

Heat risk management in the city – HEATS

bifa is participating in the development of a planning guide for municipal heat risk management



It's finally happening! The two-year collaborative HEATS project was started in June. The objective of the collaborative project is, using the example of the cities of Augsburg, Hamm and Zwickau, to provide planning principles for municipal heat management and to initiate adaptation processes.

The Federal Government's planning for a national heat protection plan reflects the importance of examination of the topic of heat in our towns and cities. The current collaborative project is intended to assist municipalities to assess and quantify the objective hazard, the vulnerability

and the development of integrative solutions and planning strategies to facilitate better adaptation of the urban structure, economy and the provision of public services to climate change. The current project makes an important contribution to aligning municipal heat management to the actual needs.

The method for identifying heat hotspots was developed in the "Abc – Augsburg bleibt cool" (Augsburg stays cool) project – in which bifa was also involved. In the HEATS project, these hotspots will now be linked >>

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Five standards for environmental issues



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bifa develops energy use plan for the Town of Senden

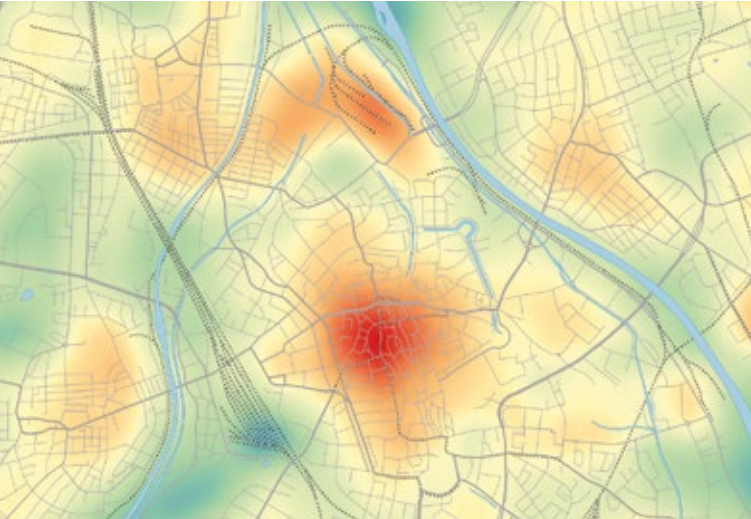


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bifa produces the CO₂ balance and determines the potential



>> with sociodemographic data from the census. This is not only to estimate the overheating hazard in a 100 x 100 m grid, but also to determine with this resolution whether or which vulnerable groups live there, in order to be able to plan targeted and apposite adaptation measures for these people. These include, for example, the supply of nearby places to retreat in the event of heat (cool rooms in public buildings, green spaces, etc.). With the help of



Map section of the Augsburg city area showing the temperature distribution (from blue=cold to red=hot) on a summer day.

a newly developed topic-specific app, the results are to be visualised and the population sensitised to them. In addition, a general framework for a database in which heat-vulnerable persons can register or be registered will be compiled and discussed.

Furthermore, by way of example, type representatives for social facilities such as retirement homes are to be analysed by microscale, numerical urban climate models and further detailed studies (including building energy simulations) with regard to interior and exterior hazards and (structural and planning) adaptation measures illustrated at building and ambient level. Project results will be validated in workshops and prepared for further training and professional development courses for people in energy/climate protection consulting. It is also planned to form a network with other towns and cities.

The German Federal Environment Ministry is funding the project with the "Measures for adaptation to the consequences of climate change" funding guidelines. Within the project, bifa is responsible for analysing the needs for user-oriented technology development and is providing support and advice for the project communication and PR work.

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European Sustainability Reporting Standards (ESRS) – a doable task!

