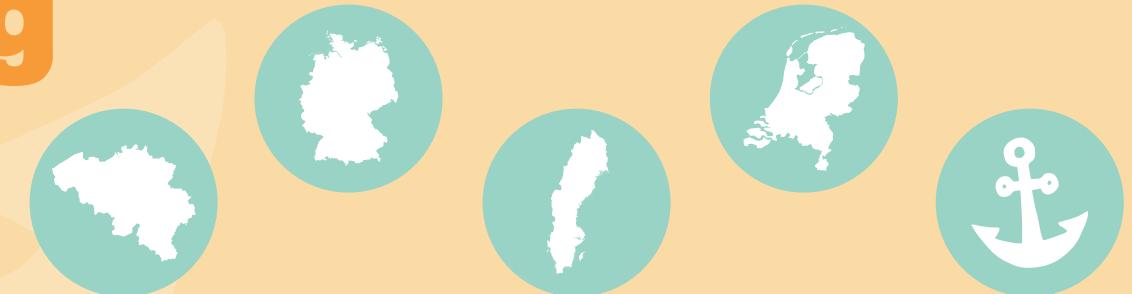


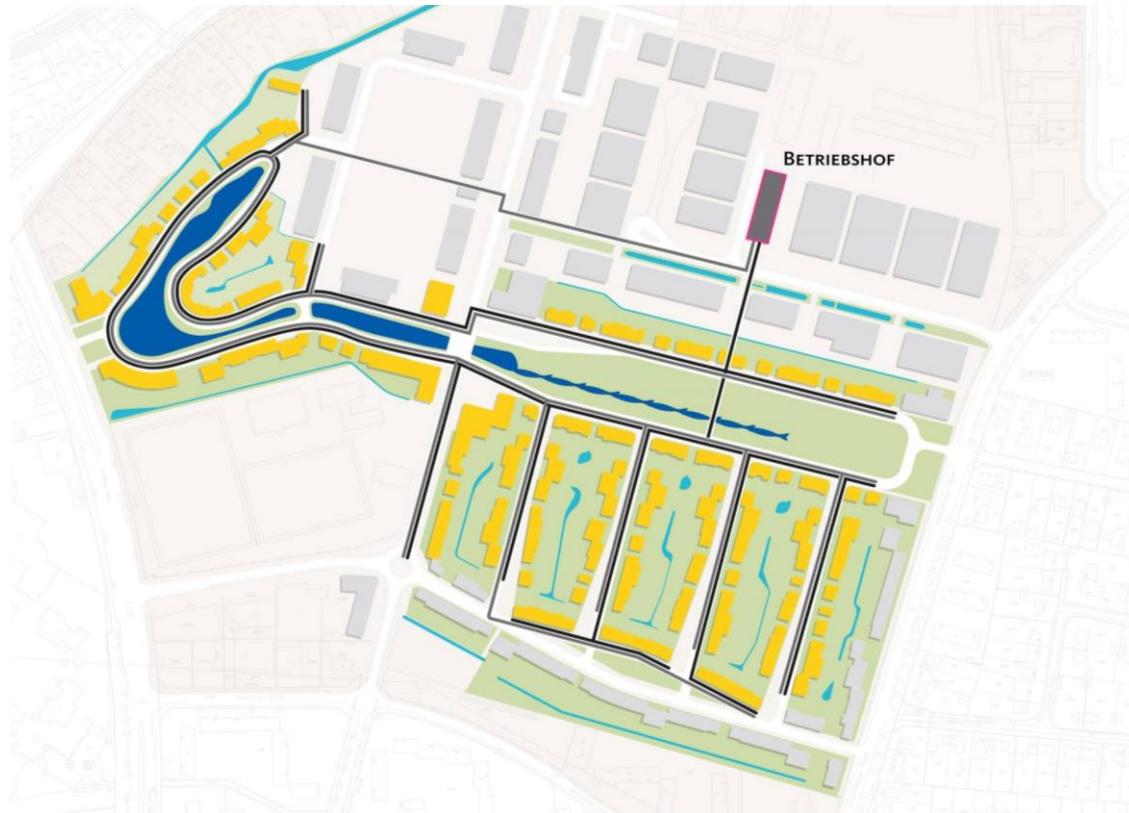
# City districts with source-separating wastewater systems

