



Fuel certifications

Needs of a shipping and logistics company

25 April 2022

Fuel certifications - intro

- In general, certification bodies certify to existing standards like e.g. the EU Renewable Energy Directive. They may apply own sustainability criteria on top of the standard criteria
- Shipping companies need certifications for several purposes:
 - To document the sustainability of the fuel,
 - produced from feedstocks accepted by the company (or customers) e.g. wastes and residues
 - Low land use change
 - Does not lead to unintended consequences e.g. loss of soil fertility, biodiversity, poor forest conditions
 - To document the greenhouse gas emissions associated with the production of the fuel for reporting purposes
 - Consistent and auditable
 - To document traceability of the fuels to their source
 - To document more sustainable products to customers
 - In the future, shipowners may need certified marine fuels in the context of e.g. the EU Emission Trading System



Agricultural residue OK

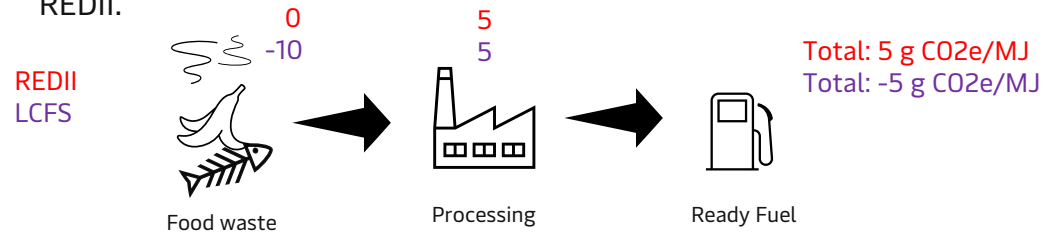


Rapeseed oil not OK



Challenges and needs

- International shipping is global and shipping emissions fall outside the national greenhouse gas emissions inventories (UNCCC), outside of local trading schemes e.g. California Low Carbon Fuel Standard (LCFS) .
- Existing standards do greenhouse gas accounting differently.
- A biofuel certified to e.g. the LCFS Standard is likely to have a very different GHG footprint than the same fuel certified to the REDII.



- Shipping needs consistency in grade naming and GHG allocation for new renewable/circular fuel plants for residual and intermediate streams.
- The EU's pending a delegated act for e-fuels*, RFNBOs (Renewable Fuels of Non-Biological Origin) is causing major uncertainty for fuel suppliers and off-takers
- Existing rules on mass-balance bookkeeping are not aligned with the realities of marine fuel logistics, e.g. floating storage, bunker barge last point before consumption.
 - Fuel production is often far from ports

* It is finally out!

Shipping needs **globally recognised** standards and **robust** greenhouse gas accounting across continents, regions and countries (and preferably also across transport modes like trucking and aviation) that emphasize **consistency**.



How to get the transition to green fuels going

- IPCC advice:
 - *Demand signals are key and fast action*
 - *There is no room for unabated fossil fuels in credible pathways to 1.5°C or new fossil infrastructure – including natural gas infrastructure which has problematic methane emissions*
- Taking into account the urgency and the pace at which action is needed, it is absolutely imperative that certification highlights sustainably produced fuels, this requires:
 - Accounting for upstream and downstream emissions
 - Accounting for by and co-product benefits/burdens in a consistent way
 - Taking into account current uses of feedstock for fuel production including the consequences of diverting feedstock from current uses, whether that is energy production or soil carbon accumulation, etc.
 - Clear definitions of carbon neutrality
- Can the transition be supported by catering for certification on mass balance basis or swapping of volumes globally?
 - Logistical challenge e.g. small volumes of green methanol and other green fuels in locations far from trade lanes
 - First mover disadvantage

Our needs for a global certificate:

- ✓ Robust sustainability criteria
- ✓ Consistent GHG accounting
- ✓ Flexible fuel bunkering logistics
- ✓ Inclusion in incentive schemes