

PRESS RELEASE

CLIMATE-FRIENDLY NEW RESIDENTIAL AREA "AM BERGHOF"

Energy concept launched with innovative methods

Maintal, 25. 05. 2023



Kick-off meeting for the energy concept "Am Berghof" in the town hall of the city of Maintal (from left): First row: Dr. Thomas Nacht (4ward Energy Research/WHY), Monika Böttcher (Mayor of the city of Maintal), Tamara Sievers (Climate Management City of Maintal), Jasmin Henkel (Urban Development & Urban Planning City of Maintal). Second row: Nina Stiehr (Climate Management City of Maintal), Matthias Falkenhain (Alpha IC GmbH), Dr. Wolfgang Hofstetter (Climate Alliance/WHY), Eva Suba (Climate Alliance/WHY). Back row: Dr. Tillmann Hosius (Managing Director Maintal-Werke GmbH), Felix Nolte (Maintal-Werke GmbH), Peter Kraus (Maintal-Werke GmbH), Daniel Schächtele (Managing Director Maintal Immobilien Gesellschaft mbH & Co. KG), Jörg Wuff (Head of the Department of Urban Development, City of Maintal). Photo: City of Maintal

The new development area "Am Berghof" in Wachenbuchen, which is currently under development, is planned to be as climate-friendly as possible. This was the decision of the town council. For this reason, the magistrate of the town of Maintal, in consultation with Maintal Immobilien Gesellschaft mbH & Co. KG (MIG) and Maintal Werke GmbH (MWG), commissioned an energy concept funded by the state of Hesse. The EU project "WHY" supported the creation of the energy concept with innovative methods.

As a direct neighbour of Frankfurt and Hanau and the second largest municipality in the Main-Kinzig county, Maintal is also affected by the residential pressure in the Frankfurt/Rhine-Main agglomeration. In order to avoid sealing new areas in the suburbs, the focus is shifting to conversion areas. Among other things, a new building area with single-family and multi-family houses, multi-storey housing - also for social housing - and a kindergarten is to be built on the site of the former Kaufeld nursery in Wachenbuchen.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 891943

"Climate protection is given high priority in the planning of the new development area. This decision was reinforced by last year's energy crisis, which shows that high energy consumption is hardly affordable any longer. Finally, the legal requirements of the federal and state governments place a special obligation on the municipalities to find solutions for supplying residential areas with climate-neutral heat by 2045," explains Mayor Monika Böttcher.

So it was an obvious choice to take advantage of a grant from the state of Hesse to get an appropriate concept off the ground. The planning office Alpha IC GmbH, which has already successfully supported several such projects, was contracted for this purpose. The concept should show how the residential area can be realised with a decentralised, sustainable and climate-friendly energy supply with low energy costs. The aim is to supply the residential area exclusively with renewable energies and at the same time to keep energy consumption as low as possible through a special construction method, for example through a passive house standard in combination with photovoltaics.

From the KfW 55 standard for houses to the "Plus-Energie-Quartier" project, different energy efficiency levels are considered and the respective investment-, demand- and operation-related costs are taken into account. Based on this economic evaluation, a cost-benefit assessment can finally take place in order to decide which energy efficiency level the new development area should receive.

The degree of self-sufficiency, i.e. the possibility of supplying the future residential area as far as possible with energy generated on site, for example with the support of innovative storage systems, is also in the foreground. This is where, in addition to the commissioned planning office Alpha IC GmbH, the EU project "WHY" comes into play, which will provide information on how the residential area could still supply itself independently for a certain time in a blackout situation - in which the city of Maintal would thus be completely cut off from an energy supply.

As an essential part of the energy concept, the electricity, water and heating requirements of the future residents are determined on the basis of various parameters. This is where the EU project brings in special methods. The calculations for the methods are so complex and demanding that "super computers" from the Spanish University of Deusto and the Research Centre Jülich have to provide support. With these results, it should be guaranteed that the quality of energy efficiency will still exist to a high degree in a few decades, when the demands of the inhabitants as well as the political situation have changed.

The energy concept is scheduled for completion in October 2023, after which the results will be incorporated into the further planning of the new development area.

[Read the original press release issued by the City of Maintal in German here.](#)

Nina Stiehr from the climate management of the city of Maintal will answer questions via klimaschutz@maintal.de or by telephone on 06181 400-436.

