

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

Andrea Sola
LNG Business Development Manager, RINA

CO-AUTHORS

Adhemar Garcia-Agreda
Business Development Director for Americas RINA

Angelo Lo Nigro:
Engineering Solutions Senior Director, RINA

BOG MANAGEMENT IN SMALL-SCALE LNG COASTAL DEPOTS: A CASE STUDY

An efficient and flexible Boil-Off Gas (BOG) management system is one of the key drivers in the development of the design of small-scale LNG plants, especially during the offloading of LNG to atmospheric pressure tanks.

In this scenario, RINA has been appointed by Edison and Kuwait Petroleum Italia (Q8) for the design of a highly flexible system able to manage BOG for a 20,000 m³ small-scale depot to be located in the Port of Naples.

The depot, at the service of sustainable mobility, is intended to receive LNG carriers, store LNG in the tank, supply it by trucks and barge ships and perform bunkering and transshipment operations. The implementation of the project will concur to the development of a small-scale market in the South of Italy and will boost the use of LNG as a fuel for maritime transportation.

In line with the current decarb trend, the plant will also be equipped to manage transfer of bio-LNG.

The depot will be connected to a local distribution network to which the BOG generated in all operational phases will be sent. Solutions designed for BOG management are noteworthy.

In particular, BOG management system is designed to operate the plant in a “no flaring” philosophy and consists of the integration of a power generation unit (partially covering the BOG production and the electrical plant self-consumption), and a compression system to send the BOG excess to the grid and the carriers during the plant reloading, therefore optimizing the entire BOG balance.

To view the full conference agenda, visit <https://www.lng2023.org/lng-programme-overview>