MARITIME EU MRV

Your guide to monitoring, reporting and verification of CO₂ emissions from ships

Move Forward with Confidence
Maritime transport has an impact on the global climate and on air quality, as a result of the carbon dioxide (CO₂) emissions and other emissions that it generates.

The European Parliament and the Council of the European Union (EU) have adopted the regulation 2015/757 on the monitoring, reporting and verification (MRV) of CO₂ emissions from maritime transport. It entered into force on 1 July 2015, with monitoring to begin in 2018.

This guide explains the Maritime EU MRV Regulation, its impact on you, and how Bureau Veritas can support you in implementing it.

WHO MUST COMPLY?
The Maritime EU-MRV regulation applies to all merchant ships of 5,000 GT or above on voyages from, to and between ports under jurisdiction of EU Member States. Ships above 5,000 GT account for around 55% of the number of ships calling into EU ports and represent around 90% of the related emissions. Companies operating the vessels will have to monitor the CO₂ emissions released while in port and for any voyages to or from a port under the jurisdiction of a EU Member State and to keep records on CO₂ emissions on both per-voyage and annual bases.

WHY DID THE EU INTRODUCE THE REGULATION?
International maritime shipping remained the only method of transportation not included in the Union’s commitment to reduce greenhouse gas emissions. In order to reduce CO₂ emissions from shipping at European level, the EU has imposed a system for monitoring, reporting and verification (MRV system) of CO₂ emissions based on the fuel consumption of ships. This represents the first step of a staged approach for the inclusion of maritime transport emissions in the Union’s greenhouse gas reduction commitment.

WHY CHOOSE BUREAU VERITAS?
Understand the regulation and its requirements
Achieve and maintain compliance
Ensure your crew are appropriately trained
Minimize business and technical risk
Timely Approval of MRV Monitoring Plans
Review of EU MRV Monitoring Reports by qualified Verifiers
Issuance of Certificates of Compliance for the vessels

EU MRV: WHAT DOES IT MEAN FOR YOU?

5,000 GT
THRESHOLD FOR COMPLIANCE WITH THE NEW REGULATION

90%
OF CO₂ EMISSIONS FROM SHIPS WITHIN THE EU COME FROM SHIPS >5000 GT
Companies must, for each of their ships, monitor and report the relevant parameters during a reporting period in accordance with following principles:

- Monitoring and reporting must be complete and cover CO₂ emissions from the combustion of fuels, while the ships are at sea as well as at berth.
- Companies must apply appropriate measures to prevent any data gaps within the reporting period.
- Monitoring and reporting must be consistent and comparable over time.
- Companies must obtain, record, compile, analyse and document monitoring data, including assumptions, references, emission factors and activity data, in a transparent manner that enables the reproduction of the determination of CO₂ emissions by the verifier.
- Companies must ensure that the determination of CO₂ emissions is neither systematically nor knowingly inaccurate and must identify and reduce any source of inaccuracies.
- Companies must enable reasonable assurance of the integrity of the CO₂ emission data to be monitored and reported.

By 31 August 2017, companies must submit to the verifiers a monitoring plan for each of their ships indicating the method chosen to monitor and report CO₂ emissions and other relevant information.

The monitoring plan must consist of a complete and transparent documentation of the monitoring method for the ship concerned and must contain at least the following elements:

- Identification, type of the ship and the Company details
- Description of the CO₂ emission sources on board the ship and the fuel types used. These include main engines, auxiliary engines, gas turbines, boilers and inert gas generators
- Procedures for monitoring the fuel consumption of the ship by following methods:
  - use of Bunker Fuel Delivery Notes and periodic sounding of fuel tanks
  - bunker fuel tank monitoring;
  - flow meters for applicable combustion processes; or
  - direct emission measurements
- Single emission factors used for each fuel type,
- Procedures used for determining activity data per voyage, including:
  - the distance travelled,
  - cargo and/or the number of passengers transported,
  - time spent at sea and berth
  - Information about the ice class of the vessel

