



SOLARONIX

SOLARONIX SOLAR CELLS

Get ready to see our solar cells where you wouldn't expect any at all.

Solaronix is now unveiling our next generation photovoltaic panels. Their ability to work in diffuse light conditions, coupled with unprecedented possibilities of design, make them applicable to a variety of novel installations.

INNOVATIVE SOLUTIONS FOR SOLAR PROFESSIONALS

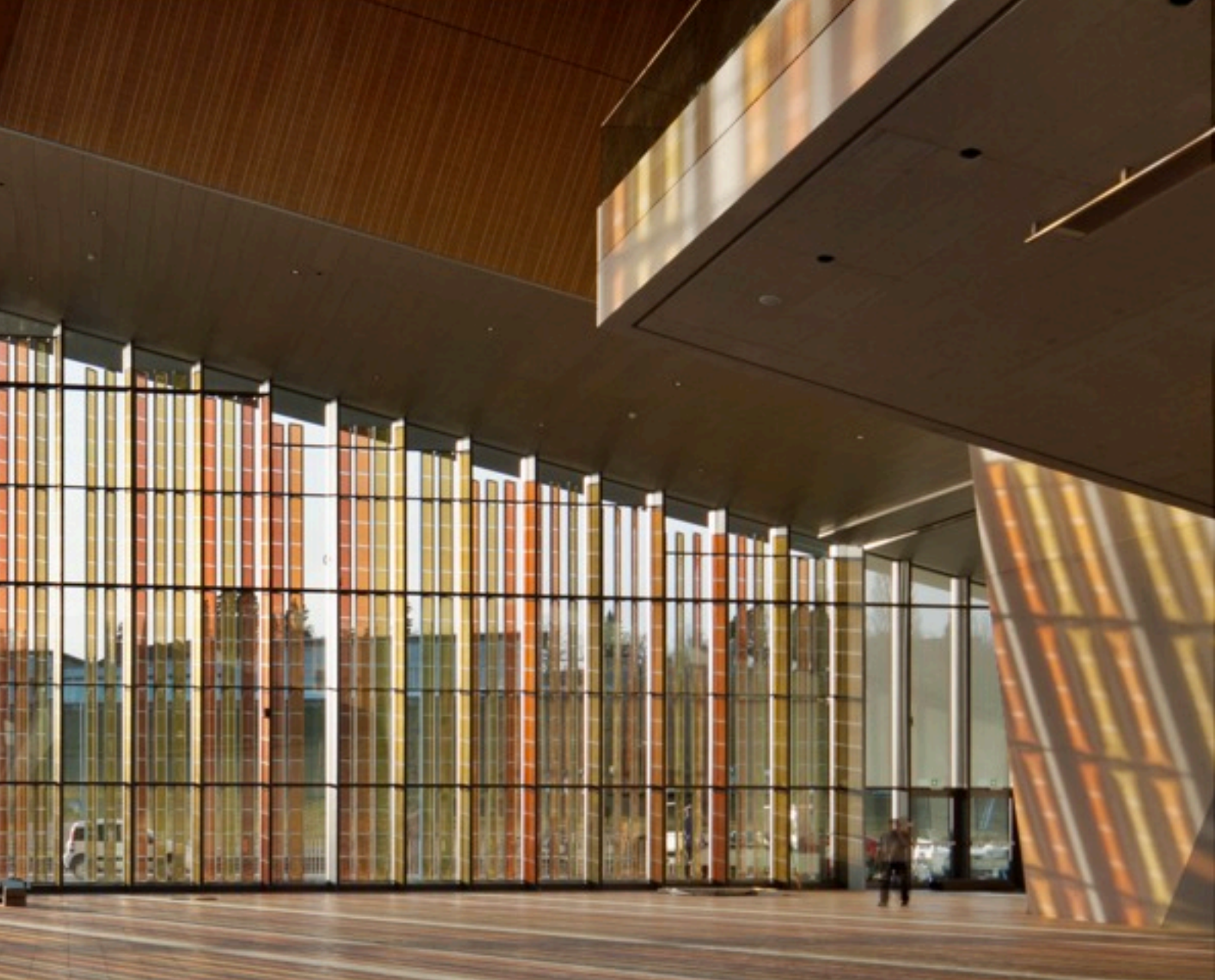


Solaronix' multicolored transparent photovoltaic façade at the SwissTech Convention Center, EPFL, Switzerland.

