

Transform your marine operations

Lower fuel costs

Lower emissions



Zero CAPEX



sulnox



**Fossil fuels will still power c.95% of shipping in 2030,
c.80% in 2040 and c.50% even in 2050 – despite IMO targets.¹
That's because viable alternatives are still years away:**



→ Batteries

- Insufficient power density to be able to support shipping.
- Can't support long-distance voyages.

→ Alternative Fuels

- Infrastructure not ready.
- Costly and potentially hazardous.
- Increased training and crew costs.

→ Biofuels

- Availability & cost issues.
- Variable stability and quality.
- Potential engine compatibility issues.

Who

we are.



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FUEL FUSION
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Sulnox Group Plc is the greentech company delivering lower fuel costs and emissions with zero CAPEX.

01

UK PLC listed on AQUIS Exchange (Also traded on OTC Market in USA).

02

Inventors of Greentech fuel emulsifiers and conditioners since 2012.

03

Scientifically proven and multi-award-winning products with significant ROI's.

04

Patented, unique green chemistry unlike all other traditional fossil fuel additives.

05

Reduces regulatory costs: helps improve CII ratings and reduce compliance costs under FuelEU and EU ETS.

06

Enhances green credentials: Retain or win new business Significant Carbon Return on Investment.

Backed by industry leaders


EASTERN
PACIFIC
SHIPPING

Independently tested





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40+

Countries with recorded sales.

50+

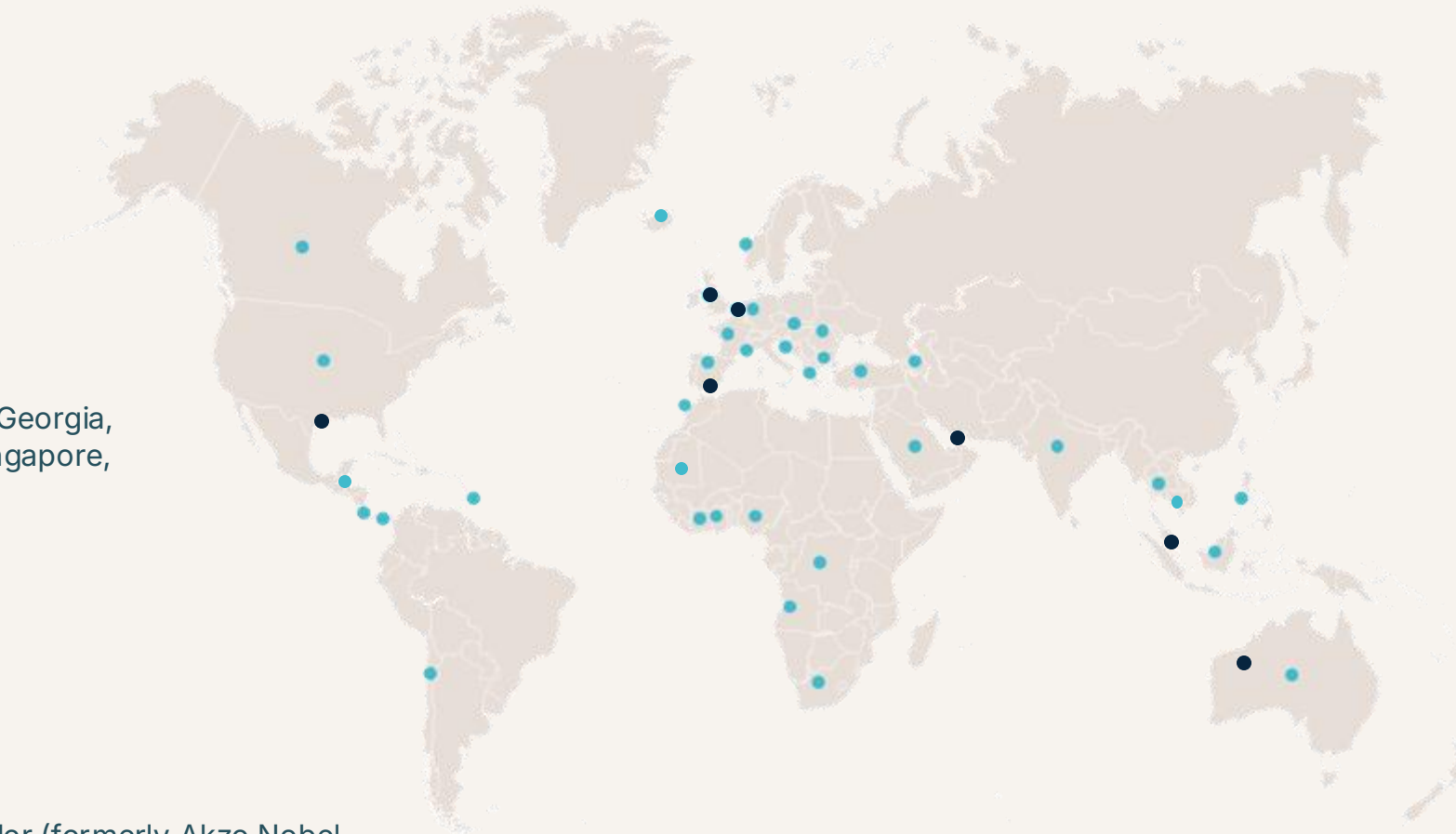
Patents include: Chile, China, EU, Eurasia, Georgia, Hong Kong, Indonesia, Japan, Malaysia, Singapore, South Africa, Ukraine, USA, Saudi Arabia.

