

ClassNK ZETA

Zero Emission Transition Accelerator



Vessel
monitoring



Periodical
Report



Fleet
monitoring



Simulation

ClassNK EU-ETS Seminar

Introduction of ClassNK ZETA EU-ETS function

11 October 2023

Zero-Emission Transition Center
ClassNK

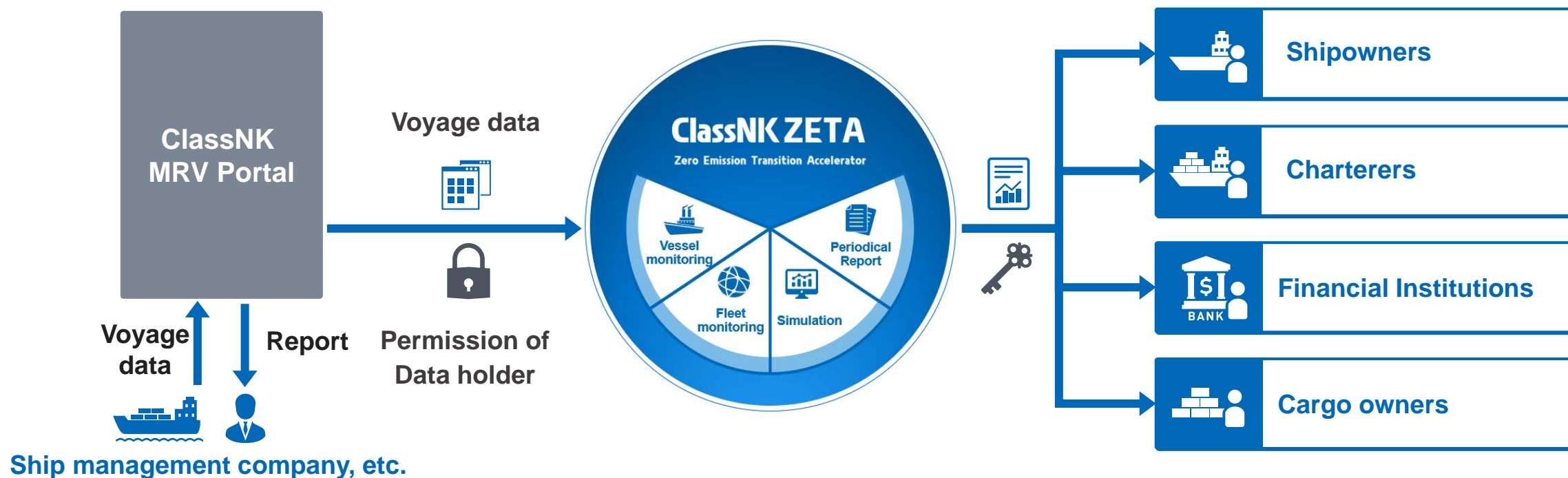


GHG Emissions Management Tools

ClassNK ZETA

- Tool for visualizing CO₂ emissions from ships and CII ratings to support suitable GHG reduction management and necessary measures to be taken.
 - ✓ Monitoring of CO₂ emissions on a real-time basis (linked with ClassNK MRV Portal)
 - ✓ Simulating CO₂ emissions and CII ratings for individual ships / fleet as a whole
- Available for shipowners, ship management companies and charterers.

