BIPV.WORLD

EUFRAMEWORK PROGRAMMEFOR R&I - INNOVATION FUND SYNERGES WORKSHOP

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Overview & Background of BIPV.world (by TULiPPS)

Which EU R&I funding programme did the project benefit from?

- H2020 EnergyMatching (768766) Adaptive and adaptable envelope RES solutions for energy harvesting to optimize EU building and district load
- H2020 BIPVBOOST (817991) cost reduction for Building Integrated PhotoVoltaics.

What technological solution(s) were covered and developed?

- EnergyMatching: Click&Go mounting system for Building Integrated PhotoVoltaics.
- · EnergyMatching: BIPV.world platform for digital design and know-how sharing
- BIPVBOOST: cost reduction for Click&Go system, assembly processes and intallation

What is the main output/achievement of the R&I project?

- New Intellectual property: NL1044218 & PCT/EP2022/000106
- BIPV facade systems: 50% cost reduction for Click&Go mounting systems
- BIPV.world platform and Revit Plugin tools
- Demonstration BIPV facade 540 m2



Deployment Prospects

Following the completion of the R&I project, what exactly is required to promote/prepare the technological solution for the next stage of the innovation pipeline (deployment)?

• Funding for the further development and rollout acceleration of the BIPV.world online platform and 3D plug-in with auto configurator and product families to the building industry characterized by fragmentation and high diversity. Rollout of BIPV.world platform and its tools to EU Universities and Technical High schools. Develop webinars & online training programs in cooperation with Fraunhofer ISE, SUPSI, Eurac and Tecnalia to train architects, BIM designers, facade builders and building companies.

BIPV.world is a platform for inspiration, design, project management and supply chain collaboration in the field of building-integrated solar panels (BIPV). It is developed for architects, facade builders and construction companies for new-build and renovation projects. The BIPV.world Revit plugin (auto-configurator and product families) will enable architects to quickly deliver custom BIPV facade designs (in Autodesk Revit) according to the most recent BIM standards

Why BIPV.world?



Deployment Prospects

Why is the Innovation Fund specifically regarded as a suitable tool and opportunity to support the path to reaching deployment phase?

- BIPV.world platform with Revit plugin delivers a step-change transfer of BIPV know-how to European building professionals. BIPV.world "right-first-time" design methods (BIM) and flexible Click&Go solutions result in fast and cost-efficient implementation.
- BIPV.world digital platform solves staffing issues and lack of knowledge issues in the building industry Europe. BIPV facades are required for nZEB high-rise buildings and energy-intensive industry buildings.
- To achieve <u>radical innovation and impact</u>, we need funding to further develop the functionality of the BIPV.world platform and Revit plug-in in order to accelerate successful implementation for Zero Energy or energy-positive buildings.
- Positive business case for Click&Go BIPV: new-build with traditional facade already planned: € 200,- extra investment for 150 kWh/m² year will deliver € 35 € 45/m² revenues per year.





Deployment Prospects

What do you envisage will be the main challenges in promoting the R&I output to deployment (via the Innovation Fund)?

The BIPV.world platform is TRL6 - 7 with fully functional Revit Plugin (3rd Beta phase including functional API's). The building sector is characterized by fragmentation and high diversity. There will practical implementation challenges to introduce the BIPV.world platform tools to architects and developing (designing) construction companies.

How will these challenges be addressed?

We are already in cooperation with leading European knowledge institutes. We aim to expand our cooperation with Fraunhofer ISE, Tecnalia, Eurac and SUPSI for webinars & online training targeting a broad audience of building professionals. Part of the budget is needed for these knowledge institutes.





Inspiration

