



**SOLAXESS**   
WHITE & COLOR SOLAR TECHNOLOGY

100% integrated  
photovoltaics

[www.solaxess.ch](http://www.solaxess.ch)

**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.

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.**

# Construction

**+** Energy

**=** Active facades

## Your sustainable construction

Building together the buildings of tomorrow, with our shapes and colors.

**Our perfection makes solar energy invisible and efficient.**



Solaxess,  
high-end design, sustainable  
performance



**Others colors as desired**

# 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.

- A** 2016 - Flexible solar panel CIGS
- B** 2017 - Standard module with PERC cells
- C** 2018 - 1<sup>st</sup> installation on an existing facade



Our patented technology makes facades active and enhances the architectural design

# A revolutionary technology

## SOLAXESS <sup>+</sup> simplicity, sustainability

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Our innovative technology allows the necessary part of the visible light energy to be reflected in the best possible way to **give the panel the desired color, while maximising 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.

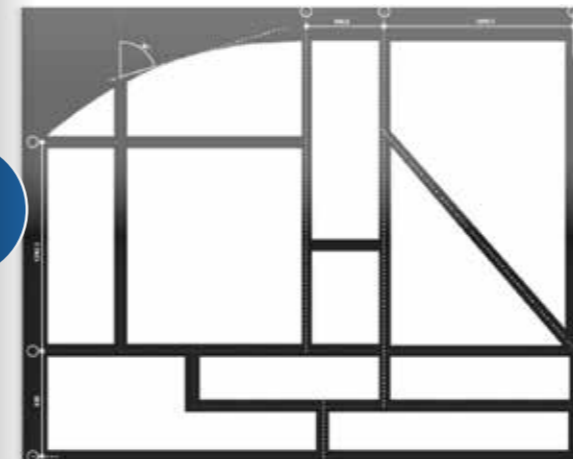
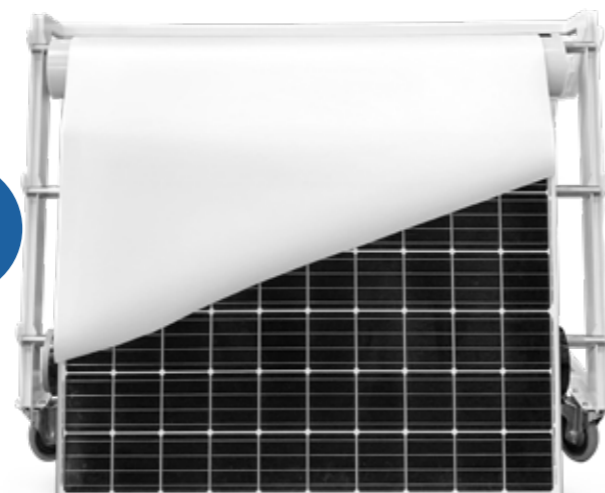
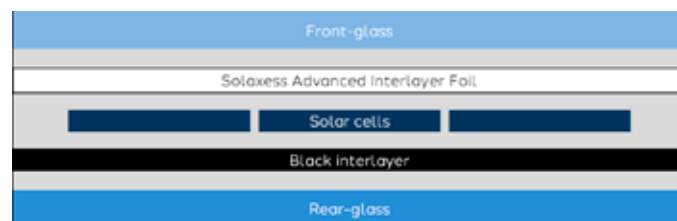
Our foil is **compatible with the main PV technologies on the market**, based on c-Si, CIGS-based thin foils or others. It makes any PV panel aesthetically pleasing and therefore easier to integrate into a facade or roof.

- A Foil production machine
- B White and colored foils
- C Panel with PERC cells
- D Roll: 1200 mm width, 200 linear meters length



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

## Simple integration into PV modules



## Strengths

- Aesthetic design**  
provides the best trade-off in terms of aesthetics and performance
- Exclusive technology**  
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>
- Flexibility**  
can be adapted to any size and shape required
- Customised color**  
any color can be manufactured
- Long term guarantee**  
excellent color uniformity and stability

# 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 180 Wp/m<sup>2</sup>, 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 :

White 110 Wp/m <sup>2</sup>	Beige 125 Wp/m <sup>2</sup>	Nut brown 165 Wp/m <sup>2</sup>	Terracotta 163 Wp/m <sup>2</sup>
Light grey 149 Wp/m <sup>2</sup>	Dark grey 179 Wp/m <sup>2</sup>	Grey beige 157 Wp/m <sup>2</sup>	



Let's pool our knowledge together for a better world: ventilated facade, photovoltaic product and sustainable development

## -10°C Reduced temperature

The foil reduces the module's operating temperature. A reduction of around 10°C was measured at the back of the module when the outdoor temperature was 25°C.

Compared with standard black PV modules, this temperature reduction leads to:

- A better relative performance in real outdoor conditions, particularly in warm climates
- Reduced building air conditioning needs
- A heat-islands effects which is reduced

This 2.0 facade produces your energy and offers you electrical independence

# The future of construction lies with BIPV

## Photovoltaic system as an 100% integrated building material



A METAFORM architects  
B Architect: Richard Meier

Architects and designers trust Solaxess for their building and renovation projects

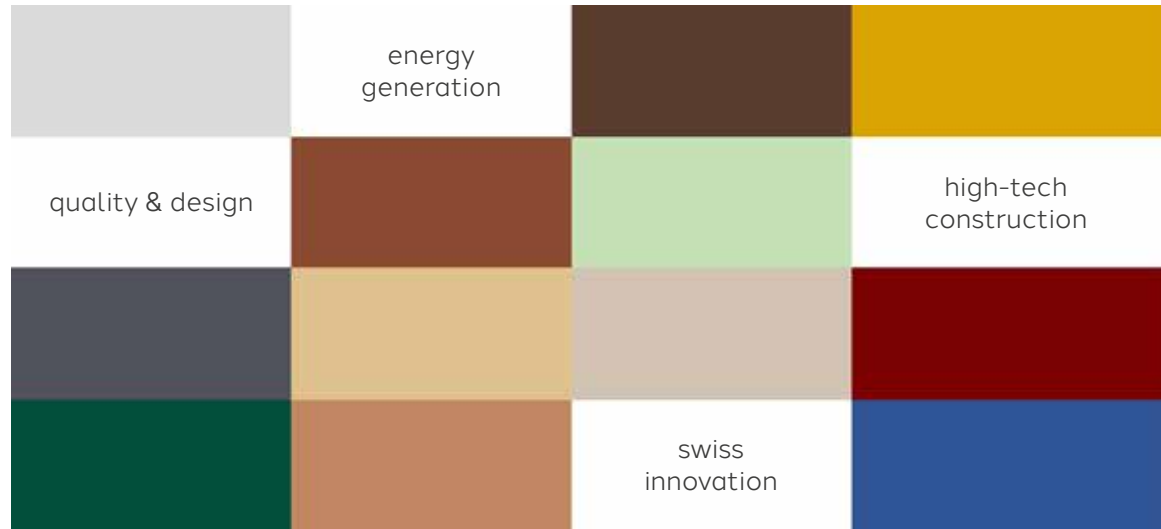
By covering a part of the buildings with photovoltaic panels, we largely reach our objectives of sustainable development.



renovated and active

“We shape our buildings and afterwards our buildings shape us”

Sir Winston Churchill



## BE SMART

We are part of BE-Smart. This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 818009



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