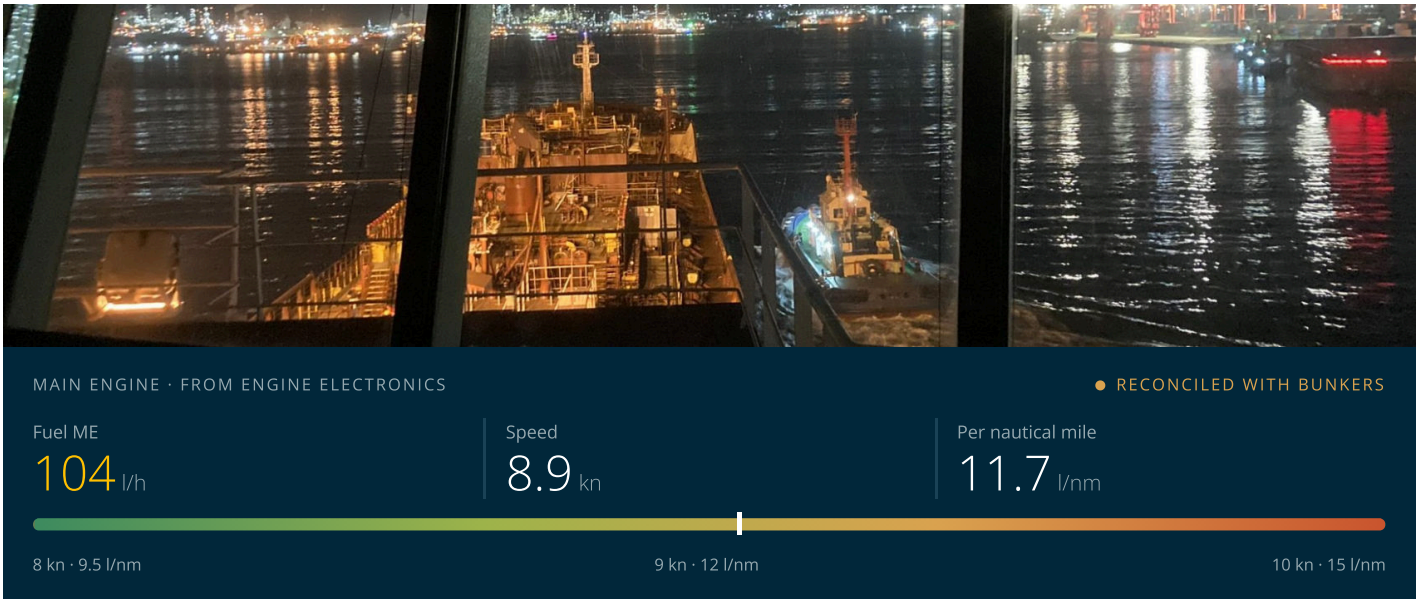
Fuel on the bridge, without new meters in the engine room.

A modern electronically controlled engine already knows how much fuel it burns. Kyst Lite reads that figure from the engine, shows it on the bridge in litres per hour and per nautical mile, and reconciles it with your bunker receipts. The installation is a small box on the engine's data network, not pipework.



Illustration, example values for a main engine of about 500 kW.

How it works

1

The engine reports its fuel rate

Electronically controlled engines broadcast their fuel rate on their own data network (`J1939` or `NMEA 2000`). A gateway connects to that network and reads it. Nothing touches the fuel system, and the engine does not notice.

2

The bridge shows it

The same bridge display as VesOPS Kyst: litres per hour and per nautical mile, live, so the crew sees what a knot costs while they adjust. It works offline on board and sends data ashore when there is coverage.

3

Every bunkering checks it

What was delivered, minus what is still in the tanks, is what the ship actually used. The engine's figure is calibrated against that, period by period.

Calibrated against the fuel you actually bought

The engine's own figure is a good estimate, not a measurement, and it can differ by a few percent from ship to ship. So we calculate a factor for each bunker period and apply it to the engine's figure. Over a period, the total then matches the bunker receipts.

Factor = (delivered per receipt − increase in tank contents) ÷ sum of the engine's figures

- Delivered: from the bunker delivery note (BDN) or the truck's meter ticket.
- Tank contents: soundings at each bunkering, or a level sensor in the day tank.
- Generators are included: from their power (kW) and fuel curve, or as a fixed figure per hour.
- One factor per fuel type, since the energy content differs.

Bunker period	Used per bunkers, l	Engine's figure, l	Factor
January	31,200	29,900	1.04
February	28,600	27,700	1.03
March	33,100	31,700	1.04
April	30,400	27,400	1.11

Example values. A steady factor means the engine's figure can be trusted. A jump, as in April, is a warning: worn injectors, a different fuel quality, or a sounding or receipt that does not add up. It becomes something to look at, not a figure quietly adjusted.

