

# HECLA

Emissions Management

“Organizing your EU ETS compliance”

Digital Ship  
Grieghallen, Bergen  
21<sup>th</sup> November 2023



## Øyvind H. Størdal Director, Hecla Emissions Management

- Øyvind is part of the management team in Hecla Emissions Management and has been since the start in 2022.
- Prior to Hecla he was driving digitalisation initiatives for Wilhelmsen Ship Management, and before that he worked with corporate strategy, mergers, and acquisitions within the maritime industry. Additionally, he has operational background from the bunker industry.

### What is Hecla Emissions Management?

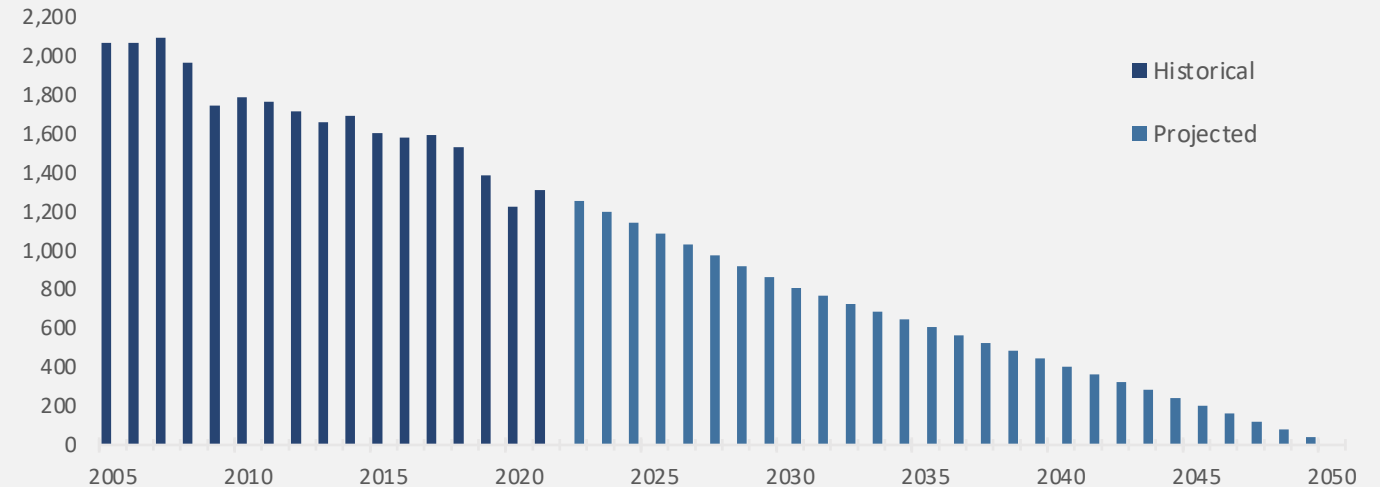
- A joint venture between Wilhelmsen Group and Affinity Shipping LLP.
- Hecla was established to provide a full EU ETS compliance service to the shipping industry.
- Wilhelmsen Ship Management are 3<sup>rd</sup> party managers of 450+ ships and part of the Oslo-listed Wilh. Wilhelmsen Group.
- Affinity Shipping is an independent shipbroker with offices on five continents. Affinity was the first shipbroker to establish a Carbon Desk in 2019.
- Hecla has more than 500 ships under contract for EU ETS services and is growing rapidly.



## Overview of the EU ETS

- The European Union Emission Trading System (**EU-ETS**) is the most sophisticated and liquid carbon market in the world.
- It covers approximately 40% of EU greenhouse gas emissions and over 10,000 installations.
- Launched in 2005, it is a **cap-and-trade** system that requires polluters to purchase a number of carbon allowances (**European Union Allowances**, or **EUAs**) equal to the tonnes of carbon dioxide emitted in a calendar year.
- EUAs are stored in **registry accounts**, which are digital warehouses for EUAs. They must be surrendered to the EU before the annual compliance deadline.
- Failure to surrender the requisite number of EUAs leads to a fine equal to €100/t-CO<sub>2</sub> not accounted for; however, non-compliant company must still make good on its obligations the following year by purchasing those missing EUAs.
- The volume of EUAs released onto the market is controlled by the EU, and is reduced overtime so that there is a 61% reduction in sectors covered by the ETS by 2030 (relative to 2005 levels), and to achieve net-zero by 2050

