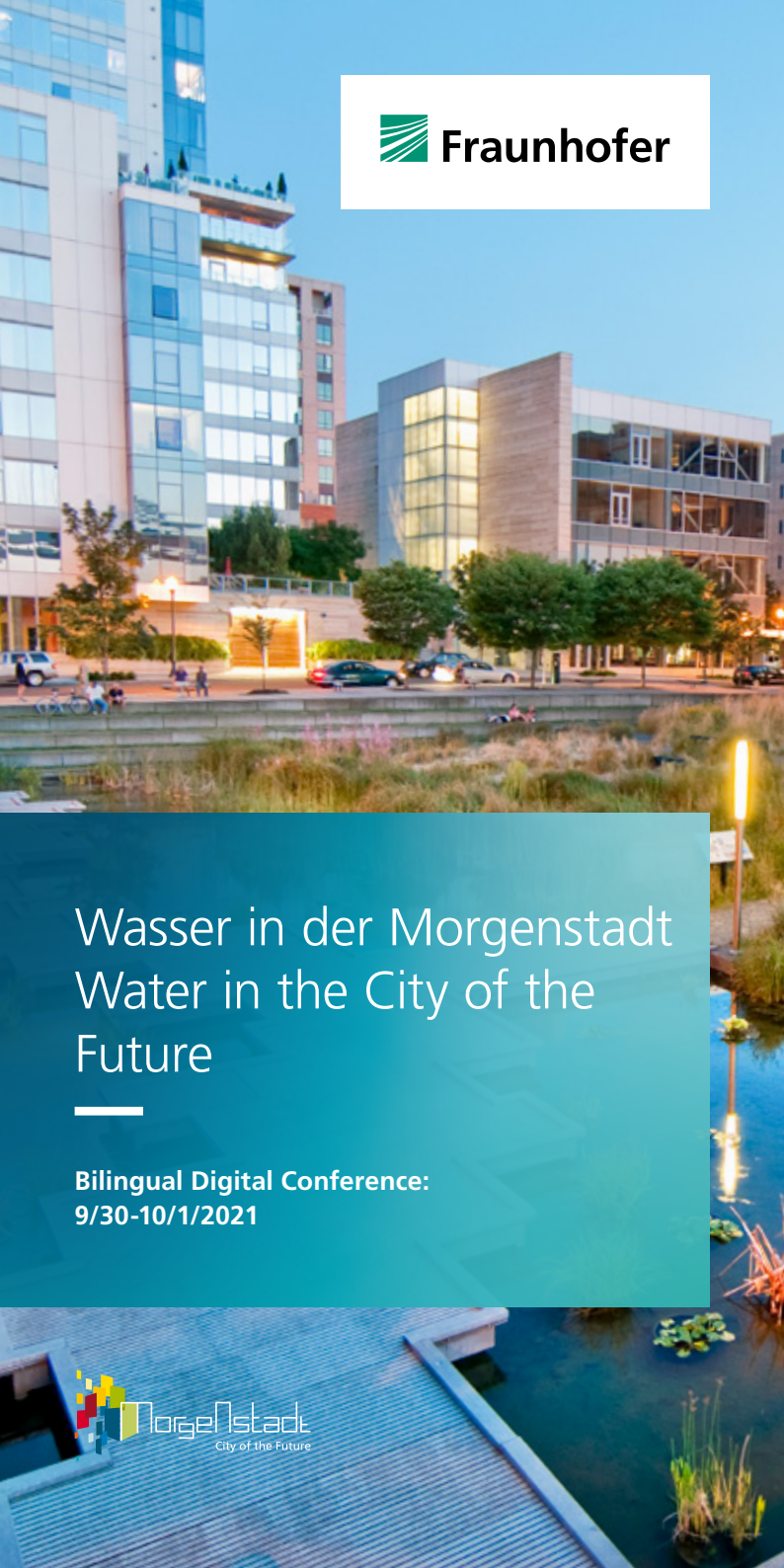

Fraunhofer

Wasser in der Morgenstadt
Water in the City of the Future

Bilingual Digital Conference:
9/30-10/1/2021

MorgenStadt
City of the Future

Potential of Urban Water Management for Climate-adapted Urban Development

Heavy rainfall, prolonged droughts, heat stress, rising water demand and declining water reserves - cities diverse challenges due to climate change. Beyond the direct climatic pressures amplified through climate change, there will likely be significant consequences for the urban water balance and water quality. In addition to climate protection measures, climate adaptation strategies play an important strategic role. Active urban water management is one of the crucial building blocks for future-oriented and climate-adapted urban development.

The need for water-sensitive urban development is already being felt by diverse cities as a consequence of climate change. As an innovation network, Morgenstadt therefore aims to bring this topic to the center of the social debate and to demonstrate replicable solution proposals to help address these urgent issues.

