

CORE LNGas hive

A more sustainable transport

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Newsletter N° 6 2Q 2018





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CORE LNGas presented during the TEN-T Days organised by the European Commission in Ljubljana, Slovenia 25-27th April

The CORE LNGas hive project participated at the Trans-European Transport Network (TEN-T) days in Ljubljana. The event counted with the participation of more than 2000 institutions, including 26 Ministers of Transport (one of them Spanish Ministry Iñigo de la Serna), Members of the European Parliament and key stakeholders. The TEN T-Days agenda focused on how contributing to a smart, sustainable and safe Mobility, relying on the trans-European transport network and investments in transport connectivity.

High-level Interinstitutional meetings took place, aimed at analysing further synergies between transport, energy and digital connectivity, and the EU investment support for the post-2020 framework. These activities converged in the approval by all relevant stakeholders of the Ljubljana declaration on key principles for investment in smart, sustainable and safe mobility. In parallel, additional high-level events took place, such as the Ministerial session with Southern Mediterranean countries. The TEN-T Days also hosted an idea accelerator and futuristic lab that allowed young European entrepreneurs and companies to showcase innovative mobility solutions.

The TEN-T days also hosted an exhibition aimed at presenting the activities and scope of more than 100 co-funded transport projects. CORE LNGas hive shared its scope and aims with the event attendees on Thursday 26th and also took part to the exhibition with a stand with information and videos about the initiative that is developing a safe, efficient and integrated logistics chain for the supply of LNG as a more sustainable fuel for the maritime sector. It was a perfect opportunity for the Project Coordinator, Fernando Impuesto, and Technical Leader, Jose Enrique Murcia, to interact with stakeholders and representatives of





the European Commission, including the European Commissioner for Transport Violeta Bulc, the Spanish Ministry of Public Works and Transport, Iñigo de la Serna and Spanish representatives at the Trans-European Transport Network, María del Corral and Rosa Izquierdo.





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The kick off meeting of the project stakeholders' group took place in Madrid on March 2nd 2018, counting with the representatives of 77 companies, including shipbuilders, engineering firms, shipping companies, public administrations, universities, port authorities and associations.

Organized by Enagás, as project coordinator, the meeting pursued the aim of presenting to the attendees CORE LNGas hive as a whole, the studies and pilots that it proposes, and the stakeholders' engagement plan defined in order to take on board external feedback, considered as elemental in order to maximize the project impact.

Enagás Gas Assets General Manager, Claudio Rodríguez, opened the meeting by stressing the importance of the project as an "opportunity First meeting of the CORE LNGas hive project stakeholders group

within the framework of the European Union that values the role of liquefied natural gas as fuel". He thanked the stakeholders for their participation and highlighted the main role of shipping companies and, in general, of all different sectors involved as key "for the project to become known and be part of the strategy of the entities invited". The project coordinator and Enagás Entrepreneurship General Manager, Fernando Impuesto, presented the general aspects of the action and the new opportunities offered by LNG, notably within maritime transport, as well as the forecasted evolution of the demand for liquefied natural gas. Puertos del Estado (the Spanish government agency in charge of the state-owned port system), represented by Antonio Góngora, Head of logistics and intermodal area, shared with the attendees the progress of the "National Action Framework for Alternative Energy in Transport", approved on October 2016 and the actions that are forecasted in order to perform its triennial review. José Enrique Murcia, Project Technical Leader and Mar Casado and Enrique Olarte, Project Technical Officers, presented the details of CORE LNGas hive, explaining the efforts of the 42 project partners in the development of feasibility studies and pilots covering different typologies of infrastructures (including barges, jetties, tugs, straddle carriers, mobile OPS and LNG/CNG stations).

The final part of the meeting represented an opportunity for the stakeholders to take the floor, introduce themselves and briefly explain what they expected from the stakeholders group, constituting a great networking opportunity for all the attendees.





Newsletter N° 6 2Q 2018 www.coreIngashive.eu ©@core_Ingashive II CORE LNGas hive Conference took place on March 23rd in Galicia The II CORE LNGas hive project conference, aimed at the promotion of liquefied natural gas (LNG) as a fuel in the transport sector, took place in the framework of the Galicia Energy Exhibition – Feria de la Energía de Galicia. The event was officially opened by the President of the Spanish Ports Authority, José Llorca, the Director General for Energy and Mines of the Government of Galicia, Ángel Bernardo Tahoces, the Gas Assets General Manager for Enagás, Claudio Rodríguez, and the General Manager of Reganosa, Emilio Bruquetas.

The aim of the conference was presenting the status of the project and the commitment of the European Commission and the Spanish

Government to promote decarbonisation of the transport sector, especially in the maritime transport.

José Llorca pointed out that CORE LNGas hive "is a project of national significance", and therefore a cooperative project in which all partners actively participate. "In the field of international maritime transport, Spain lies on the main sea lanes and in a privileged position for supplying ships with LNG," he said, being the leading country in Europe as per infrastructures. Llorca announced the forthcoming publication of a royal decree on tolls for the transfer of LNG to ships, considered as essential in order to transform Spain in an LNG hub. Moreover,









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he announced that progress is being made with regard to other regulatory aspects in order to make this supply a basic port service.

