



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

Independently tested



40+

Countries with recorded sales.

50+

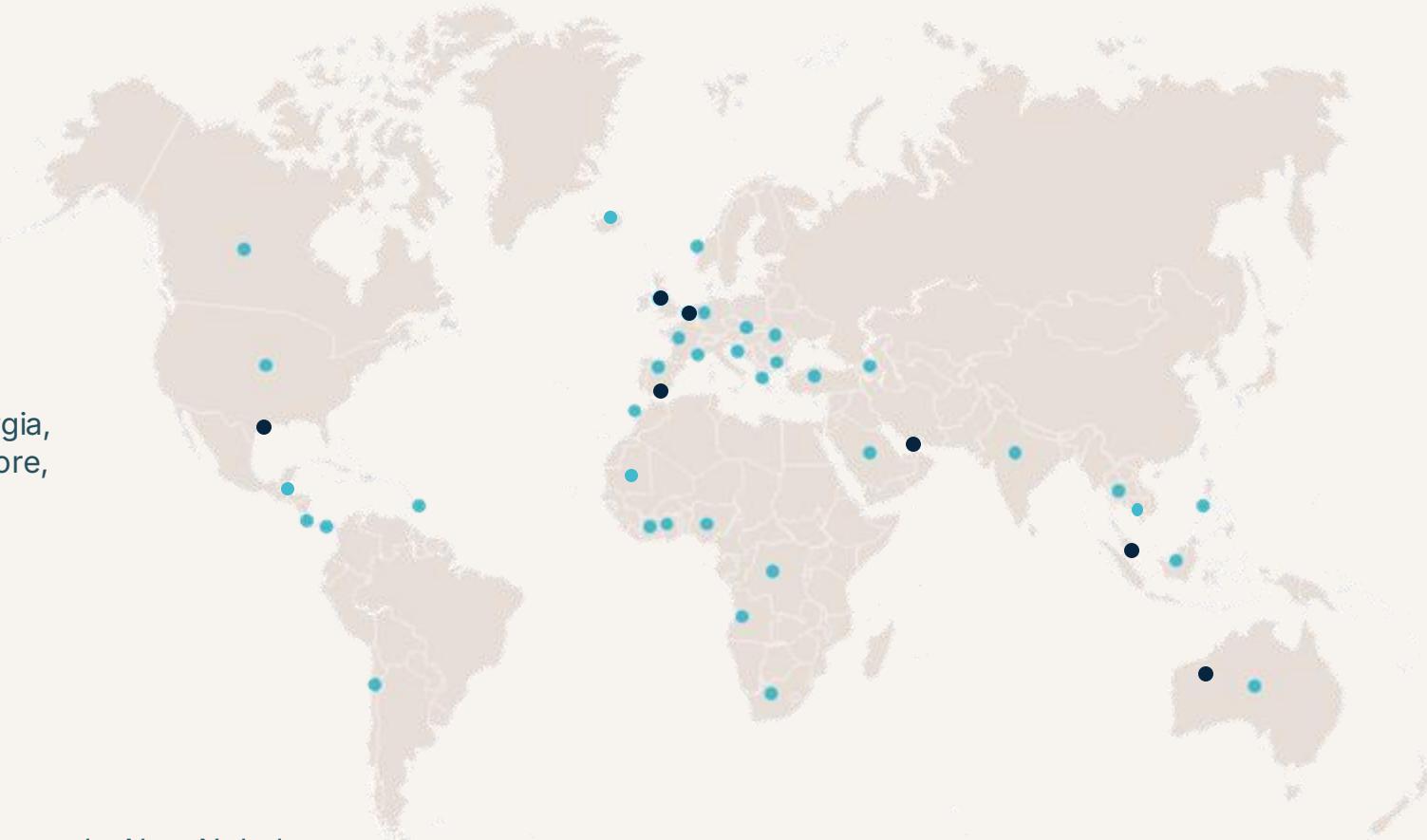
Patents include: Chile, China, EU, Eurasia, Georgia, Hong Kong, Indonesia, Japan, Malaysia, Singapore, South Africa, Ukraine, USA, Saudi Arabia.

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.





sulnox eco

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 NOx - 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.

