



SUSTAINABLE & SMART MOBILITY STRATEGY

FuelEU Maritime

and perspective on future Fuel Certification for Shipping



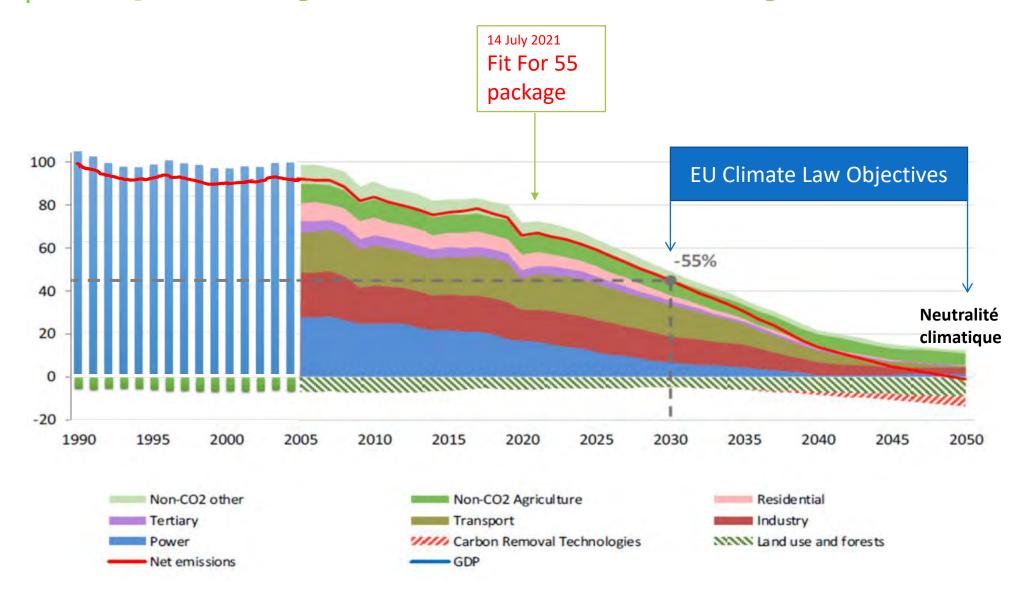




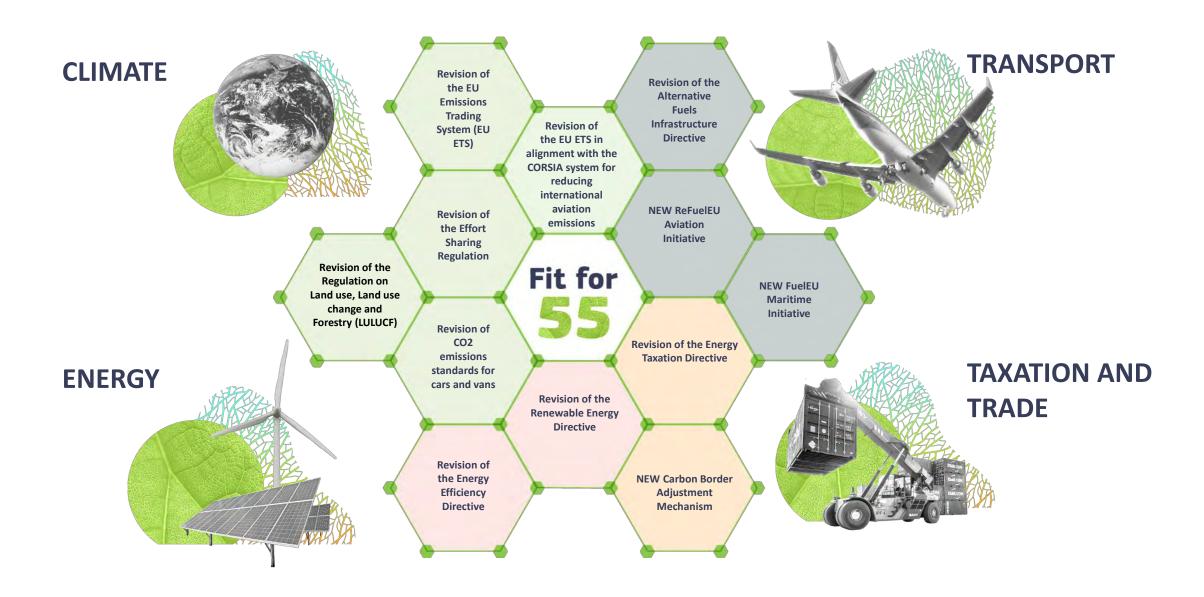
ISCC - Maritime Aviation Kick Off Event – 24 May 2022 DG MOVE D.1 – Ricardo Batista



