

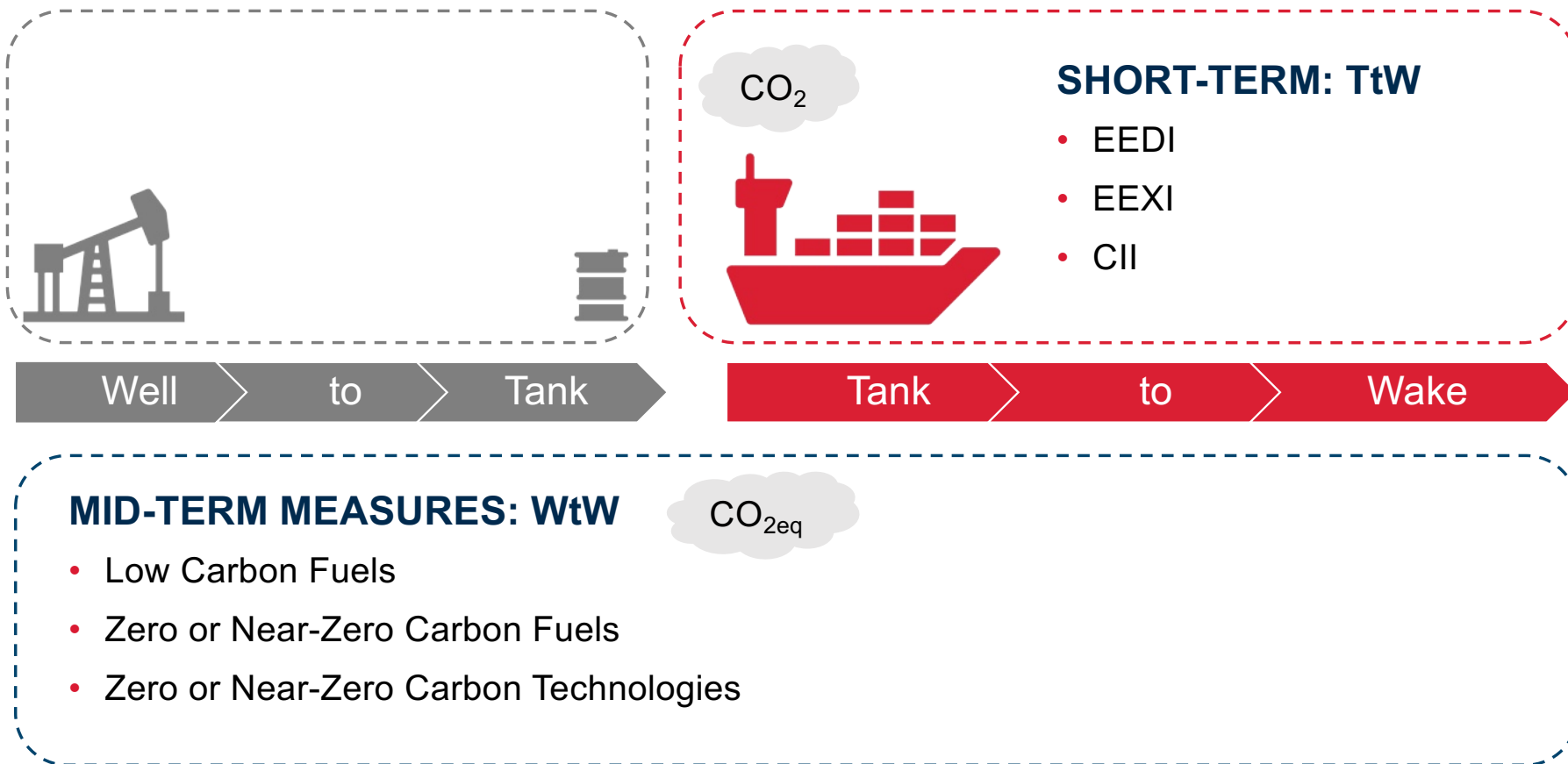


IMO Mid-Term Measures and the Impact on the Existing Fleet

IMO中期措施及其对现有船队的影响

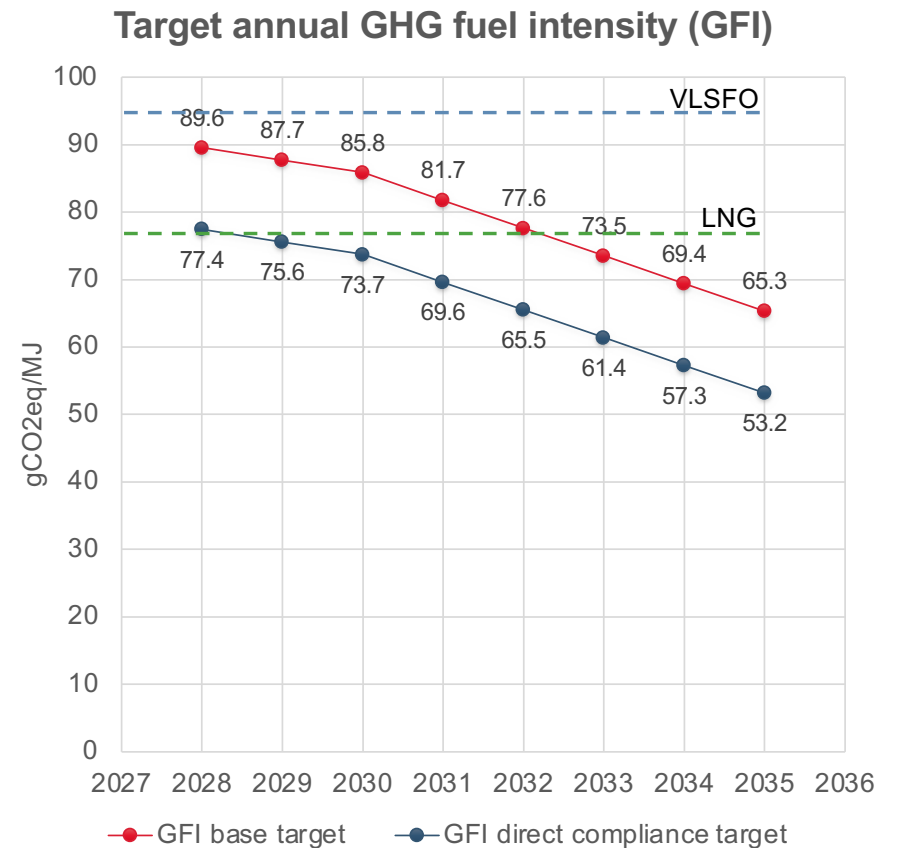
沈韬 Shen Tao | April 16, 2025

GHG Reduction Measures: From Short- to Mid-Term



Mid-Term GHG Reduction Measures

- Mid-Term GHG Reduction measures will apply to ships of 5,000 gross tonnage and above
- Attained GFI expressed in **gCO_{2eq}/MJ** of all fuels used on board in a calendar year on a WtW basis, must be below the target annual annual GFI
- Target annual GFI consists of two tiers:
 1. base target annual GFI
 2. direct compliance target annual GFI
- $GFI_T = (1 - Z_T/100) \cdot GFI_{2008}$
- GFI_{2008} is the GFI reference value equivalent to 93.3 gCO_{2eq}/MJ



Annual GFI Compliance Approaches

#1

Tire 2 Deficit
(US\$380/tCO_{2e})

Att. GFI

Base

Tire 1 Deficit
(US\$100/tCO_{2e})

Direct compliance

#2

Tire 1 Deficit
(US\$100/tCO_{2e})

