





2021

# 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.

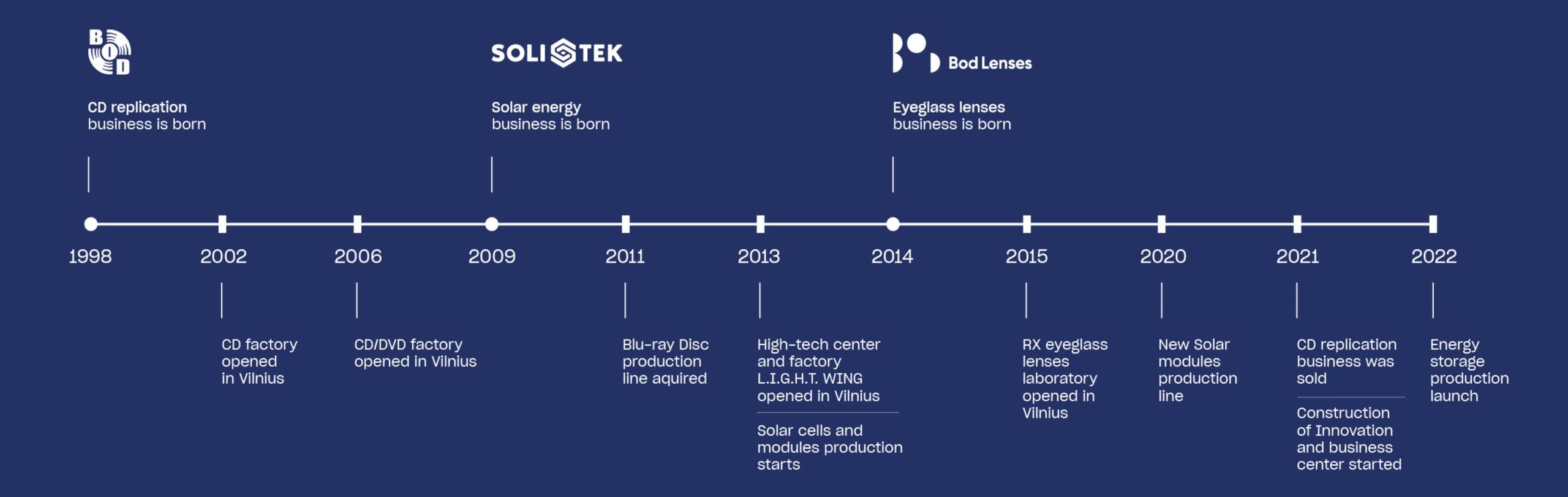
#### Constructed by Global BOD Group in 2011.

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.









