

2022 

When performance matters





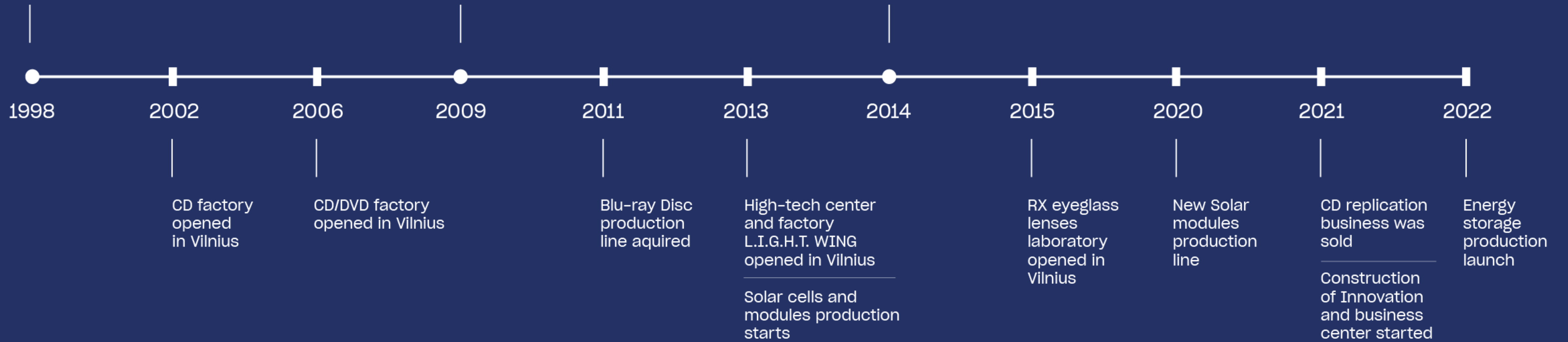
CD replication
business is born



Solar energy
business is born



Eyeglass lenses
business is born



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.

