

OUTPUT FACT SHEET

Pilot actions (including investment, if applicable)

Version 3

Project index number and acronym	CE1444 InterGreen-Nodes
Output number and title	Output O.T3.2 “Highly visible and practical development and demonstration of technical solutions” for Deliverable D.T3.2.6: LNG use in freight transport in Emilia Romagna Region Pilot
Investment number and title (if applicable)	N/A
Responsible partner (PP name and number)	PP8 Freight Village Bologna
Project website	https://www.interreg-central.eu/Content.Node/InterGreen-Nodes.html
Delivery date	30.06.2022

Summary description of the pilot action (including investment, if applicable) explaining its experimental nature, demonstration character and transnational added value

The main goal of the demonstrator is the realization of a new LNG filling station for truck inside the main and biggest freight village of the Emilia Romagna region. The action is part of the infrastructure decarbonization strategy and includes several other actions and investments in the medium and long term, such as the building of new rail and intermodal facilities and the modernization of the existing ones, the digitalization of the intermodal terminal operations, the implementation of several energy sources inside the infrastructure, the creation of an energetic community.

The whole strategy, in turn, is included in the Emilia Romagna region's plan to foster the green transition envisaged by the European Green Deal to achieve climate neutrality by 2050.

Specifically, the implementation of a LNG refueling station promotes the use of sustainable fuel by freight transport operators, as transport is responsible for a quarter of Europe's greenhouse gas emissions (*Source: The European Green Deal [COM (2019) 640 final]*), with a constantly growing impact. Indeed, natural gas has become increasingly important in the international energy scene, especially regarding freight transportation, with prospects for further growth in the coming decades. The output of the demonstrator will be used as a reference in the Emilia Romagna Region to be applied in other similar locations, in order to create a network of LNG plants serving the road freight transport. Likewise, the regional model can be replicated in other regions, particularly in those with high productivity and density.

NUTS region(s) concerned by the pilot action (relevant NUTS level)

Considering that the LNG distributor is used by heavy traffic that, by definition, travels long distances by road, the pilot certainly has an impact on both the Emilia Romagna - NUT Region 2, and the entire Northeast - NUT Region 1, bringing environmental benefits to the entire area involved.

Investment costs (EUR), if applicable

The LNG project in Interporto Bologna needed an investment of nearly 2 million of Euro and 1,5 years for its completion. ENI had been in charge for the implementation of the KLNG plant, whereas Interporto Bologna, being the owner of the land, took care of the road network system modifications.

The only costs charged to the project were man/hours related to the meeting held for the design, marketing and commercialization, part of which described in the Stakeholders Involvement Reports.

Expected impact and benefits of the pilot action for the concerned territory and target groups and leverage of additional funds (if applicable)

The LNG station for truck will contribute to the green transformation of the logistic platform, which will be a benefit for the whole surrounding area in terms of emissions of pollutants. Indeed, several surveys related to LNG gas emissions compared to the emissions of industrial vehicles set up with the latest generation diesel engines, show a reduction up to 50% in NOx, almost total suppression of PM10 and a reduction of up to 15% in CO2 from vehicles using liquid natural gas (*Source: Freight Leaders Council "Quaderno 28 - Il GNL in Italia per un Trasporto sostenibile"*).

The target groups of the demonstrator are:

- Freight transport companies with LNG trucks and medium/small vehicles for the city logistics;
- Transport companies dealing with the mobility of people;
- Cars of the employees working inside the infrastructure.

Interporto Bologna is also participating in a hydrogen focus group, which in the future could expand the offer of alternative fuels within the infrastructure.

Sustainability of the pilot action results and transferability to other territories and stakeholders

The actions to decarbonize the infrastructure created during the project will be followed by others already planned: by the end of 2022, nearly 50 charging stations for electric cars will be installed inside the freight village; a project to increase the number of photovoltaic installations on the warehouses is already underway; an energy community for the benefit of both the companies located inside and the inhabitants of the neighboring municipalities is being defined.

Thus, the path to decrease the environmental impact of the infrastructure will continue with concrete actions, some of which are already planned and scheduled.

What has been done in the area can be taken as an example of best practice in similar contexts.

If applicable, contribution to/ compliance with:

- relevant regulatory requirements
- sustainable development - environmental effects. In case of risk of negative effects, mitigation measures introduced
- horizontal principles such as equal opportunities and non-discrimination

The total plan of actions undertaken and included in the project is aimed at cutting emissions and greening the logistics platform.

The first achievement of this strategy is represented by the new LNG station opened at the beginning of 2022, which widened the offer for the truck companies operating both within the node and in the surrounding area, favouring and encouraging the road transport companies to shift from diesel trucks to LNG trucks.

The LNG station together with the implementation of the charging stations for electric cars and the creation of the energy community, will bring environmental benefits to the entire local community.

References to relevant deliverables (e.g. pilot action report, studies), investment factsheet and web-links

If applicable, additional documentation, pictures or images to be provided as annex

The related project deliverable is the D.T3.2.6: LNG use in freight transport in Emilia Romagna, which can be founded at:

Report:

[https://www.interreg-central.eu/Content.Node/InterGreen-Nodes/CE1444-InterGreen-DT3.2.6-Report-\(2022-06-16\).pdf](https://www.interreg-central.eu/Content.Node/InterGreen-Nodes/CE1444-InterGreen-DT3.2.6-Report-(2022-06-16).pdf)

Handbook Part 2 Energy Systems: <https://www.interreg-central.eu/Content.Node/InterGreen-Nodes/CE1444-D.T3.3.3-Part2-Energy-systems.pdf>



