

CHARTING THE FUTURE 

ClassNK

FAQs on the EU-ETS for Shipping
(1st Edition)

[English]



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Introduction

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; the Initial IMO Strategy on Reduction of GHG Emissions from Ships adopted by the International Maritime Organization (IMO) in 2018 sets levels of ambition to reduce the total annual GHG emissions by at least 50% by 2050 compared to 2008, and negotiations are ongoing toward the adoption of the revised strategy with the reinforced targets at the 80th session of the IMO Marine Environment Protection Committee (MEPC 80) to be held in July 2023.

Meanwhile, the European Union (EU) has set a goal 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 a proposal to extend the EU Emissions Trading System (EU-ETS) to the shipping sector. As of the end of February 2023, the proposal is under the final consideration by the European Parliament and the Council of the European Union with a view to implementing it from January 2024.

The “FAQs on the EU-ETS for Shipping (1st Edition)” 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. Readers of this document may wish to note that many points are yet to be clarified about the practical implementation of the EU-ETS for shipping sector, and thus the information provided herein is solely based on the information currently under consideration within the EU. The latest information will be provided to the stakeholders without delay once further details become available.

We hope that the “FAQs on the EU-ETS for Shipping (1st Edition)” will help all the stakeholders in the shipping sector for their preparation for the EU-ETS.

Q1. What is the EU-ETS ?

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

◆Participating States

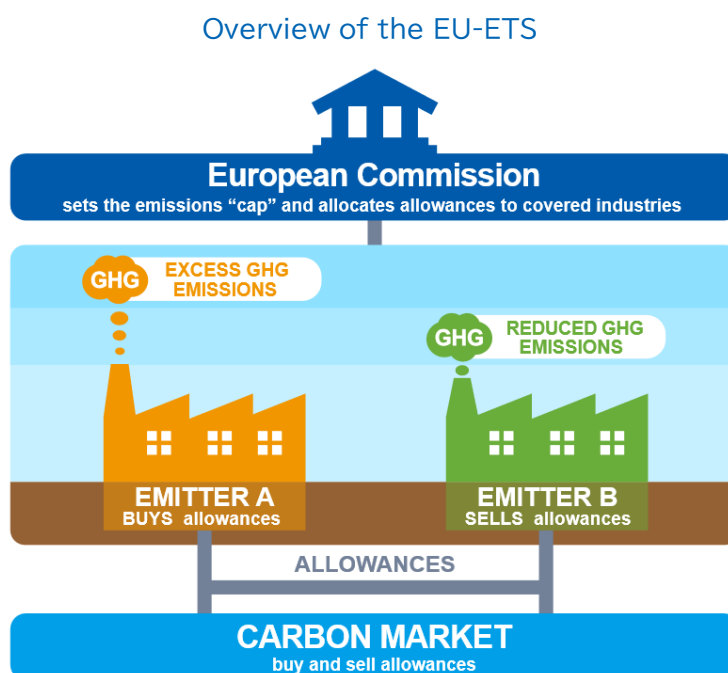
The EU-ETS is currently applicable to 30 States consisting of 27 EU Member States and 3 EEA States, namely, Norway, Iceland and Lichtenstein. In this document, the descriptions such as “EU-ETS participating States”, “EU/EEA Member States”, and “EU/EEA ports” are used.

◆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 is planned in 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.

◆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

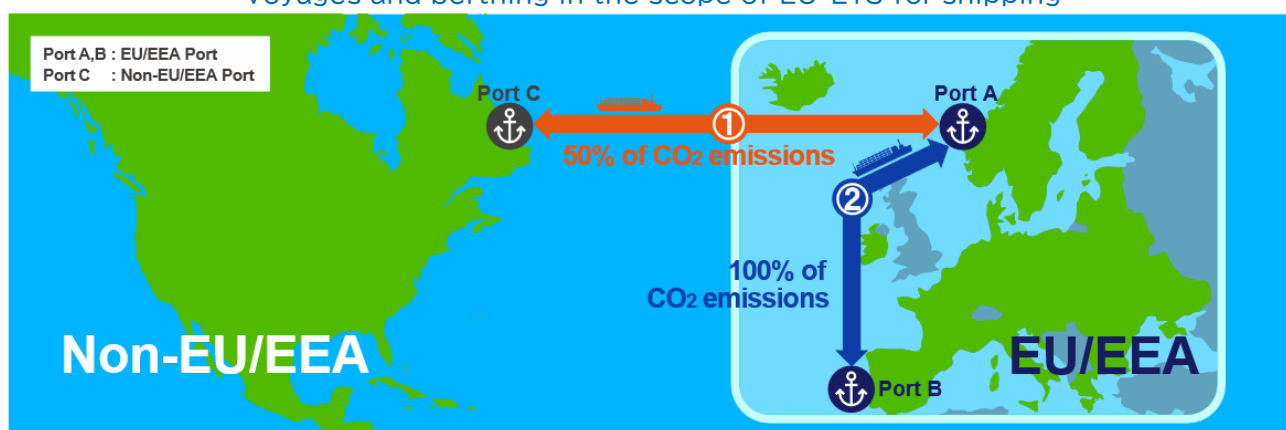
- Until 2025: Carbon dioxide (CO₂) only
- From 2026: Carbon dioxide (CO₂) + methane (CH₄) + nitrous oxide (N₂O)

◆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 within 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



◆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

Q3. How can I check the GHG emissions?