ETS Verified Emissions, 2005 – 2050 (MM tCO<sub>2</sub>)



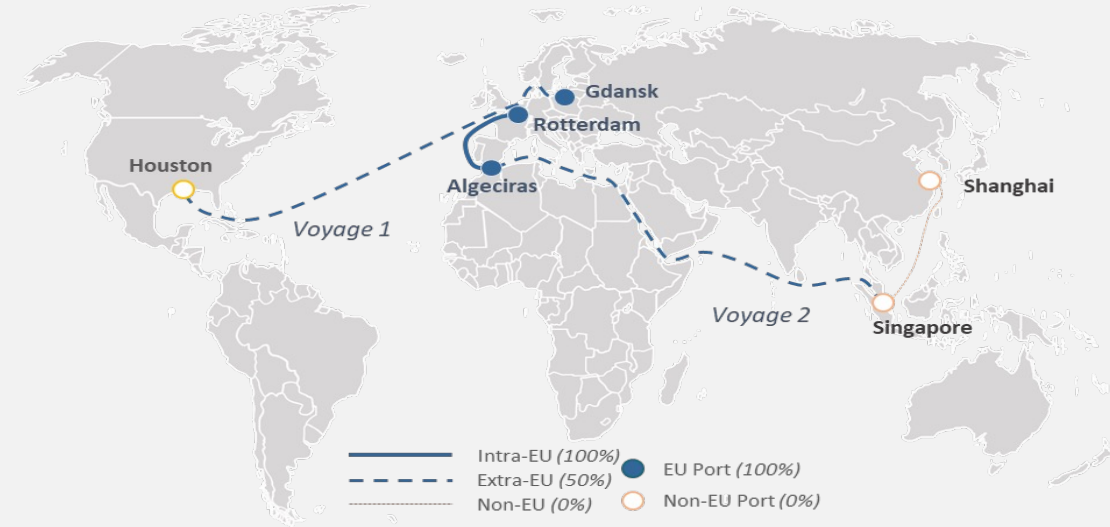
European Union Allowance (EUA) Price, 2012 – Present



