IBC module technology for IPV products

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BCworkshop2025

December 10, 2025
Amsterdam, the Netherlands

Background

tecnalia

MEMBER OF BASQUE RESEARCH
& TECHNOLOGY ALLIANCE

BRANKA

- INDUSTRIAL COMPOSITE SOLUTIONS

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Start-up manufacturer of PV solutions supported on Solarface® technology

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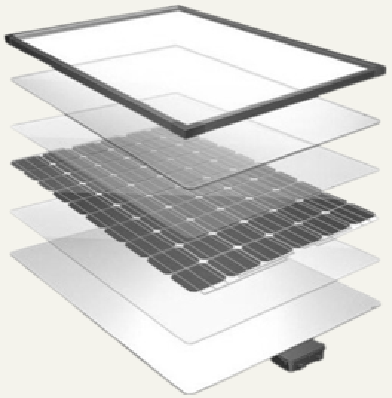
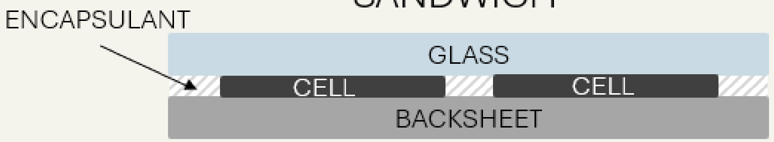
Our technology

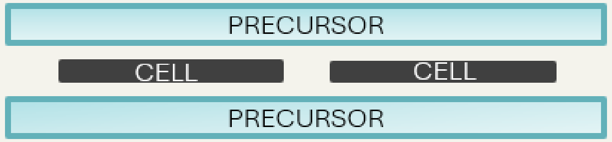
Conventional technology vs. IZPITEK technology



