





### **ATTENTION SHIPOWNERS & OPERATORS:**

# REVISE YOUR MONITORING PLAN TO COMPLY WITH THE EU ETS

Stay compliant with the latest EU MRV regulations and EU ETS directives!

Understand key changes in the Monitoring Plan for EU ETS compliance.

Verifavia's experts are here to guide you through the adaptation process.





ENSURE ACCURATE REPORTING



Update your Monitoring Plan with crucial ship and owner details as required by the regulations. This includes:

- IMO Unique Company and Registered Owner Identification Number
- Ice class information
- References to supporting documents like the Continuous Synopsis Record (CSR) and Certificate of Registry

Ensure accurate identification for transparent and verifiable emission reporting within the EU ETS.



Guarantee transparency by precisely defining your company information based on the ISM Code scope (Shipowner vs. ISM Company) as mandated by the updated plan. This clarifies your role and responsibilities within the EU ETS framework.



### CLEAR COMPANY DEFINITION:

ALIGN WITH ISM CODE SCOPE FOR EU ETS REPORTING





### MEET EU ETS REGULATORY REQUIREMENTS



#### Provide accurate details on:

- Emission sources (Main engines,' 'Auxiliary engines,' 'Gas turbines,' 'Boilers,' 'Inert gas generators,' 'Fuel cells,' 'Waste incinerators)
- Emission types: ICE (other), LNG Otto (dual fuel medium speed), LNG Otto (dual fuel slow speed), LNG Diesel (dual fuel slow speed), LBSI, Gas turbine, Boilers, Fuel Cells, Waste Incinerators, Inert Gas generators
- Revised emission factors according to the Annex I of Regulation (EU) 2015/757

Meet EU ETS regulatory requirements and ensure accurate monitoring and reporting of your vessel's GHG emissions.

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The slippage coefficient (as % of the mass of fuel used by the specific emission source) by Annex I to Regulation (EU) 2015/757 should be mentioned in this section.

The slippage coefficient for LNG is as follows:

- 3,1 for LNG Otto (dual fuel medium speed)
- 1,7 for LNG Otto (dual fuel slow speed)
- 0,2 for LNG Diesel (dual fuel slow speed)
- 2,6 for Lean-Burn Spark Ignited (LBSI)



### **OPTIMIZED ENGINE EFFICIENCY:**

IMPLEMENT REVISED SLIPPAGE COEFFICIENTS FOR ACCURATE FUEL CONSUMPTION ESTIMATION IN THE EU ETS



CARBON CAPTURE & STORAGE TECHNOLOGIES:

DEMONSTRATE
COMPLIANCE WITH EU
ETS REQUIREMENTS FOR
INNOVATIVE SOLUTIONS



Vessels using carbon capture and storage technologies should mention the Supporting evidence for compliance with the requirements spelled out in Article 12(3a) or Article 12(3b) of Directive 2003/87/EC and the Emissions source to which capture and storage and/or carbon capture and utilization is applied.





# DETERMINING AND UPDATING EMISSION FACTORS (EU 2015/757)

ENSURE VERIFIABLE RESULTS FOR EU ETS REPORTING



The description of the procedure must identify how actual emission factors listed under Table B.4 and B.5 are derived for approval, including the method by which compliance with the conditions and restrictions for diverging from default values in accordance with Annex I to Regulation (EU) 2015/757 is demonstrated.



- CO<sub>2</sub> emission factors are derived based on sustainability criteria and regulations.
- Biomass fraction has a CO<sub>2</sub> emission factor of zero if it meets certain criteria.
- Recycled Carbon Fuel (RCF) and Renewable Fuels of Non-Biological Origin (RFNBO) have CO<sub>2</sub> emission factors calculated according to specific regulations.



### BIOFUEL & RFNBO CO<sub>2</sub> EMISSION FACTOR DETERMINATION

REPORT ALL GHG EMISSIONS IN THE EU ETS



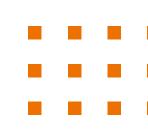
MONITORING OF GREENHOUSE GAS EMISSIONS AND FUEL CONSUMPTION

ENSURE DATA ACCURACY FOR RELIABLE EU ETS REPORTING



The updated MP contains GHG emissions instead of only CO<sub>2</sub>.

"Emissions source reference No." and "Emissions source type" have been added and should be filled as reported in Table B.3 and emissions sources used on board, respectively.





## GHG EMISSION AND FUEL CONSUMPTION ESTIMATION

METHODS TO BE USED TO ESTIMATE GREENHOUSE GAS EMISSIONS AND FUEL CONSUMPTION.



Specify and implement the methods stipulated in Table D.1 for estimating GHG emissions and fuel consumption accurately.

The calculation to estimate the greenhouse gas emissions should be performed as per Annexes I to The Commission Delegated Regulation on the rules for monitoring greenhouse gas emissions and other relevant information from maritime transport.



PROCEDURES FOR DATA FLOW ACTIVITIES





# INCLUDE RISK MANAGEMENT IN YOUR DATA FLOW



## MITIGATE ERRORS, ENSURE COMPLIANCE WITH THE UPDATED MONITORING PLAN

- Regulation mandates companies to conduct a thorough risk assessment identifying potential errors in data flow, from initial collection to final emission reports (Table E.3).
- This assessment ensures data accuracy and regulatory compliance, safeguarding against misstatements in reports.
- Continuous improvement is crucial: companies must regularly review and update both risk assessments and control measures based on their effectiveness.
- Risk assessment should cover all the risk associated with the data flow activities, including but not limited to:
  - Human errors in data entry
  - Data loss or corruption
  - Lack of knowledge leading to incorrect data handling
  - Data mismatches due to inconsistencies
  - Inadequate procedures for handling data gaps

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# HAVE QUESTIONS OR NEED OUR HELP FOR YOUR MONITORING PLAN ASSESSMENT?

Contact us at insights@verifavia.com