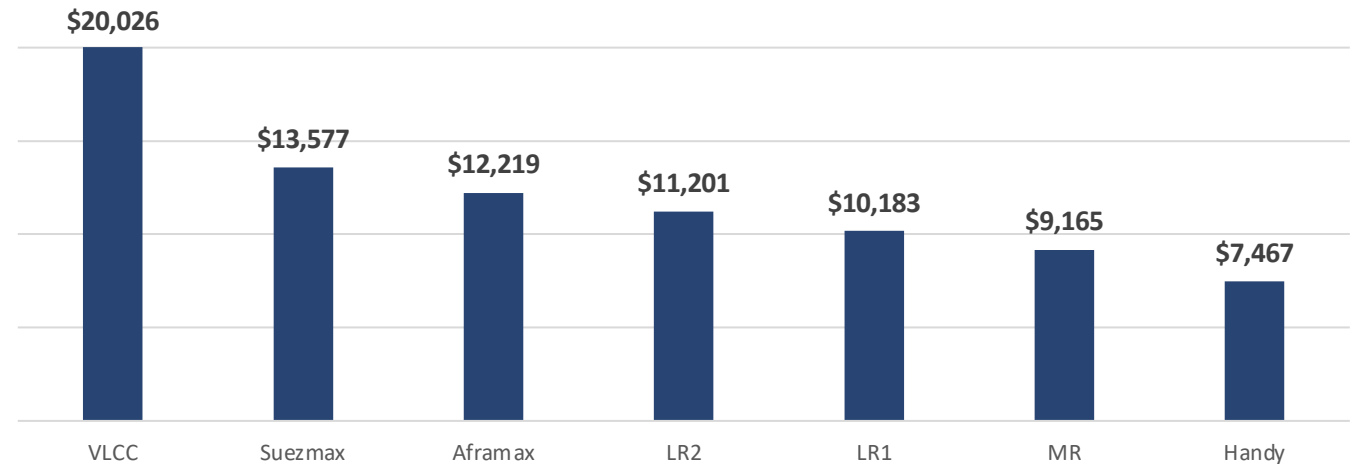
## Shipping in the EU ETS

- Start date is 1<sup>st</sup> January 2024, with a phase-in period of 40% of applicable emissions liable in 2024, 70% in 2025 and 100% in 2026 and each year thereafter.
- The shipping company, defined as either the owner or the entity responsible for the ship under the ISM Code, is responsible for surrendering EUAs. **STILL TBC!**
- Shipping companies are liable for:
  - (i) **100%** of emissions on intra-EU voyages
  - (ii) **50%** of emissions on inbound/outbound EU voyages
  - (iii) **100%** of emissions at EU ports.
- Carbon dioxide (CO<sub>2</sub>) is subject to the ETS from 2024, methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) emissions are subject to the EU-ETS from 2026.
- Punishments for non-compliance include penalty charges and blacklisting.

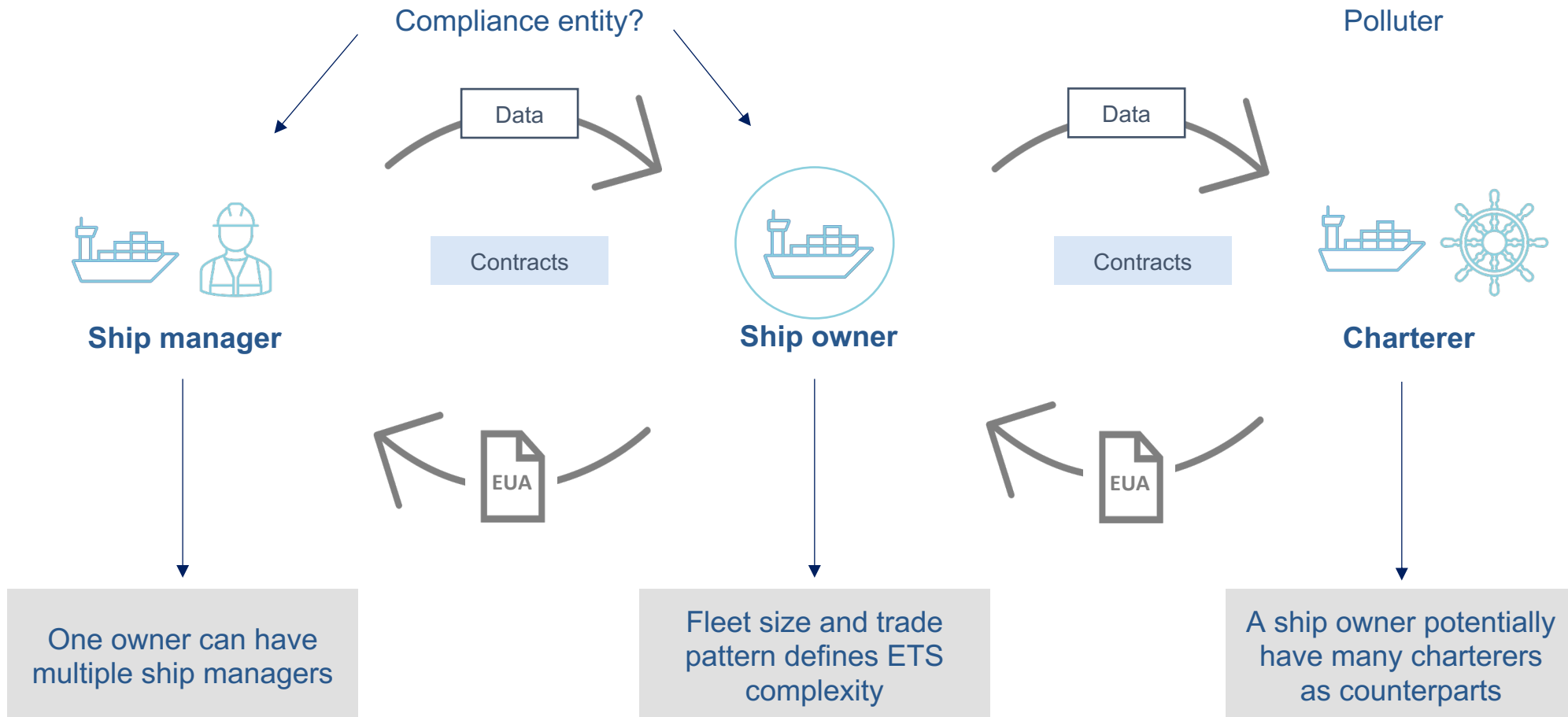
## Maritime Emissions Trading System Applicability





