

# TransKOM – Transformation of Existing Urban Quarters

## The funding measure Resource-efficient urban districts for the future (RES:Z)

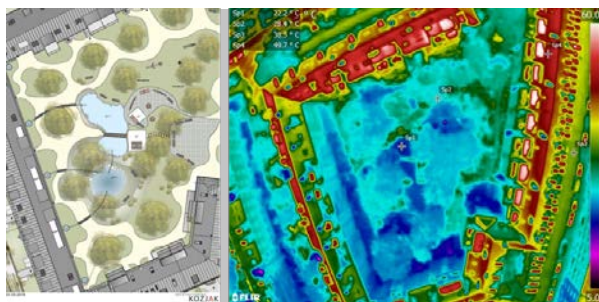
The concepts of quality-based separation drainage (qbTE) developed in TransMiT (1<sup>st</sup> funding phase) and the newly initiated administrative process StadtQuartier2050+ will be further developed and tested in TransKOM (2<sup>nd</sup> funding phase) as the basis for an institutionalized strategic neighborhood development at the intersection of water management and climate adaptation.

The German Federal Ministry of Education and Research (BMBF) is funding the project as part of the funding measure “Resource-efficient urban districts for the future (RES:Z).” The funding measure focuses on the resource-efficient use of water, land, material flows, energy and urban greenery in urban areas. The goal is integrative planning and sustainability-oriented management of urban neighborhoods with the participation and coordination of all relevant stakeholders.

### Strategic Planning at Neighbourhood Level

For climate-adapted and resource-conserving urban development in existing neighbourhoods, urban development needs must be considered in the long term and in conjunction with the redesign of the wastewater disposal system. To this end, the development and implementation of an overarching planning process at a strategic framework level is essential. This process should ensure that the structural deficits are overcome, as these are currently making it difficult to achieve the networking and planning coordination desired by all parties involved.

The “StadtQuartier2050+” strategy process developed as part of TransMiT (first funding phase) facilitates the implementation of measures in existing urban neighbourhoods. This is achieved through the early identification of conflicting objectives in each neighbourhood and a subsequent analysis of independent alternatives. At the end, a specific, comprehensive transformation plan is documented for each neighbourhood.



Assessment of Local Impact of Adaptation Measures for Climate-Adapted Neighborhood Development.

It is already apparent that the jointly developed information and knowledge-based decision-making, conflicts can be significantly reduced or dealt with in a solution-orientated manner. This enables long-term strategic decisions are made possible.

### Quality-Based Drainage – A New Drainage Strategy

The central urban water management question posed in TransMiT, “What direction should urban drainage systems take in the context of the challenges facing the entire city?” is answered with concept of quality-based separation drainage.

The concept focuses on the water quality of precipitation and offers simple options for utilising rainwater. This is achieved through the intelligent utilisation of the existing drainage infrastructure and the separation of water flows according to their quality. This means that water flows of lower quality are channelled to the sewage treatment plant in the combined sewer. Higher-quality partial flows, on the other hand, are retained for use in the neighbourhood.

Above-ground neighbourhood development is included in the concept across all sectors in order to improve the quality of rainwater. If water management and urban development go hand in hand here, the vision of an additional urban water supply component from locally collected precipitation can be realised. The technical core element of quality-based separate drainage is the wastewater diverter, which directs the rainwater in different directions depending on its quality.

## Application in Practice

In the TransKOM continuation phase, the concept of quality-based separation drainage is being tested and further developed together with the new “StadtQuartier2050+” management process in Hanover and Hildesheim. The aim is to establish these approaches as an integral part of strategic neighbourhood development.

### Funding initiative

Resource-efficient urban districts for the future (RES:Z)

### Project title

TransKOM – Integration of quality-based drainage system through transformation of municipal planning processes for existing neighbourhoods

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