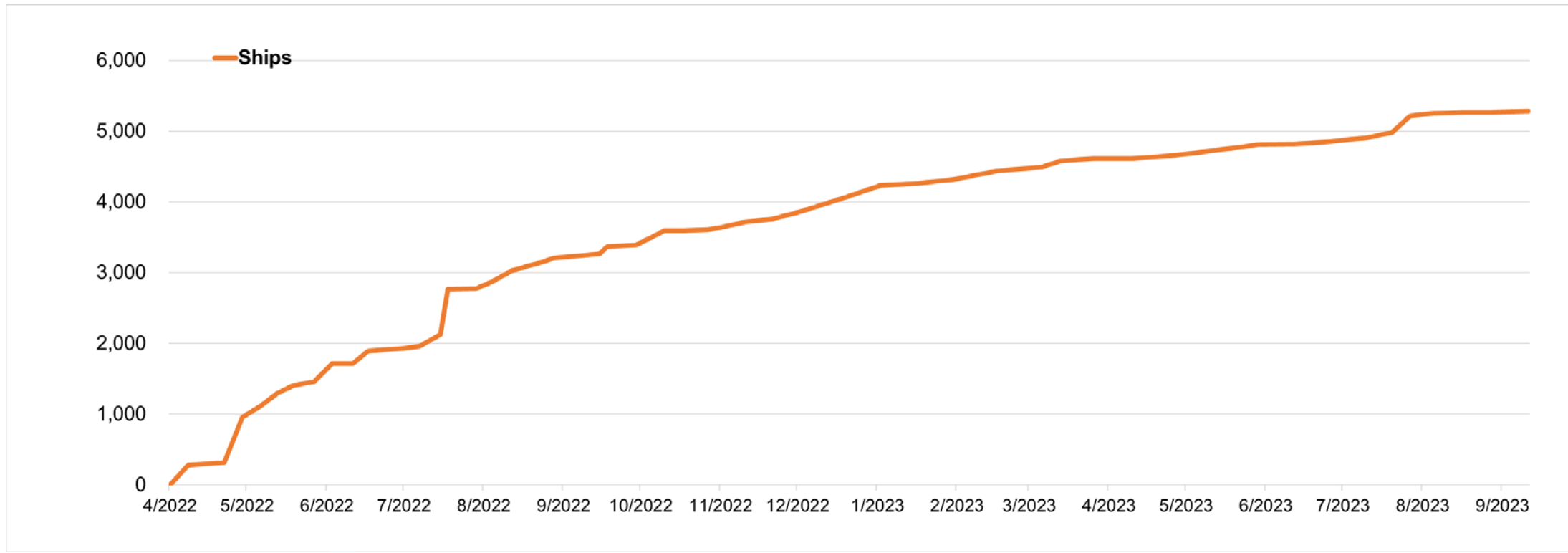
[ClassNK ZETA Promotion Video](#)





■ ClassNK ZETA users

- ✓ Increasing number of companies have started GHG emissions management by ClassNK ZETA.





GHG Emissions Management Tools

ClassNK ZETA

- Monitoring CO₂ emissions and CII rating of each ship without delay.

Based on the current operation status, estimated annual CO₂ emissions and CII ratings can be checked at any time for consideration of any necessary measures.

Add:
Management of EU-ETS for individual ships

- Monitoring CO₂ emissions and CII ratings of the fleet of your company without delay.

Estimated annual CO₂ emissions and CII ratings of entire fleet or the fleet in charge can be checked at any time.

Add:
Management of EU-ETS for entire fleet



- Providing CO₂ emissions and CII rating report by a ship, fleet, voyage, etc.

Meets reporting demands required by various stakeholders, such as financial institutions, cargo owners, insurance companies, etc.

Add:
Provide various reports for EU-ETS

- Simulating CO₂ emissions and CII ratings of a ship and fleet when implementing slow steaming, installing energy-saving devices, and/or switching fuels.

Possible to consider measures to reduce CO₂ emissions.