Daily EUA Costs for Tankers, Intra-EU Sailing, 100% Phase-in, €100, 1.09 FX




## Simplified overview of the EU ETS value chain



## EU ETS trading account screen shot

European Commission  
**Climate Action**  
Energy for a Changing World




Thomas  
URID: [redacted]  
[Edit your personal details](#)

Home page  
Kyoto Protocol Public Reports  
Task list

**Accounts**

- Accounts
- Account Request
- Claim account
- Release account
- Transactions

[Mandatory Fields](#)



**Account Search Criteria**

Identifier	Name	Status	Period	
<input type="text"/>	<input type="text"/>	- Any -	-- Select a period --	
Type	Account Holder Name		Installation / Aircraft Operator Identifier	Group
-- Select a type --	<input type="text"/>		<input type="text"/>	-- Any --
Over-Allocation	Marking Year		Excluded for the Current Year	
--Any--	<input type="text"/>		- Any -	
TAL 4 eyes principle	Transfers not on TAL preference		Swiss Dynamic Compliance Status	
- Any -	- Any -		-- Select a value --	
ETS Phase				
--Select a Phase--				
Unit Type				
<input type="checkbox"/> EUA <input type="checkbox"/> EUAA <input type="checkbox"/> CHU <input type="checkbox"/> CHUA				

**Account Search Results**

Page 1 of 1 (2 rows found) 10

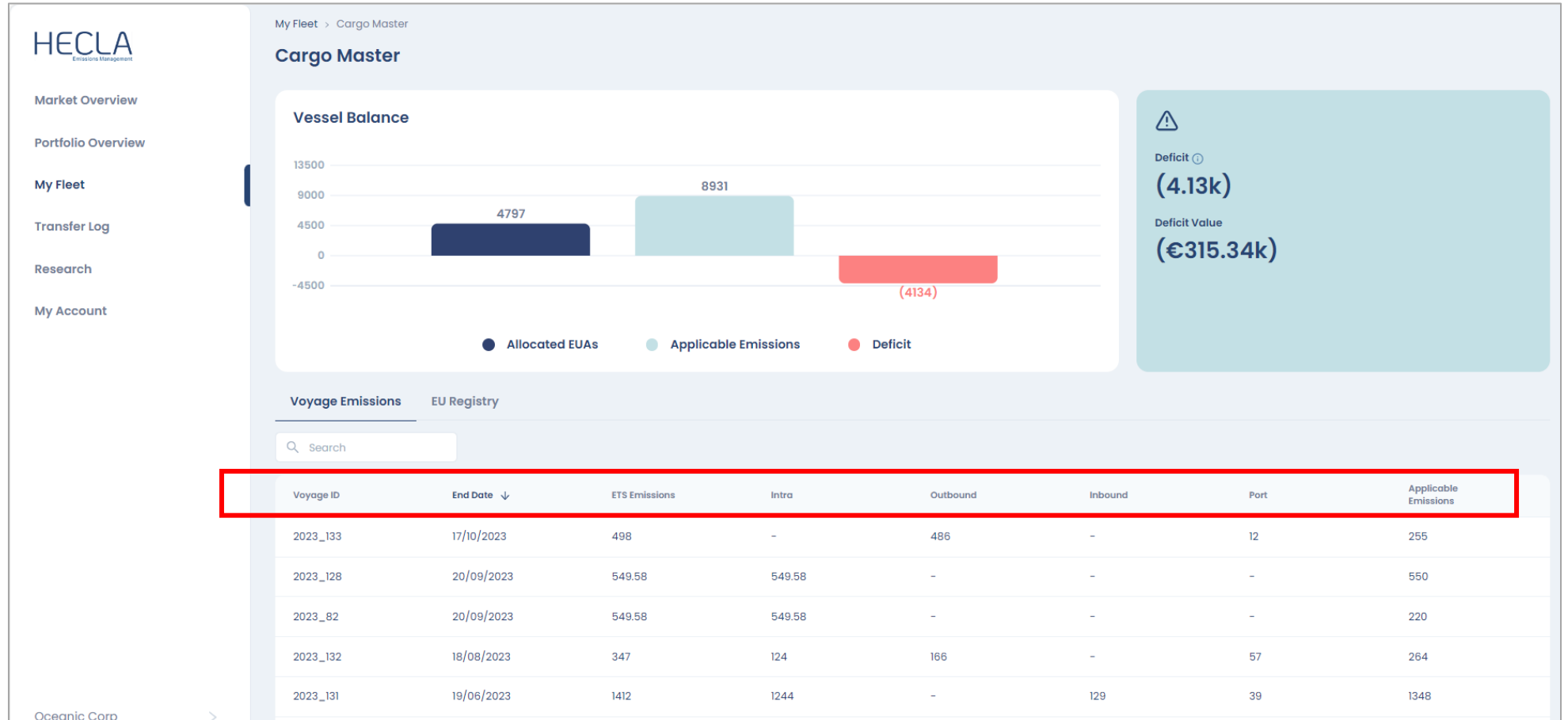
Number	Name	Type	Period	Group	Balance	Selected Quantity*	EU Dynamic Compliance Status	Swiss Dynamic Compliance Status	Status	Account Holder Name	Installation / Aircraft Operator Identifier	Transfers on TAL	Transfers not on TAL
EU-100-0-16	[redacted]	Trading Account	0	NO	5	5			Open	[redacted]		4 eyes principle	
EU-100-0-59	[redacted]	Trading Account	0	NO					Open	[redacted]		4 eyes principle	

