

WHEN TRUST MATTERS

Maritime outlook 2050: why energy efficiency matters more than ever

Greener Shipping Summit

Lefteris Koukoulopoulos

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Where is the maritime industry now?

Industry snapshot

- **Momentum beyond regulation**: Commercial and ESG drivers accelerate change despite regulatory uncertainty
- **Geopolitics over technical approach:** IMO delays create unpredictability; regional schemes gain traction
- **Some owners moving ahead:** Many have set decarbonization paths, some outpace regulation

Fuel transition reality

- **New fuels face three major hurdles:** Price | Availability | Infrastructure

IMO INTERNATIONAL MARITIME ORGANIZATION

SEA CARGO CHARTER

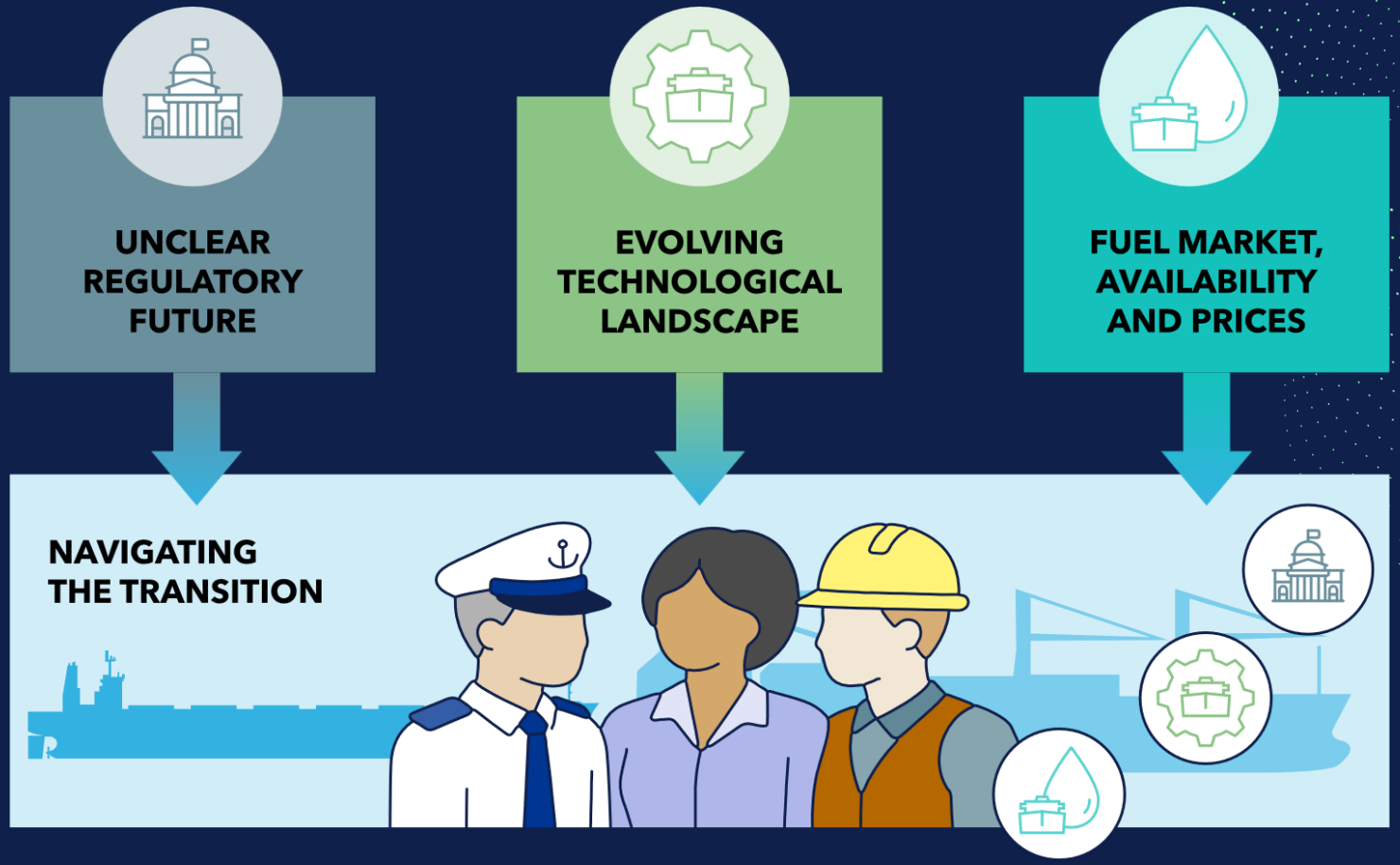
POSEIDON PRINCIPLES

Corporate ESG commitments

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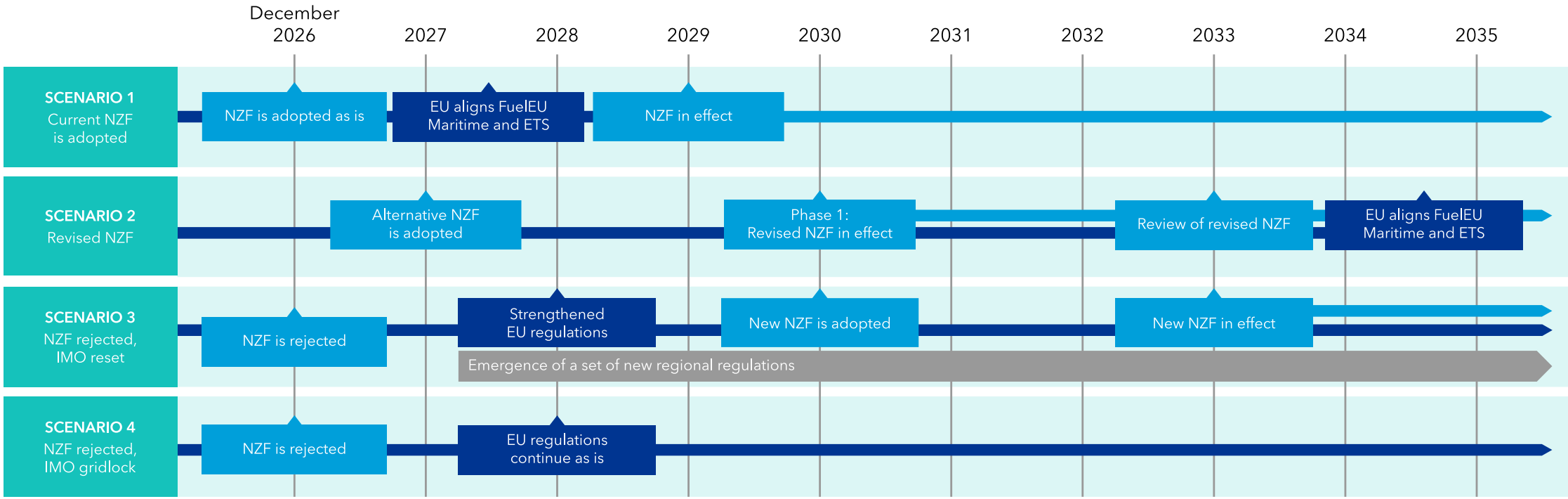
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Robust technology and fuel strategies are needed to navigate an uncertain transition



