Where a fleet's carbon bill actually sits — and why the pool does not help this one

An owner with ten bulk carriers, all on conventional fuel, trading partly into Europe. The 2026 bill has two parts that behave differently: EU ETS allowances, which follow each vessel's EU voyages and the allowance price, and the FuelEU Maritime penalty, which follows the fuel's carbon intensity and can be netted across the fleet. One year priced vessel by vessel, then the same fleet carried to 2030, 2035 and 2040.

1 · THE FLEET, VESSEL BY VESSEL

VESSEL		FUEL / YR	EU SHARE	CO_2E / YR	CII	EU ETS 2026	FUELEU 2026
MV NMX-01 Newcastlemax · 208,500 dwt	HFO	10,400 t	8%	32,897	A	€224,000	€51,000
MV NMX-02 Newcastlemax · 207,800 dwt	HFO	14,847 t	30%	46,963	**E**	€1,198,000	€273,000
MV CAPE-01 Capesize · 181,000 dwt	HFO	9,639 t	15%	30,489	A	€389,000	€88,000
MV CAPE-02 Capesize · 179,500 dwt	HFO	9,718 t	22%	30,740	A	€575,000	€131,000
MV KMAX-01 Kamsarmax · 82,200 dwt	HFO	7,000 t	25%	22,142	B	€471,000	€107,000
MV KMAX-02 Kamsarmax · 81,900 dwt	HFO	6,950 t	45%	21,984	A	€841,000	€191,000
MV KMAX-03 Kamsarmax · 81,500 dwt	HFO	7,100 t	60%	22,458	A	€1,145,000	€261,000
MV UMAX-01 Ultramax · 63,600 dwt	HFO	5,750 t	30%	18,188	A	€464,000	€106,000
MV UMAX-02 Ultramax · 63,400 dwt	MGO	5,600 t	55%	18,229	A	€852,000	€118,000
MV UMAX-03 Ultramax · 63,800 dwt	HFO	5,700 t	0%	18,030	A	€0	out of scope
FLEET · 10 VESSELS · 1.21 MILLION DWT		**82,704 T**		**262,120**		**€6,158,000**	**€1,326,000**

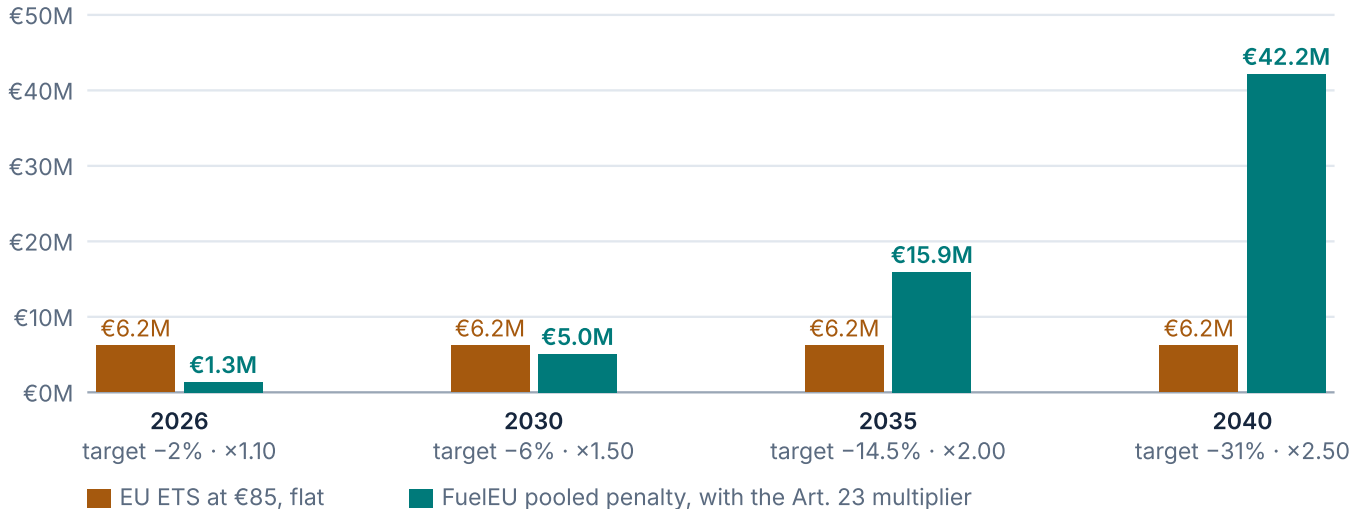
EU share = the part of the year's voyages that touch an EU port (one end in the EU counts half, both ends in full). EU ETS at €85 per allowance, 100% surrender for 2026 emissions. The CO_2e column is CO_2 plus CH_4 and N_2O at the IMO factors — the basis the ETS applies from 2026 — and is what the allowance bill is charged on. FuelEU at the 2026 target of 89.34 gCO_2e/MJ, €2,400 per tonne of VLSFO-equivalent deficit, with the Art. 23 multiplier at ×1.10 for a second consecutive year in deficit.