EU pathway to climate neutrality



Delivering on the 2030 commitment



Fit for 55: addressing maritime emissions

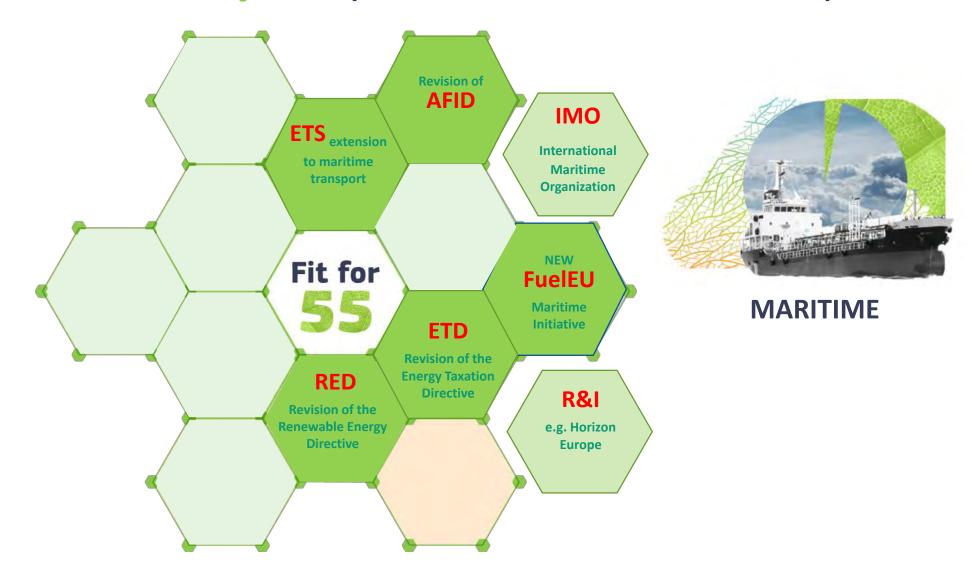
Objectives

 Ensure that maritime transport contributes to the increased EU climate effort and to the Paris Agreement commitments



- Put in place the right incentives to drive the decarbonisation of the sector, which requires:
 - Improving energy efficiency i.e. using less fuel
 - Greater use of renewable and low carbon fuels i.e. using cleaner fuels
- Address various barriers through a basket of measures (Market and economic barriers, technological barriers, lack of a strong enabling regulatory framework)
- Coordination at global level & ensuring fair competition and the proper functioning of the EU maritime transport market.

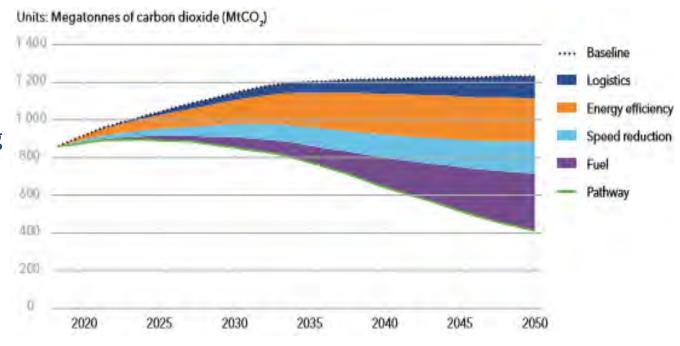
Initiatives that concern waterborne transport ("basket of measures")



Ways to reduce maritime emissions

Meeting the climate targets would require significant progress on two aspects:

- Improvement of energy efficiency (covering logistics, design, technical improvements and operations) – *i.e. using less fuel*
- Greater use of renewable and low carbon fuels – i.e. using cleaner fuels



