RIBuild

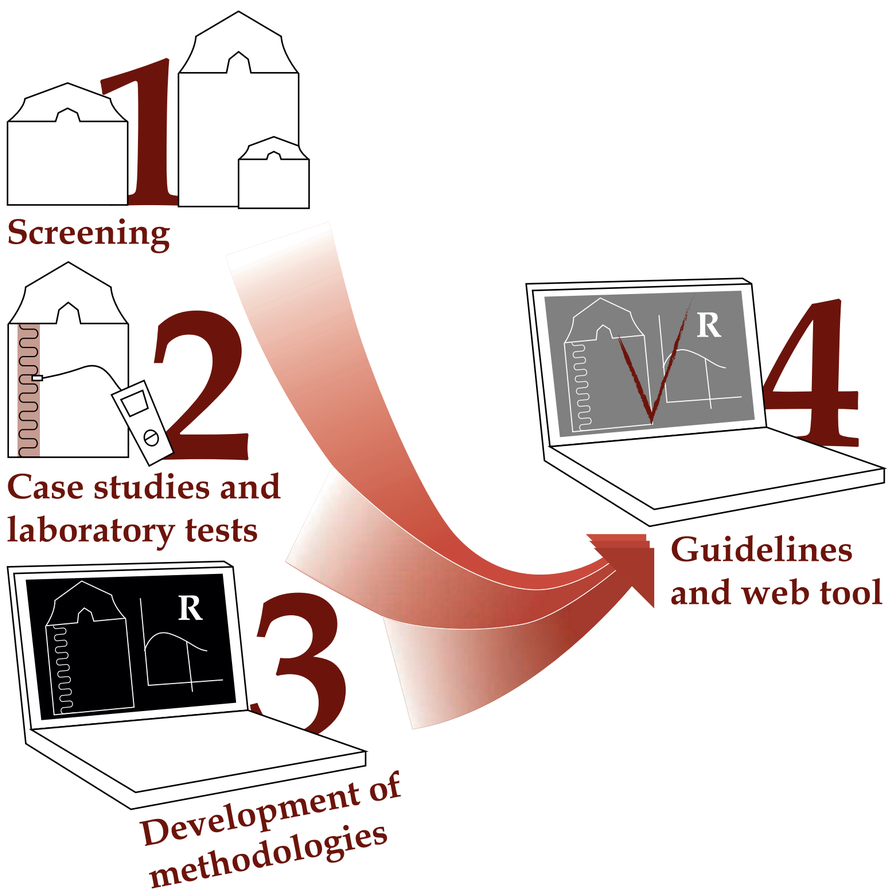
Robust internal thermal insulation of historic buildings

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 637268.

Making historic buildings more energy efficient

RIBuild is an EU research project that develops guidelines on how to install internal thermal insulation with an acceptable safety level against deterioration and collapse of heavy external wall structures. The aim is to make historic buildings more energy efficient while maintaining their architectural and cultural heritage.

Research



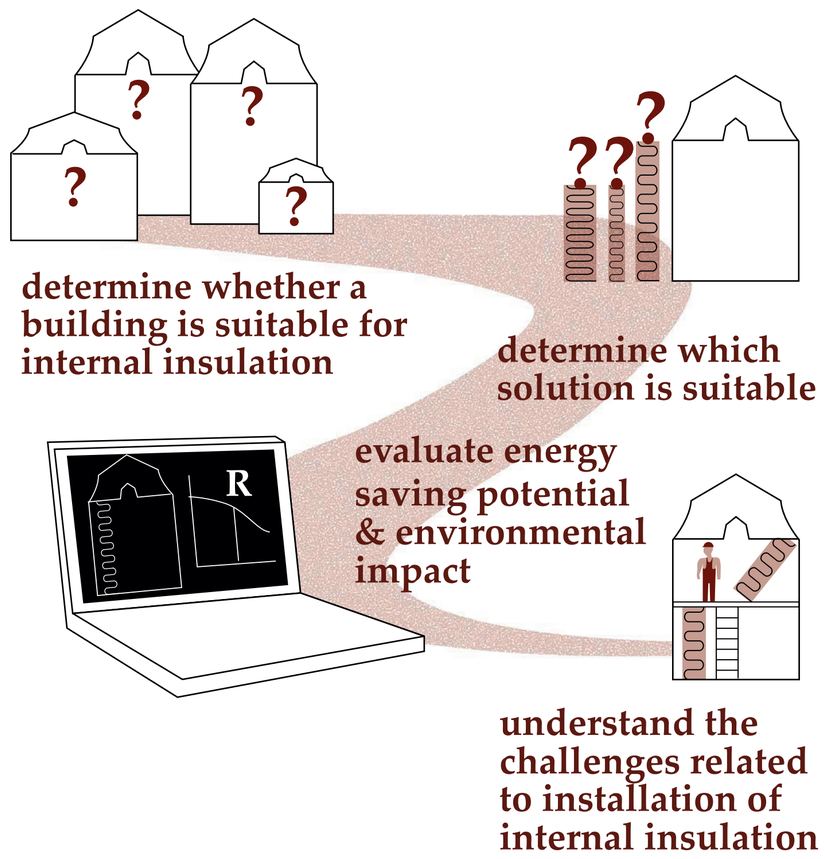
From 2015-2019 RIBuild investigates how and under what conditions internal thermal insulation can be employed.

