This abstract will be presented during LNG2023 conference on 10-13 July in Vancouver, Canada among many other innovative projects, ideas and outlooks. LNG2023 will provide a unique platform for the global LNG industry and key stakeholders to discuss, debate, and showcase the latest industry developments and opportunities.

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BIOLNG: A DECARBONIZED ENERGY SOLUTION FOR MARITIME TRANSPORT

Maritime transport which currently runs on heavy fuel oil or diesel accounts for more than 3% of global CO2 emissions worldwide. LNG has been proven to be a safe and clean marine fuel available to reduce CO2 emissions and remove particle emissions. Offering to the market a competitive and alternative maritime fuel such a liquefied biogas, bioLNG would reduce total emissions and ensure a decarbonized maritime transport. There is still one main hurdle for the emergence of this alternative fuel: the high cost of production and liquefaction of biogas. To face this challenge and accelerate bioLNG growth, ENGIE Lab CRIGEN has proposed several studies and developed an innovative solution to reduce the cost of biogas liquefaction and debottleneck bioLNG affordability. To demonstrate this new technology's performances, ENGIE Lab CRIGEN has installed two test benches that replicates biogas liquefaction at a lower scale in order to enhance the technology TRL. Continuous tests have demonstrated the performances of the new liquefaction technology, a big step forward to ensure a competitive and decarbonized fuel for maritime transport.