DNV-GL (2019) | Maritime Forecast to 2050



Challenges

- To reach the climate targets in 2050, maritime sector should use close to 90% of renewable and low-carbon fuels. Today: fossil fuels over 99% of the fuel mix
- Not a single technological option for the large variety of ship types and trades. Operators are trapped in a "wait-and-see attitude"
- Coordination failure between supply, distribution and demand. Need to address all relevant aspects fuel production (Renewable Energy Directive); fuel distribution (Alternative Fuel Infrastructure Regulation) and <u>fuel demand</u> to break the chicken-and-egg issue
- Obligations must be imposed on demand not only to promote investments in supply and distribution, but also to avoid carbon leakage
- Long lead times for fuel supply chains and fleet renewal: need for immediate, yet gradual action

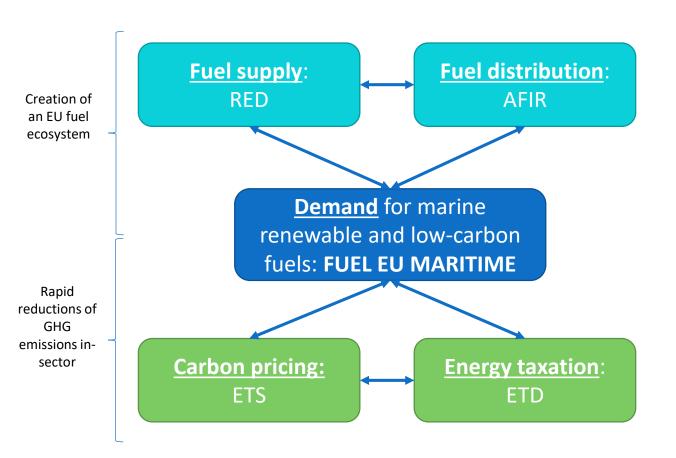


Goals

- Complement ETS by specifically addressing the technology issue related to fuels, which may not be sufficiently incentivized by the ETS price signals in the short-medium term
- Provide regulatory predictability
- EU supports global measures at IMO, where discussions are ongoing.
 The EU submission to IMO on a low GHG fuel standard reflects the proposal. Proposal on guidelines on well-to-wake GHG emission is also coherent with the FuelEU Maritime approach



FuelEU Maritime as part of Fit for 55



- Complementary with ETS: ETS promotes energy savings while FuelEU addresses fuel technology.
- Complementary with RED and AFIR: FuelEU addresses fuel demand, RED fuel supply and AFIR fuel distribution
- Complementarity with ETD: taxation levels for renewable and low-carbon fuels and for electricity at berth are consistent with FuelEU goals.

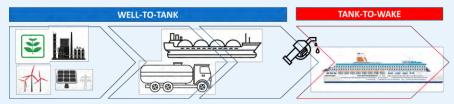
FuelEU Maritime - Proposed Approach

- Focus on fuel and on demand promotion of uptake of renewable and low-carbon fuels for maritime transport – complement to Energy Efficiency
- <u>Technology-neutral approach</u>: maritime operators will need to use an increasing proportion of zero and low carbon sustainable fuels, without obligation to use a specific technology
- <u>Establishes</u> limits on the yearly average GHG intensity of the energy used on-board (CO2eq/MJ)

| 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
|------|------|------|------|------|------|
| -2% | -6% | -13% | -26% | -59% | -75% |

- **Scope:** ships above 5000 GT, intra-EU traffic + 50% international, EU ports (same as for ETS)
- Additional requirement for Zero-Emission at berth (OPS and <u>alternative zero-emission technologies</u>) compulsory as of 2030 for container and passenger vessels (some exemptions up to 2035)

 Inclusion of CO₂, methane and nitrous oxide on a full Well-to-Wake calculation: allows fair comparison of fuels

