

Environmental and Social Data Sheet

Overview

Project Name:	EMSCHER RENATURIERUNG III
Project Number:	2020-0089
Country:	GERMANY
Project Description:	2020 - 2024 investment program related to the restructuring of a regional waste water system in North Rhine-Westphalia.

EIA required: yes

The project is implemented as a coherent programme that comprises a number of separate schemes. Some of the schemes may require an EIA.

Project included in Carbon Footprint Exercise¹: yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

Environmental and Social Assessment

Environmental Assessment

This is the fourth EIB operation in support of the Emscher programme since 2011. The overall programme concerns the restructuring of the regional wastewater system servicing a population of 2.2m inhabitants in the northern part of the Ruhr territory, in the Federal State of North Rhine-Westphalia.

The Water Framework Directive (WFD) (2000/60/EC) does not permit the use of the Emscher River as an open sewer. In order to satisfy the requirements of the Directive and to improve water quality in the river, the promoter - Emschergenossenschaft - decided in 1991 to invest into (i) an underground wastewater transport infrastructure conveying the effluent to wastewater treatment plants and (ii) the Emscher river restoration.

One of the Emscher programme's main targets has been to make River Emscher free from wastewater (achieved so far only on the first quarter of its length). The programme has been developed by an experienced promoter and takes into consideration environmental and social aspects as required by European and national environmental requirements.

¹ Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO₂e/year absolute (gross) or 20,000 tonnes CO₂e/year relative (net) – both increases and savings.

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The Emscher programme was included in Rhine River Basin Management Plan (RBMP), which was approved on the 18 November 2015² according to the WFD requirements. Consequently, under the RBMP, a Strategic Environmental Assessment (SEA) further to Directive 2001/42/EC has been conducted and approved for the programme.

The Environmental Impact Assessment (EIA) including impact on nature conservation sites is an integral part of the project approval cycle according to the national legislation, and thus it is validated through a "Planfeststellungsbeschluss" (PFB) i.e. EIA approval. The PFB is issued by the competent authority on district level ("Bezirksregierung"), in line with § 170 LWGNWG (North Rhine Westphalia water law).

For the main project component under this operation, the tunnel collector ("Abwasserkanal Emscher"), the Bezirksregierung Münster approved the project in 2008 (PFB dated 08 August 2008). Subsequently, Bezirksregierung Münster amended the PFB eight times³ to reflect changes to the project scope. The main changes were the reduction of the number of shafts for the tunnel collector and the location of one major pumping station. It issued the eighth and latest amendment on 21 December 2015. It also issued the approvals of minor changes concerning exhaust air on 5 May 2017 and concerning the "Holtener Feld" area on 26 June 2020.

For the works at the confluence of Emscher River with the Rhine River, Bezirksregierung Düsseldorf issued the PFB on 16 September 2013.

EIB received all relevant PFB and other approvals and published them on the Bank's website.

The main positive long-term environmental impacts can be summarised as follows:

- The continued river restoration will allow the re-establishing of biodiversity along the Emscher River.
- At the confluence of Emscher River with Rhine River, the replacement of the concrete cascade by a floodplain and a sloped passage will re-establish hydraulic continuity between Rhine and Emscher. This will allow fish migration. Besides, the new confluence floodplain will have a positive impact on the four Natura 2000 areas for fish or bird protection, which are located in its vicinity⁴.
- Flood retention areas will help reduce the threat of flooding caused by heavy storms and river floods, especially in the areas located below the level of River Rhine (total area of 327km²).
- The fourth treatment stage in the wastewater treatment plants will drastically reduce the level of micro-pollutants contained in the treated effluent (discharged to Emscher and Rhine) and further enhance bio-diversity by enabling the development of pollution-sensitive species.