Research activities include on-site case studies as well as simulations of hygrothermal performance and laboratory measurements of materials.

Guidelines and web tool

RIBuild will result in comprehensive guidelines and a web tool for professional practitioners in the construction industry.The guidelines and web tool will be applicable to historic buildings across Europe.

Guidelines and web tool will help you:



Buildings erected prior to 1945 make up **30 %** of the European building stock.

There is an energy saving potential of **15-20 %** in historic buildings with use of internal insulation

Partners

Hes·so Haute Ecole Spécialisée de Suisse occidentale – Fachhochschule Westschweiz – University of Applied Sciences and Arts Western Switzerland

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TECHNISCHE UNIVERSITÄT DRESDEN

KU LEUVEN

UNIVERSITÀ POLITECNICA DELLE MARCHE

ERIK MOLLER ARKITEKTER

RTU RIGA TECHNICAL UNIVERSITY

DTU

DANISH BUILDING RESEARCH INSTITUTE AALBORG UNIVERSITY COPENHAGEN

INTRO FLEX

www.ribuild.eu Contact: Project manager, senior researcher Ernst Jan de Place Hansen, Danish Building Research Institute, ejp@sbi.aau.dk.

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A probability-based Life Cycle Assessment Software for retrofitting Historic Buildings

WHY?

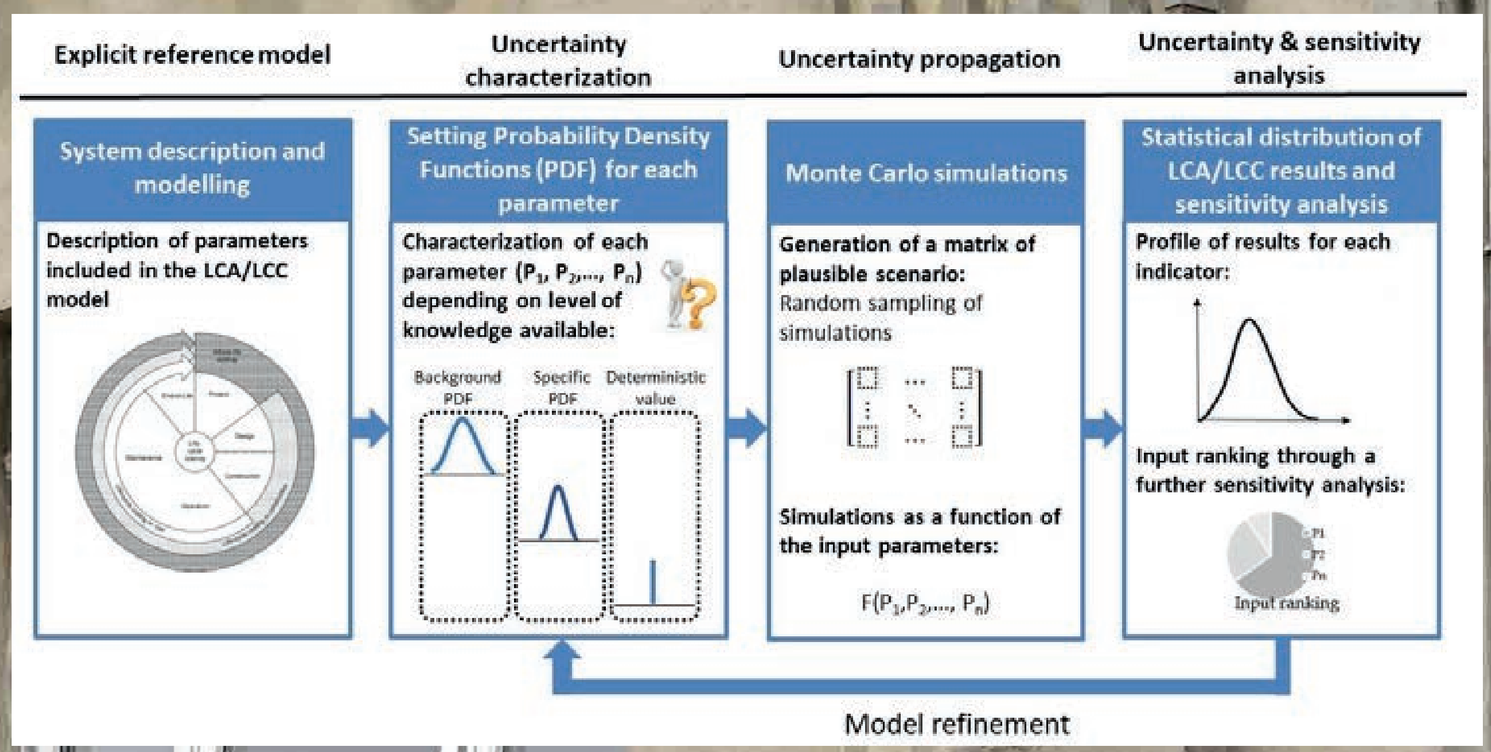
The potential of energy savings in historic buildings is great. However, barriers such as uncertain investments, long payback periods and perceived credit risk hamper energy renovation of buildings. Life Cycle Assessment (LCA) and Costing (LCC) in this field needs to properly consider calculation uncertainties, risks and constraints.

