

Luxembourg, 02.06.2017

Environmental and Social Data Sheet

Overview

Project Name:STROMNETZ HAMBURGProject Number:2016-1019Country:GERMANYProject Description:Modernization of the City of Hamburg's municipal electricity
2017-2021EIA required:Not Expected

Project included in Carbon Footprint Exercise¹: no

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

Environmental and Social Assessment

Environmental Assessment

The Project is driven by the German legislative framework (EnWG, EEG), in line EU policies/directives (EU 2020, 2006/32/EC, 2009/125/EC), as well as by initiatives of the city of Hamburg towards a strategy of sustainable urban development and by the city's climate protection programme. The Project scope includes² (a) the expansion of the LV/MV/HV network (0.4-110kV) in order to connect renewable energy and CHP plants, (b) the modernization of the ageing LV/MV network and the replacement of LV overhead lines with underground cables, (c) the installation of advanced and smart meters, (d) the grid connection of bus stations for electric buses and (e) the construction of three climate-neutral substations.

The construction of new high voltage substations as part of the grid expansion falls under Annex II of the EIA Directive (2011/92/EU, if applicable, as amended by Directive 2014/52/EU), thus implying a review by the competent authorities at the planning stage with due regard to the necessity for an environmental and biodiversity assessment. For the remaining sub-projects, given their characteristics, scale of works, and installation method for the new electrical lines (underground), a full EIA is not expected to be required.

All sub-projects have been/will be subject, as necessary, to environmental analyses in the process for the authorization to build and operate. The relevant authorities shall be consulted – where required – to ensure proper protection of environmental aspects relating to plants, animals and their habitats, and designated areas of conservation as per environmental management system operating procedure of the promoter.

For all sub-projects, appropriate mitigating measures will be implemented – as required – to minimise the impacts during the construction phase in accordance with the applicable regulations. These include, but are not limited to, containing noise, dust, vibrations, emission

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 Abbraviationary LV – low voltage MV – mid voltage HV – bidv voltage kV – bidv voltage

² Abbreviations: LV – low voltage, MV – mid-voltage, HV – high voltage, kV – kilovolt.



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of gaseous pollutants and traffic disruption as well as proper management of construction waste materials.

The electrical bus network programme, which does not form directly part of this Project but it is enabled via the necessary grid connection of its facilities, shall contribute to the reduction of CO₂ emissions, once it reaches its full capacity of electrical buses (240 buses by 2030 at BBD Busbetriebshof Gleisdreieck and circa 80 buses by 2021 at BBH Busbetriebshof Harburg or Harburg 2).

In the three 'climate neutral' substations, the Promoter shall install for the first time innovative switchgear, the insulation medium of which is climate neutral (mix of oxygen and nitrogen), instead of SF6 gas.

For those substations that shall be built with SF6 switchgear, the impact in terms of SF6 emissions³ is expected to be negligible.

Social Assessment, where applicable

The Promoter has confirmed that no resettlements shall be necessary for the construction of the aforementioned substations and/or lines.

The Promoter is an experienced distribution network operator in Germany and is certified according to BS OHSAS 18001 standards, for occupational health and safety management best practice.

Other Environmental and Social Aspects

The environmental management capacity of the Promoter is strong, as reflected by the ISO-14001 standard certification that they have obtained.

Conclusions and Recommendations

The Bank is overall satisfied with the low negative environmental and socio-economic impacts of the Project. It will be carefully monitoring all the outstanding studies required, to ensure that these are in line with the Bank's Environmental and Social Standards.

Undertakings:

• The Bank will require the Promoter to undertake not to allocate Bank's funds to Project components that require an Environmental Impact Assessment (EIA) until the EIA and/or the necessary biodiversity assessment have been finalized, satisfactory to the Bank, and approved by the competent authority. When the EIA is made available to the public, an electronic copy of the full EIA study shall be sent to the Bank.

³ Sulphur hexafluoride (SF6) is a powerful greenhouse gas with a <u>global warming potential</u> of about 23,000 times that of CO₂. SF6 is the electric industry's preferred gas for high voltage electrical insulation, current interruption and arch quenching. It is extensively used in circuit breakers and gas insulated substations because of its inertness and dielectric proprieties. The emission of SF6 is mainly due to fugitive emissions that may occur during installation, operation, maintenance and disposal of the equipment.



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- The Promoter shall undertake to take into account and implement conditions expressed in any screening-out decision or EIA consent granted by the competent authority for nature and environment.
- The Promoter shall undertake to store and keep updated any documents as may be relevant for the programme supporting the compliance with the provisions under the EU Habitat and Birds Directives and shall promptly upon request deliver such documents to the Bank.

Based on the information available, and with appropriate environmental conditionality included in the Finance Contract (aforementioned conditions), the programme is deemed to be acceptable for Bank financing from an environmental and social perspective.