Certificate No: LR25233596SC
Issue Date: 29/09/2025
Expiry Date: 28/09/2028

# Software Conformity Certificate

This certificate is issued to

**Manufacturer** **Shanghai Ship and Shipping Research Institute Co., Ltd.**

**Address** Room 201, Building 5, No. 600, Minsheng Road, Pudong New Area, Shanghai City, 200135, China

**Software:** Ship GHG Emission Monitoring and Control Platform, version No.: v 1.0

**Description:** GHG Emissions and Control Platform undertakes the verification, statistics and analysis of ship energy consumption data, provides technical support for the management and emission reduction policies of ship energy efficiency through data indicators and calculation and analysis, and monitors ship energy consumption data in realtime through digital and intelligent dynamic data calculation and indicator reporting system, and timely compares various domestic and foreign ship emission indicators to promote environmental protection and the healthy developmentof ship economy.
Modules including in the product:
Monitoring of the Quality of Noon Report Data
Monitoring of Voyage Data Quality, Summary of Reefer Container Reduction Data for Voyage Segments
Summary of Ship Type CII(Voyage Segment Data)
Summary of Ship Type CII(Daily Data)
Records of Biofuel Refueling, Details of Biofuel Usage
Summary and Comparison of Ship Type CII
Overview of Ship Type CII
Overview of Route CII
Monitoring of Key Ships
Monitoring of EU - ETS
Monitoring of FuelEU
Analysis of Single Ship Stages
Analysis of Single Ship Performance
Biofuel Calculator IMO CII

Downloaded Copy

Room 02-05, 48F, Raffles City Shanghai Office Tower, No.268 Xi Zang Middle Road, Huangpu District, Shanghai, 200001, China

**Ke Lin Zhang**

Lead surveyor Electrical en control engineering to Lloyd's Register Classification Society (China) Co., Ltd.

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Certificate No: LR25233596SC
Issue Date: 29/09/2025
Expiry Date: 28/09/2028

# Software Conformity Certificate

Biofuel Calculator EU ETS
Biofuel Calculator FuelEU Maritime
Calculation of Route and Fleet
Audit of Noon Report Data
Audit of Voyage Data
Audit of Original Emails
Verification of Refueling Data
Verification of Voyage Data by the Maritime Bureau
Verification of Year -Crossing Fuel Quantity
Maintenance of Basic Information

**Operating Environment:**

The hardware devices and network environment of the platform are provided by the company's group cloud,the hardware consists of:
Application server: one application instance, Linux, 2 cores, 2GB memory, 50GB storage space
Scheduled Task Server: one application instance, Linux, 2 cores, 4GB memory, 50GB storage space
Web server: One application instance, Linux, 1 core, 200MB memory, 50GB storage space
Database server: PostgreSQL
Cache Server: Redis
File Storage Service: minio

**Assessment Module:**

Software Conformity Assessment System Procedure SC94
Software Conformity Assessment System Assessment Module GEN1

**Qualifications:**

This certificate is valid only for the above-mentioned versions of the software.

Downloaded Copy

Room 02-05, 48F, Raffles City Shanghai Office Tower, No.268 Xi Zang Middle Road, Huangpu District, Shanghai, 200001, China

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Certificate No: LR25233596SC
Issue Date: 29/09/2025
Expiry Date: 28/09/2028

# Software Conformity Certificate

This certificate is valid only for the software mentioned herein and excludes software that has been developed outside the assessed development process.

**Previous Version:** N/A

The Design Appraisal Document No. PRJ111005040431-2 and its supplementary Software Conformity Assessment Terms and Conditions form part of this Certificate.

Downloaded Copy

Room 02-05, 48F, Raffles City Shanghai Office Tower, No.268 Xi Zang Middle Road, Huangpu District, Shanghai, 200001, China

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.