

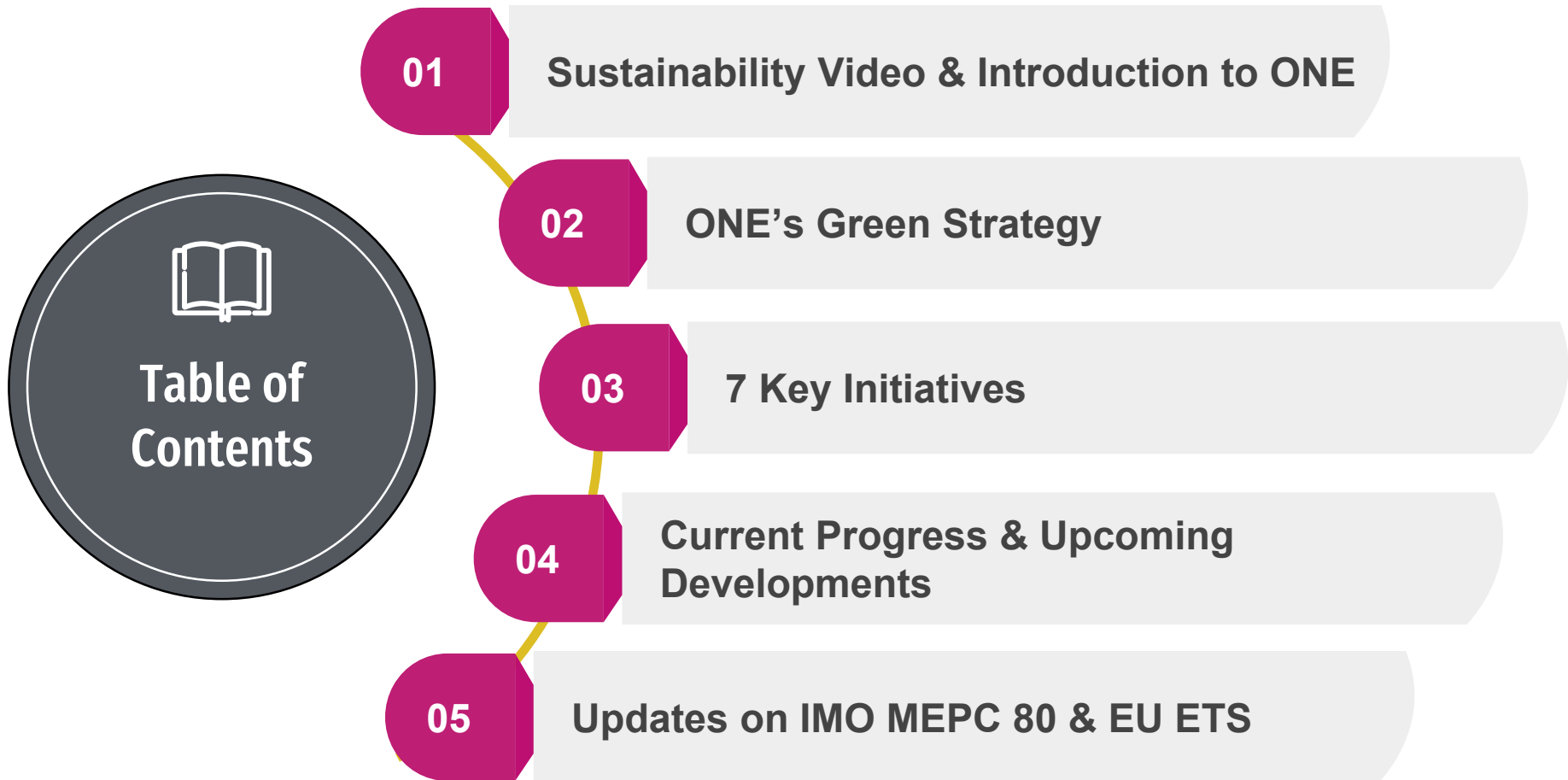
ONE & Our Green Strategy

AS ONE, WE CAN.

ONE

OCEAN NETWORK EXPRESS

18th October 2023



The diagram features a central dark grey circle with a white book icon and the text "Table of Contents". A yellow line connects this circle to five numbered, magenta-colored circular nodes (01-05). Each node is connected to a light grey horizontal bar containing the corresponding section title.

- 01** Sustainability Video & Introduction to ONE
- 02** ONE's Green Strategy
- 03** 7 Key Initiatives
- 04** Current Progress & Upcoming Developments
- 05** Updates on IMO MEPC 80 & EU ETS

Importance of Sustainability in ONE



ONE's Green Strategy

ONE'S GREEN STRATEGY

ONE will be a **leader in the decarbonization** of shipping industry and is committed to achieving and providing sustainable maritime transport.



ONE's **Green Strategy** sits at the top of our management agenda, as does our commitment to achieving **carbon neutrality by 2050**, thereby playing an important role in **global environmental conservation**.



ONE will make **continuous investments in greener assets & technologies** whilst also taking all appropriate actions to achieve our green targets.



ONE will engage in **open collaboration** with industry stakeholders to realize the goals in the **Decarbonization of Shipping**.

VISION, MISSION, TARGETS

ONE's ambitious vision, mission and targets demonstrate our full commitment towards achieving **Green Excellence**.

Green Vision

- To be a **global leader** in the realization of **environmentally sustainable shipping**.

