

Successful launch of the DISC project

Double-side contacted cells with innovative carrier-selective contacts

The European Commission represented by the Innovation and Networks Executive Agency (INEA) and the entire project consortium led by the coordinator, Institut für Solarenergieforschung Hameln (ISFH) and supported by a project management specialist, Ayming, have officially launched the DISC project as of October 1st 2016.

This 3-year project has received a financial support from the European Union Horizon2020 Research and Innovation Programme under the grant agreement n° 727529.

The DISC project addresses the development of 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 consists of a combination of 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.

Together with a reduction of non-abundant material consumption (Ag, In), with an enhancement of the energy yield, with modern module design ensuring outstanding durability, DISC will provide the key elements for achieving in Europe very low Levelized Costs of Electricity between 0.04 – 0.07\$/kWh (depending on the irradiation), with mid-term potential for further reduction, making solar one of

the cheapest electricity source. The high efficient PV modules developed in DISC are predestined for rooftop installations, i.e., neutral with respect to land use aspects. A dedicated life cycle approach lead by Environmental Resources Management (ERM) prevents the shifting of environmental or social burdens between impact categories.

DISC has a chance to contribute towards mitigating the impacts of climate change, improving energy access and towards bringing Europe back at the forefront of solar cell science, technology and manufacturing.



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



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