Gregor Rudolph-Schöpping | HAMBURG WASSER | Circular Solutions | 04.02.2026

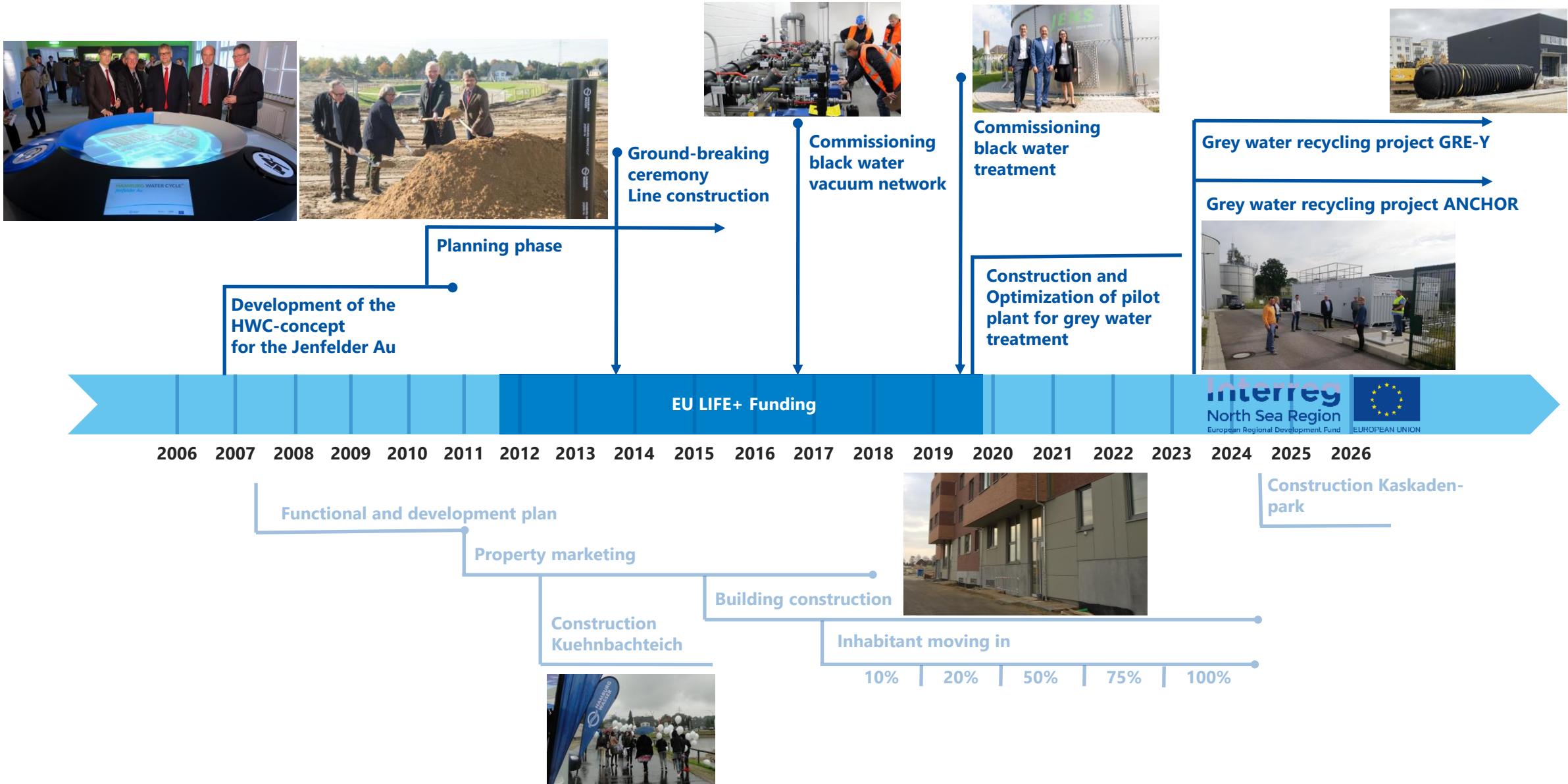


# Jenfelder Au, Hamburg, Germany

- New quarter on a **35-hectare** site of the former Lettow-Vorbeck barracks in the Wandsbek district
- Integrated large-scale implementation of a decentralised wastewater infrastructure for **835 residential units**
- In 2023, **2,180 inhabitants** were registered in the district



