

## FAQs on the EU-ETS for Shipping (2nd Edition)

[English]



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## Introduction

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The Paris Agreement adopted in 2015 sets a common goal for the global GHG emissions reduction, which is to keep the increase in global average temperature to at least well below 2°C above pre-industrial levels while aiming to limit it to 1.5°C.

International shipping is no exception; International Maritime Organization (IMO) revised its GHG Strategy in July 2023 as the *2023 IMO Strategy on Reduction of GHG emissions from Ships*, which includes a target for total annual GHG emissions from international shipping to be net zero by or around 2050.

Meanwhile, in the European Union (EU), CO<sub>2</sub> emissions from maritime transport to and from ports in the European Economic Area (EEA) account for approximately 11% of the total CO<sub>2</sub> emissions from the EU transport sector and 3% to 4% of the EU's total CO<sub>2</sub> emissions. CO<sub>2</sub> emissions from maritime transport are expected to increase unless further measures are taken. The EU has therefore set a target of reducing GHG emissions by at least 55% by 2030 compared to the 1990 levels, with the aim of achieving net zero emissions by 2050. In July 2021, a comprehensive climate policy package, "Fit for 55" was announced to achieve the 2030 target, including proposals to extend the EU Emissions Trading System (EU-ETS) to the shipping sector and to promote the decarbonization of fuels used on board ships (FuelEU Maritime). Subsequently, EU decided to extend the EU-ETS to the shipping sector from 1 January 2024, and to implement the FuelEU Maritime from 1 January 2025.

In March 2023, ClassNK published the "FAQs on the EU-ETS for Shipping (1st Edition)", which provides an overview of the EU-ETS for the shipping sector and the necessary preparations in a Q&A format to assist maritime stakeholders in their first efforts for the compliance with the EU-ETS. In June 2023, the amendments to the EU-ETS Directive to bring the shipping sector into the EU-ETS entered into force and, subsequently, supporting regulations have also been issued.

In this "FAQs on the EU-ETS for Shipping (2nd Edition)", brief explanations of the aforementioned supporting regulations have been added, and the contents have been updated based on the latest information. We hope that this document will help all the stakeholders in the shipping sector for their preparation for the EU-ETS.

## Correction / Revision Record

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Version	Date	Section	Details
1.0	Mar. 2023	–	–
2.0	Jan. 2024	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q9	Updated based on the latest information.
		Q2-A	New addition
		Relevant Information	Updated based on the latest information.

## Q1. What is the EU-ETS ?

The EU-ETS is the EU Emissions Trading System (ETS) introduced in 2005.

### ◆Participating States

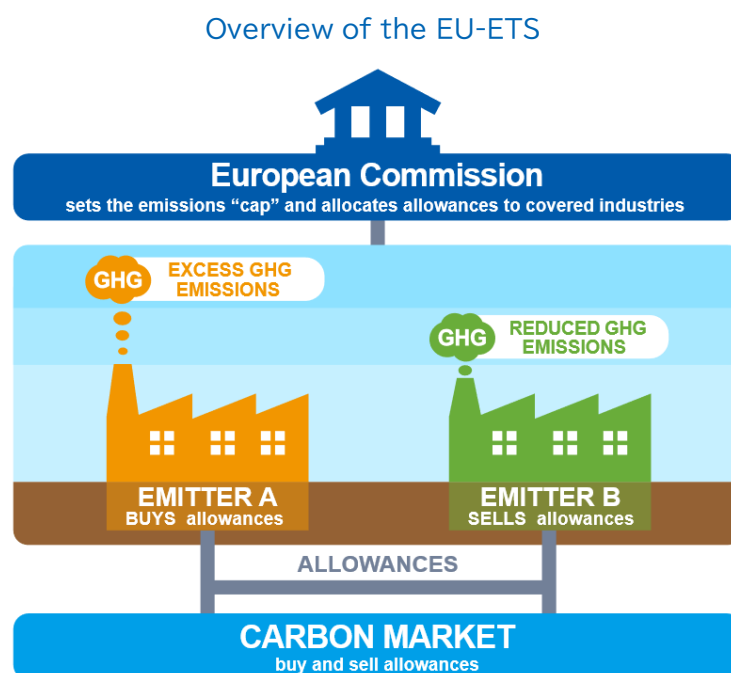
The EU-ETS is currently applicable to 30 States consisting of 27 EU Member States and 3 EEA States, namely, Norway, Iceland and Lichtenstein. In this document, the descriptions such as “EU-ETS participating States”, “EU/EEA Member States”, and “EU/EEA ports” are used.

### ◆Sectors in the scope of EU-ETS

The EU-ETS has been covering the energy-intensive sectors such as power generation, steel works, cement production and oil refineries since its launch in 2005. The aviation sector was incorporated in 2012, and its extension to the shipping sector starts from January 2024.

### ◆Cap-and-trade system

The EU-ETS works on the cap-and-trade system, which is to (1) allocate allowances on the total amount of greenhouse gases (GHG) emissions that can be emitted by each operator or installation (cap), and to (2) let them buy and sell their allowances in case of surplus or shortage (trade). Such operators who exceed their allocated allowances must purchase the allowances from the designated markets or other operators. As cap levels are set to be gradually stringent, the efficient emissions reduction through the market principle is expected among the participants as a whole.



