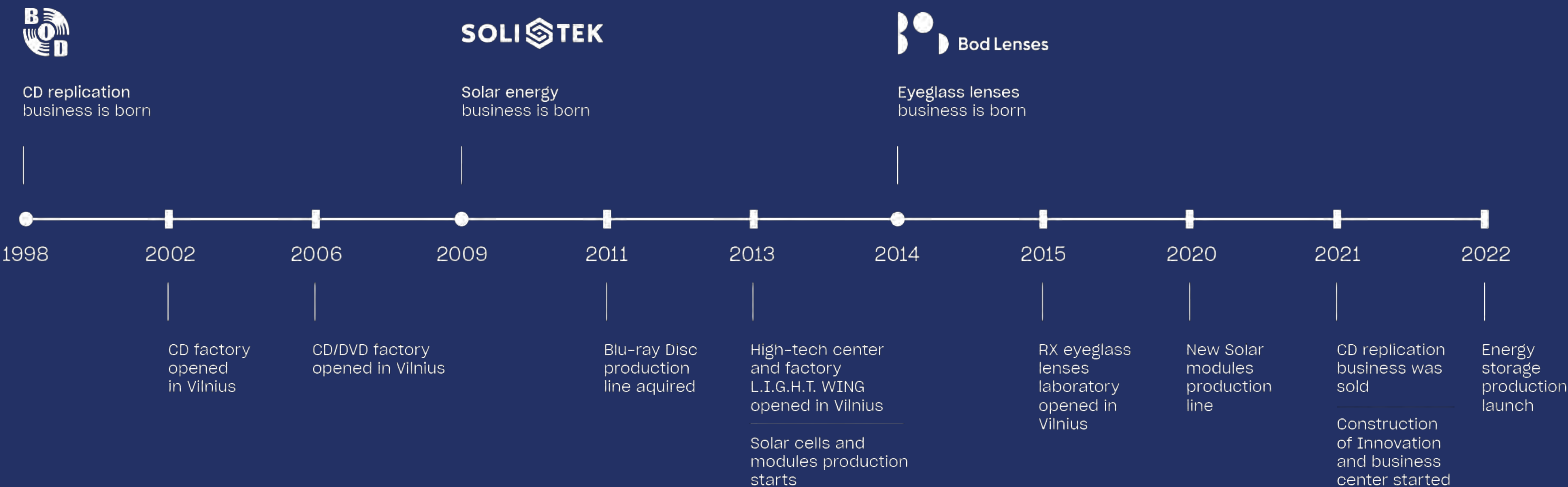


2022 —

# When performance matters









## The L.I.G.H.T wing

The Lithuanian Incubator of Green and High Technologies (L.I.G.H.T.) hosts SoliTek R&D, manufacturing & head office in Vilnius, Lithuania.

**Constructed by Global BOD Group in 2011.**

In 2013 recognized by German Chamber of Commerce as the “Greenest Industrial Building in Europe”.

Production is powered and cooled by renewable energy mix - both solar (150 kW on the roof) and geothermal.