According to Claudio Rodríguez, "The Spanish gas system has spent close to 50 years innovating in logistic alternatives that today, through the CORE LNGas hive project, allow us to showcase an experience that we have turned into an opportunity to develop sustainable solutions for more competitive and efficient maritime transport respectful of air quality."

Emilio Bruquetas stated that "There is a need to materialise all the plans contained in the CORE LNGas hive project so that Spain will become an engine for change for maritime transport (From left to right) Claudio Rodríguez, Enagás Gas Assets General Manager; José Llorca, Puertos del Estado Chairman; and Emilio Bruquetas, Reganosa General Manager.

Monika Zsigri from DG Energy, European commission.



fuel. The sea cannot be overlooked at this time of energy transition, and we must offer to ship owners' an efficient infrastructure to guarantee LNG availability at ports. This project is a very important step; it has shown us the way, but it is only the beginning."

Monika Zsigri, representative of the European Commission's Directorate-General for Energy, highlighted that the promotion being given to alternative zero or low-emission fuels can play an important part in the transition towards sustainable, low-emission energy. "We want to guarantee a stable and secure supply."

José Enrique Murcia, CORE LNGas hive technical leader, presented an update of the progress made by the members of the project in 25 activities: 14 studies and 11 studies with integrated pilot, targeted at adapting infrastructure to develop logistic and commercial facilities to provide smallscale services and bunkering (LNG supply as fuel for ships). After him, Carlos Vales, director of the Reganosa Hub project explained the specific aspects of the North-West Iberian Hub, including the existing plans to equip the Mugardos terminal with a new storage tank and jetty, in addition to adapting the existing jetty to small-scale, in order to serve the future demand arising from sustainable shipping.

To finalise the event, a round table discussion was held, focused on the implementation of LNG as a maritime fuel - presented as the most economically and environmentally efficient substitute for the fuels currently used in shipping. The discussion presented the perspectives of shipbuilders, ship owners, shippers, certification agencies and government institutions.

Further events forecasted in 2018

CORE LNGas participation is forecasted for the following events during 2018: Madrid LNG Shipping Forum (24th and 25th May); 5th Workshop "LNG Roadmap –LNG as a driving force for cross-border cooperation within Europe" (Germany, 29 May) and Gastech in Barcelona in September.

The III CORE LNGas hive Conference is foreseen in Algeciras (Spain) during the month of October 2018.





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The studies that analyses the adaptation of Sagunto SAGGAS regasification plant to provide bunkering services have been finalized

The subactivity EV5 "Adaptation for LNG bunkering/small scale services in regasification plant of Sagunto" has almost achieved the objective set at the beginning of the project. The technical studies carried out in the subactivity were used to determine the necessary works for the adaptation of SAGGAS regasification terminal for LNG bunkering/small scale services. Additionally, the financial feasibility of such works was also evaluated through a Cost Benefit Analysis which considered the potential demand, the required investment and the operational costs. The current SAGGAS facilities have been designed for big scale operation involving large LNG tankers. A technical feasibility study analysed the compatibility of the current state of the infrastructure with vessels that potentially could use the terminal for bunkering purposes (smaller ones). This compatibility study specifically examined the adequacy of the existing fenders, mooring systems, gateway and loading arms to vessels either directly receiving LNG as a fuel or bunkering barges for LNG supply to other vessels.

Additionally, an engineering study carried out in the framework of the CORE LNGas hive project determined the necessary modifications in the LNG system for the addition of a loading system adequate for small scale operation and more specifically for the operation involved in the LNG bunkering market. The study concluded that the use of flexible hoses is the most adequate technical solution in this case.





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News from project partners

Retrofitting to LNG of the railway transport services in Tarragona port area

Port of Tarragona, as a partner of the CORE LNGas hive project, has completed in December 2017 the subactivity EV3 "Port locomotive powered by LNG" that aims to pave the way towards the introduction of LNG as a more sustainable alternative to current diesel technology in railway traction, driven by increasingly stringent environmental regulations. The first phase, a feasibility study, was carried out by Institut Cerdà and it was finished in September 2016. As a result, technical and legal barriers were identified and the economic feasibility and environmental impact concerning the introduction of LNG to the manoeuvring railway service at Port of Tarragona was analysed.

The second phase started in June 2017 when the tender to study the necessary technical modifications to convert diesel locomotive to LNG



was launched; it was awarded during the month of August to GPO Ingeniería. The study details all the steps to be considered for the transformation of the locomotive - Adif model 310 - with the aim to implement a future pilot test in the port area. The categories considered in the study involve: engineering - technical characteristics of the engine and tanks and their impact for instance on maintenance plans, weight distribution or gravity centre of the vehicle; integration – necessary work to be done by an integrator to replace the diesel-powered system with a new one with LNG in the current locomotive; and validation – in case of a pilot test, the methodology and data to record in order to evaluate the modified locomotive.





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Push forward the process of decarbonization in the Iberian Peninsula

Contribute to the reduction of pollutant emissions in shipping

Position the maritime industry and natural gas as maritime fuel Increase the European visibility within the Iberian Peninsula LNG sector

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€**16.65**Mn

financial support from the European Commission



partner entities from Spain and Portugal: 8 state-owned institutions, 13 port authorities; 21 industrial companies Propuls

€333

project budget



Puertos del Estado



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