



Executive summary

COLOURED BIPV

Market, research and development

IEA PVPS Task 15, Report IEA-PVPS T15-07: 2019

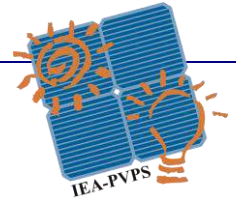
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IMPLEMENTING AGREEMENT ON PHOTOVOLTAIC POWER SYSTEMS

TASK 15 ENABLING FRAMEWORK FOR THE ACCELERATION OF BIPV

This report focuses on the economic, technical and theoretical research and development topics of BIPV products, which are available in different colours and sizes.

The given market overview of state-of-the-art coloured BIPV products clearly reveals that for all parts of a BIPV module (glass, polymers, PV-active layers), there are technical solutions available for colouring. Pilot projects utilizing coloured BIPV products have been built in numerous (mainly European) cities clearly demonstrating the maturity of these solutions.

What are still slowing down the progress of implementation of these aesthetically appealing and technically sophisticated new products into a wider market are the costs. In this respect a lot of effort was made to improve and optimize the relationship between colour and efficiency/power generation of BIPV elements. The results of the past and on-going innovative research and intensified fundamental considerations are also summarized in this report.

Besides the colour perception of the coloured BIPV elements under solar irradiation which is essential for the acceptance of the exterior appearance of a building, also transparency and inside visual comfort of BIPV – windows and façade elements are essential for the users and inhabitants.

In the context of Subtask E under IEA-PVPS Task 15, this report aims to give an insight into the "diversity of BIPV products", with particular emphasis on colour.

The report can be downloaded from the IEA-PVPS website: www.iea-pvps.org.