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# The IMO Net-Zero Framework: regulatory outlook and implications for sustainable marine fuels

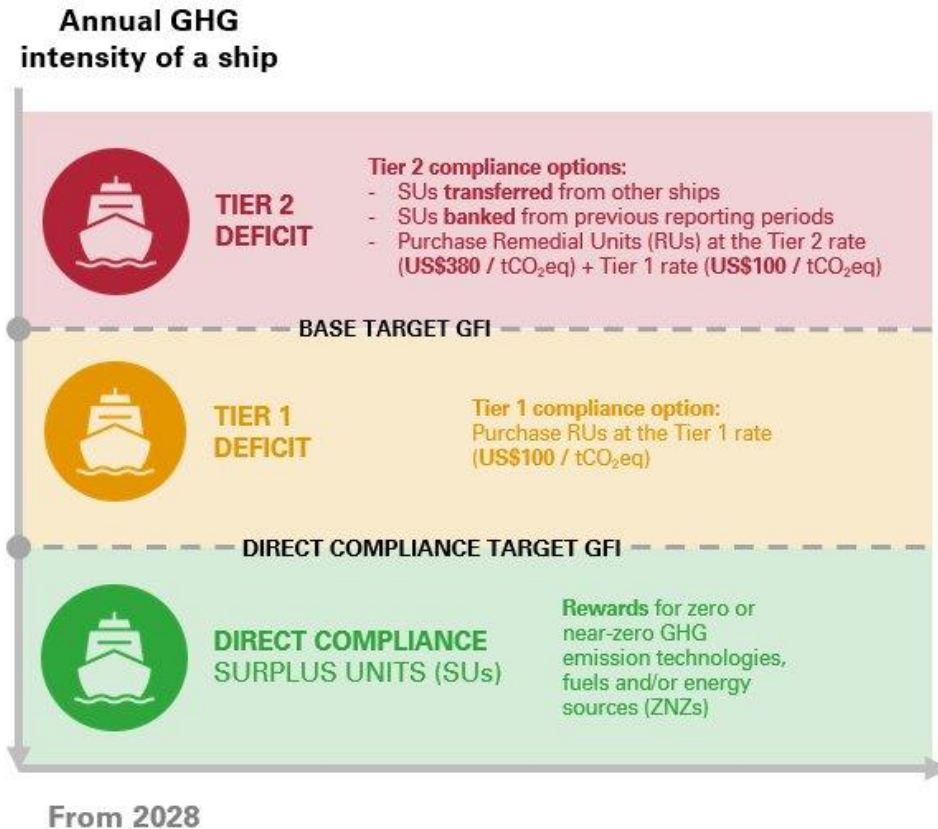
Webinar Global Biofuels Alliance : Biofuels for Maritime  
Decarbonization: A Global Dialogue - Tuesday, 29 September 2026

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INTERNATIONAL MARITIME ORGANIZATION

# Overview of the draft IMO Net-Zero Framework



- Two-tiered GHG Fuel Intensity (GFI) reduction trajectories ('base target' and 'direct compliance target')
- GFI calculated on the basis of **Well-to-Wake** (life-cycle) GHG emissions
- Over-compliant ships can generate + transfer '**surplus units**' (SUs)
- Non-compliant ships can use surplus units and/or purchase '**remedial units**' (RUs)
- Ships using eligible fuels, technologies or energy sources can receive **rewards** from the IMO Net-Zero Fund
- **IMO Net-Zero Fund** to support developing States, with the 'energy transition of shipping'

- MEPC/ES.2 adjourned. To be reconvened on 4 December.
- In the interim, Member States will continue to **work towards consensus** on IMO's mid-term GHG reduction measures and **addressing concerns** expressed

# Mid-term measures: way forward

- MEPC 84: considered how to address **concerns** with the IMO Net-Zero Framework, and the **way forward** in adopting mid-term GHG reduction measures
- in view of **continued commitment** to work together towards convergence on a **global measure**; agreed to 2 ISWG-GHG meetings ahead of MEPC 85 to:
  - **consider proposals**, incl. containing amendments, on how to address concerns with the draft amendments to MARPOL Annex VI on the Net-Zero Framework
  - further **consider draft guidelines** supporting the uniform and effective implementation of IMO's mid-term measures
  - further consider the development of the **IMO LCA framework**