Base

Att. GFI

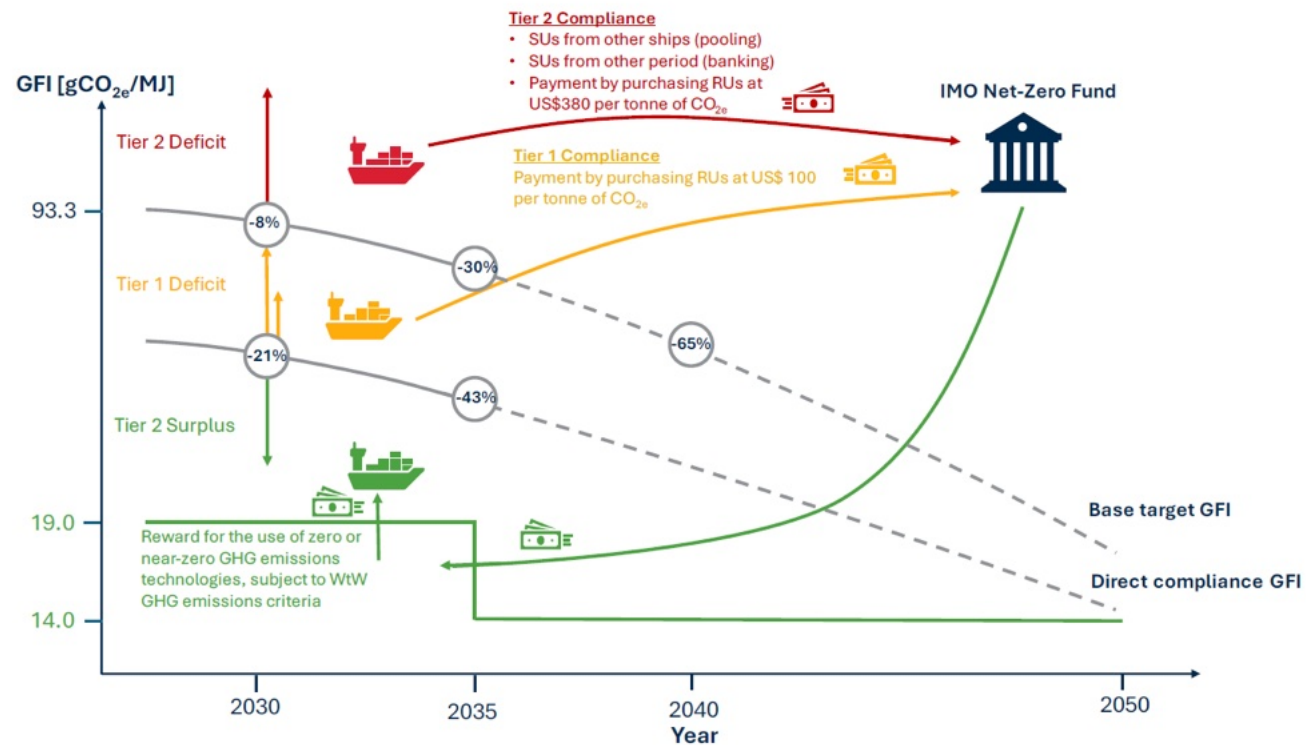
Direct compliance

#3

Surplus

Direct compliance

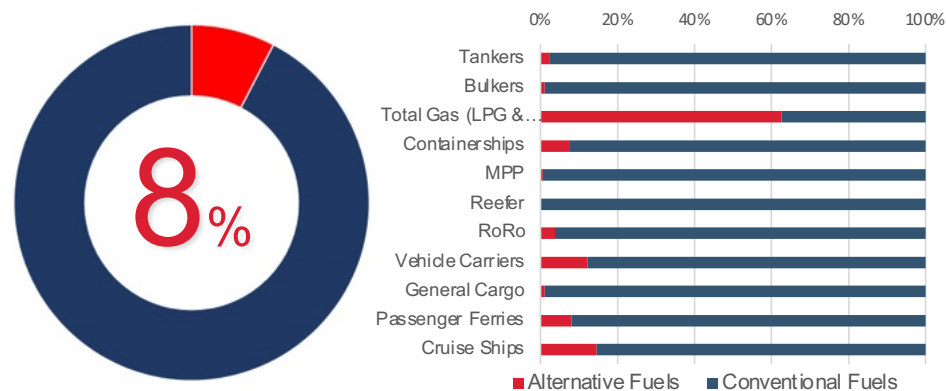
Att. GFI



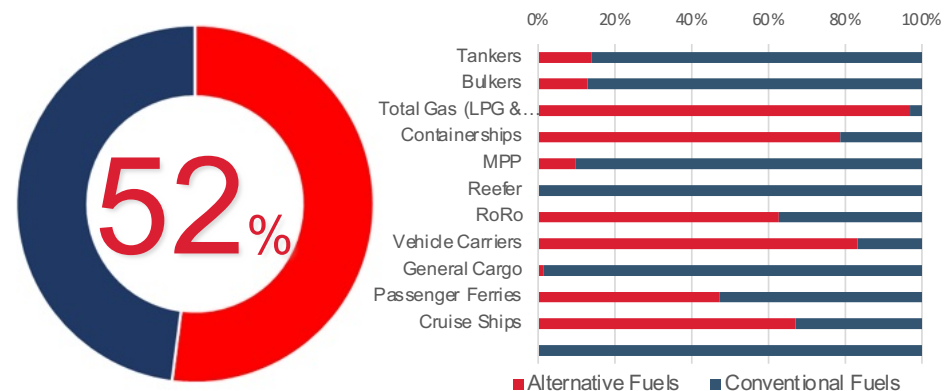
Data source: ABS, News Brief MEPC 83

Fleet Fuel Adoption – How many vessels must pay?