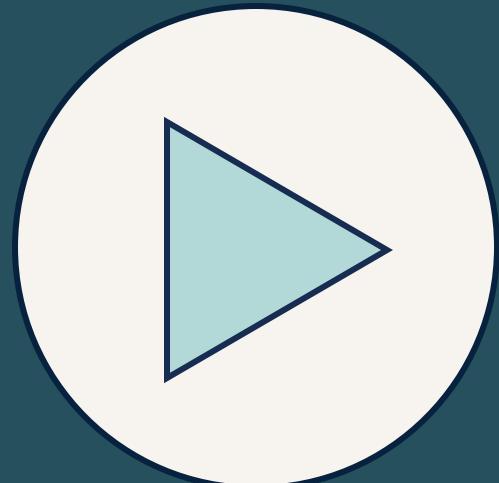
No costly upgrades.





- **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 NOx, and 64% less SOx.
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

Calculate your savings



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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:	APPLICATION TYPE:	FUEL TYPE:
United States	Ship/Yacht/Vessel	VLSFO
NUMBER OF SHIPS/VESSELS:	AVERAGE DAYS PER SHIP/YACHT/VESSEL, PER ANNUM:	
50	250	
FUEL CONSUMPTION IN METRIC TONS PER DAY:	FUEL PRICE PER METRIC TON (US\$):	
50	650	
MAINTENANCE COST REDUCTIONS (%):	SULNOX FUEL EFFICIENCY (%):	
2.0	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\$408,250	US\$20,312,500
MAINTENANCE COST REDUCTIONS	US\$162,500	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.



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 Logothetis' SulNOx fuel venture



Idan Ofer throws weight behind Constantine Logothetis green fuel venture



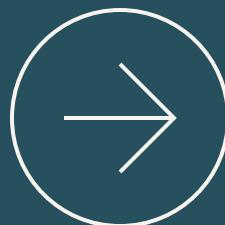
Marfin Management expands its trial of Logothetis-linked fuel additives



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



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**.

"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 | C R Y S T A L®

- 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 Exo 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.



**FUEL FUSION
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Across vessels.

Across fleets.

Across the
world.



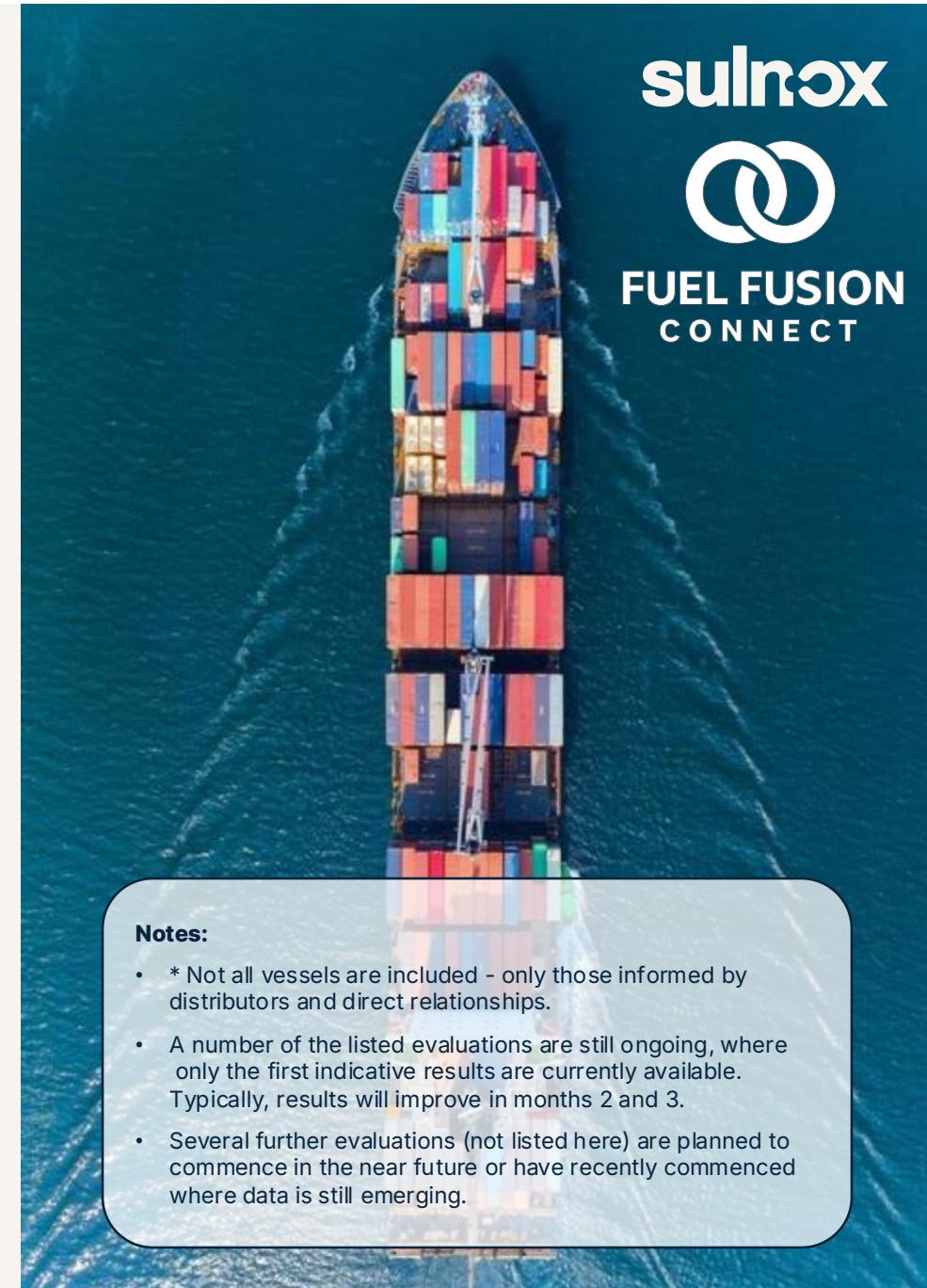
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Vessel Type	Vessel Sub-type	Av. Fuel Reduction
Tanker	Small product tanker	7%
	Suezmax	5%
	Aframax	5%
	Bunkering barge	4%
	VLCC	3%
	Average	5%
Bulk Carrier	Ultramax	6%
	Supramax	5%
	Handysize	5%
	Capesize	3%
	Average	5%
Containership	ULCV	5%
	Feeder	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%



