

Luxembourg, 17 July 2018

Environmental and Social Data Sheet

Overview

Project Name: MINSK WASTEWATER TREATMENT PLANT CONTRUCTION
Project Number: 2017-0024
Country: BELARUS
Project Description: The project consists of the reconstruction of Minsk's largest wastewater treatment plant
EIA required: yes
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

The project involves the major reconstruction of the existing wastewater treatment plant (WWTP) of Minsk, the capital of Belarus. As the project is jointly financed by the EBRD and the EIB, a joint due diligence and environmental and social assessment were carried out.

Compliance of the project with the principles of Annex I and Annex II of the EU Directive 2014/52/EU amending the EIA² Directive 2011/92/EU, and EIB Environmental and Social Guidelines was analysed, alongside with compliance with the Belorussian legislation. The two main legal documents governing the EIA procedure in Belarus are Law No. 339-3 from 18.07.2016 "On State Ecological Expertise, Strategic Environmental Assessment and Environmental Impact Assessment" and Regulations of the Cabinet of Ministers No.47 from 19.01.2017. "On EIA Procedure, EIA report and required qualification of experts carrying out an EIA".

If located in the EU, the project would fall under Annex I of the EIA Directive.

A full EIA procedure, including public consultations, was carried out in 2016 and approved by the State Environmental Review. In 2017 an additional environmental and social assessment under EBRD's standards was carried out, including preparation of a Nontechnical Summary (NTS), stakeholder engagement plan (SEP), environmental & social action plan (ESAP). The ESIA and the NTS were published on both EBRD's and EIB's websites.

The project is not located in a protected area and it will not affect any such area. The planning consent based on the revised the Feasibility study (reduced capacity & cost) from the State Authority is still expected.

¹ Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO₂e/year absolute (gross) or 20,000 tons CO₂e/year relative (net) – both increases and savings.

² Environmental Impact Assessment

Luxembourg, 17 July 2018

The Promoter is committed to respect the WWTP discharge in full compliance with the Belarus legislation³, which is mostly in line with the requirements of the relevant EU Directive⁴ (see table below). If the WWTP were located in the EU, the more stringent requirements for sensitive areas would apply because of the discharge into Svisloch River, a freshwater body subject to eutrophication.

Parameter	EU Directive (mg/l)	Belarus legal requirement (mg/l)	WWTP current effluent (mg/l)
BOD ₅ (Biochemical oxygen demand)	25	15	9.7
COD (Chemical oxygen demand)	125	70	34.3
Total Suspended solids	35*	20	19.0
Total Phosphorus**	1	2	1.1
Total Nitrogen**	10	20	17.2

* required for agglomerations above 100,000 p.e

**required for EU declared sensitive areas and agglomerations above 100,000 p.e.

The review and appraisal of the proposed operation have identified a number of potential positive environmental impacts.

- More reliable waste water disposal services and more efficient waste water treatment;
- Significant reduction of impacts on the environment, including air, soil and ground water, River Svisloch (and the Dnieper downstream) and its ecosystems, as well as minimisation of odour emissions;
- More efficient use of natural resources due to reduction of water consumption and enhanced energy saving performance of the processes, utilization of biogas from sludge digestion for energy cogeneration;
- Reduction of greenhouse gas emissions in a long term.

Negative impacts are limited to the demolition and construction works and include:

- Temporarily increased levels of noise and vibration.
- Risk of river or groundwater pollution through construction materials and products

The ESIA and ESAP propose mitigation measures for any of the aforementioned impacts. Special attention shall be paid to stakeholder engagement, managing construction activities, as well as supervision of design and construction works. Recommendations for enhancement of the Project benefits have been developed where possible. An Environmental and Social Management Plan (ESMP) shall also be developed for the execution of the works with due account of the design solutions adopted. The ESMP shall address the issues identified in the ESAP and provide measures and actions to mitigate potential adverse impacts, and to enhance positive or beneficial impacts.

All potential negative impacts of the Project are in general controllable and can well be prevented or reduced as required by the proposed mitigations and through implementation of the Environmental and Social Action Plan, the Environmental and Social Management Plan and the Stakeholder Engagement Plan.

³ Decree of Ministry of Nature dated 27.05.2017, N°16

⁴ Urban Waste Water Treatment Directive 91/271/EC

Luxembourg, 17 July 2018

Climate Action

There are no particularly high climate risks. In July 2017, the EIB's Services undertook a climate risk screening exercise based on the Aware™ geographic data set, compiled from the latest scientific information on current climate and related hazards together with projected changes for the future where available. In addition, the EBRD assessed the project's climate change resilience. It was found that the proposed investments are considered "no regret" actions with respect to climate change adaptation, *i.e.* a type of adaptation that would generate net social and/or economic benefits irrespective of whether or not anthropogenic climate change occurs.

The Project has a significant contribution to Climate Action Mitigation (74 % of project investment cost) under application of EIB's relevant Guidelines. The climate action stems mostly from the sludge management (62%) and to a smaller extent from enhanced nutrient removal (12%).

EIB Carbon Footprint Exercise

- Estimated emissions savings are 77,800 tonnes of CO₂ equivalent per year.
- The project boundaries are those of the currently operated plant including the sludge dumping facilities located some 20km away from the plant and transportation to these facilities by truck.
- The absolute emissions of the Wastewater treatment plant have been calculated using the EIB tool, based on the IPCC methodology. The project will consist of a Wastewater Treatment Plant with biological treatment, including nutrient removal beyond the national standards. In addition, the project will include sludge treatment facilities for anaerobic digestion with energy recovery and sludge incineration.
- The Baseline Scenario is the Wastewater Treatment Plant without nutrient removal. The current sludge treatment consists of a regular dewatering and disposal of the sludge in lagoons. The reduction in emissions is caused by:
 - Reduction in the N₂O emissions, because the baseline did not have nutrient removal, and the project does.
 - Reduction in the emissions in the sludge disposal. Currently, sludge is dried, transported by truck to lagoons where it is dumped (so the methane produced by the sludge under anaerobic conditions is freely emitted to the atmosphere).
 - Reduction in the electricity consumption with savings of more than 16 GWh/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'.