Five standards for environmental issues

The consultation phase on the draft of the delegated regulation of the European Commission on the ESRS finished on 9/7/2023. The ESRS are based on four pillars: cross-cutting standards, environment, social and governance.

bifa analysed the ESRS standards for environmental issues and determined that the materiality above all for "E1 climate change" followed by "E5 circular economy" applies to most companies. Reporting of "E2 Pollution" is required, especially for production companies that are affected by immission control regulations. The "E3 Water and marine resources" and "E4 Biodiversity and ecosystems" standards are more likely irrelevant for individual industries.

Required data are easy to determine

Data on energy consumption and the energy mix for the circular economy and data on resource inflows and outflows (including waste) must be disclosed for the climate change part of the reporting. Companies with energy management and waste representatives must document most of this information anyway in the respective annual report, which is why the additional work for many companies will keep

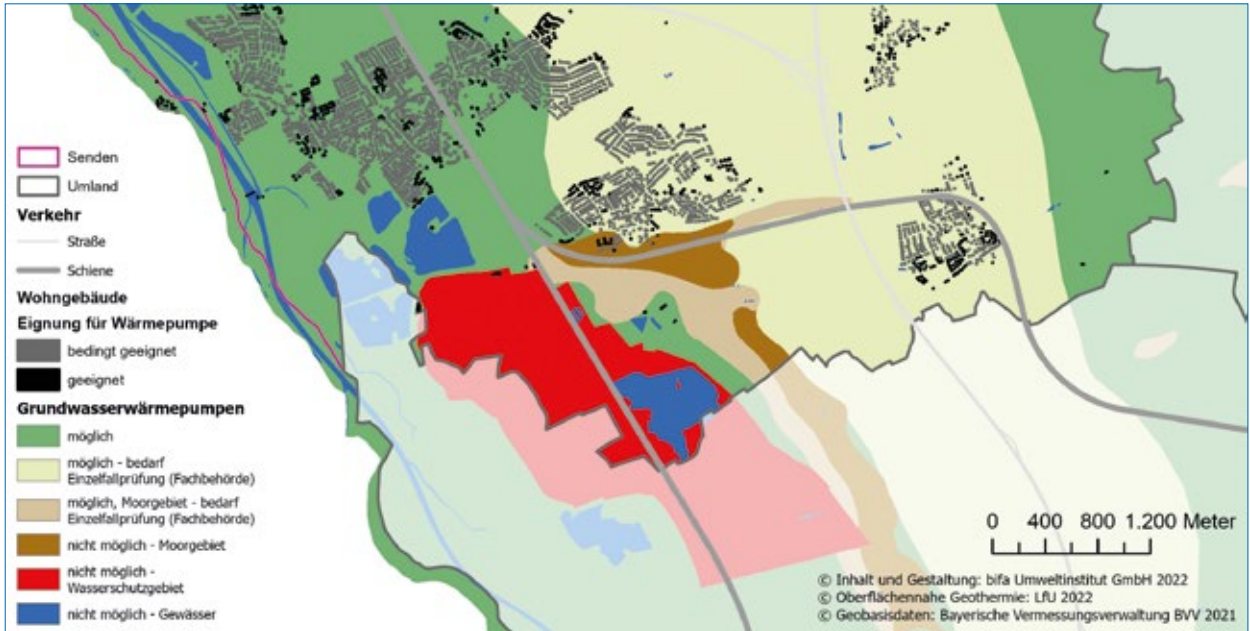


within reasonable limits. Reports according to the ESRS are a doable task!

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Establishing climate protection as a continuous task

bifa develops energy use plan for the Town of Senden



Areas for the use of groundwater heat pumps (green) and their constraints due to water protection needs (red), due to fens (brown) and areas requiring a case-by-case review (lime green and light brown), building suitability for heat pumps (black = suitable; grey = conditionally suitable).

The Bavarian format of the digital energy use plan introduces transparency into the municipal energy situation and local greenhouse gas emissions. As a planning instrument, it helps the decision makers to identify and implement effective climate protection measures.