Decarbonization targets

- **Emissions intensity:**
To **Reduce scope 1 GHG** emissions **by 70% ⁽¹⁾** per TEU km **by 2030**.
- **Absolute emissions:**
Achieve net-zero GHG emissions (including scope 2 & 3) **by 2050**.

Green Mission

- **We will achieve carbon net-zero shipping** in order to protect our planet via **lean and agile** best practices and **open collaboration**.

Environmental Compliance

- **Ship recycling:**
Ensure partner yards **comply with the highest internationally-recognized standards**.
- **Environmental conservation:**
Ensure ZERO significant spills for all vessels.

7 Key Initiatives

7 KEY INITIATIVES

□ To achieve our targets we are addressing **7 key initiatives**

Decarbonization initiatives

1 Green Investment

- Invest and **upgrade hardware** assets
- **Invest in** green related **technologies**
- Invest in green **talents and expertise**

2 Alternative Fuels

- Develop alternative fuels roadmap
- First alternative fuel ships to be deployed by 2030
- Zero emission vessels AIP by 2023

3 Carbon Management

- Deploy internal carbon pricing scheme
- Develop low-carbon service offering;
- Study green related tech. such as CCS

4 Operational Efficiency

- Further improvement of fuel efficiency and other programs
- Vessel digitalization program

5 Community Ecosystem Building

- Call to Action for Shipping Decarbonization
- Open collaboration activities such as GCMD, academic partnerships etc.
- Supplier policy

Environmental initiatives

6 Clean Ship Recycling

- Frequent 3rd party audits of all dismantling sites used.
- Join the Ship Recycling Transparency Initiative

7 Active Environmental Conservation

- Ensure zero significant spills for all vessels;
- Participate in ecological conservation programs;
- Establish an Environment Fund to finance activities

7 KEY INITIATIVES

1

Green Investment

Green investment is for incremental efficiency increase and innovative technologies for net-zero.

Major objectives of Green investment

- **Incremental efficiency increase**
 - Frequent maintenance to keep existing vessels in good condition.
 - Replace older fleet with new and more fuel-efficient vessels.
 - Implement technologies to gain higher efficiency e.g., propeller attachments, bulbous bow etc.
- **Innovative technologies for net-zero**
 - Continue to invest and implement green technologies into all operations.

Types of Green investment

- **Hardware** – Vessels, Containers, Terminals etc.
- **Technologies** – Green technologies such as digital technologies, alternative fuels and other related technologies.
- **Talents** – Operational know-how and expertise e.g., for zero-emission vessels.

7 KEY INITIATIVES

2 Alternative Fuels 1/2

Each alternative fuel is at a different development stage and has different characteristics. However, there is an emerging trend for some fuels to actually be used as fuel.

Trend

Growing expectations for green methanol

Some shipping companies are moving to secure it as a long-term off take basis, as it can be handled at room temperature and pressure, not classified as a hazardous product and can use some of the already existing grey methanol production process.

It can also be supplied as a marine fuel under already established technology and is therefore increasingly being supplied to ships.

A GHG reduction of around -20% can be expected in a life cycle assessment.

