

# Future Cities

urban networks to face climate change

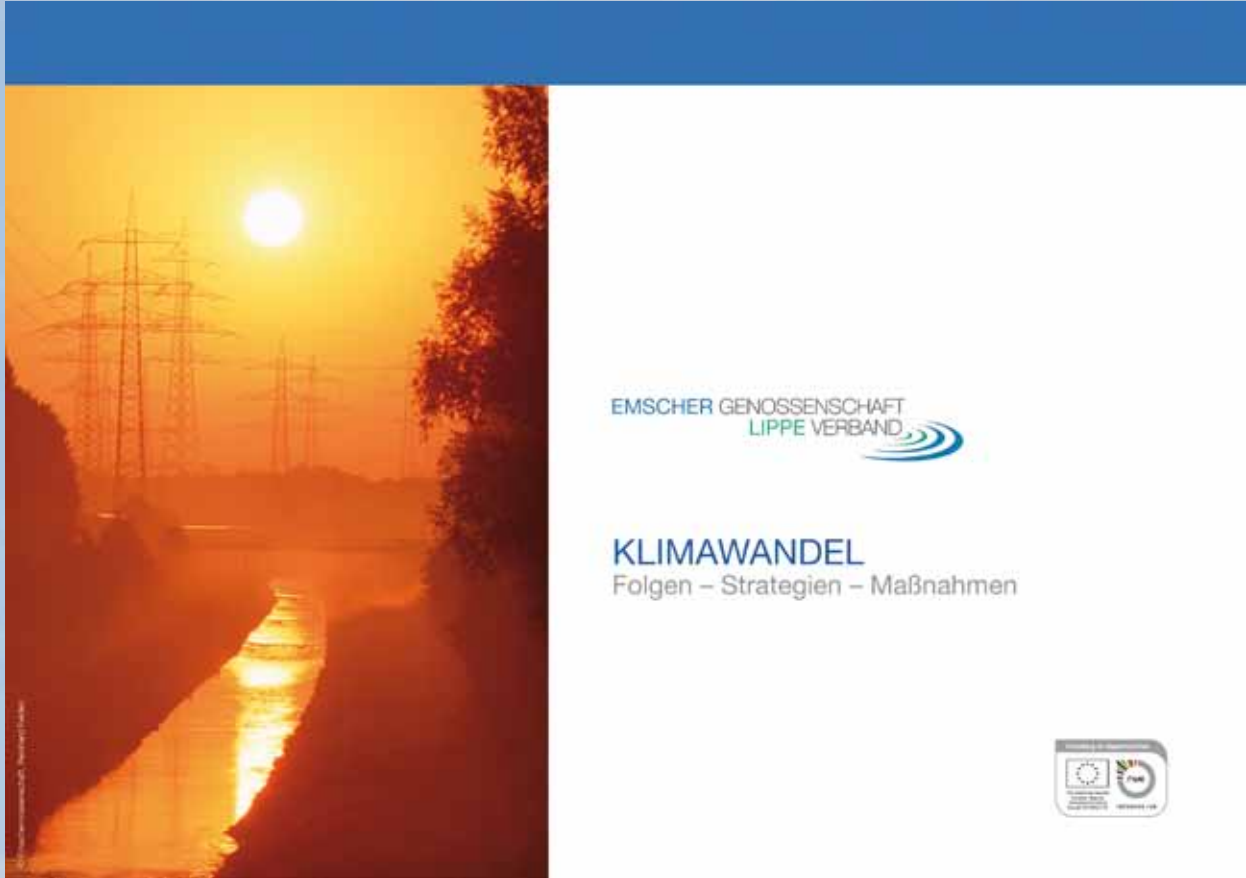
Making city regions fit to cope with the predicted impacts of climate change



## CLIMATE-SENSITIVE DEVELOPMENT IN THE EMSCHER CATCHMENT

### A regional guideline provides the framework

The catchment area of the Emscher is one of the most densely populated regions throughout Europe. The water board Emscher-genossenschaft establishes a ‘Guideline Climate Change’ for its own actions. The document will be a guideline for the own staff to understand coherences of climate change, water cycle and the water board’s activities. Recommendations for planning new projects, maintaining the water cycle and running the operating facilities are given. The guideline will be an awareness raising tool for the colleagues of the Emscher-genossenschaft, who can develop own ideas of mitigation and adaptation.



## JOINT FORCES FOR WATER MANAGEMENT AND URBAN DEVELOPMENT

### Business site ‘Scharnhölzstraße’ in Bottrop, Germany

Emscher-genossenschaft and the municipality of Bottrop are cooperating to restructure the industrial park ‘Scharnhölzstraße’ to become climate-proof. The business site is located in Bottrop on a former mining site. Today nearly the whole area is sealed with buildings and streets.



As a result of the ongoing redensification there are existing problems with floods after heavy rain events but also with heating up in summer time. These problems will occur more often and become worse with the upcoming climate change. The companies are important employers in Bottrop so that it is necessary to focus on this existing business site and strengthen the resident companies.



City of Bottrop

The project partners will develop together a couple of measures to adapt the companies to climate change effects. As a general, combined measure it is planned to redesign the existing sewage system and bring the rainwater in a separate open channel to the nearby river Boye. Furthermore single measures on every company site and in the public space shall improve the business site. These measures are, for example greening roofs, greening walls, photovoltaic installations, usage of rainwater or the planting of hedges between streets and buildings.

## MITIGATION IN WATER MANAGEMENT



### Shredder fibres for sludge de-watering

At the moment the sludge of three large waste water treatment plants is de-watered for incineration by adding fine black coals. At the pilot site in Bottrop, the fossil coal is substituted by shredder fibres, a product from car recycling. This also provides good dewatering results and reduces the greenhouse gas emissions.

## PROJECT PARTNERS