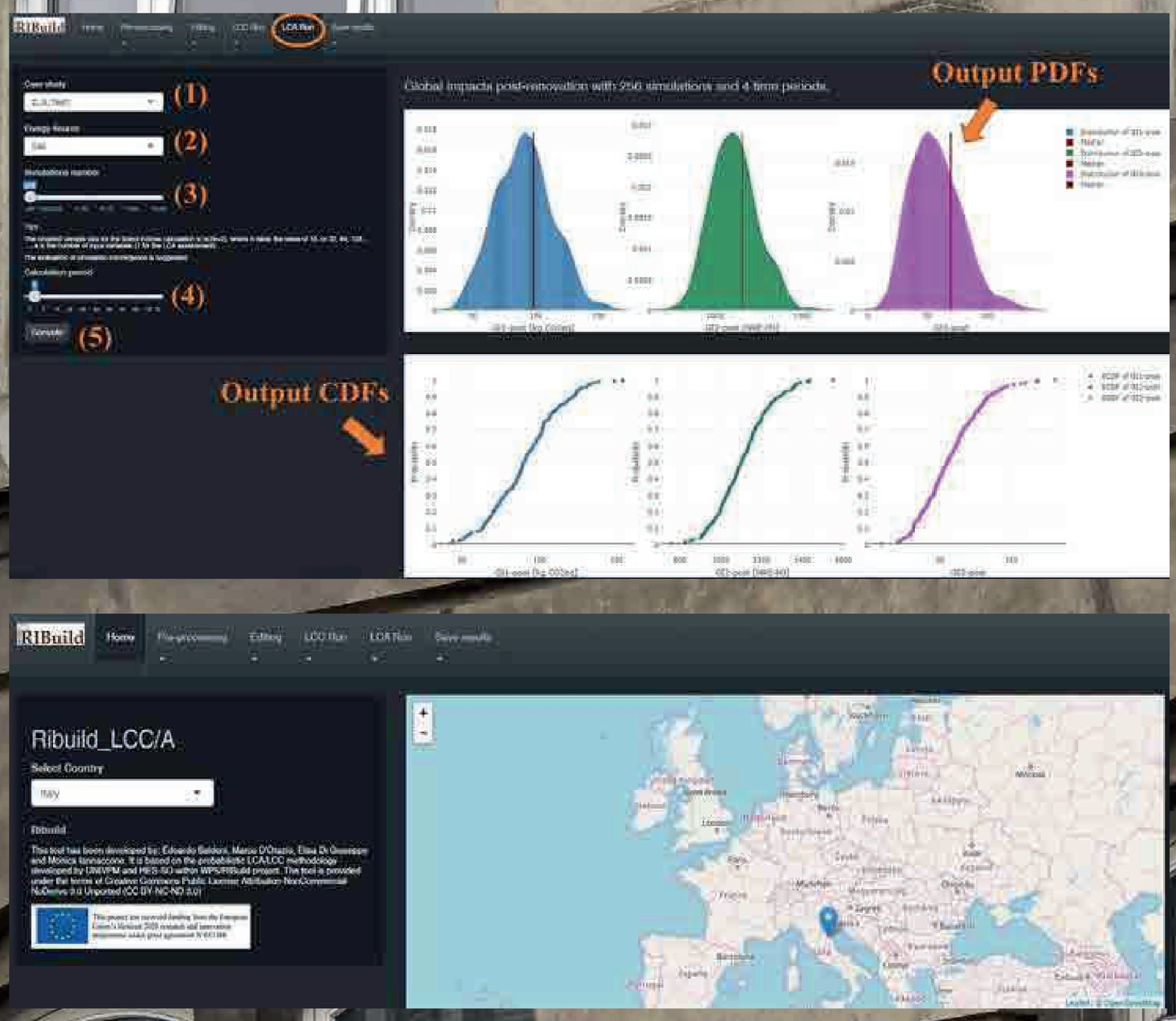
WHAT?

The RIBuild WP5 tool allows a "probability-based" LCA and LCC of buildings energy renovation, taking into account inputs uncertainties and alternative assessment scenarios. In this way, the user can investigate the affordability and environmental benefits of different design solutions, analyzing the inherent uncertainty and risk.

FOR WHOM?

Building designers and engineers, researchers, real estate stakeholders, policy makers can benefit from the tool.





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