## Q2. What is an overview of the EU-ETS for shipping?

### ◆Emission allowances

There is no free allocation for the shipping sector. Shipping companies are required to purchase allowances based on their emissions.

### ◆Responsibility

Shipping companies are responsible for the compliance with the EU-ETS for shipping (see Q2-A).

### ◆Ships in the scope

Ships of 5,000 GT and above, arriving at or departing from EU/EEA ports are in the scope of the EU-ETS for shipping, which is the same scope as the EU-MRV regulations (see the Relevant Information on “What is the EU-MRV regulations?”).

### ◆Greenhouse gases (GHG) in the scope

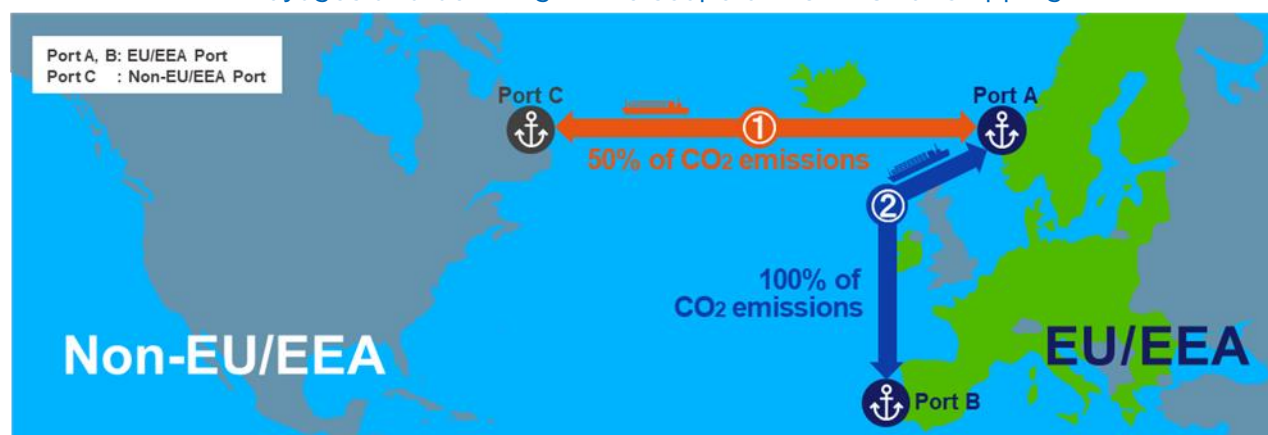
- Until 2025: Carbon dioxide (CO<sub>2</sub>) only
- From 2026: Carbon dioxide (CO<sub>2</sub>) + methane (CH<sub>4</sub>) + nitrous oxide (N<sub>2</sub>O)

### ◆Emissions in the scope

Emissions in the geographical scope of the EU-ETS for shipping are as follows:

- Voyages between EU/EEA and non-EU/EEA ports (Route ①): 50% of emissions
- Voyages between EU/EEA ports (Route ②): 100% of emissions
- Berthing in EU/EEA ports: 100% of emissions

#### Voyages and berthing in the scope of EU-ETS for shipping



(For emissions from voyages between an EU/EEA Member State and an outermost region of the same State, and for emissions at ports in connection with these voyages, an obligation to surrender allowances shall not arise until December 2030.)

### ◆Phase-in approach

Emissions subject to the EU-ETS for shipping for the first two years are as follows:

- Emissions in 2024 (surrendered in 2025) : 40% of the total emissions in the scope
- Emissions in 2025 (surrendered in 2026) : 70% of the total emissions in the scope

## Q2-A. What is the “Shipping Company”?

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Under the EU-ETS for shipping, the shipping company is responsible for the compliance with the regulation and is defined as follows:

*‘shipping company’ means the shipowner or any other organisation or person, such as the manager or the bareboat charterer, that has assumed the responsibility for the operation of the ship from the shipowner and that, on assuming such responsibility, has agreed to take over all the duties and responsibilities imposed by the International Management Code for the Safe Operation of Ships and for Pollution Prevention, set out in Annex I to Regulation (EC) No 336/2006 of the European Parliament and of the Council.*

In this connection, implementing regulations on the shipping company have been issued. The overview is as follows:

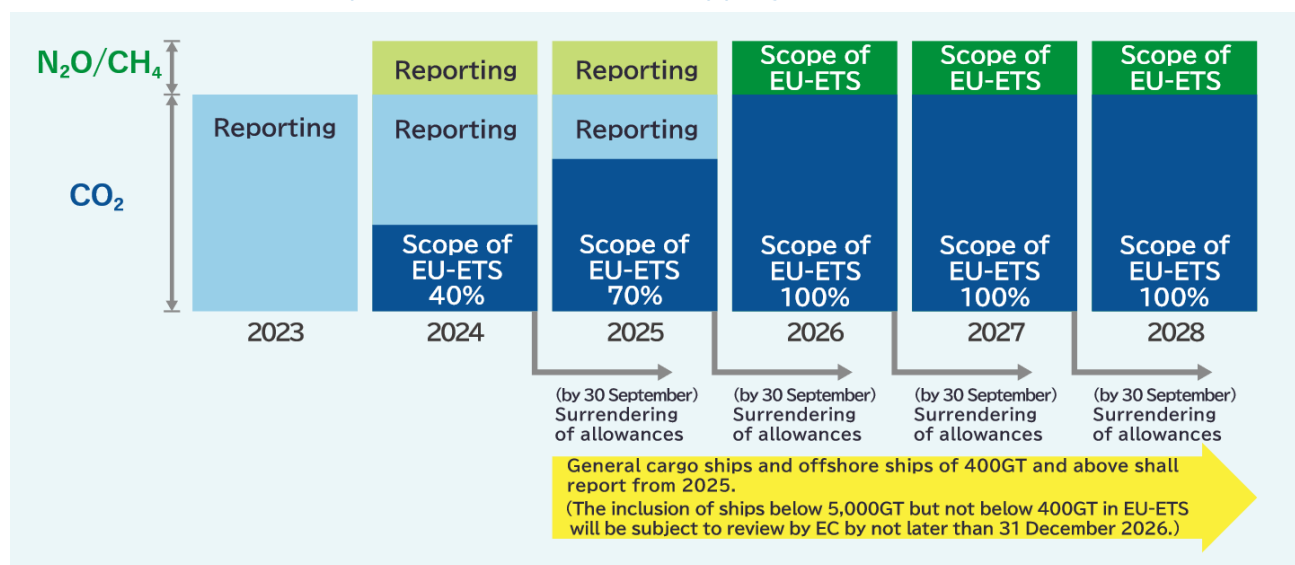
- The shipping company responsible for the EU-ETS can be either the registered owner or the management company (ISM company/ISM DOC holder).
  - ✓ Registered owner means the registered owner that is identified in the Ship’s Certificate of Registry and has an IMO Unique Company and Registered Owner Identification Number.
- The registered owner can delegate the EU-ETS obligations to the management company, i.e., ISM company. In this case, a mandate document clearly indicating that it has been duly mandated by the shipowner to comply with the ETS obligations, signed by both the registered owner and the ISM company, should be submitted to the Administering Authority and the verifier of the EU-MRV. (In the absence of the document, the registered owner has ETS obligations.)
  - ✓ A bareboat charterer can become the shipping company that has ETS obligations only if it is an ISM company.
  - ✓ Beneficial owner or time charterer cannot become a shipping company that has ETS obligations.

The shipping company having ETS obligations and the company responsible for the EU-MRV regulations should be identical. However, emissions monitoring and reporting required by the EU-MRV regulations can be carried out by a third party designated by the shipping company. Therefore, for example, the registered owner could be the shipping company responsible for both the EU-ETS and EU-MRV, while a management company (ISM company) carries out the emissions monitoring and reporting required by the EU-MRV regulations.

### Q3. How can I check the GHG emissions?

Emissions subject to the EU-ETS for shipping are verified in accordance with the EU-MRV regulations. In addition to CO<sub>2</sub>, methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) will be covered by the shipping EU-ETS from 2026 onwards. In this connection, CH<sub>4</sub> and N<sub>2</sub>O have also been added as GHG subject to monitoring, reporting and verification under the EU-MRV regulations from 2024.

Scopes of the EU-ETS for shipping and the EU-MRV



For the CH<sub>4</sub> and N<sub>2</sub>O emissions monitoring, except using the direct greenhouse gas emissions measurement, as with CO<sub>2</sub> emissions, emissions of CH<sub>4</sub> and N<sub>2</sub>O are calculated by multiplying an emission factor of each fuel by the amount of fuel used on board. These emissions are then converted into CO<sub>2</sub> equivalents by multiplying the Global Warming Potential (GWP). In the case of LNG, methane slip is also taken into account when calculating CH<sub>4</sub> emissions. Different rates for the methane slip are defined depending on the combustion system of the engine. Emission factors for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O, methane slip as well as the GWP for CH<sub>4</sub> and N<sub>2</sub>O for fossil fuels, ammonia (NH<sub>3</sub>) and methanol are as follows:

Type of fuel	CO <sub>2</sub> emission factor [gCO <sub>2</sub> /gFuel]	CH <sub>4</sub> emission factor [gCH <sub>4</sub> /gFuel] GWP: 28	N <sub>2</sub> O emission factor [gN <sub>2</sub> O/gFuel] GWP: 265	Methane slip [% of gFuel] GWP: 28
HFO	3.114	0.00005	0.00018	---
LFO	3.151	0.00005	0.00018	---
MDO/MGO	3.206	0.00005	0.00018	---
LNG: for LNG Otto (dual fuel medium speed)	2.750	0	0.00011	3.1
LNG: for LNG Otto (dual fuel slow speed)	2.750	0	0.00011	1.7
LNG: for LNG Diesel (dual fuel slow speed)	2.750	0	0.00011	0.2
LNG: for Lean-Burn Spark-Ignited (LBSI)	2.750	0	0.00011	2.6



Type of fuel	CO2 emission factor [gCO2/gFuel]	CH4 emission factor [gCH4/gFuel] GWP: 28	N2O emission factor [gN2O/gFuel] GWP: 265	Methane slip [% of gFuel] GWP: 28
LPG(Butane)	3.03	0.00005	0.00018	---
LPG(Propane)	3.00	0.00005	0.00018	---
NH3	0	0.00005	0.00018	---
Methanol	1.375	0.00005	0.00018	---

For the use of biofuels, the following emission factors for CO2, CH4 and N2O, methane slip as well as the GWP for CH4 and N2O are identified.

