

The RaiLNG Project studies the technical, economic and environmental feasibility of establishing a **liquefied natural gas (LNG)** infrastructure as a new energy source for **rail traction in the European Union**.

Project Activities

- Test infrastructure preparation **01**

Normative study, staff training and concession of authorizations and permissions necessary to carry out the pilot test.
- Pilot tests **02**

Real tests are carried out over about 15,000 km to extract technical, environmental, logistical and economic data.
- Studies **03**

Aimed at facilitating the deployment of LNG infrastructure in the railway sector in Spain and the EU. Data from the pilot test will be evaluated in order to carry out logistic, environmental, economic, technical, regulatory studies, and life cycle analysis (LCA).
- Programme for the implementation of LNG rail transport in the TENT-T network **04**

It evaluates the technical, economic and environmental feasibility of deploying LNG in Spain and other EU Member States as an alternative fuel in rail at other scales and different locations on the TEN-T network.



Loc - Diesel

Platform

Loc - LNG

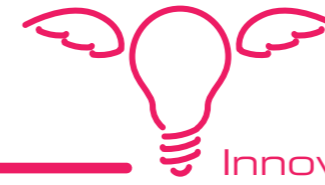
Composition of the CEF traction group

Environmental Sustainability

- Improves air quality.
- Reduces soil pollution from diesel spills.



Natural gas: an alternative railway energy of the future



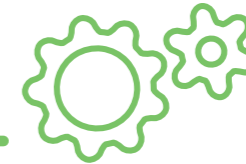
Innovation

- Design of the **first LNG-powered unit** in **Spain**.
- **Adaptation** of the **railway network** to the logistical needs of LNG operation.
- **Application** of **LNG logistics** to the railway sector.



Economic Sustainability

- **Saving** in fuel and taking advantage of the existing logistics and motorizations to facilitate the introduction of other renewable gases.
- **Alternative to the high costs** of electrification of railway lines.
- **Increase** in the use of railway gas infrastructure **capacity**.



LNG in rail transport

- The project addresses the integration of LNG into the life cycle of railway operation: refuelling, operation and maintenance.
- **Reduction of LCC costs** as opposed to conventional solutions (diesel or electric) is greater than 40%.
- **Reduction of "externalities"** by diesel substitution is greater than 95%.
- The project **improves railway**, economic, social and environmental **impact** efficiency of the park by more than 20%.
- **Improves the competitiveness** of rail transport of unprofitable electrification, action with both social and direct environmental impact on the carbon footprint of land transport in continuous growth.



RaiLNG
CEF 2016

Co-financed by the Connecting Europe Facility of the European Union

Budget: 4.8 million euros

Partners: 4

15.000 km real test



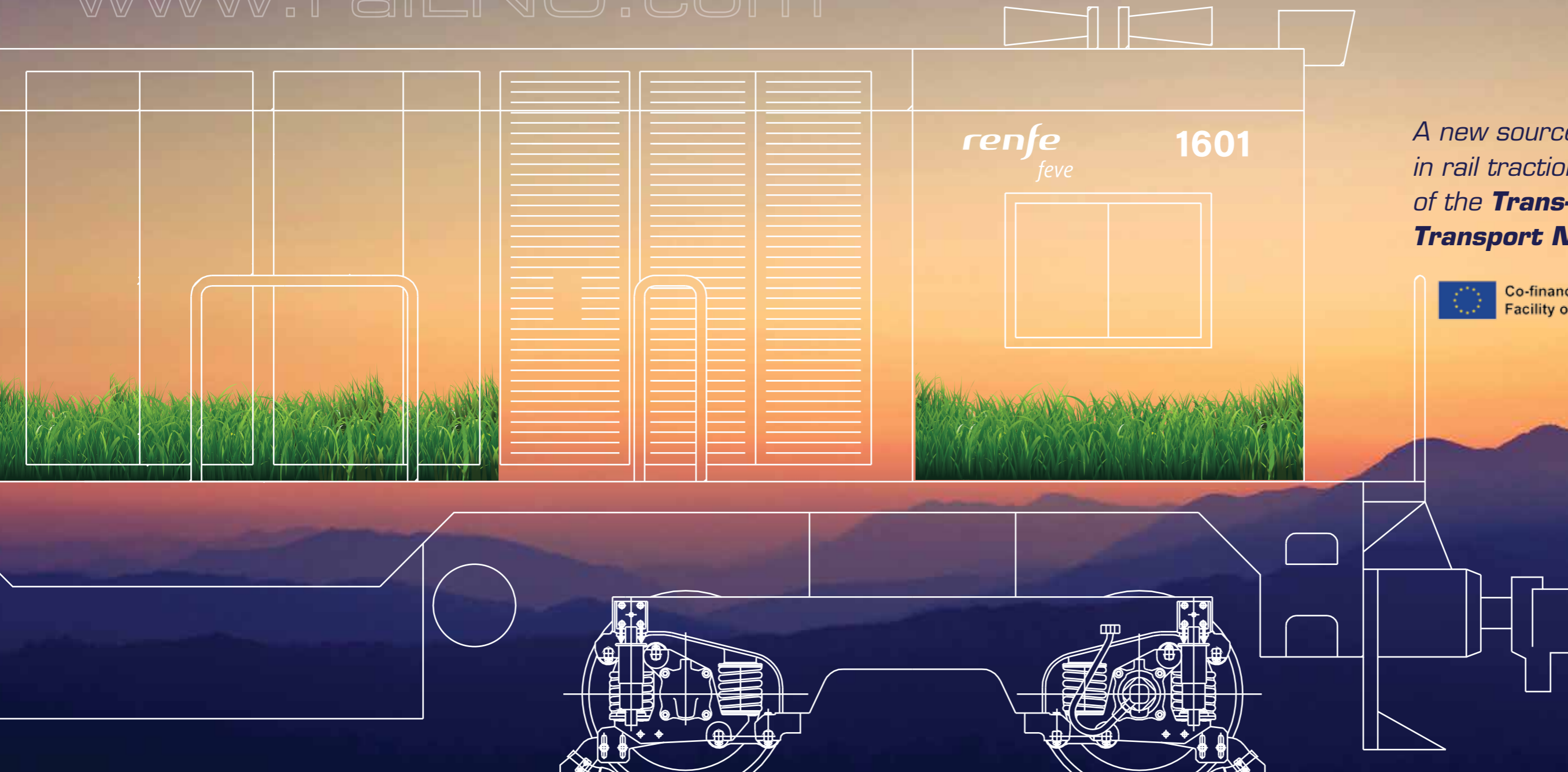


RaiLNG Project

liquefied natural gas (LNG)

An alternative railway energy of the future

www.raiLNG.com



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A new source of energy
in rail traction on the corridors
of the **Trans-European
Transport Network (TEN-T)**



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Facility of the European Union