

This research project aims at developing innovative technical and organizational solutions for holistic modernization of historic buildings.

Gesamtheitliche Modernisierung
von Gründerzeitgebäuden

Pilot Project Wißgrillgasse, Vienna

Factor-8-Modernization and highly
efficient attic floor construction



Implemented measures

- >> renewal of all windows and doors, high insulation standard of all external structural components (passive house quality)
- >> reduction of losses caused by thermal bridges
- >> use of different systems for controlled ventilation with heat recovery
- >> CO₂-neutral heat supply with an efficient housing technology concept: pellets-central heating system, integration of façade-integrated solar collectors; solar power system
- >> draining of basement for storage of pellets

Pilot Project Eberlgasse, Vienna

First modernization of a historic building to
passive house standard

>> completion in fall 2013



Demonstration Project David's Corner, Vienna

Modernization of three historic buildings
located next to each other

>> completion in 2015



Pilot Project Kaiserstraße, Vienna

Modernization of a monument-protected
building to a low-energy house



Implemented measures

- >> refurbishment of the Viennese box-type windows (preservation of outer casements, use of wooden windows suitable for passive house standard for inner casements)
- >> reduction of energy demand through internal insulation and thermal renovation of the courtyard facade
- >> use of a central comfort ventilation with heat recovery
- >> structural reinforcement and thermal insulation of the roof truss in compliance with preservation requirements

Further contents of the project Gründerzeit mit Zukunft

Technical feasibility studies

Comprehensive feasibility studies were prepared for the demonstration projects in order to represent the spectrum of innovative remediation measures for historical building in detail. Different measures and variants are examined and compared in terms of technical and legal feasibility and impact on energy performance. The following topics are analyzed in detail:

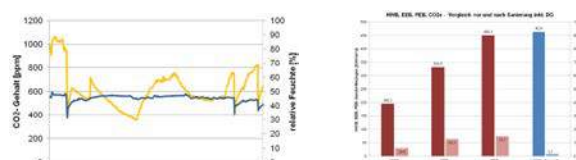
- Plus-energy standard for a historical building
- Attic extension in relation to summer overheating
- Ventilation systems in historical buildings
- Thermal renovation with interior insulation
- Thermal renovation of an ensemble of historic buildings

Guide for the support of tenants

If high-quality renovations can be implemented or not depends not only on whether the technical and legal issues can be solved, but also to what extent organizational and social issues can be resolved. A working tool has been established, which is based on years of experience in the renovation of residential buildings and which summarizes findings from the field.

Monitoring and documentation

Comprehensive documentation of the implemented measures and detailed resource and energy use monitoring as well as a social-scientific evaluation of the user satisfaction are carried out for every demonstration project.



Projekt coordination

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Project partners

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- >> Bluewaters Environmental Consultants
- >> Gemeinschaft Dämmstoff Industrie (GDI)
- >> Havel & Havel BeratungsGmbH
- >> Österreichischer Verband der Immobilienreuhänder
- >> Schöberl & Pöll GmbH
- >> Ulreich Bauträger GmbH
- >> Gassner und Partner GmbH
- >> Architekt Kronreif & Partner ZT GmbH