# Jenfelder Au, Hamburg, Germany – the history and status



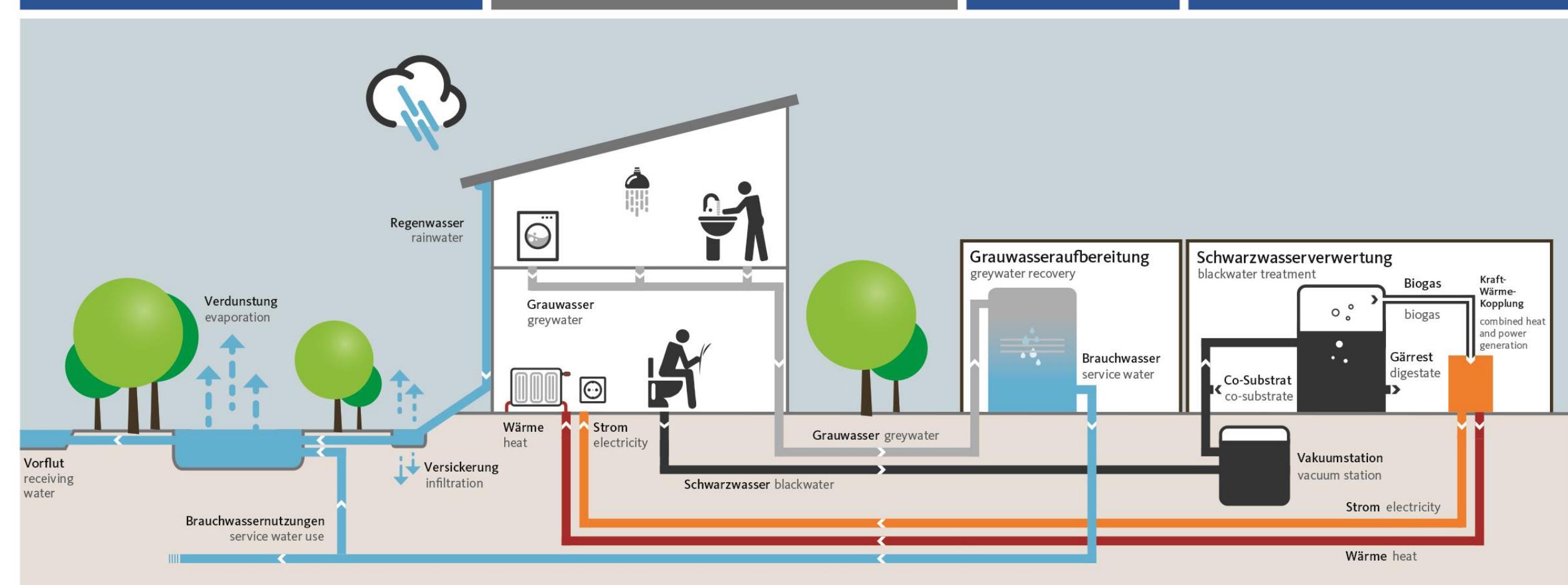
# The HAMBURG WATER Cycle® in the Jenfelder Au

REGENWASSER  
RAINWATER

WOHNQUARTIER  
RESIDENTIAL DISTRICT

GRAUWASSER  
GREYWATER

SCHWARZWASSER  
BLACKWATER



# Quality of treated greywater

Parametere	DWA M 277	Effluent values for the ultrafiltration pilot plant
Turbidity	< 2 NTU	<b>&lt; 0,07 NTU</b>
BOD <sub>5</sub>	< 5 mg/L	<b>2,6 mg/L</b>
pH	6,5 – 9,5	<b>7,25 - 8,22</b>
Total Coliforme	10.000 /100 mL	<b>&lt;1 MPN /100 mL</b>
E.Coli	< 1.000 /100mL	<b>&lt;1 MPN /100 mL</b>
P.Aeroginosa	<100 /100 mL	<b>&lt;1 MPN /100 mL</b>
N <sub>tot</sub>	-	<b>1,3 mg/L</b>
P <sub>tot</sub>	-	<b>0,27 mg/L</b>

**Greywater pilot plant meets all criteria** (technical and qualitative) for use class C2 according to DWA M 277 leaflet, so that toilet flushing and irrigation appear to be unproblematic

www.dwa.de

**DWA**  
Klare Konzepte, Saubere Umwelt,

DWA-Regelwerk

**Merkblatt DWA-M 277**

Hinweise zur Auslegung von Anlagen zur Behandlung und Nutzung von Grauwasser und Grauwasserteilströmen

