

#### Condo energy retrofitting stories

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Target group:

#### These co-owners did it, when will you?



# **Renovation Backlog All Around**

Neu-Isenburg, Hesse, GERMANY

Year of construction: **1977**  Number of units: Size:

450m<sup>2</sup>

Current statt

completed

10

22,5

20

# **Project Summary**

An energy consultant calculated an energy consumption rate of 146 kWh per m<sup>2</sup> per year for the co-owners' building. As is the case for many co-owned buildings, a renovation backlog had developed. The concept's initial step proposed to insulate the roof and the outer shell. Both measures were executed simultaneously in order to maximize on cost effectiveness. The energy retrofit was funded by a Credit Institute for Reconstruction (KfW) loan with subsidized interest rates.

### **Facts and Figures**

- Total cost for roof and outer shell reconstruction & retrofit: approx. 35.000 Euros
- Reduction of energy expenditure from approx. 66.000 kWh to 47.000kWh per year
- + KfW Loan 151 with 0,75% subsidized interest rate
- + Quality of living improvement
- Building value increased

#### **Milestones**



# **Retrofitting Focus**

The building's windows were replaced in 1995; since then no other renovations or reconstructions had taken place which resulted in a renovation backlog. Supported by the energy consultant, the co-owners formulated a plan to bring their building up to modern standards. The outer shell was wrapped with a thermal insulation composite system (WDVS). The roof received a full-surface insulation on the rafters. As both measures required scaffolding, it was cost-effective to move forward simultaneously.

#### Financing

 The co-owners financed the project via the building's maintenance fund as well as with a KfW Loan 151 with 0,75% subsidized interest rates.

#### **Main Successes**

- Going forward with both measures simultaneously meant that the costs for the scaffolding could be split, contributing to the project's cost effectiveness.
- The stable temperatures in the building resulting from the energy retrofit improved the inhabitants' quality of life.
- Overall, involved stakeholders considered the project to be very successful: expected goals were reached and inhabitants only had to endure a minimum of discomfort during construction.

### **Advice to Others**

 Building evaluations at regular intervals as well as developing consensus among the coowners are methods which can be helpful to reduce the risk of a renovation backlog and consequently expensive reconstruction.





#### **Any questions?**

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#### Information

**Department of Energy website:** https://frankfurt.de/themen/klima-und-energie/klimaschutz/angebot-energiereferat

**Department of Energy project page:** www.sanierungsWEGweiser.info

Building service provider index (WEG-Bereiter-Liste): https://www.sanierungswegweiser.info/weg-bereiter-liste-

#### You too are facing the challenge of the energy retrofitting of privately-owned condominiums in your city?

The ACE-Retrofitting project aims to develop a governance model facilitated by cities linking owners and building professionals to accelerate condominium energy retrofitting. The French CoachCopro tool will be upgraded and adapted to other countries.



The consortium is composed of Agence Parisienne du Climat (France), Maastricht University (the Netherlands), Energy House Antwerp (Belgium), the City of Liège (Belgium), Aberdeen City Council (UK), Frankfurt Energy Agency (Germany), the City of Maastricht (the Netherlands), Changeworks (UK) and Energy Cities (coordinator). Study visits are organised in the partner cities of the consortium. www.nweurope.eu/ace-retrofitting

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