

Methane Abatement in Maritime Innovation Initiative (MAMII)

A groundbreaking collaboration led by Safetytech Accelerator that unites industry leaders, tech innovators, and maritime stakeholders, all working together to advance technologies that monitor, measure and mitigate methane emissions in the maritime sector.

The Challenge

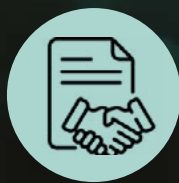
Shipping is utilising Liquefied Natural Gas (LNG) as a fuel for greener operations on the road to carbon neutrality. LNG is estimated to emit up to 23% less CO₂ than other marine fuels and is sulphur-free.

However, the environmental benefits of using LNG are undermined by methane slip and leakage into the atmosphere, where it has a significant warming effect. Technology exists to both measure and abate the emissions of methane from LNG-fuelled ships but it needs to be adapted and proven in maritime operations.

Our goal: significantly reduce methane emissions from LNG use as a marine fuel



Decarbonisation is the most important challenge for the maritime industry to reach net zero by 2050. Methane is 28 times more potent than CO₂ over a 100 year period.



Addressing methane emissions is vital if LNG is to be used as a marine fuel.



Currently, the industry lacks the information and tools it needs to accurately measure the amount of methane released by LNG-fuelled ships.



Existing technologies can measure and abate methane emissions from ships, but need more maritime validation for broader use.



As the world's third-largest LNG player, we are delighted to be joining the MAMII initiative and contributing our expertise in reducing the emissions all along the gas value chain. It is key for TotalEnergies to further improve the environmental benefits of LNG as a marine fuel, already a major decarbonisation lever for the maritime industry."

Jerome Cousin, SVP Shipping at TotalEnergies

Objectives

- Understand and mitigate emissions in the LNG fuel supply chain.
- Reduce commercial risk for shipping and accelerate methane abatement technology adoption.
- Inform key stakeholders and share insights from technology efforts.
- Enable a future in which methane emissions are no longer an issue.

Anchor Partners include:



Benefits of joining

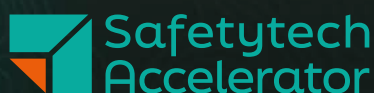
- Innovate Efficiently:** Gain early access to cost-effective, high-impact technologies and the opportunity to trial and deploy them efficiently across your operations.
- Strategic Collaboration:** Join a network of industry leaders and a curated technology ecosystem working to address safety and sustainability challenges.
- Enhanced Industry Standing:** Showcase your commitment to innovating in safety and sustainability, thereby elevating your industry profile and stakeholder perception.
- Global Impact:** Contribute to a global initiative, shaping industry standards for a safer and more sustainable maritime industry.

Achievements & Future Focus

- Produced a comprehensive technology landscape report:** Covering regulatory requirements, 'Well to Tank' and 'Tank to Wake' analyses, and cost-benefit assessments.
- Curated an ecosystem of 27 companies** specialising in methane capture, measurement, and abatement, with 20+ actively engaged with MAMII partners.
- Focus: LNG fueled ships and LNG carriers** Feasibility studies, on-ship pilots, methane measurement guidance, methane slip and fugitive emissions.

How to Get Involved

As MAMII looks to expand, join our existing members and pave the way for a sustainable future in maritime. For more information visit www.mamii.org



About Safetytech Accelerator

Safetytech Accelerator, established by Lloyd's Register, is the first fully dedicated technology accelerator focused on advancing innovation in safety critical industries, with a mission to make the world safer, more resilient, and more sustainable through the wider adoption of technology.