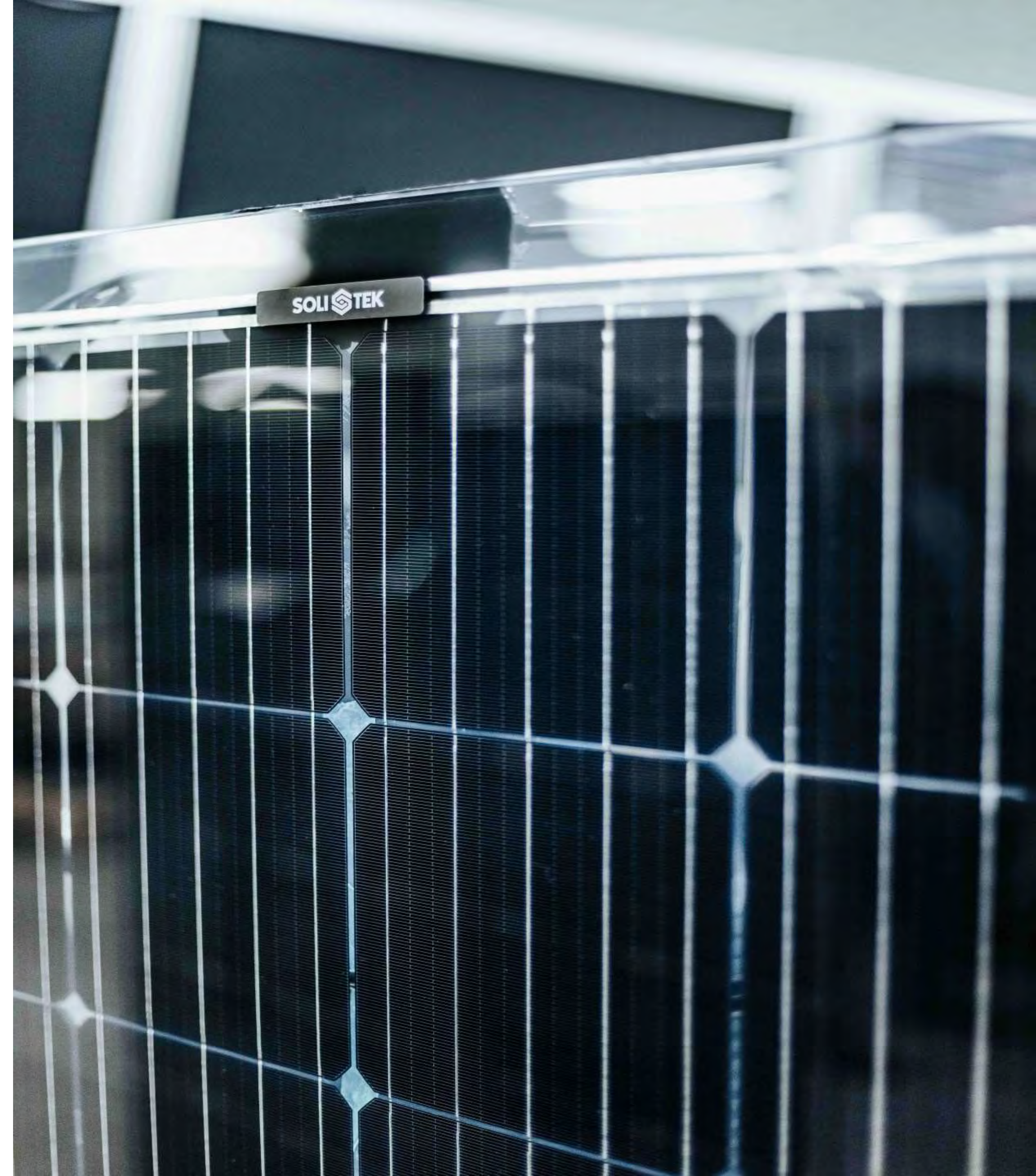


## It's all about innovation

Manufacturing innovation is SoliTek DNA. In 12 years we have matured to offer the European market an exceptional new products, that will please even the most refined and demanding customer.

At the core of innovative product lie 3 major elements:

- Exceptional design
- Produced in Europe
- Green panels





## Partners in research

### Universities:

- ISC Konstanz (DE)
- CEA-INES (FR)
- SINTEF (NOR)
- Fraunhofer ISE (DE)
- Fraunhofer CSP (DE)
- DTU (DK)
- KTU (LT)
- VU (LT)
- Protech (LT)



### Memberships



### Certificates



### Programs

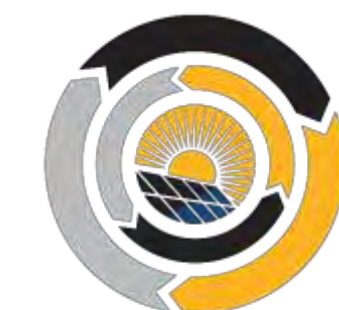


European  
Commission

Horizon 2020  
European Union funding  
for Research & Innovation



2015.10 - 2018.10 - partner



2015.06 - 2018.06 - partner



# Cradle to Cradle™ certified

Cradle to Cradle Certified® Product Scorecard	
MATERIAL HEALTH	Silver
MATERIAL REUTILIZATION	Gold
RENEWABLE ENERGY & CARBON MANAGEMENT	Gold
WATER STEWARDSHIP	Platinum
SOCIAL FAIRNESS	Gold





## Facts & Figures

### SoliTek production, 2021

**270k**   
Of solar panels

**120MW**   
Total produced capacity

### SoliTek production forecast, 2022

**500k**   
Of solar panels

**180MW**   
Total produced capacity





## Our customers

60% 

Of our solar panels is  
exported to Sweden,  
Finland and Benelux.

85% 

Of our solar panels are  
exported to EU markets.

The majority are the PV  
installers, distributors, and  
project developers in the EU.



