

These professionals did it, when will you?



Target group:
**Energy
Consultants**



Noticeable Effect, small Change

Wiesbaden, Hesse, GERMANY

Year of
construction:
1995

Number
of units:
12

Current status:
completed

Project Summary

In 2018 the co-owners decided to modernize the building's heating system and commissioned an energy consultant to evaluate different energy retrofitting options. He recommended replacing the boiler in combination with hydraulic balancing of the system. Due to high costs, the co-owners decided against this recommendation and opted for just hydraulically balancing the current system. The employed heating engineer also recommended the installation of thermostatic valves with presetting. The project was supported by a KfW investment grant, approved by the co-owners in April 2019 and concluded in December 2019.

Main Successes

Despite retrofitting the thermostatic valves with presetting was not initially factored into the original proposal, the project could be successfully concluded after 18 months. Construction could be kept to a minimum: replacement balancing could be completed in just a few weeks.

Facts and Figures

- + Total cost for hydraulic balancing & thermostatic valves: approx. 17.500 Euros
- + Reduction of heating costs: 1440 Euros per year
- + Reduction of energy cost: 780 Euros per year
- + KfW investment grant 430
- + Short construction period, no noise or dust
- + Payback period of approx 5 year



Advice to Others

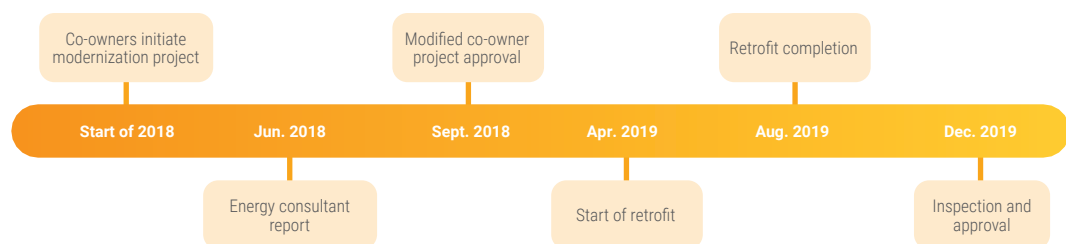
- + Hydraulic balancing is a solid first step to be brought to the attention of co-owners: costs are relatively low, project duration is short and construction only minimally impacts the daily lives of inhabitants. Also, the payback period is short.

Technique and Methods

- + **Technique used:** Hydraulic balancing aims to optimally distribute heated warm water throughout the heating system. All heaters are set to a specific temperature value, so, based on the inlet temperature, every room is supplied with exactly the required heat amount. The entire heating system works more efficiently and saves energy.
- + **Challenges:** The co-owners were at odds concerning any kind of energy retrofitting, especially costly ones. Decimating the maintenance fund was also a concern.
- + **Positive ancillary effects:** Considering that hydraulic balancing is a comparatively simple measure, it can introduce weary co-owners to the subject matter and can serve as a benchmark for future more complex and extensive energy retrofitting projects.



Milestones



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-0>

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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