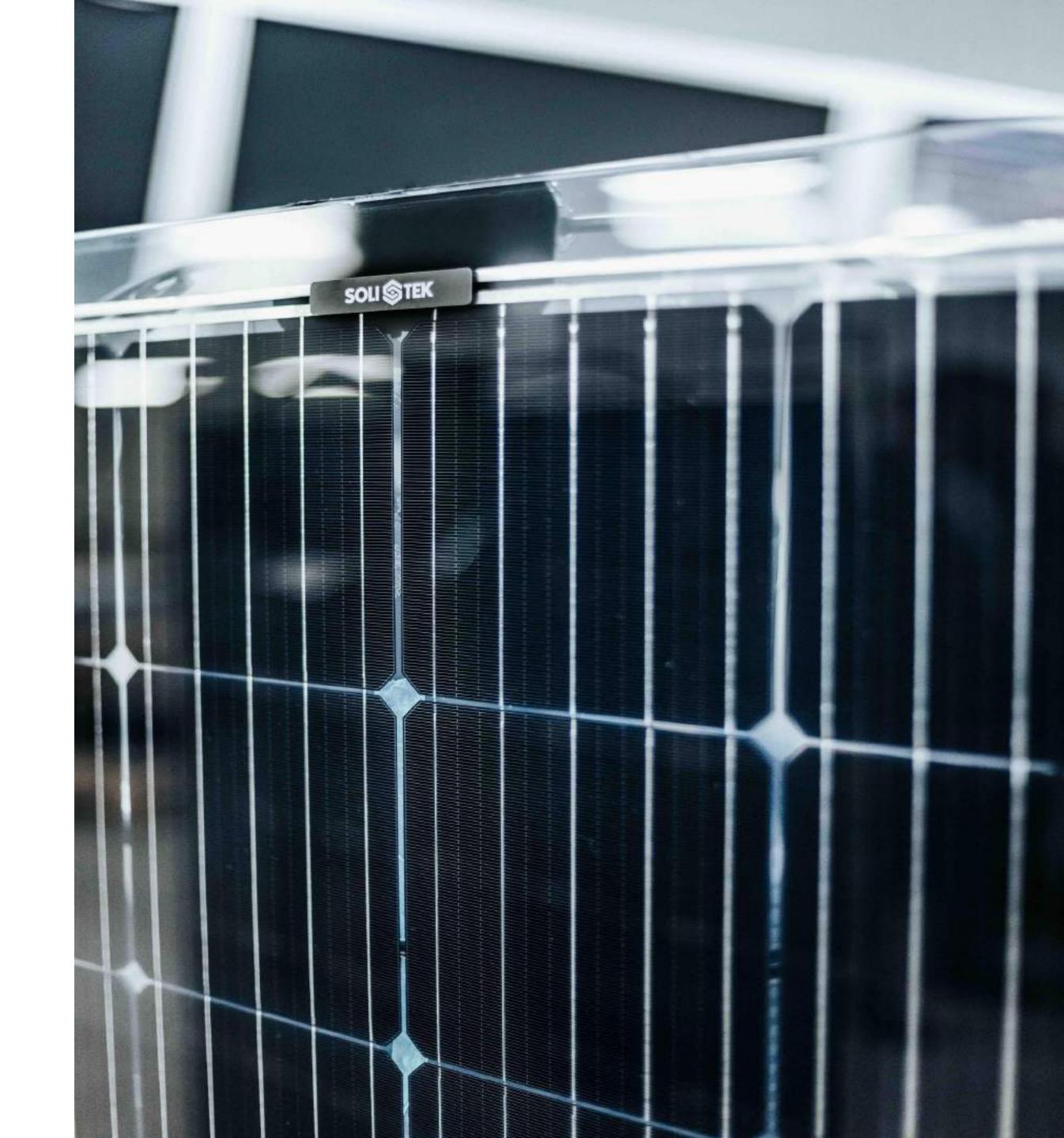
#### It's all about innovation

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:

- Bifacial monocrystalline solar cells
- Premium tempered glass to glass lamination
- Flawless industrial design





#### 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)











#### Sertificates







#### Programs





2018.05 - 2022.10 - coordinator



2018.06 - 2022.11 - partner



2019.10 - 2022.09 - partner



2015.10 - 2018.10 - partner



**CABRISS** 

2015.06 - 2018.06 - partner

#### Cradle to Cradle™ certified

The C2C certification defines 5 components for circular economy compatible product:

- 1. Safe and healthy materials.
- 2. Eliminate the concept of waste.
- 3. Manufactured with clean energy.
- 4. Protection of water as a precious resource.
- 5. Respect human and natural systems.





## Facts & Figures

SoliTek production, 2020

150k Solar panels



SoliTek production forecast, 2021

270K Solar panels







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.

