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# IMO's ruleset and policies relevant for the use of biofuels

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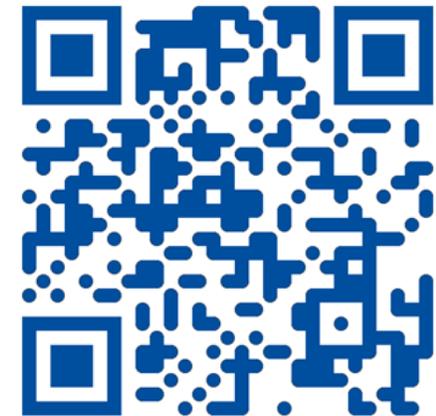
# IMO Future Fuels and Technology Project (FFT)



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A gateway to the latest information on **future fuels and technology** promoting a just and equitable transition

The website has been developed by Future Fuels and Technology Project (FFT Project) supporting the implementation of the 2023 IMO GHG Strategy by facilitating relevant information sharing.



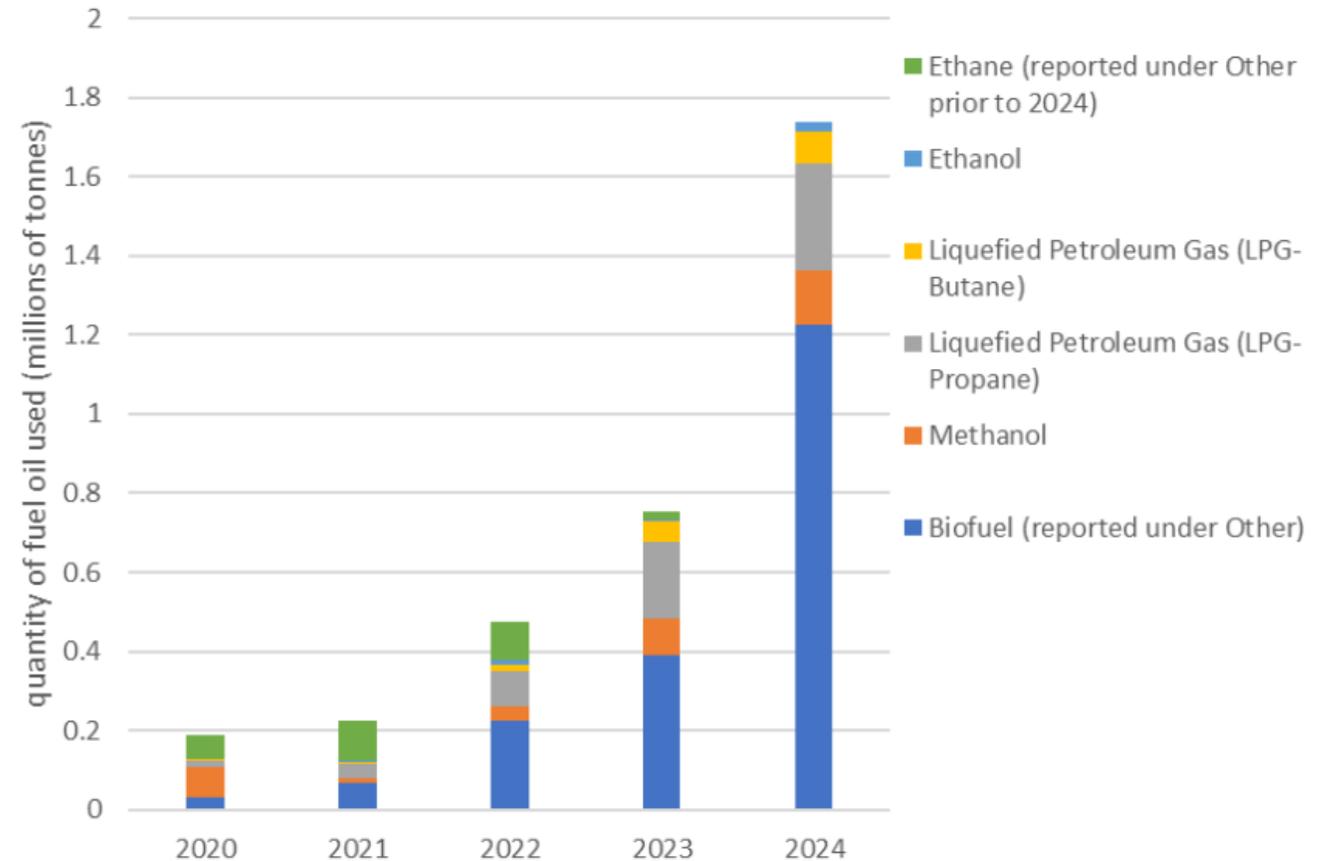
<https://futurefuels.imo.org/>

Contact us:  
[futurefuels@imo.org](mailto:futurefuels@imo.org)

# IMO Ship Fuel Oil Consumption reporting

Document MEPC 84/6/1:  
latest IMO DCS report (2024 data)