"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





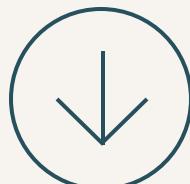
- Sludge accumulation was measured extensively on one vessel, **82 days without Sulnox Eco and 83 days with Sulnox Eco.**

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.”

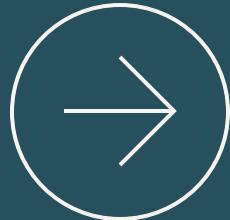
Several vessel types, Singapore

“Removal of water contamination issues in fuel.”

Coastguard vessel, Central America

Regulatory

impact.



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.

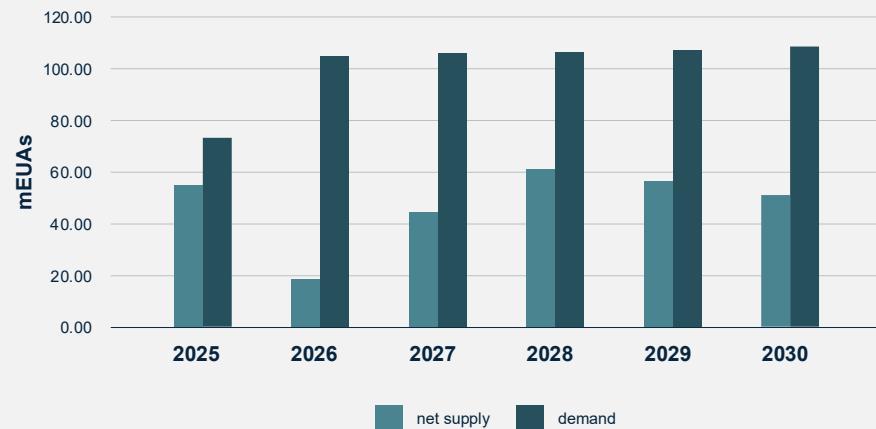
04

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	Bulk Carrier (<279k Dwt)	WITHOUT SULNOX	VESSEL PER VOYAGE
Vessel Type	83,007	Fuel Consumption (MT)	1,231
DWT (MT)	42,887	Co2 Emissions (MT)	3,834
GRT	14.00	Fuel Cost (US\$)	\$800,351
Speed (kn)	37.00	EU ETS Compliance Cost (US\$)	\$55,711
Sailing Fuel Consumption (MT/day)	2.00	Total Cost (US\$)	\$856,062
Idle Fuel Consumption (MT/day)		CII Rating	D
FUEL INFORMATION	650	WITH SULNOX	
Fuel Price (US\$/MT)		Reduced Fuel Consumption (MT)	1,170
650		Reduced Co2 Emissions (MT)	3,643
Voyage Information	11,000	Reduced Fuel Cost (US\$)	\$760,334
Voyage Distance (nm)	10	Reduced EU ETS Compliance Cost (US\$)	\$52,925