Alternative fuels

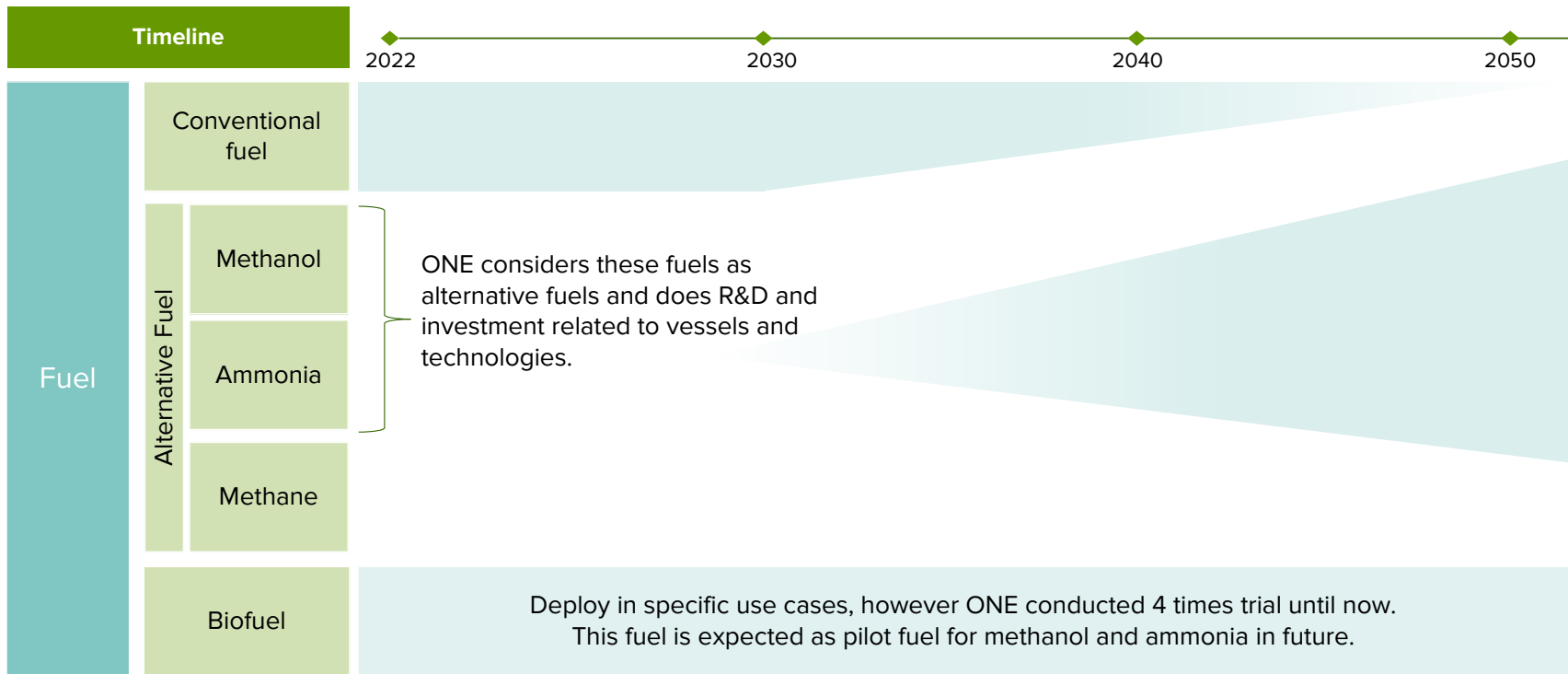
	Description	Key Challenge & Key Benefit
Ammonia	<ul style="list-style-type: none"> There is no carbon in the fuel itself, so it is recognized as a carbon-free fuel. 	<ul style="list-style-type: none"> It is a new technology that has not yet been put to practical use. Carbon-free and closest to carbon neutrality upon market penetration in the long-term.
Hydrogen		<ul style="list-style-type: none"> It takes some time to be put to practical use. Hydrogen is good for certain applications e.g., small ships. But is not suitable for bigger vessels due to energy density issues.
Methanol	<ul style="list-style-type: none"> This is a group of synthetic fuels. E-methanol and E-methane contain carbon. However, carbon neutrality can be achieved by using hydrogen derived from renewable energy sources and CO2 recovered from CO2 emission sources during production. 	<ul style="list-style-type: none"> Some types have been commercialized and the fuel has no physical supply restriction. However, future supply availability is uncertain. Could be used with dual-fuel vessel with heavy oil in operation.
Methane		<ul style="list-style-type: none"> Some types have been commercialized and the fuel has no physical supply restriction. Could be used with LNG infrastructure.
Biofuel	<ul style="list-style-type: none"> This can also be carbon neutral fuel, even though it contains carbon. It is derived from biomass, so there are supply constraints. 	<ul style="list-style-type: none"> Due to resource supply constraints, it is difficult to utilize biofuels as a main fuel. Biofuels are useful as a support fuel - deployed in specific use cases and as a pilot fuel for methanol and ammonia in future.

7 KEY INITIATIVES

2 Alternative Fuels 2/2

ONE plans to deploy alternative fuel vessels by 2030 and replace existing conventional fuel vessels by 2050.

Roadmap for alternative fuel vessels deployment



7 KEY INITIATIVES

3

Carbon
Management

We start to deploy internal carbon pricing, and low-emissions service offerings, and study green related technologies.

Major actions for carbon management

Deploy
internal carbon
pricing guidelines

- Introduced an internal carbon pricing system on a trial basis from 2021.
- Intended to be used continuously as one of the indicators for investment decisions.

Develop
Low-Carbon
Service offering

- Launched ONE Eco Calculator to measure the emissions from our services in Apr 2023.
- We are planning to launch Low - Carbon Service.

Study green
related technologies
such as CCS

- Ongoing discussions with carbon capture and other related technology owners.
- Communication with regulatory authorities in each country.

7 KEY INITIATIVES

4 Operational Efficiency

Various efforts are being made to pursue operational efficiency in order to reduce GHG emissions.

Optimize Product Performance

Continuous review of Proforma, Cascade, Terminal.

- Optimized Vessel Fleet Deployment
- PFS Improvement study

Improve Asset Portfolio

Modification for save bunker, load ability, flexibility.

- Reefer plug increase for 3rd tier loading
- AMP retrofit
- Bow Windshield retrofit
- AF Paint

Evaluate new technology / Strategy

Evaluate new technology, Study new area.

- Fuel Additive for VLSFO
- Energy saving device
- Wind power technology
- Machinery plant optimization

