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LEAN DER

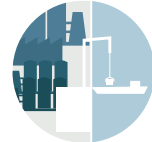
Duisburg

LNG - The clean alternative to diesel in the Port of Duisburg

LOCATION



SCALE



TAG



R&D facilities



environmental
regeneration



smart logistics

What's happening?

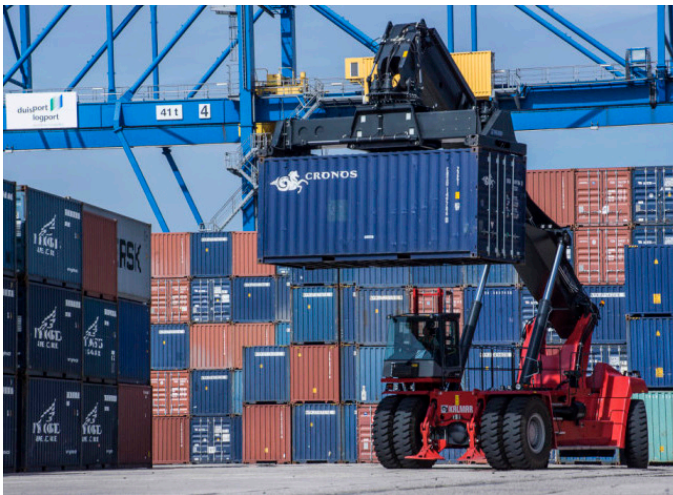
How does it happen?

The LEAN DeR is a joint research project developing multimodal LNG infrastructure for the Duisburg Port. The project develops an integrated and sustainable LNG logistic system, having as a test site the port of Duisburg, in order to shift to a sustainable mobility inside the port. The Demonstration project has the aim of create awareness and increase the knowledge for the use of LNG within the industries. The test will be carries out in Dual fuels operations and, in the same time just with LNG fuels, in order to experiment and develop a long-term business model for transition from fossil fuels to LNG fuels.

Why is this an interesting circular initiative for circular harbours?

This research project is developing new means of mobility inside the port in order to manage and support the transition from fossil fuel to more sustainable and ecological fuels. It is important to recognize the aim of this project to implement the smart logistic within the Duisburg port and in the same time enhance the innovation in the logistic field as a way to strengthening different collaboration within the port.

More information



LNG vehicle in the Duisburg Port

What is the relation with the port and water?

The LEAN DeR project is developing a system to transform the Duisburg port. In this sense, new typology of infrastructure will be made available inside the port, furthermore an LNG fuel station have been installed, with the aim of being a mobile fueling station providing for port vehicles the necessary support.

What is the relation with the city?

The use of LNG fuel is reducing on one side the operational port costs (estimated to -35%), together with the decrease of CO₂ emissions (estimated to -25%) especially when used in heavy vehicles with big energy requirement. In this sense the change in LNG infrastructure could have a positive impact on air pollution not only in the port but also in the city of Duisburg. Therefore the positive impact coming from the transition from fossil fuels to the LNG one can reflect also on the general environment of the whole city.

What is the timeframe?

Sources

<https://www.duisport.de/unternehmen/unsere-verantwortung/forschung-foerderprojekte/?lang=en>
https://www.uni-due.de/mechatronik/forschung/leanderlng_en.php



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Partners involved in the Lean DeR research project

What are the ambitions?

The ambition of this research project is to support the transition in the port of Duisburg, from fossil fuels to more sustainable fuels. In this sense, the experimentation and the tests have been located inside the port in order to monitor and observe the efficiency and the emission of the new LNG vehicles. The aim of this research is to keep implementing the use of sustainable fuels within the port in order to have a more ecological logistic.

Who is behind it?

The research is carried out by the industrial partners as the Duisburg Port Authority and the RWE Supply & Trading, together with the Universität Duisburg Essen (UDE). The research has been funded by the European Fund for Regional Development (EFRE).