



# Reduction of GHG Emissions from Ships

**Hong Kong Marine Department**

**Mr. Derek MAK**

**Senior Surveyor of Ships / Environmental Policy**

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# Background of the IMO Net-zero Framework

- Previously known as mid-term measures
- To be implemented by a new Chapter 5 of MARPOL Annex VI
- Applicable to all ships of 5,000 GT or above engaged in international voyages
- Approved by MEPC 83 on 11 April 2025, with a view to adoption by MEPC/ES.2.





## GHG Fuel Intensity (GFI)



- Attained annual GFI on a well-to-wake basis,  $\text{gCO}_2\text{eq/MJ}$
- Tiers of target annual GFI ( $\text{GFI}_T$ )
  - Direct compliance target (Tier 1); and
  - Base target (Tier 2)
- Reduction factor ( $Z_T$ )

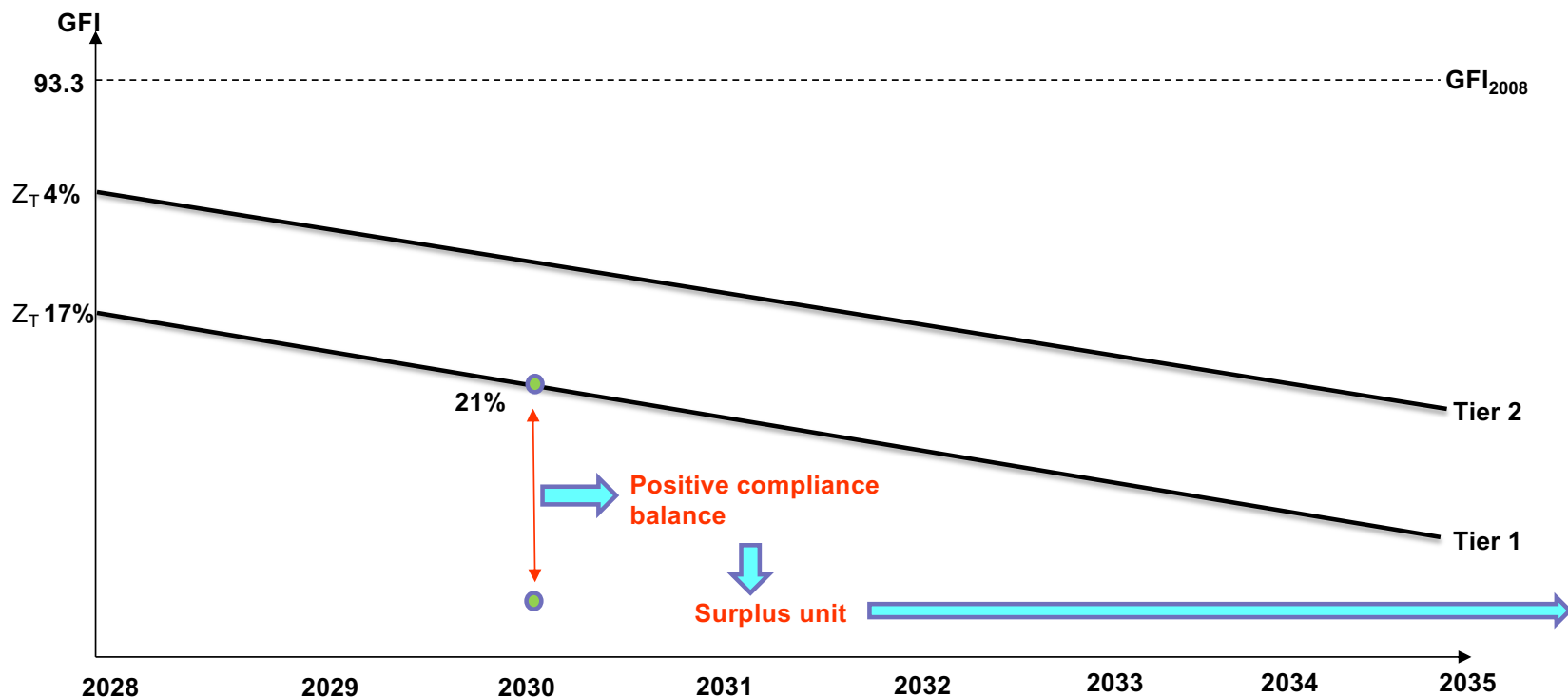
# Annual GFI reduction factors for the target annual GFI relative to the GFI reference value