7

Marine hubs and expanding rapidly.

Manufactured by
Nouryon

A global leader (formerly Akzo Nobel specialty chemicals) operating in 80+ countries with 8,200 employees. Gold Ecovadis rating and an A- CDP climate score.



● Sales recorded ● Marine hub

What

we do.



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100% organic, biodegradable fuel conditioner that delivers:

- **Lower Fuel Costs:** ~5% average across all marine applications, average ROI >300% within weeks.
- **Lower Emissions:** Verified reductions include over 96% fewer particulates, 26% less CO₂ and 14% less NO_x - proven in independent land-based generator testing.
- **Better Engine Performance:** Reduces engine wear and removes carbon deposits, improving efficiency.

Applicable to any liquid hydrocarbon fuel, including: MDO, MGO VLSFO, HSFO, ULSFO and biofuels.

No retrofits.

No costly upgrades.



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**New
biofuel & oil
reclamation
innovations
coming
soon**



See the science behind Sulnox Eco

Click the icon below to watch the video explainer:













Or visit: <https://sulnoxgroup.com/products/sulnox-eco>





The smarter choice: Sulnox Eco vs. Traditional additives

Unlike many traditional additives that rely on waste fossil fuel components or cetane boosters, Sulnox Eco enhances combustion efficiency - helping to reduce emissions, improve fuel economy, and protect engines while keeping fuel within specification.

| | Traditional Additives | Sulnox Eco |
|---------------------------------|--|---|
| How It Works |  Often relies on cetane boosters or waste fossil fuel components. |  Atomises fuel into smaller particles for cleaner combustion (secondary atomisation). |
| Composition |  Often petroleum-derived or metal-based. |  100% organic, biodegradable, no fossil waste or metals. |
| Emissions Reduction |  May enhance combustion but does little to reduce soot, particulates, or other harmful emissions. |  Over 96% fewer particulates, 26% less CO ₂ , 14% less NO _x , and 64% less SO _x . |
| Lubricity & Cleaning |  Many do not improve lubricity, some increase wear. |  Adds average 17% lubricity, reduces wear & cleans engine. |
| Ease of Use |  Often fuel-specific, some require hardware. |  Works in any liquid fuel, no retrofits needed. |



Rapid gains: Add Sulnox Eco to any efficiency plan

Sulnox Eco is the fastest ROI solution (4-6 weeks) with no retrofits required and works on all ship types and fuels. Other solutions require high upfront costs, drydocking, or specific conditions to deliver returns.

| Solution | Fuel Savings | CAPEX Cost | ROI | Limitations | Applicability |
|---|--------------|---------------|---------------------|---|-------------------------------------|
| Flettner Rotors | 3-15% | \$400K-\$1.5M | 4 years | Needs sufficient wind, ship size matters | New or retrofit (drydock required) |
| Propulsion Improvement Devices | 2-6% | \$100K-\$1M+ | ~1 year | Ship-specific modifications needed | New or retrofit (drydock required) |
| High-Efficiency Propellers | 3-6% | \$100K-\$1M+ | 6 months | None | New or retrofit (drydock required) |
| Hull Air Lubrication | Up to 10% | \$500K-\$2M+ | 3-5 years | Limited studies, not proven for all ships | New or retrofit (drydock required) |
| Fuel Efficiency Software and Hardware Upgrades | 10%+ | \$20K-\$150K | 3-5 months | Certain upgrades not available for all engine types | Retrofit (no drydock required) |
| Silicone Anti-Fouling Paints | 6-8% | \$500k+ | 3 months to 5 years | Requires re-coating every 3-10 years | Drydock required |
| Sulnox Eco | 5%* | \$0 | 4 to 6 weeks | None | Any ship type, any fuel, any engine |

*Average across all marine applications



See your savings, instantly

Our website savings calculator gives you a personalised view of the fuel and CO₂ emissions savings you could achieve. Simply input your fleet details and discover the immediate impact Sulnox Eco can deliver.