# Mid-term measures: way forward

ISWG-GHG 22 (1 to 4 September) considered various alternative proposals, including new legal text from Australia et al., Brazil, China, Japan, Liberia, Tuvalu

Discussion structured in 5 parts:

- Part I: GHG fuel intensity (GFI) calculation, reporting, verification and certification requirements
- Part II: GFI reduction pathway
- Part III: GFI compliance approaches
- Part IV: Establishment of a Fund/Facility
- Part V: ZNZ Reward mechanism and incentives for the uptake of new fuels and technologies

# Part I: GHG fuel intensity (GFI) calculation, reporting, verification and certification requirements

## Main issues:

- OCCS in the GFI calculation/in Guidelines?
- ZNZ multiplier?

## Outcome:

**General support** for the underlying GFI calculation, reporting and verification architecture, building on the GFI formula, LCA, Sustainable Fuel Certification Schemes (SFCS), and the IMO GFI Registry.

# Part II: GFI reduction pathway

## Main issues:

- smoother initial GFI reduction trajectory?
- one or two reduction curves?
- inclusion of a long-term GFI reduction target?
- linking the determination of the GFI reduction factors to an assessment of the availability, affordability and scalability of marine fuels

## Outcome:

Many delegations showed **willingness to find a compromise solution**, including by stressing merits seen in other proposals. ISWG further noted the possible ways forward to **adjust the GFI reduction targets**, suggested by the Chair, as follows:

1. **softer start** to safeguard shipping's reliable service to global trade;
2. provide **predictability** for a needed time horizon, bend down the curve to cater for the needed investments and make it possible for such investments to be sustainable; and
3. **assess** to adjust as appropriate while maintaining the **reliability** of the framework.

# Part III: GFI compliance approaches

## Main issues:

- Ensure predictability of SU market (e.g. shortages, oversupply, price volatility)
- Concerns over centralized pricing and payment mechanism
- Proposed Direct Contribution Scheme (Japan)

## Outcome:

**Retain all four compliance options** at this stage, on the understanding that the first two were fully acceptable while the other two required further work to address remaining divergences, as follows:

1. reducing emissions on board the ship itself;
2. drawing on emission reductions achieved elsewhere within the fleet, incl. through pooling;
3. drawing on emission reductions (direct or implicit) achieved through financial contributions towards a Fund/Facility; and/or
4. making direct contributions to a project approved by the Organization.

Delegations were encouraged to **continue exploring areas of convergence**

# Part IV: Establishment of a Fund/Facility

## Main issues:

- Removal of all revenue generation elements?
- Replacement of the "IMO Net-Zero Fund" by a "Facility" to enable revenue collection and distribution under a lighter institutional framework?
- Proposed Direct Contribution Scheme (Japan)?
- How to ensure a level playing field for all ships and support a just and equitable transition without the establishment of a fund?

## Outcome:

**Divergent views** expressed. Delegations were to further consider this issue and explore how to resolve the remaining concerns, including regarding the role of the Organization and other bodies, if any.

# Part V: ZNZ Reward Mechanism incentives for the uptake of new fuels and technologies

## Main issues:

- dedicated reward mechanism would remain necessary if a more gradual GFI reduction trajectory and increased compliance flexibility through expanded use of SUs were adopted?
- encourage wider geographical deployment and production of ZNZs in developing regions
- ZNZ multiplier?

## Outcome:

The Chair suggested that:

1. a **dedicated ZNZ incentive** be retained in principle at this stage, including through potential financial rewards; and
2. interested delegations be invited to **further explore the ZNZ multiplier**, including the safeguards needed to preserve environmental integrity and ensure a level playing field.