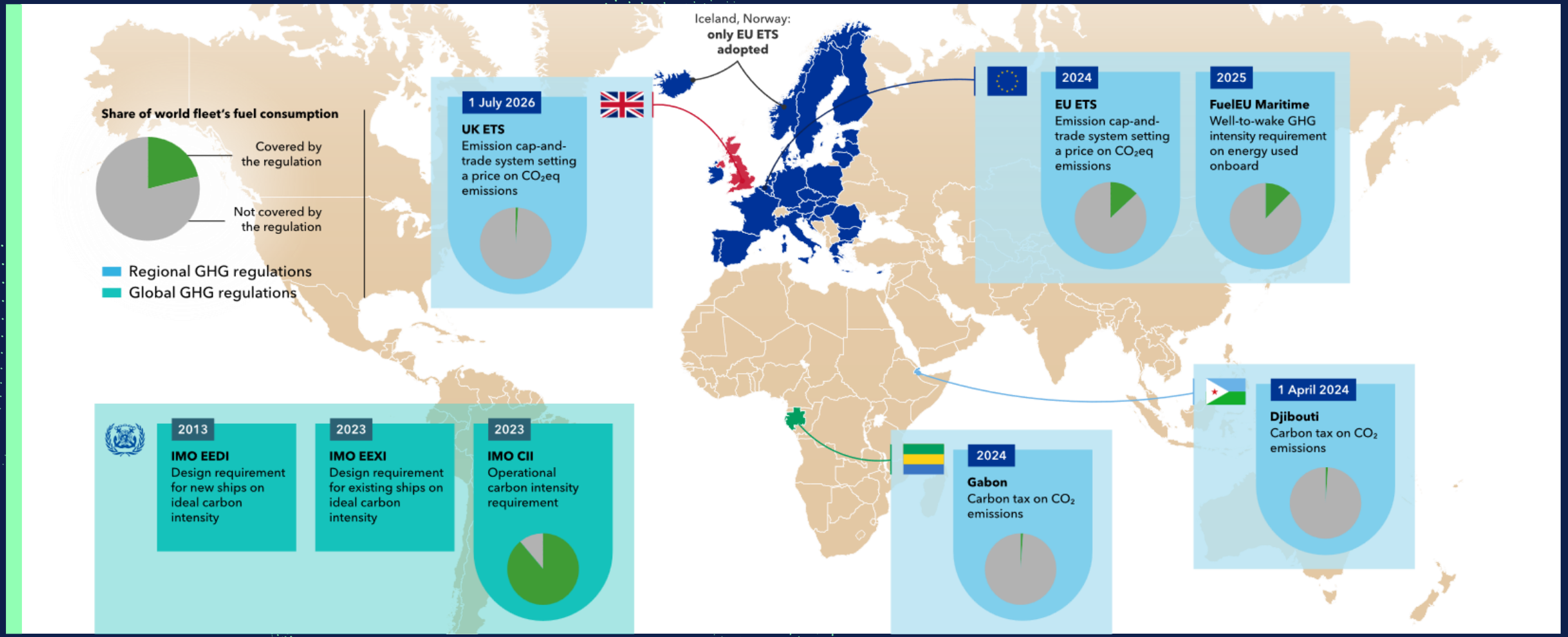
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Multiple regulatory futures are possible, calling for robust strategies performing well across scenarios



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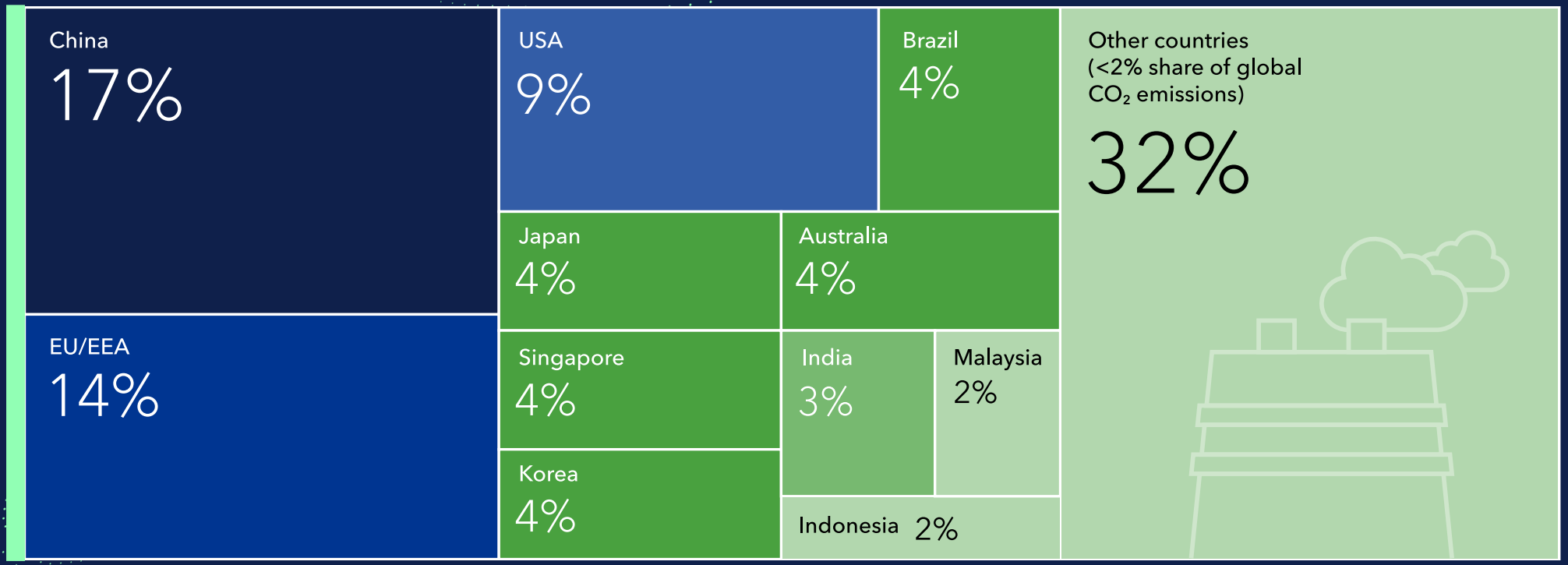
Regional regulations are moving ahead while global alignment lags