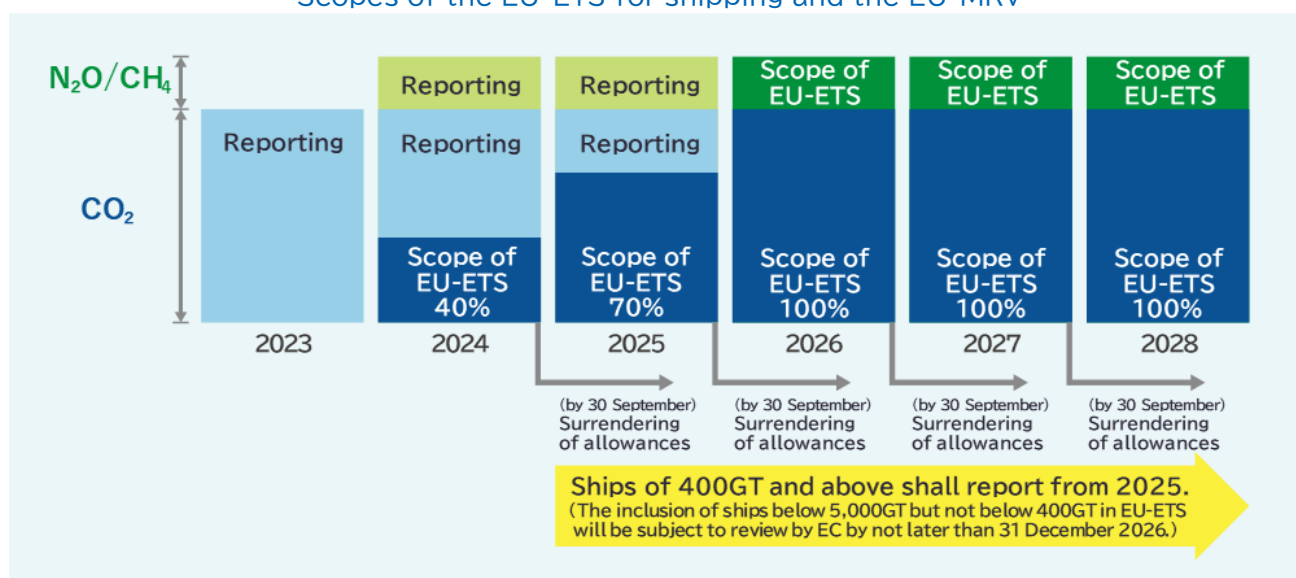
Emissions subject to the EU-STS for shipping are verified in accordance with the EU-MRV.

The EU-MRV regulations will be amended to align them with the EU-ETS as follows:

| Scope | Current | After amendments |
|------------|-----------------------|---|
| GHG | CO2 only | CO2+CH4+N2O (from 2024) |
| Ship types | Commercial ships only | commercial ships+offshore ships (from 2024) |
| GT | 5,000 GT and above | 400 GT and above (from 2025) |

* Monitoring methods for CH4 and N2O emissions will be announced by October 2023.

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



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.

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

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

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

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 containerhips in a neighbouring container transshipment port listed in the implementing act adopted pursuant to Article 39(1) are excluded;

As such, “stops of containerhips 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 “neighbouring container transshipment 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.

By 31 December 2023, a list of such container transshipment ports will be established by the European Commission.

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?

◆Step 1: Registration to a competent authority

Under the EU-ETS for shipping, a shipping company performing EU related voyage(s) is registered to an administering authority of the EU/EEA Member States. As the registration is based on the following manner, a shipping company will not be 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 list will be updated every two years for (1) and four years for (2).

◆Step 2: Update of ships' monitoring plans (for the revised EU-MRV regulations)

Shipping companies should update monitoring plans for individual ships and, after obtaining their verifications, submit them to the administering authority concerned by 1 April 2024. The updated monitoring plan needs to contain the monitoring methods for CH₄ and N₂O emissions to be announced by October 2023.

