

## Environmental and Social Data Sheet

### Overview

Project Name:	<i>Midway Alignment Vaasa Umea Ferry</i>
Project Number:	20170368
Country:	<i>Finland / Sweden</i>
Project Description:	<i>The project concerns the construction of a new passenger/car (RoPax) ferry to replace the existing one currently used to connect the cities of Vaasa (Finland) and Umea (Sweden). The new vessel will be equipped with a dual-fuel liquid natural gas/biogas (LNG/LBG) and marine diesel engine, an electric propulsion system, an optimised hull design and other similar energy efficiency features that improve significantly its environmental performance compared to the existing vessel. The project also involves small-scale port infrastructure works for the adaptation of the berths required for the reception of the new ferry at the ports of Vaasa and Umea.</i>
EIA required:	no
Project included in Carbon Footprint Exercise <sup>1</sup> :	no

### Environmental and Social Assessment

#### Environmental Assessment

The Promoter, Kvarken Link Ab is jointly owned by the cities of Vaasa (Finland) and Umea (Sweden). Kvarken Link Ab established in 2015 the limited liability company NLC Ferry Oy Ab with trade name Wasaline – a shipping company operating the ferry Wasa Express on a route between Vaasa and Umea.

The project concerns the construction of a new passenger ferry (RoPax) to replace the existing one used to connect the cities of Vaasa and Umea. The new vessel will be constructed and operated in compliance with IMO and EU regulations. It will be constructed at the Rauma Marine Constructions shipyard located in Rauma, Finland and operate under the Finnish flag.

The new vessel falls outside the Environmental Impact Assessment (EIA) Directive 2014/52/EU amending the EIA Directive 2011/92/EU.

The ferry will be equipped with a hybrid propulsion system with a combination of a dual fuel engine and batteries. The dual-fuel engine will allow it to operate with marine diesel or with liquid natural gas (LNG) and liquid biogas (LBG), providing a longer-term possibility to replace parts of the LNG supply with LBG. The Promoter anticipates that the vessel will predominantly use LNG as the primary source of energy, significantly reducing emission of air pollutants (CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub> and Particulate Matter) compared to conventional fuels. The vessel will be delivered battery-ready, with the option to install the batteries after vessel completion to boost propulsion and further reduce fuel consumption.

<sup>1</sup> 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 20,000 tons CO<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

Luxembourg, 26<sup>th</sup> April, 2019

According to information provided by the Promoter, compared to the use of HFO/MDO, LNG use reduces CO<sub>2</sub> emissions by 20-30%, almost completely eliminates SO<sub>x</sub> emissions and reduces NO<sub>x</sub> emissions by approximately 80-85%.

Moreover, the new ferry will have an electric propulsion system with azimuth thrusters/pods, an optimised hull design, provisions to power through shore-side connection (cold ironing) without using its engines or on-board generators and hence significantly reducing emissions while in port and other similar energy efficiency features that further improve its environmental performance compared to the existing vessel.

The project also includes small-scale port infrastructure works in the ports of Vaasa and Umea for the adaptation of their existing ferry facilities required for the reception of the new vessel. These include the upgrade of existing ferry quay walls, terminal yard renovation, installation of flexible ramps and passenger gangways, the upgrade of the utility networks including the waste management system and installation of shore-side electricity and other smaller safety and protection enhancements.

The competent authority of Vaasa has confirmed that the planned infrastructure works fall outside the Environmental Impact Assessment (EIA) Directive and that the existing environmental permit of the port already covers these.

The competent authority of Umea has confirmed that the only project component pending clearance is the quay wall ramp extensions, for which a simplified environmental assessment will be performed due to the small scale of works. The port authority is currently in the process of obtaining the required clearance, which according to the Promoter is expected to be obtained by the end of the 2<sup>nd</sup> quarter of 2019.

The vessel route crosses a Natura 2000 site extending offshore the ports of Vaasa and Umea. The new vessel will operate under the required permits issued by the Finnish flag state and classification society. Given the overall improvement in environmental performance of the new vessel compared to the existing one the net environmental impact is expected to be positive.

The Project's overall residual risks are expected to be positive or neutral and thus acceptable for EIB financing.

## Conclusions and Recommendations

The Bank will condition disbursement for the quay wall ramp extensions at the port of Umea upon delivery to the satisfaction of the Bank of the environmental decision from the relevant Competent Authority.

Subject to the above condition being met, the project is acceptable for EIB financing in environmental and social terms.