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Further regional action could cover substantial emissions

% share of global CO_2 emissions from shipping related to different countries and EU/EEA

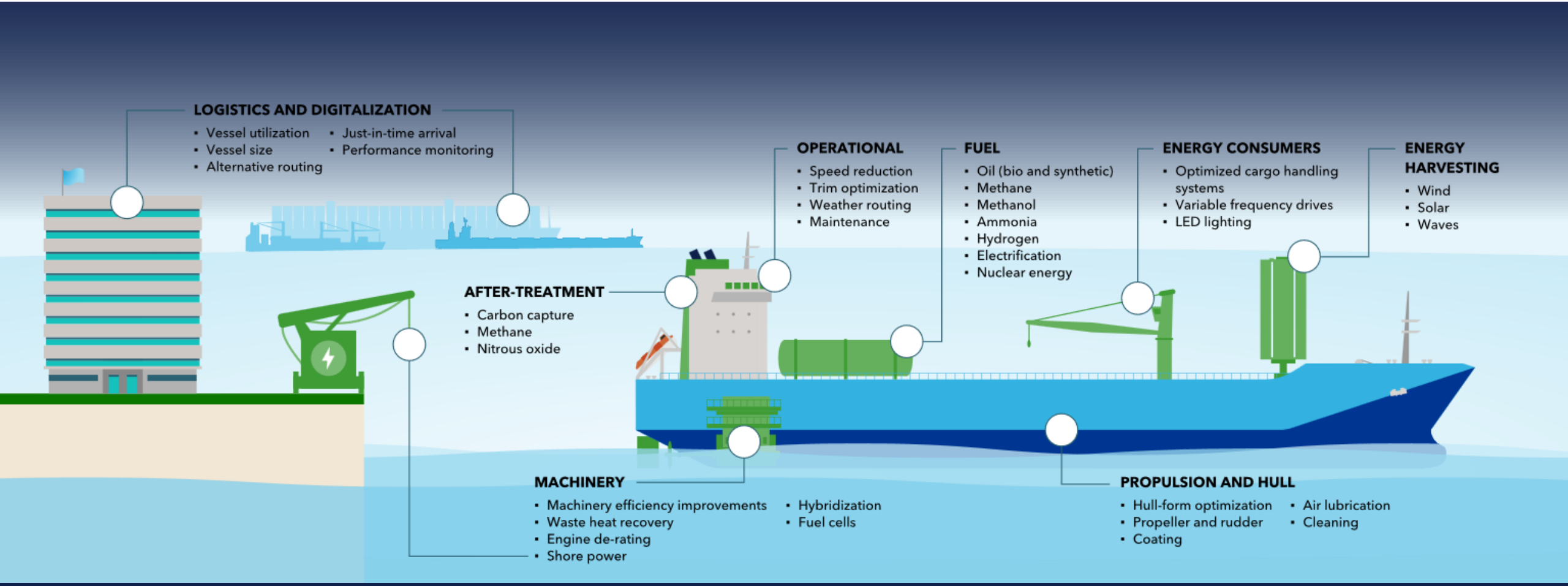


Note: includes 100% of emissions from domestic/within EU/EEA voyages and 50% of emissions from incoming/outgoing voyages.
Percentages may not add up to exactly 100% due to rounding.

