

## ? What is?

This web-based tool generates and evaluates customized renovation options for existing buildings, even with limited initial data. It automatically creates tailored renovation scenarios, assessing them for energy efficiency, thermal comfort, environmental impact, and cost over the building's life cycle, then ranks and presents the results to the user based on their preferences.

## 🎯 Challenge

The design of building renovations is often hindered by typical barriers at design stage, such as lack of information on the building, cost associated with surveying, and limited awareness and uncertainty on the potential benefits of the renovation.

## 💡 Solution

The Early Decision Support Tool supports and simplifies the initial stage of renovation designs, by quickly generating and analysing renovation scenarios with minimal input, providing performance estimates that can enable informed choices from the early stages of the design, when the possibility of changes in improvements is much greater than in later stages of the process.

## ➞ Key Benefits



**Works with limited**  
building information



**Renovation**  
Automatically  
generates tailored  
renovation options



**Combines analysis**  
Energy, comfort, cost,  
and environmental  
without the need of  
proprietary software tools



**Fast results**  
Delivers fast results  
informing early-stage  
design and planning

## ➞ Target Users



- ✓ Architects and design firms
- ✓ Building owners and developers
- ✓ Energy consultants
- ✓ Students and researchers

## ➞ Next Steps

- ✓ The EDST is currently being validated in real and virtual pilot buildings in different European locations. The outcomes from this study will be used to enhance the tool and guide the next steps towards its market development.



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