## Ground mounted solar plants



Electricity delivered to  
1100 homes

**4.6 MW** ✓  
Turkey

Bifacial solar plant with horizontal  
single-axis sun tracking system

**2 MW** ✓  
Ukraine

**3.4 MW** ✓  
Lithuania





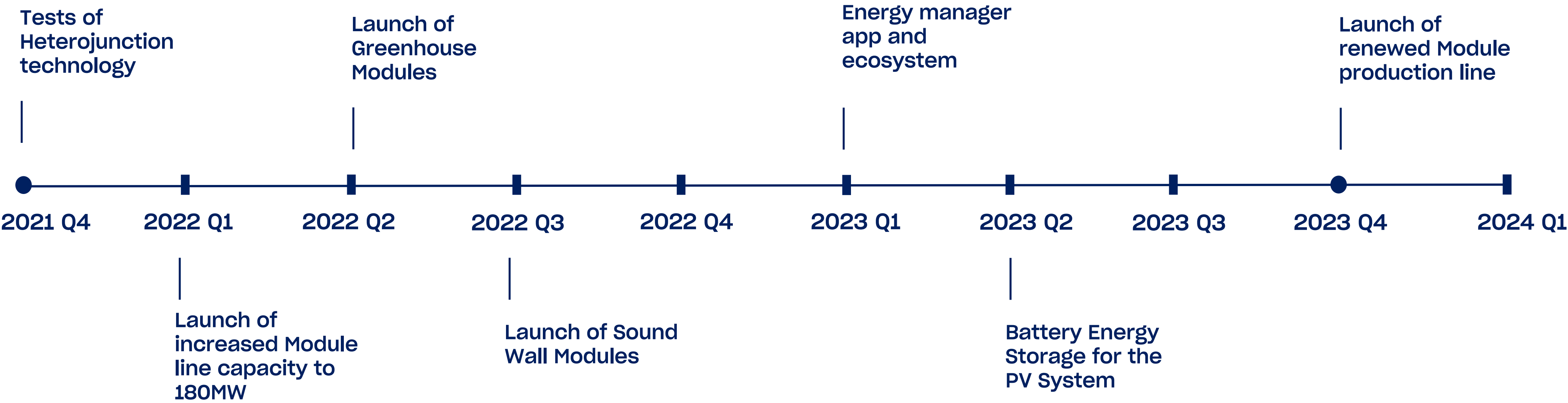
# Energy storage solution

R&D Battery Equipment

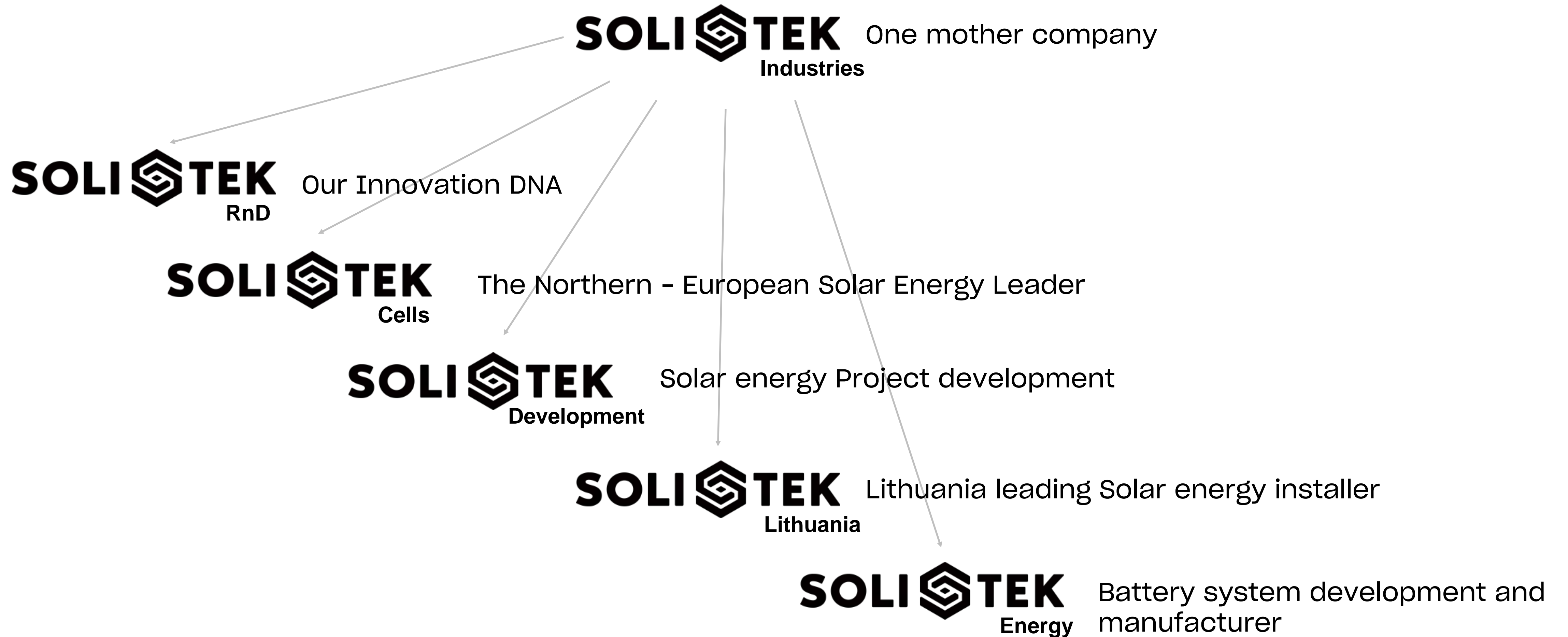
2022 Vilnius Lithuania













## Product Portfolio

Product warranty

**30**  
Years

Power Guarantee  
After 30 years

**87%**

Efficiency guarantee

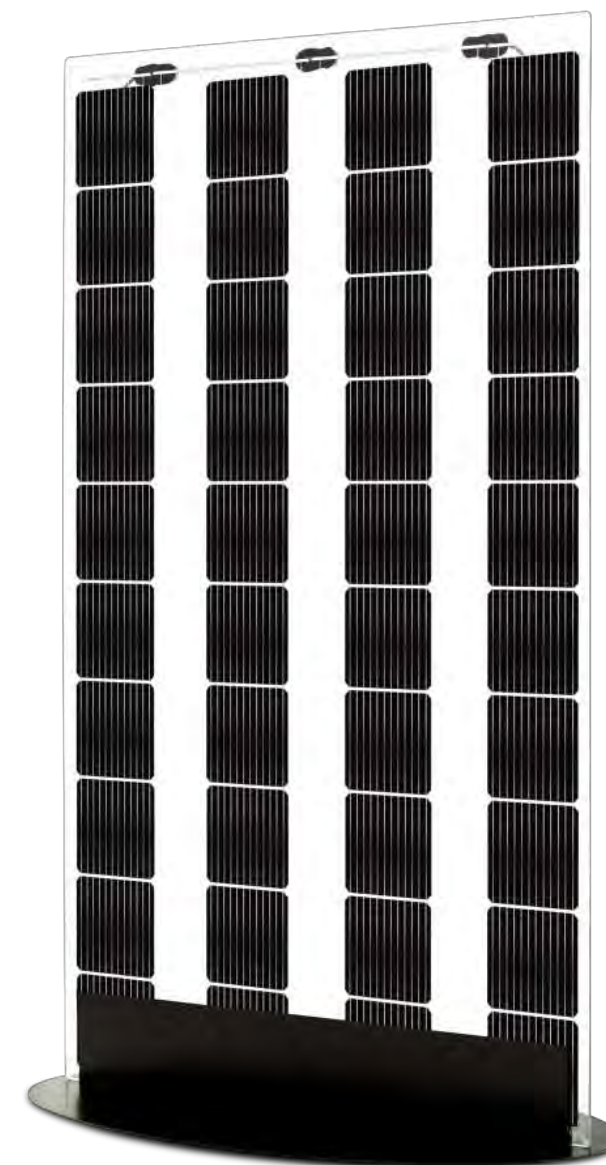
**30**  
Years