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\*Selected Quantity is the total amount of allowances held by the account based on the selection made in ETS Phase and/or Unit Type.

## A break-down of EU ETS exposure on vessel basis will be required

- Tracking vessel specific ETS exposure
- Displays total emissions vs. allocated EUAs and deficit
- Displays all related voyage emissions – intra, inbound, outbound and port
- Displays all related EUA transfers / allocations



## A fleet overview showing EU ETS exposure will be required

➤ Fleet and activity overview with quick view for vessels with EUA deficit

➤ Displaying all vessels in the fleet with exposure to EU ETS

The screenshot shows the 'My Fleet' dashboard in the HECLA system. It features a sidebar with navigation options: Market Overview, Portfolio Overview, My Fleet (selected), Transfer Log, Research, and My Account. The main content area displays two summary cards: 'All Vessels' with a count of 45 and 'Vessels with Deficit' with a count of 14. Below these is a search bar and a filter dropdown set to 'All types'. A table lists 10 vessels with columns for Vessel Name, Type, Deficit amount (sorted ascending), and Last Allocation. Each row includes a chevron icon for further details.

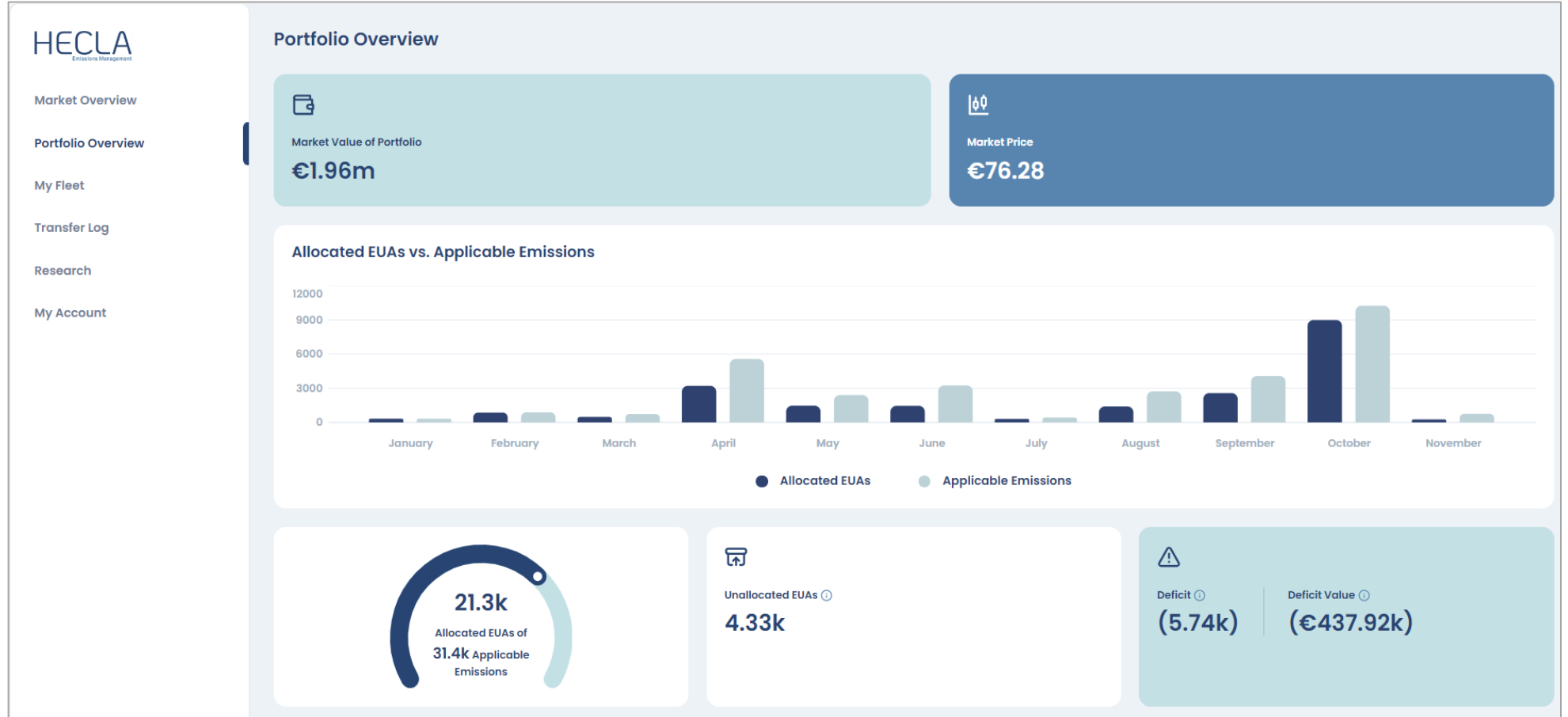
Vessel Name	Type	Deficit amount	Last Allocation
Cargo Master	Container ship	(4134)	16/10/2023
Roll-On Star	Ro-ro ship	(1276)	01/01/2023
Bulk Carrier 1	Bulk carrier	(1252)	-
Bulk Carrier 2	Bulk carrier	(915)	02/01/2023
On Time	Combination carrier	(842)	16/10/2023
Ocean Voyager	Oil tanker	(472)	04/05/2023
