

BIPVpod

Building Integrated Photovoltaics panels on demand

Project Duration: 01.2016 to 05.2020

Initial report submitted: 03.2018

Summary

The BIPVpod consortium will focus on the further processing of semi-finished PV panels using one each of the two available groups of thin film technologies: superstrate and substrate modules. Substrate will be represented by CIGS, and superstrate by thin-film silicon. The involvement of an additional refinement manufacturer in the value chain will give European industry the opportunity to add value to mass-produced products, even if the semi-finished modules are produced elsewhere. The refinement of BIPV products will enable the customization of the product aesthetics, electrical capabilities, and other functional properties of the panel for each specific building, at a reasonable price. The refinements will include size and shape adaption by laser cutting of the PV panels, color tuning by post-deposited series connection, and integration of the panels into construction materials such as e.g. double glass windows or insulation plates. The final products will be fully aligned with the demand of the building industry.

The BIPVpod consortium is a Dutch-German expert team representing all different segments along the supply chain – from module manufactures and experts of the electrical interconnection methods, to architects, insulating glass experts and finally the distributors and installers.

The outcome of this project should be a set of processing methods that will allow production of customer tailored ‘panels on demand’ with specified PV panel dimensions and colour for small production batches and low added costs. The ‘panel on demand’ technology will be developed, implemented and demonstrated in building elements. This opens up a huge variety of possibilities and niche applications for BIPV. In order to demonstrate the potential, a small number of demo-projects will be realized with these customized panels.

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	3	1'653'863	1'327'141
The Netherlands	4	941'450	738'160
<i>Total</i>	<i>7</i>	<i>2'595'313</i>	<i>2'065'301</i>

Funding agencies involved and contracts

Funding Agency	Contract N° and Title
Projektträger Jülich	Förderkennzeichen: 0324130A BIPVpod – Gebäudeintegrierte Photovoltaik-Module nach Bedarf
Projektträger Jülich	Förderkennzeichen: 0324130B BIPVpod – Innovative Laserprozesse für maßgeschneiderte BIPV Solarmodule
Projektträger Jülich	Förderkennzeichen: 0324130C BIPVpod – Lasertechnologien für gebäudeintegrierte Photovoltaik-Sondermodule
Rijksdienst voor Ondernemend Nederland (RVO)	Besluit tot verlening subsidie – Referentienummer TEID215005 – Kenmerk TSE15ID156JJ0U
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