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Partners of the Morgenstadt network

Currently, the Fraunhofer Innovation network "Morgenstadt: City Insights" is comprised of the following partners:

■ Industry

badenova, Bosch, Cadfem, Daimler, Dorsch Gruppe, Drees & Sommer, EnBW, EWE, Fichtner, Finmeccanica, IBM, Ill Taiwan, RTI, Qingdao Ecopark, SBA, Schüco, Siemens, TÜV Süd, Vattenfall, Volkswagen, Züblin

■ Cities

Berlin, Freiburg, Ingolstadt, Düsseldorf, Norderstedt, Karlsruhe, Baden-Baden, Offenburg, Waldkirch, Lörrach, Kehl

■ Institutes

Fraunhofer Institute for Industrial Engineering IAO

Fraunhofer Institute for High-Speed Dynamics, Ernst-Mach-Institut, EMI

Fraunhofer Institute for Open Communication Systems FOKUS

Fraunhofer Institute for Building Physics IBP

Fraunhofer Institute for Factory Operation and Automation IFF

Fraunhofer Institute for Interfacial Engineering and Biotechnology IGB

Fraunhofer Institute for Material Flow and Logistics IML

Fraunhofer Institute for Manufacturing Engineering and Automation IPA

Fraunhofer Institute for Solar Energy Systems ISE

Fraunhofer Institute for Systems and Innovation Research ISI

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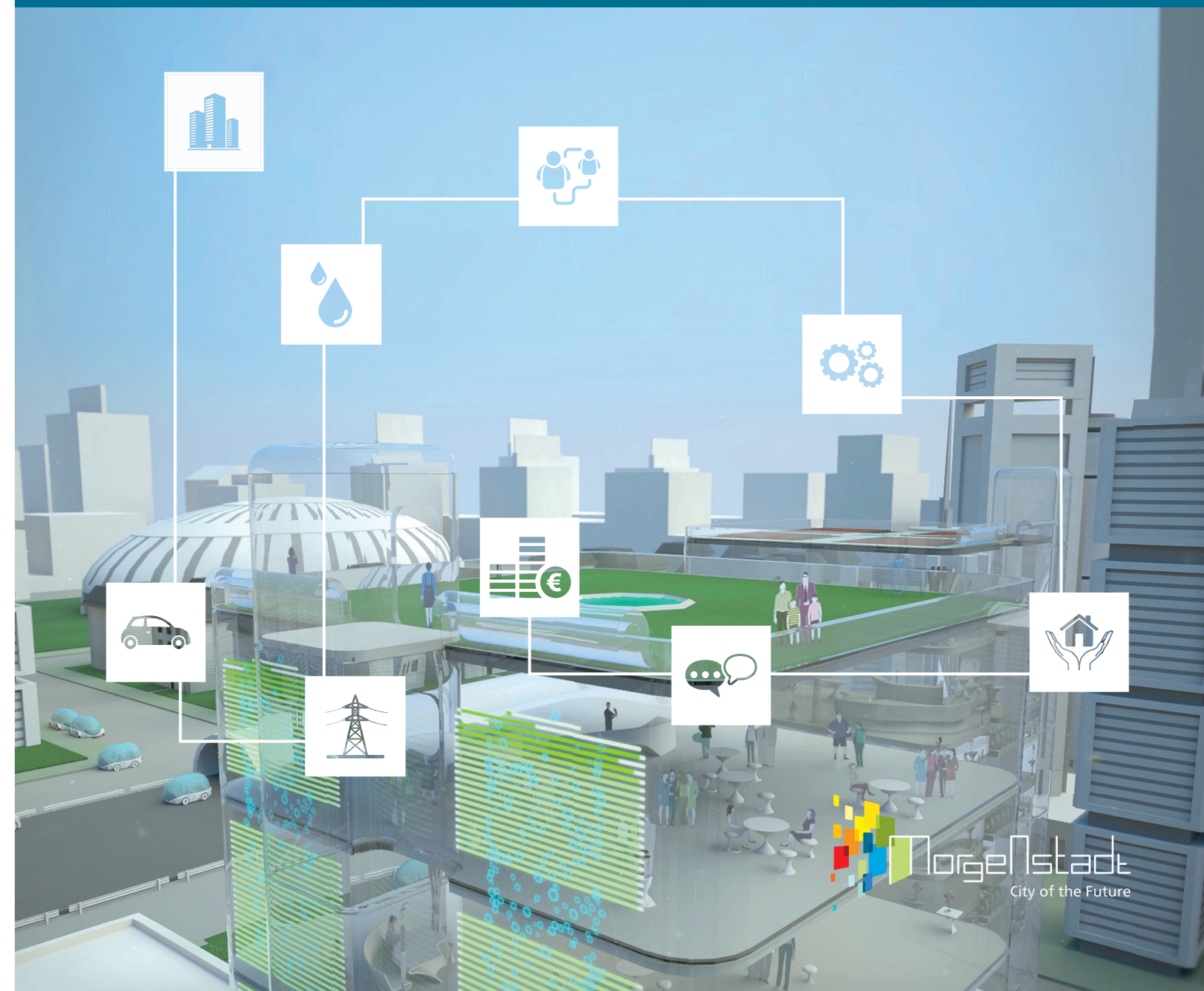
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MORGENSTADT: CITY INSIGHTS

CITY OF THE FUTURE PHASE II



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Management Summary

“The political and economic foundations of cities will determine whether four billion new urban houses in the next 40 years can be built, whether global warming can be limited to 2°C and whether the state and quality of our ecosystems and resources can be sustainably maintained”

Zimmermann 2013:

“The Economy of Green Cities”

The Fraunhofer Morgenstadt (“City of Tomorrow”) Initiative is making an active contribution to shaping sustainable urban systems worldwide. Members of the Initiative share three important convictions:

- Cities are the key to a sustainable future.
- Technical, social, and financial innovations are the key to sustainable cities.
- Interdisciplinary collaboration lies at the heart of urban innovation.

