FunGlass
Multi-Functional Glass for PV Application

Project duration: from 03.2016 to 08.2018
Final report submitted: 30.04.2019

Publishable Summary

The main objective of this project is to develop chemically functionalized surfaces for glass sheets of photovoltaic (PV) modules, with the main targets of reducing the electricity generation cost by increasing the module power, providing increased long-term reliability and improving energy yield. To achieve these goals, an existing glass technology developed by D.A. Glass will be transferred to PV application. A highly controlled, low cost chemical process at the glass surface enables optimizing glass properties without deposition of additional coatings. By texturing the surface on different length scales from the nanometre to the micrometre range, anti-reflective, light trapping and light diffusion properties can be tailored. Structures at the micrometre scale can reduce bonding of dirt and dust particles to the surface, improving anti-soiling properties. In this project the individual effects and their combination will be investigated, optimized and applied to PV modules to improve module power, energy yield and lifetime without increasing material cost.

Project consortium

Coordinator and contact details:

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Participating countries and financing:

Country	**Number of organisations involved**	**Project costs in EUR**	**Public funding in EUR**
Germany	2	677’769	503’703
Poland	1	449’705	244’197
Total	*3*	*1’127’474*	*747’900*

Funding agencies involved and contracts

Funding Agency	Contract N° and Title
Projekträger Jülich	0324021B
NCBR	DZP/SOLAR-ERA.NET 2014/123/2016
Projekträger Jülich	0324021A