

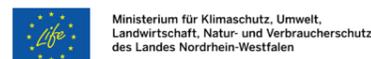


# EMIR

## ABOUT:

In the Evolving Regions project eight participating regions will be enabled to develop and implement integrated and innovative solutions for the challenges of climate adaptation together with seven different partner institutions. The method of integrated road mapping, which will be further developed in the project, acts as a procedural framework and can be transferred to other regions in NRW, Germany and Europe. The overall project is coordinated by the Social Research Centre of the TU Dortmund University, forming a broad and interdisciplinary project consortium together with six other partner institutions.

Evolving Regions is a project on climate adaptation in North Rhine-Westphalia and the Netherlands, funded by the LIFE programme of the European Union and by the Ministry of the Environment of North Rhine-Westphalia (MULNV).



LIFE Roll-outClimAdapt - LIRCA



The project is funded by the EU's LIFE environmental programme and co-financed by MULNV NRW

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# About **EVOLVING REGIONS**

In many aspects of life people take preventive measures and protect themselves, their loved ones and their belongings from future uncertainties. They take care of their health and finances. But what is done for the immediate living environment in which people want to live? Neighbourhoods, municipalities, cities and districts are facing complex and constantly changing challenges due to climate change.

## ***HOW CAN REGIONS, MUNICIPALITIES AND RESIDENTS ADAPT TO THESE COMPLEX CLIMATE CHANGE CHALLENGES?***

These and other questions are to be answered by the Evolving Regions project, in which eight regions go through a complete climate adaptation cycle. This report gives a brief insight into the objectives, the project approach, introduces the participating regions and partner institutions and introduces the methodology of integrated road mapping.

# **DYNAMIC REGIONS**

## for a climate-robust future

Developing measures to be prepared for future events is a major effort for all of us. Evolving Regions provides a framework in which a wide range of different actors join forces on the road to a climate robust future. This means taking new paths of cooperation, developing and discussing common visions of the future, and using regional climate maps and regional analyses as a basis for developing actions for adapting to the consequences of climate change.

# Who is part of **EVOLVING REGIONS?**

The consortium of the project includes seven regions from NRW, and an association of two municipalities of the province of Overijssel in the Netherlands, and seven partner institutions. The regions are all rural regions with middle and upper centres. Despite many similarities, the consequences of climate change will have different effects in the regions, depending on local conditions. The diversity of impacts requires tailor-made responses.

**IN TOTAL, THE REGIONS IN NRW COVER ABOUT 25% OF THE TOTAL AREA OF THE MOST POPULOUS FEDERAL STATE IN THE FEDERAL REPUBLIC.**

Through the cooperation with the two Dutch municipalities, the Evolving Regions project aims at a cross-border learning process about different approaches to climate change adaptation.

The project is funded by the EU's LIFE environmental programme and co-financed by MULNV NRW

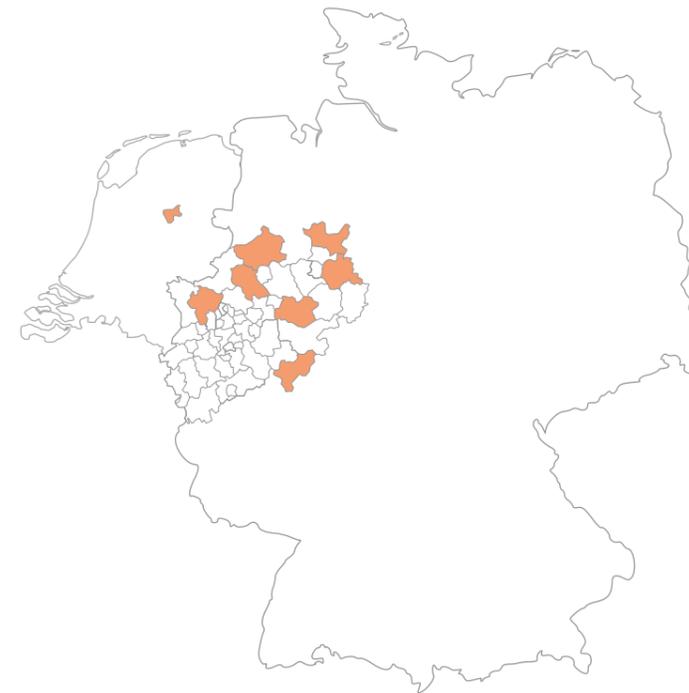


Figure 1: Project Participants in Evolving Regions

### PARTNER REGIONS

- District of Wesel
- District of Steinfurt
- District of Siegen-Wittgenstein
- District of Soest
- Geemete Zwartewaterland
- District of Minden-Lübbecke
- District of Coesfeld
- District of Lippe