Daily FOC Saving

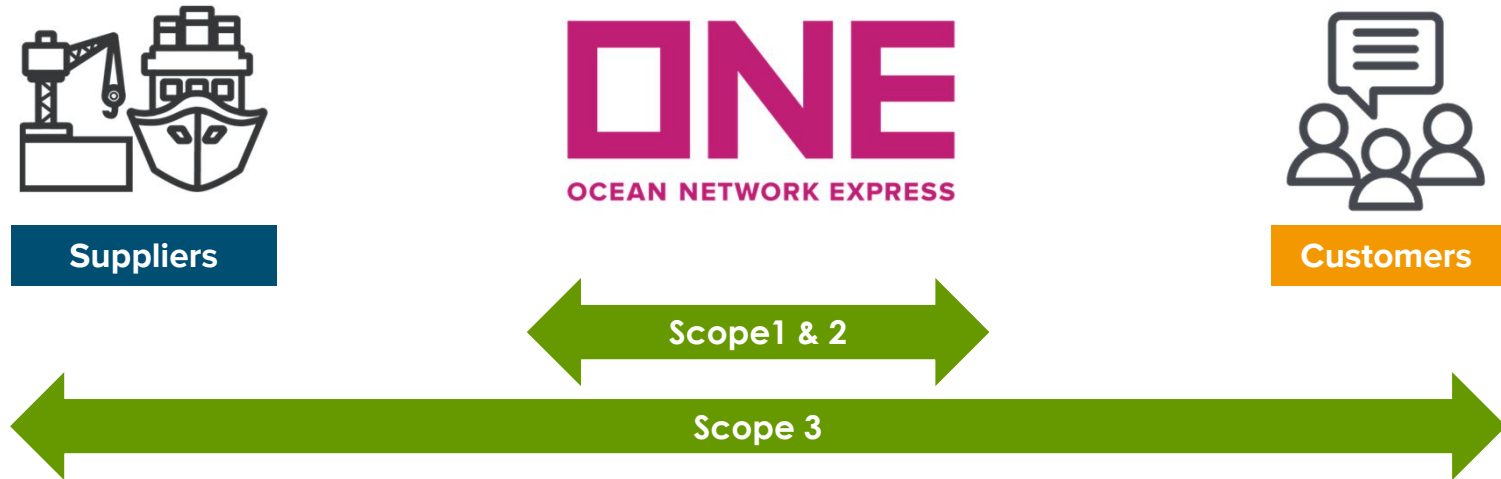
FOC save by micromanagement, IT utilization.

- Enhance Operations Micromanagement
- Rapid Information Gathering by IT
- Cross Operations Initiatives
- Agile Decision Making with IT
- Improve Operations by Advanced Stowage

7 KEY INITIATIVES

5 Community Ecosystem Building

In order to manage scope 3 emission, ONE collaborates with partners towards green procurement.



- It is crucial to collaborate with suppliers and customers to achieve net-zero GHG emissions for Scope3.
- Work with suppliers and customers to start measuring scope 3 GHG emissions from our services.
- Continue to co-work with suppliers & customers towards green procurement.





7 KEY INITIATIVES

Initiatives	Rationale	Description
<div style="writing-mode: vertical-rl; transform: rotate(180deg);">Other Environmental initiatives</div> <div style="text-align: center;"> 6 <h2 style="margin: 0;">Ship Recycling</h2> </div>	<ul style="list-style-type: none"> Ship recycling is critical to ensure sustainable vessel operations from start to end of life. Recovery of scrap metal, reduction of GHG emissions and reduction of pollution. 	<ul style="list-style-type: none"> Audit dismantling sites used with third-party organizations. <ul style="list-style-type: none"> ✓ To undertake additional auditing processes to minimize possible environmental damage during shipbreaking and recycling process. To join Ship Recycling Transparency Initiative (SRTI). <ul style="list-style-type: none"> ✓ Jointly developed with key maritime stakeholders to align policies, practices and sustainable outcomes for maritime sector.
<div style="text-align: center;"> 7 <h2 style="margin: 0;">Environmental Conservation</h2> </div>	<ul style="list-style-type: none"> Oceans are our important food source for us. They host 80% of our planet’s biodiversity. As frequent users of the ocean, we also play the role of being a custodian. ONE will prevent ecological damage and proactively lead initiatives to help regenerate the ecosystem. 	<ul style="list-style-type: none"> Ensure zero significant spills for all vessels. To participate in ecological conservation programs. <ul style="list-style-type: none"> ✓ Engaging local organizations in ecological conservation programs (marine life regeneration, tree population). To establish Environment Fund to finance activities. <ul style="list-style-type: none"> ✓ This is to be established in 2022 to support a long-term effort towards material environmental themes, serving as platform to educate employees and stakeholders.

ONE Current & Upcoming Developments

CURRENT & UPCOMING DEVELOPMENTS

Various measures are on track, and actively progressing as planned

Current major achievement	Status and progress in 7 key initiatives											
<div style="background-color: #e91e63; color: white; padding: 20px; text-align: center;"> <p>>50% reduction of CI <i>(from 2008 to 2022, g/TEU-km)</i></p> </div> <div>  <p>IBIS PLUS</p> </div> <div>    </div>	<p>Decarbonization initiatives</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #003366; color: white; text-align: center; padding: 10px;"> 1 Green Investment </td> <td style="padding: 10px;"> <ul style="list-style-type: none"> 20 methanol/ammonia-ready vessels for delivery in 2025/2026 Installation of Bow windshields </td> </tr> <tr> <td style="background-color: #003366; color: white; text-align: center; padding: 10px;"> 2 Alternative Fuels </td> <td style="padding: 10px;"> <p>Various projects and discussion involving external industry partners (e.g., Study of alternative fuels)</p> </td> </tr> <tr> <td style="background-color: #003366; color: white; text-align: center; padding: 10px;"> 3 Carbon Management </td> <td style="padding: 10px;"> <ul style="list-style-type: none"> ONE Eco Calculator for customers released Study of CCS installation </td> </tr> <tr> <td style="background-color: #003366; color: white; text-align: center; padding: 10px;"> 4 Operational Efficiency </td> <td style="padding: 10px;"> <ul style="list-style-type: none"> Core operating systems are continuously upgraded Vessel operation system to manage CII ratings </td> </tr> <tr> <td style="background-color: #003366; color: white; text-align: center; padding: 10px;"> 5 Ecosystem Building </td> <td style="padding: 10px;"> <p>Participation in and sponsorships of various industry movements (e.g., Collaboration with GCMD⁽¹⁾)</p> </td> </tr> </table>	1 Green Investment	<ul style="list-style-type: none"> 20 methanol/ammonia-ready vessels for delivery in 2025/2026 Installation of Bow windshields 	2 Alternative Fuels	<p>Various projects and discussion involving external industry partners (e.g., Study of alternative fuels)</p>	3 Carbon Management	<ul style="list-style-type: none"> ONE Eco Calculator for customers released Study of CCS installation 	4 Operational Efficiency	<ul style="list-style-type: none"> Core operating systems are continuously upgraded Vessel operation system to manage CII ratings 	5 Ecosystem Building	<p>Participation in and sponsorships of various industry movements (e.g., Collaboration with GCMD⁽¹⁾)</p>
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Note: (1) Global Centre for Maritime Decarbonisation