When calculating the emissions subject to the EU-ETS, CO2 emissions are calculated to be zero, provided that these biofuels meet the criteria set by the EU (RED II: Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast)).

Type of biofuels	CO2 emission factor [gCO2/gFuel]	CH4 emission factor [gCH4/gFuel] GWP: 28	N2O emission factor [gN2O/gFuel] GWP: 265	Methane slip [% of gFuel] GWP: 28
Bio-diesel	2.834	0.00005	0.00018	---
Hydrotreated Vegetable Oil (HVO)	3.115	0.00005	0.00018	---
Liquified Bio-methane (Bio-LNG): for LNG Otto (dual fuel medium speed)	2.750	0	0.00011	3.1
Liquified Bio-methane (Bio-LNG): for LNG Otto (dual fuel slow speed)	2.750	0	0.00011	1.7
Liquified Bio-methane (Bio-LNG): for LNG Diesel (dual fuel slow speed)	2.750	0	0.00011	0.2
Liquified Bio-methane (Bio-LNG): for Lean-Burn Spark-Ignited (LBSI)	2.750	0	0.00011	2.6
Bio-methanol	1.375	0.00005	0.00018	---

## What is the EU-MRV regulations?

EU-MRV regulations means the *Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC* requiring the monitoring, reporting and verification of fuel consumptions used onboard ships etc. during EU-related voyages which have been implemented from 2018.

Ships of 5,000 GTs and above calling at EU ports are required to prepare a monitoring plan for their fuel consumptions and an emission report containing the records of their CO2 emissions for verification by an EU-accredited verifier.

With the introduction of the EU-ETS for shipping, EU-MRV regulations have also been amended to expand the GHG subject to reporting and verification, and the types and sizes of ships covered, as follows:

Scope	Until 2023	From 2024	From 2025 onwards
GHG	CO2 only	<b>CO2+CH4+N2O</b>	CO2+CH4+N2O
Ship types	Commercial ships only	Commercial ships only	Commercial ships+ <b>offshore ships</b>
Size of ships	5,000 GT and above	5,000 GT and above	Commercial ships:5,000 GT and above <b>General cargo ships:400 GT and above</b> <b>offshore ships:400 GT and above</b>

ClassNK provides verification services as an accredited verification body under EU-MRV regulations.

<https://www.classnk.or.jp/hp/en/authentication/eumrv/>

ClassNK is in the process of updating the EU-MRV verification system, ClassNK MRV Portal, to facilitate the updating of existing EU-MRV monitoring plans for each ship and the preparation of the aggregated emissions data for company level. From 2024, the monitoring plan is required to be submitted electronically according to the format specified on THETIS-MRV, instead of on paper or PDF. The MRV Portal user guide will provide information on how to update and submit monitoring plan to THETIS-MRV in due course.

## Q4. What is the “port of call” under the EU-ETS for shipping?

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Port of call under the EU-ETS for shipping is defined as follows:

*‘port of call’ means the port where a ship stops to load or unload cargo or to embark or disembark passengers, or the port where an offshore ship stops to relieve the crew, considering that stops for the sole purposes of refuelling, obtaining supplies, relieving the crew of a ship other than an offshore ship, going into dry-dock or making repairs to the ship and/or its equipment, stops in port because the ship is in need of assistance or in distress, ship-to-ship transfers carried out outside ports, stops for the sole purpose of taking shelter from adverse weather or rendered necessary by search and rescue activities, and stops of containerships in a neighbouring container transshipment port listed in the implementing act adopted pursuant to Article 39a(2) are excluded;*

Therefore, a port call for the sole purpose of refuelling, obtaining supplies, or docking in a dry dock, etc. is not considered as the *port of call* under the EU-ETS and the voyages from the previous ‘port of call’ to the next ‘port of call’ are considered continuous.

“stops of containerships in a neighbouring container transshipment port” are excluded from the *port of call* under the EU-ETS for shipping, and the neighbouring container transshipment ports are defined as the ports where the share of transshipment of containers, measured in twenty-foot equivalent unit, exceeds 65% of the total container traffic of that port during the most recent twelve-month period for which relevant data are available located outside the Union but less than 300 nautical miles of a port under the jurisdiction of a Member State. It means that the voyages preceding and following such ports are considered as consecutive voyages.

Two container transshipment ports have been designated for this provision: TANGER MED in Morocco and EAST PORT SAID in Egypt. The container transshipment ports subject to this provision will be reviewed every two years.

