

Visit us on <http://www.lch.grat.at> or follow us on twitter [@GrAT_group4at](https://twitter.com/GrAT_group4at)

Project Partners

Project Management:

- GrAT – Centre for Appropriate Technology
Dr. Robert Wimmer
Wiedner Hauptstraße 8-10, 1040 Vienna, Austria
Phone: +43 (0)1 58801-49523
Email: contact@grat.at

Building Services:

- teamgmi Ingenieurbüro GmbH
DI Michael Berger
Schönbrunnerstraße 44/10, 1050 Vienna, Austria
Phone: +43 (0)1 5457489 0
Email: wien@teamgmi.com

Architect:

- Architekten Scheicher ZT GmbH
Mag. Georg Scheicher
5421 Adnet 241, Austria
Phone: +43 (0) 6245 83521-0
Email: architekten@scheicher.at

Project Dissemination & Public Relations:

- GrAT – Centre for Appropriate Technology
Christina Böckl, Alma Becic
+43 (0)1 58801-49523
Email: contact@grat.at



Co-financed by the European Union LIFE+ Environment Program (LIFE13 ENV/AT/000741) and the Austrian Climate and Energy Funds

Life Habitation ycle

The EU-LIFE+ project “LIFE Cycle Habitation” demonstrates innovative building concepts that significantly reduce CO₂ emissions, mitigate climate change and minimize environmental impact over their entire life cycle.



- Modular prefabricated apartment building in ecological wood-straw construction with units from 55 to 110 m²
- Semi-detached houses in load-bearing straw bale construction
- Innovative building and building services concept that reduces CO₂ emissions significantly
- Resource-saving and energy-efficient over the entire Life Cycle



Project Objectives:

In the European Union approximately 40% of energy consumption and 36% of CO₂ emissions are accounted to the construction sector. In order to minimize the environmental impact, buildings of the future need to be resource-efficient and energy-saving without compromising comfort.

For this reason, the LIFE Cycle Habitation - building complex in Böheimkirchen / Lower Austria demonstrates different prototypes (apartment building, semi-detached houses) that are highly energy-efficient and resource-saving over their entire life cycle. Renewable and regional building materials such as wood, straw and clay contribute to reducing CO₂ emissions significantly. During the use phase of the building, renewable energy and an intelligent energy management system will minimize carbon emissions. The 'End-of-Life' design strategy facilitates and enables environmentally sound re-use and recycling of building materials at the end of its lifetime. Waste will be reduced to nearly zero.

Construction:

The building complex consists of a modular prefabricated apartment building in wood-straw construction with six units along with a community centre and two semi-detached houses in load-bearing straw bale construction.

The modular prefabrication for the apartment building and the use of straw as insulation allows resource efficiency, short construction time, cost-effectiveness together with user comfort and a healthy living environment. The passive house design of the buildings, along with high insulation values of the straw insulation contributes to climate change adaption and reduction of energy consumption.

In the community centre prototypes using thermal energy directly without conversion losses are demonstrated (e.g. cooking devices, washing machines).