Existing Fleet by Gross Tonnage



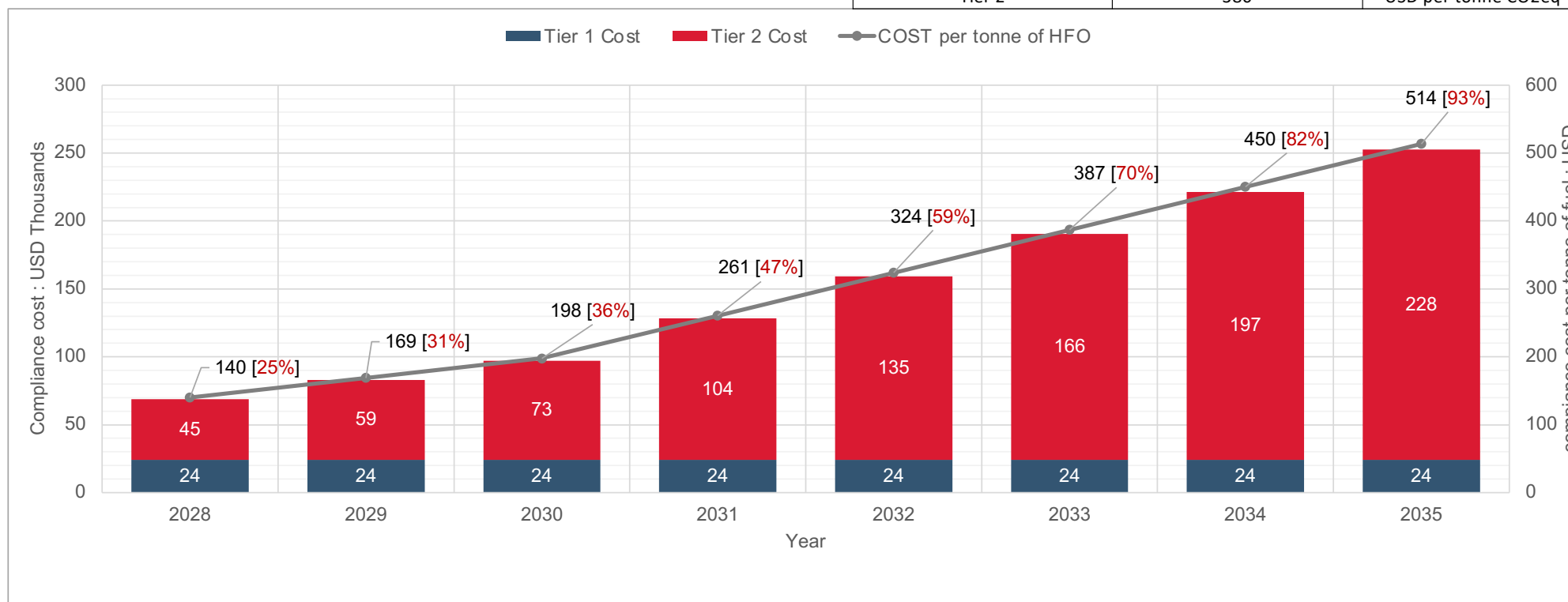
Orderbook by Gross Tonnage



Case Study: Kamsarmax BC - VLFSO

Trading route: China - Australia