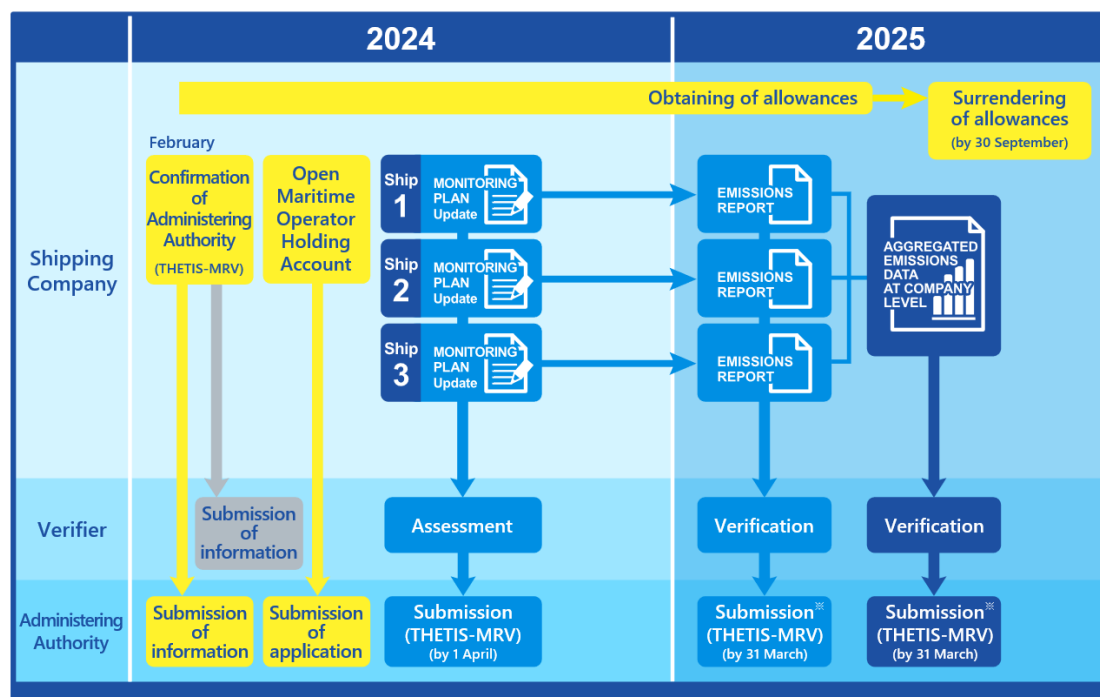
### Ice-class ships under the EU-ETS for shipping

Shipping companies may surrender 5% fewer allowances than their verified emissions taking place until 31 December 2030 from ice class ships having the ice-class IA or IA Super or an equivalent ice class.

## Q5. What should I do for the EU-ETS for shipping?

With the introduction of the EU-ETS for shipping from January 2024, the following actions will be required.

Timeline for the introduction of the EU-ETS for shipping



※Administering Authority may require companies to submit their emissions reports by 28 February.

### ◆Step 1: Confirmation of Administering Authority (expected by 1 February 2024)

Under the EU-ETS for shipping, a shipping company having ETS obligations is registered to an Administering Authority of an EU/EEA Member State. As the registration is based on the following manner, a shipping company will not be freely able to change its administering authority.

- (1) A shipping company registered in an EU/EEA Member State:  
The administering authority of the EU/EEA Member State in which the shipping company is registered.
- (2) A shipping company that is not registered in an EU/EEA Member State:  
The administering authority of the EU/EEA Member State with the greatest estimated number of port calls from voyages performed by that shipping company in the last four monitoring years and falling within the scope of EU-ETS for shipping.

\*A shipping company, having no such voyage in the preceding four monitoring years, is

registered to the administering authority of the EU/EEA Member State that the concerning ship of the shipping company has arrived or started its first voyage.

A list of the Administering Authorities for each shipping company will be published by 1 February 2024. The publication is currently expected to be made on the EU-MRV reporting platform "THETIS-MRV" operated by the European Maritime Safety Agency (EMSA). After publication of the list, it will be necessary to confirm which Administering Authority of EU/EEA Member State the shipping company is registered with.

#### ◆Step 2: Submission of information to the Administering Authority

After confirming the list of Administering Authority, the shipping company responsible for the EU-ETS is required to submit the necessary information to the Administering Authority. Necessary information differs depending on whether the shipping company responsible for the EU-ETS is a registered owner or an ISM company, as summarized below. Please note that additional information may be required by each Administering Authority.