Wind Breaker	Ro-ro ship	(426)	16/10/2023
Muscle Ship	Bulk carrier	(407)	16/10/2023
Boxer Express	Container ship	(295)	-
To Be Named	Container ship	(241)	16/10/2023

Oceanic Corp >



## EU ETS trading account screen shot

- Time-period overview on reconciliations of emissions vs. allocated EUAs
- Overviews of total allocated EUAs and unallocated EUAs
- EUA deficit amounts/values
- Market value of EUA portfolio and latest EUA price



## Key take-aways – Organizing your EU ETS compliance

### Costly

- EU ETS will be costly for ship owners and charterers and EUA prices rigged to increase over time.
- Owners should pass on the EUA cost to charterers according to “polluter pays” principle.

### Administration

- Contracts between owners and its counterparts needs to be rewritten - emissions clauses to be included.
- EUAs must be held in registry accounts which are very time consuming to set up and operate. Now is already too late for 1st Jan 2024.

### Data

- Verified / validated data will required in many cases - data quality is going to be key.
- Voyage specific info & registry account balance will be important to allocate EUAs per ship and per voyage.

### Digital oversight

- To ensure full compliance at the year end and avoid unexpected EUA extra cost, a comprehensive and robust overview of ETS applicable emissions is needed.

### Resource requirements

- Creating an efficient system to deal with EU ETS will either require an internal data, trading and back-office team, or outsourcing to a service provider.

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Thank you!

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