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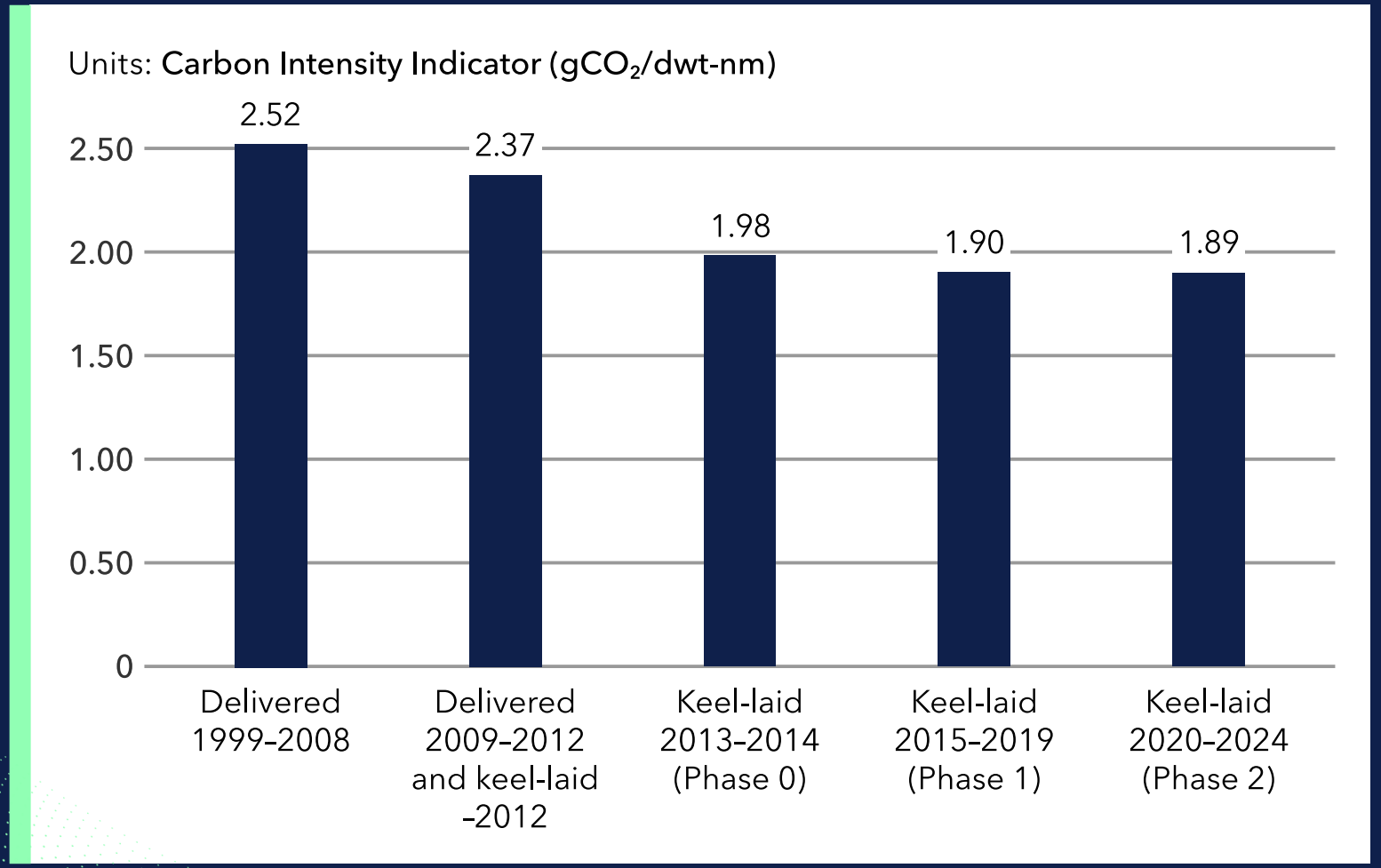
Global fleet could consume 25% less energy by 2050



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Newer vessels show improved CO_2 efficiency

Example: Carbon Intensity Indicator (CII) for VLCCs delivered under different EEDI phases



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Why is energy-efficiency important TODAY?