- ① In case where a registered owner has ETS obligations:
  - The registered owner is required to submit to its Administering Authority a list of ships (ship name and IMO Number) that are subject to EU-ETS and EU-MRV obligations.
  - After submitting the necessary information, the following information should also be submitted to the Administering Authority:
    - ✓ In case where additional ships are to be added: the ship name and IMO Number of the additional ships.
    - ✓ In case when transferring ETS obligations to an ISM company or deleting a registered ship, e.g. by selling the ship: the ship name and IMO Number, as well as the company name of the new shipping company and its IMO Unique Company and Registered Owner Identification Number.
- ② In case where an ISM company has ETS obligations:
  - The ISM company is required to submit to its Administering Authority a mandate document stating the delegation of ETS obligations from the registered owner to the ISM company. This document should be signed by both the registered owner and the ISM company.
  - This document should, at least, include the following information:
    - ✓ Name, IMO Unique Company and Registered Owner Identification Number, Country of registration of the ISM company

- ✓ Name, IMO Unique Company and Registered Owner Identification Number, contact details of the registered owner
  - ✓ IMO Number of each ship that the ISM company has ETS obligations
  - ✓ The date of application of the mandate from the registered owner to the ISM company
- If the document is in a language other than an official language of the Member State or English, an English translation shall be provided. If the document is a copy, this shall be certified as a true copy by a notary public or other similar person specified by the Administering Authority.

It is not expected that EC will provide a standardized format for the mandate document to be signed by both the registered owner and the ISM company. ClassNK prepared a sample of this document which can be available from [here](#).

**◆Step 3: Submission of information to the verifier (in case of an ISM company has ETS obligations)**

If the shipping company is an ISM company, the mandate document signed by both the registered owner and the ISM company should also be submitted to the verifier in addition to the Administering Authorities. (The document to be submitted to the verifier can be a copy.)

**◆Step 4: Opening Maritime Operator Holding Account  
(within 40 working days of the publication of the list of Administering Authority)**

A shipping company having ETS obligations is required to surrender allowances (EUA: EU Allowances) corresponding to the previous year's emissions by 30 September each year. In this connection, each shipping company is required to open a registry account for surrendering EUA, called the Maritime Operator Holding Account (MOHA).

For this purpose, each shipping company is required to submit an application to the Administering Authority for the opening of MOHA within 40 working days of the publication of the list of the Administering Authorities. The method of application for opening MOHA (e.g. paper-based, system-based, etc.) varies from each Administering Authority. Contact details for each Administering Authority to apply for the opening of MOHA can be found in the "contact points" section of the following URL maintained by the European Commission.

[https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/union-registry\\_en#links](https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/union-registry_en#links)

**◆Step 5: Updating and submission of the monitoring plan (by 1 April 2024)**

The company responsible for the EU-MRV regulations (the same as the shipping company having the ETS obligations) must update the monitoring plan for each ship for the revised EU-MRV regulations. Updated monitoring plan should be submitted, after the confirmation by the verifier, to the Administering Authority by 1 April 2024. (For more information on monitoring methods, see Q3: “How can I check the GHG emissions?”)

If the emissions monitoring and reporting required by the EU-MRV regulations is carried out by a third party on behalf of the shipping company, this third party can also prepare, update, and submit the monitoring plan.

In addition, for ships which firstly apply to the EU-MRV regulations after 1 January 2024, a new monitoring plan should be prepared. After confirmation by a verifier, it should be submitted to the Administering Authority within three months of each ship’s first port of call in an EU/EEA Member State.

**◆Step 6: Preparation and submission of emissions report of each ship and aggregated emissions data at company level (by 31 March of each year)**

The company responsible for the EU-MRV regulations (the same as the shipping company having ETS obligations) is required to prepare the following:

- Emissions report for the previous year for each ship; and
- Aggregated emissions data at company level.

These emissions reports and aggregated emissions data at company level should be verified by a verifier and then submitted to the Administering Authority by 31 March each year. It should be noted that this deadline, i.e., 31 March, may be brought forward by one month at the discretion of each Administering Authority.

**◆Step 7: Obtaining and surrender of allowances**

The shipping company having ETS obligations should obtain the allowances for the emissions in the scope in advance and surrender allowances based on the emissions reported to the Administering Authority as specified in Step 6 above by 30 September each year.

## European Green Deal

The European Green Deal combines a comprehensive set of mutually reinforcing measures and initiatives aimed at achieving climate neutrality in the EU by 2050, and sets out a new growth strategy that aims to transform the Union into a fair and prosperous society, with a modern, resource-efficient and competitive economy, where economic growth is decoupled from resource use. The strategy includes a commitment to reduce EU's economy-wide net greenhouse gas emissions by at least 55% by 2030 below 1990 levels.

## FuelEU Maritime Regulation

In addition to extend the EU-ETS to shipping sector, EU developed a new framework called the FuelEU Maritime Regulation and decided to implement the regulations from January 2025. While the EU-ETS focuses on the GHG directly emitted from ships only, the FuelEU Maritime covers the lifecycle GHG intensity of the fuels used onboard ships, i.e. their production, transportation, storage and combustion on board.

Another regulatory component of the FuelEU Maritime Regulation is the mandatory use of shore power when moored in EU ports (starting in 2030) for container and passenger ships.

ClassNK published "[FAQs on FuelEU Maritime \(1st Edition\)](#)", which provides an overview of the FuelEU Maritime Regulation and necessary preparations for the compliance with them in a Q&A style.



