

## Pressemitteilung

Institut für Landes- und Stadtentwicklungsforschung gGmbH

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Institut für Landes- und  
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## ICLEI Action Fund 2.0 launches innovative climate projects in Dortmund

The ICLEI Action Fund 2.0 is proud to announce the launch of two groundbreaking projects in Dortmund (Germany). The projects, Data2Resilience led by the Urban Climate Lab of Ruhr-University Bochum (RUB) and Climate Adaptation through Thermographic Campaign and Heat mapping (CATCH4D) led by the Research Institute for Regional and Urban Development (ILS), will utilise various data sources to implement inclusive climate actions. The initiatives, supported by ICLEI Europe through grant funding from Google.org, aim to bolster Dortmund's resilience to extreme heat and enhance energy efficiency in buildings and urban environments.

Thomas Westphal, Mayor, Dortmund, expresses his enthusiasm for the selection of two projects from Dortmund, highlighting the significance of collaboration between science, the municipality and citizens in achieving successful climate goals:

"The projects use innovative techniques to collect and merge current climate data with existing data. This process ensures that targeted measures for climate impact adaptation and energy consulting can be developed. The municipality supports the teams in the analysis and will consolidate the results in the city's actions."

The CATCH4D project seeks to create a comprehensive 3D thermal model of Dortmund. Leveraging advanced laser scanning, thermographic, and Earth observation techniques, the project will evaluate building energy efficiency and urban heat stress. By incorporating Google Earth Engine data and socio-economic information, the project aims to identify areas with energy-poor households and residents vulnerable to heat stress. The resulting data analytics will contribute to the implementation of sustainable and climate-oriented initiatives in Dortmund. Furthermore, the project aims to directly benefit local citizens, including supporting energy-poor households through legal advice and funding for housing modernisation, as well as the installation of green and blue infrastructures to mitigate heat stress.

Dr. Shaojuan Xu (ILS - Research Institute for Regional and Urban Development), principal investigator of the project, emphasised the project's objective to make energy efficiency and climate resilience tangible and accessible saying,

"The 3D heat map will visually represent energy efficiency in an intuitive manner, facilitating faster decision-making. The project's data analytics will also be made available to stakeholders, promoting sustainable development".

The Data2Resilience project aims to implement data-driven actions and services to enhance Dortmund's resilience to extreme heat, recognising the risks posed by extreme heat to human health and well-being, as well as the usability of public spaces. Data2Resilience will deploy a state-of-the-art biometeorological sensor network and develop a nowcasting service for monitoring thermal comfort throughout the city. This real-time information will guide on-ground actions and services for smarter urban climate comfort planning, pioneering the integration of thermal comfort data within Dortmund's smart city ecosystem. The collaboration aims to develop data-driven services tailored to the municipality's needs and the well-being of its citizens.

Professor Benjamin Bechtel, Head of the Bochum Urban Climate Lab representing the Data2Resilience project, says:

“Adapting cities to climate change is one of the most critical challenges for humanity in the coming decades. We are excited to work with a pioneering city in both climate adaptation and smart city solutions to jointly develop data-driven tools and services that can help both the administration and the citizens to cope with extreme heat.”

The ICLEI Action Fund 2.0 and Google.org will continue to support these groundbreaking projects in Dortmund as they contribute to building a resilient and sustainable future for the city.

About ICLEI - Local Governments for Sustainability:

ICLEI – Local Governments for Sustainability is a global network of more than 2,500 local and regional governments committed to sustainable urban development. Active in 125 countries, we influence sustainability policy and drive local action for low emission, nature-based, equitable, resilient and circular development. ICLEI Europe provides Members in Europe, North Africa, the Middle East and West Asia with a voice on European and international stages, a platform to connect with peers and tools to drive positive environmental, economic and social change. ICLEI Europe works closely with an extended network of local and regional governments and partners on a broad range of topics.

About Google.org:

Google.org, Google's philanthropy, supports non-profits that address humanitarian issues and apply scalable, data-driven innovation to solving the world's biggest challenges. It accelerates their progress by connecting them with a unique blend of support that includes funding, products, and technical expertise from Google volunteers. It engages with these believers-turned-doers who make a significant impact on the communities they represent, and whose work has the potential to produce meaningful change. Google.org wants a world that works for everyone—and believes technology and innovation can move the needle.

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Kick-off of the ICLEI project in Dortmund  
Cedric Müller  
Cedric Müller/ILS