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Environmental and Social Data Sheet

Overview

Project Name:	DUINWATERBEDRIJF ZUID-HOLLAND - III
Project Number:	2015-0829
Country:	NETHERLANDS
Project Description:	The project is part of a 6-year (2015-2020) investment programme related to the upgrading of drinking water supply and distribution networks in The Hague region.
EIA required:	yes

This is a programme made up of multiple schemes. Many of the schemes will require an EIA. The Promoter shall provide the link to the website where the NTSs are published or send copies to the Bank.

Project included in Carbon Footprint Exercise[1]: no

Environmental and Social Assessment

Environmental Assessment

This is the third operation with Dunea NV. The programme is developed by an experienced promoter and takes into consideration environmental and social aspects as required by European and national environmental requirements. The Dutch legislation complies with the relevant EU environmental Directives (Drinking Water Directive 98/83/EC, SEA Directive 2001/42/EC, EIA Directive 2011/92/EU, Water Framework Directive 2000/60/EC, Birds Directive 2009/147/EC, Habitats Directive 92/43/EC). The Promoter is well aware of these requirements and acts accordingly.

The programme is mainly geared toward improving security and quality of drinking water supply and has positive environmental components through the sustainable management of environmentally sensitive dune areas around the infiltration sites and the ground water abstraction zones. The use of innovative water treatment technologies will allow further compliance with the Drinking Water Directive (98/83/EC).

Sustainable management of the environmentally sensitive dune areas

Infiltration of transferred surface water in dune areas is unique to the Netherlands and is important for the public perception of the drinking water and the image of the company. By its statutes, Dunea manages a coastal nature reserve of an area around 2,235 hectares that surrounds the dune infiltration sites. The function of the dunes is not only for recreation and water abstraction but they are also important sea defences, with the mainland lying some 2 metres below sea level. The company actively draws interest and visitors to the area (approximately 1 million visitors a year), although access to the actual infiltration areas themselves is restricted.
The core process of drinking water production by Dunea is the infiltration of surface river water through open basins and deep injection wells among coastal dunes. The water seeps down slowly from the infiltration basin to the bottom of the sand body, where it mixes with rainfed groundwater. After a minimum permanence of two months, most of the water is pumped up again. As the water seeps slowly to the bottom, its quality is improved and undesirable bacteria and viruses are made harmless in a natural way.

[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.

Dunea's nature conservation activities in dune areas began in the 1950s in Meijendel, Berkheide and Solleveld. The responsibility for sustainable nature management was gradually adopted through the need to strike a balance between establishing and maintaining the infiltration ponds and installations and preserving the surrounding environment to support the special habitats of the area and to keep out any sources of potential contamination. The presence of infiltration basins has also created a wide variety of new biotopes in the dunes open water, reed beds, bogs, damp and dry dune valleys, dune grasslands, short and tall scrub and woodland. Due to all this diversity, Meijendel has evolved into one of the richest areas for bird life in the Netherlands. An area with a wide variety of mammals, reptiles, insects, butterflies, dragonflies, damselflies and amphibians, together with numerous species of plants, fungi and mosses.

Under the investment programme, the upgrading of the whole infiltration and extraction (wells) system at Meijendel includes also the regeneration of the surrounding natural environment. The scrub in some parts of the dune has become overgrown and, without intervention, would eventually become woodland. Totally removing this growth will allow the vegetation that is so characteristic of a dune area to flourish once again. The sand that this regeneration activity will release, can be used in the rest of the area to renovate the water extraction facilities. All work is planned to take place outside the breeding season and is carried out in a way that limits any inconvenience to holidaymakers and local residents as far as possible.

The main positive environmental and social impacts can be summarised as follows:

- it is expected that the reconstruction of the whole infiltration and extraction (wells) system at Meijendel will allow preserving and re-establishing biodiversity within the dune areas in the long run;
- the programme is beneficial to public health by sustaining high water quality to 1.3 million inhabitants using innovative and efficient technology such as the advanced oxidation treatment;
- the works will also contribute to employment creation during construction.

Negative environmental and social impacts are:

- minor disturbance due to faster pipe replacement techniques is possible during construction for residents adjacent to work sites;
- temporary increase of traffic around the construction sites. Appropriate stakeholder information, public consultation and participation and mitigation procedures are in place.

The project contributes to the Bank's transversal objective of Climate Action Adaptation by investing into an innovative process of water purification, the advanced oxidation, to remove micro pollutants e.g. pesticides from the drinking water. Due to longer dry periods with low river discharges, the main water source – the river Maas- will be less diluted, which leads to higher concentrations of organic micro pollutants. For this purpose, the National Institute of Public Health and the Environment (RIVM), the Dutch water authorities, drinking water companies and central government, have assessed the drought vulnerability of the Meuse and Rhine Rivers. It has led to the adoption of the Regional Adaptation Strategy (Impact klimaat op oppervlaktewater als bron voor drinkwater, 2013). This study resulted in three categories of mitigation measures: policy measures, adjustments to the water system, and a more extensive process of water purification by the drinking water companies.
The project also contributes to Climate Change Mitigation. The rehabilitation of several pumping stations will result in energy savings and the renewal of slow sand filters at the production site in Scheveningen will be combined with the installation of solar panels at the south side of the rooftops (10.000 m^2). The solar panels will produce slightly more than 10 % of the energy consumption of pumping station Scheveningen itself.

Public Consultation and Stakeholder Engagement

Dunea has engaged into a close dialogue with civil society and the main stakeholders of the project and has been implementing a comprehensive communication programme. Dunea's

internet portal presents a collection of publications related to environmental and social aspects.

Conclusions and Recommendations

Although net long term environmental and social impacts will be positive, some works will require a full EIA according to Directive 2011/92/EC or affect protected areas. The promoter shall not allocate any EIB funds to a project component that requires an EIA or biodiversity assessment according to the provisions of the EU EIA (2011/92/EU), Habitats (92/43/EEC) and Birds (2009/147/EC) Directives respectively, without, prior to commitment, receiving the consents from the competent authorities. Copies of the relevant documents, including the consents and approvals will be submitted on request, to the EIB. The non-technical summaries of the full EIAs will be published on the Bank's website.

In line with the EU Directives, implementation of the project will result in the upgrading and renewal of the production plants and the sustainable management of the environmentally sensitive dune areas which have lasting positive environmental benefits. The capacity of the promoter is deemed high, having a good track-record in environmental and social management.

The project is acceptable for EIB financing in Environmental and Social terms.