- The volume of **biofuel** used by ships >5,000 GT is rapidly increasing
- 1,225,531 tonnes used in 2024 (390,846 tonnes in 2023)



# MARPOL Annex VI regulations on air pollution

- For “drop-in” biofuels: relevant MARPOL Annex VI requirements apply: fuel quality, Bunker Delivery Note, sulphur content, etc.
- MEPC.1/Circ.795/Rev.9: unified interpretation to regulation 18.3 of MARPOL Annex VI
  - Allows liquid biofuels (up to B30) to be used in engines certified under Annex VI without extra NO<sub>x</sub> testing, provided they do not cause exceedances of emission limits
  - For blends >30% biofuel with changes to the NO<sub>x</sub> critical components or settings, assessment of NO<sub>x</sub> impacts is required



# Use of biofuels under CII regulations

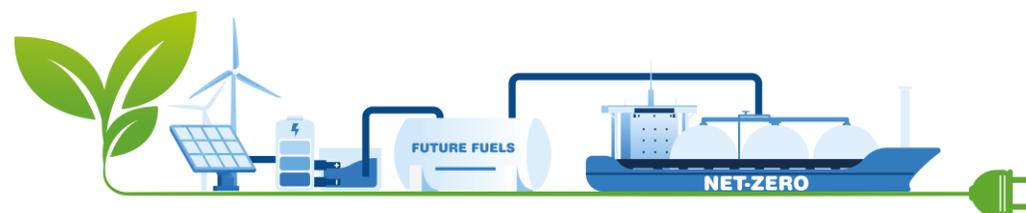
- MEPC.1/Circ.905: *Interim guidance on the use of biofuels under regulations 26, 27 and 28 of MARPOL Annex VI (DCS and CII)* approved by MEPC 80 (July 2023)
  - Allowing the use of sustainable biofuels for CII compliance
  - WtW value certified by an international certification scheme (ref: ICAO)
  - Proof of Sustainability to be provided for verification
  - Interim solution, until LCA framework is fully operational



# Biofuels GHG emissions assessment

- **LCA Guidelines** - provide a general methodology for the assessment of GHG emissions of all marine fuels, including biofuels, on a well-to-wake basis
- Review of proposed default WtT and TtW emission factors by **GESAMP-LCA WG**
- Review of LCA methodology, including sustainability aspects such as **ILUC**
- Draft Guidelines on **marine fuel certification**
- Draft Guidelines on the **fuel lifecycle label (FLL)**
- Draft Guidelines for Test-Bed and Onboard **Measurements of Methane (CH<sub>4</sub>) and/or Nitrous Oxide (N<sub>2</sub>O) Emissions** from Marine Diesel Engines

Sustainability themes/aspects in the IMO LCA Guidelines
1. GHGs
2. Carbon source
3. Source of electricity/energy
4. Carbon stock – DLUC
5. Carbon stock – ILUC
6. Water
7. Air
8. Soil
9. Waste and chemicals
10. Conservation



# Biofuels carriage requirements

- MSC-MEPC.2/Circ.17: *2019 Guidelines for the Carriage of Blends of Biofuels and MARPOL Annex I Cargoes*
  - Biofuel blends containing <75% of a MARPOL Annex I cargo are subject to MARPOL Annex II (IBC Code carriage requirements)
- MEPC.1/Circ.879: Guidelines for the carriage of energy-rich fuels and their blends
  - energy rich fuels which are not petroleum-based should be covered by MARPOL Annex I, i.e., not necessary to require biofuels to be carried only on chemical carriers
- MEPC.1/Circ.917: *Interim guidance on the carriage of blends of biofuels and MARPOL Annex I cargoes by conventional bunker ships* adopted by MEPC 83 (April 2025)
  - allowing up to 30% biofuel blend in conventional bunker ships

# IMO safety requirements for biofuels

- On the use of **liquid biofuels** (e.g. FAME, HVO), there is already a wide set of safety rules applying today, including for blends
- **IGF Code** applies to all low-flashpoint fuels, including LNG and bio-methane
- MSC.1/Circ.1621: *Interim guidelines for the safety of ships using methyl/ethyl alcohol as fuel* approved by MSC 102 (November 2020)
  - Based on the principles of the IGF Code
- **CCC Sub-Committee** is revising guidelines for methyl/ethyl alcohol as fuel (ethanol/methanol) to ensure consistency in the approach regarding requirements on toxicity:
  - Correspondence Group established by CCC 11 (September 2025)
  - ISWG + CCC 12 in 2026
  - Approval expected in 2027
- MSC 110 recommended to develop new guidance on the safe storage and handling of **FAME** as fuel (CCC)

# Which of the following topics would you like the next Technical Seminar to focus on?

- Ammonia
- LNG (including bio- and e-LNG)
- Methanol
- Hydrogen
- Batteries
- Fuel Cell
- Nuclear Propulsion

Scan the below QR Code or enter the following code on the Slido website: 4624251

<https://app.sli.do/event/ksCSwtoW9onCUae7JS6sCc>



Thank you.



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