**BLACKSTAR**  
**(Solid framed)**  
365W



**SOLID Bifacial**  
355W



**SOLID Agro**  
235W



**SOLID Solrif**  
355W



**SOLID Wall**  
355W



**Glass - Foil**  
**Standard,**  
**Half-cut cell**  
365W/375W



Certifications



IEC 61215  
IEC 61730

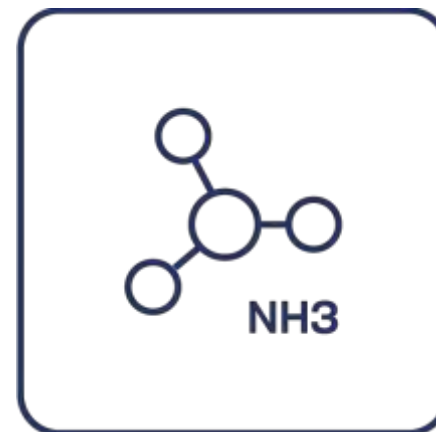




## Glass - Glass advantages



Extreme load  
resistance



Ammonia  
resistance



Self- cleaning  
effect



Dust & Sand  
resistance



Fire class A



Salt mist  
resistance





## Frameless - able to handle high snow loads



Extreme  
load  
resistance  
Certified

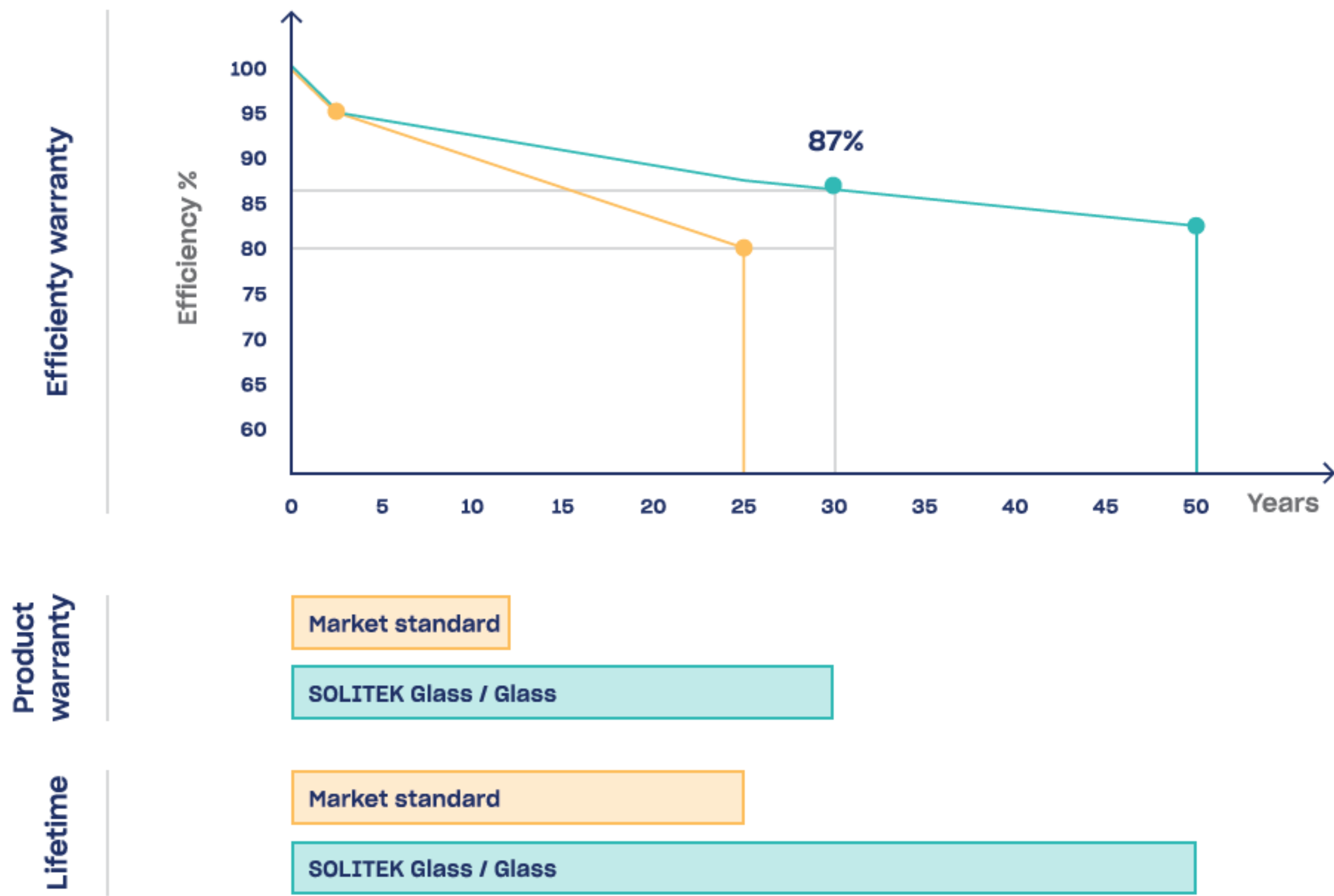