EU-ETS Management on ClassNK ZETA (individual ships)

ClassNK ZETA : EU-ETS Management

- Management of the emissions, voyages and port of calls for EU-ETS (per voyage)

ClassNK ZETA Regulatory Reporting

Report: EU-ETS (Individual ship selected)

NK BULKER IMO 98765432

CII of 2023 to date: **B 10.922**

Total CO₂ emission 2023: **824.0 tons**

CO₂ emission EUA held: **0 tons**

CO₂ emission EU ETS 2024 (40%): **255.7 tons**

CO₂ emission Internal EUA: **173.3 tons**

CO₂ emission External EUA: **82.4 tons**

CO₂ emission Remaining EUA: **-255.7 tons**

Departure port	Arrival port	Departure date (UTC)	Arrival date (UTC)	Distance sailed (nm)	Actual CO ₂ emissions (tons)	EU ETS CO ₂ emissions (tons)	CO ₂ emissions EU ETS 2024 (tons)	Voyage/port call	Own EUA
Port AAA	Port BBB	2024-05-22 08:27	2023-06-01 07:01	3331.3	369.4	184.7	73.9	Voyage inside or out of EU/EEA	Yes
Port BBB	Port CCC	2024-06-02 08:27	2023-06-14 17:28	4468.9	454.6	454.6	181.8	Voyage within EU/EEA	Yes
Total				7800.2	824.0	639.3	255.7		

Buttons: EDIT EXPENSE SPLIT, EXPORT REPORT

Display emissions, voyages and port of calls for EU-ETS per voyage



EU-ETS Management on ClassNK ZETA (entire fleet)

ClassNK ZETA : EU-ETS management

- Management of the emissions for EU-ETS for entire fleet
- Management of the emissions and allowances per responsible parties concerned.
- Management of the allowances currently in hand.

ClassNK ZETA Regulatory Reporting

Emissions for EU-ETS

Report: EU-ETS

Individual ship | **Fleet wide**

Select ships: All ships selected

Voyages from (year): 2024

EUA FOR WHOLE FLEET

EUA purchased (tons): 900

EUA received (tons): 100

EU ETS target year: 2024 (40%)

Export type: PDF export CSV report

EXPORT REPORT

824.0 tons
Total CO₂ emission 2023

1000 tons
CO₂ emission EUA held

164.8 tons
CO₂ emission EU ETS 2024 (40%)

835.2 tons
CO₂ emission Remaining EUA

82.4 tons
CO₂ emission Internal EUA

82.4 tons
CO₂ emission External EUA

Fleet Summary

IMO	Vessel Name	Ship Type	GT	DWT	Distance sailed (nm)	Actual CO ₂ emissions (tons)	EU ETS CO ₂ emissions (tons)	CO ₂ emissions EU ETS 2024 (tons)
98765432	NK BULKER	Bulk Carrier	5000	187882	7844.7	824.0	412.0	164.8
98765434	NK CONTAINER	Container ship	5000	186650	0.0	0.0	0.0	0.0
98765433	NK TANKER	Tanker	5000	127695	0.0	0.0	0.0	0.0
Total					7844.7	824.0	412.0	164.8

Allowances in hand purchased by the company/received from other companies

Allowances currently in hand

Emissions responsible for the company

Emissions responsible for other companies

Display surplus and shortfall of allowances

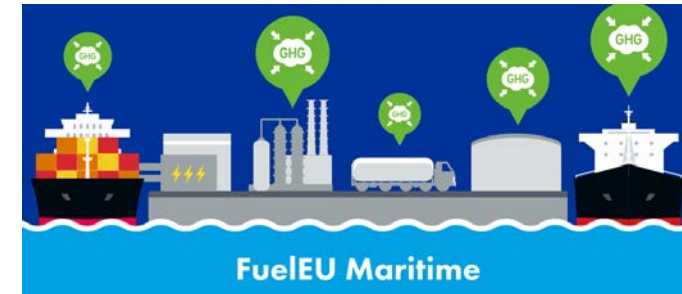
Available in ClassNK ZETA by the end of 2023



ClassNK ZETA *further updates*

① Management of FuelEU Maritime

- ✓ Calculation of lifecycle GHG emissions
- ✓ Management of entire fleet compliance with regulations



② CII management related to the BIMCO II clause

- ✓ BIMCO CII operations clause for time charter parties





THANK YOU

for your kind attention

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