

Connecting Huckarde district with the renatured Emscher River and Deusenberg sites



NBS description

The implemented NBS contributes to improved green corridors, connecting Huckarde citizens with the renatured Deusenberg landfill. The former landfill sites has developed into a recreation area frequently visited e.g., to walk, jog, watch birds or enjoy the view across the city of Dortmund.

The NBS implementation consists of a barrier-free 2.5 m wide and 115 m long foot and bike path was built to connect the existing Emscher river path with a paved maintenance road south of Deusenberg as a first step to improve the overall path network around the former landfill.

Adjacent drainage was constructed to lead the collected rain water of the path into the Emscher river. Three sorbus trees have been planted as an adjustment for interventions into vegetation. Slopes were sowed with biodiversity seeds. A bench will be installed close to the Emscher path.

Aim & goals

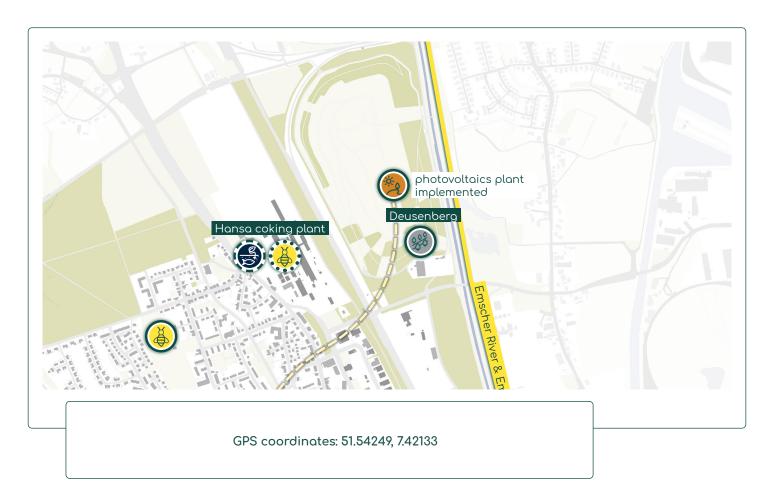
The Deusenberg hill has only been properly accessible from the northeastern side via stairs and a path. In the past, citizens of the Living Lab Huckarde have expressed the desire for better access. A connection between the existing Emscher path with a paved maintainance road south of Deusenberg already existed as a trodden path underlining the need improve this link.

The NBS implementation was the first measure of the longer-term goal to improve the Deusenberg path network for the International Garden Exhibition 2027. It aims at reaching the western part of the former landfill that will be part of the exhibition area.

In addition, the new path is part of a planned sports loop at Deusenberg foothill.

Area of implementation

The foot and bicyle path was built on a 1.500 m² site south of the renatured Deusenberg landfill.

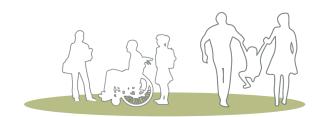




Target groups (beneficiaries)

Renatured Deusenberg landfill is a recreation area frequently visited. Key target groups include:

- Huckarde residents
- Physically impaired citizens
- Users of the Emscher river foot and bike path
- Perspectively, visitors of the International Garden Exhibition 2027 using the path to enter the Deusenberg area.



Stakeholder constellations

Main responsible partner

- Department of Urban Renewal, City of Dortmund: project management
- Department of Environmental Affairs, City of Dortmund: project approval, support with aspects of soil, nature protection, drainage
- Entsorgung Dortmund GmbH (EDG): site management
- Emschergenossenschaft und Lippeverband (EGLV): land owner
- Landschaft planen + bauen: planning, construction inspection
- Robert Kramer GmbH: landscape construction
- Wessling GmbH: soil expert (consulting, analyses)

ProGlreg partners involved

Department of Urban Renewal, City of Dortmund



Other stakeholders involved

- Koster & Kremke: preliminary soil analysis (three drill cores)
- Department of Real Estate/ City of Dortmund: transfer of ownership for one plot
- Local politicians: voting to realize the path
- NRW.Urban: working out call for bids for planning and construction inspection work
- Emschergenossenschaft (EGLV): interventions on plots of EGLV
- Neogrün: accompanying landscape conservation plan
- Bezirksregierung Arnsberg: warfare detection
- IGS: soil removal company









Planning and preparatory activities (administrative and technical procedures)

Planning this NBS required numerous steps:

- Initially, it was planned to upgrade an existing north-south path connection as the shortest connection between Huckarde settlement and Deusenberg landfill, but was refused by the private company owning the land. Soil contamination required time consuming site transfer and additional finances.
- Plot ownership had to be transferred from the City of Dortmund to EDG GmbH in order to ease construction and maintenance processes.
- In summer 2019, a feasibility study for a westeast path followed an existing trodden path.
 Three drill cores explored the degree of soil contamination.

