



# SUSTAINABLE & SMART MOBILITY STRATEGY

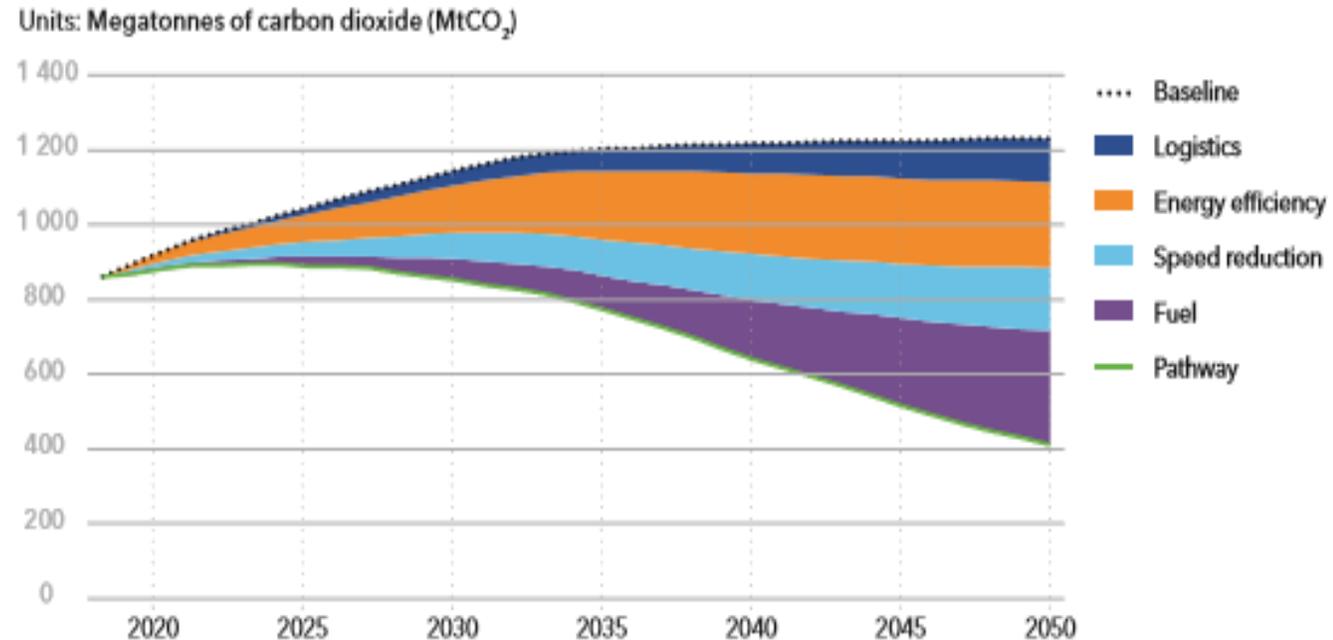
## FuelEU Maritime



## 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



# Proposal for a Regulation



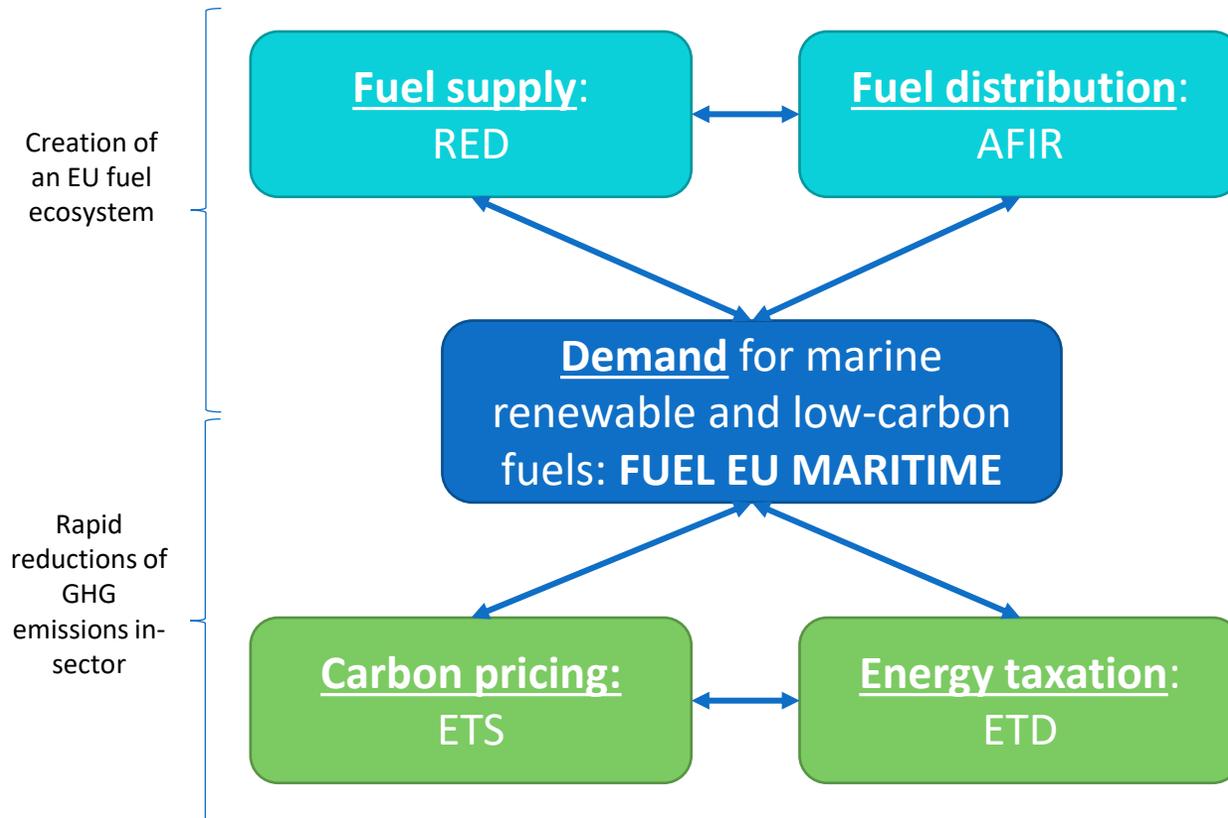
## Challenges

- 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 fuel demand – 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.

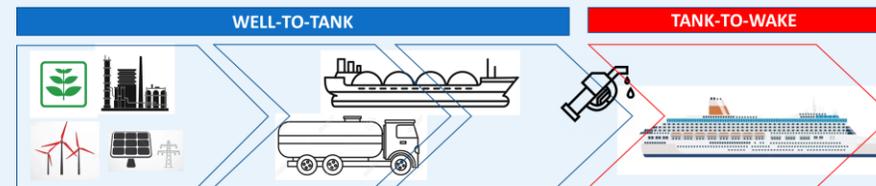
## FuelEU Maritime – Proposed Approach

- Focus on **fuel** and on **demand** – **promotion of uptake of renewable and low-carbon fuels** for maritime transport – complement to Energy Efficiency
- **Technology-neutral approach**: maritime operators will need to use an increasing proportion of zero and low carbon sustainable fuels, without obligation to use a specific technology
- **Establishes** limits on the yearly average GHG intensity of the energy used on-board (**CO<sub>2</sub>eq/MJ**)