CURRENT & UPCOMING DEVELOPMENTS

Vessels

Further upgrades to come with wide variety of vessels scheduled for delivery by 2026

Fleet investments and commitments

Phase in	Size TEU	No. of Vsl
FY2020	12K	4
FY2020-21	15K	4
FY2022	12K	4
FY2023	15K	4
FY2023	24K	6
FY2024	15K	6
FY2024	7K	10
FY2025	13K	10
FY2026	13K	10

Investing in new buildings

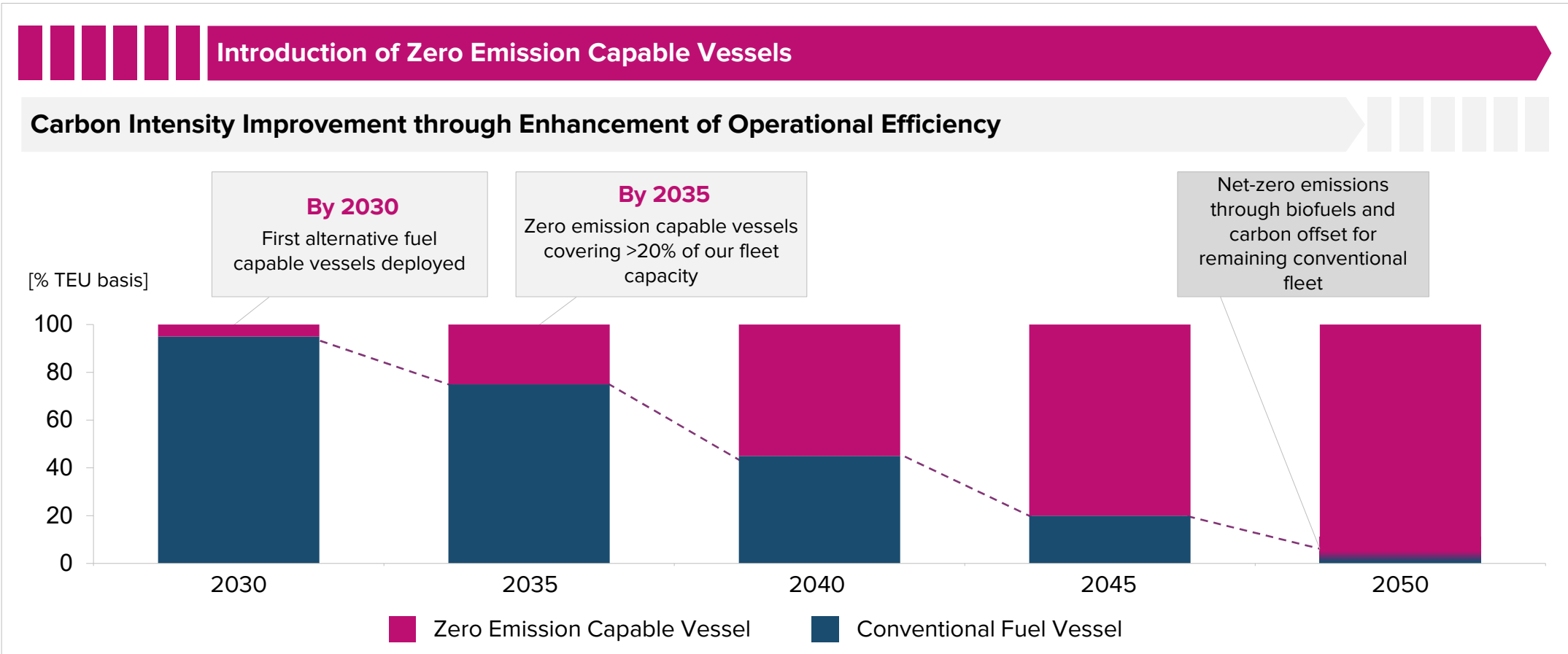
ONE has actively expanded its core fleet to meet customer demand for future sustainable supply chains. These investments are part of ONE's green strategy and decarbonization plans.



Methanol & Ammonia ready vessel : The vessels will be delivered as conventional fuel from shipyard, but we can change the fuel to methanol or ammonia in the future.

CURRENT & UPCOMING DEVELOPMENTS

Transitioning ONE's fleet towards decarbonization



Roadmap will be continuously reviewed based on technology development, industry regulations and voices of stakeholders

Updates on IMO MEPC 80 & EU ETS

As the industry strives towards decarbonisation as one, we must remain alert to upcoming regulations, review and take necessary action.