### PARTNER INSTITUTIONS

- Social Research Centre of the TU Dortmund University
- Institute for Spatial Planning of the TU Dortmund University
- German Institute of Urban Affairs (Difu)
- PROGNOS AG
- BEW Bildungszentrum
- University of Twente
- ZDF Digital



# AIMS of Evolving Regions

Evolving Regions has three specific aims:

- 1 SELF-EMPOWERMENT:**  
 The participating regions will become climate resilient by establishing further cooperation, further climate knowledge, new dialogue formats and network structures in order to develop themselves as a region in the future.
- 2 INTEGRATION INTO PLANNING PROCESSES:**  
 The overarching theme of climate adaptation will be integrated into local and regional planning processes.
- 3 KNOWLEDGE EXCHANGE AND ROLLOUT:**  
 The Evolving Regions project will make available the roadmap procedure, which has been further developed in the regions, with maps on climate impacts, dialogue formats, exemplary strategies and bundles of measures, as well as monitoring concepts for other regions and potential service providers of the climate adaptation economy.

In order to achieve these goals, the project structure consists of four components: **(1)** the regional processes, **(2)** interregional exchange, **(3)** mainstreaming and transfer, and **(4)** monitoring. Of these four building blocks, the regional processes form the largest part of the activities in the Evolving Regions project.

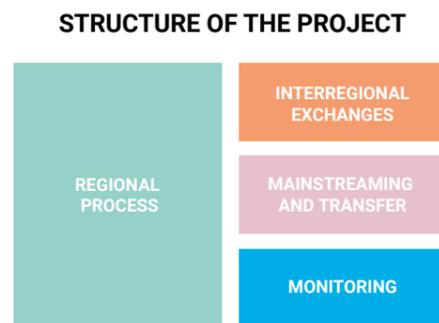


Figure 2: Structure of the Project



**DR. JÜRGEN WUTSCHKA**

Regional Development Department (climate protection, energy, mobility, digitisation and innovation, tourism, planning and development)

**DISTRICT OF SOEST**

„The district of Soest has been affected by storm and heavy rainfall events several times in the past. Climate change is also illustrated by the fact that a large number of spruce trees are currently dying in the Arnsberg Forest Nature Park, and the water level of the Möhnesee drinking water reservoir has fallen very sharply in the last two summers. The consequences of climate change will challenge us in the region. I hope that Evolving Regions will enable us to seize opportunities to shape the future dynamically and bring the various players in the district with us“.

**DISTRICT OF STEINFURT**

**SILKE WESSELMANN**

Head of Office, Office for Climate Protection and Sustainability



„In the district of Steinfurt, the consequences of climate change do not end at municipal borders. Extreme weather events such as heat and drought, for example, already affect all farmers and foresters in energieland2050. We therefore want to tackle adaptation to the consequences of climate change together as a region. We already have a good organisational basis for developing integrated climate adaptation measures. We want to expand this network together with Evolving Regions and work with cross-regional experts on climate adaptation.“

# BEYOND SPECULATION:

## Climate impact maps and stakeholder analysis as the basis for action

In order to be prepared for scenarios that lie in the future, it is important to know how the future will look like. The basis for the best preparation for the future is the broadest and detailed possible knowledge of today's conditions. In a first phase of the project the Institute for Spatial Planning at the TU Dortmund University is analysing possible effects of climate change and localising them in the eight partner regions. This work step serves to create a common working basis to get to know how climate change will affect the regions in concrete terms and to identify the concrete effects of climate change in the regions.

With the help of this basis, the impacts of climate change will become more visible and tangible for those involved. The visualisation of possible regional consequences of climate change not only reveals local vulnerabilities, but also sensitises regional actors to the need for climate adaptation measures. The Institute for Spatial Planning at the TU Dortmund University prepares the climate impact analysis in the form of maps and intersects the effect with spatial characteristics, such as the regional building structure with the climate impact, so that regional hotspots can be read off easily.