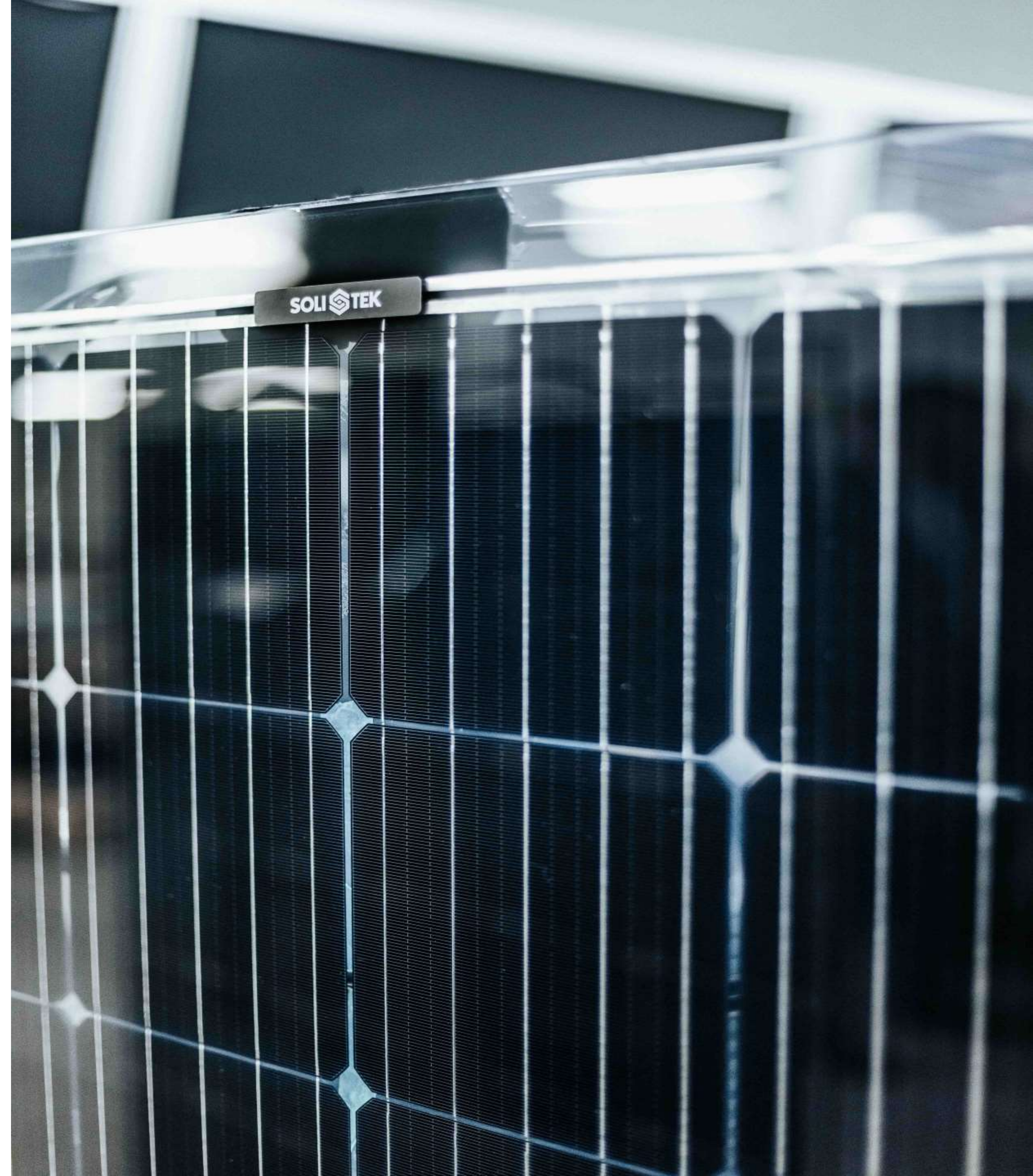


It's all about innovation

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



Sertificates



Programs

European Commission

Horizon 2020
European Union funding
for Research & Innovation



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

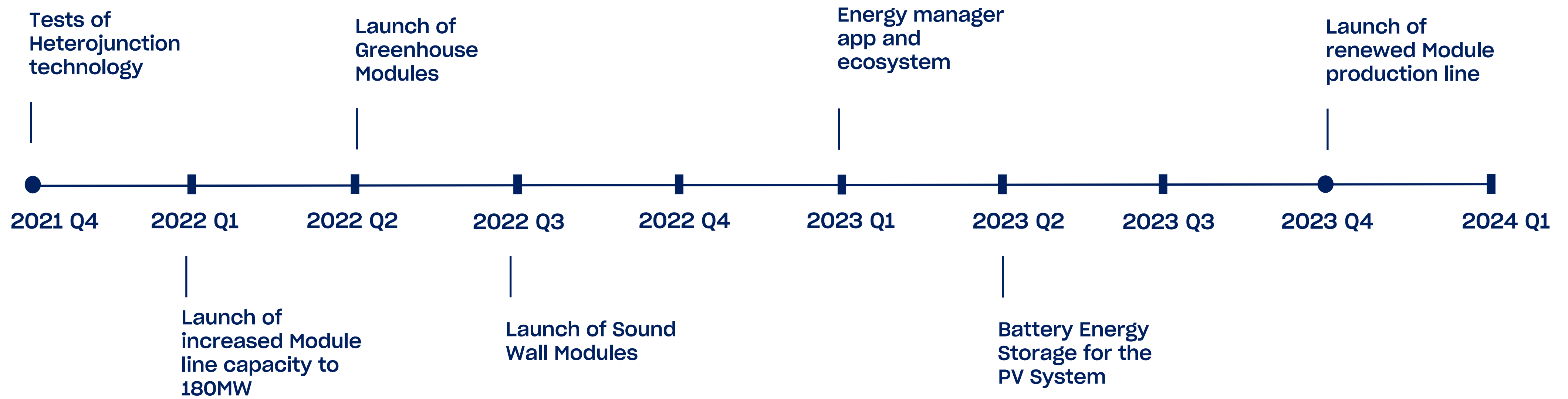


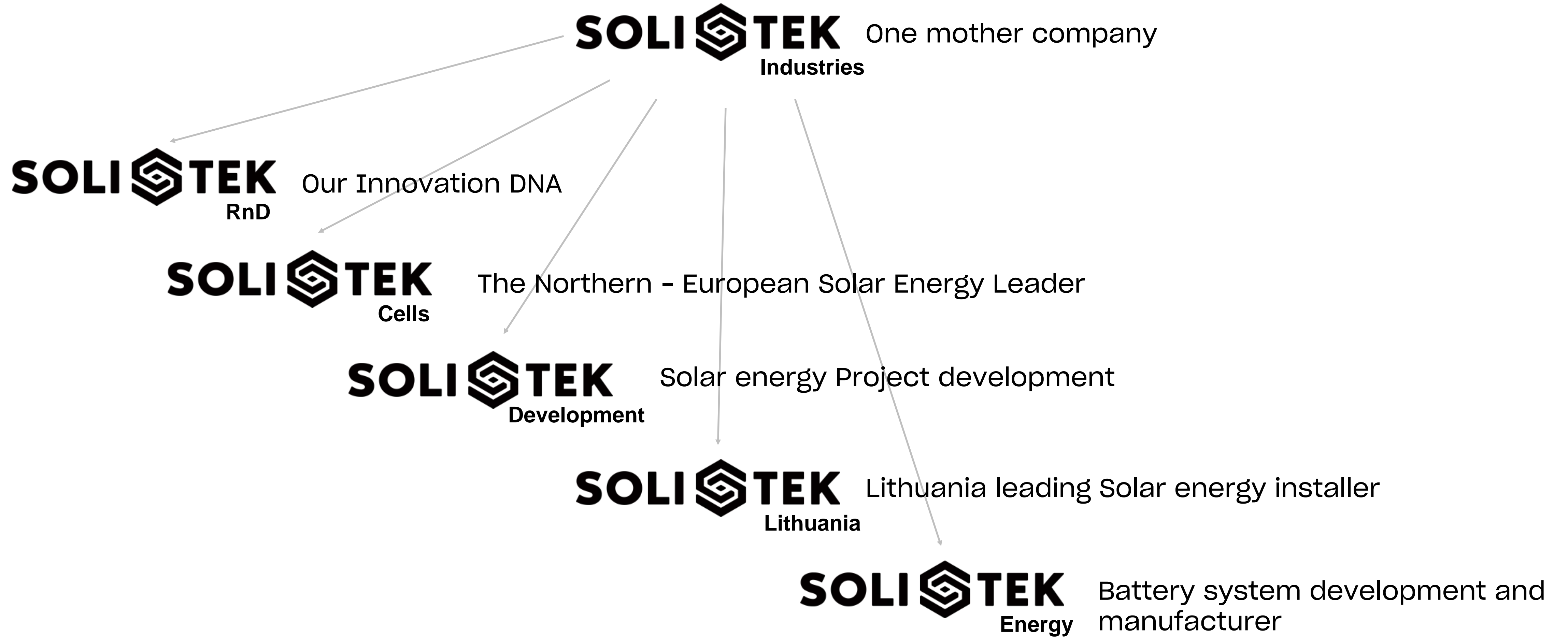