Some new regulations or legislations that were introduced:

3rd – 7th July 2023

**IMO Marine Environment
Protection Committee
(IMO MEPC 80)**

1st January 2024

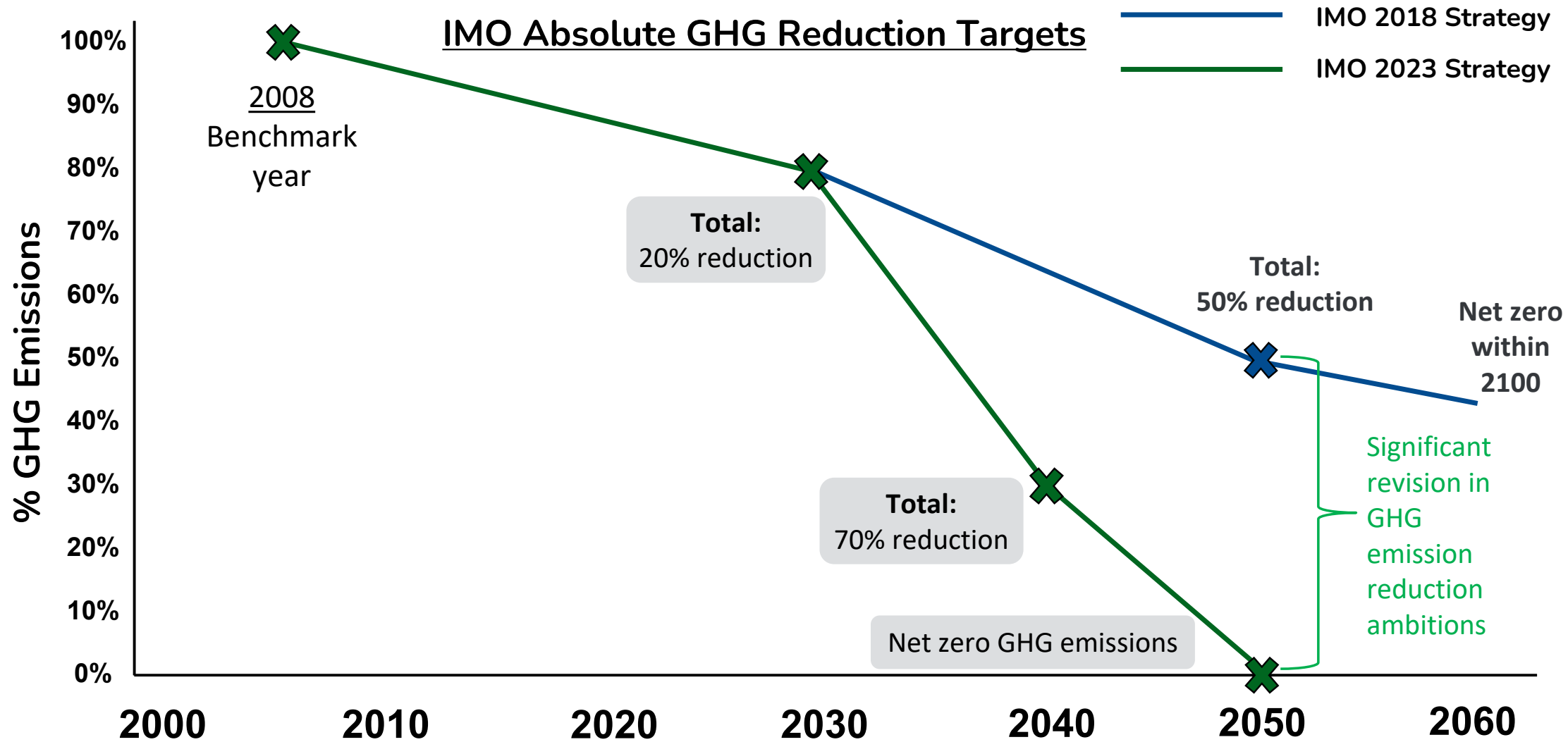
**European Union Emission
Trading Scheme
(EU ETS)**