30

Years

#### **Product Portfolio**



Glass - Foil Standart 360W/365W



Glass - Foil Standard, Half-cut cell 360W/370W



SOLID Solrif 350W



BLACKSTAR (Solid framed) 360W



Glass - Glass SolidWall



SOLID Bifacial 350W















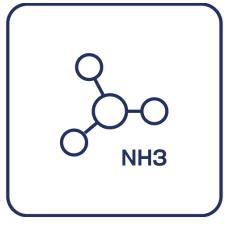




## Glass - Glass advantages



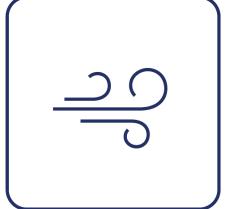
Extreme load resistance



Ammonia resistance



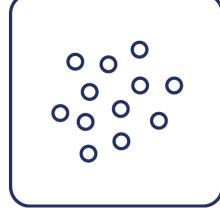
Self- cleaning effect



Dust & Sand resistance



Fire class A

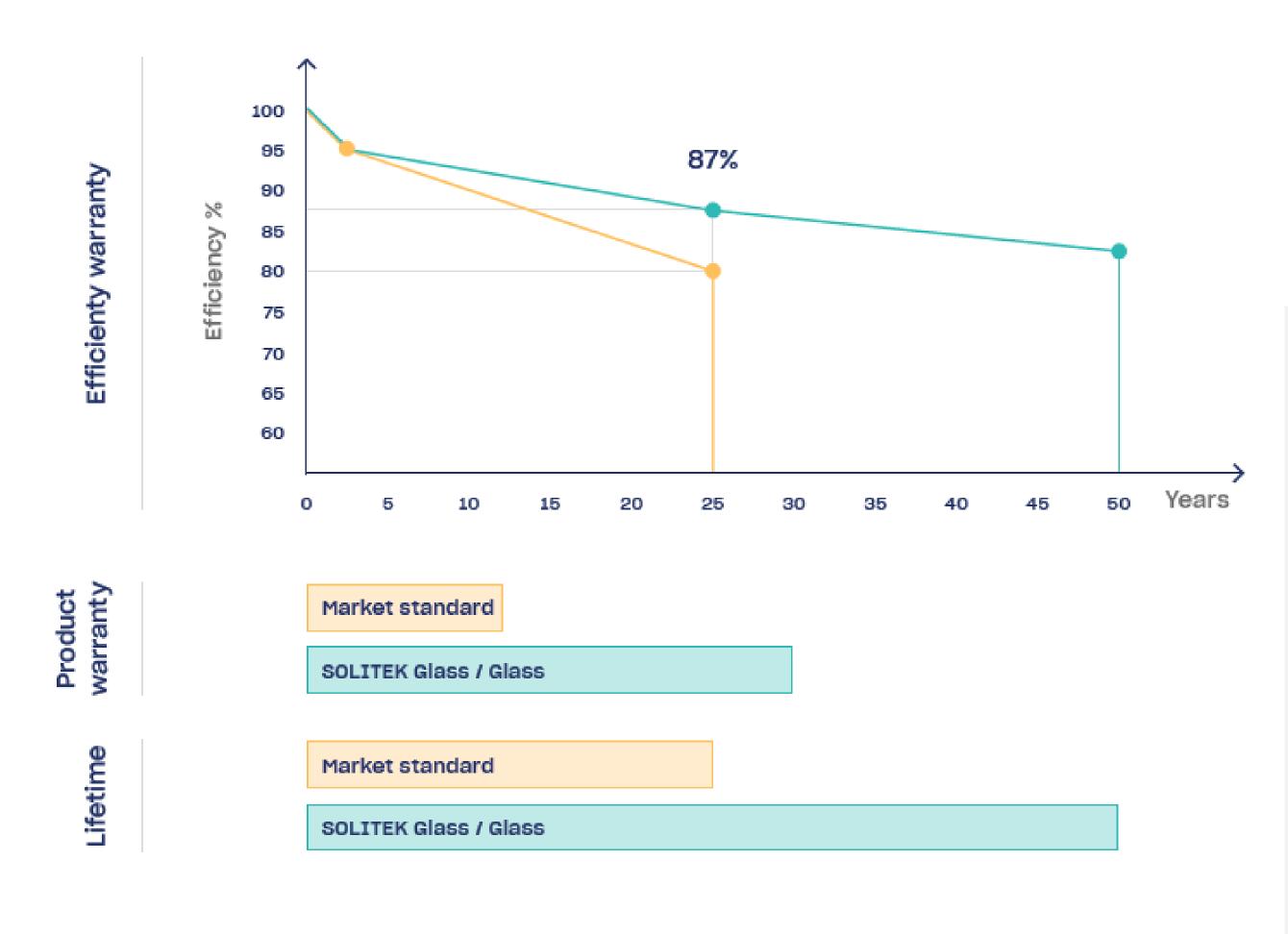