Energy storage solution

R&D Battery Equipment

2022 Vilnius Lithuania







Product Portfolio

Product warranty

30
Years

Power Guarantee
After 30 years

87%

Efficiency guarantee

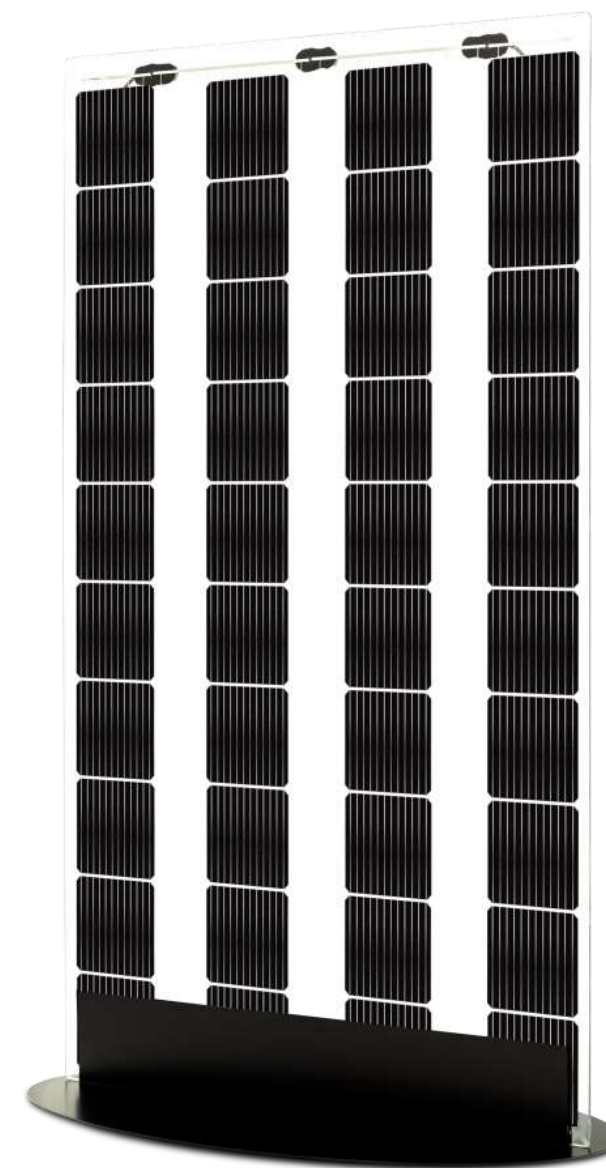
30
Years



BLACKSTAR
(Solid framed)
365W



SOLID Bifacial
355W



SOLID Agro
235W



SOLID Solrif
355W



SOLID Wall
355W



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