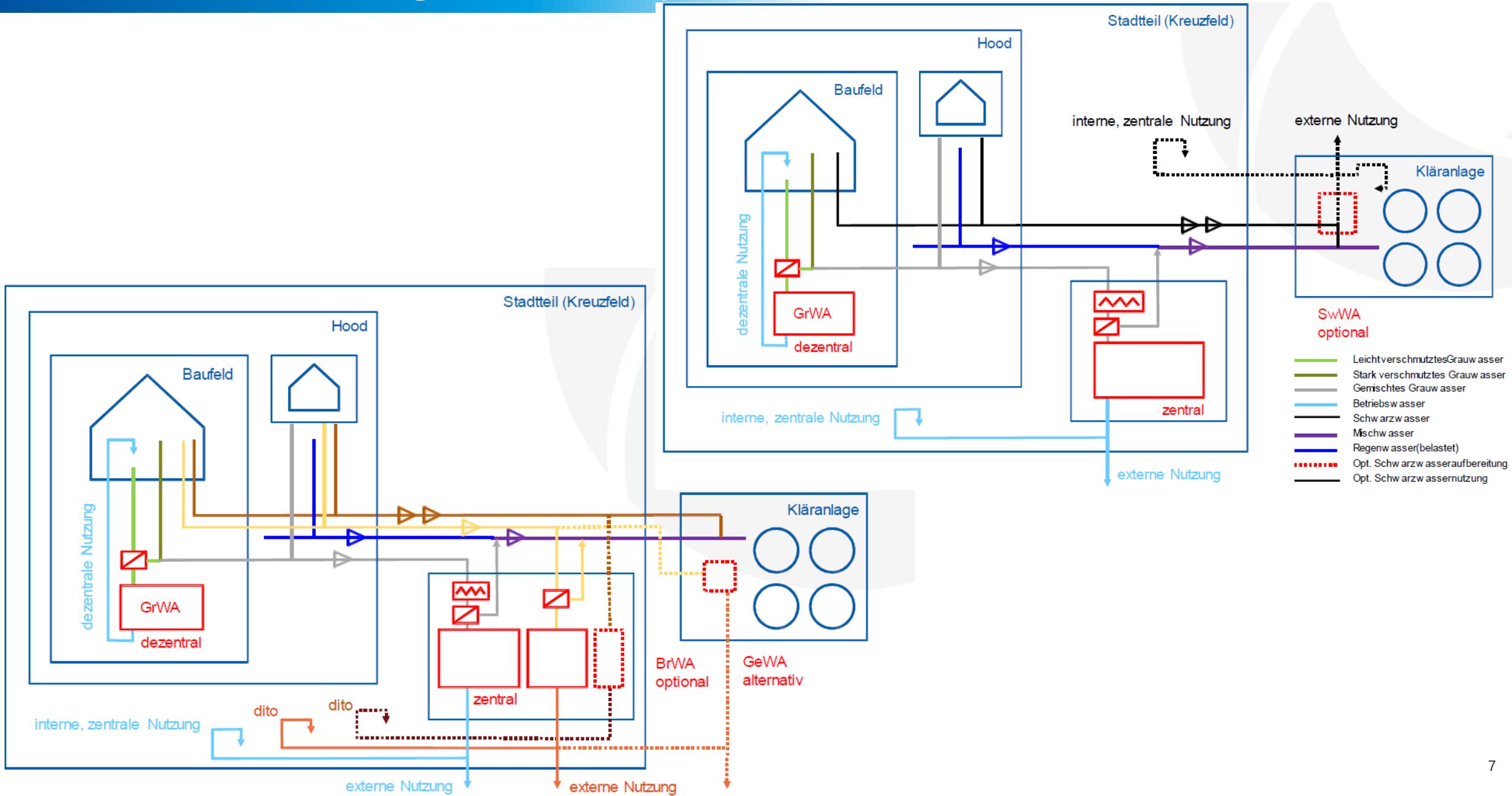


# Köln Kreuzfeld, Cologne, Germany

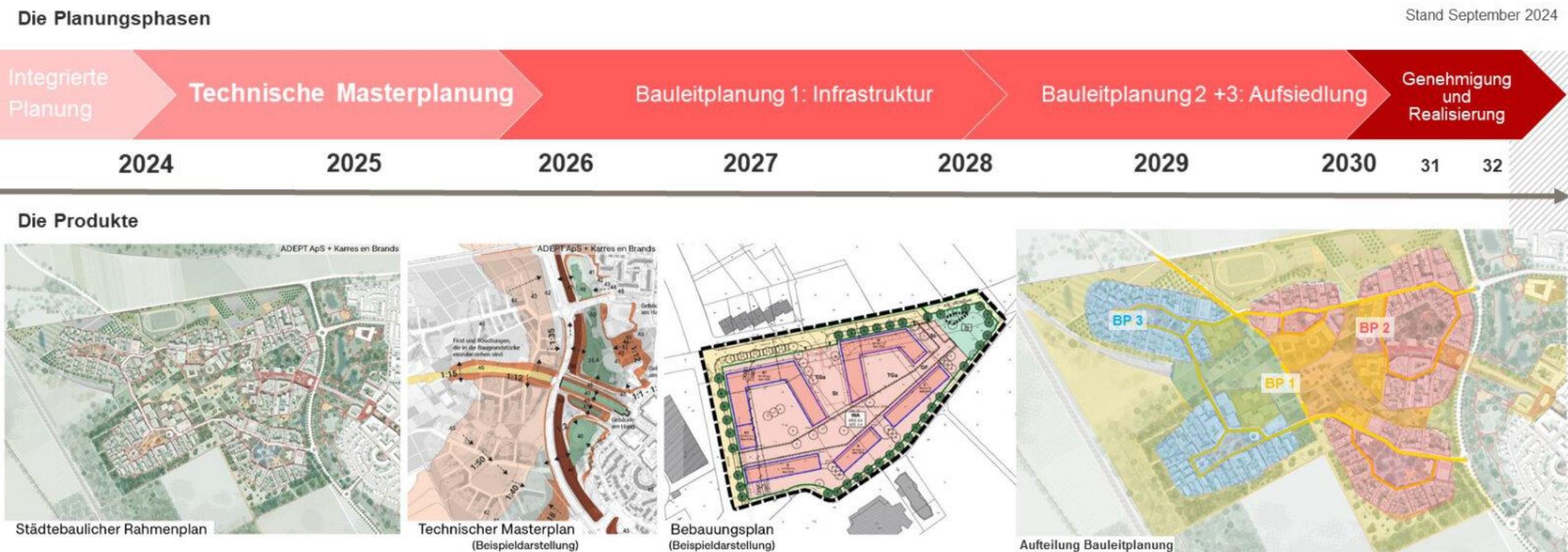


- 80 ha area
- Approx. 3,500 new residential units
- Approx. 8,000 residents

# Köln Kreuzfeld, Cologne, Germany



# Köln Kreuzfeld, Cologne, Germany – time line



# Zukunftsquartier, Paderborn, Germany

- Paderborn's largest redevelopment area, covering **54 ha** and located close to the city centre and university. Ownership was transferred from the British Armed Forces to BImA in 2019 and to the City of Paderborn in 2024, with key handover in January 2025.
- The first development phase is publicly funded under the "Growth and Sustainable Renewal" programme, securing support until at least 2031.