Voyage Port Days (Load + Disc incl. waiting)	1	Reduced Fuel & EU ETS Costs (US\$)	\$813,259
Number of EU Ports (during voyage)	42.74	Improved CII Rating	C
EUFA FACTORS	2024	SULNOX VALUE ADDED	
Year for reference	\$73	Co2 Reduction (MT)	192
EUFA Price (US\$/EUFA)		CII Rating upgrades to	C
EFFICIENCY PARAMETERS	5.00%	EU ETS Savings (US\$)	\$2,786
SulNOx Efficiency Gain (%)		Fuel Savings (US\$)	\$40,018
5.00%		Total Gross Savings (US\$)	\$42,803
EFFICIENCY GAIN (%) NEEDED FOR CII RATING CHANGE (FOR THE GIVEN VESSEL AND VOYAGE)			
A	21.23%	2024	22.93%
B	13.90%	2025	24.62%
C	2.91%	2026	17.61%
D	-8.08%	5.00%	7.09%
		-5.75%	-3.43%



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

Standard VLSFO Emissions

3,118kg CO₂ per tonne of fuel burned



Sulnox Eco Dosage - 1:2000

2.05kg CO₂ emitted per tonne of fuel treated¹



Sulnox Eco Fuel Efficiency

5% saved² = 156kg CO₂ reduction per tonne



Net Impact

Every 1kg of CO₂ input from Sulnox Eco, removes 76kg of CO₂ output

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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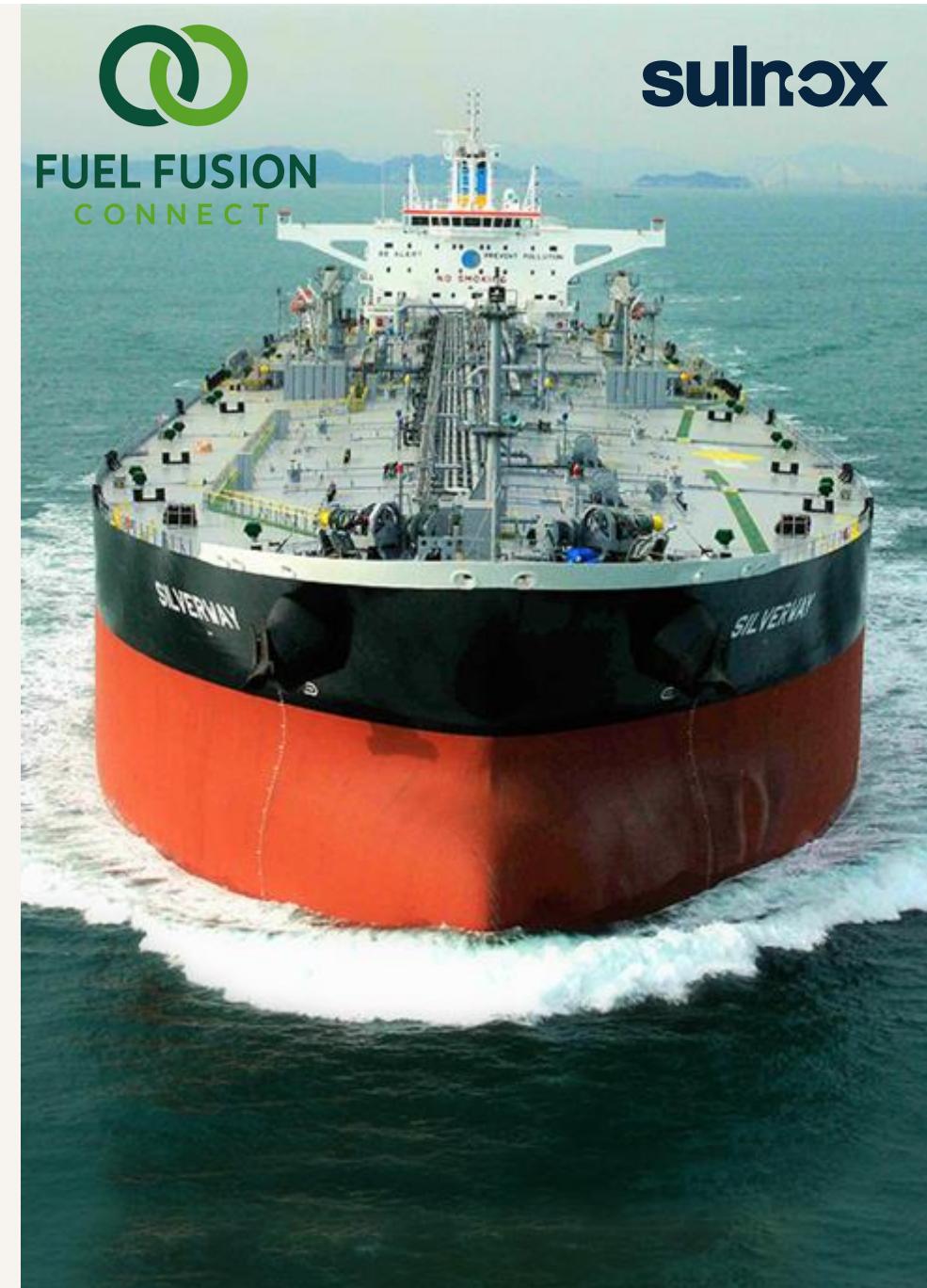
○ Sulnox Eco Meets ISO 8217 Standards.

