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EcoSolifer

New momentum for the EU PV research and industry - Towards high efficiency cost effective PV cells
Double-side contacted solar cells with Innovative carrier-Selective Contacts (DISC)
Successful project launch

The European Commission represented by the Innovation and Networks Executive Agency (INEA) and the entire project consortium officially launched the DISC project on October 1st 2016.

This three-year project has received financial support from the European Union Horizon2020 Research and Innovation Programme under the grant agreement n° 727529.

DISC is coordinated by the Institute for Solar Energy Research (ISFH), supported by Ayming.

The DISC project aims to develop key technologies for the next generation of high-performance photovoltaic (PV) solar cells and modules, allowing ultra-low solar electricity costs with minimum environmental impact.

Technologically, the approach of the DISC project combines today's simple, non-patterned device architecture for double-side contacted Si solar cells with innovative carrier selective contacts.

In this respect, a strong consortium of experienced industrial actors (MeyerBurger, Meco, Von Ardenne, Total, EcoSolifer) will collaborate with a set of renowned institutes (ISFH, Fraunhofer ISE, CEA-INES, CSEM, EPFL, University of Ljubljana) with demonstrated record devices and worldwide exceptional experience in the R&D field of carrier selective contacts. DISC will target efficiencies >25.5% on large area cell and >22% at module level while demonstrating pilot manufacturing readiness at competitive costs.

DISC will provide the key elements to achieve a very low Levelized Costs of Electricity in Europe between 3.7-6.4€ct/kWh (depending on the irradiation), with mid-term potential for further reductions. This can make solar one of the cheapest electricity sources available. DISC will have a modern module design to ensure outstanding durability, reduce the use of scarce materials (Ag, In) and enhance the energy yield. The highly efficient PV modules

developed in DISC are designed for rooftop installations, alleviating land use concerns associated with other PV technologies. In addition, a life cycle thinking approach led by Environmental Resources Management Limited (ERM) will be applied to help prevent the shifting of environmental and social impact burdens across the value chain and improve overall sustainability performance.

DISC is anticipated to have positive impacts with respect to climate change and energy access, and thus contribute towards the ambitious EU 20/20/20¹ climate and energy targets. DISC has the ability to help place Europe back at



the forefront of solar cell science, technology and manufacturing.

DISC Consortium – Kick-off meeting – 4th October 2016 – Brussels, Belgium



Contacts

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¹ The 2020 package is a set of legislation to ensure EU meets its climate and energy target for year 2020, i.e. 20% cut in greenhouse