Based on these principles, the Fraunhofer Innovation Network “Morgenstadt: City Insights” has developed a pioneering approach to urban systems research. In the first phase, ten Fraunhofer Research Institutes joined forces with a network of high-profile industry and city partners to analyze successful sustainable urban solutions in six leading cities worldwide. The analysis resulted in a) an in-depth catalogue of best practices and innovations and b) a whole systems analysis toolkit that identifies key factors and forces that create the conditions for sustainable solutions to thrive.

In the second phase, the City Insights Network will focus on implementing innovative solutions in selected cities. Concrete, context-based solutions will emerge from the “Morgenstadt: City Insights” collaborative analysis process and the development of transition road maps.

Aims and structure of the network

Both creating and responding to “the city of tomorrow” require new ways of thinking. Conventional products and solutions oriented to single consumers or single markets must be replaced by integrated approaches that relate to whole urban systems. Future cities must master an innovation loop based upon a new relationship between information, resources, products, natural systems and users ...

The primary mission of the City Insights Network is to identify, develop, initiate, and implement pilot projects that demonstrate sustainable urban solutions. Solutions will be developed by various stakeholder constellations from industry, regional governments, community organizations, and research institutes. Strong competence in collaborative strategic planning and implementation is joined with deep, specialized expertise in leading-edge technological, natural and social systems.

We bring together strong consortia from industry, cities, and research to support the long-term transition of selected cities towards sustainable development and to thereby create compelling reference projects at the level of urban districts, whole cities, or entire metropolitan regions.

We aim to become the leading global alliance for planning and implementing systems-based sustainable urban solutions in cities around the world.

Morgenstadt Foundations (Phase I)

In Phase I, the City Insights Initiative conducted an on-site analysis of six leading cities: Singapore, Freiburg, Copenhagen, Berlin, New York and Tokyo. Over one hundred global best practices were identified and evaluated in the sectors of energy, mobility, ICT, buildings, production & logistics, security, governance and urban water infrastructure.

The results of these investigations were brought together in an integrated action-oriented model for sustainable urban development. The “Future City” model is a tool that can be used to analyze any city’s sustainability performance and potentials from a whole systems perspective. Working together, relevant stakeholders can use inputs from the “Future City” analysis to derive targeted initiatives, projects, and strategies for accelerating sustainable development in each unique context.

Approach and scope (Phase II)

In January 2013 City Insights project partners inaugurated an R&D Platform and put forward a multitude of concepts for innovative applied research projects for cities and pilot projects in various sectors. The City Insights Network will build upon this R&D platform in the second phase.

The City Insights Network facilitates focus groups around specific sectors and will engage more deeply with 3-4 selected cities.

A multidisciplinary project development team serves as a research and business development unit for initiating long-term collaboration with selected cities:

First, the team will identify a number of key cities that are ready to engage with the City Insights Network. Based on specific criteria three or four cities will be selected for the first round of collaboration.

Next, in close collaboration with city counterpart teams and local stakeholders, the project team will conduct an on-site analysis based on the City Insights model. They will identify promising action areas and develop strategies and roadmaps for the city’s long-term transition to sustainability. Throughout the process, City Insight partners will work together with cities and innovation networks to develop and implement projects.

The R&D platform coordinator will actively engage all actors by supporting and developing promising proposals, by searching for viable possibilities for project financing, and by coordinating the application process.

All participants will meet regularly in workshops and conferences to address specific research topics and build smaller, project-focused project consortia. Member cities will communicate their requests and market requirements through the City Insights Net-

work, and project partners, in collaboration with city stakeholders, will work towards presenting innovative solutions.

Value for all: participating cities will receive the benefit of top-quality research and analysis, collaborative strategy development, and leading-edge project implementation. Industry and research partners have the opportunity to develop and showcase innovative solutions and flagship projects that will enable them to access and shape key future markets.

Project duration

The second phase of the City Insights project, starting on January 1, 2014, is designed as a long-term alliance. Membership starts at a two-year contract and can be extended on an annual basis.

Project financing

The joint research and implementation project is financed primarily by members. The participation fee for different member categories is as follows:

	Participation fee
Enterprises	50 000 € p.a.
SME/NGO	25 000 € p.a.
Cities	15 000 € p.a.

Expected results as of Dec. 2015

- Long-term collaboration established with at least three cities
- 3-5 system-wide projects per city, running or ready for immediate implementation
- 10-20 sector level projects by appropriate consortia of stakeholders and partners

Benefits for Project partners

Cities

- Learn about leading-edge technologies and applicable solutions from industry, research, and other cities
- Identify strategic partners and form collaborations for the implementation of specific projects
- Conduct a sustainability benchmarking quick check
- Access funding for specific projects
- Exchange and discuss experiences and promising practices
- Promote city brand and attract international attention

Companies

- Learn how products relate to cities and how to maximize market position
- Partner with business, research, and cities to generate pilot projects
- Access selected German and international city markets with a comprehensive and systemic approach
- Co-create roadmaps and urban development strategies in selected cities
- Influence scope and content of smart/sustainable city projects in early project development stages
- Gain access to regional and international funding
- Promote global brand
- Inform product development and logistics processes based on future city scenarios