TRANSPARENT & COLORED PHOTOVOLTAIC PANELS

Until now, building-integrated for solar energy meant rooftop installations. This is no longer true with our next generation photovoltaic panels. Available with a palette of different colors and adjustable transparencies, they are enough to make architects envision original integrations, with a natural emphasis on façades. Low light sensitivity and a smaller angular dependency allow our solar cells to work in vertical installations. The panels not only fulfill their technological duty by converting sunlight to electricity, but also become an integral part of the aesthetics of the building.

Façade installations accentuate the dual functionality of our solar panels. First, a passive function: they reduce the need for indoor cooling by decreasing the amount of light entering the building. Second, an active function: a portion



of the incident sunlight is converted to electricity, complying with the renewable energy concerns of modern construction.

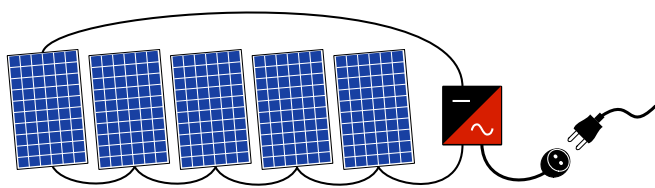
A WORLD'S FIRST FOR THE SWISSTECH CONVENTION CENTER

EPFL and the architects at Richter Dahl Rocha contracted Solaronix with an ambitious goal: to combine a technology showcase with an ornamental façade. A year later the challenge has been met. The all-new SwissTech Convention Center hosts the world's first multicolored Dye Solar Cell façade.

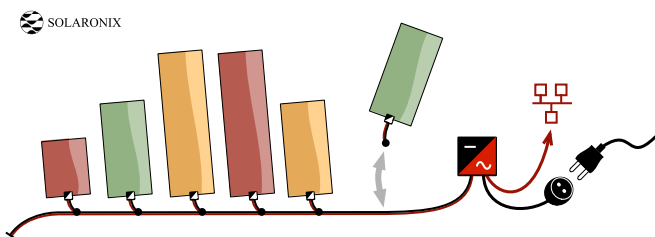
With the financial support of local electricity provider Romande Energie, this novel photovoltaic installation has been realized on the vast west side of the building. The 300 m² installation encompasses a length of 36 meters and a maximum height of 15 meters. No less than 355

panels were installed for 200 m² of active photovoltaic area. In order to fit with the inclination of the roof, panels from 1 m to 2.5 m were produced by grouping together two to five 50 cm modules. The panels are arranged in 65 colored columns that perfectly complement the sublime architecture of the edifice, fulfilling both the aesthetic ambition and energy awareness of the designers.

The transparency of red, green, and orange panels were tuned to meet the overall light transmission target of the architects. The solar façade completes both functions: passively preventing incoming sunlight from overheating the majestic entrance hall while actively producing renewable electricity from sunlight. Mixed and matched, the arrangement of colors ingeniously designed by artist Catherine Bolle gives a unique dynamic to the façade while providing a smooth color tone to the light transmitted into the hall.



Conventional photovoltaic chain installation.



Solonix' smart photovoltaic installation.

SMART ENERGY COLLECTION SYSTEM

Solonix has developed an energy collection system specifically adapted to these extraordinary photovoltaic panels. While typical solar installations electrically chain identical panels together in one system, our photovoltaic grid can accommodate the demanding possibility of mixing panel sizes, tints, and exposure angles in the same installation.

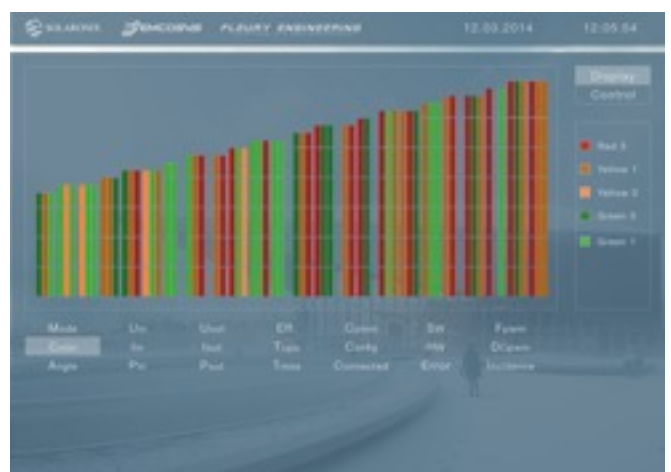
The electricity produced by the panels is harvested with a safe, low-voltage electrical backbone running through the installation. This system allows for maintenance or upgrades of any part of the installation without interruption.

Each panel features a dedicated micro-converter that continually adapts to the changing light conditions, maximizing the power output of the whole installation.



