

Luxembourg, 04 November 2024

Environmental and Social Data Sheet

Overview

Project Name:	DEBRECEN WATER AND WASTEWATER SYSTEM UPGRADES
Project Number:	20230845
Country:	Hungary
Project Description:	Upgrading of the water supply, sewerage and stormwater management infrastructure in the Municipality of Debrecen
EIA required:	Yes. This is an investment programme made up of multiple schemes. Some of them may require an EIA under Annex II of the EIA directive 2011/92/EC as amended by Directive 2014/52/EU.
Project included in Carbon Footprint Exercise ¹ :	no

Environmental and Social Assessment

Environmental Assessment

The Promoter of this operation is the Municipality of Debrecen. The assets financed by the project will be operated by Debreceni Vízmű (Debrecen Waterworks), the municipal water utility responsible for providing water and wastewater services within Debrecen and surrounding settlements.

The project concerns the Promoter's 2024-2027 Investment Plan, which includes the development and upgrading of drinking water abstraction and treatment facilities, wastewater collection and treatment system, construction of a wastewater reuse plant and stormwater retention facilities.

The investments are planned to cater for several needs. The additional water demand generated by the increasing population within the city and the surrounding settlements, as well as new industrial companies settling in the city require the expansion of the existing water supply and wastewater infrastructure. This includes the expansion of water supply and wastewater networks to currently un-served population in the Eastern part of the city, upgrading the network serving the City's industrial zones and the construction of a wastewater reuse plant for industrial clients. Investments in the stormwater management system will also be undertaken to significantly increase its retention storage capacity.

The project contributes to continued compliance with the EU Drinking Water Directive 2020/2184, the EU Urban Waste Water Treatment Directive 91/271/EEC and the Water Framework Directive 2000/60/EC as it will ensure safe provision of drinking water and sanitation services to the concerned population.

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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Strategic Environmental Assessment (SEA) procedure

Individual components themselves have not been subject to an SEA, however the investment plan is aligned with the Programme of Measures of the latest River Basin Management Plan (VGT3 in Hungarian) for the river Tisza sub-basin approved by government decree on 28 April 2022. The VGT3 itself was subject to a SEA procedure as required by the Water Framework Directive 2000/60/EC. Prior to the approval of the VGT3, the SEA procedure had been concluded in the course of 2021. The SEA competent authority at the time was the Ministry of Interior.

Environmental Impact Assessment (EIA) procedure

The EIA Directive (2014/52/EC) amending the EIA Directive 2011/92/EC, is fully transposed in Hungary. The EIA procedure falls under the jurisdiction of the Environmental Protection, Nature Protection and Waste Management Divisions of the provincial government office. For this project, the competent authority is the Provincial Government Office / Department of Environmental Protection, Nature Protection and Waste Management, (Hajdú-Bihar Vármegyei Kormányhivatal Környezetvédelmi, Természetvédelmi és Hulladékgazdálkodási Főosztály, "KTHF" in Hungarian). In Hungary, provincial offices are fully authorised to act as a competent authority when it comes to local projects implemented within a region. Only projects of regional or national importance are referred at ministry level.

The project is an investment programme made up of multiple components. To date, only the stormwater management component required a full EIA report whose approval decision was granted in Sept 2022. The EIA procedure was required due to the proximity of one of the schemes (a retention reservoir and section of an open storm water channel) of the stormwater management system to the Natura 2000 site of Derecske-konyári gyepek HUH20009. Fully integrated within the EIA procedure, an Appropriate Assessment (AA) was carried out and completed by June 2022. The AA was applied to all screened-in components of the proposed stormwater management system.

Mitigation Measures

The EIA concluded that during both the construction and operational phase, the expected short- and long-term negative impacts concerning the following elements: air, surface and subsurface waters, soil and waste management, noise and vibrations are not significant and thus were accepted as tolerable. Moreover, the EIA concluded that minor negative impacts on the affected Natura 2000 area could be expected, and therefore, the EIA decision recommended a range of mitigation measures to be applied, including specific measures on nature conservation. The project's scope and budget has been adjusted in order to fully integrate the mitigation measures into the project design and implementation. These include but are not limited to seasonal timing of works where protected species are identified, redesign of embankments with shallower angle, construction of escape ramps for small mammals, reduction of stormwater retention volumes in bird nesting season, protection of indigenous species when clearing scrub and professional supervision of all plantations work.

Monitoring and supervision of the mitigation measures will be performed by the Hortobágyi Nemzeti Park Igazgatóság (Hortobágy National Park Directorate) which is the responsible body to manage Natura 2000 areas within the Hortobágy National Park.



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Other project components

To date, with regard to the other components under the project, no other EIA was required, neither any impact on nature protected areas including Natura 2000 was identified. The remaining part of the investment programme is foreseen to be implemented either within the boundaries of existing water and wastewater treatment plant sites owned by the Promoter or within the Promoter's service area, which is predominantly located within urban environment or following, to the extent possible, existing routes of water mains and sewers.

Given that the project is an investment programme, the environmental screening process of the project components is still ongoing and as a result, some of the project components may fall under Annex II of the EIA Directive 2014/52/EU amending the EIA Directive 2011/92/EU. This means that the decision as to whether an EIA is required or not, is left with the competent authority based on the criteria defined in Annex III of the Directive. Nevertheless, in case some components under the programme require a full EIA according to Directive 2011/92/EC as amended by Directive 2014/52/EU, the Promoter is obliged to inform the Bank accordingly and the respective EIAs will be published on the EIB website.