Salt mist resistance





## 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 falls 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

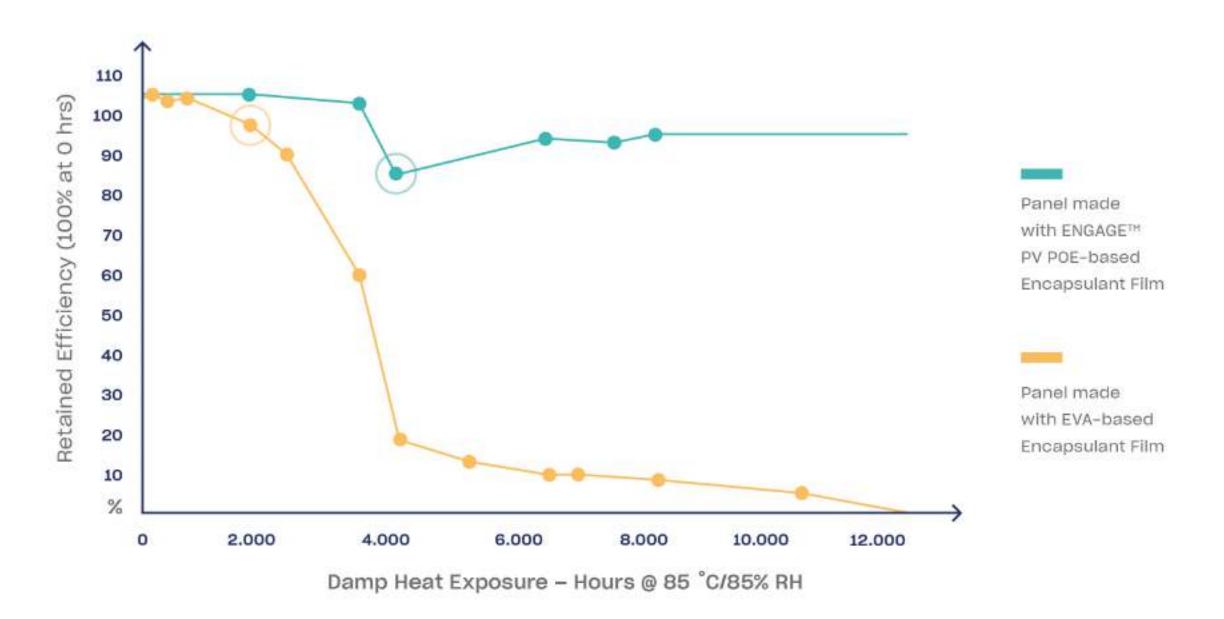
# Best choice for your wallet. 30 year savings

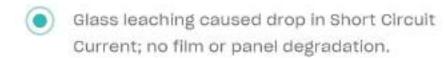
A house with a Solar PV system Increases by ~3% In value and sells 20% faster! It makes sense to invest in a PV system that lasts!

23% more savings!



#### Poe is the key





We use POE.

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.