2 · WHAT THE TABLE SAYS

- **EU share drives the bill more than size.** The Kamsarmax trading 60% into Europe (KMAX-03) owes €1.15M a year in allowances; the Newcastlemax at 8% (NMX-01), two and a half times her size, owes €224,000. The Ultramax with no EU calls owes nothing and is outside FuelEU altogether.
- **One sister ship is the fleet's problem.** NMX-02 burns 43% more fuel than NMX-01 for fewer miles: she carries 19% of the fleet's ETS cost, 21% of its FuelEU penalty, and is the only vessel rated E. An E rating requires a corrective action plan in the SEEMP regardless of anything the rest of the fleet does, and charterers screen for it.
- **The pool gives nothing here.** Nine vessels are in FuelEU deficit and none in surplus, so pooling nets €0: the €1.33M is the sum of nine separate deficits. A pool only pays when at least one ship beats the target — a vessel on certified biofuel or a dual-fuel newbuilding — or when the fleet pools with another company's surplus.
- **The multiplier is already running.** A fleet in deficit since 2025 pays ×1.10 in 2026, ×1.50 in 2030 and ×2.00 in 2035. One compliant year resets the count for that ship.

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3 · THE SAME FLEET, CARRIED FORWARD



Same ten ships, same fuel, same EU share, priced against each year's FuelEU target with the multiplier the regulation applies to a fleet that stays in deficit. The ETS bar is held at today's allowance price so that only the regulation moves; a market forward curve or an analyst path can be switched on in the tool. The IMO Net-Zero Framework — adoption to be attempted at MEPC 85, scheduled for December 2026 — would, if adopted, add a third bar from 2028 on all fuel wherever the fleet trades.

2026 · target −2% · second deficit year, ×1.10	**ETS €6.2M + FuelEU €1.33M**
2030 · target −6% · ×1.50 (€3.4M before the multiplier)	**ETS €6.2M + FuelEU €5.05M**
2035 · target −14.5% · ×2.00	**ETS €6.2M + FuelEU €15.9M**
2040 · target −31% · ×2.50	**ETS €6.2M + FuelEU €42.2M**

By 2035 the FuelEU penalty is two and a half times the allowance bill. The ETS is a cost to be priced into every fixture; FuelEU is a fleet decision — which ship changes fuel, when, and whether the surplus is kept, banked or pooled.

4 · WHAT THE OWNER DECIDES WITH THIS

- **Fixtures.** Each vessel's ETS cost per voyage goes into the freight or the clause, vessel by vessel; the desk prices it from the same figures before the fixture is signed.
- **NMX-02.** A corrective action plan is due on the rating alone. The same measures that lift her to D or C cut her share of both bills; the tool reprices the fleet as each measure is entered.
- **The 2030 question.** One ship beating the target by enough to cover the others' deficit turns the pool from €0 saving into the fleet's cheapest compliance route. The roadmap module prices the candidates — a certified bio share on the high-EU vessels, or a dual-fuel order — against the penalty they remove, year by year.
- **Disclosure.** The 258,000 t of Scope 1 CO_2 (262,000 t CO_2e with CH_4 and N_2O) and the two regulated-cost lines are the figures the annual report, the lenders' Poseidon return and the charterers' questionnaires all draw on; here they come from one inventory.

5 · WHAT IS CERTAIN, AND WHAT IS NOT

- **Known:** the two regulations and their arithmetic; the targets and multipliers to 2050; today's allowance price.
- **The owner's own data:** fuel per vessel, distance, EU share, fuel pathway. Here they are archetypes — a real inventory replaces them in an afternoon, from the MRV and DCS returns the company already files.
- **Estimated:** next year's trading pattern. A vessel that moves from 30% to 60% EU trading doubles her allowance bill; the forward view holds this year's pattern.
- **Not a forecast:** the allowance price beyond today, the freight market, and the IMO vote.

MCCS Owner runs this on the company's own fleet, on the company's own computer: inventory, ETS, FuelEU with pooling and banking, CII per vessel, the roadmap of measures and the disclosure statements, from one set of figures. Nothing leaves the office.

Basis. MCCS Owner v4.24.6, run 8 Nov 2026, on a demonstration fleet of ten bulk-carrier archetypes (eight from the tool's mixed-portfolio sample, two added sister ships); no real vessels or companies. EU ETS: 100% surrender of 2026 emissions at EUA €85, CO_2e basis (CH_4 and N_2O at the IMO factors). FuelEU Maritime, Reg. (EU) 2023/1805: baseline 91.16 gCO_2e/MJ, 2026 target −2%, €2,400 per tonne VLSFO-equivalent, Art. 23 multiplier counted from a first deficit year in 2025; trajectory at Annex IV targets with fuel mix and EU share held constant. CII per IMO MEPC.353(78) and .354(78) on annual distance. Figures are illustrative and not freight, investment or legal advice.

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