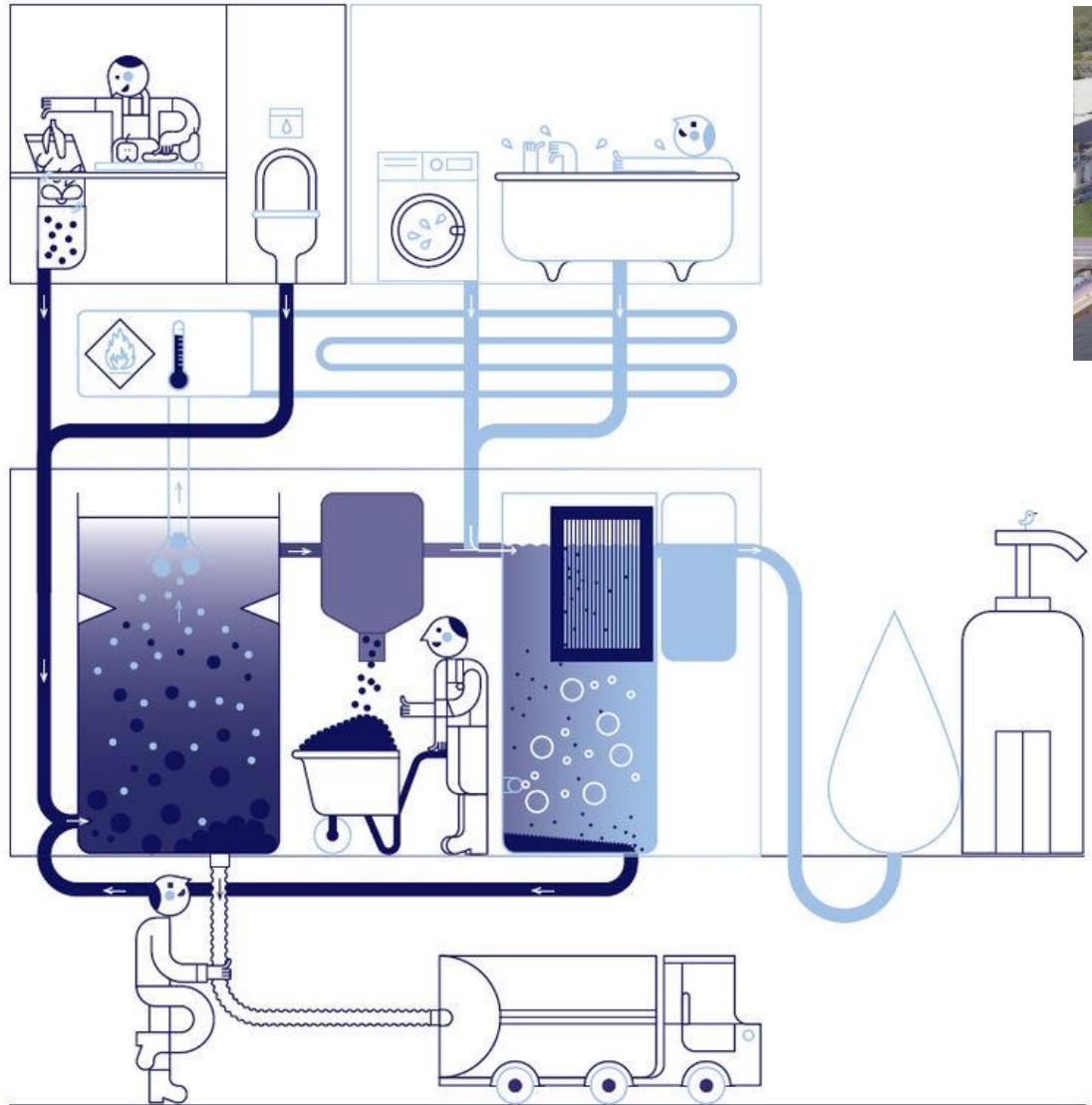


# Zukunftsquartier, Paderborn, Germany