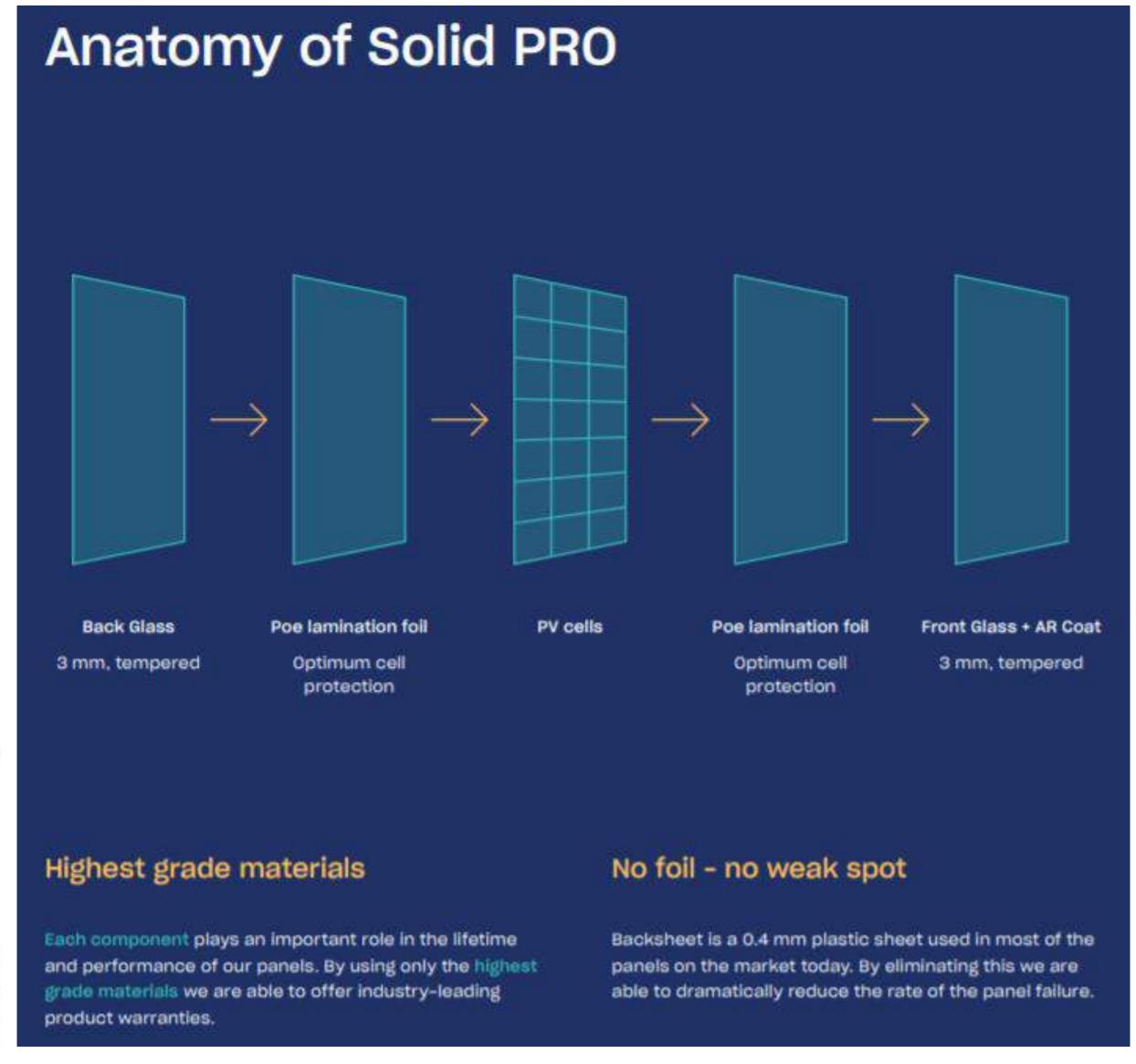
Most manufacturers are using EVA encapsulants.