NZF is delayed

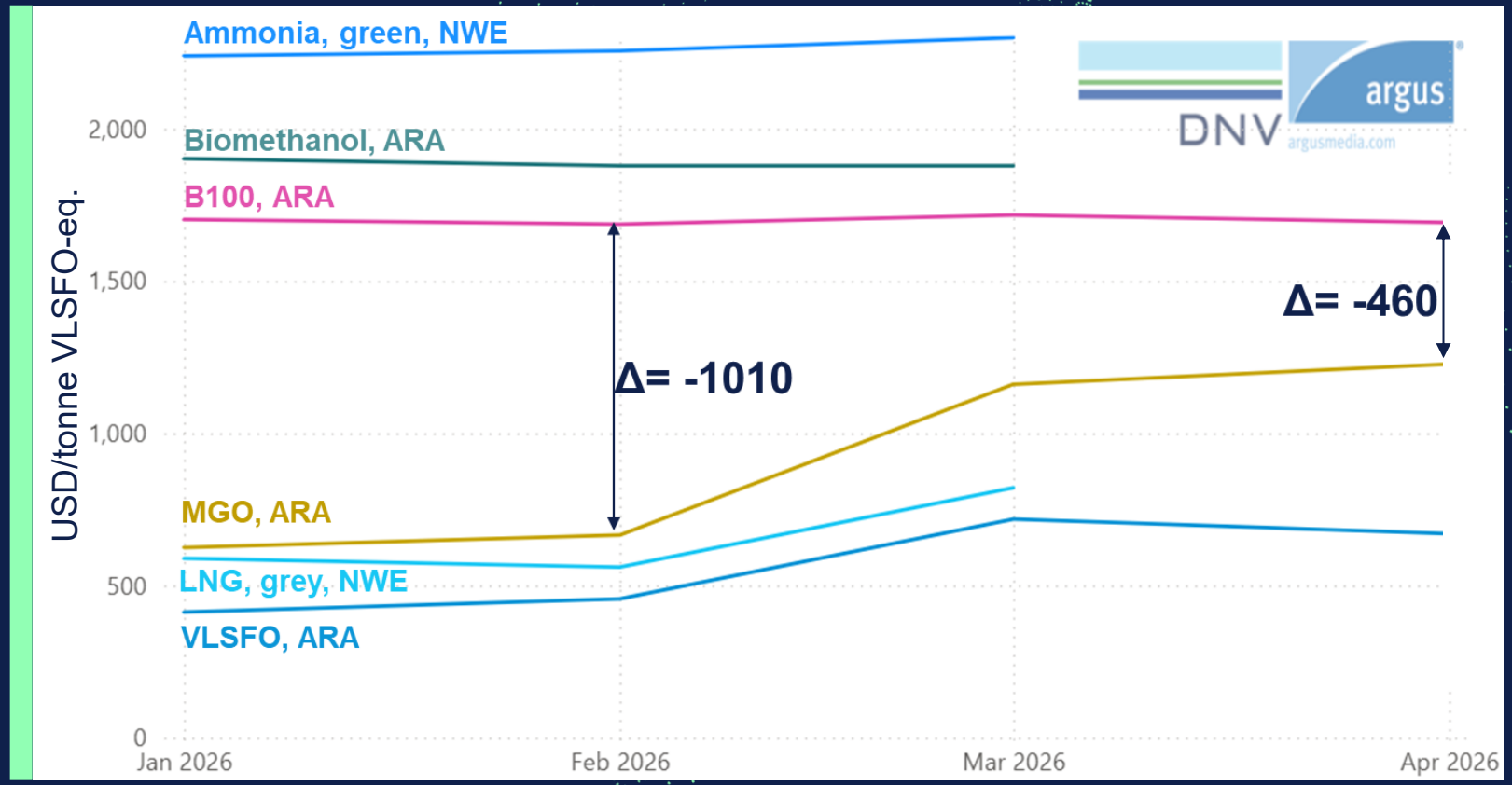
Adoption of fuels is delayed accordingly