Unlike conventional photovoltaic installations, the smart electronics allow our photovoltaic installations to continue working in the event of partial shading or even with the unlikely failure of a panel. What's more, the micro-converters allow for remote interrogation of each individual panel in real time. This feature is critical for non-rooftop installations.

Ultimately the direct current solar electricity is converted into alternating current for appliance use, or grid feed-in. Optionally, batteries can store the solar energy during production peaks, for use during peak demand.



Remote monitoring of Solaronix' installations.



PERFORMANCE OUTLOOK

Thanks to the unique Dye Solar Cell technology, our solar panels have the unmistakable advantage of maintaining equal or better efficiency when light intensity decreases. As a result, they work perfectly well with the diffuse hazy and cloudy days often seen at our latitude. Simply put, they work for a broader time between dawn and dusk.

Matching real conditions is a feature that is attractive in solar panels and it compensates for the fact that Dye Solar Cells do not compete with conventional photovoltaic technologies under full sun irradiation, but only at lower light intensities.

With this in mind, their performance cannot be directly compared to existing technologies, rather considered in

terms of annual production average. For example, the annual production of the SwissTech Convention Center solar façade is estimated at 2,000 kWh, a respectable figure given the high transparency and orientation of the façade.

Photovoltaic simulation software is currently not suitable to predict the output power of Soloronix' novel solar installations. Nonetheless, the remote-monitoring embedded in our demonstration installations will allow us to collect field data which can be added to simulation software in the future.

About Solaronix

Solaronix has been developing Dye Solar Cell technology for 15 years and has successfully cultivated a customer base of hundreds of clients around the world.

Solaronix is now introducing a whole new generation of photovoltaic panels with unprecedented optical characteristics. Unlike traditional solar panels, Solaronix' solutions come in different shapes, colors, and transparencies. Our products offer a range of new possibilities for building integration, allowing new or existing construction to exhibit renewable energy friendliness without sacrificing aesthetics.

With this offer, Solaronix is addressing enlightened estate owners, inquisitive architects, and technology pioneers who want to host a unique photovoltaic installation, as well as serious investors willing to help bring our technology to the market.

Visit our website www.solaronix.com to learn more about our technology, products, and solutions.

Solaronix also has 2 more complementary divisions:



MATERIALS

Supplier of specialty chemicals and materials, Licensee of EPFL for Dye Solar Cell technology since 1994, we deliver all the components used for Hybrid and Dye Solar Cell fabrication to researchers and industries worldwide.



EQUIPMENT

Based on the exclusive light engine, our solar simulation equipment delivers a perfect and continuous artificial sunlight 24/7, allowing for accurate stability and performance assessments of solar cells at laboratory and industrial scales.

JOIN THE FUTURE

From its inception Solaronix has focussed on mastering the entire value chain of panel manufacturing. We produce the materials for the panels in-house and have validated the key assembly steps for panel manufacturing. What's more, we benefit from solar testing equipment developed and produced by the engineering division of Solaronix for the most demanding customers worldwide.

Our pilot production line was built specifically for the production of full-scale demonstration installations, and we have begun delivering pioneer solar projects like the SwissTech Convention Center. Moreover, we have developed a smart energy collection system capable of mixing different sorts of panels (sizes, colors, orientations) in the same solar installation. A must-have for building integrated photovoltaics.

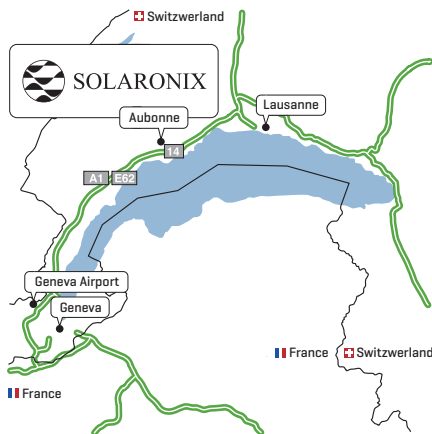
Solaronix has big plans for the future. Our engineers have already obtained higher efficiencies with prototypes and are optimizing production processes to facilitate large scale panel manufacturing. We will continue to implement those improvements at the production level, making our panel production faster, larger, more efficient, and more cost effective.

Solaronix is poised to take on new demonstrations projects, could they be exclusive solar installations, or innovative product applications for indoor and outdoor use. Be a pioneering customer or investor and help support Solaronix' efforts making solar energy the future. Inquires are welcome.

Sign up and hear from us at: solaronix.com/hearfromus/



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