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The need for water-sensitive urban development is already being felt by many people as a consequence of climate change. As an innovation network, we have therefore made it our task to place the necessary measures at the center of the social debate and to point out proposed solutions for this urgent issue.

Eva Ottendörfer,
Head of Urban Governance Innovation and
Morgenstadt Network at Fraunhofer IAO

In particular, cities need sustainable solutions for problems related to drinking water supply, water storage or wastewater management in the context of increased urban water demand and diminishing water reserves. Therefore, it is essential for future urban planning and development to create new climate-adapted urban planning frameworks, for example, through the strategic construction and integration of green and blue infrastructures. For instance, the planning of blue infrastructures to support evaporative cooling can counteract the increasing problem of inner-city heat islands. These same infrastructures can serve as water storage to shave the peaks during heavy rainfall events, combatting the dual extremes being dealt with by many cities globally.

Conference for exchange and networking

For many municipalities, climate adaptation is no longer new territory. However, as in the area of climate protection, the necessary transformation of cities to deal with such challenges is highly complex. Beyond having a purely technical character, water-sensitive solutions have a broad range of economic, social and environmental benefits and require a high degree of coordination between diverse urban stakeholders. The successful transformation to a water-sensitive city has therefore significant organisational and governance dimensions. The Morgenstadt Network of the Fraunhofer-Gesellschaft thus aims to support exchange between interested participants on this topic as well and to promote cooperation. In addition, the Morgenstadt Network would like to initiate concrete new projects in the field of climate-adapted water management in the course of this conference.

The conference will be held in a cooperation between the Fraunhofer Institutes IAO, IGB and ISI in an interactive digital format with an international orientation. The event is supported through partnership with the HafenCity University Hamburg, HAMBURG WASSER and the Ministry of environment, climate, energy and agriculture of the City of Hamburg.

Partners of the Morgenstadt Water Conference

Morgenstadt Initiative

The Morgenstadt Initiative of the Fraunhofer-Gesellschaft is a network of Fraunhofer Institutes, municipalities and companies. Together with the Morgenstadt partners, solutions for the city of tomorrow are developed and tested in various research projects and innovation partnerships. This includes research and development around systems solutions to urban challenges, as well as innovation in the underlying governance and organisational structures and processes that support a transformation to more sustainable cities.

Fraunhofer Institute for Industrial Engineering IAO

How will people live and work in the future? Asking this and similar questions, researchers at Fraunhofer Institute for Industrial Engineering IAO apply their findings in practice to achieve concrete results. Our experts shape the interaction between humans, technology and organization with a view to the whole, keeping each customer's specific needs in mind. We help companies and institutions recognize the potential of new technologies, harness them for profit, and open up attractive future markets.

Fraunhofer Institute for Systems and Innovation Research ISI

Fraunhofer ISI analyses the emergence and effects of innovations. The experts research the short- and long-term developments of innovation processes as well as the societal impact of new technologies and services. On this basis, it provides its clients from business, politics and science with recommendations for action and perspectives for decision-making. The institute's expertise lies in its well-founded scientific competence and an interdisciplinary and systemic research approach.

Fraunhofer Institute for Interfacial Engineering and Biotechnology IGB

Fraunhofer IGB develops and optimizes processes, technologies and products for health, sustainable chemistry and the environment. In doing so, the experts rely on the combination of biological and process engineering competencies in order to contribute to human well-being, a sustainable economy and an intact environment with the systems approach of the bioeconomy and bioinspired, biointegrated and biointelligent solutions.

Ministry of environment, climate, energy and agriculture (BUKEA)

BUKEA is responsible for environmental, climate, energy and agricultural policy in Hamburg. It coordinates central tasks for the future, such as climate protection or adaptation to the consequences of climate change. Important topics here are the preservation and improvement of urban green spaces, the sustainable use of water, and ultimately the safeguarding and enhancement of the quality of life in Hamburg.

HafenCity University Hamburg (HCU)

Founded in 2006, HafenCity University Hamburg (HCU) is unique as a university for architecture and metropolitan development: HCU unites all aspects of building in design and drafting, engineering and natural sciences, as well as humanities and social sciences under one roof, and all subject areas are consistently thought of in an interdisciplinary and integrated way in research and teaching. For around 2400 students and 250 employees, the HafenCity location, as Europe's largest inner-city urban development project, offers the special attraction of an urban laboratory on one's own doorstep.

HAMBURG WASSER

HAMBURG WASSER supplies around two million people in the Hamburg metropolitan region with the best drinking water and treats wastewater. In addition, HAMBURG WASSER contributes its more than 175 years of experience in water management to projects in Germany and abroad. In Hamburg, HAMBURG WASSER actively contributes to making the city more robust against the consequences of climate change. This includes the development of modern drainage infrastructures that pursue the goal of water-sensitive, climate-resilient urban development.

More info about the event and registration at

https://s.fhg.de/wasser-in-der-morgenstadt

Daily updated program

https://s.fhg.de/wasser-in-der-morgenstadt-programm

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