



LNG – a fast lane to make Europe a leader in clean shipping

Summary

- LNG is a well-developed alternative fuel of choice to help meet the IMO GHG and Air Quality objectives.
- From a climate perspective, using LNG as propulsion fuel today achieves meaningful CO2 emission reductions compared to traditional fuels.
- LNG also drastically reduces air pollutant emissions and can significantly improve air quality in port and coastal areas.
- LNG has already become a fuel of choice for key shipping companies across the world.

What is the challenge?



The International Maritime Organization has set a 50% GHG emission reduction target for 2050 in the global shipping sector.



Separately, the IMO set a limit of 0.5% sulfur (S0x) content in fuel oil as of 2020.

- · Meeting these targets will require manufacturers to adapt hull design, speed, and propulsion, but also to switch to lower-emission fuels.
- Securing the international position of European ports will require developing strategically located bunkering facilities dispensing fuels compatible with these criteria, such as LNG1.

Why is LNG a fuel of choice?

Today

- LNG is uniquely positioned to contribute to addressing both climate and air quality objectives in the shipping sector
- Unlike other alternative fuels, no compatibility issues are expected for LNG.
- LNG is produced and traded in all regions of the world, including Europe.

Existing European LNG Terminals



Source: Gas Infrastructure Europe

 The extensive European LNG and natural gas infrastructure together with Small Scale LNG modules and the flexibility of delivery modes (terminal, ship-toship, trucks, etc.) are excellent prerequisites from a security of supply perspective.

Tomorrow

- In addition to tackling methane emissions today, industry can strive to a further decarbonisation of LNG over the long-term, through blending of biomethane (bioLNG).
- LNG offers vessel operators protection against potential future restrictions on nitrogen oxide (NOx) and particulate matters (PM) emissions.
- Dual-fuel engines (Diesel & LNG) can offer flexibility to vessel operators with respect to fuel supply and economic factors.
- A well-developed LNG fueling capacity will contribute to the establishment of a 'Silk Road' or 'Green Corridor' of clean ports linking Europe to Asia to reduce shipping emissions.

What can Europe do?

- Adopt a best-performing approach giving consideration to the life-cycle GHG performance of technologies (well-to-wake).
- Build on the extensive existing European LNG terminal and natural gas infrastructure to achieve economies of scale.
- Put in place a stable regulatory system to accelerate deployment of LNG bunkering facilities.

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