



***Subject: Update on MRV Surcharge and EU ETS Developments***

***Dear Valued Customer,***

***We hope this message finds you well.***

***As part of our continued commitment to transparency, environmental responsibility, and compliance with EU regulations, we would like to inform you of an adjustment to our MRV surcharge effective from December 1st, 2025.***

***The EU Emissions Trading System (ETS) for maritime transport will increase its coverage from 50% in 2025 to 70% in 2026. While our fleet operates below 5000 gross tons and is therefore not directly affected by the ETS, we continue to maintain full compliance with the EU Monitoring, Reporting and Verification (MRV) regulation.***

***To support these compliance efforts and offset rising administrative and verification costs, we will be increasing our MRV surcharge by 20% as follows:***

- ***EUR 36.00 or GBP 30.00 per unit***
- ***EUR 0.78 or GBP 0.66 per ton***
- ***EUR 0.48 or SEK 6.00 per cbm***

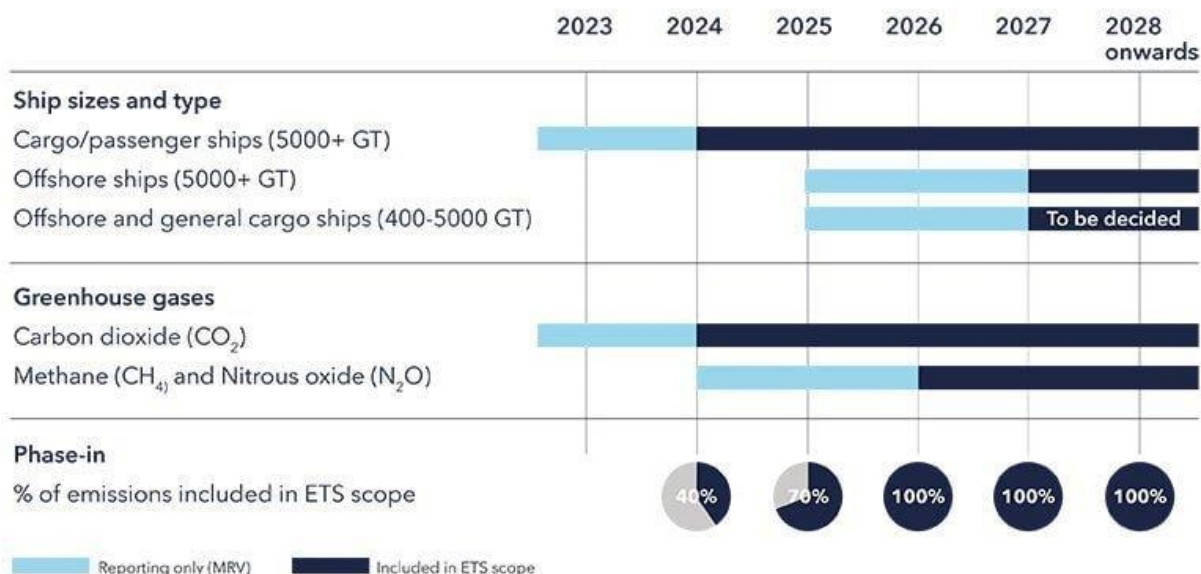
***We understand that pricing adjustments can affect your planning, and we want to assure you that this step is taken to ensure continued transparency, operational quality, and environmental responsibility in our services.***

***We greatly appreciate your continued trust and cooperation. Should you have any questions, please do not hesitate to contact our customer service team.***

***Warm regards,  
TSG Shortsea & SUN Line***



## EU ETS introduction timeline



This entails a three-year phase-in period, increasing in scope from 40% of emissions in 2024 to 70% in 2025 and 100% in 2026. It applies to cargo and passenger ships above 5000 GT from 2024 and offshore ships above 5000 GT from 2027. The EU ETS will initially cover carbon dioxide emissions and be widened to include methane and nitrous oxide from 2026. Offshore ship and general cargo ships between 400 and 5000 GT will also be required to report emissions and may be included in the EU ETS at a later stage.

### EU MRV Regulation (Regulation (EU) 2015/757):

- From January 2025, vessels operating in European ports will also need to comply with the MRV regulation, which involves reporting their **CO<sub>2</sub> emissions**. Ships of 5,000 GT or more calling at EU ports must report annual CO<sub>2</sub> emissions, fuel consumption, and related data.
- Articles 8–12:** Detail the specific reporting requirements under the MRV regulation, covering:
  - Fuel consumption and CO<sub>2</sub> emissions reporting.
  - Monitoring plans.
  - Verification and submission of emission reports.

For emissions reporting, compliance will involve submitting reports under both IMO and EU frameworks if operating in European waters.

### What vessels have to report emission after 2025-01-01 to London database?

After January 1, 2025, vessels that have to report their emissions to the London-based **IMO DCS (Data Collection System)** under **MARPOL Annex VI** are:

## 1. Vessels of 5,000 Gross Tonnage (GT) or more:

- **All vessels** of 5,000 GT and above engaged in international voyages are required to report their fuel oil consumption, distance traveled, and hours underway to their flag state administration.
- The data is then aggregated and sent to the **IMO's centralized database**, which is maintained by the IMO Secretariat in London.