**SOLITEK**





# Efficiency is important



Market standard of 12 year product warranty and 25 year efficiency warranty sounds good only on paper. This means that if the panel fails completely after 13 years it is not covered by any warranty.

- 30 years product warranty
- 30 years of 87% efficiency warranty
- 50 years predicted lifetime

# Best choice for your wallet. 30 year savings

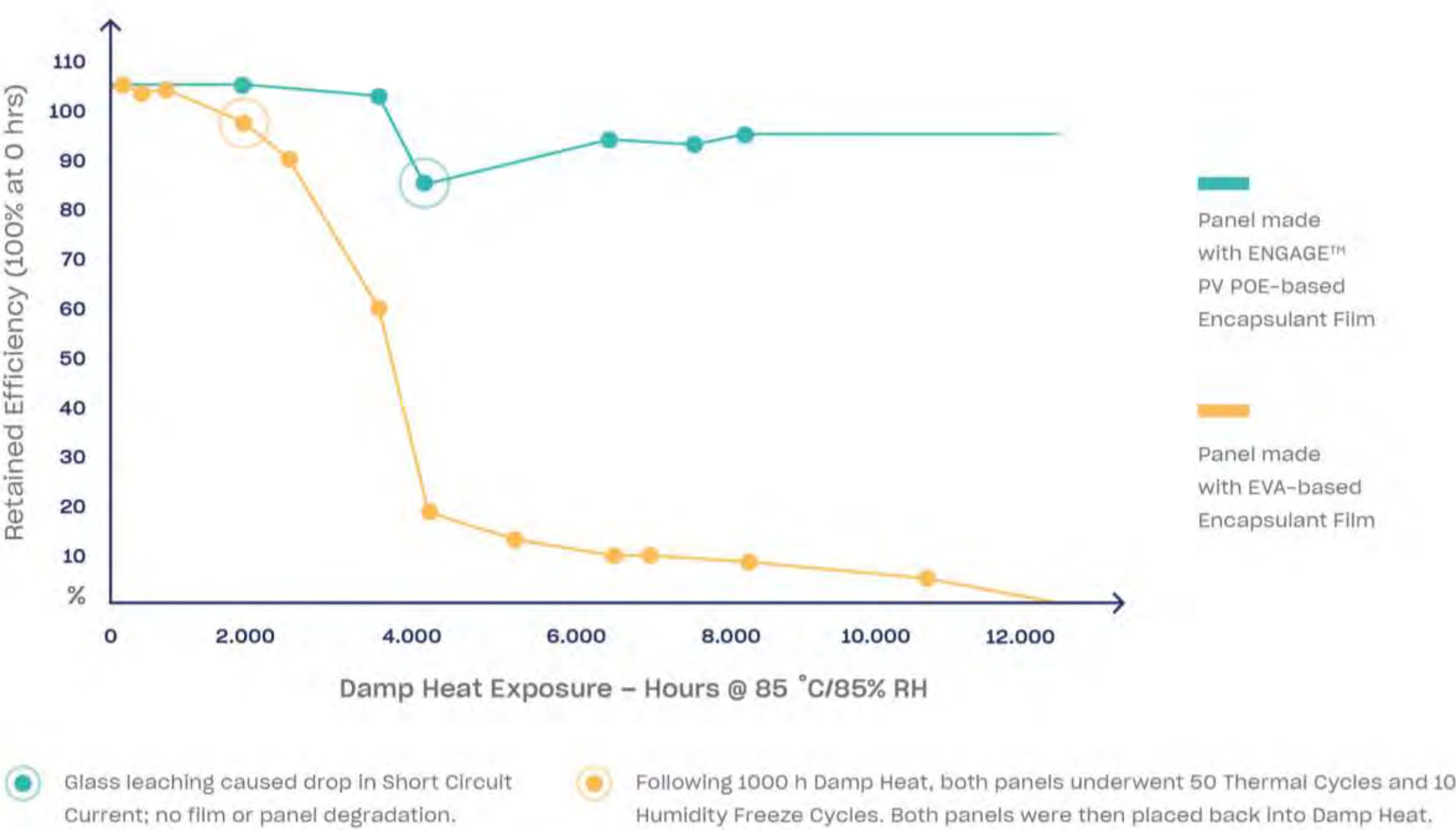
A house with a Solar PV system **Increases by ~3% in value and sells 20% faster!** It makes sense to invest in a PV system that lasts!