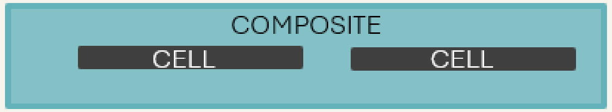
SANDWICH



3 Patents
1 industrial secret



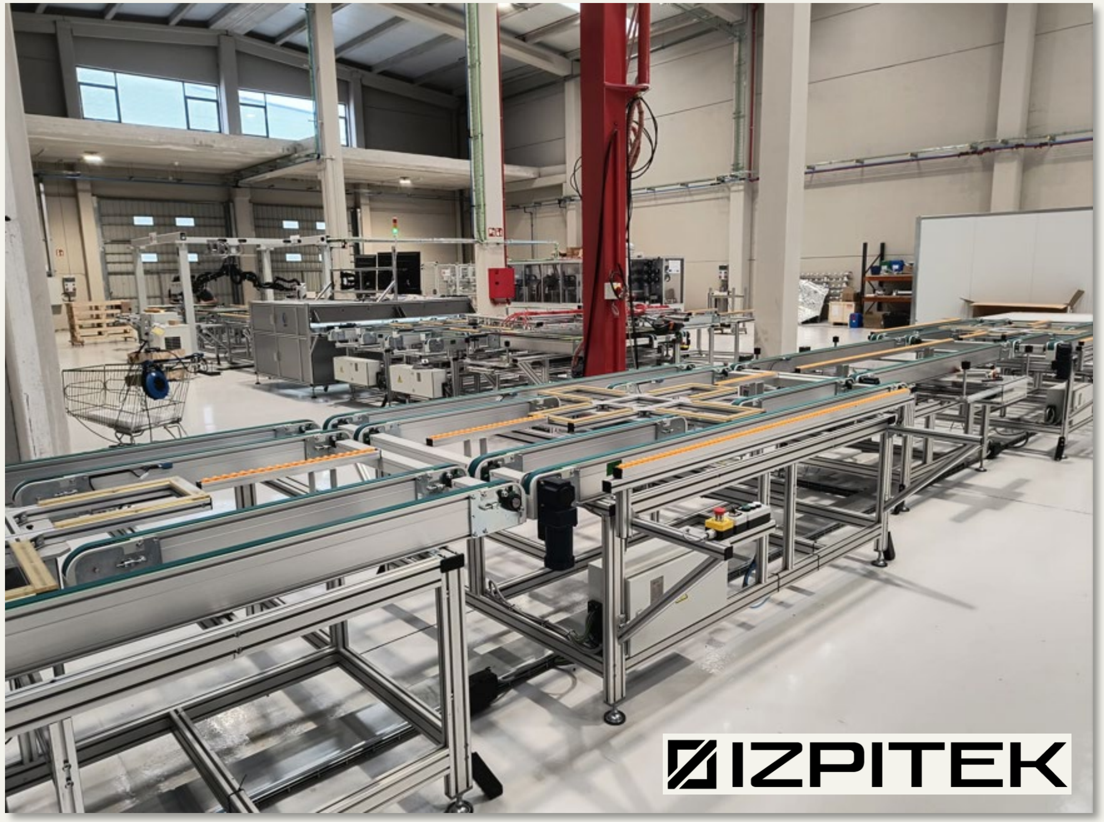
MONOLITHIC PANEL



- ❑ **Design flexibility**
  from ultra-thin flexible panels, to semi-flexible or rigid stand-alone
- ❑ **Lightweight**
  5% to 30% of the weight of equivalent glass-based panels
- ❑ **Aesthetic design**
  translucent or opaque, different background or front colors
- ❑ **Integrability**
  easy installation or integration on other base element products (glass, aluminum, ceramics...)
- ❑ **Performance**
  efficiency comparable to standard PV panels

Manufacturing plant

- 3.000 m^2 plant located in Güeñes (Spain)
- Production capacity
  - Ready since September 2025
  - Semi-automated
  - 30 MWp/year approx.
  - 3 cell technologies



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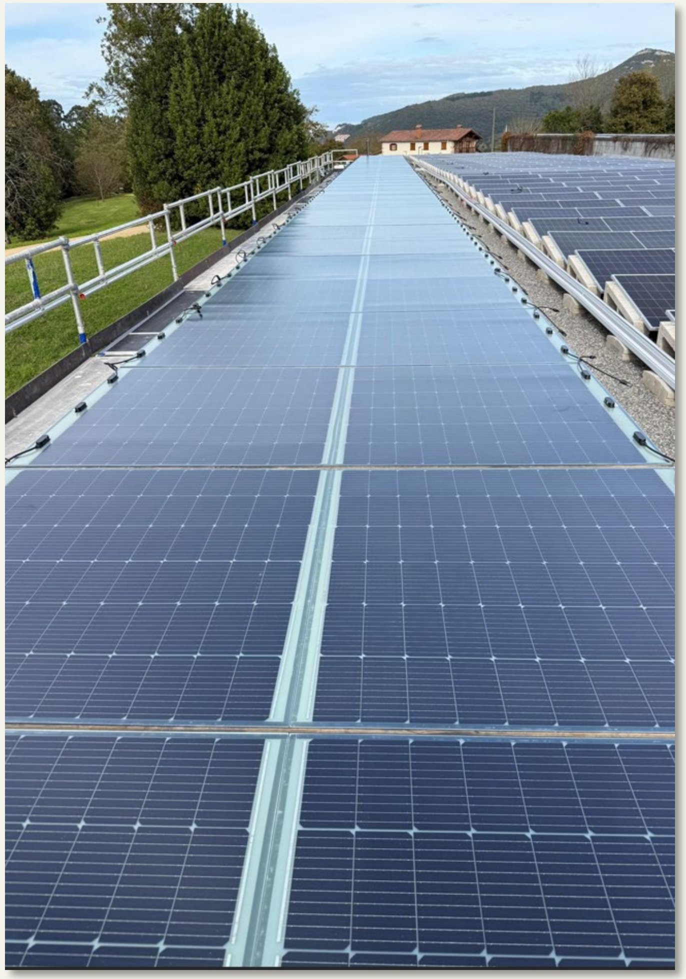
Applications



