



DET NORSKE VERITAS

STATEMENT OF FEASIBILITY

This is to state that the

COSCON Energy Efficiency Management Information System and GHG Emission Calculator

COSCON has been evaluated in accordance with DNV RP-A203 Qualification Procedures for New Technology /1/ Sections 5.5. Det Norske Veritas AS (DNV) considers the technology conceptually feasible as defined in /2/ and thereby suited for further development and qualification according to DNV-RP-A203.

Technology owner:	COSCO Container Lines Co., Ltd (COSCON)
Name of technology:	COSCON Energy Efficiency Management Information System and GHG emission calculator
Description:	<p>The boundary of the GHG emission calculator includes all ships owned, controlled and sea routes operated by COSCON.</p> <p>The technology is established on a reasonable boundary definition, data collection, data consolidation, methodology of calculation, and data estimation, which has the following advancements.</p> <ol style="list-style-type: none">1. The GHG emission calculator runs with dynamically updated Energy Efficiency Operation Indicator (EEOI) database that is based on daily factual activities data of ships. The up-to-date EEOI extracted from database is applied in GHG emission calculation.2. Data validation is applied prior to EEOI calculation.
Application:	In known area with limited field history
Involvement:	DNV has taken part in and verified the Qualification Basis formulation and the Technology Assessment and evaluated the main challenges and uncertainties of the technology.
Opinion:	DNV's opinion is, under the limitation stipulated in the statement, the GHG calculator provides reasonable estimation of CO ₂ emission for public use.
Limitations:	The GHG emission calculator only includes emission of CO ₂ gas during sea transportation phase. The GHG calculation methodologies have incorporated mechanisms to reduce the degrees of uncertainties, however the overall level of uncertainty should be quantified in the future.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



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- Reference documents:**
- /1/ DNV-RP-A203, Qualification Procedures for New Technology, September 2001.
 - /2/ DNV-OSS-401, Technology Qualification Management, June 2004 (Draft)
 - /3/ COSCON Energy Efficiency Management Information System Design Report, Sept. 2010
 - /4/ COSCON GHG Calculation Model and Technology Treatment Method, Sept. 2010
 - /5/ COSCON Energy Efficiency Management Information System Application Programme, Sept. 2010.
 - /6/ COSCON EEOI benchmark and data validation documents, Sept. 2010

DNV shall not be responsible for not having identified failure modes or causes that has resulted in loss or damage or for not having prescribed the qualification activities necessary to avoid the loss or damage.

Shanghai, 30 Sept. 2010

Det Norske Veritas AS

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