## Q6. Who will purchase allowances under the EU-ETS for shipping?

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Under the EU-ETS for shipping, while the shipping company is responsible for the compliance with the regulation (see Q2-A), EU/EEA Member States should take the necessary measures to ensure that when the ultimate responsibility for the purchase of the fuel and/or the operation of the ship is assumed by a different entity than the shipping company pursuant to a contractual arrangement, the shipping company is entitled to reimbursement from that entity for the costs arising from the surrender of allowances.

“Operation of the ship” means determining the cargo carried and/or the route and the speed of the ship. It is to be noted that the shipping company still assumes the responsibility to ensure the compliance with the EU-ETS for shipping notwithstanding their entitlement for the reimbursement.

The arrangement of emission allowances would be agreed under a charter party. Full consultation between the parties concerned is recommended.

### **BIMCO's clauses related to the EU-ETS for shipping sector**

BIMCO (The Baltic and International Maritime Council) has issued following Emissions Trading Scheme(ETS) clauses for charter party agreements, and ship management agreements to clarify allocation of the costs and responsibilities for obtaining, transferring, and surrendering GHG emissions allowances for ships operating under emissions trading schemes, such as EU-ETS.

- Emission Trading Scheme Allowances Clause for Time Charter Parties 2022
- Emission Scheme Freight Clause for Voyage Charter Parties 2023
- Emission Scheme Surcharge Clause for Voyage Charter Parties 2023
- Emission Scheme Transfer of Allowances Clause for Voyage Charter Parties 2023
- SHIPMAN Emission Trading Scheme Allowances Clause 2023

## Q7. When, where, and how can I purchase/surrender allowances?

### ◆How to purchase allowances

No free allocation is provided to the shipping sector. Allowances can be purchased through the European Energy Exchange (EEX) as the primary market. It can also be purchased through future trades or bilateral trades on the secondary market. Allowances can be purchased at any time, as long as they are secured by the due date for surrender each year.

### ◆How and when to surrender allowances

Allowances should be surrendered by 30 September each year in accordance with the emissions in the previous year. The surrendering is to be done by electronically transferring EU Allowances from Maritime Operator Holding Account(MOHA) of a shipping company to its Administering Authority. A demonstration of the surrendering can be found in the webinar jointly organized by the European Commission and EMSA, which is available from [here](#).

## How is the price of allowances determined?

Price of allowances is determined by the supply/demand balance on the market. Necessary and proper adjustments are made by the EU to protect the market from insider trading and market operations. For the purchase through European Energy Exchange (EEX), price is determined through an auction. For the purchase on the secondary market, the trading is conducted between the parties concerned. Shipping companies need to understand in advance how many allowances are required to decide when to purchase them, for there may be a great price gap depending on the timing.

### Transition of the price of allowances at the European Energy Exchange (EEX)



(Based on the price of allowance issued by EEX)

ClassNK held the “ClassNK EU-ETS Seminar -Get Ready for EU Allowance in the Shipping Sector-” in Singapore in October 2023. In this seminar, experts provided an introduction on how to purchase EU allowances (EUA). Videos and materials of this seminar are available from [here](#).

## Q8. What are the penalties for non-conformities?

The EU-ETS sets the penalties to the shipping companies who are in breach of requirements to surrender sufficient allowances. Penalties for the shipping company are as follows:

- Publication of the names of shipping companies;
- The excess emissions penalty shall be EUR 100 for each tonne of carbon dioxide equivalent emitted for which the shipping company has not surrendered allowances. Payment of the excess emissions penalty shall not release the shipping company from the obligation to surrender an amount of allowances equal to those excess emissions when surrendering allowances in relation to the following calendar; and
- In the case of a shipping company that has failed to comply with the surrender requirements for two or more consecutive reporting periods and where other enforcement measures have failed to ensure compliance, the competent authority of the Member State of the port of entry may issue an expulsion order.

### Addition of the EU-ETS functionality to ClassNK ZETA

ClassNK released ClassNK ZETA (Zero Emission Transition Accelerator) in 2022 to efficiently manage GHG emissions from ships.

ClassNK ZETA, linked to the ClassNK MRV Portal storing various data provided by ships, is equipped with the functions to enable the constant monitoring of CO<sub>2</sub> emissions and CII ratings for individual ships as well as for the entire fleet, and to simulate how CO<sub>2</sub> emissions and CII ratings are changed with slow steaming, etc. Currently, ClassNK ZETA is serving more than 5,000 ships.



ClassNK ZETA has now been updated to add the functionality to manage the GHG emissions under the EU-ETS and the surplus/shortage of allowances. Please utilize ClassNK ZETA for the compliance with the EU-ETS for shipping.

ClassNK ZETA as a cloud service is accessible immediately with only a simple application. Please place the application from “ClassNK ZETA application form” in the following website:  
[https://www.classnk.or.jp/hp/en/info\\_service/ghg/nk-zeta.html](https://www.classnk.or.jp/hp/en/info_service/ghg/nk-zeta.html)

## Q9. How are the revenues from the EU-ETS for shipping used?

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Revenues from the EU-ETS for shipping are expected to be assigned to the Innovation Fund to support relevant projects for the penetration of fuels from renewable energy sources and low carbon fuels and to accelerate the innovation of low- or zero carbon technologies for the shipping sector.

