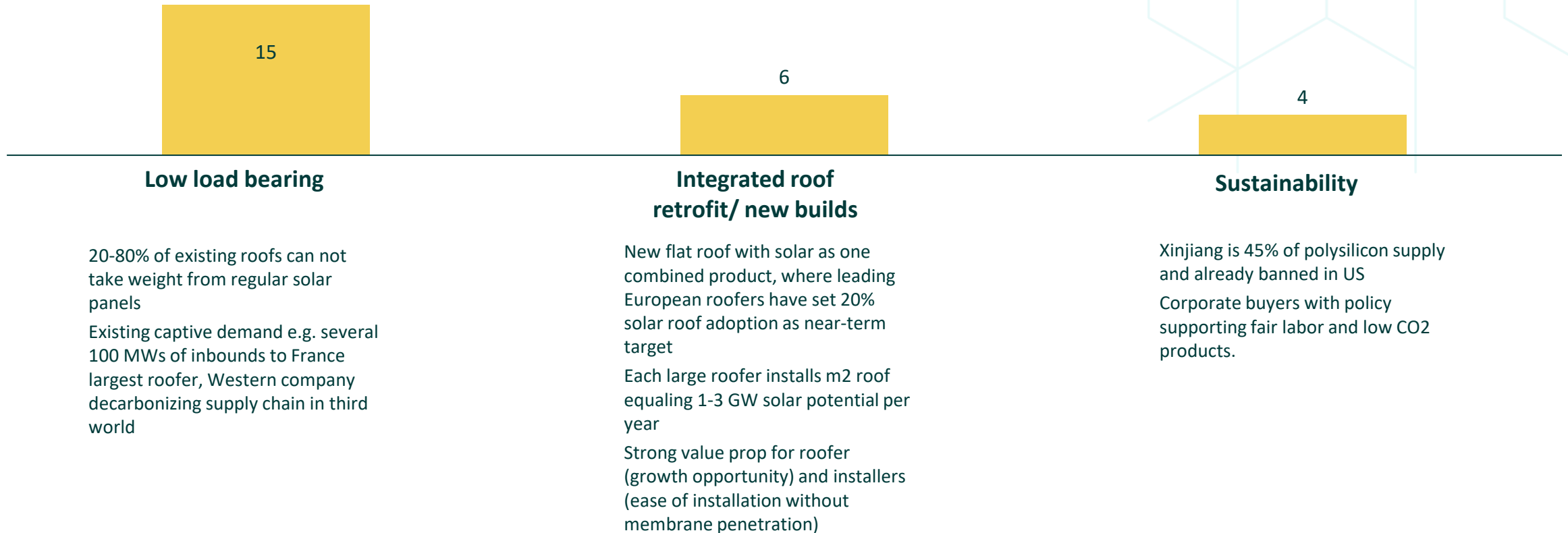
MARKET: MIDSUMMER'S PROTECTED POCKETS WITH POTENTIAL OF +25 GW PER YEAR BY 2030 FOR C&I INSTALLATIONS IN EUROPE ALONE

Addressable market potential 2030, C&I, GW/yr

 Midsummer protected pocket

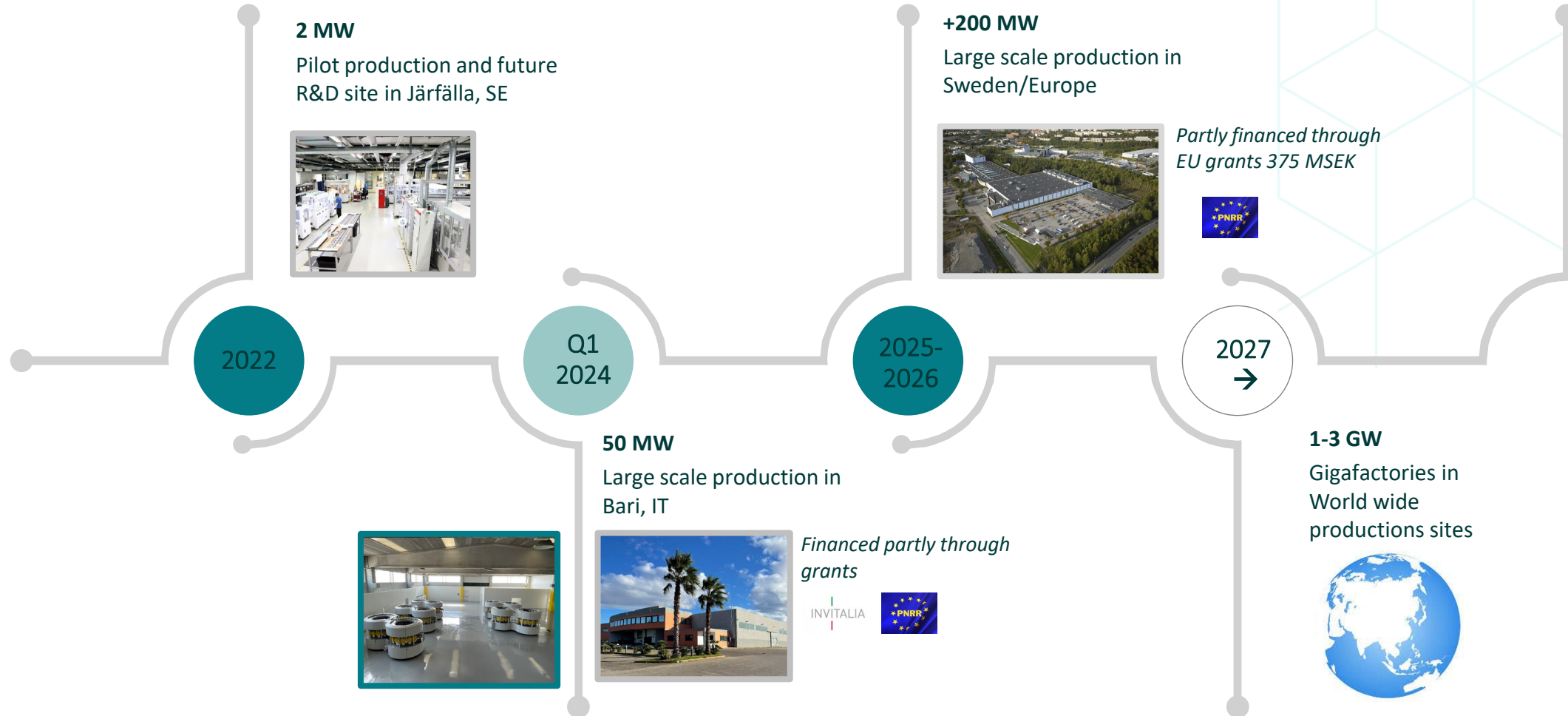


25+ *GW/yr potential in protected pockets*



VISION TO RAMP UP PRODUCTION TO >1 GW BY 2030

Sweden's first high-volume production factory and the world's largest for flexible solar panels



THANK YOU!

midsummer 



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