Luxembourg, 25/07/2016

Environmental and Social Data Sheet

Overview

Project Name:	WATER SUPPLY PROVINCE NORTH HOLLAND III
Project Number:	2016 - 0151
Country:	The Netherlands
Project Description:	The project concerns the 2016-2020 investment programme into the production and distribution facilities of PWN, Netherlands' 4th largest water supply company operating in the province of Noord-Holland.

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, to be published on the EIB's website.

Project included in Carbon Footprint Exercise[1]: no

Environmental and Social Assessment

Environmental Assessment

This is the third operation with name PWN (Waterleidingbedrijf Noord-Holland – North Holland Province Water Company). 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/EEC). 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, PWN manages a coastal nature reserve of 7,334 hectares that surrounds the dune infiltration sites. The function of the dunes is not only for recreation and water abstraction but they are also a strategic water storage means and important sea defences, with the mainland lying some 2 metres below sea level. The company actively draws interest and visitors to the area (approximately 7 million visitors a year), although access to the actual infiltration areas themselves is restricted.
PWN uses two types of processes for drinking water production: a) infiltration of pre-treated river (Rhine) or lake (IJsselmeer) water through open basins and deep injection wells in the coastal dunes and b) full treatment of surface water from lake (IJsselmeer). The dune infiltration process consists of water seeping slowly to the bottom during which its quality is

[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.

improved and undesirable bacteria and viruses are made harmless in a natural way. The water mixes with rain fed groundwater and after a minimum permanence of two months it is pumped up again.

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, the costal dunes have 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. PWN is the first and only operator that has reintroduced bisons in the dune areas as an ecological management vector; this also has an impact on the attractiveness of the areas to visitors.

The dunes areas are a Natura 2000 site, and PWN is well versed into mitigating the environmental impacts. All works in the dunes are planned to take place outside the breeding season.

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

- The maintenance of the dunes areas will foster biodiversity, improve the natural defence of the zone against rising sea level; the injection of water into the dunes also helps controlling the sea water intrusion in the ground water resources;
- the programme is beneficial to public health by sustaining high water quality to 1.8 million inhabitants using innovative and efficient technology;
- the works will also contribute to local 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;
- potential disturbance of wildlife, appropriate mitigation procedures are in place.

Due to longer dry periods with low river discharges, the main water source – the IJselmeer lake and river Rhine- 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 contributes to the Bank's transversal objective of Climate Action Adaptation by investing into an innovative process of water treatment, the coupling of ion exchange through resins with ceramic filtration, to raise abatement levels of organic content from the water and improve the purification efficiency of the UV treatment.

The project also contributes to Climate Change Mitigation. The rehabilitation of several pumping stations, the improvement of the water quality (less organic residual mater) to be treated by UV will result in consequent energy savings as well as the investment in solar panels and windfarm for renewable energy production. The expected offset of energy consumption through the implemented investment is 0.2 GWh.

Public Consultation and Stakeholder Engagement

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

Conclusions and Recommendations

In line with the EU Directives, 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.

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.

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