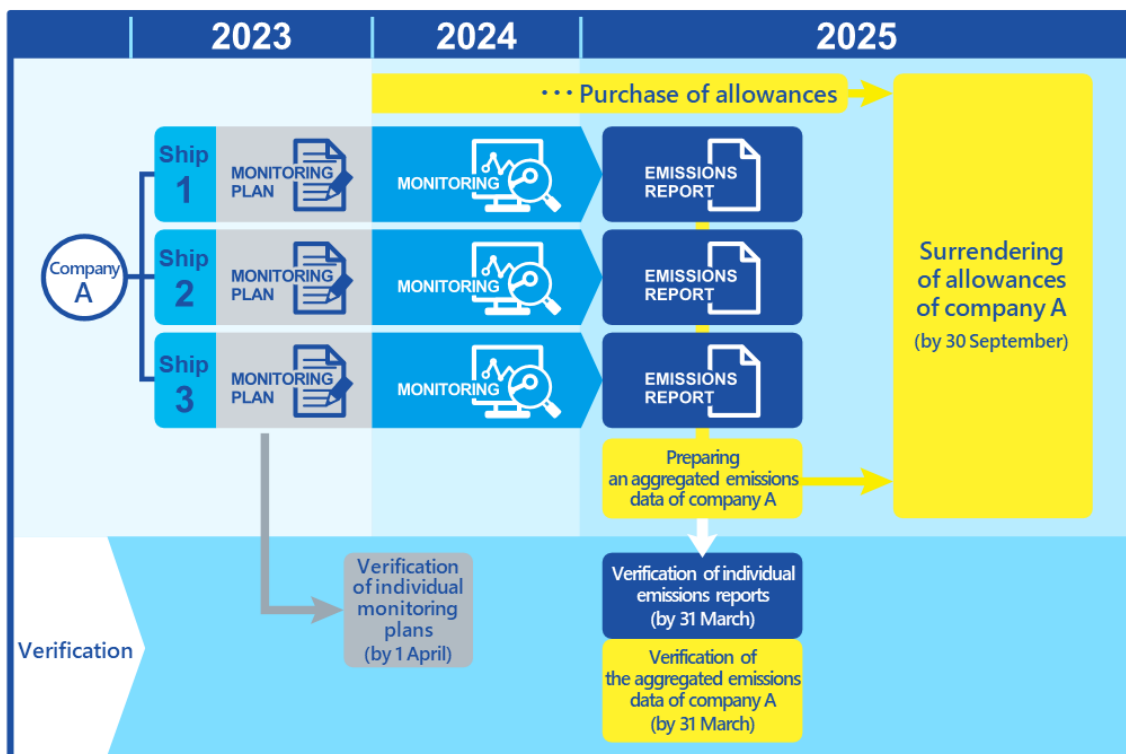
◆Step 3: Development and submission of emission reports for individual ships and aggregated emissions data at company level (under the revised EU-MRV regulations)

Shipping companies should develop emission reports for ships applicable to the EU-MRV regulations for verification by a verifier. Shipping companies should then submit verified emission reports and aggregated emissions data at company level to the administering authority concerned by 31 March each year.

◆Step 4: Purchase and surrender of allowances

Shipping companies should purchase 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 3 above by 30 September each year.

Timeline for the introduction of the EU-ETS for shipping



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 Proposal

The EU is considering the “FuelEU Maritime” proposal in addition to the EU-ETS for shipping. While the EU-ETS focuses on the GHG directly emitted from ships only, the FuelEU Maritime, expected to be introduced from 2025, covers the lifecycle GHG intensity of the fuels that ships used onboard, i.e. their production, transportation, storage and combustion on board.

Reference value for GHG intensity is reinforced every five years from 2020. In case of non-compliance with the reference value, penalty is imposed corresponding to the energy consumption exceeding the reference value. Mandating the use of onshore power supply in EU ports (from 2030) is also under consideration.

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

Under the EU-ETS for shipping, the shipping company is responsible for the compliance with the regulation and 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 addition to the above, 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.

BIMCO’s Emission Trading Scheme Allowances Clause for Time Charter Parties 2022

BIMCO (The Baltic and International Maritime Council) issued the “ETS - Emission Trading Scheme Allowances Clause for Time Charter Parties 2022” that is aiming to allocate costs and responsibilities for obtaining, transferring, and surrendering GHG emissions allowances for ships operating under an emissions scheme, such as EU-ETS. This clause covers all GHG emissions including methane and nitrous oxide, not only CO2 emissions.

This clause follows the “polluter-pays” principle, by ensuring the pass-through of ETS costs to the commercial operators of vessels – in this case, the time charterers. Shipowners are to monitor the emissions from the ships and provide the information on the relevant emissions data and the basis of calculations to the charterers, based on which charterers transfer the appropriate allowances to shipowners every month.

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 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 scope of the previous reporting year. The specific surrendering method for the shipping sector has not yet been clarified, while there is a case of an onshore sector in France, where “operators are required to surrender the allowances by transferring them from their accounts to the government’s account every year.” (Report by New Energy and Industrial Technology Development Organization (NEDO), Fukazawa, 2005:5).

As explained in Q2, allowances to be surrendered are mitigated for the first two years (2024/2025).

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)

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 2020 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 CO₂ emissions and CII ratings for individual ships as well as for the entire fleet, and to simulate how CO₂ emissions and CII ratings are changed with slow steaming, etc. Currently, ClassNK ZETA is serving more than 4,500 ships.



ClassNK ZETA will be updated to add the functionality to manage the CO₂ 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

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

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.

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

The revision of the Initial IMO Strategy on Reduction of GHG Emissions from Ships is under discussion in the IMO, and the adoption of the revision is expected at the 80th session of the IMO Marine Environment Protection Committee (MEPC 80) in July 2023. Global scheme for the GHG reductions through market-based measures, such as carbon levy and emissions trading, are also under consideration for international shipping.

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.

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