### Specific vessel types required to report:

- **Cargo ships** (including container ships, bulk carriers, general cargo vessels, and tankers).
- **Passenger ships** (including cruise ships).
- **Ro-Ro ships**.
- **Refrigerated cargo vessels**.
- **Combination carriers**.
- Any other type of ship meeting the **5,000 GT threshold**.

To calculate a **surcharge for MRV (Monitoring, Reporting, and Verification)** of emissions for a vessel, we typically consider the following elements:

1. **CO<sub>2</sub> emissions** (tonnes of CO<sub>2</sub>).
2. **Cost of allowances** (if operating under a carbon trading system, such as the EU ETS—European Emissions Trading System).
3. **Administration and reporting costs** for compliance.

Let's break it down step by step:

## 3. Add Administrative Costs:

Administrative costs for MRV compliance typically include:

- **Monitoring and reporting** of emissions.
- **Verification by an accredited verifier**.
- Costs associated with submitting reports to authorities.

These costs can vary but could range between **€5,000–€15,000** annually, depending on the size of the fleet and complexity of operations. For simplicity, let's assume **€10,000**.

## 4. Total MRV Surcharge:

The total MRV surcharge would be the sum of:

- **Cost of carbon allowances** (if applicable, like under EU ETS).
- **Administrative and compliance costs**.

For our example:

$$\begin{aligned} & \text{€28,854 (carbon costs)} + \text{€10,000 (admin costs)} = \text{€38,854} \\ & \text{€28,854 (carbon costs)} + \text{€10,000 (admin costs)} = \text{€38,854} \end{aligned}$$

Thus, the **MRV surcharge** for a voyage could be around **€38,854**.

### Summary:

- **CO<sub>2</sub> emissions:** 320.6 tonnes (based on fuel consumption).
- **Carbon cost:** €28,854 (assuming €90/tonne under the EU ETS).
- **Administrative costs:** €10,000 (for compliance and verification).
- **Total surcharge:** €38,854 for the voyage.

This surcharge would vary depending on the **fuel consumption**, **emission factor**, and **carbon price** at the time of reporting. Let me know if you'd like adjustments based on specific vessel details.

### System cost onboard for doing reporting, what is the cost

The **onboard system cost** for monitoring, reporting, and verifying (MRV) emissions from a vessel involves a variety of equipment and software required to meet compliance with regulatory requirements (such as the EU MRV or IMO DCS). These costs can vary depending on the complexity of the system, the size of the vessel, and the specific equipment installed. Here's a breakdown of potential costs:

#### 1. Monitoring Equipment

- **Fuel Flow Meters:** These meters are required to accurately measure the amount of fuel consumed by the vessel. The cost of fuel flow meters can vary based on the vessel size and engine configuration.
  - Cost estimate: **€5,000–€15,000 per meter**, depending on the technology (mechanical, ultrasonic, etc.) and installation complexity.
  - A vessel might need several meters, depending on the number of engines or fuel tanks.
- **Emissions Sensors** (optional): Some vessels might install real-time emissions sensors that measure exhaust gases (e.g., CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub>) directly.
  - Cost estimate: **€10,000–€50,000**, depending on the system's sophistication.
  - While not mandatory for IMO DCS or EU MRV, these sensors provide precise monitoring in real time and can simplify the reporting process.

#### 2. Data Logging and Communication Systems

- **Data Acquisition Systems:** These systems gather fuel consumption, engine activity, and emissions data in real time and store it for reporting purposes.
  - Cost estimate: **€10,000–€25,000**, depending on system capabilities and integration with existing vessel systems.

- **Satellite Communication:** To report data to shore-based servers, vessels may need to install or upgrade satellite communication systems, especially if they operate in areas without consistent terrestrial internet.
  - Cost estimate: **€5,000–€20,000** (initial setup), with **monthly fees** ranging from **€500–€1,500** depending on data usage and provider.

### 3. Software and Compliance Tools

- **Emission Reporting Software:** Software platforms help automate MRV compliance by generating reports in formats required by regulators (IMO or EU MRV). These tools collect data from onboard systems and streamline the reporting process.
  - Cost estimate: **€5,000–€15,000** (initial cost), with **annual fees** for updates and support ranging from **€1,000–€5,000**.
- **Annual Software Licenses and Updates:** To maintain compliance, onboard software often requires regular updates and verification to meet changing regulatory standards.
  - **Annual costs:** **€1,000–€5,000** depending on the service provider and system complexity.

### 4. Installation and Integration Costs

- Installation costs depend on the complexity of integrating the monitoring equipment with the ship's existing systems (e.g., engine control systems, navigation systems, etc.). These costs typically include:
  - **Hardware installation.**
  - **Software integration** with onboard systems.
  - **Testing and calibration.**
  - **Training for crew** to operate and maintain the system.
  - Cost estimate: **€10,000–€50,000**, depending on the extent of work required.

### 5. Ongoing Maintenance and Calibration

- **Maintenance and Calibration:** Sensors and flow meters may need regular calibration to ensure accurate readings, which can involve specialized technicians and downtime for equipment.
  - Annual costs: **€5,000–€20,000**, depending on the system and service contract.

### 6. Total Onboard System Cost Estimate:

- **Initial setup** (hardware, software, installation, etc.): **€35,000–€150,000**.
- **Annual operating costs** (software licenses, maintenance, communications, etc.): **€5,000–€25,000**.

### Summary of Costs:

- **Initial installation and equipment costs:** **€35,000–€150,000**.
- **Ongoing annual costs:** **€5,000–€25,000**.