Pricing an allowance you have not bought yet

A fixture agrees the freight today; the owner buys the EU allowances for the voyage months later. Five ways to write the ETS cost into the charter party, and who carries the price move in between, on one Capesize voyage from Brazil to Rotterdam.

1 · THE VOYAGE AND THE GAP IN TIME

Capesize, about 180,000 dwt, fixed in October 2026 on the Brazil–Rotterdam iron ore lane (cf. Baltic C2): Tubarão to Rotterdam, 175,000 t, 5,066 nm laden, at 12 kn (MCCS Capesize archetype: 29.5 t/day laden, 519 t of HFO and 17.6 days for the leg). The voyage is performed in November–December 2026; its emissions are surrendered as EU allowances by 30 September 2027, eleven months after the freight was agreed.

CO_2e in EU ETS scope — CO_2 with CH_4 and N_2O, as the ETS counts from 2026 (50%: one end of the voyage in the EU)	**821 t**
EUA price on the day of fixing	**€88**
EU ETS cost at the fixing price	**€72,200 · €0.41 per tonne of cargo**
FuelEU exposure at the 2026 target: the voyage's share of the ship's deficit, at the €2,400 per tonne VLSFO-equivalent penalty rate	**≈ €14,400 · €0.08 per tonne**

The FuelEU amount does not move with the EUA market. What the ship actually pays is set on its annual result, after banking, borrowing and pooling; a ship in a surplus pool may pay nothing. The ETS amount does move: the owner buys 821 allowances at the price on the day it buys them, while the freight was agreed with the EUA at €88. The clause decides who carries the difference.

2 · FIVE CLAUSES, FIVE EUA OUTCOMES

CLAUSE	EUA €65	€80	€88	€100	€120
WHAT THE CHARTERER PAYS THE OWNER FOR THE ETS					
Fixed surcharge at the fixing price	€72.2k	€72.2k	€72.2k	€72.2k	€72.2k
Index-linked: the price at surrender	€53.3k	€65.7k	€72.2k	€82.1k	€98.5k
Collar: index-linked, floor €80, cap €100	€65.7k	€65.7k	€72.2k	€82.1k	€82.1k
Shared: half the move from €88	€62.8k	€68.9k	€72.2k	€77.1k	€85.4k
Trigger band: nothing within ±10% of €88; the excess passes	€60.6k	€72.2k	€72.2k	€74.8k	€91.3k
OWNER'S GAIN (+) OR LOSS (−): WHAT IT WAS PAID, LESS WHAT THE ALLOWANCES COST					
Fixed surcharge	+€18.9k	+€6.6k	0	−€9.8k	−€26.3k
Index-linked	0	0	0	0	0
Collar €80–100	+€12.3k	0	0	0	−€16.4k
Shared 50/50	+€9.4k	+€3.3k	0	−€4.9k	−€13.1k
Trigger band ±10%	+€7.2k	+€6.6k	0	−€7.2k	−€7.2k

EUA prices are scenarios, not forecasts. The charterer's position is the mirror image of the owner's.

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3 · THE OWNER'S EXPOSURE, AT ANY EUA PRICE



Owner's gain or loss on the 821 allowances, by clause, with the freight agreed at EUA €88.

4 · HOW TO READ IT

- **Fixed surcharge** is the simplest and the riskiest: the owner has sold the charterer a fixed-price allowance and carries the full move, about €820 for every euro the EUA moves. At €120 the loss is €26,300, more than a third of the ETS bill.
- **Index-linked** removes the owner's risk entirely and moves it to the charterer, who then holds an open carbon position until surrender.
- **A collar** keeps the charterer's bill inside a known range (€65.7k–€82.1k here); above the cap the owner pays, below the floor the owner keeps the gain.
- **Shared adjustment** halves the risk for both sides at every price, with no cliff edges; the easiest to agree.
- **A trigger band** avoids small reconciliations (up to about ±€7,200 here is absorbed by the owner) and passes only large moves.

5 · WHAT THE CLAUSE HAS TO NAME

Reference price. "The EUA price shall be the average daily settlement price of the ICE EUA Futures December [2027] contract over [the 30 days before the surrender deadline of 30 September 2027]." Spot and December futures can differ by a few euros; the clause should say which.

Quantity. "Allowances due for the voyage as verified under Regulation (EU) 2015/757, including emissions at berth in EEA ports." Verified, not estimated: the reconciliation follows the verifier's figure.

Mechanism and dates. Fixed / index-linked / collar [floor, cap] / shared [%] / trigger band [±%]; invoice date and payment terms; what happens if the voyage straddles two reporting years.

Illustrative wording for discussion, not legal advice. Standard BIMCO ETS clauses allocate the allowances between the parties; the price reference, and how a move between fixing and surrender is shared, are for the parties to agree.

6 · WHAT IS CERTAIN ON THE DAY OF FIXING, AND WHAT IS NOT

- **Known:** the EU scope of the voyage (from the two ports), the clause, and the EUA at fixing. The ballast leg to Tubarão is out of scope when the ship comes from a non-EU port; from an EU port it adds half of that leg's emissions, and the clause should say whether it is covered.
- **Estimated:** the fuel burned. If the ship burns 10% more than planned, the allowances due rise by 10% (about 82 more here, €7,200 at the fixing price), whatever the clause.
- **Not known until the year closes:** the FuelEU amount, which depends on the ship's whole year and on pooling.

MCCS runs the same comparison on any fixture, with the vessel's own consumption, and shows each side's payment and gain or loss across EUA prices with a draft clause. It runs on the desk's own computer; no fixture data leaves the office.

Basis. Vessel: MCCS Capesize class archetype, about 180,000 dwt, at 12 kn laden on HFO (29.5 t/day; cube-law scaling of the archetype's 52 t/day at 14.5 kn), laden leg only, no port or berth time. Route: Tubarão → Rotterdam 5,066 nm (Neptune Atlas sea-lane distance, Vitória, checked against an NGA Pub 151 junction composition of about 5,093 nm, 7 Nov 2026). EU ETS at 100% surrender for 2026 emissions; 50% of voyage emissions in scope. CO_2e basis (CO_2 3.114 t/t HFO plus CH_4 and N_2O at the IMO factors): 1,641 t CO_2e for the leg, 1,616 t CO_2. EUA at fixing €88 (mid-October 2026). Allowances assumed bought at the surrender reference price; no hedging, financing cost or futures basis. FuelEU at the 2026 target, 89.34 gCO_2e/MJ. Lane named for orientation only; no index-provider data is used. Figures from MCCS Broker v4.24.6, run 8 Nov 2026. Illustrative; not freight, investment or legal advice.

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