BIPV – Buildings and façades

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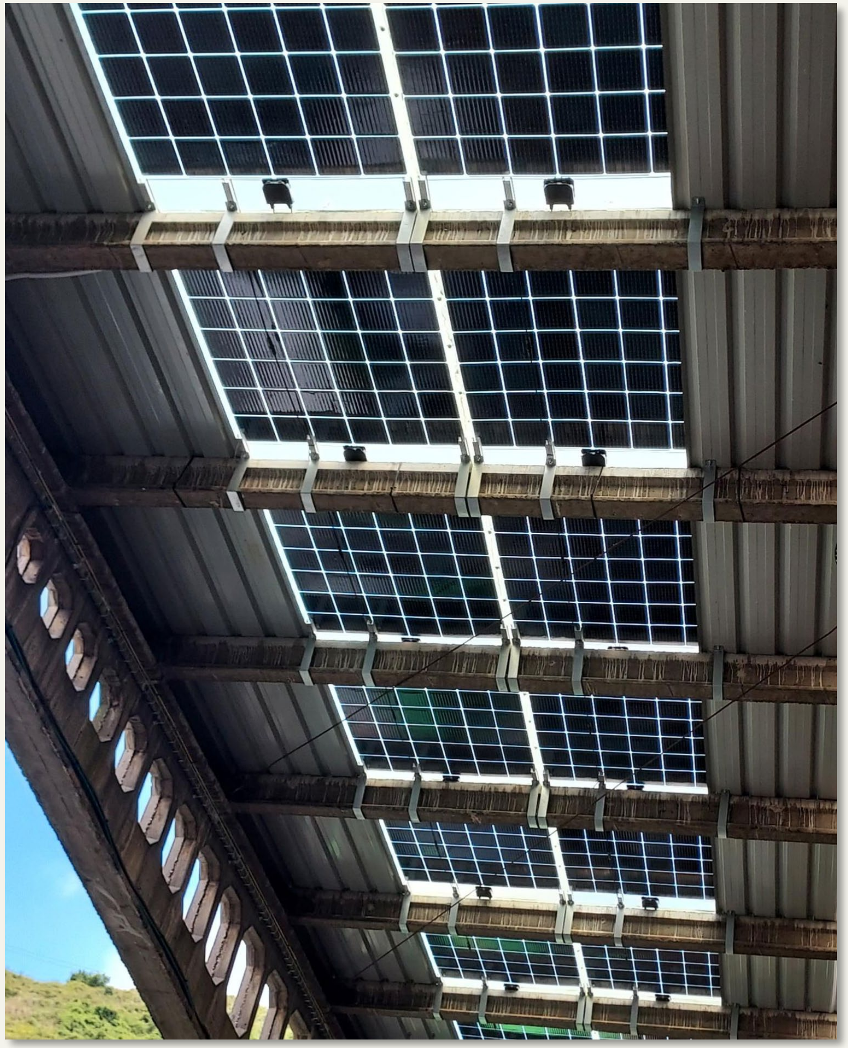
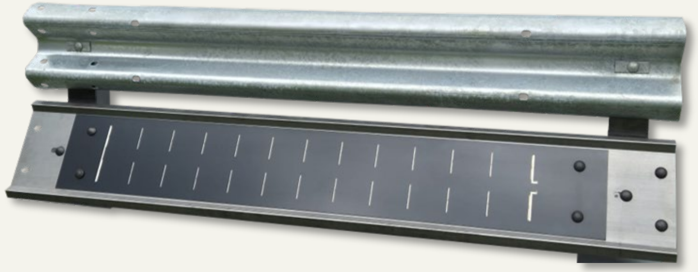
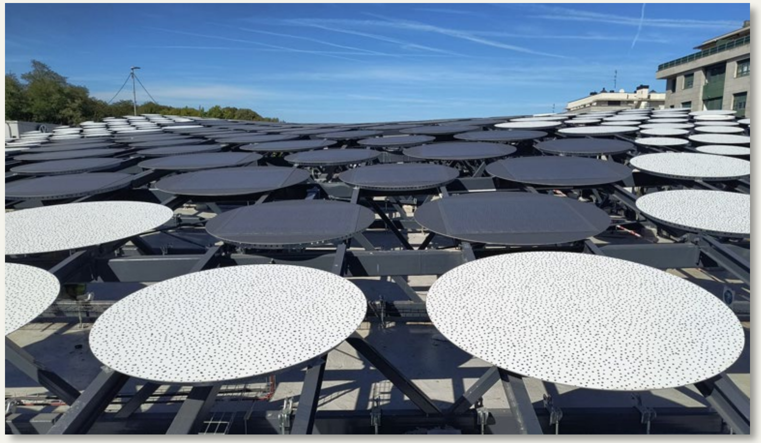
IZPITEK Applications and Projects



