

## PRESS RELEASE

# SENER receives DNV GL Approval in Principle for two new LNG-fuelled bunkering vessel designs

Barcelona (Spain), September 19, 2018 - The global quality assurance and risk management company DNV GL has presented the engineering and technology group SENER with an Approval in Principle (AiP) Certificate for a LNG-fuelled bunkering vessel. The new innovative design has been found to comply with DNV GL class rules and all current and upcoming regulations, including the new emission control regulations and the IGF Code for fuel with a low flashpoint.

Two separate AiPs have been issued, covering the new design of the SENER LNG Bunkering Vessels (LBV) family which consists of a small unit having a bunker capacity of 4,000 m<sup>3</sup> and a "big brother" having bunkering capacity of 8,000 m<sup>3</sup>.



*Mr. Rafael de Góngora, General Manager of Marine at SENER, receives the AiP from Mr. Lucas Ribeiro, DNV GL Area Manager Iberia & France.*

Mr. Rafael de Góngora, General Manager of Marine at SENER, stated: "We have focused our design on the optimization of the cost, safety, efficiency and bunkering processes, by minimizing Opex and Capex, reducing the risks during loading and bunkering operation, and managing and reducing the boil off."

He added: "LNG is emerging in several ship sectors and has a great potential but should be accomplished by the necessary port facilities and infrastructure capable of providing a quick and efficiency gas refueling, in which LNG bunkering vessels will play an important role. SENER, with this project, will contribute to make this potential becoming a reality."

"We were very pleased to have worked on this innovative design with SENER. It offers our customers a flexible, safe and future-proof solution as well as the opportunity to facilitate LNG bunkering, while at the same time contributing to the decarbonization of the maritime industry and further elimination of the emission of greenhouse gases," said Mr. Lucas Ribeiro, DNV GL Area Manager Iberia & France.

“We are delighted to have been able to support SENER in the development of the innovative LBV concept.”

The approval process has paid special attention, on top of the traditional topics such as hull structure, stability, etc., to the most innovating items of the project related to cargo handling, (liquid and vapour), hazardous zones and risk assessment, mooring arrangement and quick release, manifold, transfer arms and hoses as well as boil-off.

The AiP Certificates were delivered at DNV GL’s Madrid office in a brief ceremony attended by SENER and DNV GL representatives.

### **About SENER**

*SENER is a private engineering and technology business group founded in 1956. Its aim is to offer its clients the most advanced technological solutions and to achieve international recognition based on its independence and commitment to innovation and quality. SENER has more than 2,500 professionals across its centres in Algeria, Argentina, Brazil, South Korea, Canada, Colombia, Chile, China, the United Arab Emirates, Spain, the United States, Morocco, Mexico, Poland, Portugal, the United Kingdom and South Africa. The group's operating revenue exceeded 766 million Euros (2017 data).*

*Media contact SENER:*

*Oihana Casas*

*SENER Corporate Communication*

*Phone: +34 918 077 318 / M: +34 679 314 085*

*Email: oihana.casas@sener.es*

### **About DNV GL - Maritime**

*DNV GL is the world's leading classification society and a recognized advisor for the maritime industry. We enhance safety, quality, energy efficiency and environmental performance of the global shipping industry - across all vessel types and offshore structures. We invest heavily in research and development to find solutions, together with the industry, that address strategic, operational or regulatory challenges. For more information visit [www.dnvgl.com/maritime](http://www.dnvgl.com/maritime)*

*Media contact DNV GL:*

*Nikos Späth, Head of Media and Public Relations*

*DNV GL Maritime Communications*

*Phone: +49 40 36149-4856*

*Email: [nikos.spaeth@dnvgl.com](mailto:nikos.spaeth@dnvgl.com)*