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Future initiative «Klima.Werk» : collaboration from the very beginning

Le réseau “Klima.Werk” : une collaboration très en amont

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RÉSUMÉ

Dans le bassin hydrographique de la région métropolitaine de la Ruhr, en Rhénanie-du-Nord-Westphalie, qui compte plus de 5,5 millions d'habitants, il s'agira de planifier et de mettre en œuvre des mesures d'adaptation au climat à échelle régionale dans les années prochaines, dans le but de développer des villes-éponges modernes, multifonctionnelles et orientées vers l'avenir. Avec le projet „Klima.Werk“ - un réseau interprofessionnel et interurbain qui vise à planifier et implémenter des mesures d'adaptation au climat dans la région - de plus en plus d'infrastructures bleu-vert seront créés avec le large soutien de l'Emschergenossenschaft et du Lippeverband (les entreprises de gestion des eaux de droit public dans le bassin versant de l'Emscher et de la Lippe). Dans ce contexte, la coopération interprofessionnelle et interorganisationnelle dès le début doivent être considérées comme deux facteurs de réussite importants. Parmi les différentes méthodes de travail employées par le „Klima.Werk“, le format de travail *“table de projet”* a prouvé son efficacité pour rendre plus agile la coordination des travaux transversaux nécessaires pour l'exécution d'un projet.

ABSTRACT

In the hydrographic basin of the Ruhr Metropolis, located in the federal state of North Rhine-Westphalia and inhabited by more than 5,5 million people, extensive climate change adaptation measures will be planned and implemented within the next years. Following the sponge city concept, these measures aim at designing modern, multifunctional and sustainable cities. The future initiative “Klima.Werk”, a multidisciplinary and intercommunal network, plays a crucial role in strengthening the region's blue and green infrastructure. It is supported by the regional waterboards Emschergenossenschaft and Lippeverband, and its main goals consist in both planning and implementing climate change adaptation measures at a regional scale. The commitment for cooperative governance structures and a participatory approach from the earliest stages of planning has shown to be a key factor for successful project management and administrative behaviour in this context. Within the wide range of project management tools and working methods used by the Klima.Werk initiative, the so called *“Projektisch”* (lit. project table; meaning see below) has proven to facilitate the overarching planning process efficiently.

KEYWORDS

Climate resilience, integrated planning, multi-department cooperation, municipal strategy, sponge city

1 INTRODUCTION

Human life and natural resources are under increasing threat of both drought periods as well as extreme rain events. The sponge city concept and its philosophy to retain (storm)water at its source contributes to a greater resilience of our cities and rural areas in the face of extreme meteorological events.

Approaches that are jointly supported by cities, municipalities, and water boards play a key role in the response to climate change, especially in large urban agglomerations.

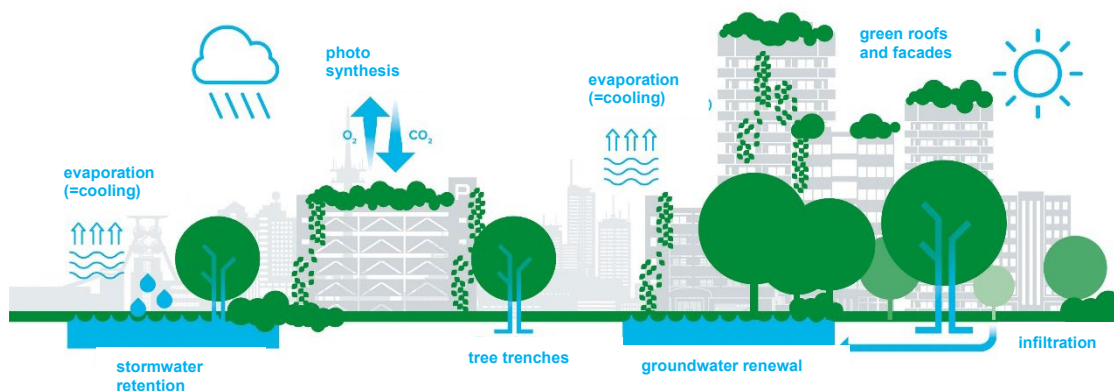
2 NETWORKS AND WORKING FORMATS IN THE EMSCHER REGION

2.1 The Klima.Werk initiative

The Klima.Werk initiative is a multidisciplinary and intercommunal network that supports the planning and execution of climate change adaptation measures in its catchment area. It was brought to life in one of the biggest conurbations in Europe, the Ruhr metropolitan region in North Rhine-Westphalia with more than 5.5 million inhabitants. The central hub of the network and a driving force behind the implementation of climate change adaptation measures is the so-called service organisation (KW-SO), led by the waterboards (public organisations under federal law) EmscherGenossenschaft and Lippeverband.

The KW-SO supports municipalities in developing and implementing projects and securing financing through various funding programs by the ministry of environment as well as the ministry of urban development. A central focus of the network is the funding program KRiS (climate-resilient region with international appeal) by the state of North Rhine-Westphalia. It funds the implementation of sponge city measures and projects for climate change adaptation in at least one project quarter per municipality.

