

# Mobile unit to supply electricity generated by LNG to ferries, during its stay in port

## EPT1

Mobile LNG powered electricity generator to supply ferries' auxiliary engines.

This OPS is able to navigate in a ship or to be placed in the wharf at port, which could be used for more than one vessel.



## Partners involved



Port de Barcelona



Puertos de Tenerife

Autoridad Portuaria de Santa Cruz de Tenerife



Puerto de Vigo

Autoridad Portuaria de Vigo

The objective of the project is to reduce the emissions that ships produce during their calls in ports by replacing the operation of the auxiliary engines of the ship with mobile LNG units that provide electricity to the ship.

On the 15th of December the Port of Barcelona was the official presentation to the media and the fourth test of the first electric connection to a vessel from a dock using an engine powered by natural gas. Next tests are foreseen in Tenerife (Apr 2018) and Vigo (May 2018).

● **EPT1:** This IPS develops an innovative solution in order to implement a mobile LNG powered electricity generator to supply the auxiliary engines of ferries. As a mobile unit it is able to navigate with ship or placed in the wharf at port, being more versatile as it could be used for more than one vessel. No other solution of this kind exists in Spain. The trial looks for market conditions for deployment on larger scale, focusing on ferry and cruise ship.



This EPT1 sub-activity pilot aims decentralisation and autonomous power supply of auxiliary engines of a ro-ro ferry in the port. Electricity is generated by a gas engine on the wharf. Tests will be carried out in the ports of Barcelona, Vigo and Tenerife.

The specific objectives of this sub-activity are:

- To lower emission levels and thus contribute to the air quality of the city, meeting the objectives of the Clean Air Plan for Europe.
- To develop a feasible, versatile and economical solution for ports and shipowners which will give continuity and development of this measure to reduce emissions in ports located in the vicinity of cities.

EPT1 consists of the design and installation of a mobile gas generating unit that incorporates:

- Generator Engine of 850kW that runs with natural gas.
- LNG feeder tank with gasification equipment.

The two units (motor and tank) installed on the deck of the ro-ro vessel "Bouzas", property of FLOTA SUARDIAZ when it is docked or when it remains in the berth. The ship adapted its electrical box to be able to use the electricity generator replacing the auxiliary engines while in port.