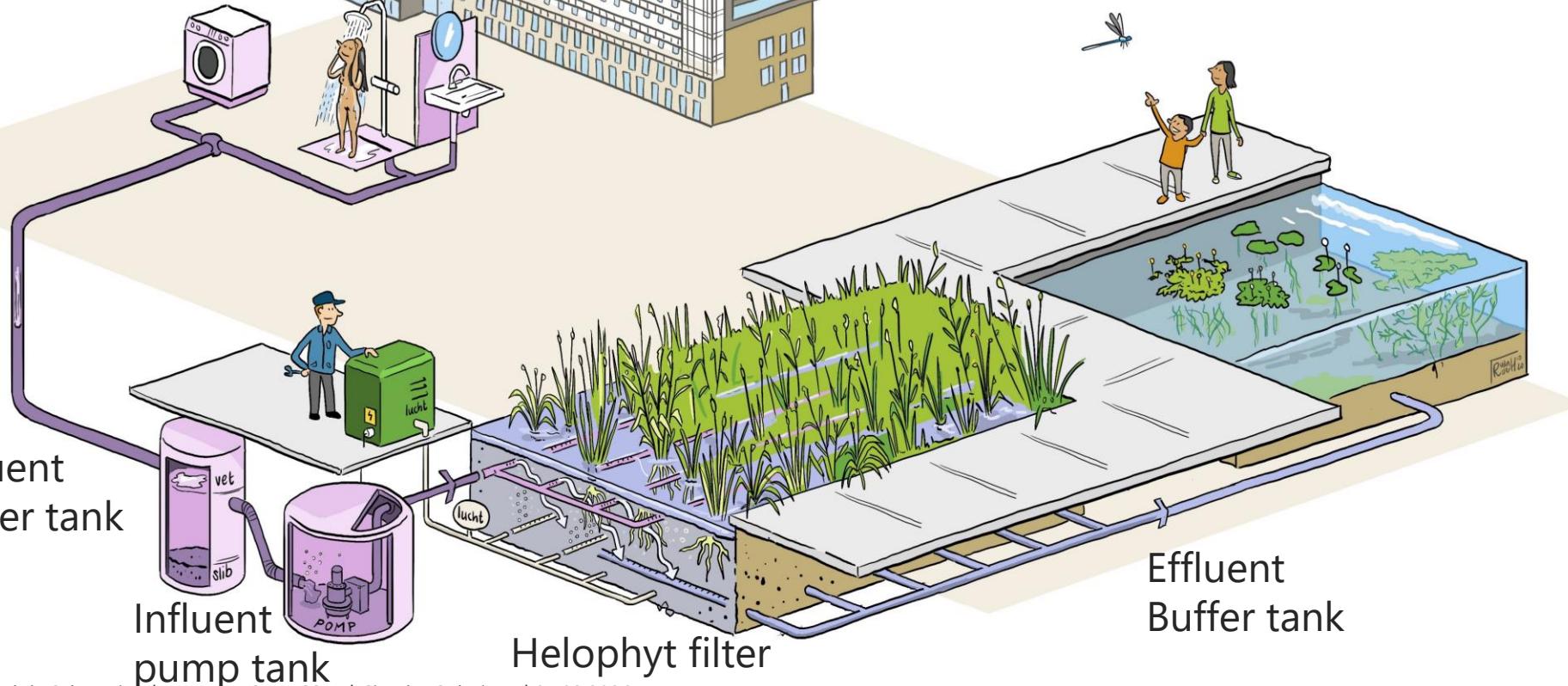
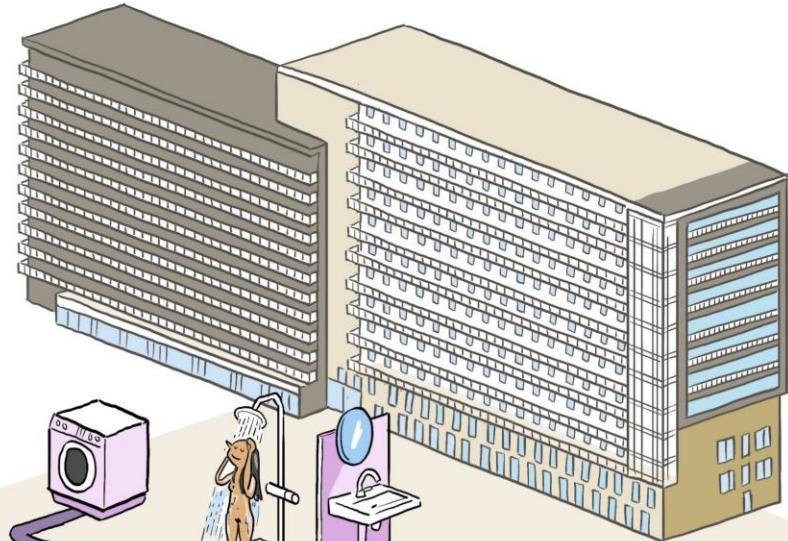


