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iBRoad

Individual Building Renovation Roadmaps

My path towards an energy efficient home



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www.ibroad-project.eu

Renovating a building can be complex and time consuming. For building owners, the lack of knowledge about what to do and in which order to implement renovation measures is one of the main obstacles to improving the energy performance of their building.

The iBRoad project works on lifting these barriers by developing an Individual Building Renovation Roadmap for single-family houses. This tool looks at the building as a whole and provides a customised renovation plan (iBRoad-Plan) over a long-term horizon (15-20 years). The renovation roadmap is at its core a home-improvement plan which considers the occupant's needs and specific situations (e.g., age, financial situation, composition and expected evolution of the household, etc.) and avoids the risk of 'lock-in' future renovation solutions due to a lack of foresight.

The iBRoad-Plan is combined with a repository of information, i.e. a building logbook or passport (iBRoad-Log) on aspects like the energy consumption and production, executed maintenance and building plans.

With a target focus on residential buildings, the iBRoad project analyses and builds upon relevant examples from Germany, France and Belgium (Flanders), to identify the elements, develop an integrated concept, and produce modular tools, suitable for differing national conditions.

The iBRoad innovative concept and tools will be tested in Bulgaria, Poland, Portugal and Germany, supported by auditor training, and providing feedback as input to the feasibility and replicability analysis of the model to other building typologies and EU Member States. Stakeholder engagement is sought from the start at the national level in Austria, Belgium, Bulgaria, Germany, Greece, Poland, Portugal, Romania and Sweden, as well as at EU level, for maximum impact.



Objective

The overall objective of iBRoad is to design, develop and demonstrate individual building renovation roadmaps (iBRoad-Plan) and building logbooks (iBRoad-Log) as a key means to foster and facilitate deep renovations in the residential sector. The individual building renovation roadmaps and building logbooks shall also empower energy auditors and end-users to familiarise with and experience deep renovation in individual buildings, and provide public authorities with real-life studies and analysis supporting the benefits of deep renovation, both as an individual building strategy and as a long-term national strategy.

INFORMATION AT INDIVIDUAL BUILDING LEVEL

EXISTING ENERGY PERFORMANCE CERTIFICATE (EPC)

ON-SITE GATHERED INFORMATION

- Energy audit
- Building professionals, e.g. construction plan, info installations, BIM, etc.
- Building owner or tenant
- Public authorities

AUTOMATED DATA

- Smart meters
- Monitoring systems, e.g. RES, heating, CO₂ meters, etc.

BUILDING RENOVATION PASSPORT

RENOVATION ROADMAP

- Systematic renovation in a sensible order and packages
- Comprehensive audit
- Long-term perspective
- Considers individual context