Before

SULNOX SAVINGS CALCULATOR

CALCULATOR SETTINGS

COUNTRY / REGION:

United States

APPLICATION TYPE:

Ship/Yacht/Vessel

FUEL TYPE:

VLSFO

NUMBER OF SHIPS/VESSELS:

50

AVERAGE DAYS PER SHIP/YACHT/VESSEL, PER ANNUM:

250

FUEL CONSUMPTION IN METRIC TONS PER DAY:

50

FUEL PRICE PER METRIC TON (US\$):

650

MAINTENANCE COST REDUCTIONS (%):

2.0

SULNOX FUEL EFFICIENCY (%):

5.0

After

INDICATIVE SAVINGS PER ANNUM

| SHIP/YACHT/VESSEL | INDIVIDUAL | FLEET |
|--|---------------|-----------------|
| TOTAL DAYS | 250 | 12,500 |
| METRIC TONS OF FUEL CONSUMED | 12,500 | 625,000 |
| COST OF UNTREATED FUEL | US\$8,125,000 | US\$406,250,000 |
| SULNOX FUEL EFFICIENCY SAVING | US\$406,250 | US\$20,312,500 |
| MAINTENANCE COST REDUCTIONS | US\$182,500 | US\$8,125,000 |
| TOTAL GROSS SAVINGS | US\$568,750 | US\$28,437,500 |
| TOTAL CO2 REDUCTIONS (METRIC TONS PER ANNUM) | 1,969 | 98,469 |

CO2 reductions are estimated according to IMO emission conversion factors.



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With impressive results achieved, several marquee shipping names are now placing their trust in us. New partnerships are developing – Sulnox is gaining rapid momentum in the marine sector.

Trusted by



Shipbroker McQuillling buys into Constantine Logotheitis' SulNOx fuel venture



Idan Ofer throws weight behind Constantine Logotheitis green fuel venture



Marfin Management expands its trial of Logotheitis-linked fuel additives



Constantine Logotheitis and Idan Ofer-backed SulNOx moves into cruise sector with Crystal fleet deal



CRYSTAL

From evaluation
to endorsement.



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Eastern Pacific Shipping, one of the world's largest privately-owned shipping companies, completed an extensive evaluation of Sulnox Eco™ and committed to **adopt it on a minimum of 30+ vessels.**

During their evaluation, they saw:

- ✓ Up to 5% fuel savings with Heavy Sulphur Fuel Oil (HSFO), VLSFO and B30 biofuel
- ✓ Improved engine condition
- ✓ Reduced emissions

But EPS didn't just stop at adoption. They believe in Sulnox potential so much that **they're becoming a major shareholder.**

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"This partnership with Sulnox is a significant step towards achieving EPS's long-term sustainability objectives.

By enhancing our operational efficiency and reinforcing our commitment to meeting global environmental standards, this collaboration further solidifies our position as a proactive leader in sustainable shipping practices."

CYRIL DUCAU

Chief Executive Officer (CEO)
Eastern Pacific Shipping





sulnox | CRYSTAL®



After an eight-month evaluation aboard the Crystal Symphony vessel, using VLSFO and MDO, significant results were achieved:

- ✓ **Proven fuel savings:** Average 3.4% average reduction, cutting costs with zero capital investment.
- ✓ **A cleaner operation:** Significant black smoke reduction, minimising environmental impact and maintaining access to protected marine areas.
- ✓ **Sustainable cruising benefits:** Improved air quality for guests and crew, cleaner pools and outdoor areas, and less soot buildup on decks.

Crystal Cruises is now preparing to **adopt Sulnox Eco** fleet-wide.

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"After the introduction of Sulnox Eco... we observed measurable fuel savings, cleaner engines, and reduced emissions.

This innovation helps us enhance operational efficiency, reduce our environmental impact, and provide a more sustainable experience for our guests."

ROBERTO FAZI

Senior Vice President of Marine Operations
Crystal Cruises



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- Marfin Management ran a 3.5 month evaluation of Sulnox Eco onboard the 60,000 MT DWT bulk carrier 'Paolo Topic', using Very Low Sulphur Fuel Oil (VLSFO).

Daily data collection ensured accurate, like-for-like comparisons, with adjustments for extreme weather and idling.

After this robust analysis, a **6.4% reduction in fuel consumption was confirmed** – and Marfin are now adopting across their fleet.

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Evaluating across their tankers and bulk carriers, Spring Marine saw a clear reduction in Specific Fuel Oil Consumption (SFOC) when using Sulnox Eco.

Consistent savings of 4-7% were achieved.

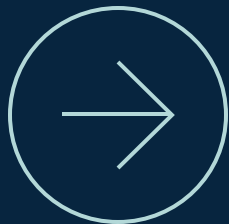
These savings were achieved across multiple engine loads, with a sustained downward trend in SFOC.

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Across vessels.

Across fleets.

Across the
world.