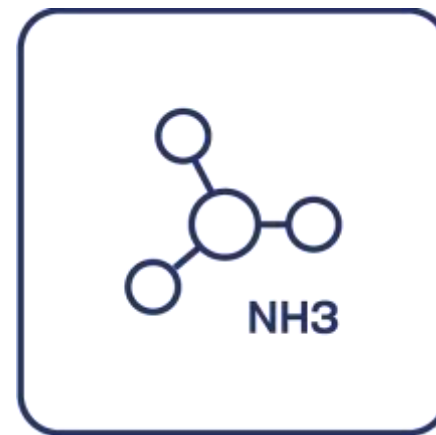
Certifications



Glass - Glass advantages



Extreme load
resistance



Ammonia
resistance



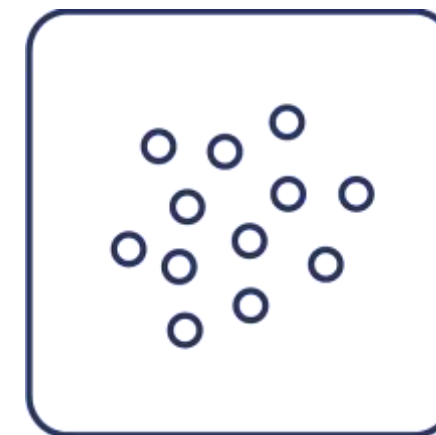
Self- cleaning
effect



Dust & Sand
resistance



Fire class A



Salt mist
resistance



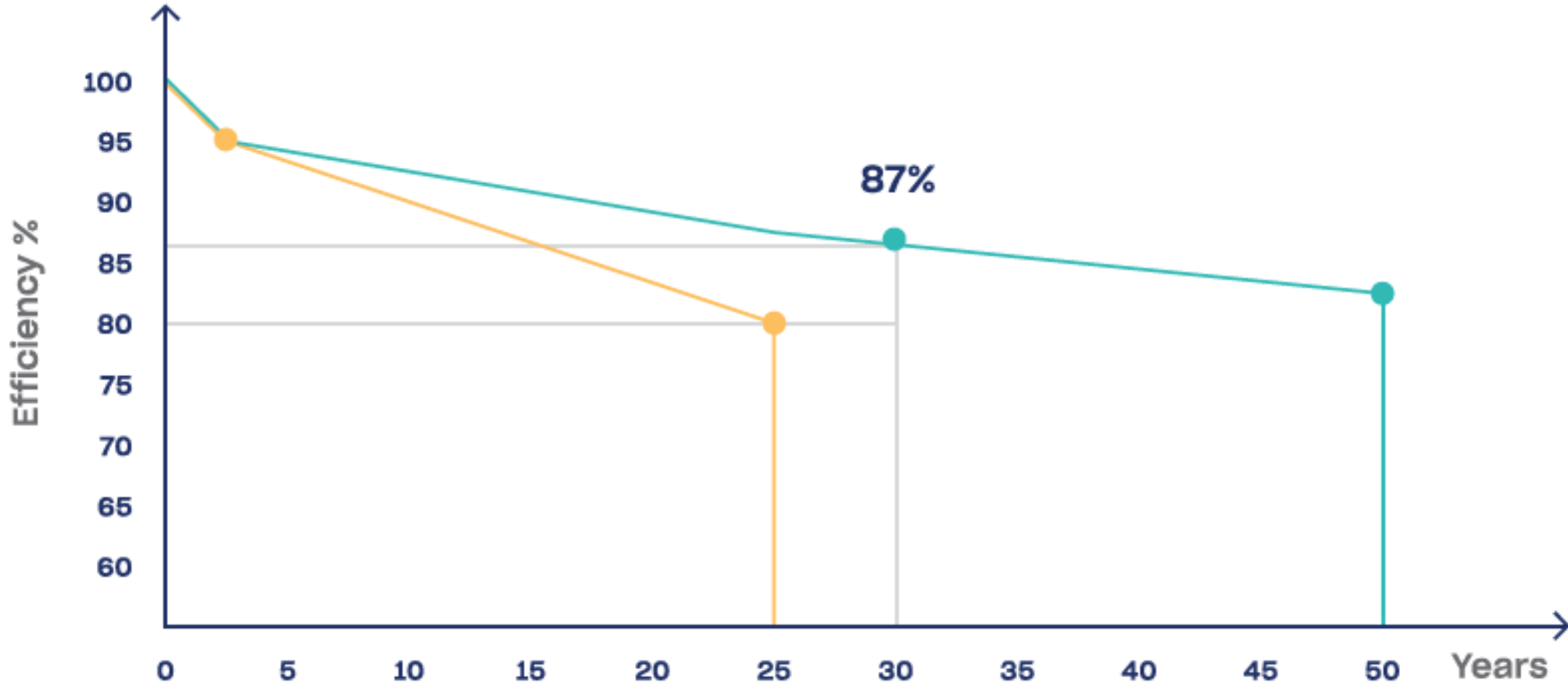
Frameless - able to handle high snow loads