- Climate protection
- Circular economy
- Real-world laboratory
- City of Tomorrow
- Technological innovation
- New decentralized infrastructures
- State-of-the-art sustainability requirements
- Water-sensitive neighbourhood development
- Sustainable energy concept

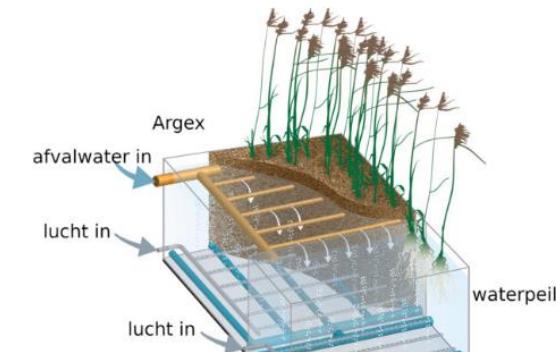
# De Nieuwe Dokken, Ghent, Belgium



- New quarter with around **400 residential units** as well as several community buildings supplied with energy and water infrastructure by the sustainability cooperative DuCoop
- Cooperative operates material flow separation system for the recovery of energy, nutrients and process water.
- About **1,200 inhabitants** connected to local water treatment, biogas and heat generation and closes cycles for water, energy and nutrients within the district.



- Three vacant high-rise buildings were demolished, and valuable materials in the project area were reused for **114 apartments and 15 single-family houses**, among other things, instead of being lost through demolition.
- Water serves as a central resource to be efficiently recovered and reused



# Spoordok, Leeuwarden, The Netherlands

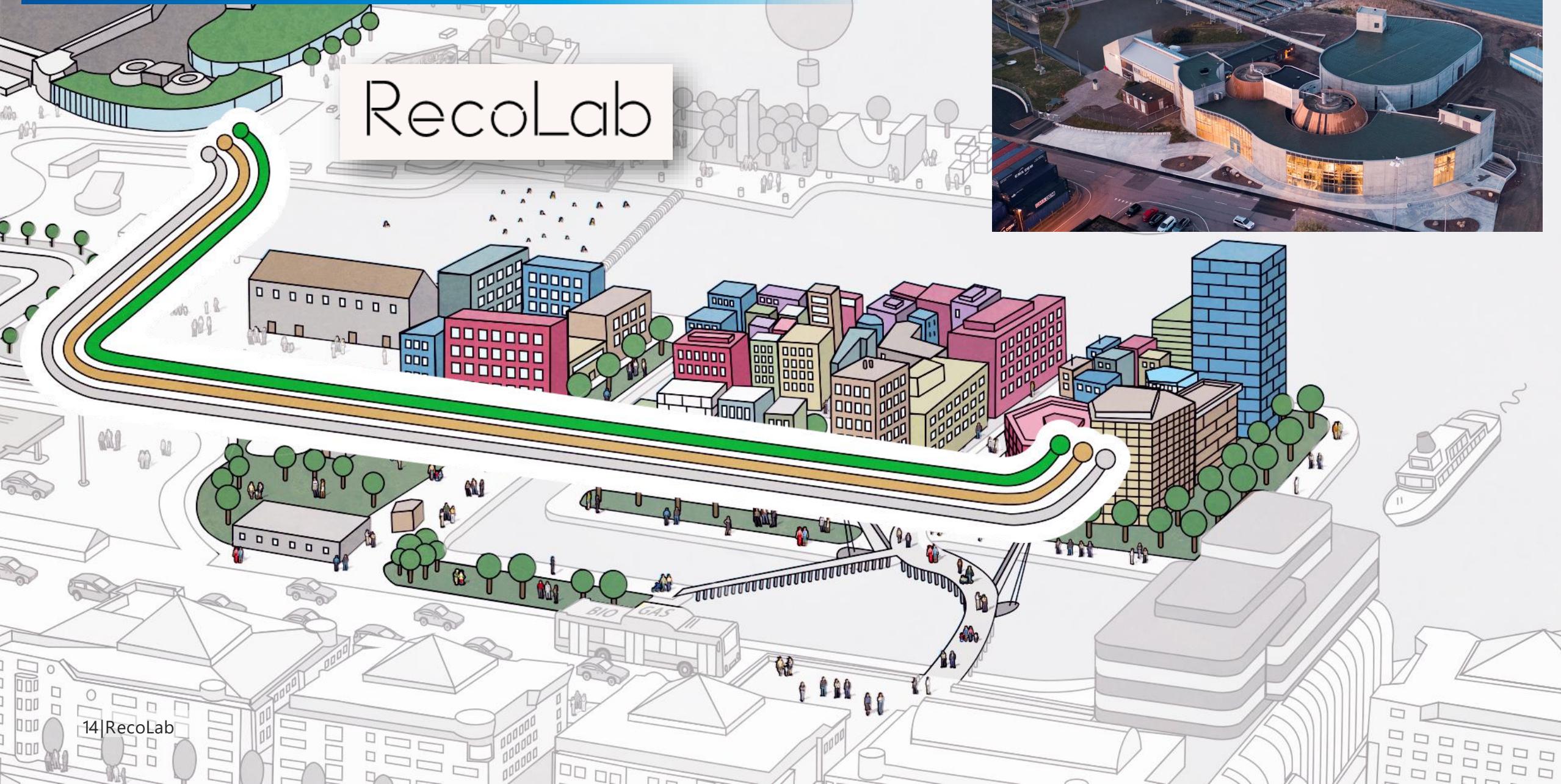
'NOT A SINGLE DROP OF WATER OUT OF THE AREA!'



