

## Low Carbon Future Cities – A Sino-German Cooperation on an Integrated Climate and Resource Proof Urban Development

### The Challenge

Increasing urbanisation and climate change are two of the great challenges of the 21st Century. Cities cover only 1% of the Earth's surface, but are home to about 50% of the Earth's population (soon 60%). Accommodating more than three billion people, cities are major sources of greenhouse gas emissions. Up to 80 % of global greenhouse gas emissions are estimated to originate in urban areas, providing large mitigation potentials, e.g. through Low Carbon City (LCC) concepts and strategies. At the same time, with high population and infrastructure densities, as well as concentrated economic activities, cities are particularly vulnerable to the impacts of climate change and therefore need to adapt.

### Aim of the Project

Based on the challenges posed by climate change for urban settlements, the project has the following *main objectives*:

- To develop an **integrated low carbon, circular economy and adaptation strategy** for a city government in China and Germany that addresses the needs of political and industrial decision-makers. The concept of a circular economy describes the idea of improving resource efficiency in order to decouple resource usage from economic growth.
- To show **good practice examples of sustainable urban development** that have a high potential for implementation and replication in other urban areas.
- To initiate a stimulating dialogue among stakeholders from Wuxi and Düsseldorf to enable and actively support **mutual learning and information exchange between China and Germany**.

### Project Approach

- The **holistic and integrative approach** to combine mitigation, adaptation and circular economy will be applied for the first time on such a large scale. Synergies and trade-offs between these three major challenges of urban restructuring shall be identified.
- The strictly **participatory approach** aims at an early integration of urban stakeholders in China and Germany into the strategy development. This shall ensure high applicability and timely implementation of the developed concepts and strategies.
- The **integrated development of business models and other tools** aims at involving in particular the urban economic stakeholders. They are crucial given the depth of the needed comprehensive strategies towards climate change and circular economy.

### The Project consortium

- Wuppertal Institute for Climate, Environment and Energy (WI)
- Tsinghua University, Research Centre for International Environmental Policy (RCIEP)
- China Environment Research (CER)
- Chinese Society for Sustainable Development (CSSD), Low Carbon Group
- China Meteorological Administration, National Climate Centre (NCC)
- UNEP Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production (CSCP)
- Wuxi Low Carbon Development Research Centre (WLCDRC)

### Cooperation partners:

- Düsseldorf Environmental Office
- Wuxi Development and Reform Commission



## Join the Sino-German Low Carbon City Dialogue!

For developing Low Carbon Future City strategies the input of practitioners is essential. The Sino-German City Dialogue is a crucial part of this project. It aims at encouraging decision-makers from politics, industry, civil society or other relevant organisations to strengthen our scientific research with their profound knowledge and experience. For that purpose, four stakeholder fora will be held.

The Sino-German Low Carbon City Dialogue offers you an excellent opportunity to

- enter into an inspiring exchange of knowledge and views with other Chinese and German practitioners.
- contribute your valuable input to a highly innovative and unprecedented process of strategy development.

## Your Benefits

Developing an integrated strategy offers the following advantages:

- Gain new insights through first-hand research by international experts and discussions in working groups
- Excellent networking opportunities with German and Chinese experts on a field of high strategic and economic relevance
- Establish contacts for future cooperation and partnerships
- Find new business models and opportunities for a low carbon future
- Achieve sustainable economic and urban development
- Contribute to a climate-resilient environment

The project will facilitate knowledge exchange and mutual learning between China and Germany. It will establish a network of dedicated experts and decision-makers – you could be part of it!

## The project cities

*Wuxi / China:*

The Chinese city of Wuxi, a five-million inhabitant city near Shanghai, was chosen as a project city because of its ambition and political willingness to pursue a low carbon development path and *green entrepreneurship*. At the same time, Wuxi is exposed to climate and weather related risks such as floods, droughts, extreme temperatures, and water logging, which have negative impacts on society, economy, and ecology. All these risks and vulnerability are projected to be aggravated under a changing climate.

*Düsseldorf / Germany:*

In Germany, the city of Düsseldorf serves as the counterpart for the study. The project team closely collaborates with the Department for Environment of Düsseldorf. The city of Düsseldorf is a densely populated city of high economic and political relevance whose political decision-makers have recognised the challenge of climate change and initiated a process of low carbon strategy development. Besides the city of Düsseldorf the neighbouring city of Ratingen (partner city of Huishan district in Wuxi) will also be engaged in the stakeholder dialogue.

In order to broaden the perspective of the project and to ensure comparability with Wuxi, further cities or administrative districts of the Rhine-Ruhr region with highly developed industrial structures will be integrated into the dialogue. Particularly an exchange with the Innovation City Bottrop seems promising.

In the long term the Low Carbon Future City project is intended to go beyond the two pilot cities or regions. It therefore incorporates activities involving non-governmental actors, focusing on low-carbon entrepreneurship, engaging retailers and a media campaign on low-carbon (and resource-saving) consumption.

## Contact

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