The revenues will also be assigned to the Modernisation Fund to support the modernisation of energy systems and the improvement of energy efficiency in 13 lower-income EU Member States during their transition to climate neutrality.

### EU-ETS for shipping and the IMO's market-based measures

IMO revised its GHG Strategy in July 2023 as the *2023 IMO Strategy on Reduction of GHG emissions from Ships*, which includes a target for total annual GHG emissions from international shipping to be net zero by or around 2050.

The revised strategy also identifies the timeline to develop mid-term measures which will include both a technical element and an economic element, with a view to introducing these measures in 2027.

When the IMO adopted the market-based measures, the European Commission will review the measures to ensure that any significant double burden is not placed on the shipping sector. If the IMO does not adopt a global market-based measure by 2028, further reinforcement of GHG emissions requiring the purchase of allowances (50% of the GHG emissions from the voyages between EU/EEA ports and non-EU/EEA ports) under the EU-ETS for shipping will be considered.

## List of regulations related to EU-ETS for shipping and EU-MRV regulations

### ◆EU-ETS relevant

- Amendments to the EU-ETS Directive: [Directive \(EU\) 2023/959 of the European Parliament and of the Council of 10 May 2023 amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union and Decision \(EU\) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading system \(Text with EEA relevance\)](#)
- EU-ETS Directive (consolidated text): [Consolidated text: Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a system for greenhouse gas emission allowance trading within the Union and amending Council Directive 96/61/EC \(Text with EEA relevance\)](#)Text with EEA relevance
- Implementing Regulation on a shipping company, etc.: [Commission Implementing Regulation \(EU\) 2023/2599 of 22 November 2023 laying down rules for the application of Directive 2003/87/EC of the European Parliament and of the Council as regards the administration of shipping companies by administering authorities in respect of a shipping company](#)
- Implementing Regulation on the list of neighbouring container transshipment ports: [Commission Implementing Regulation \(EU\) 2023/2297 of 26 October 2023 identifying neighbouring container transshipment ports pursuant to Directive 2003/87/EC of the European Parliament and of the Council](#)
- Amendments to the Delegated Regulation on the Union Registry: [Commission Delegated Regulation \(EU\) 2023/2904 of 25 October 2023 amending Delegated Regulation \(EU\) 2019/1122 supplementing Directive 2003/87/EC of the European Parliament and of the Council as regards the functioning of the Union Registry](#)
- Implementing Decision on the list of islands and ports, etc. that excluded from the scope of EU-ETS for shipping: [Commission Implementing Decision \(EU\) 2023/2895 of 19 December 2023 laying down the list of islands and ports referred to in Article 12\(3-d\) of Directive 2003/87/EC of the European Parliament and of the Council and the list of transnational public service contracts or transnational public service obligations referred to in Article 12\(3-c\) of that Directive](#)

### ◆EU-MRV relevant

- Amendments to the EU-MRV regulations: [Regulation \(EU\) 2023/957 of the European Parliament and of the Council of 10 May 2023 amending Regulation \(EU\) 2015/757 in order to provide for the inclusion of maritime transport activities in the EU Emissions Trading System and for the monitoring, reporting and verification of emissions of additional greenhouse gases and emissions from additional ship types \(Text with EEA relevance\)](#)
- EU-MRV regulations (consolidated text): [Consolidated text: Regulation \(EU\) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of greenhouse gas emissions from maritime transport, and amending Directive 2009/16/EC \(Text with EEA relevance\)](#)Text with EEA relevance
- Amendments to the EU-MRV regulations on the monitoring of GHG emissions: [Commission Delegated Regulation \(EU\) 2023/2776 of 12 October 2023 amending Regulation \(EU\) 2015/757 of the European Parliament and of the Council as regards the rules for monitoring greenhouse gas emissions and other relevant information from maritime transport](#)
- Delegated Regulation on the verification activities, etc.: [Commission Delegated Regulation \(EU\) 2023/2917 of 20 October 2023 on the verification activities, accreditation of verifiers and approval of monitoring plans by administering authorities pursuant to Regulation \(EU\) 2015/757 of the European Parliament and of the Council on the monitoring, reporting and verification of greenhouse gas emissions from maritime transport, and repealing Commission Delegated Regulation \(EU\) 2016/2072](#)
- Delegated Regulation on the aggregated emissions data at company level: [Commission Delegated Regulation \(EU\) 2023/2849 of 12 October 2023 supplementing Regulation \(EU\) 2015/757 of the European Parliament and of the Council as regards the rules for reporting and submission of the aggregated emissions data at company level](#)
- Implementing Regulation on the templates of monitoring plan, etc. : [Commission Implementing Regulation \(EU\) 2023/2449 of 6 November 2023 laying down rules for the application of Regulation \(EU\) 2015/757 of the European Parliament and of the Council as regards templates for monitoring plans, emissions reports, partial emissions reports, documents of compliance, and reports at company level, and repealing Commission Implementing Regulation \(EU\) 2016/1927](#)

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