Luxembourg, 17 July 2018

Social Assessment

The review and appraisal of the proposed investment projects have identified a number of potential positive social impacts:

- Improved quality of life of local communities across the Project area and near the sludge dumping facilities, due to reduced odour emissions and less pollution to Svisloch River;
- Reduction of risks to community health and safety related to WWTP operations, enhanced safety of the Company's operational sites;
- Improved working conditions and enhanced Operational Health and Safety (OHS) performance at the Company's facilities;
- Local employment associated to the construction phase.

Negative impacts are mostly limited to the demolition and construction works and include:

- Temporary diversion of traffic and related loss of time.
- Temporary Reduced quality of life due to nuisance from the construction site

Four houses remain in the vicinity of the WWTP, including three abandoned houses which are located within the sanitary protection zone around the plant. The potential relocation of occupants of the four houses located near WWTP facilities was assessed. Consultations with stakeholders revealed that physical displacement will not be needed, provided that the proposed corrective measures are implemented. Such conclusion takes into account the overall beneficial effect of the Project on air quality in the former Shabany village at the operation phase, and the agreed practices with the four households. During the construction phase, the Promoter Minsk Vodokanal (MVK) should apply best efforts to implement the proposed mitigations and minimize disturbance and impacts on communities in the above houses.

The ESIA and ESAP propose mitigation measures for any of the aforementioned impacts. The ESMP shall further develop these measures (see above). Special attention shall be paid to stakeholder engagement, managing construction activities, as well as supervision of design and construction works. Recommendations for enhancement of the Project benefits have been developed where possible.

All potential negative impacts of the Project are in general controllable and can well be prevented or reduced as required by the proposed mitigations and through implementation of the Environmental and Social Action Plan and Stakeholder Engagement Plan.

Luxembourg, 17 July 2018

Public Consultation and Stakeholder Engagement

Belarus is a signatory of Aarhus Convention of 1998 and therefore disclosure of information to public is embedded in the national legislation.

For disclosing Project-related information and engaging with relevant stakeholders, the following activities were employed:

- Statutory consultations conducted by MVK in November 2015 as part of the Belarusian EIA
- public consultations related to the development of the industrial area in which the WWTP is located (July 24 – August 17, 2017);
- Public meetings held by Zavodskoy district administration jointly with Minskgrado in July 2017;
- Disclosure of relevant information via media sources by the MVK;
- Consultation activities taken by EBRD's consultant and MVK in November 2017;

Public consultation and ongoing stakeholder engagement will be arranged throughout the Project preparation and implementation.

A Stakeholders Engagement Plan (SEP) including a grievance mechanism, has been developed to support this process which identifies key stakeholders and defines measures to communicate to the communities the nature of the Project, including information on its potential impacts. The SEP will be regularly reviewed and updated during the Project implementation. If any new components are included in the Project or previously proposed elements need to be amended, the SEP will be updated and stakeholders advised accordingly. Detailed description of the Project disclosure and stakeholder engagement activities is provided in the SEP. All Project press releases will be disclosed on MVK's website (in addition to being communicated to media).

The promoter has appointed a dedicated Community Liaison Officer who will be responsible for dialogue interested stakeholders during the project's implementation.

MVK has also developed Public Grievance Mechanism which can be specifically used for reception and processing of queries, comments, grievances and opinions from the affected communities and other stakeholders of the Project.

The promoter, assisted by the project implementation consultant, has the capacity to manage environmental and social related risks/ impact identified in the ESIA.

Luxembourg, 17 July 2018

Other Environmental and Social Aspects

In accordance with national law on labour standards and ILO obligations ratified by Belarus, (Belarus has ratified all ILO fundamental conventions). The promoter is committed to make grievance mechanism available to all project personnel including contractors and sub-contractors. Furthermore MSK will include into their tender documents and subsequent agreements with selected contractors the requirement to manage environmental and social aspects of the contract works in line with the applicable national requirements, ILO standards and EU requirements (including: working conditions, occupational and community health and safety and provision of grievance mechanism). The promoter will as well conduct regular inspections to monitor contractor's practices.

Last, in line with the provisions agreed upon in the ESAP, the promoter committed to enhancing their management of social aspects and to the inclusion of necessary provisions to this end in the relevant policy or policies.

Conclusions and Recommendations

Overall, the project will generate positive impacts on the environment.

The project will also provide long-term socio-economic benefits to the local population in the form of employment opportunities and improved quality of life.

The promoter will be reporting on the implementation of the Environmental and Social Management Plan (ESMP) and the Environmental and Social Action Plan (ESAP).

The provision of the ESMP, and the Integrated Environmental and Social Policy (as defined in the ESAP) will be required as a condition for first disbursement. The provision of the Code of Conduct (as defined in the ESAP) for all project personnel including contractors and sub-contractors shall be a condition for first disbursement for works.

In an undertaking to the finance contract, the EIB will require the promoter to comply with the Stakeholder Engagement plan, the ESMP and the ESAP.

In view of the above findings the project is acceptable for EIB financing from the perspective of environmental and social compliance.