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| Vessel Type | Vessel Sub-type | Av. Fuel Reduction |
|-------------------------|----------------------|--------------------|
| Tanker | Small product tanker | 7% |
| | Suezmax | 5% |
| | Aframax | 5% |
| | Bunkering barge | 4% |
| | VLCC | 3% |
| | Average | 5% |
| Bulk Carrier | Ultramax | 6% |
| | Supramax | 5% |
| | Handysize | 5% |
| | Capesize | 3% |
| | Average | 5% |
| Containership | ULCV | 5% |
| | Feeder | 4% |
| | Average | 4% |
| Ro-Ro Vessel | Vehicles carrier | 3% |
| | Average | 3% |
| Offshore Support Vessel | Crew boat | 9% |
| | Supply vessel | 6% |
| | Average | 8% |
| Passenger vessel | Cruise ship | 5% |
| | Superyacht | 5% |
| | Average | 5% |
| Combined Average | | 5% |

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- * Not all vessels are included - only those informed by distributors and direct relationships.
- A number of the listed evaluations are still ongoing, where only the first indicative results are currently available. Typically, results will improve in months 2 and 3.
- Several further evaluations (not listed here) are planned to commence in the near future or have recently commenced where data is still emerging.



“Particulates were considerably reduced. Average levels of NOx produced are just 30% of the untreated ones. Carbon monoxide reductions are also evident. All vessels tested found to be well within the strict Green Award Foundation regulatory limit”

3x River Cruise vessels, Independent emissions monitoring study, Europe

“Visible reductions in black smoke.”

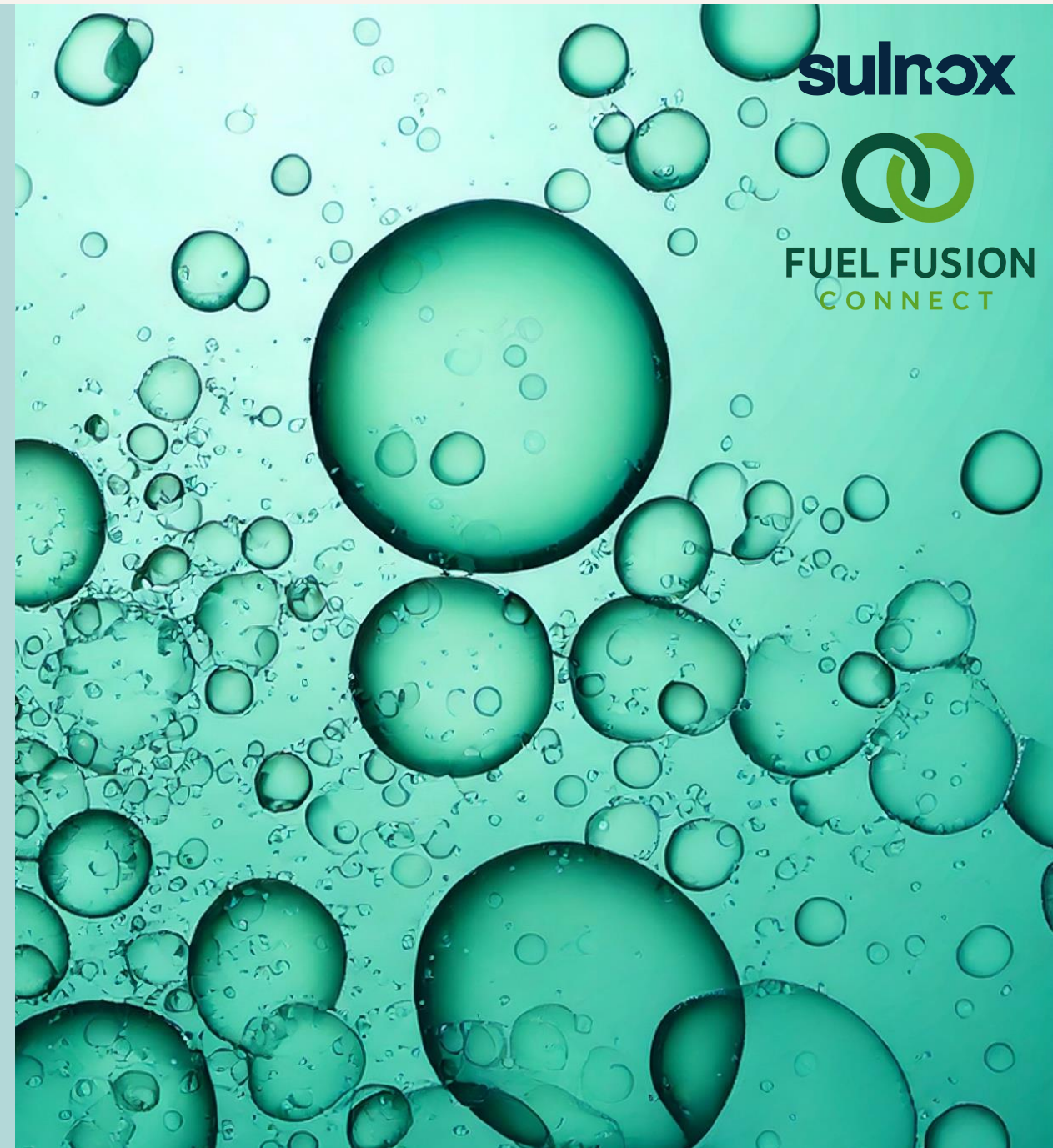
Captain, Containership M/V Rumba, Myklebusthaug Management

“Smoke looks clearer, and the tanks looked better/cleaner.”