# Mid-term measures: way forward

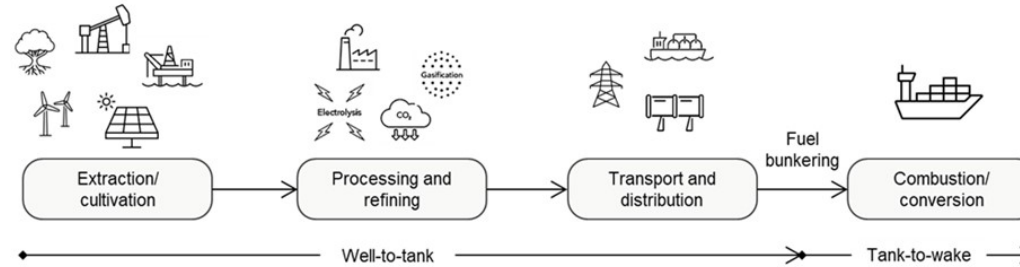
## Conclusion:

ISWG-GHG 22 invited interested delegations to continue to consult intersessionally to address remaining concerns with the draft amendments to MARPOL Annex VI, in line with the 2023 IMO GHG Strategy, taking into account views expressed at this session, with a view to submitting concrete proposals reflecting **enhanced convergence allowing timely adoption and effective implementation**.

## Next steps:

- ISWG-GHG 23: 23 to 27 November 2026
- Resumed MEPC/ES.2: 4 December 2MEPC 85: 30 November – 3 December 2026
- 026, subject to confirmation by MEPC 85

# LCA Framework



- LCA Framework:
  - **GESAMP-LCA WG**
    - Work under the expert group progresses on a number of issues
    - MEPC 84 agreed to a first initial default well-to-tank (WtT) emission factor: intermediate-crop corn-based ethanol produced with biomass as an energy source for combined heat and power (20.8 gCO<sub>2</sub>eq/MJ)
  - Work continues on the determination of **well-to-wake default emission values**; indirect land-use change (ILUC); accounting of **onboard captured carbon**; avoided emissions, etc.
  - The Secretariat organized a GHG Expert Workshop on “**Chain of custody models**” : fuel origin tracking along the supply chain : **15 July**
- Methane (CH<sub>4</sub>)/nitrogen oxide (N<sub>2</sub>O)
  - MEPC 84 adopted 2026 Guidelines for **test bed and onboard measurements** of CH<sub>4</sub> and N<sub>2</sub>O emissions from marine diesel engines + **Engine Load Monitoring** Guidelines and Guidelines for **continuous emission monitoring systems**

# Fuel certification guidelines

**Informal group** (Brazil, Singapore, Netherlands, RINA, IPIECA, etc.) submitted document ISWG-GHG 21/2/5 containing draft guidelines on **sustainable fuel certification schemes (SFCS)**

ISWG-GHG 21 agreed to use this document as a basis for discussion on the **SFCS governance** aspects