LOGBOOK

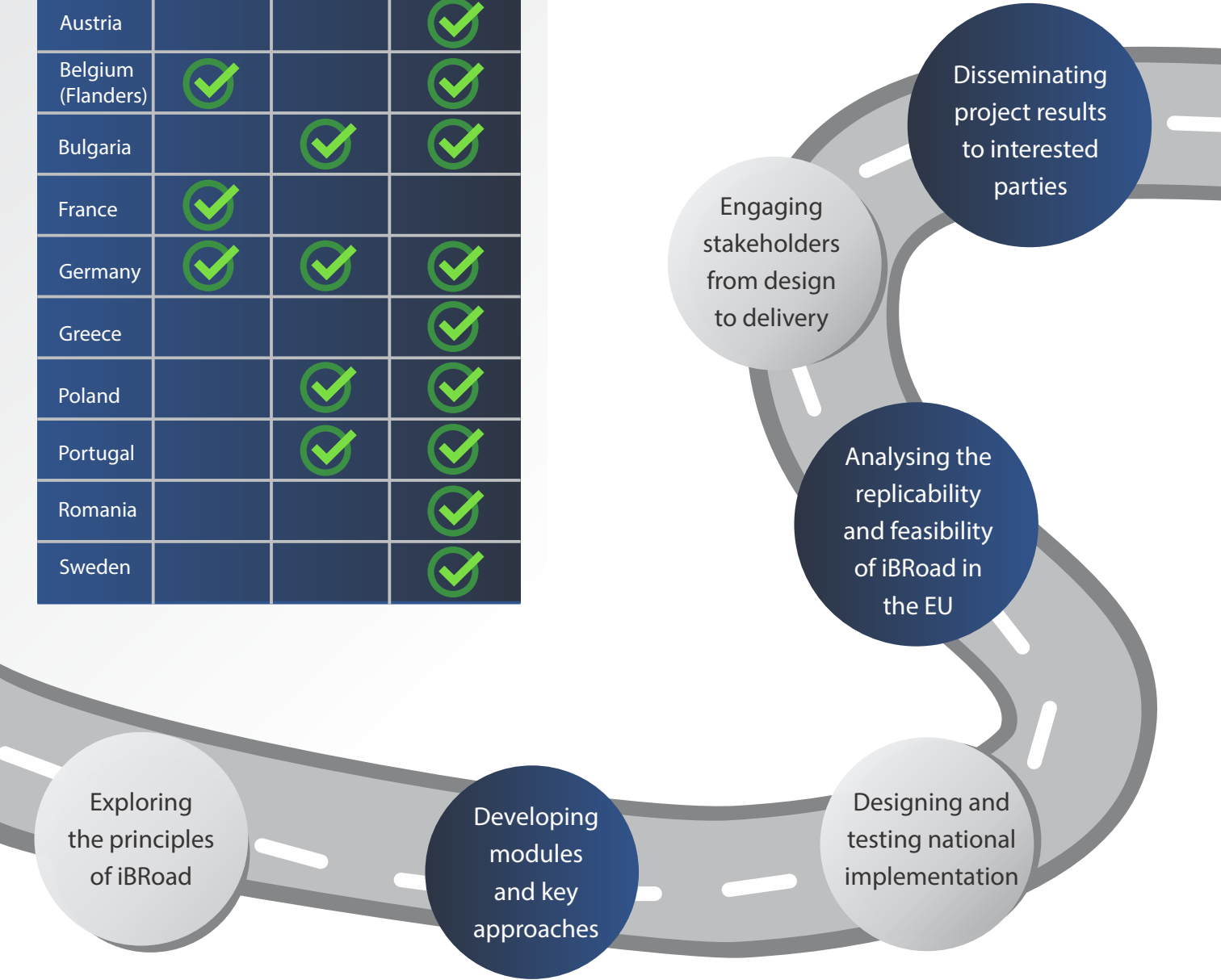
- Inventory of non-dynamic information
- Manage and monitor real time energy consumption
- Linking building owners (users) and third parties, e.g. public authorities, market place, etc.

10 countries involved

| | Starting concepts | Test run concept & tools | Stakeholder involvement & promotion |
|--------------------|-------------------|--------------------------|-------------------------------------|
| Austria | | | ✓ |
| Belgium (Flanders) | ✓ | | ✓ |
| Bulgaria | | ✓ | ✓ |
| France | ✓ | | |
| Germany | ✓ | ✓ | ✓ |
| Greece | | | ✓ |
| Poland | | ✓ | ✓ |
| Portugal | | ✓ | ✓ |
| Romania | | | ✓ |
| Sweden | | | ✓ |

Route to iBRoad

The project implementation includes the following steps



What is the iBRoad Project?

iBRoad explores, develops and demonstrates the concept of individual building renovation roadmaps as a tool outlining a step-by-step renovation plan for a specific building (iBRoad-Plan), combined with a repository of building-related information (logbook, iBRoad-Log).

ENERGY PERFORMANCE CERTIFICATE

Informs potential buyers/tenants
on the buildings' energy performance

BUILDING RENOVATION ROADMAP

Guides (new) owners with a personalised
step-by-step renovation roadmap

Expected impacts

- Enabling the adoption of future policies in support of energy performance and decarbonisation of the building stock.
- Increasing the number of individual deep renovations.
- Supporting consumers / end-users by providing tailor-made, specific, and individual advice, suggesting an optimal strategy for an individual building, taking into account their financial and occupancy situation, their specific needs & preferences, as well as suitable opportunities.
- Contributing to a transparent evaluation of savings and costs of renovation and thus supporting a reliable energy performance rating.
- Monitoring the performance of buildings over time, creating a positive impact on the compliance rate of the implemented measures.

iBRoad and you

- Are you interested in learning more about building renovation roadmaps?
- Are you a professional energy auditor working in one of the pilot countries (Bulgaria, Germany, Poland, Portugal)?
- Are you an expert on construction or energy in buildings?
- Do you represent a professional association, national authority or other group involved in buildings renovation or energy efficiency?

Get in contact with us through our website!

www.ibroad-project.eu

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iBRoad project partners

