

Environmental and Social Data Sheet

Overview

Project Name: AQUAFIN WASTEWATER TREATMENT VIII
 Project Number: 2011-0434
 Country: BELGIUM
 Project Description: *The project comprises schemes for the construction of collector sewers, storm overflows and small and medium size wastewater treatment plants, plus some upgrading of existing waste water treatment plants for tertiary treatment in the Flemish Region.*

EIA required: X

This is a programme made up of multiple schemes located in the Flemish Region of Belgium, which is declared as a sensitive area since 1995. All WWTPs projects are screened for their environmental impact regardless the size or location. Occasionally, some of them might require an EIA. The promoter is aware of environmental procedures.

.EIA not required: □

Carbon Footprint: are the project emissions estimated to exceed the absolute (gross) or relative (net) emissions thresholds (100,000 or 20,000 tons CO₂e/year respectively) of the EIB Carbon Footprint Pilot exercise? Scope, boundary, baseline and thresholds are defined in the EIB draft Carbon Footprint Methodologies.

Yes □ - details are provided in section: "Carbon Footprint"

No X

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The investment programme will improve aquatic environmental conditions throughout the Flemish Region, which as a whole has been declared a sensitive area according to the definition of the Urban Wastewater Treatment Directive.

This programme –the 8th funded by the Bank- will help Aquafin to ensure compliance with tighter environmental and customer service standards set by EU and national legislation and more specifically with the EU Urban Waste Water Treatment (UWWT) Directive (91/271/EEC) and the Water Framework Directive (2000/60/EC) . Parts of the investments programme are needed for compliance with the obligation of carrying out nutrient removal in the Flemish Region.

Aquafin has shown a good environmental awareness and has developed operating procedures to optimise the performance and cost-effectiveness of its systems. It has full ISO14001 accreditation for its EIA procedures according to directive 97/11/EC and fully complies with Natura 2000, European Bird and Habitat Directives. The approval process of the investment programme complies with the requirements of the SEA Directive (2001/42/EC).

The Promoter undertakings are the following:

- *The promoter shall not commit any EIB funds against schemes that require an EIA according to EU and national law without, prior to commitment, submitting the EIA and*

non-technical summary of the EIA to the Bank for review and publication on the Bank's website.

- *The promoter shall not commit any EIB funds against any scheme without receiving the consent from the competent authority regarding the Habitats directive and submitting the relevant forms to the Bank.*

Environmental and Social Assessment

Environmental Assessment

The Flemish legislation is applicable to plans and programmes that are elaborated on the regional, provincial or local level as well as plans and programmes which are prepared by an administration for adoption by the Flemish Parliament or the Flemish Government, and which are required by legislative, regulatory or administrative provisions.

The Decree "Algemene Bepalingen inzake milieubeleid" of 5 April 1995 (further DABM), Chapter IV (added by a Decree of 18 December 2002, modified by a Decree of 27 April 2007) implements the SEA and EIA directives in the Flemish legislation.

In 2004 the European Court of Justice ruled condemning Belgium's failure to comply with the EU Urban Waste Water Treatment Directive 91/271EC. To meet this directive, the Flemish government approved a Programme Decree in December 2004, to implement changes to the water sector. Since then, Flanders has made good progress to fully meet the requirements of the mentioned directive. The current Flemish effluent standards are stricter than those imposed by the Directive.

All WWTPs projects in Aquafin are screened, regardless of size and location, and the environmental authority decides whether or not a full EIA is required, in order to comply with the Directive.

The investment programme will improve aquatic environmental conditions throughout the Flemish Region. The entire Flemish Region has been declared as sensitive and therefore tertiary treatment will be provided at all medium and large WWTPs. This programme addresses the remaining needs for nutrient removal.

The interventions within this programme are located all over the 4 river basins in Flanders and therefore do not lead to accumulated effects. The programme has been approved by the Flemish Ministry of Environment and the works consist mostly of new sewers/collectors connecting to the existing WWTPs included the previous programmes. River Basin Management Plans –which include public consultation- for Flanders were adopted and published in October 2010.

Aquafin has shown a good environmental awareness and has developed operating procedures to optimise the performance and cost-effectiveness of its systems. It has full ISO14001 accreditation for its EIA procedures and fully complies with Natura 2000, European Bird and Habitat Directives.

Aquafin will be requested to provide timely information available to the Bank about its compliance with producing the EIA (see Undertaking).

Climate change Mitigation

Aquafin

1. *The Promoter is fully aware of Climate Change impact and has organized different multidisciplinary working groups for auditing energy consumption in the WWTPs (efficient aeration, smart monitoring and implementing new technologies for nitrogen removal). This resulted in 7 million kWh savings in 2010. With an energy cost for WWTPs amounting up to 1/5 of Aquafin's total operating costs, the company has recently committed to 2% annual decrease reduction in the energy bills.*

2. Besides, the Promoter researches to increase the potential of the biogas production from sludge in the WWTPs –chemical energy- through improving the quality of the product (dewatering efficiency and new dewatering technologies) and improving the digestion process itself (addition of substrates such as glycerine, organic waste, etc.).
3. Another field of research in course is the thermal energy recovery from sewerage or effluent by heat pumps (heat recovery for buildings).

The Programme

Flanders is affected by more extreme weather conditions, presumably a consequence of climate change. Statistics show an annual increase of 1-2% in precipitation, a change in heavy rainfall conditions of 5-40% as well as longer periods with no rainfall during the last years. This results in more frequent floods and sewer overflows.

The programme and the proposed infrastructure will contribute to the Climate Change adaptation in different ways:

- a) New design criteria for sewerage systems, adopted by Aquafin at the end of 2011. The criteria are based on the most recent (heavy) precipitation statistics recalculations. The design standards have also increased the return period from 5 to 20 years. In terms of dimensioning, it will represent for the new sewers an increase of 5%.
- b) Adaptation Measures through the new legislation in place.
 - Since 2008, separation on domestic level is obliged, so that non polluted water flows to storm sewers and rivers and polluted flows to sanitary sewers and then to WWTPs
 - Until 2011, legislation focused on storage measures, carried out in previous programmes. From 2012 it will focus on rain water infiltration, so that flood risk is reduced.

Social Assessment, where applicable

Social impacts include the possible disruption of services, noise and temporary occupation of public or private space, traffic disruptions, and safety hazards. All these impacts will require strict management to minimize the negative disturbances, inconveniences and impacts common for this type of project and will be addressed in the planning permission.

Public Consultation and Stakeholder Engagement, where required

Public consultation takes place at all levels of the definition of investments. All projects are screened and the environmental authority decides whether or not a full EIA is required.

Other Environmental and Social Aspects

N.A.

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