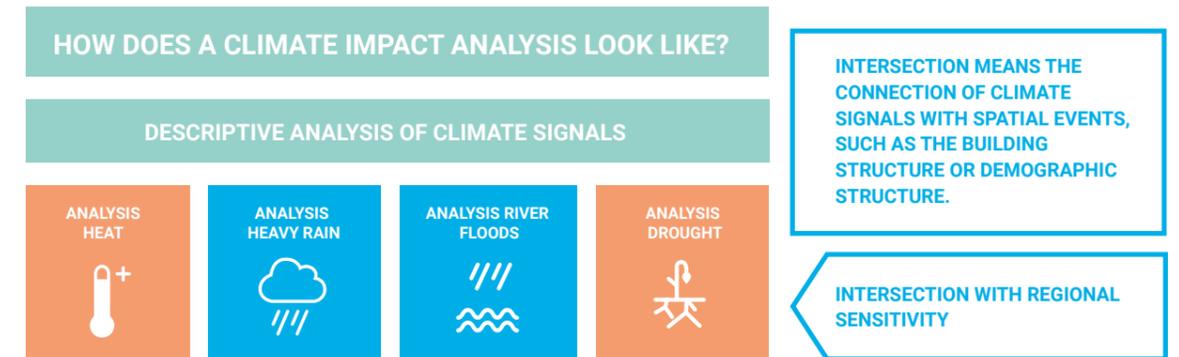


Figure 3: Climate Impact Analysis in Evolving Regions

How vulnerable a region will be to future climate events depends not only on the intensity of the climate conditions. The constitution of a system that is affected by a climate incident is also important. There are vulnerable systems and less vulnerable systems. There are systems that are vulnerable to heavy rainfall, while other systems are vulnerable to heat. Still other systems are vulnerable to river flooding. For meaningful analyses, it makes sense to take into account the future composition of regional systems (population structure, building substance, economic structure) in order to identify precisely fitting results of regional characteristics of climate impacts.

The analysis of the so-called social infrastructure in the participating regions is the second pillar of the tailor-made analyses in the Evolving Regions project. Regional climate adaptation is only possible with the participation of a diverse and broadly based constellation of actors. Therefore it is important to identify important regional stakeholders of climate adaptation and their activities, to address the actors, to integrate them into the project process and to use the regional knowledge for the validation of the results of the climate impact analysis and the development of concrete measures. The regional stakeholder analyses will be carried out in the project consortium by the Social Research Centre of the TU Dortmund University and the German Institute of Urban Affairs.

# REGIONAL DIALOGUES

for better joint action on  
climate change adaptation

Evolving Regions defines itself as a project that integrates actors from the partner regions and beyond into the individual project steps. In regional joint dialogues, the knowledge of the participating actors and the different experiences are used for the common success and at the same time serve the continuous development. Interdisciplinary discussions, workshops and other innovative formats focus on cross-sectoral dialogue between regional actors on various fields of action in climate change adaptation. In addition to the concrete development of climate adaptation measures, this dialogue leads to mutual learning processes among the actors involved and, in the best case, to a network of regional climate adaptation in the participating partner regions, which will continue to exist beyond the project duration.

## HOW CAN ACTORS AND REGIONS BECOME BETTER:

### MONITORING AS A TOOL

The regional processes of the Evolving Regions project are accompanied by Prognos AG. Prognos AG is responsible for the monitoring within the project and observes the regional processes under consideration of a special monitoring concept. Prognos will also evaluate the overarching activities within the Evolving Regions project. The conclusions from the monitoring processes will be used not only for quality management but also for the development of a funding concept to provide financial support for future climate impact adaptation measures. Thus, the project processes within Evolving Regions also serve to develop a new funding framework for climate adaptation measures. Monitoring in Evolving Regions thus serves not only for quality management, but also for the future improvement and stabilisation of the project approach beyond its duration.

## RESULTS OF EVOLVING REGIONS FOR INTERESTED ACTORS

In the work packages interregional exchange as well as mainstreaming and transfer the results of the project will be processed during the whole project phase and presented on the homepage [www.evolvingregions.com](http://www.evolvingregions.com) and the Evolving Regions Twitter channel. Other important dissemination channels are learning Labs, transnational workshops and community building activities. The Learning Labs will be addressed to interested representatives of external regions. During the Labs the results of the regional processes will be presented and discussed. The Learning Labs are explicitly aimed at interested representatives from other regions in NRW and the Federal Republic of Germany,

while the transnational workshops are designed for an international audience. Furthermore, a consultant training course will be designed, which aims to teach external consultants in the application of the roadmapping method and thus leads to building up a market of consultants for regional climate adaptation processes which will continue to exist beyond the project duration.

## DRAWING UP A ROADMAP - ROADMAP TO THE DESTINATION OF THE CLIMATE-ROBUST REGIONS

A so-called roadmap allows the user to get an overview of possible routes to a certain destination. Roadmaps provide information on the shortest route to a destination, alternative routes in the event of traffic jams and, depending on the level of detail, also information on possible stopovers on the way to a destination. In addition to searching for a route, roadmaps are also suitable for obtaining a general over-view of a depicted area and help to orientate in complex spaces.

At the end of the project, a roadmap is created in each region as a dynamic planning document. The results of the regional processes in Evolving Regions are collected in such a roadmap, which bundles statements about objectives, strategies, possible ways to reach the objectives as well as concrete individual measures, and is made available to the regions for further work. The roadmap thus serves as a guide for regional stakeholder to strategically plan and implement integrated climate adaptation measures in order to achieve their own objectives. The results of the regional processes bundled in the roadmap are the basis for making the regions fit for the consequences of climate change.

