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.

LEAD AUTHOR

Rossella Palmieri
Sr Business Management Manager, Baker Hughes

CO-AUTHORS

Marco Baldini
Baker Hughes

NET ZERO LNG PLANT CONFIGURATION: BOOST NEW ENERGY SOLUTIONS IMPLEMENTATION TODAY

In the recent years energy sector has increased the focus on decarbonization, studying less carbon intensive energy fuels and optimizing assets and operations. Liquefied Natural Gas is indicated as one of the major players towards energy transition when compared to other fossil fuels and new cleaner forms of energy productions will grow and develop.
In this contest, the way to prepare the market for the next years of operation is under evaluation from the energy players. Focusing on technologies that nowadays aim to reduce carbon emissions, three are the macro areas: Hydrogen, Renewables and Carbon Capture.
Depending on the specific emissions reduction target and related timeline, each of above technologies can be implemented at site with a different level of capex investments and site modifications. Baker Hughes is going to describe technologies mix composed by hydrogen burning in the gas turbines and integration of renewables in mechanical drive and power generation applications. The technologies with related distinguishing features can be implemented in greenfield and brownfield applications, leading to Net zero LNG plant configurations. Results in carbon emissions reductions will consequentially reach more than 50%, helping companies to orient themselves in the energy transition world.