Kyst Lite or VesOPS Kyst

The same software, the same bridge display and the same reports ashore. The difference is where the fuel figure comes from.

	Kyst Lite	VesOPS Kyst
Fuel figure from	The engine's electronics, calibrated against bunkers	Flow meters on the main engine's supply and return
Installation	A gateway on the engine's data network	Meters in the fuel system, with pipework
Figure on the bridge	Calculated by the engine, reconciled with bunkers	Measured directly
Total per period	Matches the bunker receipts	Measured, and checked against the bunker receipts
Fits	Electronically controlled engines	All engines, mechanical ones too
EU MRV monitoring method	Bunker receipts and tank soundings (method A)	Flow meters (method C)
Upgrade path	Meters can be added later	–

EU MRV accepts bunker delivery notes with periodic tank soundings (method A) as a monitoring method. A ship already reporting under a monitoring plan based on flow meters needs that plan revised with its verifier before it changes method.

EU MRV is reaching smaller ships

MRV used to start at 5,000 GT. It now covers some ship types from 400 GT, and a Commission proposal would add more. A ship that starts logging now has its fuel record and its routine in place before the obligation arrives.

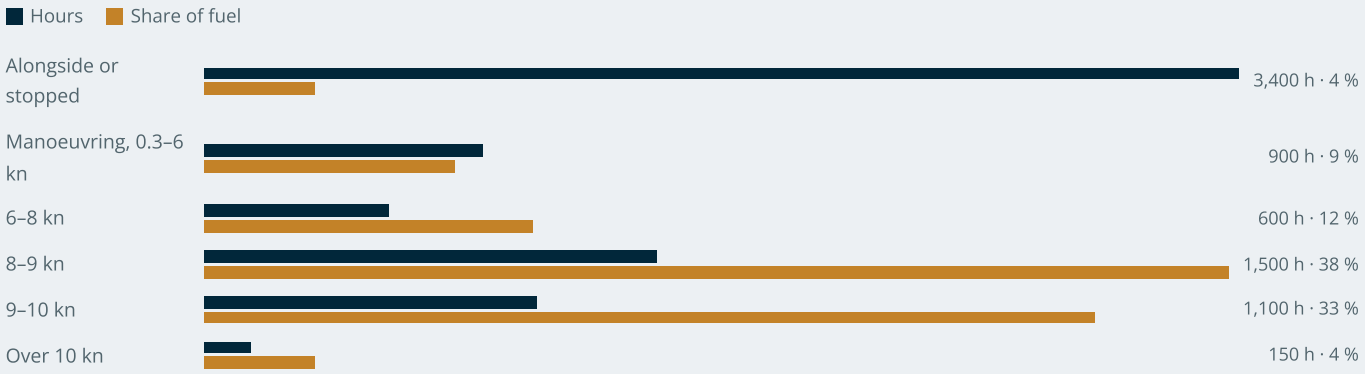
Ships of 400–5,000 GT	EU MRV	Status
General cargo ships, offshore ships	From 2025	In force
Oil and chemical tankers, gas and LNG carriers	From 2029	Proposed
Ro-pax and passenger ships	From 2029	Proposed

Proposed: Commission proposal COM(2026) 620 of 17 July 2026, amending Regulations (EU) 2015/757 and 2023/1805. It is in the legislative procedure, and the ship types and dates may change before adoption. The same package proposes that general cargo, offshore, tanker and gas carrier ships in this size range also enter the EU ETS from 2031.

Operating history is the basis for the next ship

A new ship is designed around an operating profile: how fast she sails, how long she lies still, and how much of the time the engine runs at low load. Often that profile is an estimate. With Kyst Lite it is measured, hour by hour, over several years, for every ship in the fleet.

Hours and fuel per speed band, one year



Example values. In this example the ship almost never sails above 10 kn and lies still for nearly half the year.

Engine size

A main engine that runs below half load most of the time is bigger than the ship needs, and burns more fuel per kWh than a smaller engine would.

Battery and hybrid

Hours of manoeuvring and idling are where a battery does the most good. The log shows how many hours that is, and how much energy they use.

Alternative fuels

Consumption between bunkerings decides the tank size. Methanol, LNG and ammonia take more space per unit of energy than diesel, so it has to be measured, not estimated.

Design speed

The speed the ship actually sails, not the contract speed, should drive the hull form and the propeller.

Financing and grants

Grant applications and green loans rest on how much a measure saves. Measured figures from today's ship give a documented starting point.

The same goes for a conversion or an engine replacement on an existing ship. The history also shows which ship in the fleet should be replaced first, and which jobs suit which ship.

Getting started

Nameplates

A photo of the nameplate on each main engine: model and year. That tells us which ships can run Kyst Lite.

One ship first

We start on one ship with an electronic engine and show the figures on the bridge and ashore after the first bunker period.

Bunker receipts

Receipts and soundings from the same period, so the factor can be calculated from day one.