European Investment Bank

Luxembourg, 24 May 2024

Environmental and Social Data Sheet

Overview

Project Name:	*HELSINKI CROWN BRIDGES LIGHT RAIL*
Number:	*2022-0314*
Country:	*Finland*
Project Description:	*The project concerns the construction of the Crown Bridges light rail line in the City of Helsinki, the construction of a new depot and the acquisition of related rolling stock and ancillary works relating to the light rail line. The Crown Bridges light rail will connect the suburbs of Laajasalo, Korkeasaari and Kalasatama to Helsinki city centre. It will also provide a new route for cyclists and pedestrians.*
EIA required:	yes
Project included in Carbon Footprint Exercise[1]:	no

Environmental and Social Assessment

The project consists of the works and installations for the construction of the Crown Bridges light rail line in the City of Helsinki with a total length of c. 8 kilometres, the construction of a new depot in Ruskeasuo area to host the trainsets needed for the operation of the tramline. This deport will accommodate up to 100 trams and will have also parking facilities in the roof for about 220 buses (which are not part of this project) and the acquisition of related rolling stock and ancillary works relating to the light rail line, with a surface of c.30,000 sq.m.

In particular, the project includes the construction of 3 new bridges and will also comprise the purchase of approx. 23 new tram sets 35 m-long. The new infrastructure will provide new facilities along the corridor for cyclists and pedestrians.

Environmental Assessment

This new tramline will connect with the existing tram network, with the aim of expanding the clean public transport infrastructure of the city of Helsinki.

Finland national legislation incorporates the main EU Directives into the national legal regulations. The SEA Directive 2001/42/EC is incorporated into:

- Act on the assessment of the environmental effects of public authorities' plans and programs 200/2005.
- Act on the assessment of environmental effects 468/1994, and additional amendments incorporated between 2001-2014.
- And finally, the completely renewed EIA law (KS EIA 2014), effective in 2017.
- In addition, the Land Use and Building Act (Act 132/1999) reflects some of the EU SEA Directive 2001/42/CE requirements.

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

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Finnish Environmental Protection Act (27.6.2014/527) also transposes the Environmental Impact Assessment (EIA) Directive 2011/92/EU.

The Finnish EIA legislation was revised in May 2017, by means of the Act on Environmental Impact Assessment Procedure 277/2017. This Act from 2017 aligns the national legislation to the latest revised EIA Directive 2014/52/EU.

The Promoter, Helsinki City Council, is subject to the following Finnish national legislation relevant to this project for environmental matters:

- Water Act (27.5.2011 /587)
- Environmental Protection Act (27.6.2014/527). Consolidated version of Act No. 527 of 2014 as last amended by Act No. 119 of 18 December 2020.
- Land Use and Building Act (5.2.1999/132)

Following these national laws, a SEA (Strategic Environmental Assessment) was carried out - according to the YVA (EIA) Act that transposes Directive 2001/42/EC-; The SEA is part of the latest Master Plans for the City of Helsinki, produced in 2002 and updated in 2016.

Moreover, an EIA was carried out for the Project, after the project was screened-in by the competent authority in 2009. The EIA was subject to public consultation before it was approved in 2014. No updates have been prepared for the EIA since 2014, when the EIA was approved.

The detailed design developed more recently for construction stage takes into account the risks identified in the EIA and provides updated design solutions to tackle with these risks.

The competent public authority responsible for issuing the Environmental Impact Statement (EIS) for the Helsinki Crown Bridges project (including the future tramway line and the depot) is the Centre for Economic Development, Transport, and the Environment of Uusimaa (ELY Centre). The rolling stock for this project falls outside the scope of the EIA Directive, and therefore no EIA is required for the rolling stock for this project.

The construction works for new bridges, related dredging works, and land reclamation works in coastal areas require permits in accordance with the Water Act (587/2011). The authority responsible for these permits is the Regional State Administrative Agency of Southern Finland.

Construction works in some areas of the project started in 2021 with the accommodation works, utility diversions and temporary traffic diversions.

Benefits of the project: The project is an urban public passenger transport project, and as such has a substantial contribution to Environmental Sustainability (Pollution Prevention, including noise reduction). The project will promote a modal shift from private car and bus users to a cleaner new tramline. The project will also improve the reliability and the quality of the public transport service in the city, helping thus reduce reliance on private cars and maintain and/or increase public transport share. The project is expected to reduce the Green House Gases (GHG) emissions associated to the current mobility patterns, also reducing the air pollution, noise and traffic congestion in the city. The project is also expected to produce time savings to passengers by improving the urban mobility in the city of Helsinki.

The project will improve the mobility patterns in some districts in the City of Helsinki, offering citizens a better public transport system and therefore proving access to more work opportunities that were not an option without the project because they were far away, and travel times were a constrain.