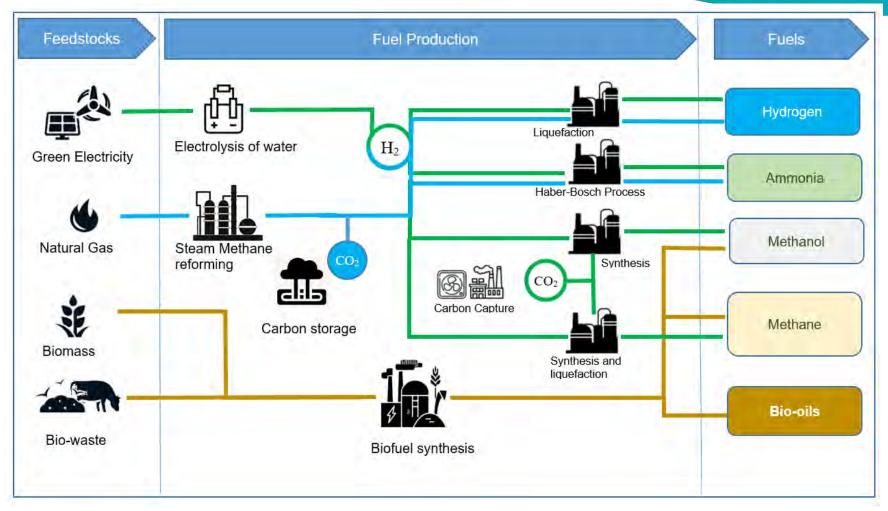


GHGe $[gCO_{2eq}] = (WtT (fuel, electricity) + TtW(combustion, slip))$

- Flexibility mechanism via banking and borrowing: surpluses and (small) deficits can be carried over to the next year
- Voluntary and open pooling mechanism to reward/ incentivise overachievers and encourage the rapid deployment of the most advanced options
- <u>Non-compliance</u> deterrent financial penalty
- Monitoring and Reporting is based on MRV approach, with some additional data (e.g. calculation of Compliance Balance)

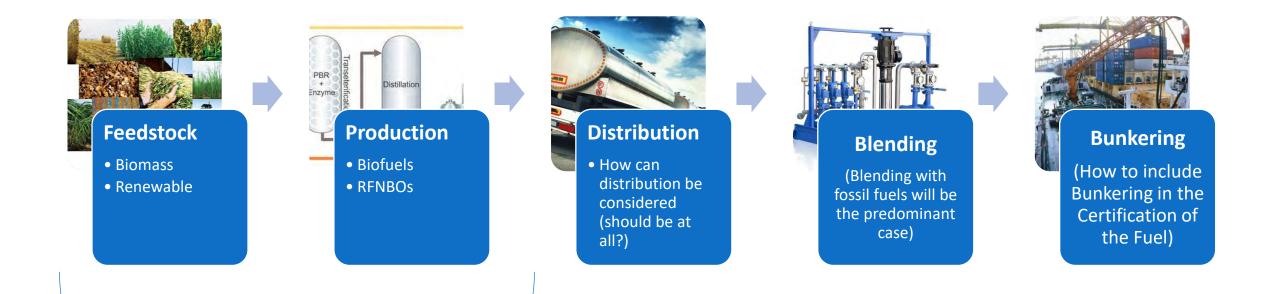
Technology Neutral Approach

Why we need it?



Perspective/Looking ahead on Fuel Certification for Shipping

Several Challenges to address



RED Sustainability Certification



How would FuelEU work?



OBLIGATIONS:

 Maximum limits on the GHG intensity of the energy used on board (yearly average) –
 Article 4

For containers, ro-pax and passenger ships obligation to connect to OPS in ports or be zero-emissions at berth –
 Article 5



Companies monitor during the year the amount and type of energy in regulated journeys / port calls (using bunker delivery notes and OPS bills) – **Articles 6, 7, 8**Data is scrutinised by verifiers

(Articles 10, 11, 12, 13) and reported to COM through IT tool (Articles 14, 15, 16)

Article 9 + Annexes

45

In case of compliance, companies are issued a valid certificate of

To provide flexibility and address issues of fuel availability the same ship can bank/borrow compliance surplus – **Article 17**

To reward early adopters and zero-emission ships, pooling of over-compliance is allowed among ships (private law agreements); no transfer of borrowed surplus — **Article 18**

Enforcement is done by checking for the certificate of compliance (Articles 22, 23); for non-compliance the company is subject to dissuasive proportionate penalties (Articles 20, 21)



compliance - Article 19

Lower GHG intensity using liquid biofuels, e-liquids, decarbonised gas (including biogas and e-gas), decarbonised hydrogen and decarbonised hydrogen-derived fuels (including methanol, and ammonia), electricity and wind. Certification relying as much as possible on existing schemes, like REDII –



In case of disagreement with the work of the verifiers, the companies may request a review (Articles 24, 25).



Commission | Mobility and Transport

Ongoing

- Discussion/ Negotiation of the FuelEU Proposal undergoing in Council.
- Link to proposal and accompanying documents:
 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12312-CO2-emissions-from-shipping-encouraging-the-use-of-low-carbon-fuels en