Extreme
load
resistance
Certified



Efficiency is important



Product warranty



Lifetime



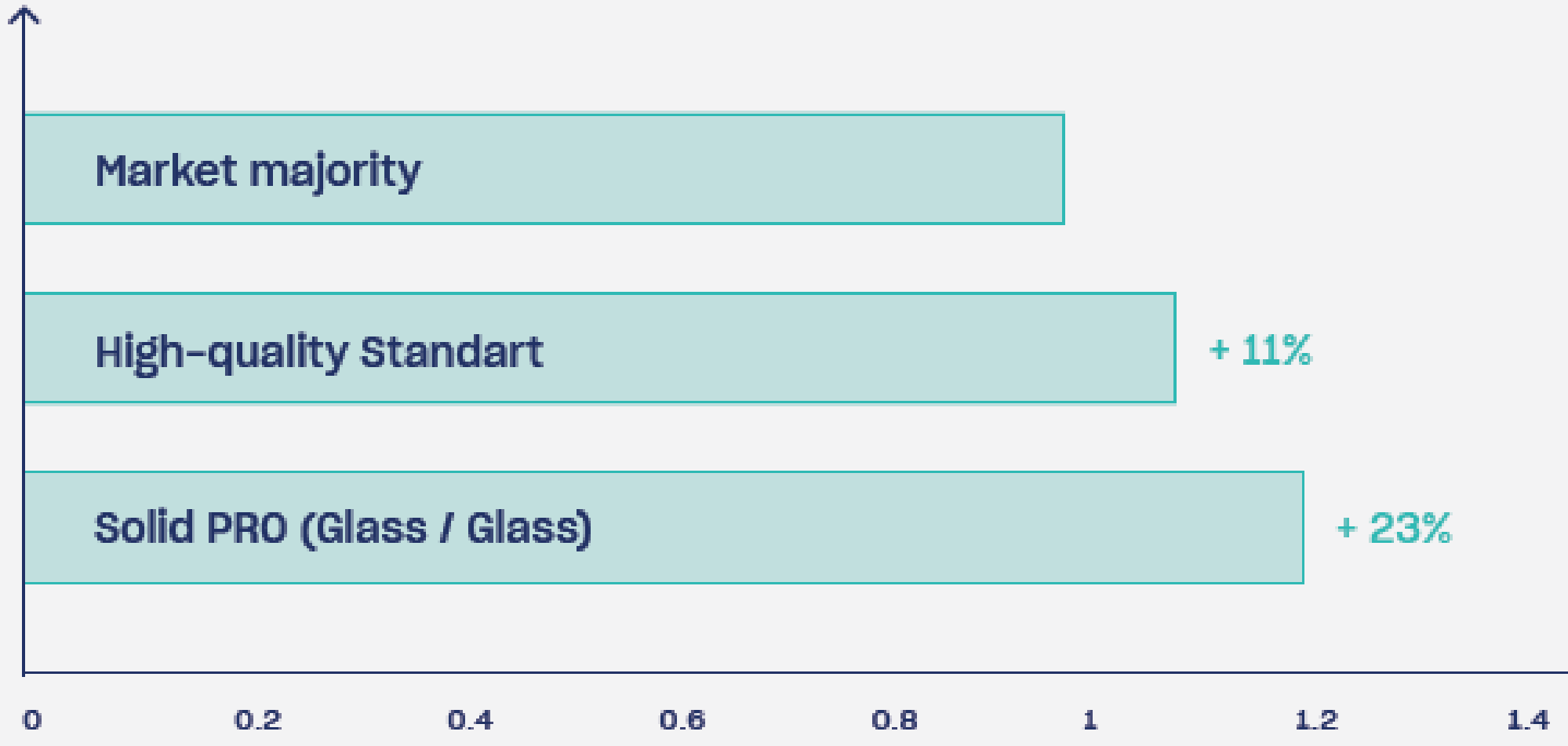
Market standard of 12 year product warranty and 25 year efficiency warranty sounds good only on paper. This means that if the panel fails completely after 13 years it is not covered by any warranty.

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

Best choice for your wallet. 30 year savings

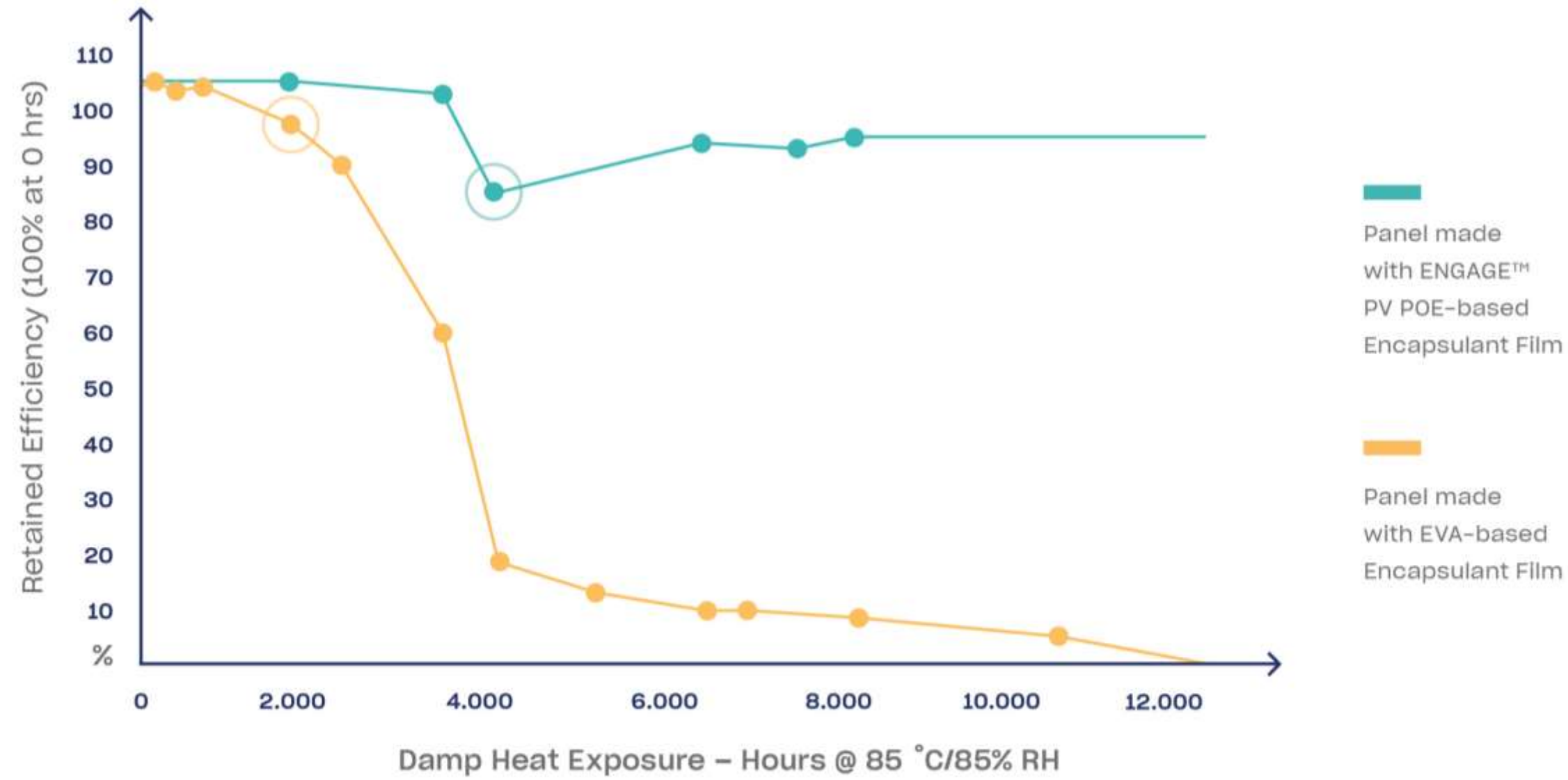
A house with a Solar PV system **Increases by ~3% in value and sells 20% faster!** It makes sense to invest in a PV system that lasts!

