7th May 2014

Environmental and Social Data Sheet

Overview

Project Name:	*FJORD LINE ROPAX VESSELS*
Project Number:	*2011-0178*
Country:	*DENMARK*
Project Description:	The project comprises the financing of two new ferries, which will offer daily services between Bergen, Stavanger, Kristiansand (Norway) and Hirtshals (Denmark). Each vessel has a capacity to carry 1,500 passengers and up to 600 vehicles. The project cost amounts to EUR 249 million and vessels were delivered in the fourth quarter of 2013 and in the first quarter of 2014 with a project completion date of year-end 2014.

EIA required: no

Project included in Carbon Footprint Exercise[1]: yes

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

By providing LNG powered ferries, the project will contribute to a significant improvement of the overall environmental performance of Fjord Line fleet. For the project vessels, which will operate on Fjord Line´s existing routes, the reduction in C02 emissions has been estimated in 35%. The main alternative for these routes would be air and land travel and hence the project will contribute to the development of sustainable European transport.

The project does not require an Environmental Impact Assessment (EIA) under the Directive 2011/92/EU. The project is expected to contribute and have a positive impact on emissions reduction and efficiency gains of commercial marine engines.

The promoter and the shipyard hold the following Certification:

OHSAS18001:2007	Safety Management
ISO14001:2004	Environmental Management System
ISO9001:2008	Quality Management

Environmental and Social Assessment

Environmental Assessment

The promoter and LNG engine suppliers claim the following reductions in emissions from this project compared with vessels operating conventional Marine Diesel propelled vessels (all figures are approximate):

- CO2 reduced by 22%
- NOx reduced by 93-94%
- Particle emissions reduced by 99%
- SOx emissions 100% removed

With respect to alternative fuels for transport, including LNG, the European Commission published on January 24th, 2013, the proposal for a Directive for “Clean Power for Transport”, which aims to establish an infrastructure of alternative fuel stations for electricity, hydrogen and natural gas with common standards of design and use across Europe. This Directive is part of a package of the “Commission´s Transport 2050

Strategy" which aims to break EU transport´s dependence on oil and sets a target of 60% greenhouse gas (GHG) emission reductions by 2050. This strategy includes all modes of transport. For example, halving the use of conventionally fuelled cars in urban transport by 2030 and a 40% CO2 emission reduction cut in aviation and shipping by 2050 (in comparison in absolute numbers to 2005 – taking substantial traffic increase into account).

The proposed Clean Power for Transport Directive provides a comprehensive EU framework on LNG for shipping. The Action Plan for the development of Liquefied Natural Gas (LNG) in shipping aims to ensure publicly accessible LNG refuelling points according to the technical specifications set out (applicable for LNG stations from 2015) for maritime and inland waterway transport in all maritime ports of the Trans-European Transport (TEN-T) Core Network by 31 December 2020. The same is suggested for inland waterway transport for all inland ports in this area by 31 December 2025. The 83 maritime ports within the TEN-T Core Network are the prime locations for use of LNG in shipping. In addition, inland waterways and road transport corridors shall also be equipped with sufficient LNG and CNG (for vehicles) stations. A vital part of the proposal is the adoption and implementation of safety regulations with respect to storage, transport and the refuelling process of LNG, as well as the technical specifications for interoperability between ships and boats and refuelling points for the LNG in maritime and inland waterway transport. It is proposed that the establishing of a minimum infrastructure is the key for acceptance of alternative fuels. However, for this project, the necessary LNG bunkering infrastructure is already well established in Norway.

EIB Carbon Footprint Exercise

Baseline emissions are 115,902 ktonCO2eq/year, and estimated emissions savings are 38,082 ktonCO2eq/year, which represents approximately a 33% of reduction in CO2 emissions.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost'.

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