

Scaling BioLNG and eLNG for Maritime Sector Decarbonisation in Europe

Why Emissions Allocation Must Follow the Biomethane/e-Methane Chain of Custody in the Recast Implementing Regulation on Sustainability Certification

The European maritime sector is entering a decisive phase of decarbonisation. FuelEU Maritime and the EU ETS create a clear and progressive framework that will increasingly require shipping companies to deliver significant greenhouse gas reductions.

BioLNG and eLNG, i.e. biomethane/e-methane that has been liquefied, are established renewable fuels. They offer an immediately deployable solution for LNG-capable vessels, using existing engines, terminal infrastructure, and bunkering logistics while helping reduce GHG emissions in a sector where scalable alternatives are limited.

Liquefaction is a necessary step of the bioLNG/eLNG supply chain and can be carried out either relying on physical liquefaction with a dedicated installation, or by equivalence through the matching of biomethane/e-methane injected to the grid with LNG available at terminal level.

Liquefaction by equivalence is one of the most effective ways to connect biomethane production with maritime demand at the scale it requires.

This approach is not theoretical. It is already used in practice and approved under the current framework in the EU and enables bioLNG to reach ports and vessels without requiring every unit of biomethane to be physically liquefied and transported. This is critical because physical liquefaction capacity alone cannot meet the rapidly growing needs of maritime bunkering across Europe.

The proposed revision of the Commission Implementing Regulation (EU) 2022/996 will render liquefaction by equivalence unviable by choosing to allocate emissions in a way that does not reflect the biomethane mass balance chain. This would reduce the volume of available bioLNG/eLNG, endanger the achievement of the FuelEU Maritime targets, and further reduce the attractiveness of the EU to bunker renewable fuels.

Allocating LNG supply chain emissions to the biomethane/e-methane liquefied by equivalence in Europe does not reflect their actual climate performance. GHG emissions allocated to bioLNG/eLNG from liquefaction by equivalence should only reflect the climate impact of biomethane/e-methane supply chains.