23% more savings!





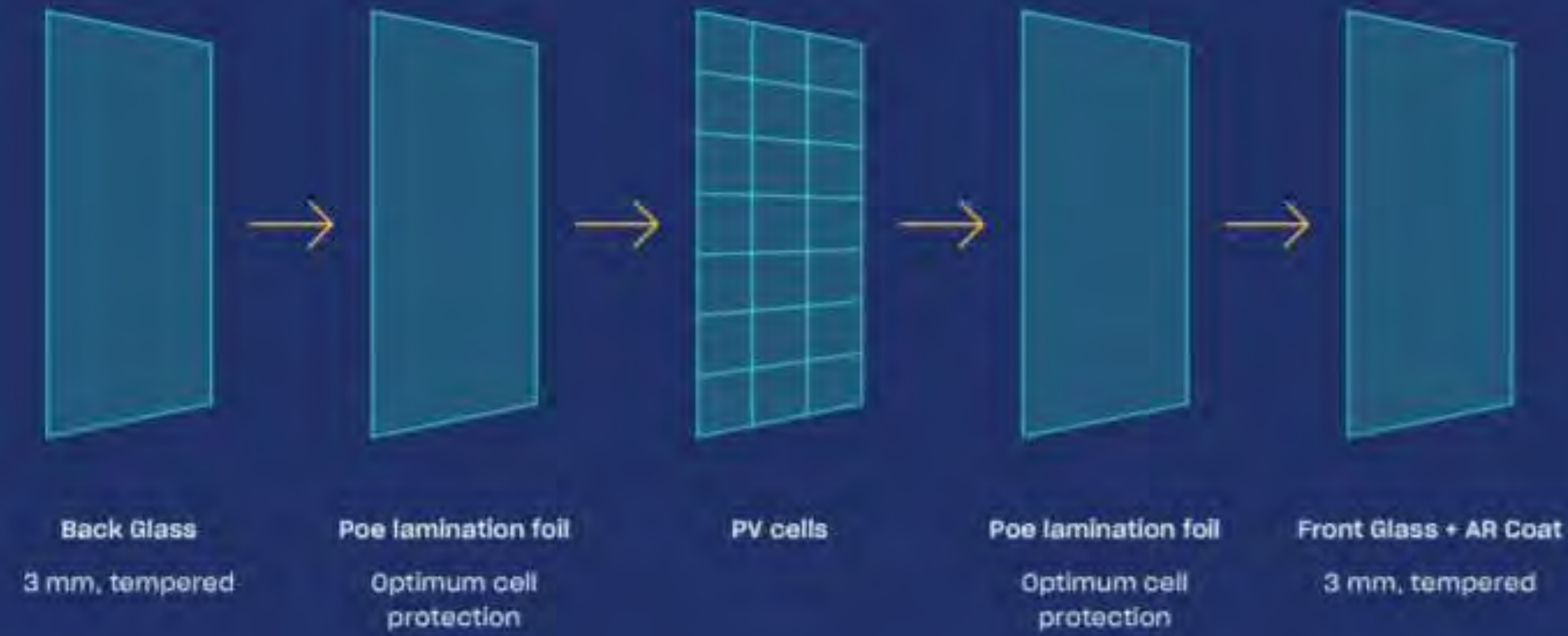
# POE is the key



Most manufacturers are using EVA encapsulants.  
We use POE.

	No Acetic acids	100% Waterproof	No browning	Eliminates PID	Maximum Lifetime	Maximum Lifetime
POE	+	+	+	+	+	50 years
EVA	-	-	-	-	-	25 years

# Anatomy of Solid PRO



## Highest grade materials

Each component plays an important role in the lifetime and performance of our panels. By using only the highest grade materials we are able to offer industry-leading product warranties.

## No foil – no weak spot

Backsheet is a 0.4 mm plastic sheet used in most of the panels on the market today. By eliminating this we are able to dramatically reduce the rate of the panel failure.