2023 IMO Strategy on Reduction of GHG Emissions from Ships

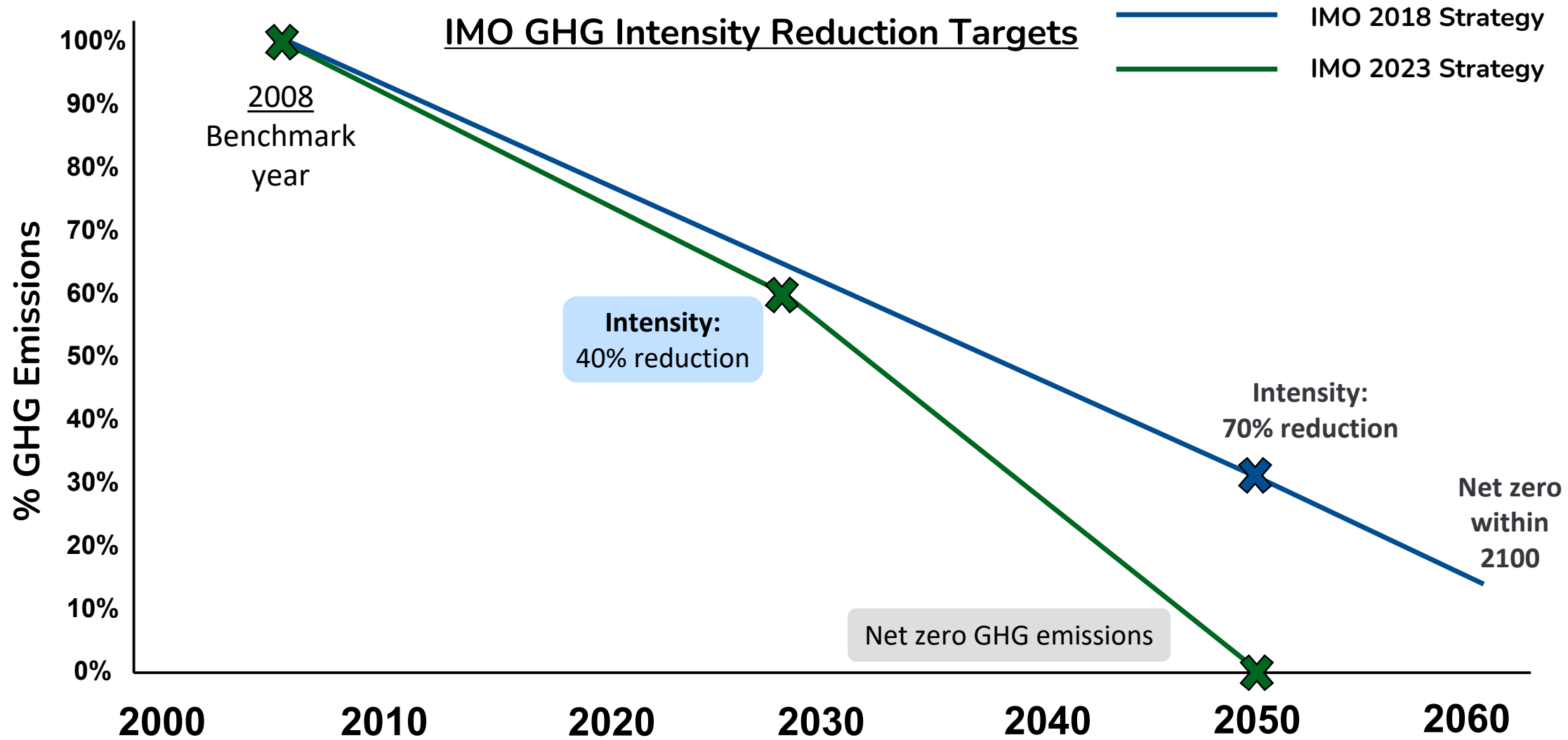
Timeline	Initial Thinking (2018)	Enhanced Ambition (2023)
2030	To reduce CO2 emissions per transport work by at least 40%	<ul style="list-style-type: none"> To reduce CO2 emissions per transport work by at least 40% To reduce total annual GHG emissions by at least 20% (striving for 30%) Uptake of zero GHG emission fuels at least 5% of the energy used (striving for 10%)
2040		To reduce total annual GHG emissions by at least 70% (striving for 80%)
2050	<ul style="list-style-type: none"> To reduce CO2 emissions per transport work by at least 70% To reduce total annual GHG emissions by at least 50% 	To reach net-zero GHG emissions by or around 2050 at the latest
Within this century	To reach net-zero GHG emissions	

Source: ClassNK

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Total: Well-to-wake GHG emissions; **Intensity:** CO2 emitted per transport work



Total: Well-to-wake GHG emissions; Intensity: CO2 emitted per transport work

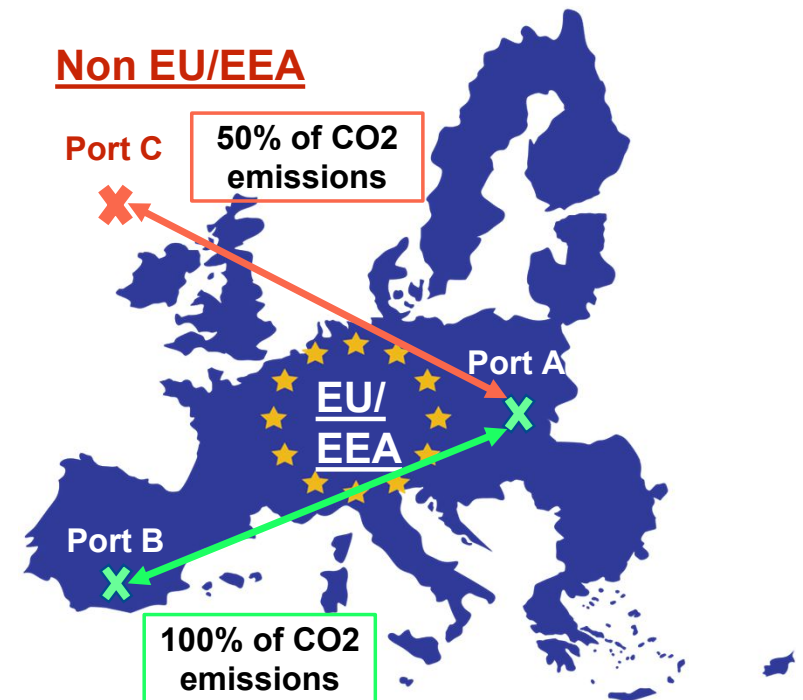
European Union Emission Trading Scheme (EU ETS)

The EU ETS is an emission cap-and-trade system that aims to reduce greenhouse gas (GHG) emissions by setting a limit on GHG emissions for certain sectors of the economy.

A revision of the EU ETS directive have been extended to **include shipping from 1st January 2024**, and applies to cargo and passenger ships above 5000GT from 2024 and offshore ships above 5000GT from 2027.