Lightweight roofing





Ground transportation infrastructures

IZPITEK Applications and Projects

Marine environment

Mobility / Transportation

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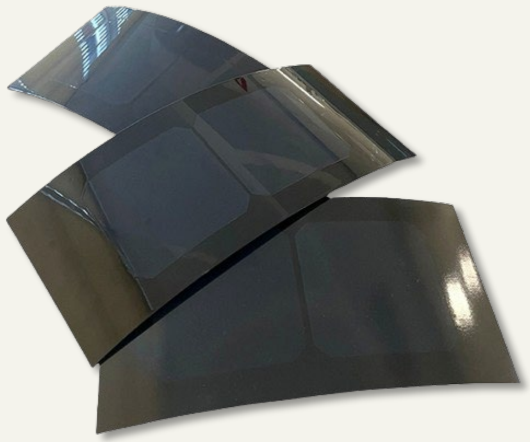
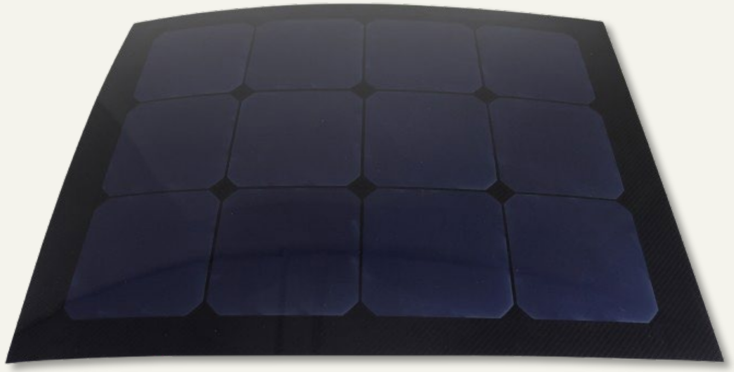
Advantages of IBC technology

- **Enhanced aesthetics**
  uniform front surface
  better visual integration
- **Higher efficiency**
  reduced shading losses
- **Design flexibility**
  easier to adapt for architectural elements without compromising efficiency
- **Improved reliability**
  less corrosion risk
  better long-term stability
- **Improved mechanical resilience**
  beneficial for curved or structural applications





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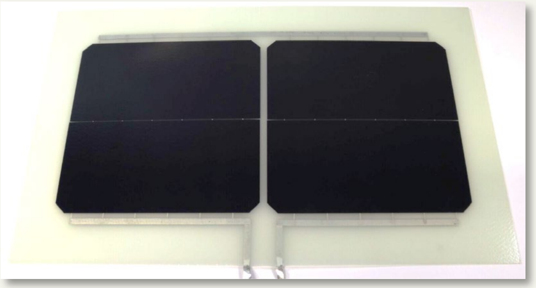
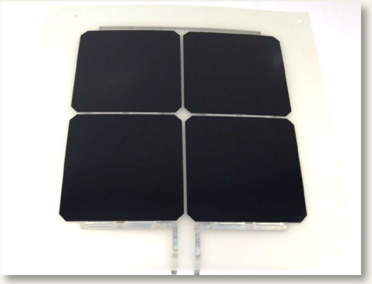
Technology reliability and testing