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.





- 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)

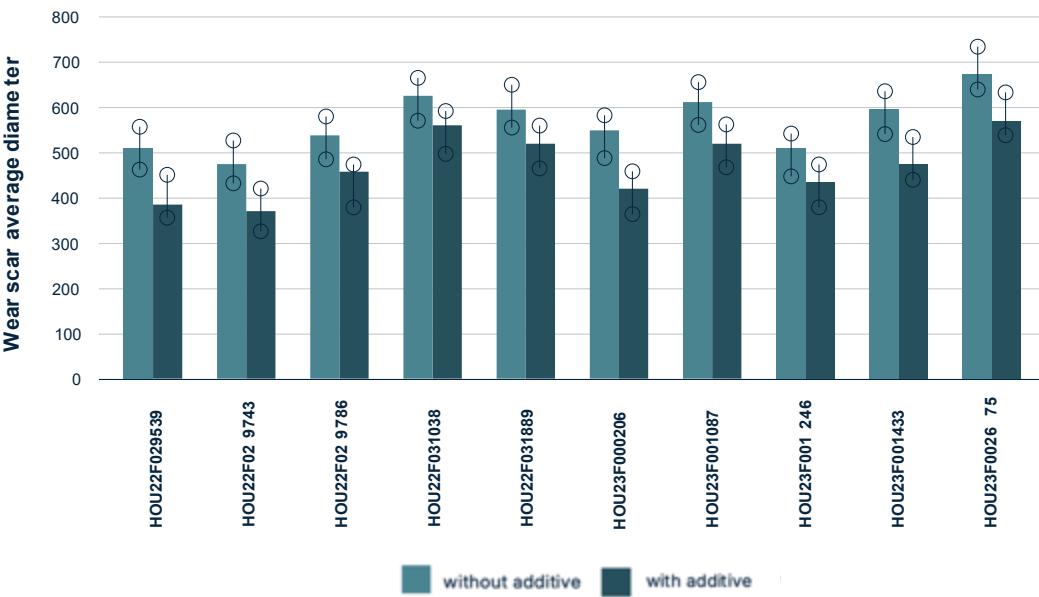
- No negative impact on fuel performance or properties at recommended dosing levels



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





- 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 oxidation 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.



Your fleet saving starts here.

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