In addition to the positive effects of climate change adaptation, the sponge city offers a lot of potential for the design of sustainable cities with good living conditions. Sponge city measures combine challenges in areas such as urban climate, transport, energy, economy, digitisation, social requirements like sojourn quality and more. Their comprehensive planning processes therefor require cross-departmental and cross-organisational cooperation, which municipal administrations are not yet accustomed to.



The « sponge city » modules and effects (© EmscherGenossenschaft)

2.2 Interactive format : “Projektisch”

Administrations must adapt new ways of thinking and courses of action to be able to design climate-resilient and multifunctional urban spaces. The successful implementation of interdisciplinary projects depends on comprehensive and interdisciplinary thinking and acting instead of isolated approaches of any municipal department. The limiting factor is often not a lack of (human) resources or technical solutions, but rather the insistence on functional responsibilities, the refusal to commit to joint objectives and a lack of perspective from outside a department’s subject area.

Replacing traditional processes with new methods and instruments when suitable can be an important factor on the way to climate resilient cities. One of the formats that has supported or even enabled the work of the Klima.Werk network is what will be referred to as “*Projektisch*” (lit. project table – in the meaning of strategy development by joint discussion and identification of synergies). Some of its merits are the following:

- joint activation of financial resources,
- Multi-disciplinary acceptance of a shared goal and responsibility for the success of the respective project

This format has been developed, tested and optimised within the Klima.Werk network. It has produced results that could not be reached if the projects were handled one-by-one by each department involved as it used to be the norm. Some principles need to be considered for a *Projektisch* to be successful:

A careful preparation by the initiators is essential. As part of this preparation the goal needs to be described as precisely as possible. It specifies the motivation for the project to be and serves as orientation in the process of the *Projektisch*. This includes the at times difficult task to define guiding principles without the anticipation of specific potential results. The aspects of technical or financial feasibility should not be given too much weight in the early stages of the process. This encourages participants to be open to new ideas and unexpected results that can eventuate through the interdisciplinary input and open discussions of the format.



Projektisch during a regional Klima.Werk network meeting : participants from different departments an different municipalities discussing and developing ideas for the climate resilient planning in a district in Herten

The aforementioned funding program “KRIS” requires the definition of so-called focus quarters in each municipality in which climate adaptation measures will be implemented extensively. This is to ensure that significant and measurable effects are achieved, which inhabitants (less heat stress, less flood risk) as well as water bodies (less CSO-induced hydraulic and chemical stress, more nature-like flow regime) can profit from in a meaningful way. Both the potential as well as a need for measure implementations should be present for a certain area to be defined as a focus quarter. The climate change adaption measures ideally have synergies with other aspects of urban living quality (see above). The identification of such focus quarters is an excellent example of use for the *Projektisch*.

3 CASE STUDY: THE BOCHUM FOCUS QUARTER

3.1 The background

In 2021 the Klima.Werk organised a Projektstisch for a possible focus quarter in Bochum. What motivated the use of the format was the goal to identify measures that could be combined with an obligatory sewer reconstruction, which was being planned by the drainage department. While the sewer itself was already planned with a climate-resilient design, the identification of synergies could lead to additional measures to improved climate resilience in the area. Members of health, environment, planning, green and traffic departments were invited to participate, as well as representatives of housing companies and municipal companies (garbage management, energy-, water- and gas-supply).

3.2 The process

During the discussion, the view of all participants was widened from the singular sewer catchments to a wider surrounding. A core team consisting of representatives of the municipality and the KW-SO support team defined a direction of action for the quarter which was accepted and supported by all partners. Beyond the demands of climate resilience, the team took aspects of living conditions in streets, other public spaces and houses into account. Thereby manifold departments and disciplines felt responsible and motivated to participate in the discussion and to give impulses and ideas from their point of view. Well-known in theory from the beginning, it was surprising even for the initiators how evident the relation between climate resilience, blue-green infrastructure and sojourn quality became in the course of the process.

3.3 Exemplary results

We are giving three examples of climate adaption measures that were suggested for the area under consideration:

- Installation of cisterns with photovoltaic pumps to be used for irrigation of public green areas. Wherever possible the public should be able to experience the stormwater that is feeding the cistern e.g. through the use of open channels.
- Initiatives for the “adoption” of street trees, in which citizens take responsibility for the watering of “their” tree with stored stormwater
- Unsealing of a parking area achieved through the use of space-saving parking lifts, realisation of a pocket park with trees, basins, and seating accommodation taking up the freed-up space

The complex and multifaceted results of the *Projektstisch* were documented and summarised. Based on the achieved commitment for the overarching goals, the next step is to derive concrete projects in the focus area and to determine responsibilities for their joint execution.

4 CONCLUSION

To ensure the successful integration of the format into the existing systematics of planning and implementation, it is important for municipal leadership and heads of the departments involved to commit to the overarching goals as well as the interdisciplinary approach and procedure. Furthermore, it is vital to clearly coordinate roles and responsibilities and to maintain close communication between all parties. Following its early successes, the *Projektstisch* format is now used and getting developed further in other cities within the ZI network.