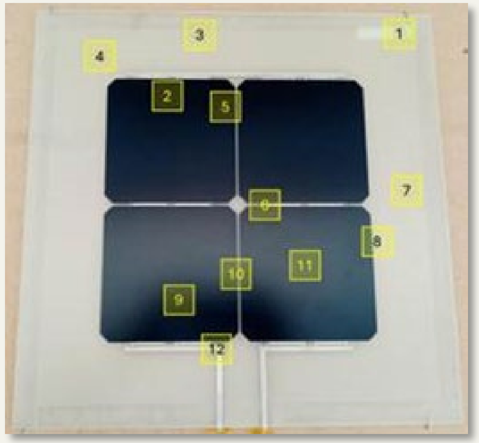
- ❑ Ageing tests according to IEC 61215

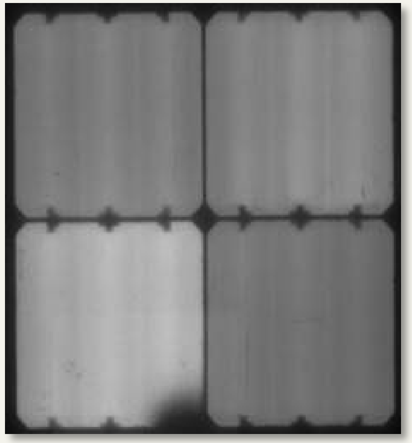
- ❑ Very good results in:
  - DH 2000h
  - TC 200
  - HF 10
  - Hail test

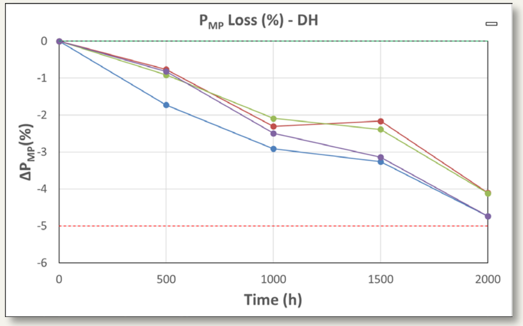
Product type	Category	Indicative Thickness range (mm)	Indicative Weight range (kg/m²)
1	Thin PV film: lamination, interlamination	0.3 - 0.8	0.5 - 1.3
2	Thin PV panel: lamination, adhesion	0.8 - 1.0	1.6 - 1.9
3	Stand-alone PV panel: adhesion,	1.2 - 1.4	1.9 - 2.2

