

Fuel Lifecycle Analysis

LNG as a Marine Fuel 2021

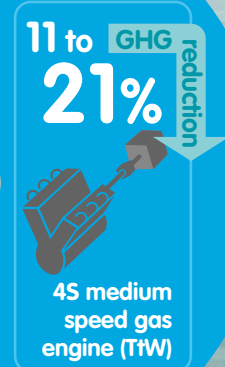


LNG IS THE MOST ENVIRONMENTALLY-FRIENDLY FUEL FOR SHIPPING TODAY AND IN THE FORESEEABLE FUTURE

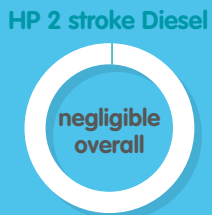
LNG marine fuel GHG reduction Benefits:



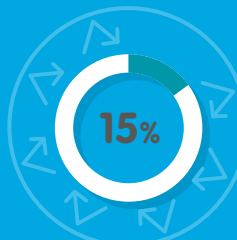
HFO+scrubber = LSFO WtW emissions
But with LNG these GHG emissions are reduced:



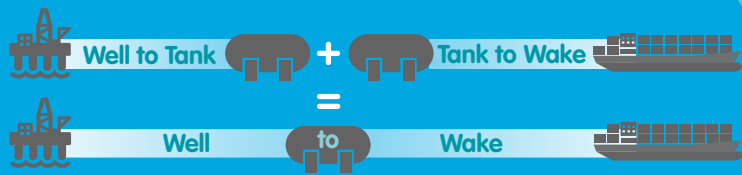
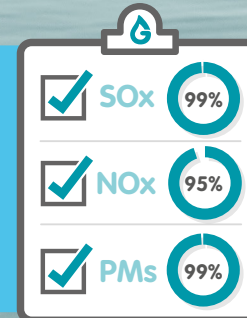
Methane slip can reduce GHG reduction benefits:



If LNG-fuelled, the world fleet today would emit 15% less GHG



Local pollutant reduction results with LNG



LCA analysis of shipping fuel

WHATS NEXT...

Gaseous fuels will be used more and more because they combust more efficiently resulting in reduced GHGs and negligible local pollutants.

Technology developments and ship operation optimisation will further reduce emissions. 30% is possible by 2030.



Use of LNG now provides a pathway for Bio and Synthetic methane and also other gaseous fuels for shipping.



INDEPENDENT – Peer reviewed by leading academics from key institutions in Germany, Japan and USA.

ISO14044 ASSURED – Assesses the supply and use of LNG as marine fuel according to relevant ISO standards.

COMPREHENSIVE – Uses latest primary data to assess all major types of marine engines and global sources of supply.

THIS REPORT IS THE DEFINITIVE STUDY INTO GHG EMISSIONS FROM CURRENT MARINE ENGINES



LNG IS SAFE TO USE, FULLY COMPLIANT AND READILY AVAILABLE AS A MARINE TRANSPORT FUEL

Standards, Guidelines and Operational protocols are all in place to ensure that the **SAFE WAY** is the **ONLY WAY** when using gas as a ship fuel.



LNG meets and exceeds all current and 2021 Marine fuel compliance requirements for content and emissions, local and GHG.



With the world LNG Bunkering fleet doubling in the next 18 months and those vessels being deployed at major bunkering hubs, LNG as a ship fuel is rapidly becoming readily available.