23% more savings!



* Levelized cost of electricity (LCOE) calculated for a 30 year period.

POE is the key

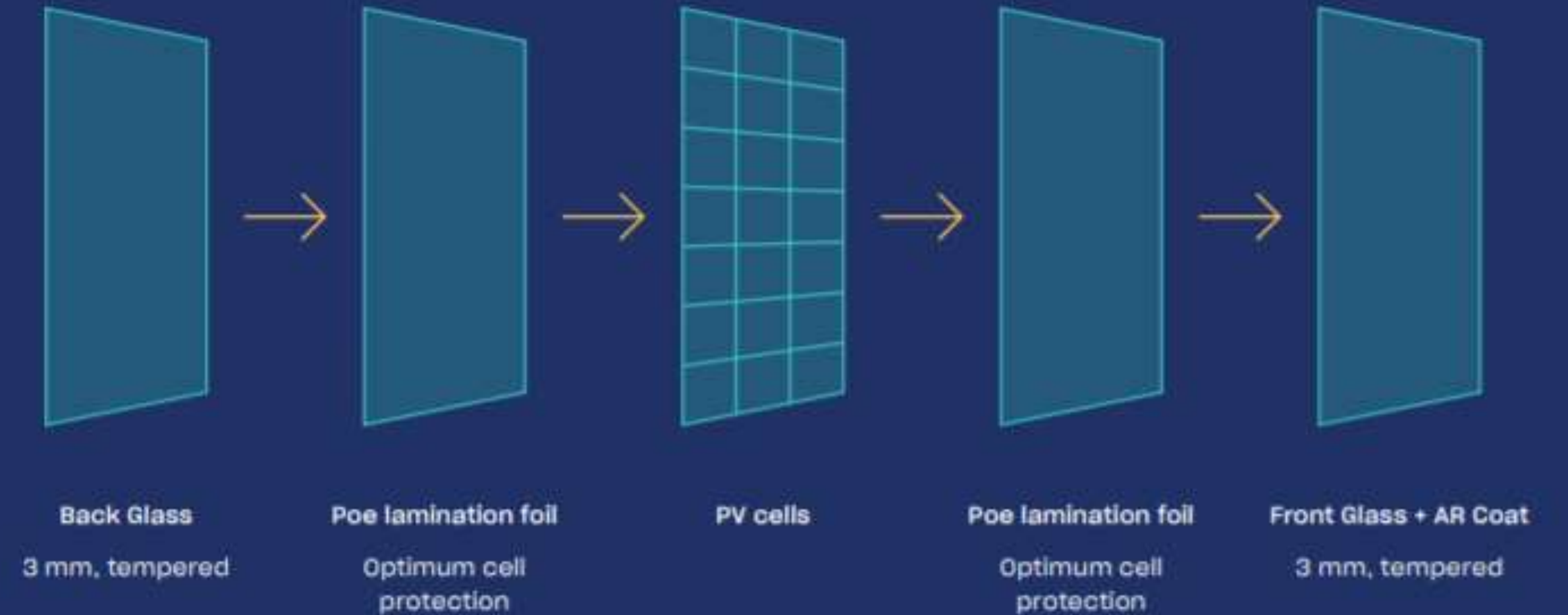


- Glass leaching caused drop in Short Circuit Current; no film or panel degradation.
- Following 1000 h Damp Heat, both panels underwent 50 Thermal Cycles and 10 Humidity Freeze Cycles. Both panels were then placed back into Damp Heat.