## Main countries SoliTek is operating in:

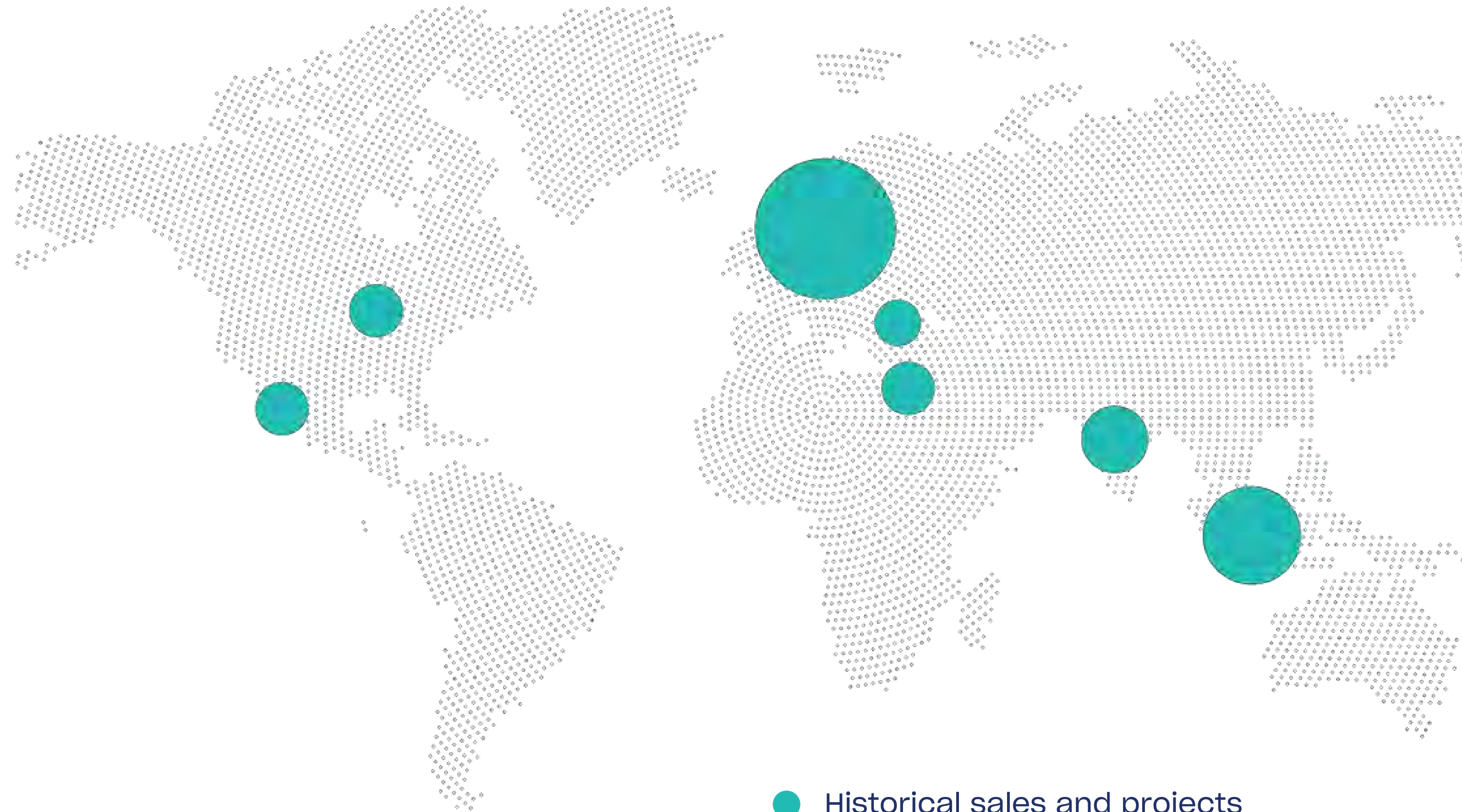
- Sweden and Finland
- Germany
- Netherlands and Belgium
- Narrowing down our existing network - Smaller customers start to buy from bigger local partners.
- All the leads from the existing markets are forwarded to a performing distributors on a fair principles (sales volumes)

Markets we plan to open in 2022:

USA

Italy

France





## SOLID Wall – smart and environment friendly solution for façade

- Modern outlook of the building;
- Sustainable and effective;
- Shows your point of view to environment and global warming issues;
- Increases the level of energy efficiency of the building;
- Decreases temperature inside the building on hot season;
- And generates electricity as well!





## Solid Wall applications

Solid Wall fits to various types of walls.

The system can change even uneven walls to a flat, beautiful external glass wall. Frameless, self-cleaning, shining, Solid Wall façade will look the same for a decades.

It is very attractive façade solution for various types of buildings. Old or brand new one, small or big – Solid Wall will make it look different.



