

Luxembourg, 24th July 2017

Environmental and Social Data Sheet

Overview

Project Name: WARTSILA RDI V

Project Number: 2017-0006

Country: Finland, Italy, Spain

Project Description: The project covers the promoter's investments in research, development and innovation (RDI) in 2017-2020, related to four-stroke (medium speed) engines for marine and power plant applications. The main objectives include improvement of efficiency, environmental performance, reliability, lifecycle cost and automation.

EIA required: no

Project included in Carbon Footprint Exercise¹: no

Environmental and Social Assessment

Environmental Assessment

The project's environmental footprint is mainly related to its outputs (products) as the project per se concerns purely R&D operations with no particular environmental impact. The majority of the spending is related to operational expenditures and a small part concerns capital investments for upgrading existing test stands, developing engine prototypes and other related activities that do not require any specific environmental authorisations.

Nevertheless, the company and the sector recognise the environmental impact of the sector and the fact that exhaust gases from ships are a major source of air pollution. According to estimates, international shipping emitted 796 million tonnes of CO₂ in 2012 - approximately 2.2% of global CO₂ emissions for that year, while shipping also accounts for up to 30% of total global NOx and 9% of SOx emissions.

Consequently, the R&D programme focuses largely in improvement of engine efficiency and environmental characteristics (CO2 and pollutant emissions) and in the development of solutions with alternative fuels (including natural gas, and low-sulphur fuels) with better emission characteristics as well as in hybrid technologies.

Other Environmental and Social Aspects

Wärtsilä's principle is to apply the certified EHS (Environmental, Health and Safety) management systems based on ISO 14001 and OHSAS 18001 in all Group companies, excluding those focusing purely on sales, and as of 2016 about 66% of the companies were certified covering more than 90% of Wärtsilä's total workforce.

Conclusions and Recommendations

The project concerns R&D activities that will be carried out in existing facilities without changing their already authorised scope and do not have any significant negative

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.



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environmental impact. Thus, an Environmental Impact Assessment (EIA) as defined in the Directive 2014/52/EU amending the EIA Directive 2011/92/EU is not required. Parts of the projects have environmental objectives, and the company's focus on sustainable operations is strong.

The project is considered as environmentally acceptable for financing by the Bank

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