**GFI reference value: 93.3 gCO<sub>2</sub>eq/MJ (Well-to-Wake) in year 2008**

Year <sub>T</sub>	Z <sub>T</sub> for Base target	Z <sub>T</sub> for Direct compliance target
2028	4.0%	17.0%
2029	6.0%	19.0%
2030	8.0%	21.0%
2031	12.4%	25.4%
2032	16.8%	29.8%
2033	21.2%	34.2%
2034	25.6%	38.6%
2035	30.0%	43.0%

# Direct compliance / Positive compliance balance

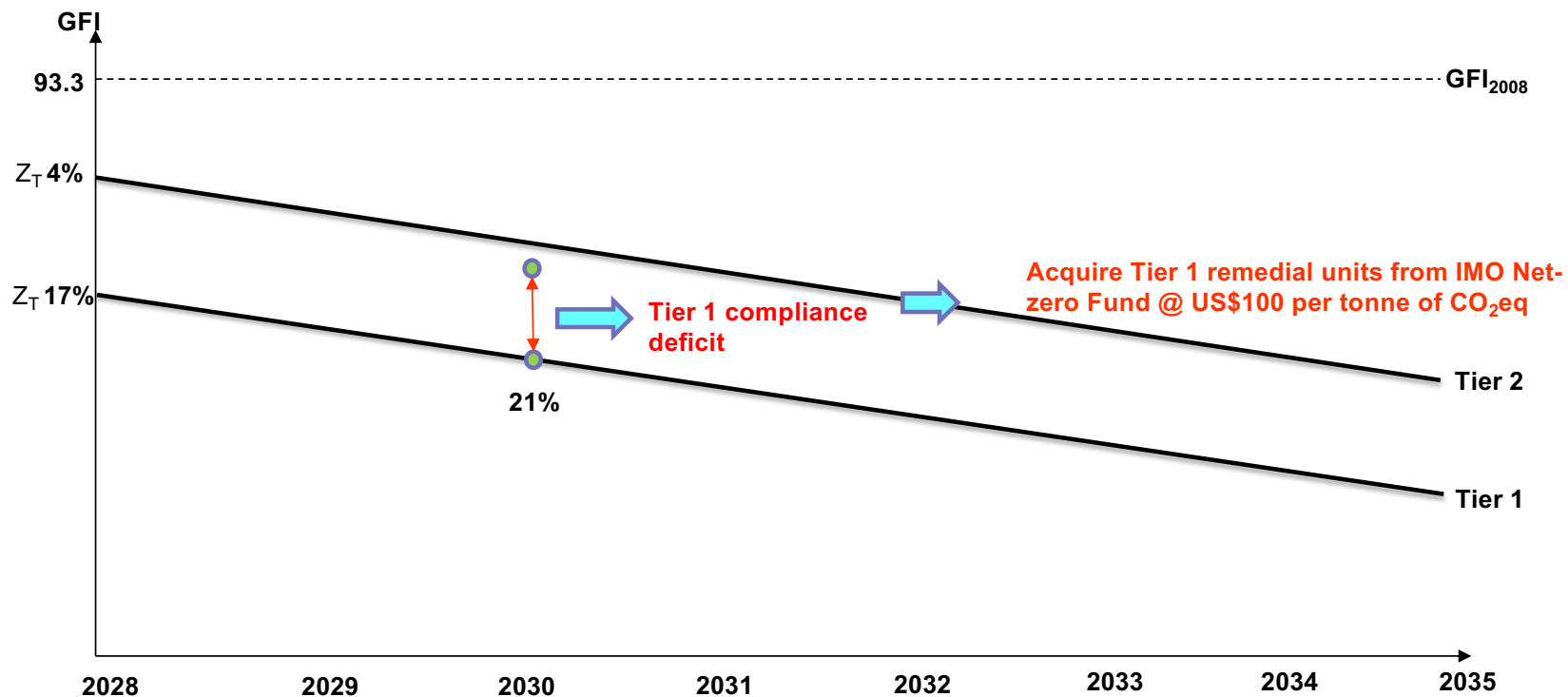


1) transfer to another ship to balance that ship's Tier 2 compliance deficit

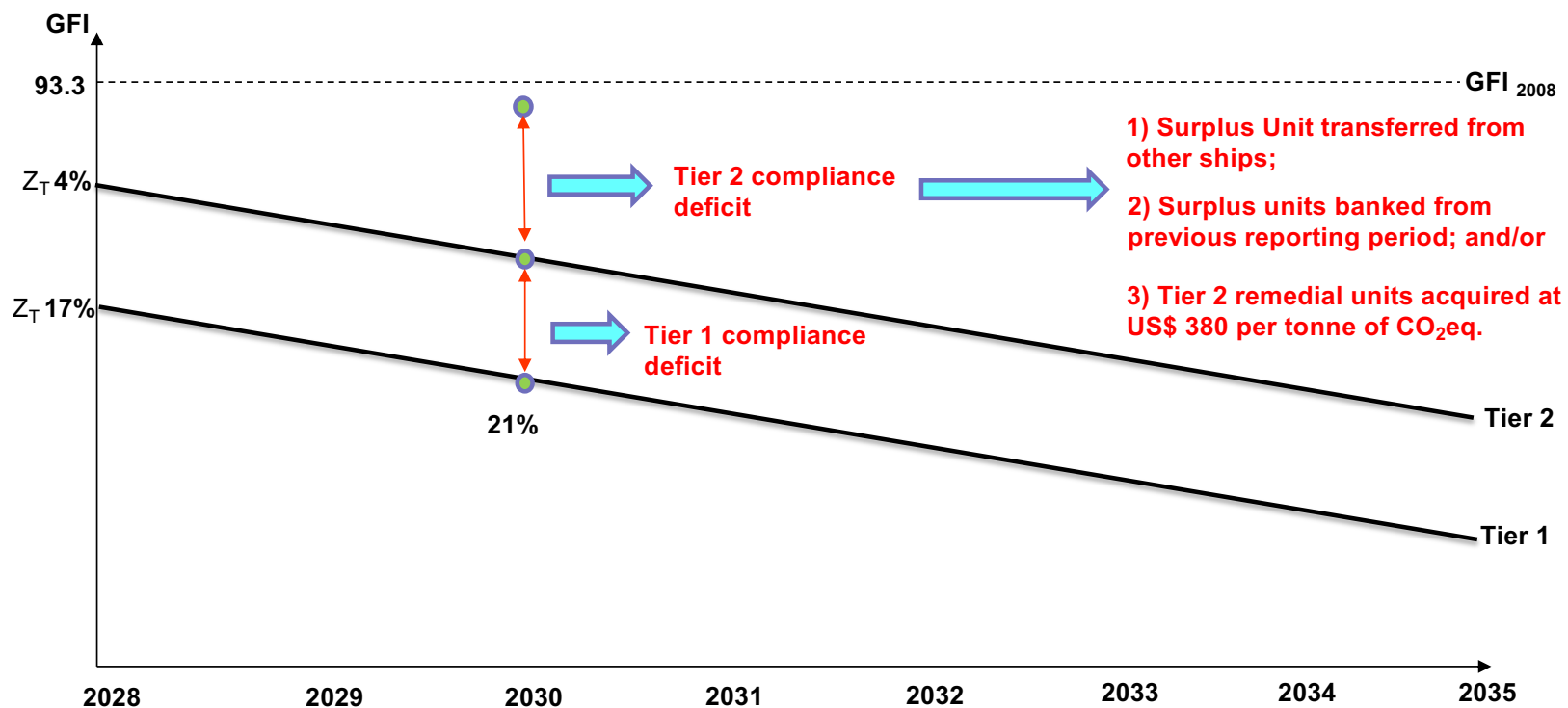
2) banked for use in the following reporting periods

3) voluntarily cancelled as a mitigation contribution

# Tier 1 compliance deficit



# Tier 2 compliance deficit





# IMO Net-Zero Fund and ZNZs



- ZNZs - zero or near-zero GHG emission technologies, fuels and/or energy sources
- Annual reward for ZNZs used
- GFI threshold for ZNZs:  $<19.0 \text{ gCO}_2\text{eq/MJ}$



# Timeline for implementation of IMO Net-zero Framework



Target date	Milestone for mid-term measures
14-17 Oct 2025 (MEPC/ES.2)	Adoption of measures
1 Mar 2027	Entry into force of measures
1 Oct 2027	Open an account with IMO GFI Registry
1 Jan 2028	Commencement of reporting period
30 Jun 2028	Administration fee paid to the IMO GFI Registry
31 Mar 2029	Reporting to Administration or RO
30 Sep 2029	Issue of Statement of Compliance



*“The IMO Net-zero Framework will drive an energy transition towards ZNZs for a green and sustainable international shipping.”*

-The End-