Captain, Cruise vessel, US

“The vessel has reported seeing reduced ‘black’ emissions compared to last time.”

Bunkering barge, Singapore





- Sludge accumulation was measured extensively on one vessel, **82 days without Sulnox Eco and 83 days with Sulnox Eco.**

The results showed:



12.5%

Reduction in total sludge generation.



13.6%

Lower daily sludge output.



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"...The sludge build up in the scavenging space has significantly decreased compared to our previous inspection. Additionally, I noticed that the machine marks on the liner are visibly clearer, indicating a positive impact. The top land of the piston and piston crown showed minimal sludge build up, and lubrication appears to just the right amount, with the piston rings well lubricated overall."

Chief Engineer, Europe

"Power has increased >19%, torque >15%, and all operating temperatures reduced."

Dredging and Heavylift Vessel, Europe

"Significant improvements in cleanliness of engine components, specifically piston crown, piston ring stack, and liner surface of the main engine."

Several vessel types, Singapore

"Removal of water contamination issues in fuel."

Coastguard vessel, Central America

Regulatory

impact.



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01

IMO Carbon Intensity Indicator (CII) is tightening

Stricter ratings could lead to further operational restrictions for underperforming vessels.

Sulnox's fuel savings can improve CII ratings.

02

EU ETS costs are rising fast

From 2025, shipping companies must cover 40% of their emissions, increasing to 70% in 2026 and reaching 100% from 2027 onward.

Sulnox's fuel savings reduce EU ETS costs.

03

FuelEU enforces stricter fuel regulations

From 2025, ships must meet carbon intensity targets, requiring cleaner fuels or efficiency improvements—or face financial penalties.

Sulnox stabilises the water within biofuels.

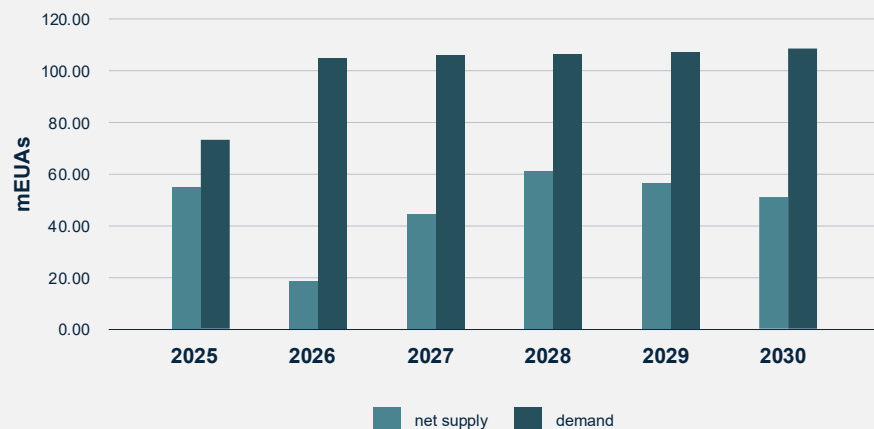
04

More regions are tightening emissions rules

Expansion of Emission Control Areas (ECA) is forcing stricter limits on SOx and NOx in key shipping lanes.

Sulnox's improved combustion reduces NOx and SOx.

Net supply and demand of shipping in EU ETS





IMPROVE YOUR CII RATING, FAST

With CII regulations tightening, vessels risk higher costs and operational restrictions.

Our CII Calculator shows how Sulnox Eco can help improve ratings and protect profitability – with no modifications.

On the right, you can see how Sulnox Eco can take a **Kamsarmax from a D rating**, requiring an action plan and potentially operational restrictions, **to a C rating** – safely in the compliance zone.