- The City of Dortmund was not able to do the planning and construction inspection work in the given time frame, therefore NRW.Urban was hired to support the bidding process for planning and construction work.
- In April 2021, Landschaft planen + bauen took over the planning permission process and the application was submitted in August 2021
- The bidding process finished in January 2022 to contract the construction company and soil expert in March 2022.
- After cutting the existing vegetation at the construction site, heavy metal was detected, requiring a warfare detection.
- Given heavy soil contamination, work and security plans had to be drawn up for the warfare detection and the construction process.

Total implementation budget:

ca. 430,000 € - 440,000 € (estimation)

proGlreg funding:
180,000 € + 11,000 € shift proGlreg overhead:
40,000 €
City of Dortmund:
ca. 199,000 - 209,000 €



Co-design and engagement activities

For years, Huckarde citizens expressed the need for better access to the Deusenberg and local politicians informed. The EU-funded proGlreg project offered the opportunity to fulfill this wish.

Experts worked on the plans for the planned path in order to meet demands for the legal admission. Co-design took place on a professional level with all stakeholders involved in the project. Citizens were informed about the construction project via press, social media and internet.

Key achievements and implementation results

Despite a number of difficulties during the planning and implementation phases due to heavy soil contamination and related challenges, competent project partners and targeted team work managed to successfully implement the NBS.

On administrative level, the Department of Urban Renewal took over project management for a construction project for the first time, gaining insights that will support the realization for the upcoming IGA-projects at the Deusenberg site, which will face comparable soil aspects.

On a social level, the new path improves access for Huckarde citizens to existing path connections around and to the top of the Deusenberg's recreational sites and view points.

Critical implementation issues and barriers encountered



Given the path was constructed on the site of the former landfill, the ground consisted completely of dumped material. It was not stable enough to drive on with machines. Necessary carrying capacity was increased by including a stabilizing grid material. Severe contamination of the ~1,500m³ excarved soil, which was stored on 11 different piles of similar quality, led to challenges – e.g. how to dump it. The related unforeseen cost explosion for analyzing and storing the material required a lot of flexibility within the City of Dortmund.

Synergies with other proGlreg activities

Feeding into WP 4 (NBS benefit and assessment monitoring): pre-and post-implementation SOPARC.

NBS 6 combines pollinator-friendly meadows and newly planted trees along the path while interlinking the NBS network in the Living Lab, e.g., to the aquaponics system at the nearby Hansa cokng plant.



NBS 4 - Aquaponics



NBS 8 - Pollinator biodiversity

Links with other external projects or activities

The NBS is linked to longer term initiatives and urban regeneration plans:

- International Garden Exhibition 2027: Barrierfree path to Deusenberg exhibition area
- Perspective part of the sports loop at Deusenberg foothill

Communication activities



So far the press was informed three times about the footpath:

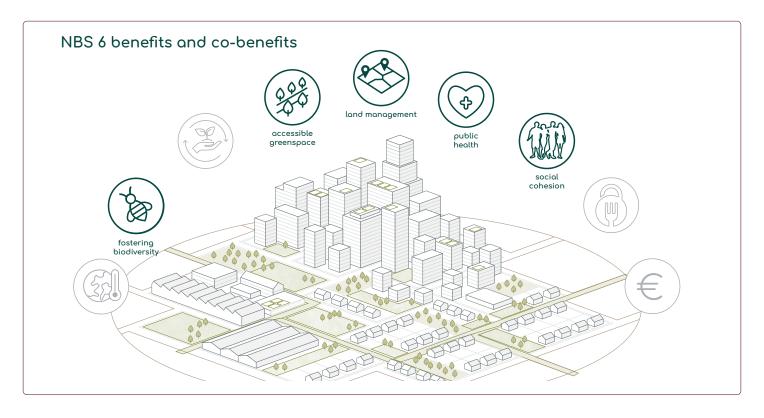
- In January 2022 that the path will be constructed
- In May 2022 that the trodden path would be closed due to construction work
- In August 2022 that construction work will take until October 2022.

After approval in November 2022, citizens will be informed by press that construction work has been finished and that the path will be officially opened.

The footpath is described on the webpage:

www.progireg.dortmund.de





NBS benefits and co-benefits for the Living Lab Huckarde, Dortmund

This NBS has multiple benefits for contributing to the regeneration of the Living Lab Huckarde. Providing access to quality green spaces and managing land usefully. It fosters public health while offering barrier-free access to recreation areas for people with physical disabilities, supporting social cohesion and inclusion.

Maintenance & Sustainability beyond proGIreg

Maintaince of the NBS is secured per existing contract with the city-owned waste management provider (Entsorgung Dortmund GmbH EDG), responsible for maintaining all paths of the Deusenberg area.













The sole responsibility for the content of this publication lies with the authors and any use that may be made of the information contained therein. It does not necessarily represent the opinion of the European Union or the REA.



This project has received funding from the European Union's Horizon 2020 innovation action programme under grant agreement no. 776528.