

Life-cycle-approach: Key to unlock green investments and climate mitigation

Green fuels are essential for the maritime sector to deliver on the Paris Agreement and the EU Green Deal. The technology for producing and using the new green fuels exists, but their production and distribution needs to be considerably upscaled. To get the necessary investments started today, politicians need to provide certainty on the requirements for the fuels of tomorrow by agreeing on a life-cycle approach in the EU Emissions Trading System (ETS).

Renewable Fuels of Non-Biological Origins (RFNBOs) such as e-methanol and e-ammonia will play a key role for the maritime sector to align with the goal to limit global temperature rises to less than 1.5 degrees. Today, engines for ships to use e-methanol exist, and engines for e-ammonia are being tested. For maritime transport to reduce its emissions, these fuels need to be produced and distributed in far greater amounts. Political commitment will be required to unlock the huge investments needed to succeed.

The fuels of the future can be produced in more than one way. One example is methanol, which can be produced sustainably or from fossil energy. While both production pathways lead to the same product, the impact on the climate differs wildly.

When creating regulations, politicians should consider the full picture to accurately capture the impact of the new fuels on the climate. Assessing fuels on a life-cycle basis includes the impact on the climate from producing, transporting and combusting the fuels.

The EU-ETS proposal to include shipping in ETS only puts a price on the greenhouse gas emissions from combustion. However, some RFNBOs release GHGs during combustion that were captured upstream during production; in this way RFNBOs avoid releasing additional carbon into the atmosphere compared to fossil fuels. By including a life-cycle approach the ETS encourages the use of green fuels and put a price on new types of fossil fuels. Furthermore, the existing proposal that only considers direct emissions could encourage the use of fuels that have significant emissions during production but no emissions when used onboard.

Long-term investments are needed to produce the renewable fuels of the future in greater quantities. The lack of a life cycle approach in ETS defers investment in the production of green fuels because developers await certainty on the implications for their choice of fuel.

It has been argued that a focus on direct emissions ensures that emissions are not accounted for twice by the EU ETS, since EU-based fuels producers/refineries are subject to the ETS.

This is correct when dealing with fossil fuels. However, RFNBO fuels are produced on renewable energy sources and have no upstream emissions. Since the EU-ETS is basically designed to penalize emissions, it is not adapted to reward zero-emissions in the fuel production line, which could be tackled through a life-cycle approach.

We therefore call on politicians to unlock the green investments by agreeing to reflect life-cycle-emissions in the ETS for shipping.