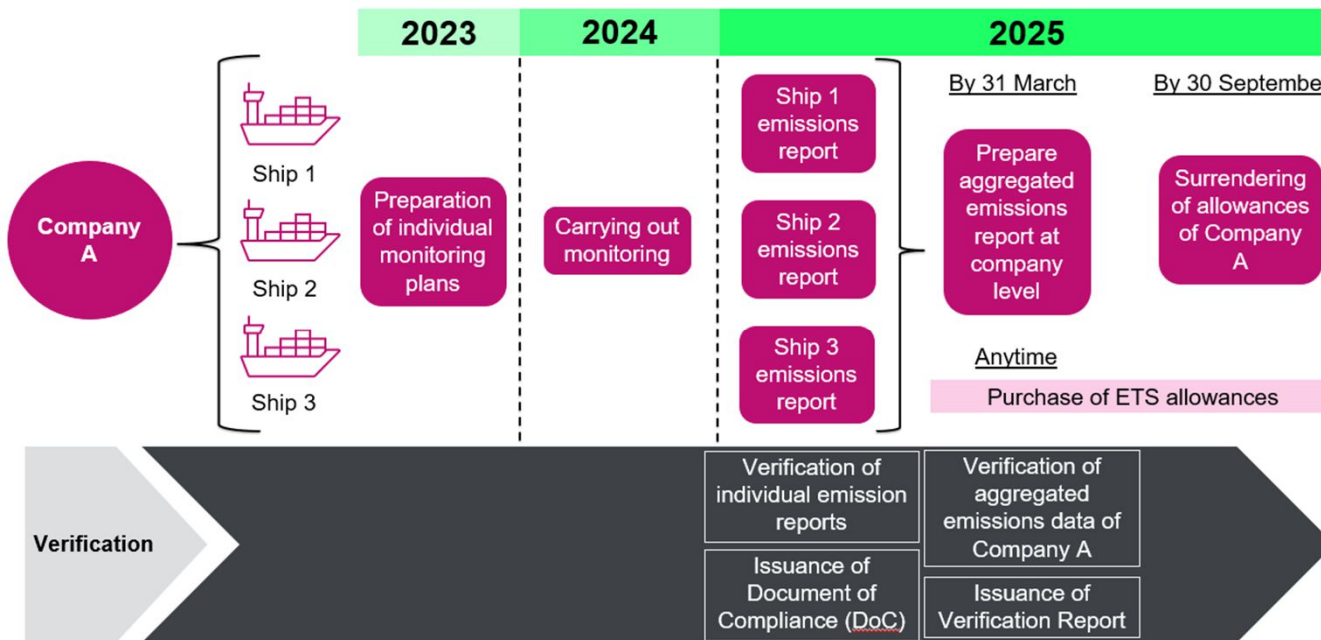
Geographical Scope

- **50%** of CO2 emissions from voyages between an EU/EEA port and a non-EU/EEA port
- **100%** of CO2 emissions from voyages between the EU/EEA ports
- **100%** of CO2 emissions while at berth in EU/EEA ports



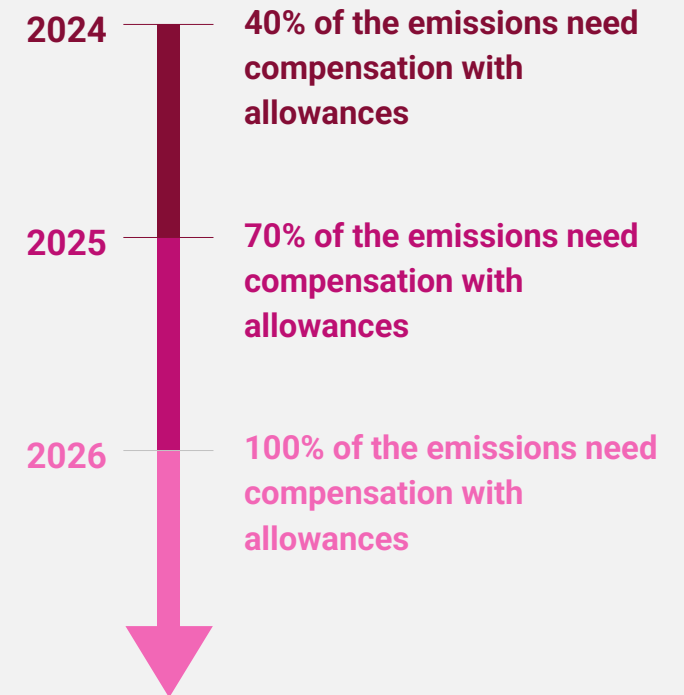
Compliance Cycle

Companies are required to monitor, report and verify the GHG emissions on an annual basis under the EU MRV regulation and this information is used to determine the allowances they need to surrender within a compliance period, or they will be penalized.



Phase-in period

This entails a three-year phase-in period



Accounting of emissions will begin in 2024, with reporting of 2024 emissions and first surrender of allowance due in September 2025.

European Union Allowances (EUA) that are equivalent to the annual CO2 emissions should be obtained for surrender.

EU-ETS Impact on the Industry



Due to the requirement set by the European Union (EU), for shipping companies the cost of purchasing allowances through the EU ETS can be a major expenditure which could have an impact on prices and additional terms of contractual arrangements among parties throughout the value chain, including charterers and cargo owners.

ONE intends to cover the cost through the means of surcharges in order to be fully compliant with the regulations and ensure cost transparency towards our customers.



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