## **Bilbao: New tugboat powered** by LNG

## EPA3

The existing and future maritime fleet needs to be adapted in terms of technology of engines and storage in order to continue with the transition towards a more environmentally-friendly shipping sector through the use of LNG as alternative fuel.

The general aim of this concrete action is the development of a LNG powered harbour TUG and its incorporation to Bilbao port tugs service.



## **Partners involved**



The tugboat construction will be executed by R. Ibaizabal and it is foreseen to be finished by the Q2 of 2019.



• **EPA3:** This IPS will develop an innovative solution consisting on the first LNG harbor powered tugboat within the EU and its implementation in order to test its feasibility and suitability as well as its added value before deploying it on a larger scale. The tugboat will be incorporated to the Bilbao port service.

The transition towards a more environmentally-friendly shipping sector through the use of LNG as alternative fuel requires a double axis action. On one side, the existing and future maritime fleet needs to be adapted in terms of technology of engines and storage. On the other, terminals and other facilities at ports need to be upgraded or developed in order to deploy a full supply chain providing enough security of supply.

Objectives of this action are:

- The development of the first LNG-powered tugboat within EU.
- The promotion and use of LNG as fuel, reducing the marine environmental impact and energy consumption at the Port of Bilbao.
- As the marine LNG fuelled engine market has been dominated in its relatively short life by a small number of players, the action aims to push for both application of new LNG techniques and technologies.
- In this action will be analysed and assessed the possible options for design and supply of "cold box" for LNG-fuelled vessels in the Basque Country (Spain) as alternative to those technologies already positioned in the market.
- Last but not least, this action aims to enable Bilbao port investors, EU policy-makers, citizens and industry to understand and decide which technologies generate the best socio-economic value and have the highest potential for rapid deployment across the EU.

Finally, It should be noted that this action is completed with other two:

- Design of resources, infrastructure and procedures necessary to supply LNG as fuel in Bilbao Port to ships sailing the Atlantic corridor. (see EPA 1).
- The adaptation of an existing ship to LNG bunker barge to provide a Ship to Ship LNG bunkering service to ships sailing the Cantabrian Coast within the southwest Atlantic Corridor (see EPA 2).