

Press release

HIPERION project awarded €10.6 million in EU funding

Scaling up the production of highly efficient solar modules

Neuchâtel, 4 September 2019 - The European Union has awarded €10.6 million in funding to HIPERION. This grant will aid in establishing a pilot assembly line to bring breakthrough photovoltaic technology, designed by Swiss startup Insolight, closer to market. HIPERION was set up by a 16-member consortium of research organizations and leading industry partners and is being coordinated by CSEM. It will ultimately strengthen the competitiveness of the EU's solar power industry in the high performance segment.

The technology developed by Swiss startup Insolight, tested under concentrator standard test conditions (CSTC) in the pre-production phase, achieves 29% efficiency. This is well above the efficiency levels of standard photovoltaic (PV) panels, which typically reach 18–20%.

The company's system uses a planar optical micro-tracking process that concentrates sunlight on multi-junction solar cells mounted on top of a conventional silicon back plane. Insolight's solar panels are highly efficient under direct sunlight and can harvest energy under cloudy conditions as well, which is not the case for standard concentration systems.

Insolight has proven the effectiveness of its technology through extensive outdoor trials and at pilot installations. Its panels can be installed on standard rooftop or ground-mounted racks, or as an overlay on other solar panels.

Next step: large-scale production

The primary aim of HIPERION is to scale up the production of Insolight's technology by showing solar panel manufacturers how they can adapt their existing production lines. "In addition to developing a pilot assembly line, we will also further demonstrate the performance and reliability of our innovation through qualification tests and several commercial pilot sites across Europe," says Laurent Coulot, the startup's CEO.

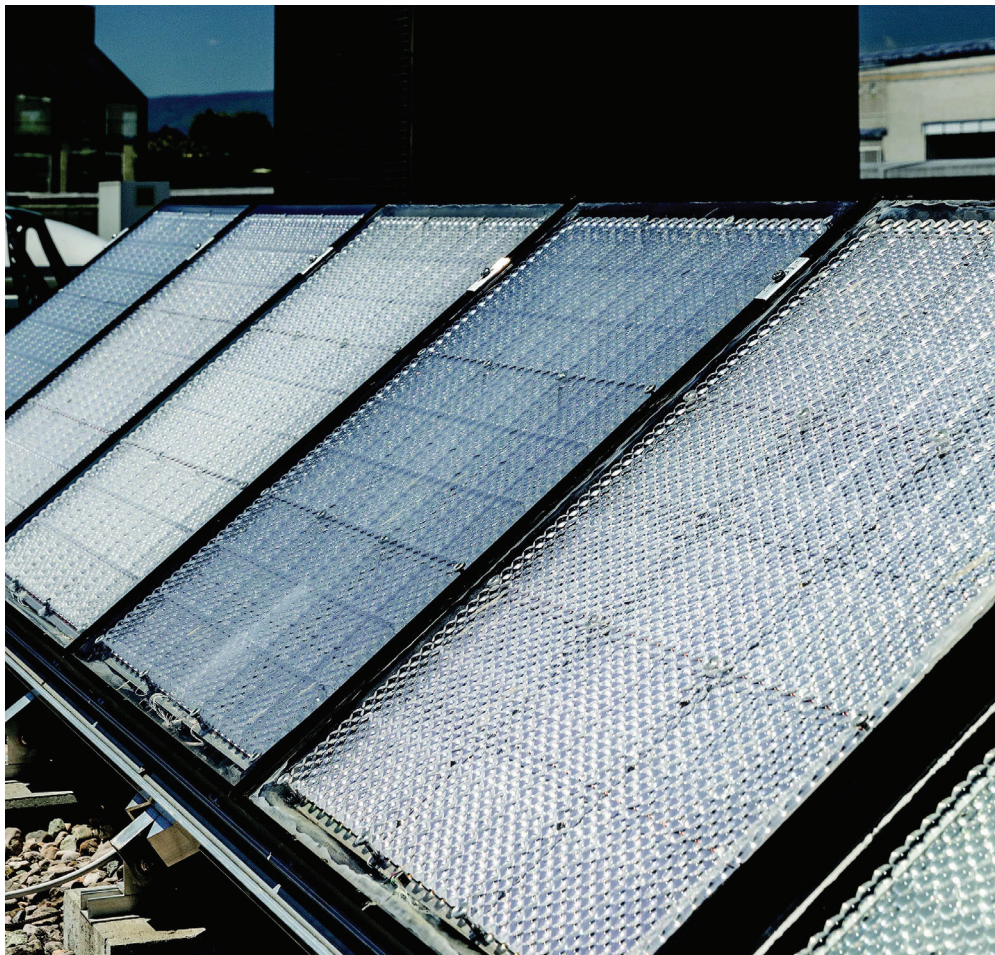
The European Commission has awarded €10.6 million to the project, which was set up by a consortium of European partners and is scheduled to run for 48 months. The project will be coordinated by the Swiss research and technology organization CSEM, one of the consortium members.

Christophe Ballif, vice president of CSEM and head of photovoltaics research, is looking forward to working with the other members – all specialists in their fields. "Our consortium has the expertise needed to bring this promising technology one step closer to mass production by further testing its economic potential and developing an assembly process that can be integrated into existing PV module production lines. Consortium members include several solar project developers that will assess the technology from the perspective of the rooftop and utility market segments."

A win for the EU's solar industry and for consumers

Insolight's innovative design sharply reduces solar power generation costs by significantly boosting efficiency, as it collects 50% more energy per square meter than traditional products. Combining this technology with the back-end manufacturing solutions that will be developed under the HIPERION project will give European PV manufacturers an edge over their mainstream competitors, putting them in a position to increase their share of the growing PV market.

