Existing buildings on the site of the former Bürgerhospital in Stuttgart are being energy efficiently refurbished and converted into affordable housing.
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Energy-Efficient City   30.10.2018

Goal: Climate-neutral, affordable housing

170 new climate-neutral homes are set to be built on the outskirts of Überlingen.
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The cities of Stuttgart and Überlingen are collaborating together in the "Urban District 2050 – Solving Challenges Together" research project. The project goal is to remodel and develop two districts to create affordable, climate-neutral housing. The two municipalities are tackling the tasks in different ways. Their systematic approaches will enable, however, the experience gained by the respective demonstration districts to be also utilised by the other city.

Stuttgart is participating in the collaborative project with the site surrounding the former Bürgerhospital. One part of the old building is being refurbished and the other part demolished and rebuilt. In Überlingen, the local housing cooperative wants to redevelop an existing outlying urban district and expand it with a new-build site with around 170 apartments. This will involve a total of 960 residential units with an overall investment of 190 million euros.

As different as the two districts seem, the goal is the same – to provide both districts with climate-neutral heating and electricity by 2050 and offer affordable housing. To this end, the existing building stock will be energy efficiently refurbished and the new buildings constructed to an energy-plus standard. The plan is to have a local heating supply that integrates local renewable energy sources and is supplemented by thermal and electrical storage systems. Whereas Überlingen is placing the main emphasis on thermal insulation, Stuttgart is focusing on a highly efficient energy supply. High requirements, however, have also been placed here on the refurbishment and new construction.

Learning from comparisons

The synergy effect for both cities is that insights gained from the inner-city Bürgerhospital can also be transferred to future inner-city projects in Überlingen, while insights gained from the development on the outskirts of Überlingen can also be transferred to future projects in more outlying parts of the city of Stuttgart.

The inter-city collaboration enables the cost-effectiveness, energy demand and ecological balance of the different approaches to be compared. It also enables a comparison of the technologies in terms of their susceptibility and user-friendliness. An urban design platform is planned for directly sharing the experience and results gained from the respective demonstration districts. This will make it easier to transfer them to the other municipality. The systematic project approach also makes it possible for other municipalities to benefit from the experience gained

in the long term.

User participation

In addition to purely structural and technical measures, the residents themselves will also be engaged in the projects. The sociological work here will also pursue different focal points. These include coordination processes with the historic buildings and monuments authorities, the involvement of property owners in the district redevelopment as well as the issue of "socially compatible and rent-neutral refurbishment".

Solar Building/Energy-Efficient City support initiative

The "Urban District 2050 – Solving Challenges Together" project is one of six flagship projects in the Solar Building/Energy-Efficient City support initiative that was launched in 2016 by the German Federal Ministry for Economic Affairs and Energy and the German Federal Ministry for Education and Research. In addition to the project coordinator, the Environmental Protection Office for the City of Stuttgart, the project consortium also consists of eleven other partners from science and industry.

A detailed description of this research project can be found on the portal for the ENERGIEWENDEBAUEN research initiative.

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