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

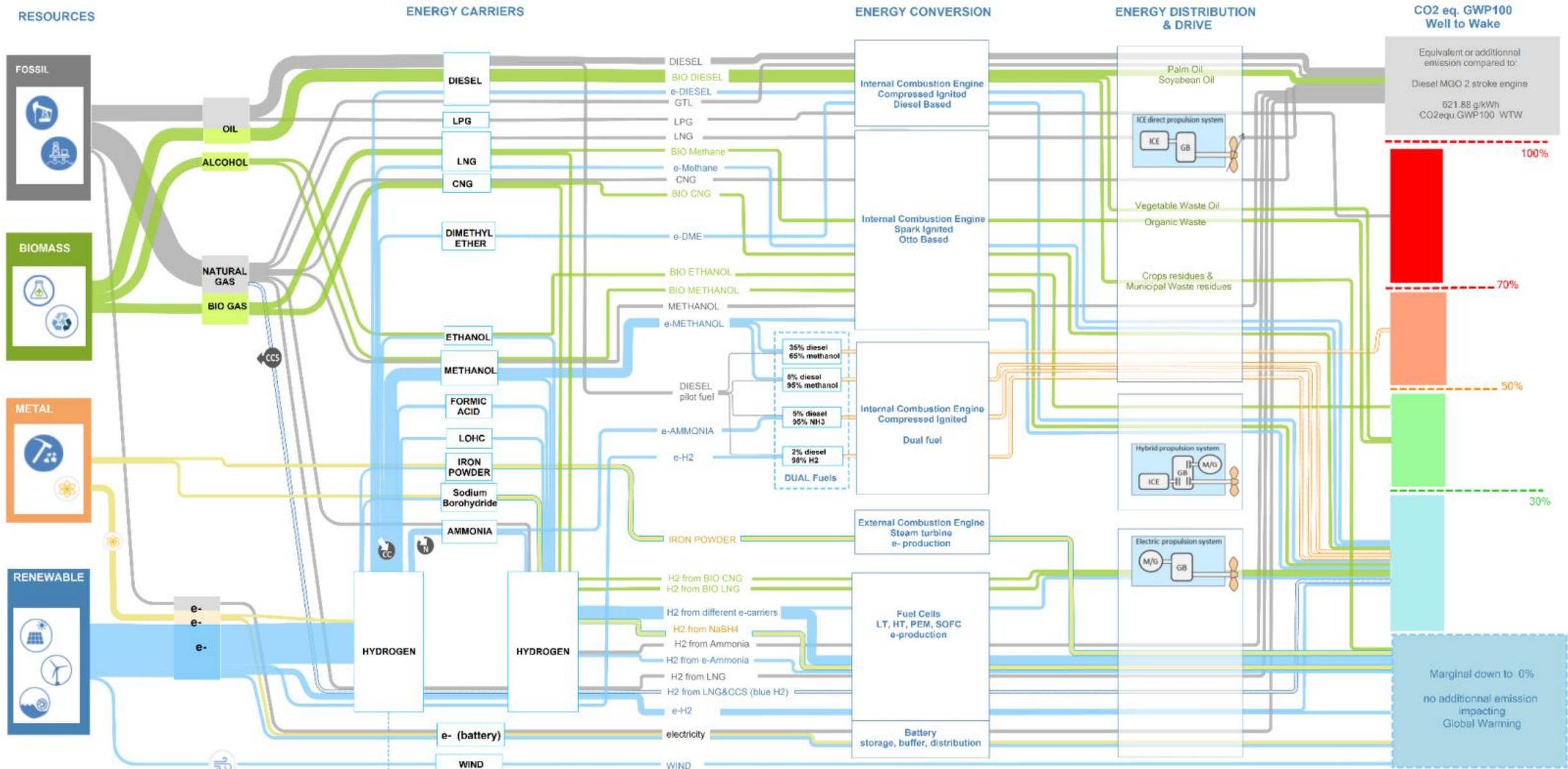
- **Scope**: ships above 5000 GT, intra-EU traffic + 50% international, EU ports (same as for ETS)
- **Additional requirement for Zero-Emission at berth** (OPS and alternative zero-emission technologies) - compulsory as of 2030 for container and passenger vessels (some exemptions up to 2035)

- Inclusion of CO<sub>2</sub>, methane and nitrous oxide on a full Well-to-Wake calculation: allows fair comparison of fuels