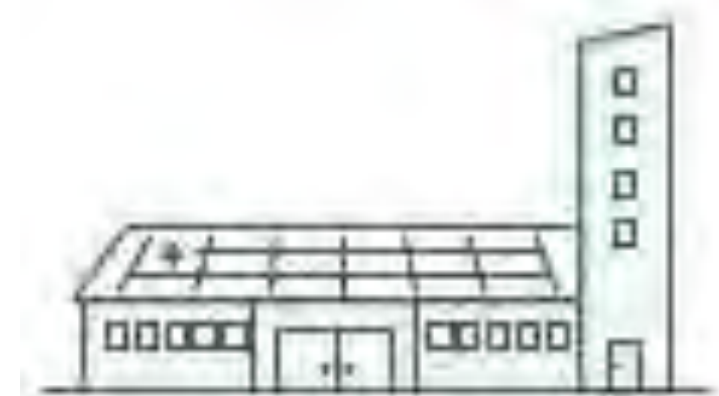
**Apartment building**



**Office building**



**Public building**



**Commercial building**



## SOLID Wall – is it worth it?

**44 kW**  
**Wall faced south in the middle of Europe**

**86.000**  
EUR in  
10 years

**Generates approx. 40.000 kWh  
per year. In EU average prices it  
is 8.636 EUR**



Baltic Disk integrated facade,  
12 kW, Estonia



First apartment building BIPV,  
42 kW, Norway



SOLID Wall solution,  
665 kW, Switzerland



## SOLID Solrif® – solar power plant as a roof

It became possible when we connected our fire class A Glass-Glass solar module SOLID Pro with Solrif® system from Ernst Schweizer AG. We call this system SOLID Solrif®.

SOLID Solrif® is valued for its ability to generate electricity, for its simplicity of mounting and design.

House owner saves money twice: at first on roof tiles, and later – on smaller bills for electricity at least for 30 years. All we need to provide the offer is building location and roof dimensions.





## Solrif® frame – Ernst Schweizer AG

- 2 decades of development and improvement
- 1920: Company founded
- 1999: Launch of Solrif® frame and mounting system





## Advantages of the Solrif® system

- Easy, fast installation (6 min per module)
- Replaces conventional roofing material
- Waterproof from 10 degrees
- Simplest design on the market
- Tried, tested and reliable
- Ventilated
- Superior aesthetics
- For roof pitches between 10 and 70 degrees (lower slopes require rain-proof or water-tight substructure)
- The system saves the end user considerable sums of money over a period of 20+ years

**Installation  
time: 6  
minutes per  
module**





## Solrif® system in distribution

- No need to do a system design before the offer - you can deliver the budget right away
- System design done online. 5 minutes per project
- 13 basic SKUs to operate with - hooks, screws, side profiles.
- Flashings and dummies available
- 8000Pa mechanical load - can be used almost everywhere





## Noise barriers with integrated PV solutions: saving the construction costs – producing energy – safeguarding the population

- An efficient way of noise prevention by application of PV modules was first demonstrated in Switzerland in 1989.
- Currently the efficiency of the PV and integration modes offers competitive and saving costs solutions.
- Applicable to roads and railways.
- The cooperation among the owner, constructor and PV supplier is the key for the successful development of the project – partnership with the local stakeholders is the key.





## Noise barriers with integrated PV solutions: key numbers

- From 2,5 to 7 meters high.
- 1 km – from 600 to 2400 PV modules (1 to 4 modules in a row) – from 0,2 MW to 0,8 MW capacity.
- Yearly output – from 200 MWh to 800 MWh.





## Agro-solar power plants - more efficient than traditional agriculture

- A typical agro-solar power plant can produce up to 900 kWh of electricity per year from installed 1 kW;
- Growing peppers, cherry tomatoes in drier and hot areas in the shade of solar modules can achieve much higher yields and significantly reduce the amount of water needed for irrigation;
- When the crops grows in the shade of solar modules, the yield of vegetables and fruits can increase 2-3 times than in usual agriculture;
- The yields matures by 30% faster than under normal conditions;
- The share provided by PV modules ensures cooler surface at daytime and a warmer night time temperature;
- The system also has a smaller vapor pressure deficit. In some cases, water losses can be reduced by as much as even 80%.



**Greenhouse**

23 kW, Sweden



## The advantages of Agri-PV compared to conventional support facilities

- Growing fruit and generating green energy
- Durable and robust protection for your crops, resistant to all types of weather. No more worries about storms or hail showers and less affected by extreme heat
- No investment in expensive (conventional) cultivation support facilities
- No labor to assemble and disassemble the plastic/foil
- Give your company a sustainable look
- More stable climate (lower maximum temperatures and higher minimum temperatures) part of the power will be diverted to your company; this gives you an annual financial benefit and makes your company more sustainable





## SOLID ePIT

- Wood construction
- With bifacial panels
- 1 car – 5,12 Kw
- 2 cars – 10,24 Kw





# SoliTek Batteries - 30% more savings

- AI-enabled intelligent charging
- Back-up Power
- Modular scalable solution
- Online monitoring
- Hybrid & off-grid
- Arbitrage savings
- Sustainably Made in Lithuania

	SE-5k	SE-10k	SE-15k	SE-20k	SE-25k	SE-30k	SE-35k	SE-40k
Number of control modules	1							
Inverter Included	YES							
Nominal Energy (kWh)	5.4	10.8	16.1	21.5	26.9	32.3	37.6	43
Inverter Nominal Power (kW)	3.6	8	8	10	12	12	12	12
Phase Options	Single / three phase	single-phase / three-phase		three-phase				





## Virtual tour

If you are not able to visit our factory live, we have provided a virtual 360° tour experience:

<https://turas.solitek.it/tour.html>

You can find it on our website [www.solitek.eu](http://www.solitek.eu)

We have installed a new production line of solar panels in spring 2021 and we will upgrade it 2022 Q1.







2022 —

# Thank you!

[info@solitek.eu](mailto:info@solitek.eu)