View the example for yourself [here](#) or request your own calculation.

| CALCULATOR INPUTS | | INDICATIVE CII UPGRADE & SAVINGS | | VESSEL PER VOYAGE |
|---|--------------------------|---|-----------------|-------------------|
| VESSEL INFORMATION | | WITHOUT SULNOX | | |
| Vessel Type | Bulk Carrier (<279k Dwt) | Fuel Consumption (MT) | 1,231 | |
| DWT (MT) | 83,007 | Co2 Emissions (MT) | 3,834 | |
| GRT | 42,887 | Fuel Cost (US\$) | \$800,351 | |
| Speed (kn) | 14.00 | EU ETS Compliance Cost (US\$) | \$55,711 | |
| Sailing Fuel Consumption (MT/day) | 37.00 | Total Cost (US\$) | \$856,062 | |
| Idle Fuel Consumption (MT/day) | 2.00 | CII Rating | | D |
| FUEL INFORMATION | | WITH SULNOX | | |
| Fuel Price (US\$/MT) | 650 | Reduced Fuel Consumption (MT) | 1,170 | |
| VOYAGE INFORMATION | | Reduced Co2 Emissions (MT) | 3,643 | |
| Voyage Distance (nm) | 11,000 | Reduced Fuel Cost (US\$) | \$760,334 | |
| Voyage Port Days (Load + Disc incl. waiting) | 10 | Reduced EU ETS Compliance Cost (US\$) | \$52,925 | |
| Number of EU Ports (during voyage) | 1 | Reduced Fuel & EU ETS Costs (US\$) | \$813,259 | |
| Voyage Duration (Days) | 42.74 | Improved CII Rating | | C |
| EUA FACTORS | | SULNOX VALUE ADDED | | |
| Year for reference | 2024 | Co2 Reduction (MT) | 192 | |
| EUA Price (US\$/EUA) | \$73 | CII Rating upgrades to | | C |
| EFFICIENCY PARAMETERS | | EU ETS Savings (US\$) | \$2,786 | |
| SulNOx Efficiency Gain (%) | 5.00% | Fuel Savings (US\$) | \$40,018 | |
| | | Total Gross Savings (US\$) | \$42,803 | |
| Visit the USERS' GUIDE to the CII Upgrade Calculator for instructions and other useful information. | | EFFICIENCY GAIN (%) NEEDED FOR CII RATING CHANGE (FOR THE GIVEN VESSEL AND VOYAGE) | | |
| Visit our SAVINGS CALCULATOR for annualised and fleet-wide potential savings. | | | | |
| CONTACT US for SulNOxEco™ prices. Discounts for large volume purchases are available. | | | | |
| | | 2024 | 2025 | 2026 |
| A | | 21.23% | 22.93% | 24.62% |
| B | | 13.90% | 15.76% | 17.61% |
| C | | 2.91% | 5.00% | 7.09% |
| D | | -8.08% | -5.75% | -3.43% |



A full Cradle-to-Gate carbon footprint study by Nouryon, conducted under ISO 14021 guidance, confirms Sulnox Eco's game-changing impact on carbon:



Reduces Scope 1 & 3 emissions and may help position fleets for future carbon credit opportunities.

1. Assuming a 947.1kg/m³ density, the average for VLSFO according to Verifuel
2. The average across all marine applications

Scientific

rigour.



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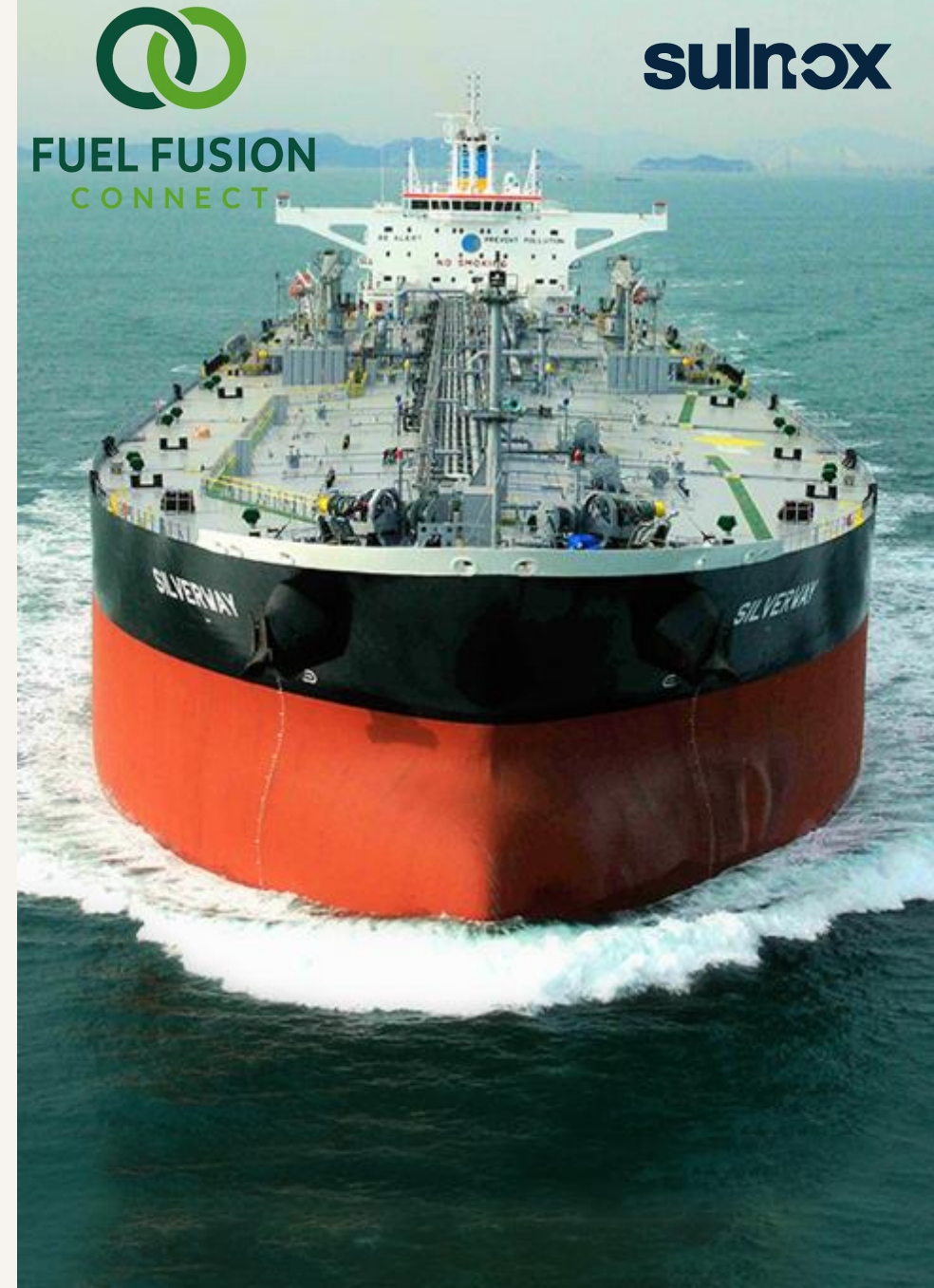
Sulnox Eco Meets ISO 8217 Standards.