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

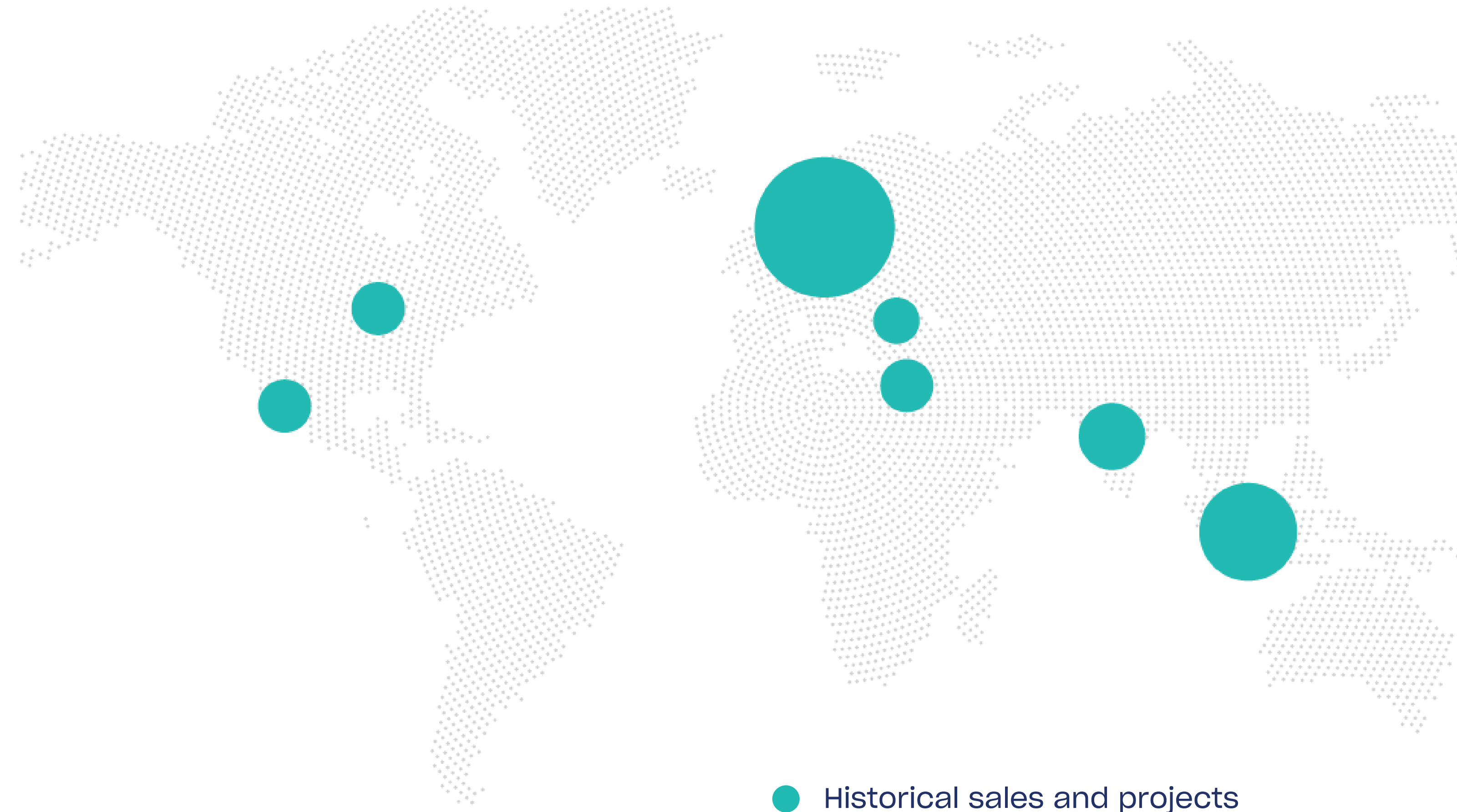
- Narrowing down our existing network - Smaller customers start to buy from bigger local partners.
- All the leads from the existing markets are forwarded to a performing distributors on a fair principles (sales volumes)

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!**

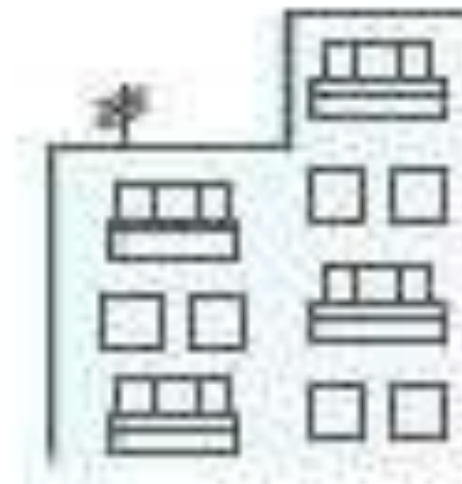


Solid Wall applications

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.



