

A revolutionary energy producing facade material that is smart, efficient and visually attractive solar visuals

# **Our Dream:**

Facade surfaces of buildings offer major opportunities for sustainable energy generation "

# **Climate neutral in 2030**

#### Implementing clean energy in future architecture

Solar Visuals introduces a new revolutionary façade material that combines maximum energy generation with high-quality aesthetic design quality. The world is facing a major challenge in the coming decades, as formulated in the Paris Climate agreement: Making the built environment more energy-neutral in 2030. This will have a big visual impact on the built environment that requires new building integrated solutions. Only then buildings and cities arise that are not only intelligent and efficient, but also visually attractive.



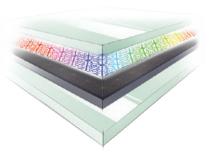


#### **Design Quality**

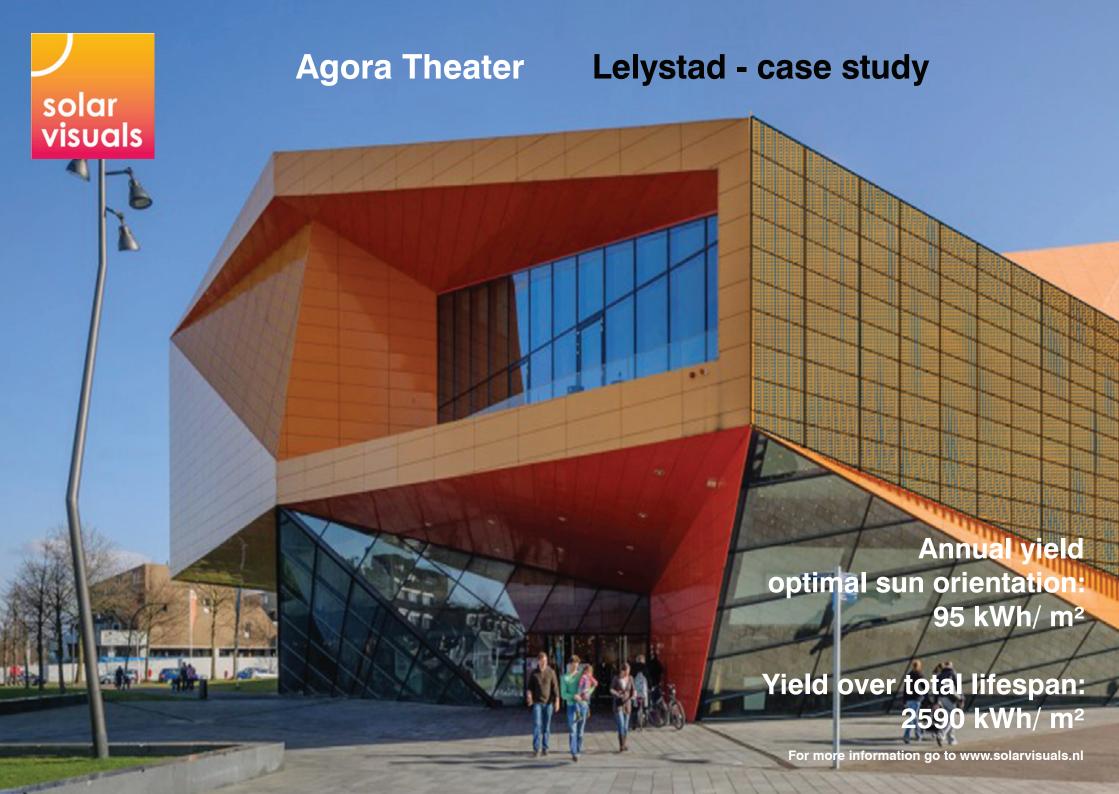
Making use of façade surfaces is a major opportunity for sustainable energy generation, and makes solar panels not only limited to roofs. Solar Visuals panels are designed to fit seamlessly into facades of residential blocks, offices and public buildings. Solar Visuals offers the possibility to scale the energy production in the built environment significantly in an aesthetic way. Our panels ensure an optimal balance between aesthetics and energy yield.

#### Custom made

The Solar Visuals panels consist of an energy-generating photovoltaic layer and an integrated full-colour visual that offers freedom of design. In order to optimize the energy output we make use of a patented printing software technology that converts designs into a pattern of dots adjusted on the desired density. The panels are available in multiple formats and versions.



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# solar visuals

"An energy-generating façade is 4 procent cheaper than a standard non-energy-generating façade"

# **Technical specifications**

#### Brand:Solar Visuals

#### Dimensions:

- 32 cells Module: 1335 x 680 mm
- 60-cells Module: 1000 X 1650 mm
- 72 cells Module: 1000 X 2000 mm

#### Power Yield (at a 30 percent coverage rate )

- 32 cells Module: 120-140 Wp
- 60-cells Module: 225-260 Wp
- 72 cells Module: 270-310 Wp

Printed visual : Design of your choice

**Coverage rate of visual:** Range between 15 to 30 percent for maximum energy yield.

**Feed-in payment:** SDE Subsidy 15 years

Life Span: 25 years

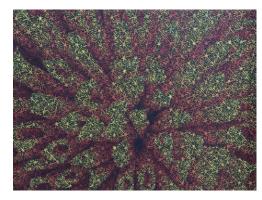
Base Material: 4 mm. low iron tempered glass

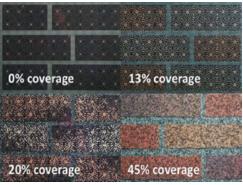
**Application:** The panels are glued or they will be mounted mechanically secured to the facade.

Warranty: 10 years Yield warrant: 90 procent after 10 years and 80 procent after 25 years

#### **Dutch Solar Design**

Solar Visuals is an initiative of ECN part of TNO, Arch tech company UnSense and large format print specialist TS Visuals. The product was developed in collaboration with the research consortium Dutch Solar Design.







# From concept to realisation

### Accompanying your needs and ambitions

You are an architect/designer, a project developer or a building owner and you are curious about the possibilities of a power façade with an aesthetically high quality appearance. Our team will be happy to inform you about the visual opportunities of the Solar Visuals panels, the different design solutions and the optimal efficiency.

### Calculation and preliminary design

You will gain insight into the product specifications and the expected energy yield based on your case. We jointly calculate the project and advise which part of the façade surface gives the most optimal application of Solar Visuals panels, in terms of energy output and efficiency. We inform the architect and other stakeholders in your team about the aesthetic possibilities, by sharing reference projects, samples, and digital design files with which the architect can create the preliminary design.

### Final Design and prototype

The preliminary design will be worked out in cooperation with the architect. We develop a vector pattern that is then converted through an algorithm to a rasterization design with an optimized coverage rate.

The Architect and/or involved design team makes a visualization of how the building and the façade can be seen from close by and from afar, followed by the production of number of test panels.

### Construction

If the design is agreed and the façade is both technically feasible and profitable, the production of the panels will be started as planned. The Solar Visuals Team advises and guides the construction team where necessary in the preparatory work on the façade. The contractor and subcontractor then install the electrical infrastructure, the suspension system and the panels. Also in this phase, the Solar Visuals team is stand-by for advice and guidance.

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### After completion of the building

After commissioning the building we take care of the panels. Together with you we make a maintenance plan for the Solar Visuals panels. We support maintenance, repairs and replacement parts.

If you're interested in our products or would like to know more about the possibilities, please get in touch with us. Email us at info@solarvisuals.nl or take a look at www.solarvisuals.nl