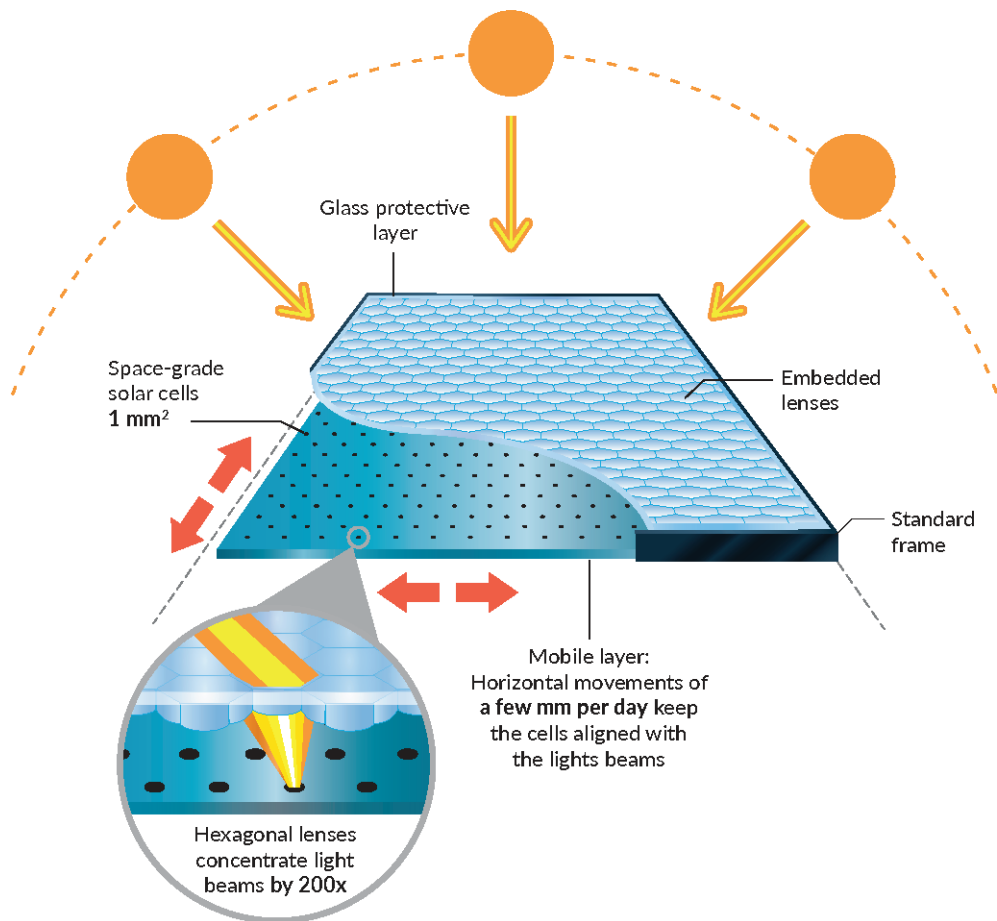
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 857775.



Using an optical micro-tracking process that concentrates sunlight, Insolight's technology achieves 29% efficiency in the pre-production phase. @Insolight

INSOLIGHT'S PHOTOVOLTAIC SYSTEM

Thanks to its novel optical design, Insolight brings space grade solar cell's power to the consumer market, reaching an efficiency of over 29%.



For more information

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About HIPERION

The HIPERION (Hybrid Photovoltaics for Efficiency Record using Integrated Optical technology) project has been awarded a €10.6 million grant from the European Union in the framework of the European Union's Horizon 2020 programme, under the "Increase the competitiveness of the EU PV manufacturing industry" funding opportunity.

The project will be run by a 16-member consortium: **CSEM** (Switzerland), the consortium coordinator; startup **Insolight SA** (Switzerland); European PV research centers **Universidad Politécnica de Madrid** (Spain), **Fraunhofer Institute for Solar Energy Systems** (Germany) and **Lodz University of Technology** (Poland); industry partners **Mondragon Assembly** (Spain), **X-Celeprint** (Ireland), **Argotech a.s.** (Czech Republic), **IQE plc** (UK), **Sonceboz** (Switzerland), **3S Solar Plus** (Switzerland) and **ENGIE Laborelec** (Belgium); solar installers **Muon Electric** (Portugal) and **Milieu Studio** (France); and coordination and **Compaz** – Communication through art and science (Switzerland) and **L-UP SAS** (France).

The project will begin in September 2019 and last 48 months.

Project coordinator : Jacques Levrat, R&D senior engineer, jacques.levrat@csem.ch



About CSEM

CSEM—technologies that make the difference

CSEM, founded in 1984, is a Swiss research and development center (public-private partnership) specializing in microtechnology, nanotechnology, microelectronics, system engineering, photovoltaics and communication technologies. Around 450 highly qualified specialists from various scientific and technical disciplines work for CSEM in Neuchâtel, Zurich, Muttenz, Alpach, and Landquart.

Further information is available at www.csem.ch

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About Insolight

Insolight—solar modules with record efficiency

Insolight is a Swiss tech company based at the EPFL Innovation Park in Lausanne, developing next-generation solar PV panels for the global market. The technology is based on a patented optical technology, which was validated at 29% efficiency in a standard flat module. The company has established strong partnerships with major industrial players as well as world-class research centers. It is supported by private investors and several EU programs. Insolight aims at further improving the return-on-investment of PV installations, ultimately decreasing solar electricity costs.

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