

First attempt to prioritize R&D&D subjects in BIPV

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Jef Poortmans, Co-Chair BIPV group / EUPVTP



Methodology

Gathering and consolidation of info from experts

- Covering the value chain from building design over building components to integration into the building upto operation&maintenance
- Discussion through conference calls with groups of 3-5 people
- Prioritization was extracted from discussion during the conference calls and summarized in a short document
- The summary was based on the value chain when creating a building:
 - Design of the building
 - Choice of BIPV building components
 - Manufacturing of PV building components
 - Integration of the PV building component in the building skin during construction
 - Operation and maintenance
 - Deconstruction and recycling
- 3 categories: high, medium and low priority/stage in the value chain



Preliminary prioritization

	Design of the building	Choice of BIPV building components	Manufacturing of PV building components	Integration in the building skin	Operation and maintenance	Deconstruction and recycling
High	Education Early inclusion Design tools Benefits quantification Stable and clear regulation	Color tunability Dimensional tunability Cost versus standardization	Performance Freeform module technology Standards for testing and certifying BIPV building components	Education and training of construction workers on PV modules Defining integration structures	High durability for standard PV and building code conditions Clarity safety Clarity O&M instructions Self cleaning BIPV systems	Avoidance of toxic materials in BIPV modules Optimize recycling process for BIPV elements
Medium	Removal of administrative barriers Effect of orientation, slope	Performance for low illumination conditions and high temperature Adapted convertors	Short lead times to deliver BIPV-elements More insurance options of BIPV products	Not yet discussed		Definition of local recycling centers close to end-users



Thank you for your attention