Negative environmental impacts: Most identified negative impacts during project execution are temporary ones, and mitigation measures are proposed to reduce the final impact, as such the residual negative impacts of the project are deemed acceptable by the competent authority.

The main identified negative impacts produced during construction phase are gas emissions by the heavy plant machinery, traffic disruptions nearby the construction sites, contamination

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of sea water during bridges construction phase -including dredging-, volumes of excavated material to be disposed, noise levels and the impact on the green areas (while these are limited areas) affected by the works, to be restored.

During the future operation of the tramline, noise and vibrations due to the trains running is likely to be the worst negative impact. This can be considered very located and limited in time. To minimise the noise and vibrations of the trains accelerating and breaking, the track works are design to absorb and mitigate them.

Construction of the foundations for the bridges (for the abutments and piers) will have a negative impact on the sea waters of the estuary the tramline flies over. This impact -mainly water pollution and disruptions to the fauna in the area- is considered temporary and limited in time and space. Still some mitigation measures are adopted, for example: construction works shall avoid the breeding season of some birds nesting in the area, and construction technics to build the foundations limit the dredging required to build the foundations.

Zero Pollution: The project includes the use of decontaminated soils for the fills (contaminated soil will be removed from the Hakaniemi area), and restoration of the seabed bank will be done, as needed, after construction of the piers and abutments for the bridges.

Impacts on protected areas or biodiversity: According to the EIA, the project does not affect any protected areas (Natura 2000) and it does not have any impact on any protected habitats either. In addition, there are no significant biodiversity issues identified in the EIA for the project. Moreover, the promoter for the project commissioned an ecological audit that came up with recommendations to increase biodiversity for the design and construction of the new depot. These recommendations are now being implemented during construction phase of the depot.

*Climate Risk assessment and vulnerability study: The*re is a risk assessment and vulnerability study for the project, carried out in 2015, where several risks for the project are identified: sea rise level, increase in the rainfall, reduced snowfall and freezing periods, etc. The detailed risk analysis for the project and the proposed relevant adaptation mitigation measures are incorporated into the structural design of the tramline to bring the identified risks to an acceptable residual level. These mitigation measures include corrosion protection for the steel structures, prevention of concrete deterioration (carbonization), changes in the maintenance routines for the tramline operation, etc.

Alignment with Paris Agreement: The Project is aligned with the Paris Agreement, according to Annex 2 the EIB's Climate Bank Roadmap, and contributes to Climate Action objectives. The Promoter is committed to reducing the net carbon emissions to zero by 2050, with an intermediate target of reducing the City's greenhouse gas emissions by at least 30% by 2025.

One of the two Borrowers for the project (the City of Helsinki) is a sub-sovereign public entity and as such is not in scope of the *EIB's Paris Alignment for Counterparties* (*PATH*) f*ramework*. The 2nd Borrower is Pääkaupunkiseudun Kaupunkiliikenne Oy, is classified as a Public Sector Entity as it is wholly owned by the City of Helsinki, therefore it is considered in scope, but screened out for PATH.

Climate change adaptation: The embankments of the light rail line are also designed as a flood barrier and prevent future sea level rise to flood urban areas. The project is thus an adaptation enabling activity, contributing to the adaptation of other assets surrounding the project.

Circular Economy and Resource Efficiency (incl. natural resources): Construction phase for the project aims for a recycling rate of at least 70 per cent. For the new Depot for the future tramline, the use of the lighting system and heating is monitored to optimize the energy consumption, also geothermal heating will be used for the depot. Residual heat is planned to be recycled and reused efficiently. During construction stage the project includes innovative solutions to reduce energy consumption and increase the project's sustainability (i.e., use of low carbon products, fibre-reinforced concrete and certified wood from sustainable forests), including also the use of biofuels for the heavy-duty machinery or the use of renewable electricity on site.

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Social: No informal resettlements were identified in the project's footprint, and therefore no compensations measures in that regard are included in the project. The Project is subject to the standard national and local proceedings related to potential complaints from the public.

Public Consultation and Stakeholder Engagement

As part of the consultation process carried out under the EIA, the Promoter engaged with all relevant third parties involved in the project in 2014, and various measures were incorporated into the EIS to accommodate the requests received, for example to address the concerns about future sea level rise or to execute a transport project minimising the gas emissions during both construction and operation.

Conclusions and Recommendations

The project was screened in for a full environmental assessment, an EIA was carried out, including a public consultation process; and eventually the environmental competent authority issued an EIS approving the project and defining the mitigation measures for the execution phase.

The project will promote a modal shift from private and bus users to cleaner electric tram system. This will reduce the adverse environmental impacts of transport in Helsinki and also reduce GHG emissions. Some of the infrastructure is designed to contribute to climate change adaptation, providing flooding protection in case of future sea level rise.

The Promoter is deemed experienced and has enough capacity to successfully implement the project according to all the environmental requirements.

Based on all the above, the project is acceptable for EIB financing in E&S terms.