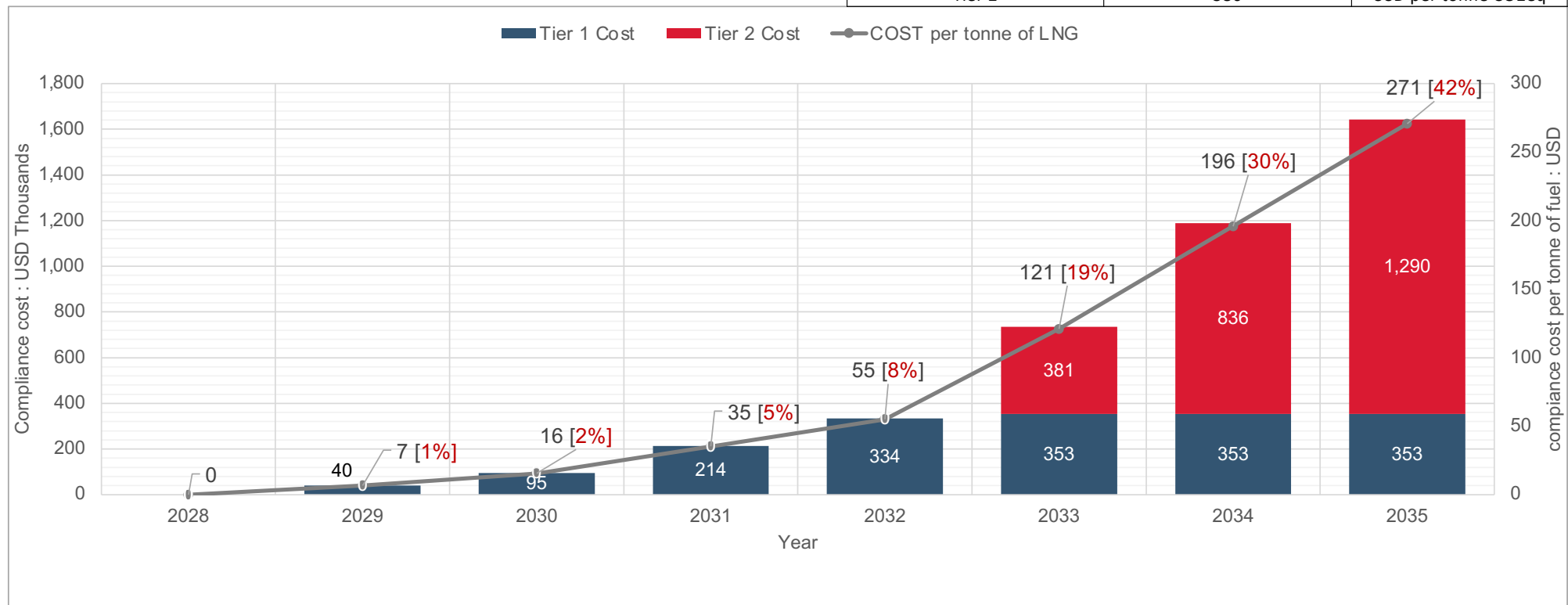
Benchmark rates	Price of remedial unit (2028 to 2030)	UNIT
Tier 1	100	USD per tonne CO2eq
Tier 2	380	USD per tonne CO2eq