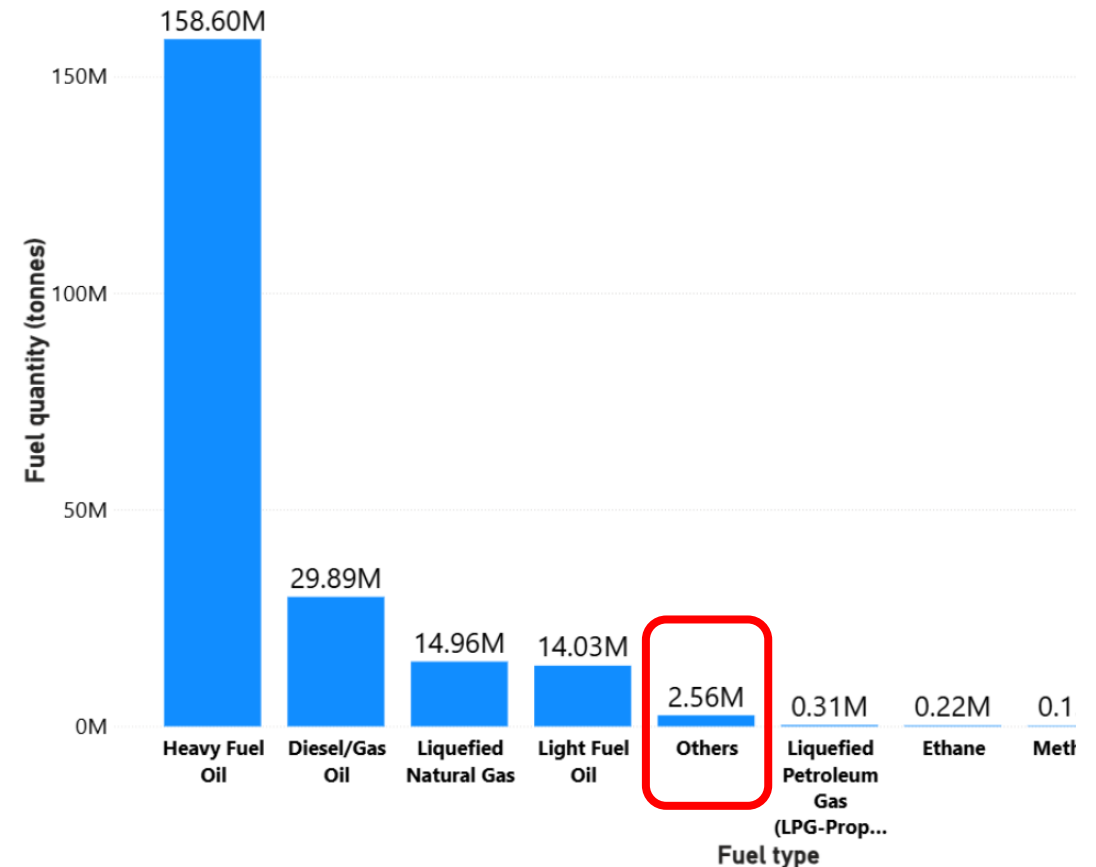
Further intersessional work focuses on:

- the **SFCS application process** (on the basis of: SFCS applying directly to IMO, with a letter of support from a Member State)
- provisions on **SFCS revocation**
- data/information that should be **reported** annually by SFCS to IMO
- mandate and organization of an SFCS assessment group (**SFCS AG**)
- **traceability** requirements (chain of custody)

Expected finalization at MEPC 85

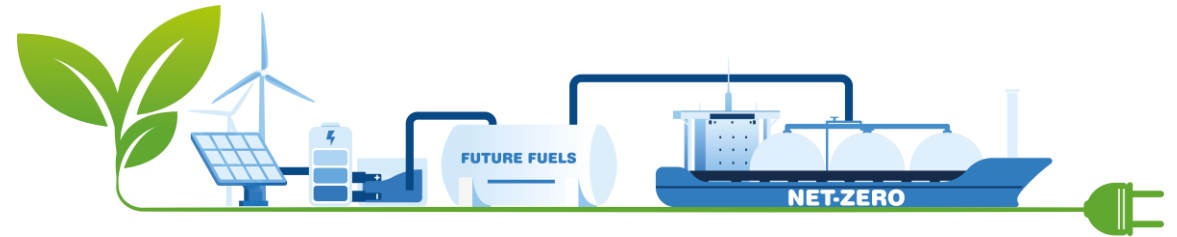
# Latest data on biofuels uptake

- MEPC 85/6 (Secretariat): report on the mandatory ship fuel oil consumption data collection system (IMO DCS) for 2025
- The amount of **biofuel** reported has more than doubled in comparison to 2024, reaching **over 2.5 million tonnes**.
- The amount of biofuel used reached **1.2%** of the reported fuel use
- Biofuels reported under “**others**”
- In the future: a dedicated biofuel reporting category (or categories) may be needed to improve the visibility and analysis of biofuel uptake



# Fifth IMO GHG Study

- 5<sup>th</sup> IMO GHG Study:
  - MEPC 84 approved terms of reference
  - Steering Committee of Member States
  - Secretariat initiated procurement process
  - Results to be presented to MEPC 87 (Spring 2028)
- The study will consist of:
  - emissions inventory
  - estimates of GHG fuel intensity
  - estimates of carbon intensity
  - emissions projections up to 2050
- Scope
  - Ships above 100 GT engaged in international voyages



# Thank you





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