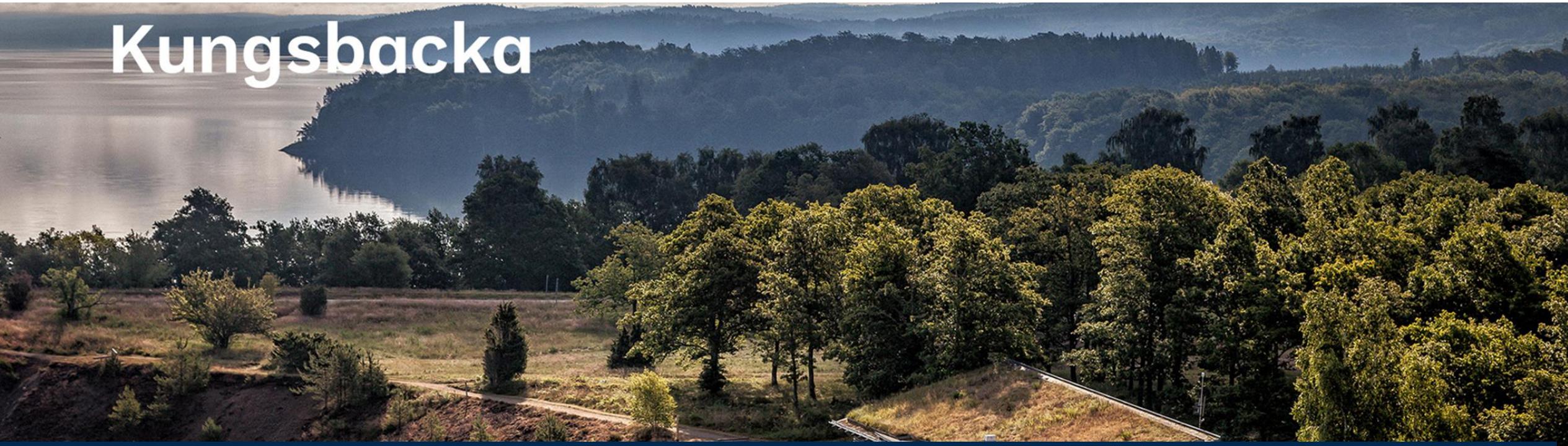
Renovation of the city district Spoordok in Leeuwarden:

- **19 hectare**
- **2000 houses**
- **+/- 4000 people**

# Oceanhamn, Helsingborg, Sweden



## Kungsbacka



- Follower city to ANCHOR, municipality on the west coast of Sweden;
- Kungsbacka is growing and **has high risk of water shortage in future** – this is main driver for interest in source-separating wastewater systems;
- Developing capacity in the municipality (planning, water, decision-makers) on March 18 with ANCHOR's road show

ANCHOR

# Thanks for your attention

 **Interreg ANCHOR project**

[www.interregnorthsea.eu/anchor](http://www.interregnorthsea.eu/anchor)