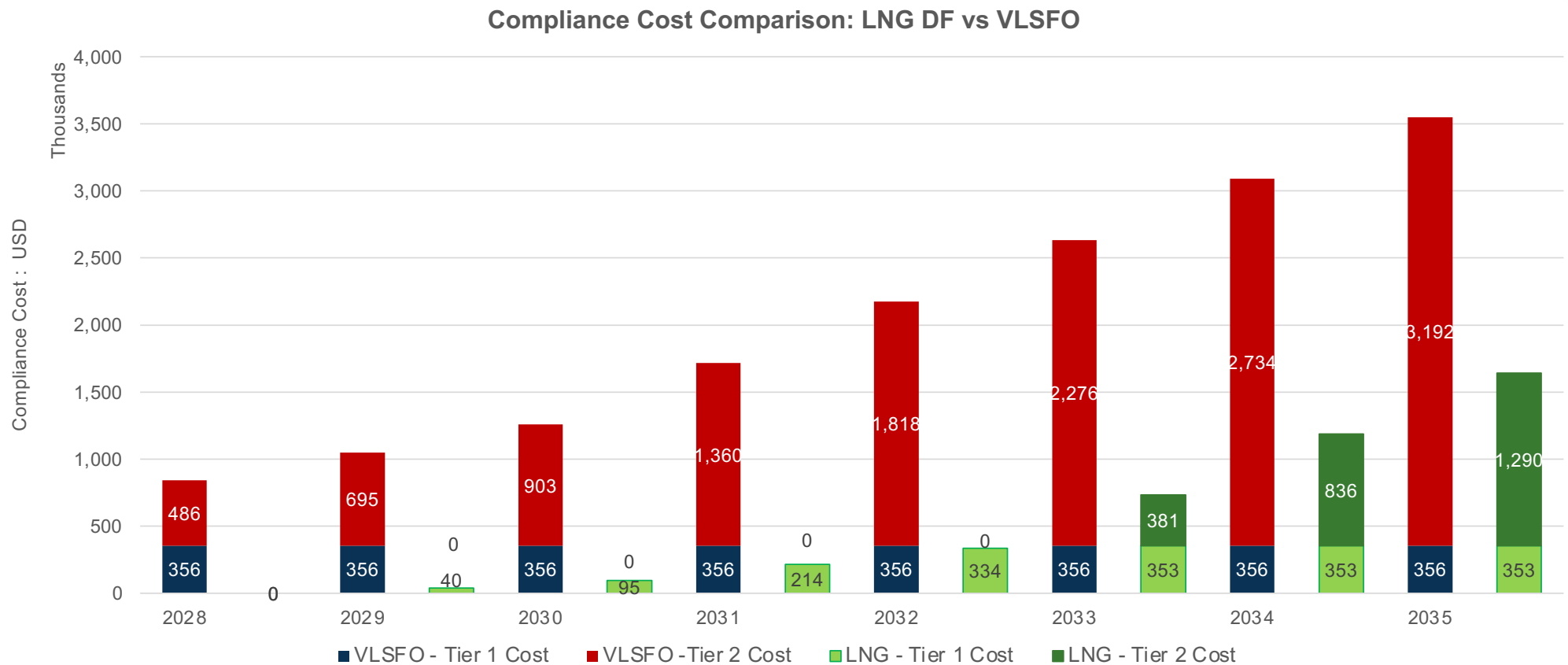
Case Study: 16K TEU Container – LNG DF

Trading route: Round voyage China - Europe

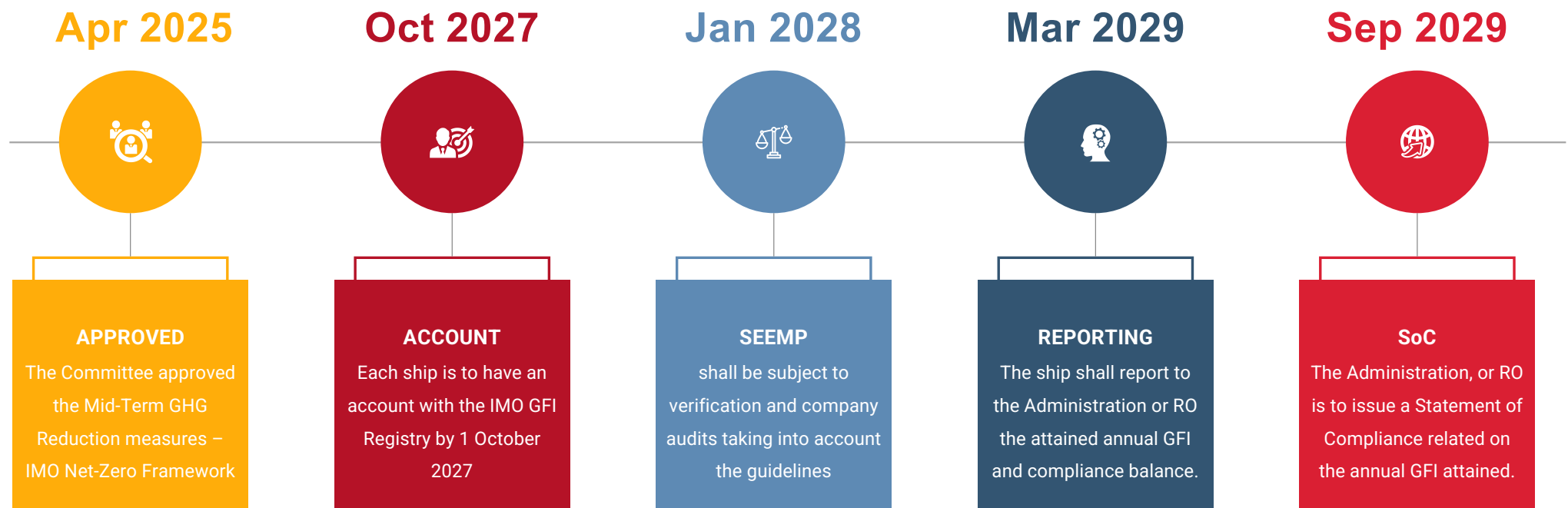
Benchmark rates	Price of remedial unit (2028 to 2030)	UNIT
Tier 1	100	USD per tonne CO2eq
Tier 2	380	USD per tonne CO2eq



Case study: 16K TEU Container – LNG DF vs VLSFO



Implementation Timelines





www.eagle.org