



NAVIGATING NEW REGULATORY WATERS

Proposed IMO Regulations Are Driving Global Maritime Decarbonization

The International Maritime Organization (IMO) is driving rapid industry action and investment in cleaner fuels and technologies, with clear financial incentives and a strict compliance timeline. Under the current regulatory framework, there are three compliance scenarios with potential of up to \$380/tCO₂ penalties.

LNG and Bio-LNG Offer Lowest Abatement Cost

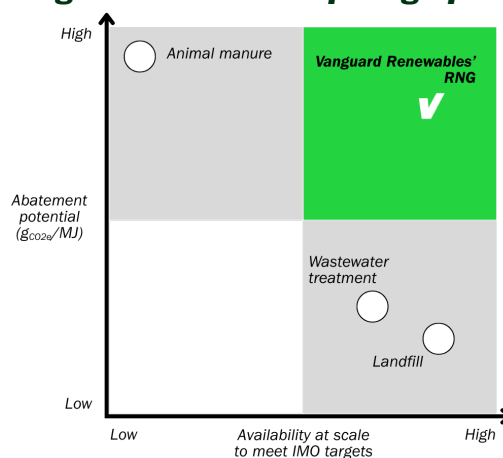
LNG will be preferred in the short-term to meet regulatory requirements; however, LNG cannot meet compliance or generate surplus units. Bio-LNG delivers the best abatement opportunity, as in many cases it has a negative CI score. This safe, proven technology is available today at scale and is a drop-in fuel for LNG vessels.

The Vanguard Difference

Vanguard Renewables' technology combines food and beverage waste with dairy manure in our anaerobic digesters to produce RNG. Our RNG delivers the lowest-cost carbon abatement solution with superior environmental impact compared to alternative waste management approaches. Competing RNG technologies typically face some combination of availability constraints and unfavorable CI scores.

Beyond RNG, Vanguard Renewables offers expertise in understanding the tangible pathways to deliver our solution in fleets. From interconnection to liquefaction to bunkering and fueling, Vanguard leverages our significant industry expertise and relationships to design pathways from well to wake.

Vanguard RNG vs. Competing Options



Working with Vanguard Renewables

With over a decade of operating experience and 200+ employees, Vanguard Renewables is rapidly scaling its national footprint. Three core pillars underscore our repeatable process:

- Develop on prime farm locations
- Build and operate with excellence
- Provide full-service organic solutions to secure reliable feedstock supply

With sound financial backing and partnerships, Vanguard Renewables is poised to position maritime industry partners with access to low-cost, low-carbon fuel.



READY TO MAKE THE SWITCH?

Plug into our national biomethane network and decarbonize your operations with no infrastructure upgrades or added overhead.

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