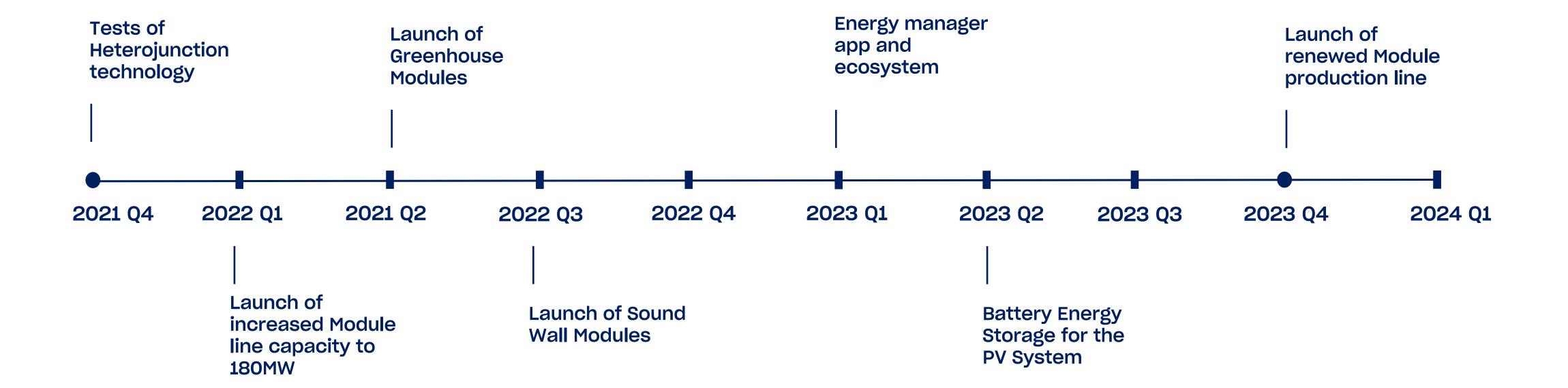
No Acetic acids 100% Waterproof No browning Eliminates PID Maximum Lifetime Maximum Lifetime

POE + + + + + 50 years

EVA - - - 25 years









# 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





# 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.











SOLID Wall - is it worth it?

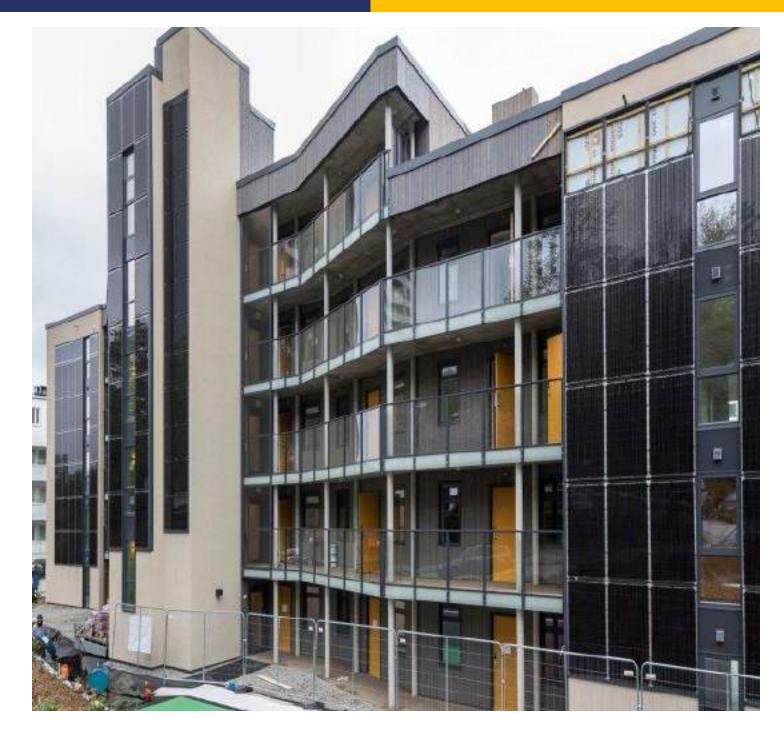
# 44 kW Wall faced south in the middle of Europe

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 ePIT

Solutions

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





# Ground mounted solar plants

Electricity delivered to 1100 homes

4.6 MW Turkey

Bifacial solar plant wit horizontal single-axis sun tracking system

3,4 MW Substitution Lithuania





# Energy storage solution

R&D Battery Equipment

2022 Vilnius Lithuania