Given that the project is located within a water stressed area² with a Medium-High Physical Quantity rating and sensitive sub-surface water resources, it is important that compliance with the Water Framework Directive 2000/60/EC is ensured. Therefore, the Promoter will be required to inform the Bank of the decisions of the competent authority with regard to the environmental permitting of any project components aimed at the expansion of groundwater abstraction capacity.

Environmental impacts

The project is expected to have significant long lasting environmental benefits, such as reduced pollution of surface waters by providing appropriate treatment of wastewater collected from currently un-serviced customers, installing separated wastewater system to avoid spillages from combined sewers; reducing the stress on sub-surface water resources by reusing treated wastewater to satisfy demands from industrial clients; and reducing urban flooding incidents by increasing storm water retention storage capacity. Investments in the wastewater infrastructure will contribute to achieving compliance with EU environmental legislation, in particular the Urban Waste Water Treatment Directive 91/271/EEC.

Negative impacts to the environment are assessed only as minor. During construction, temporary impacts on the environment such as noise and dust may occur. The prevention and mitigation of any of such impacts during the construction phase, will be done through adoption of the recommendations of Environmental Management practices to be implemented by Contractors. During the operational phase, the negative impacts will be mitigated by special operational and control practices adopted by Debrecen Waterworks.

Climate Mitigation and Adaptation

The project is expected to positively contribute towards climate change mitigation and adaptation.

Mitigation will be achieved by several performance improvement measures, including but not limited to, energy efficiency interventions in water production facilities, improved sludge digestion achieving almost 100% own energy production for wastewater treatment, and connecting currently un-serviced customers to a centralized wastewater collection and treatment system. These measures will contribute towards the overall reduction of energy requirements and will result in reduction of GHG emissions.

² <https://www.wri.org/applications/aqueduct/water-risk-atlas>



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Adaptation to identified physical climate risks, such as increased frequency and magnitude of extreme temperatures, rainfall and droughts will be achieved by implementing measures such as improving the security of available water supplies, construction of a wastewater reuse plant and by increasing stormwater storage capacity.

The Project has been assessed for Paris Alignment and is considered to be aligned both against low carbon and resilience goals against the policies set out in the Climate Bank Roadmap (CBR).

EIB Paris Alignment for Counterparties (PATH) Framework

The core business of the Promoter is to provide water supply and sanitation services. It is a public sector entity and therefore in scope of the PATH framework. However, since it is not active in high emitting sectors, nor considered high vulnerability, it is screened out of the PATH framework.

Social Assessment

The share of the proposed investments dedicated to domestic customers will improve access to safe drinking water and sanitation as well as reduce urban flooding incidents. The investments will result in more resilient and reliable water services at affordable prices. This will yield lasting positive social benefits, including improving the living conditions of the inhabitants within the service area of the Promoter and thus they will be beneficial for the public health.

A share of the proposed investments is to support water supply and sanitation services to industrial companies. As such they are expected to promote economic and social cohesion by facilitating private sector investment in less developed regions, where such investment would otherwise be restricted by market failures and imperfect information.

The works will also contribute to employment creation during construction. No additional permanent employment is foreseen after project completion.

Public Consultation and Stakeholder Engagement

Regarding the stormwater management component of the project, public consultation was carried out at the relevant stages of the EIA procedure. The decisions were published on the respective websites of the competent authorities and the Promoter. In addition, announcements were placed at the premises of the Promoter.

Regarding other components of the project, where relevant, the Promoter will be requested to ensure compliance with national and European environmental legislation, notably to facilitate public access to environmental information and guarantee public consultation during the environmental decision process. Consultations with affected communities and interested parties take place in line with the requirements of the Directives.

Other Environmental and Social Aspects

During the project's due diligence, the Promoter has demonstrated sound practice with respect to environmental, health and safety management. In addition to procedures to meet regulatory requirements, the utility has a comprehensive environmental management system, which is applied to new projects and monitors ongoing operations. The Promoter has the following certifications: ISO 9001: Quality management systems, ISO 14001: Environmental management systems.

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Conclusions and Recommendations

By developing and upgrading the water, sewerage and stormwater management infrastructure the project is expected to generate significant positive impacts on the environment and social capital and to contribute to the improvement of living conditions of the inhabitants within the service area of the Promoter. The minor negative impacts due to the construction of the stormwater management component in the vicinity of a Natura 2000 area will be addressed.

All project components 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) Directives, EU Drinking Water Directive 2020/2184, the EU Urban Waste Water Treatment Directive 91/271/EEC and the Water Framework Directive 2000/60/EC.
- The Promoter will be required not to allocate Bank funds to project components that require a full EIA until the EIA and/or the necessary nature assessment have been finalised and approved by the relevant competent authority. Once any EIA is available, 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 components and the main reasons for not requiring EIA with the reference to the relevant criteria listed in Annex III of the EIA Directive.
- With regards to any project component aimed at the expansion of groundwater production capacity within the Promoter's service area, before any disbursement of the Bank's funds, the Promoter will be required to submit to the Bank of all environmental decisions of the competent environmental authority.

Considered the above, the Project is acceptable for EIB financing from an environmental and social point of view.