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

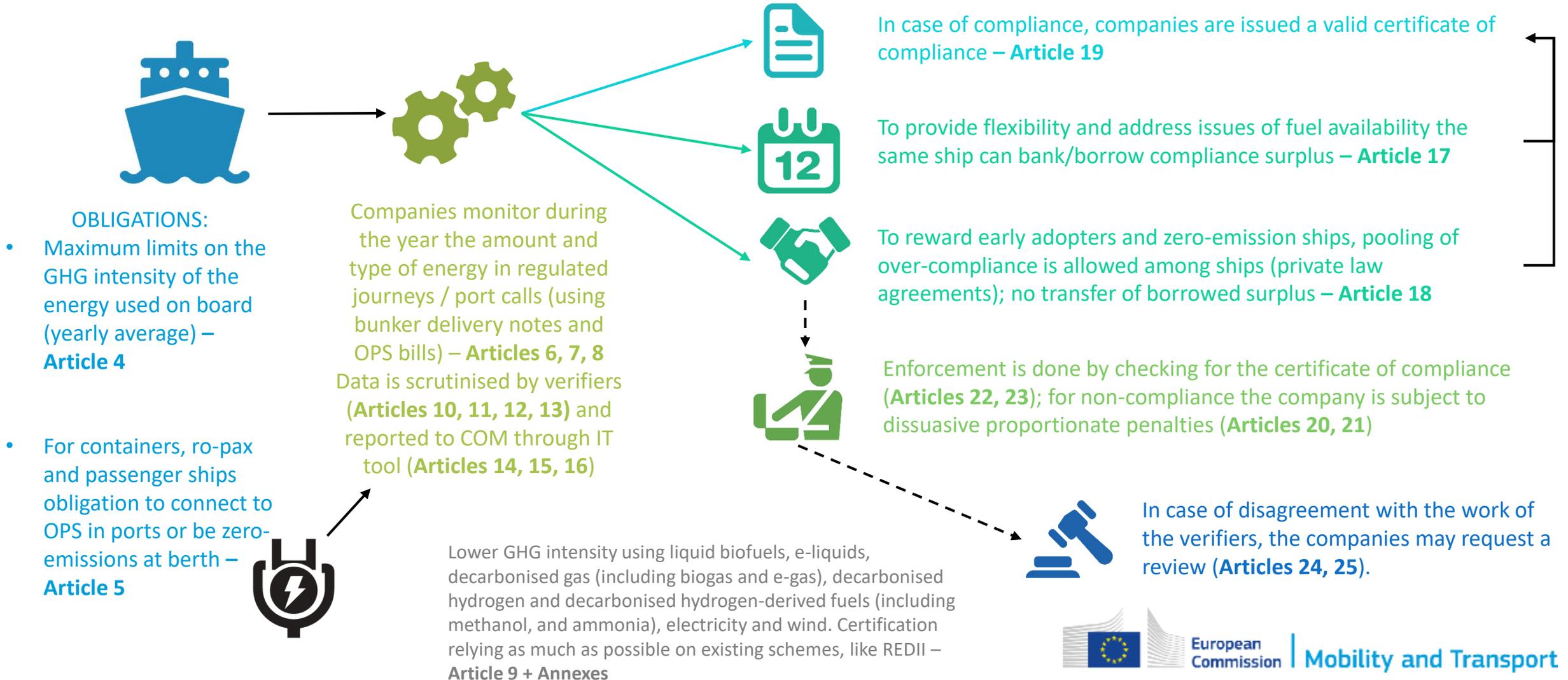
- **Flexibility mechanism** via banking and borrowing: surpluses and (small) deficits can be carried over to the next year
- Voluntary and open **pooling mechanism** to reward/incentivise overachievers and encourage the rapid deployment of the most advanced options
- **Non-compliance** – deterrent financial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



Source – European Sustainable Shipping Forum (ESSF) – Work by **MARIN**

Why is it so important to be “Technology Neutral” and compare energy options on a Well-to-Wake basis – challenge for fuel certification.

## How would FuelEU work?



## 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](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)