² Bewirtschaftungsplan 2016-2021 für die nordrhein-westfälischen Anteile von Rhein, Weser, Ems und Maas (See: www.umwelt.nrw.de)

³ First amendment dated 23.07.2010, second amendment dated 24.11.2010, third amendment dated 01.08.2012, fourth amendment dated 26.11.2012; fifth amendment dated 08.02.2013, sixth amendment dated 21.12.2015, seventh amendment dated 02.02.2018, eighth amendment dated 19.09.2018

⁴ DE-4203-401, DE-4405-301 DE-4405-303, DE-4406-301;

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The project contributes to the Bank's transversal objective Climate Action (Adaptation) by increasing substantially the resilience of Emscher river basin against floods. The region of North Rhine-Westphalia has assessed the vulnerability against floods and droughts within the Emscher River valley, which led to the adoption of the regional adaptation strategy (Anpassung an den Klimawandel. Eine Strategie für NRW, 2009).

EIB Carbon Footprint Exercise

Estimated annual emissions of the project in a standard year of operation are 41,000 tonnes of CO2 equivalent per year. Estimated emission savings are 19,000 tonnes of CO2 equivalent per year.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost'.

Social Assessment

The project's appraisal has identified a number of positive long-term social impacts. The most important one is the improved quality of life thanks to cleaner surface waters, new recreational areas, reduced nuisance from odour and visual impact of open sewer channels, as well as reduced risk of urban flooding. Another positive impact is the continued provision of wastewater services of highest standard at affordable prices. Besides, the works, supplies and services required to implement the project will temporarily create employment in the area and beyond. Finally, it can be expected that the project will contribute to make the whole region more attractive for its inhabitants and economic development, and potentially also for tourism.

Temporary adverse social impacts may include the following: disruption of services and traffic, noise, temporary occupation of public and private space, and health and safety hazards during construction. Such impacts are common for this type of project, and the mitigation of expected adverse social impacts will be addressed as part of the planning for each scheme.

Public Consultation and Stakeholder Engagement

The Promoter must ensure compliance with national and European environmental legislation and facilitate public access to environmentally relevant information in accordance with the Aarhus Convention.

Since 2001, Emschergenossenschaft has engaged into a close dialogue with civil society and the main stakeholders of the project and has been implementing a comprehensive communication programme. Emschergenossenschaft's internet portal presents a collection of publications related to environmental and social aspects.

Other Environmental and Social Aspects

The Promoter annually monitors biodiversity indicators in the River Emscher. For example, the number of indicator species (i.e. species such as birds, fish, or amphibian that can serve as indicators for the suitability of the relevant habitats) has increased from 30 to over 50 between 2011 and 2017. The total number of species which can be found in River Emscher and its tributaries has nearly tripled from 170 in 1990 to over 450 in 2019.

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Conclusions and Recommendations

The project will have long-term positive impacts on the environment, as it will result in the termination of wastewater discharges into the Emscher River and in the creation of appropriate conditions for the revitalisation of the natural ecosystem in the Emscher River valley. The project will assist in maintaining compliance with the Urban Wastewater Treatment Directive 91/271/EC, and for wastewater treatment plants equipped with a fourth treatment stage actually go beyond the requirements of this Directive. The project will also contribute to achieving compliance with the Water Framework Directive 2000/60/EC.

The project will also have positive temporary and long-term social impacts.

All schemes covered by the programme will be subject to the Promoter complying with the following requirements:

- The Promoter will be required to act according to the provisions of the relevant EU Directives, including the EIA (2014/52/EC) amending the EIA Directive (2011/92/EC), Habitats (92/43/EEC) and Birds (2009/147/EC). The promoter undertakes not to allocate Bank funds to project components that require a full EIA until the EIA and the necessary appropriate assessment, if required, have been finalised and approved by the relevant competent authority. Once any EIA is finalised, the promoter will provide the Bank with an electronic copy of the EIA, for publication on the EIB website.
- The Promoter undertakes to provide to the Bank, if requested, any decisions issued by the competent authority that screen out project component and the main reasons for not requiring EIA with the reference to the relevant criteria listed in Annex III of the EIA Directive.

Under these conditions, the operation is acceptable to the Bank's financing in Environmental and Social terms.