Companies must use standardized monitoring plans based on templates. Those templates, including the technical rules for their uniform application, must be determined by the EU Commission by means of implementing acts.
REGULATION TIMETABLE

Helping you meet the challenge from now to 2019

ACCREDITATION OF VERIFIERS
By Accredited Certification Bodies (Addition to existing ISO 14065:2013 accreditation of Bureau Veritas Certification by UKAS)

PREPARATION OF TECHNICAL RULES
in particular on data exchange formats, electronic templates, standardized monitoring plans and emission reports by EU Commission

31 AUGUST
Monitoring plans to be submitted to the verifier for assessment

31 DECEMBER
Formal adoption of technical rules by EU Commission

1 JANUARY
Start of first monitoring period

EARLY 2019
First yearly reports submitted to Verifiers

30 APRIL 2019
Verified emission report to be submitted by the company to the Commission and the authorities of the flag states concerned

30 JUNE 2019
document of compliance issued by verifier to be placed onboard

BUREAU VERITAS SUPPORT

Knowledge and training

Assessment and approval of monitoring plans

Review of monitoring report*

Assessment of compliance*

*Performed annually from 2019
From 2019, Companies must submit to the Verifier the summary of data collected on annual base for review and verification. Beginning of the year: company to submit yearly emission reports to Verifiers for assessment. By 30 April: verified emission report to be submitted by the company to the Commission and flag authorities concerned. By 30 June: A document of compliance issued by Verifier to be kept on board ships, covering the relevant reporting period. By 30 June, the Commission will make publicly available the information on CO₂ emissions, fuel consumption, technical efficiency of the ship (EEDI or estimated index value EIV, where applicable), time spent at sea, method applied for monitoring, identity of the verifier, etc.
Bureau Veritas will act as accredited Marine EU MRV Verifier in accordance with accreditation for ISO 14065:2013 certification scheme and will perform the following activities:

**REVIEW AND APPROVAL OF MARITIME EU-MRV MONITORING PLANS**
Review and approval of vessels Maritime EU-MRV Monitoring plans before end 2017 (plans to be submitted for approval by the Company before 31.08.2017).

**ASSESSMENT OF MARITIME EU-MRV MONITORING REPORTS**
Review of vessels Maritime EU-MRV Monitoring Reports before end of April each year (starting in 2019).

**ISSUANCE OF DOCUMENT OF COMPLIANCE**
Issuance of Document of Compliance following successful review of EU-MRV Monitoring Reports before end of June each year (starting in 2019).

Our worldwide organization and network of Maritime EU MRV Verifiers will enable us to quickly respond to client needs.

**BUREAU VERITAS MARITIME EU MRV SERVICES**

Bureau Veritas is a global leader in testing, inspection and certification, serving clients’ needs in quality, health, safety, environmental protection and social responsibility. For over 180 years, our clients across all industries have looked to us to provide technical support, verify compliance, or obtain certification. Our network of over 1,400 offices and laboratories ensures we meet our clients’ needs, wherever they are in the world. We are driven by a single commitment: to keep our clients’ crew and assets safe, every day.

**ABOUT BUREAU VERITAS**

Bureau Veritas was founded in 1828 for the initial purpose of collecting, verifying and providing maritime insurance companies with precise and up-to-date information about the condition of ships and their equipment around the world. Today, over 2,600 experts in Marine and Offshore serve our clients’ needs worldwide.

**OVER 1,000 ACCREDITATIONS AND AUTHORIZATIONS**
Our wide range of accreditations and authorizations across a range of industry sectors prove that we operate professionally and that our reports and certifications are recognized and respected. We hold 150 delegations of authority on behalf of national maritime authorities.

**WANT TO KNOW MORE?**
For additional information please contact your local Bureau Veritas office or our Ship Management Systems Department directly on FM_SMS@bureauveritas.com.

Tel: 00 33 (0)1 55 24 72 65