

Funding subject 5: Energy- and resource-saving district development and renewal

As a rule, measures for reducing resource consumption, for the sustainable use of natural resources, for climate protection and for climate adaptation are more efficient when they are localized and networked within a specific district and when the existing physical, technical, physiographical, social, economic and architectural conditions and requirements are considered. In addition to spatially coherent development, focussing on an entire district allows for the exploitation of synergies and the development of effective, well-integrated comprehensive solutions that help us to avoid counter-productive insular solutions. In addition to modernising the infrastructure that is connected to the power grid in a resource-efficient manner and integrating districts into coherent overall concepts that also include urban green spaces (green infrastructure), we also need to develop and try out approaches to introduce renewable energy to districts and making them more energy efficient by means of highly efficient combined heat and power systems, local heat networks, and systems for generating, storing and utilising renewable energies that are integrated into the buildings themselves. Citizens and local populations must also be involved in this process.

In particular, the following measures are eligible:

- Exemplary development, introduction and documentation of the implementation of innovative concepts for energy- and resource-efficient district development and renewal, taking into account social impacts
- Concepts for upgrading the consumption and supply infrastructure in a way that conserves resources while using mutual synergies from different infrastructural segments
- Documentation and evaluation of relevant implemented concepts and measures
- Concepts and strategies for further development of administrative, institutional and social requirements for the development of innovative concepts for district renewal that is both energy-efficient and also conserves resources
- renewal that is both energy-efficient and also conserves resources
 Further development of planning methods, process quality and tools, including digitisation, for energy-efficient district development that also conserves resources
- New ways to include the citizens and local population in the energy- and resource-efficient development of their district
- Innovative methods and concepts for education, communication and qualification



2020

DBU-funding - competent and service-oriented

The Deutsche Bundesstiftung Umwelt (DBU) can look back on more than 25 years of funding. The foundation has a broad wealth of experience and professional expertise in various fields. In its work, the DBU can rely on a broad network of experts working as honorary consultants.

The DBU is independent and neutral from any political party. When submitting an application, only the technical quality and the innovative content of the application are important. The DBU offers its applicants competent, result-oriented advice and individual support by a highly qualified, interdisciplinary team. The internal assessment of the projects and the external evaluation lead to a further development and qualification of the project proposal.

The DBU accompanies project partners from the project outline to implementation and provides support in finance and expertise.

DBU-partners of particularly successful projects are also supported in the dissemination of their project results by appropriate communication measures (trade fairs, exhibitions, events, publications, press work).

From outline to funding online submission of the project outline call for application decision by the DBUassessment by the project group supplementary information Secretary General or the **DBU-Board of Trustees** contents + goals expert appraisals letter of approval costs + financing information applicant + cooperation partner if assessment is positive if assessment is positive

First steps in a project outline

We are interested in receiving innovative, exemplary project ideas that contribute to energy- and resourcesaving district development and renewal.

When preparing your project outline, please take into account the following questions:

- Does the project idea fit the support subject?
- Does the project idea involve at least one or more solution approaches?

If this is the case, the following criteria should be taken into account when developing a successful project outline:

- The objectives of the project outline are directly related to the support subject.
- The methods and processes developed go beyond the current state of the art, and they link actors and content.

- The solution approach is tested in practice and examined for strengths and weaknesses.
- The approach can be applied to similar problems as a model.
- The results of the project will be communicated to the public and experts from the subject area in a target-group-specific manner.
- The project offers approaches for education and qualification.

If these criteria apply, interdisciplinary and systemic project approaches are of particular importance to the DBU.

You can submit your project outline online www.dbu.de/antragstellung_____

Exemplary DBU-funded projects

The following projects show an excerpt from the thematic range of funding subject 5 and specify the implementation in the fields of action mentioned on page 1. Further information on the projects can be found at **www.dbu.de**

Climate protection at the district level (AZ 33119)

Climate protection at the district level is being developed based on five projects with the goal of the »nearly Zero-Energy Building (nZEB)« standard. The project is coordinated by the Architekturbüro Schulze Darup Nürnberg-Berlin. Not only are there building types to be developed, that are economically advantageous for the housing industry, but also the plus energy balance should be realized in an economical way at the same time. The goal is a largely renewable supply for districts. In addition to the technical issues, this concerns the general conditions for the operation and independent use of renewables and their integration into the supply system. Synergies are to be tapped through the parallel processing of five different districts and the exchanges between the involved partners. In addition to the energy issues, this holistic approach includes the economical use of space and resources, the optimization of geometry and orientation of buildings, accessibility, constructive optimization and cost-effectiveness.





Holistic energy supply concept (AZ 33157)

In the development of the »Holzmarkt«, a nonprofit-oriented urban development project in Berlin, new paths are to be taken in energy generation, -use and -distribution. With a view on the location, district and neighbors, the existing resources were examined for technical and economic feasibility. The goal was a sustainable and efficient energy mix. In addition, the aim was not only to cooperatively create the administrative prerequisites for generating energy, but also to create incentives to invest in energy-saving systems and equipment, and to reduce consumption. The »Holzmarkt« is innovative in its systematic further development of creativity and improvisation of cultural interim use, towards sustainable district development.

Refurbishment of the Schillerpark settlement (AZ 26232) The historically protected settlement »Schillerpark« in Berlin's district Wedding is listed as a UNESCO World Heritage Site. Hans Hoffmann's buildings from the 1950s are located in the so-called buffer zone of the World Heritage area. Under the scientific supervision of the Institut für Baukonstruktion der TU Dresden, a refurbishment concept was developed for these buildings that is both energy-efficient and appropriate for historical monuments. The interdisciplinary planning team was coordinated by Winfried Brenne Architekten, Berlin. Outstanding features of Hoffmann's buildings are the so-called »flower windows« - a storey-high walk-in double glazed design - and the radiators centrally located in the apartments. The flower windows were integrated into the new ventilation concept and renewed; the heating medium was converted to district heating; the technical installations were also renewed; and a composite thermal system was used as facade insulation. As a result of the renovation measures, the primary energy demand of the buildings was reduced by more than 80 percent to around only 55 kWh/m²a.



DBU – We promote innovations

The Deutsche Bundesstiftung Umwelt (DBU) supports innovative, exemplary and solution-oriented projects for the protection of the environment in accordance with the foundation's mission statement, with special consideration for the mid-sized business sphere. Funded projects should achieve sustain-able effects in practice, provide impulses, and have a multiplier effect. It is important to the DBU to contribute, in particular, to solving current environmental problems which result from unsustainable economic practices and ways of life in our society. The DBU sees key challenges above all in climate change, biodiversity loss, the unsustainable use of resources, and harmful emissions. The funding subjects thus tie in with both current scientific findings on »planetary boundaries« and with the Sustainable Development Goals adopted by the UN. Especially with



regard to biological diversity (biosphere integrity) and the disruption of the nutrient cycles of nitrogen and phosphorus (biochemical flows), the planetary boundaries have been far exceeded. Humanity has therefore moved a long way from any safe operating space, and is now exposed to a high risk of negative ecological, economic and social consequences. Mankind has also already moved into the danger zone in terms of land-system change and climate change.



Deutsche Bundesstiftung Umwelt

Your contact for the funding subjects

Your project outlines are worked on in an interdisciplinary project group:

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We promote innovations

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