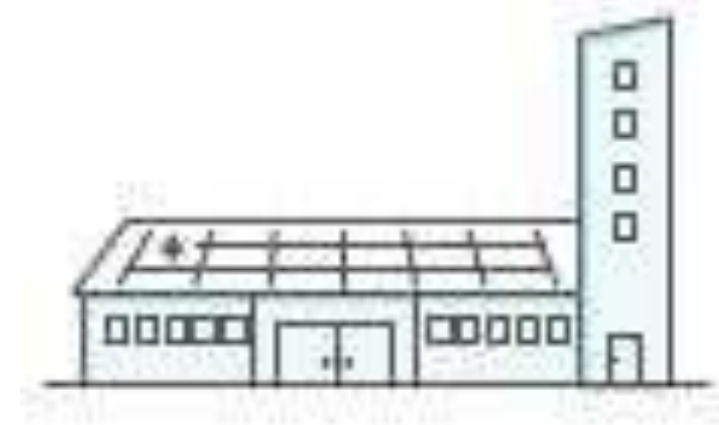
Apartment building



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



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 shade 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				



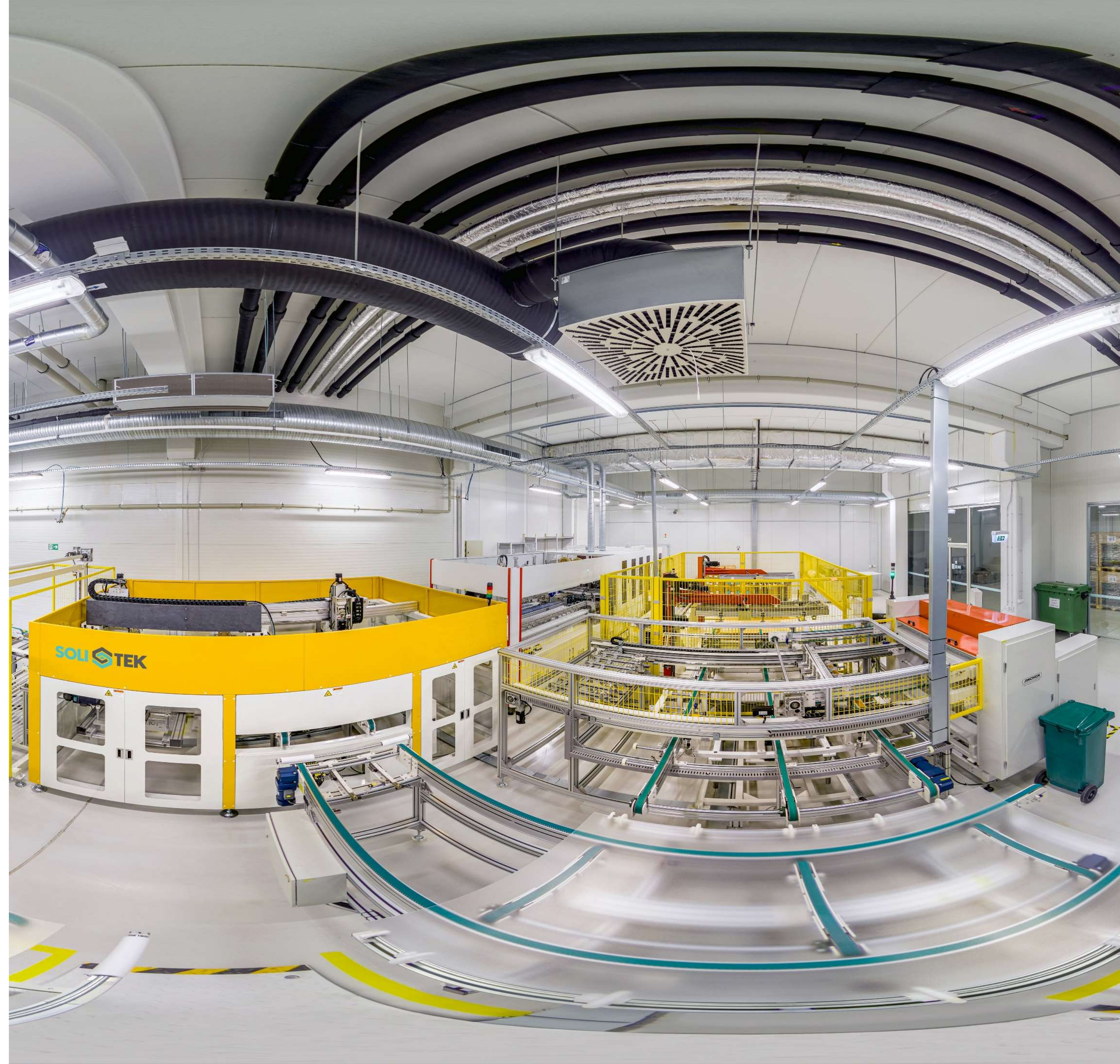
Virtual tour

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

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

You can find it on our website 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!

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