Fuel prices rise

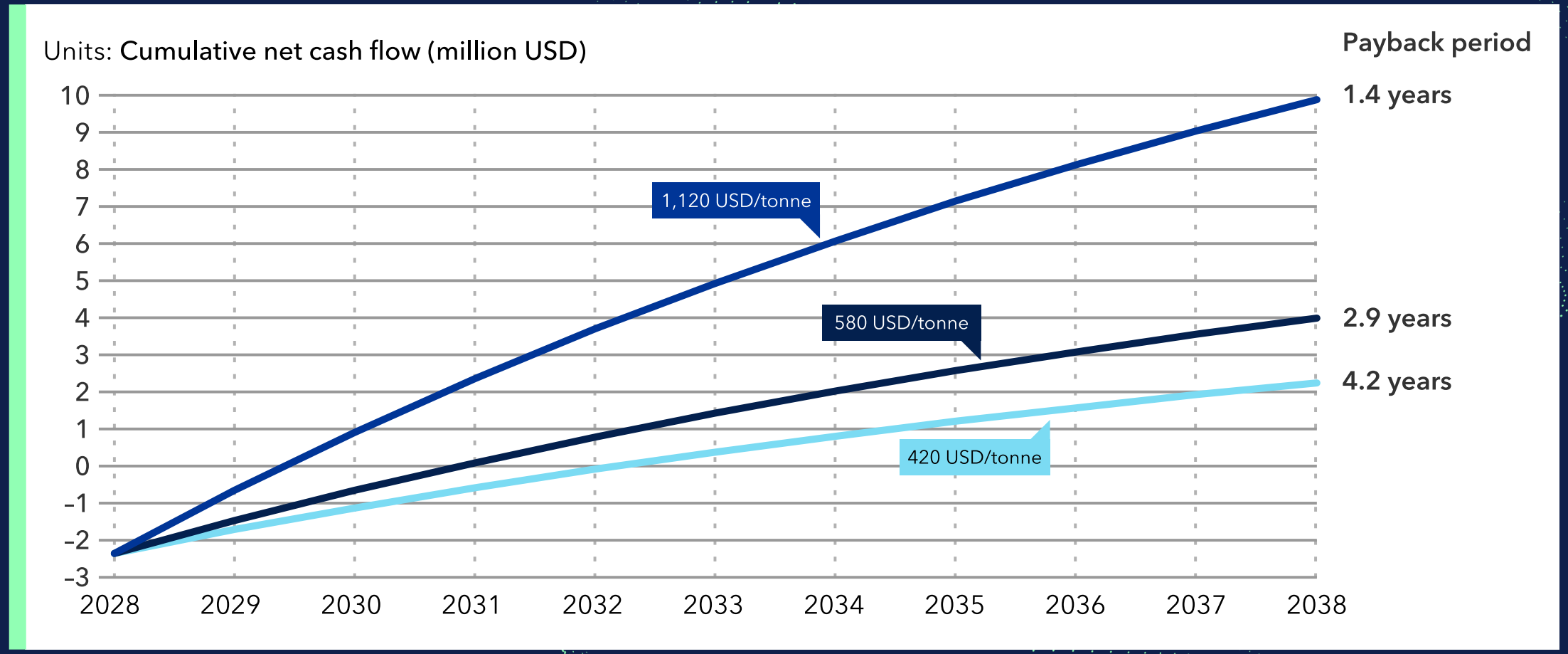
Improved techno-economic performance of solutions

Narrowed price gap between fossil and low-GHG fuels

- **B100 and MGO price gap** fell from about 1010 USD/tonne VLSFO-eq. in February to 460 USD/tonne VLSFO-eq. in April
- **Biomethanol and green ammonia** also sees reduced price gap compared to fossil fuels.



Fuel savings through retrofit – 16% for a 5000 TEU containership



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Closing: Key takeaways

1. **Commercial pressure remains**
   Customers, financiers and cost exposure continue to drive emissions reduction.

2. **EE reduces cost and emissions now**
   Lower fuel use means lower emissions and lower compliance exposure.

3. **Uncertainty strengthens the business case**
   High fuel prices and regulatory delay increase the value of flexible near-term action.

4. **Data unlocks scale**
   Fleet assessment, pilots and verification turn technology claims into investment confidence.

Thank you.



Lefteris Koukoulopoulos
Regional Decarbonization Specialist

E-mail: lefteris.koukoulopoulos@dnv.com
Mobile: +30 698 058 2770 | Phone: +30 2104100200

www.dnv.com

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