



## Digital BIM-based process for BIPV product data models

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# BIM-based BIPV tools, showcases, and research activities



## Tools

- Revit Insight
- Grasshopper + ladybug
- BIMsolar
- BIPV Enabler
- BIPV.world

## Showcases

- Franklin College-  
Switzerland
- Shuifa Singyes R&D  
Building – China
- RMIT DesignHUB -  
Australia

## Research activities

- Construct PV
- BIPVBOOST
- Vitality District
- INFINITE
- BIPV Enabler
- BIM-BIPV tool  
interoperability
- BIM4BIPV

# Overview of the report



- Reviewed the concepts of BIM (Building Information Modelling) and openBIM®, the current BIM standards scenario, the benefits of BIM for BIPV, and how can BIM potentially affect BIPV process stage
- Provided the national state of play about digital BIM-BIPV products in six regions, and their digital structure/schema/framework/standard for describing BIPV product and categorize BIPV data
- Included a list of current BIM-BIPV product database, online portals and libraries
- Reviewed five specific BIM-based BIPV tools and workflows for design and simulation, three BIM-BIPV showcases and case studies, as well as seven research activities on BIM and BIPV.

Conclusion: This report suggested preliminary inputs for BIPV product data management in a BIM-based approach, further BIM/BIPV research regarding digital product data models, pre-normative recommendations and standards, and geometrical and informative parameters to support LOIN definition.

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