Lloyd's Register tested Sulnox Eco across multiple fuel blends, assessing compliance with ISO 8217 (Table 1 & 2) both with and without the additive.

- RM Blends: All tested fuels met ISO 8217 standards before and after dosing with 500ppm of Sulnox Eco.
- DM Blends: After dosing the fuels with 500ppm of Sulnox Eco, all sets of fuels remain within the defined ISO 8217 limits.

Conclusion

Sulnox Eco does not impact ISO 8217 (Table 1 & 2) fuel parameters, confirming full compliance with industry standards.





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- Improved lubricity confirmed & no negative fuel impact.

Lubricity Testing (Wear Scar - HFRR)

10 distillate fuel samples from various ports

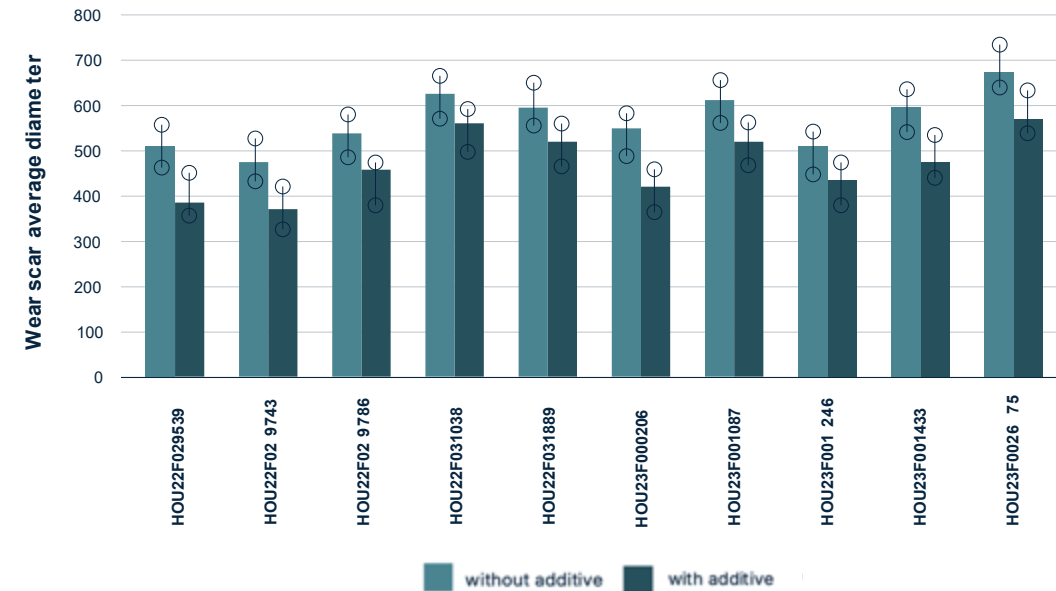
- Sulnox Eco improved lubricity across all samples, with an average 17.2% reduction in Wear Scar Diameter (HFRR WSD)

Fuel Standard Testing (ISO 8217)

30 fuel samples tested (15 VLSFOs, 15 distillates)

- No negative impact on fuel performance or properties at recommended dosing levels

Given Dosing Rates 500ppm
WSD of sample with and without additive



**SOCOTEC**

Independent testing confirms outstanding land generator results.

