

WHITE & COLOR SOLAR TECHNOLOGY



## Your partner

for the production of BIPV elements active roofs and facades

## **Our expertise**

Solaxess is a Swiss company that specializes in the **high-tech solar sector** and works closely with the CSEM (Swiss Center for Electronics and Microtechnology).

Solaxess develops, manufactures and markets nanotechnology-based foils that can be integrated into photovoltaic (PV) panel manufacturing process. Thanks to the use of Solaxess foil, photovoltaic panels can be perfectly integrated into the construction of all kinds of buildings.

Our foils enable PV module manufacturers to provide architects, developers and ultimately owners with white or other colored active full-building elements that are cost effective, durable and aesthetically pleasing.

Solaxess brings the building envelope into a new era. Facades and roofs become **active and beautiful**.



Energy

= Active roofs and/or facades

Let's build tomorrow's buildings together and renovate today in all shapes and colors.

Our perfection makes solar invisible and efficient.







Solaxess high-end design sustainable performance

Colors in constant development

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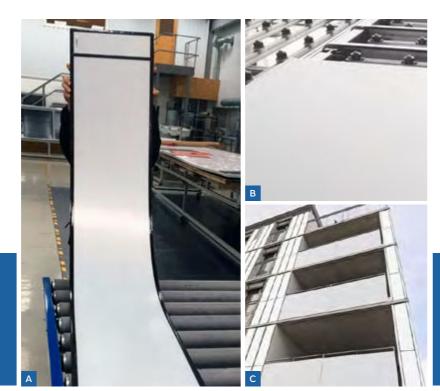
## Add colors to your projects thanks to our technology

# A product adapted to your operation

We support you with the integration of our foils into your standard fabrication process.

Our technology works with standard PV module production lines, as well as more sophisticated automated production lines.

With our shapes and colors, you allow architects and designers to better integrate your photovoltaic panels in their building concept. They can incorporate **renewable energy** into their design without compromising their aesthetic vision.











Our patented technology makes facades active and enhances the architectural design.
The anti-UV treatment guarantees an excellent stability.

A METAFORM architects

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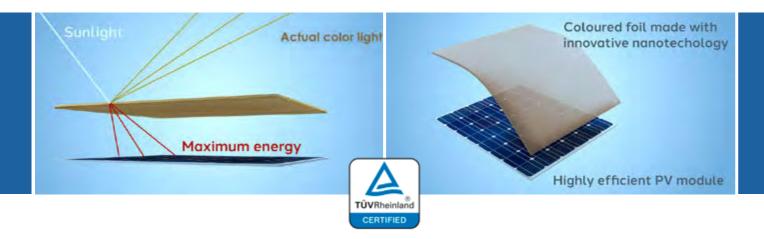
## A revolutionary technology

## SOLAXESS Simplicity, sustainability

Our innovative technology allows for optimal reflection of visible light energy. The desired color is thus obtained, while maximizing the energy transmitted to the PV cells.

This unique feature allows the PV panel to appear perfectly white or colored to the naked eye, hiding the solar cells, while maintaining excellent conversion efficiency.

Our foil is compatible with the main PV technologies on the market, based on c-Si, CIGS-based thin foils or others. It makes any PV panel aesthetically pleasing and therefore easier to integrate into a facade or roof.



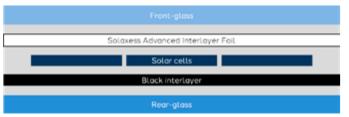
A Foil production machine

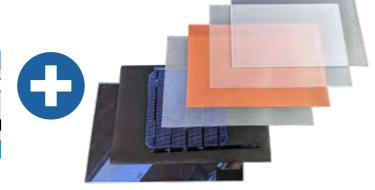
B Easy handling and logistics, reduced storage
Panel with PERC cells and white foil Solaxess
Standard roll: 200m², 1200 mm width, 167 linear meters



Solaxess supports PV module manufacturers to adapt their product to architectural needs

## Simple integration into PV modules







In BIPV, all PV panels

shapes are feasible

### **Strengths**

#### Aesthetic design

provides the best trade-off in terms of aesthetics and performance

patented and usable by any PV module manufacturer

#### Simple logistics

can be delivered worldwide - just a few rolls will cover 10'000 m<sup>2</sup>

can be adapted to any size and shape required

#### **Customised color**

on demand, any color can be manufactured

#### Long term guarantee

excellent color uniformity and stability

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## A few key facts

# Large PV facade power output

Conventional passive facade elements made of plaster, aluminium, marble or other materials can finally be replaced by active PV building elements.

The typical power output of a PV module with our technology is between 110 and 200 Wp/m², depending on the color. Any color can be developed to match the project design.

Achievable power output of mono c-Si PV modules using our foils:



The efficiency is clearly dependent on the type of cells used.





Männedorf - René Schmid Architekten AG

Award for the best energy performance under the aegis of the Swiss Federal Office of Energy SFOE



# Panel performance improvement

A photovoltaic panel better works at low temperatures. Our foil reduces high temperatures impact on its performance. This temperature reduction, compared to standard black modules, allows

- A better performance in real-world conditions, especially at high temperatures;
- · A reduction in air conditioning requirements;
- · A solution against urban heat islands.

This 2.0 facade produces your energy and offers you the energy independence.

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# The future of construction lies with BIPV, Building Integrated Photovoltaics

Photovoltaic system as an 100% integrated building material



A Architect: Richard Meier

Architects and designers trust
Solaxess for their building and sustainable renovation projects

By covering a part of the buildings with photovoltaic panels, we largely reach our objectives of sustainable development.





renovated and active

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# Solaxess provides a nanotechnology foil in white or other color to photovoltaic panels manufacturers.

If you are an architect, promoter, installer or project owner, we can support you in your projects.









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In collaboration with Hangzhou Microquanta Co. Ltd.



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