# FROM A-Z: A COMPLETE CLIMATE ADAPTATION CYCLE

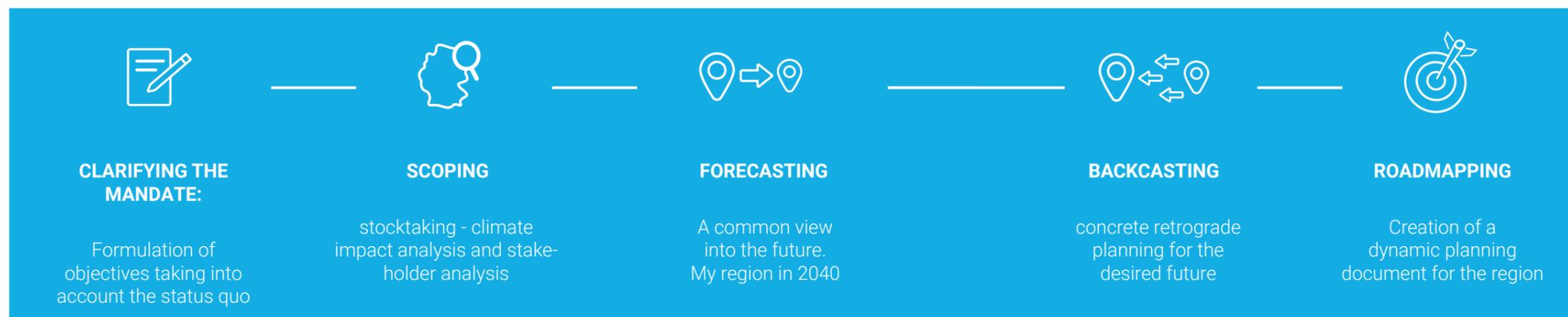
With the help of integrated road mapping, a participating region goes through different phases in the climate adaptation cycle:

Clarifying the mandate, scoping, forecasting, backcasting and the preparation of the roadmap as an integrated planning document.

Through the five different and successive steps, the integrated roadmapping method allows vision-based climate adaptation measures to develop and collect in a strategic planning document, in consideration of the initial situation.

The expected future is determined by an analytical procedure and the desired future is worked out by the participating actors in a process. The path to the desired future is then planned retrospectively

## POLITICAL ANCHORING



## STORYTELLING

## INTEGRATION IN EVERYDAY TASKS

The roadmap process involves local, regional and supra-regional stakeholders in the individual steps, uses regional knowledge and experience and is based on an empirically sound and region-specific database. Local stakeholder networks are identified and strengthened or newly established through the method. The external process, which is carried out in Evolving Regions by the Social Research Centre of the TU Dortmund University and the German Institute of Urban Affairs, is moderated to support and to enable planning actors sustainably the project regions. At the end of the process a roadmap is the product. The roadmap is used as a guide for regional actors to strategically plan and implement integrated climate adaptation measures in order to create climate-resilient regions of the future.

An important structural basis in the Evolving Regions project is the support provided by politicians and the technical, regional leaders from the administrations. The regional processes of the project are legitimised by a political and a professional mandate of the eight regions involved. The analysis of the basis for action, in combination with the vision-led development of measures, as well as the involvement of regional stakeholders and the enabling approaches of the individual project steps make the project, equipped with the professional and political mandate, unique in its kind. The interaction of different expertise of the partners in the project consortium in combination with the high performing regions provide promising initiatives in the field of climate adaptation, this impact will also be felt beyond the borders of Evolving Regions.



**KIM-NADINE ORTMEIER**

Energy and Climate Coordination Unit

**DISTRICT OF GÜTERSLOH**



*„Evolving Regions pursues an exciting approach that aims to ensure that participating parties and climate adaptation actors in the regions learn from each other and are enabled to cope with future climate events. We are very excited about the experiences of the participating regions and how we can use them for our own benefit“.*

**CITY OF MOERS**

**MARTIN DABROCK**

Department: Urban Development and Environmental Planning, Building Supervision



*„Climate events can directly affect the lives of many people. Periods of drought represent a major challenge for agriculture and forestry, but heavy rainfall events can also destroy entire harvests. Transport routes are also affected by the increasing frequency of extreme weather events: storms can paralyse transport routes, heat can cause road surfaces to crack, drought brings inland waterways to a standstill. This has a direct impact on the economy, which depends on functioning transport infrastructure. I hope that Evolving Regions will provide integrated approaches to develop regional solution strategies to cope with the consequences of climate change“.*

The project is funded by the EU environmental programme LIFE and co-financed by the Ministry of Environment, Agriculture, Nature and Consumer Protection North Rhine-Westphalia.

**PROJECT DURATION:****01.07.2019 TO 31.03.2023****PROJECT COORDINATION:****JÜRGEN SCHULTZE**

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