In a five-week trial, Socotec - experts in emissions testing - confirmed major emissions reductions from a 100kVA generator running at 80% load. Impressive fuel savings of 14.5% followed, proving Sulnox Eco delivers on both fronts:

| Emission | Baseline | 1 Hr | 1 Hr Change | 5 weeks | 5 weeks Change |
|-----------------|------------------------|------------------------|-------------|------------------------|----------------|
| CO ₂ | 5.59 % v/v | 5.84 % v/v | +4.5%* | 4.1 % v/v | -26.7% |
| NOx | 456 mg/m ₃ | 437 mg/m ₃ | -4.2% | 390 mg/m ₃ | -14.5% |
| SOx | 50 mg/m ₃ | 2.29 mg/m ₃ | -95.4% | 18 mg/m ₃ | -64.0% |
| PM 2.5 | 7.44 mg/m ₃ | 2.94 mg/m ₃ | -60.5% | 0.17 mg/m ₃ | -97.7% |
| PM 10 | 7.59 mg/m ₃ | 3.05 mg/m ₃ | -59.8% | 0.29 mg/m ₃ | -96.2% |

*Initial minor increase in CO₂ output is typical in the first few hours of using Sulnox Eco™, as the product promotes **oxidisation of unwanted carbon deposits** in the engine to be released and provides a **cleaner, more efficient engine**.





sulnox^{eco}

**Works everywhere: Any marine fuel.
Any engine. Any vessel.**

- **Compatible with all marine fuels:** VLSFO, HFO, MGO, biofuels, and blends
- **Works in any engine type:** from two-stroke and four-stroke to generators
- **Proven across all vessel types:** tankers, bulk carriers, container ships, cruise liners, and more

No investment, no retrofits, no drydocking, no waiting for new fuels.

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**Just lower
fuel costs,
lower
emissions,
all with zero
CAPEX.**

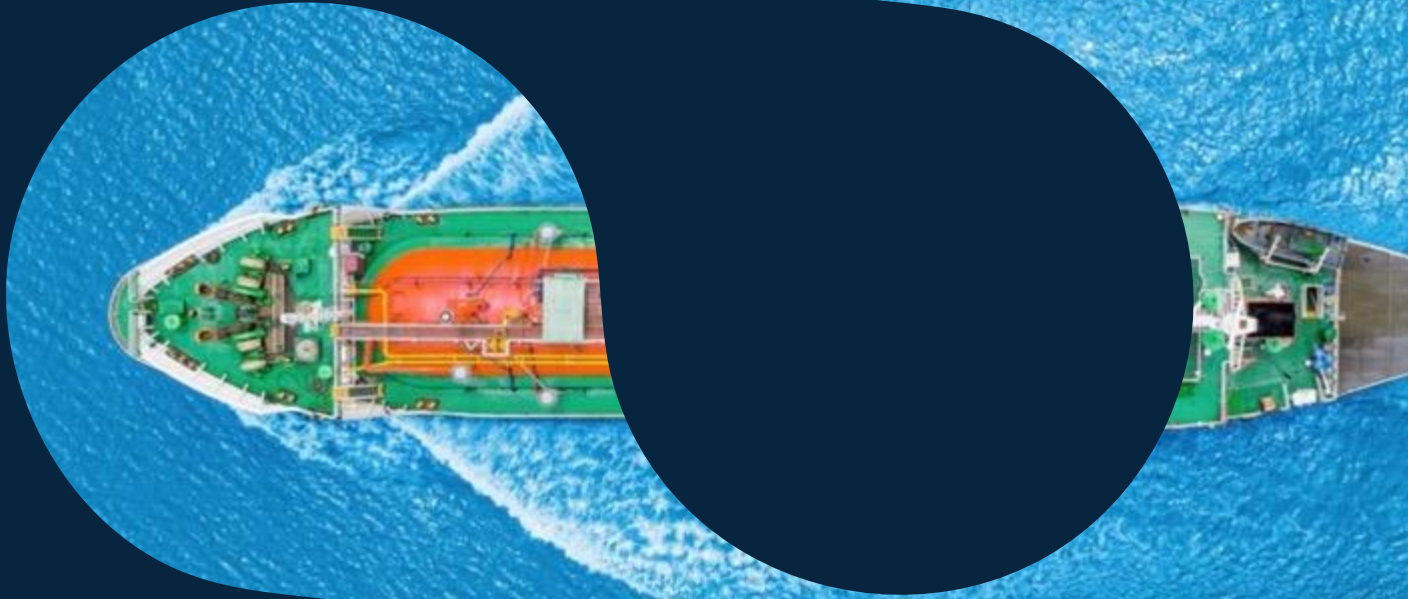
Your fleet saving starts here.

For further information, contact:

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