



Press release

## Bunkering operations supplying liquefied natural gas (LNG) to ships tripled in 2019 in Spain

- 195 LNG bunkering operations were carried out in 2019, 135 more than in 2018
- Spain stands as a benchmark in the supply of LNG as fuel for ships and LNG bunkering gains flexibility through multi truckto-ship operations
- There are 175 LNG vessels operating in the world, 22% more than in 2018

195 operations were carried out in 2019, in which 81,704 m<sup>3</sup> of LNG was supplied. This is a very significant increase compared to the 60 operations carried out in 2018, when 4,504 m<sup>3</sup> of LNG were supplied.

This growing trend continues in January 2020, with 35 operations carried out, in which 12,055 m3 was supplied. This increase has been possible thanks to the developments of the CORE LNGas hive project involving 42 partners coordinated by Enagás and the projects under LNGhive2 institutional strategy, Spanish flagship initiative for the LNG marine fuel market development promoted by Puertos del Estado and all of them co-financed by the European Commission.

The adaptation and new construction of LNG-powered ships, actively supported from the ports and these projects, will entail around 2-4 million tons  $CO_2$  reduction in the maritime sector over the next ten years.

Spain stands as a benchmark in the supply of LNG as fuel for ships. This reality is a consequence of its geostrategic positioning and the infrastructure already in place, Spain is the country in Europe with the most LNG terminals-7. Those LNG terminals were adapted or are in the process of adaptation to provide small scale and bunkering services.

165 of these operations were truck-to-ship (gas is supplied from a tanker to the ship); while 30 were the ship-to-ship type (gas is supplied from a ship to another ship). Four supply vessels carried out the 30 ship-to-ship operations: the Coral Methane with a capacity of 7,551 m³, the Coral Fraseri with 10,000 m³, the Cardissa with 6,000 m³ and the Engie Zeebruge with a capacity of 5,000 m³.

LNG bunkering in Spain is becoming increasingly more flexible and efficient responding to the growing demand in a competitive way through supply solutions from truck, ship or terminal. As an example, multi truck-to-ship operations, as the ones which are now being carried out in the Ports of Huelva and Valencia.

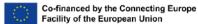












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These operations are carried out with several tankers at the same time, increasing the transfer flow and thus bringing down refuelling time. Joining the whole portfolio of alternatives to meet LNG consumption, not only of ships, but of land modes that converge in the port, such as rail.

Six LNG-powered ships (four ferries and two cruise ships) currently operate in Spain. In the next two years, there will be at least 11 such vessels operating in Spain. There are already 175 LNG-powered ships operating in the world and another 139 are LNG ready. This is a 22% increase on 2018. An additional 72 vessels have been ordered.

LNG is a sustainable fuel that meets the requirements of the International Maritime Organization (IMO) limiting sulphur content in fuel to 0.5% from January 2020. It also represents a step forward towards achieving the IMO's emissions targets, which are for a 40% reduction in  $CO_2$  emissions by 2030 and 70% by 2050, thus bringing about the decarbonisation of maritime transport.

Compared to traditional fuels, LNG reduces  $CO_2$  emissions by around 20%, almost completely eliminates emissions of sulphur oxides ( $SO^X$ ) and particles (PM) and substantially reduces nitrogen oxides ( $NO^X$ ). As an example, an LNG cruise ship reduces  $CO_2$  emissions equivalent to removing 10,000 passenger vehicles from circulation. Large ports such as Barcelona are already benefiting from LNG ships and cruise ships that dock there, improving the air quality of both the port and the city.

In addition, as shown in a recent study commissioned by Gasnam and prepared by DNV that analysed 9 types of ships propelled by 5 different fuel types, LNG is the most economical option for high-fuel consuming vessels such as RoPax, container ships and cruise ships.

All this and much more will be analysed on 1 and 2 April in Madrid at the <u>Green Gas Mobility Summit</u> event where companies, start-ups, universities and national and European administrations committed to the decarbonisation of transport and the circular economy will meet.