For the town of Senden, bifa surveyed the actual energy situation in the whole town area and pointed out potential for energy saving and supply through renewable energy. Digital maps illustrate the results, among other things, on heat demand (heat register at building level), suitable areas for near-surface geothermal energy and on the potential for outdoor PV arrays.

In consultation with the town administration and other stakeholders, bifa developed an action plan in order to initiate

specific implementations. 20 measures for reducing greenhouse gas emissions due to energy were recommended. The focal points were,

- establishing climate protection as a continuous task of the town,
- making properties climate neutral and
- to advance the development of the district heating network.

The results were presented to Senden's town council on 16 May 2023. They met with a positive response. The town council tasked the administration with submitting specific resolution proposals for the measures.

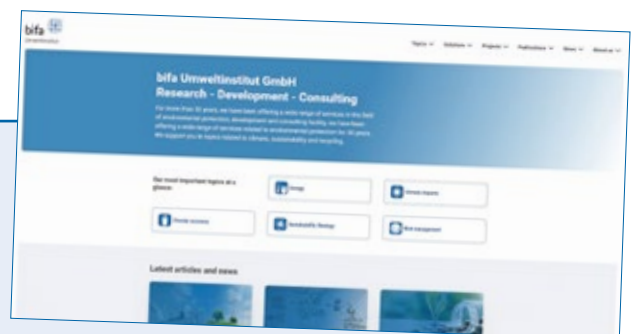
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Our new website is online!

We are very pleased to present our new internet presence to you.

After many very interesting and busy weeks, we present our new website that has been fundamentally modernised and visually revised with a fresh design – and is now more informative, modern and of course responsive.



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Sensitising for heat and its effects

bifa is developing a heat action plan for the City of Bergisch Gladbach

The increasing number of hot days and heatwaves in Germany is a health threat, especially for heat-sensitive population groups, which in the worst case can lead to death. Based on a town climate analysis from 2021, analyses of the district and as part of the integrated climate protection concept with the climate adaptation field of action, the need for a heat action plan for the City of Bergisch Gladbach was identified and the bifa Umweltinstitut and Lohmeyer GmbH were engaged to develop it.

Concept and implementation of diverse participation formats

bifa drew up the participation concept as part of the development of the heat action plan and has been implementing it since April 2023. In an online and face-to-face survey, citizens citywide were asked about the topic of heat. In addition, a workshop was held with representatives of the city administration and two in-person workshops were held with disseminators (influential spreaders) of heat-sensitive groups, such as small children, the chronically ill and homeless people. These workshops were supplemented by expert interviews. The goal of the participation formats is to develop joint measures, which sensitise the population of Bergisch Gladbach to heatwaves and point out action options and protective measures.

In the following project phase, action fact sheets will be developed on the basis of the evaluation of the workshops and interviews and the ideas formulated from the survey, and structural prevention measures will be modelled and assessed by way of example for selected heat hotspots.



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Climate protection concept for Augsburg Technical University of Applied Sciences

bifa produces the CO₂ balance, determines the potential and moderates the participation of stakeholders

Augsburg Technical University of Applied Sciences (Technische Hochschule Augsburg – THA) is one of the largest universities in the Bavarian region of Swabia. An integrated climate protection concept is planned to describe the THA's path to climate neutrality as part of its sustainability strategy and to support its climate protection management.

The Federal Government's National Climate Protection Initiative (Nationalen Klimaschutzinitiative – NKI) is providing the funding for the development of this integrated climate protection concept.

bifa is helping the THA to develop the concept

As the starting point, a comprehensive CO₂ balance of the whole university will be drawn up according to the GHG Protocol. On this basis, bifa will determine the relevant potential for reducing greenhouse gas emissions and will forecast the future CO₂ emissions of the THA within the framework of scenarios.



Involvement of the stakeholders is essential for the formulation of specific reduction measures. To this end, bifa will hold workshops with the relevant players. The THA will then use the work of bifa to complete the climate protection concept by the end of May 2024.

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