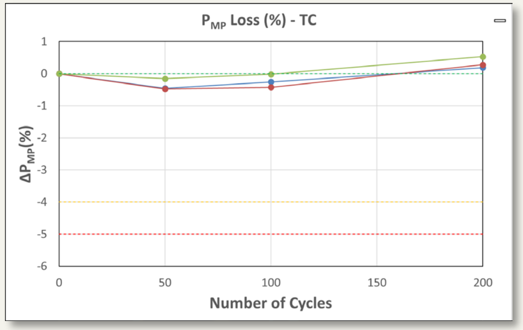


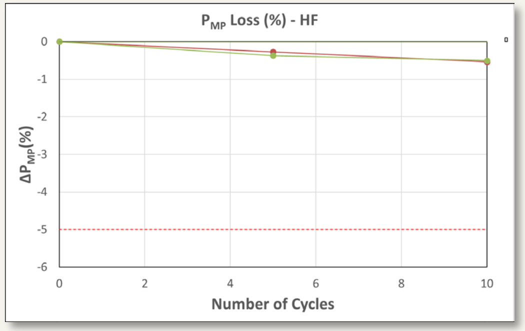












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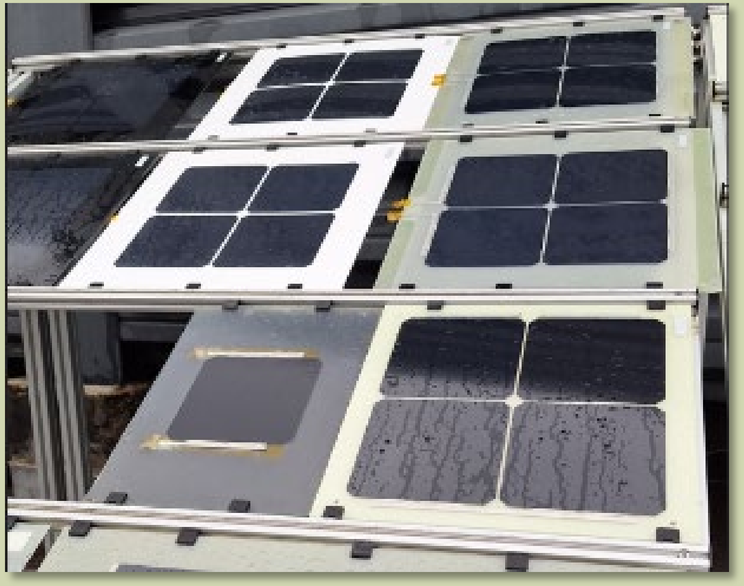
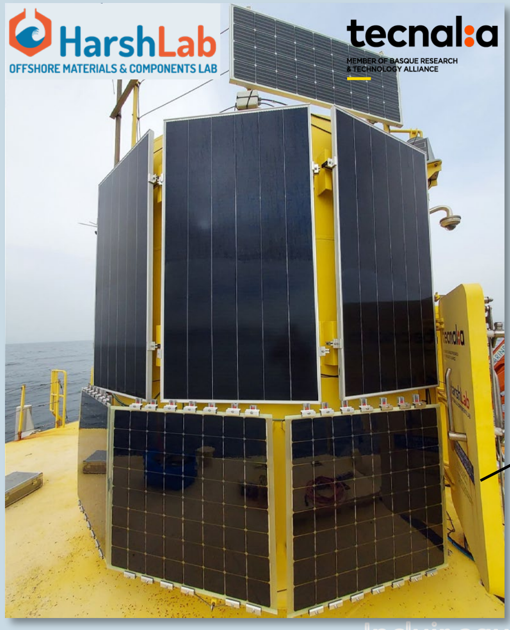
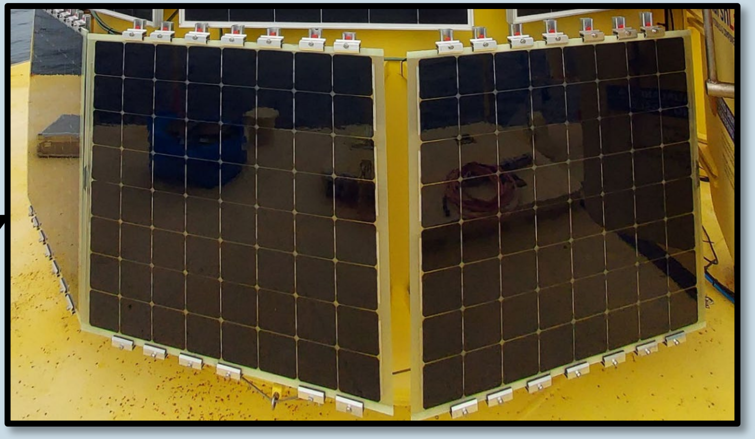
Technology reliability and testing



- Test benches outdoor and even off-shore!
  - **Materials**
    Surface finishes and protective coating evaluation
  - **Modules**
    Power generation and performance analysis





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Thank you for your attention!

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