



SMOOTH PORTS

Good practice in the Port of Nantes Saint-Nazaire : the Natural Gas Vehicle (NGV) station in Montoir de Bretagne

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Project Partner: Grand Port Maritime de Nantes Saint-Nazaire

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The NGV station in Montoir de Bretagne

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Organisation name : Port of Nantes Saint-Nazaire Authority (Grand Port Maritime de Nantes Saint-Nazaire)

(2) Organisation in charge of the good practice

Is your organisation the main institution in charge of the good practice? No

Location of the organisation in charge : Saint-Herblain

Country : France

Region : Pays de la Loire

Department : Loire Atlantique

Main institution in charge : Sydela (Syndicat d'Energie de la Loire-Atlantique)

(3) Good practice general information

The Natural Gas Vehicles (NGV) are alternative fuels and include Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG), biomethane or Renewable Natural Gas (RNG). The use of NG for Heavy Goods Vehicles (HGVs) provide environmental advantages in terms of atmospheric emissions (NOX > - 25 %) and Greenhouse Gas (GHG) emissions (up to - 20 %) and of noise (50 %). The availability of the NG has to be ensured through a network of filling stations in order to develop the fleet of the HGVs fuelled by NG.



- **Short summary of the practice**

The public NGV filling station is due to ease and boost the use of an alternative fuel to the gasoil mainly used by the road transport industry and will provide environmental benefits to the community in the Port and City territories.

- **Short description of the local situation**

Exclusive of the transport by pipe (oil or gas), the road transport share in the pre/post land transport of the goods handled in the port is 87 % (in volume). On a local and regional scale, the road transport is the main mode of transport used by the Pays de la Loire economy and by Western France as a whole.

- **Detailed information on the practice**

The Port of Nantes Saint-Nazaire is committed in the NG for 40 years thanks to Elengy terminal of Montoir de Bretagne, one of the largest in Europe. This LNG terminal has broadened its activity now ranging from big scale operations to small scale ones.

The Port commitment in alternative fuels has to take into account the lack of NG station in the downriver part of the Port, where 90 % of the traffic is handled. The closest existing NGV stations were upriver in Nantes (50 km) and in northward, in Vannes (100 km) in Brittany.

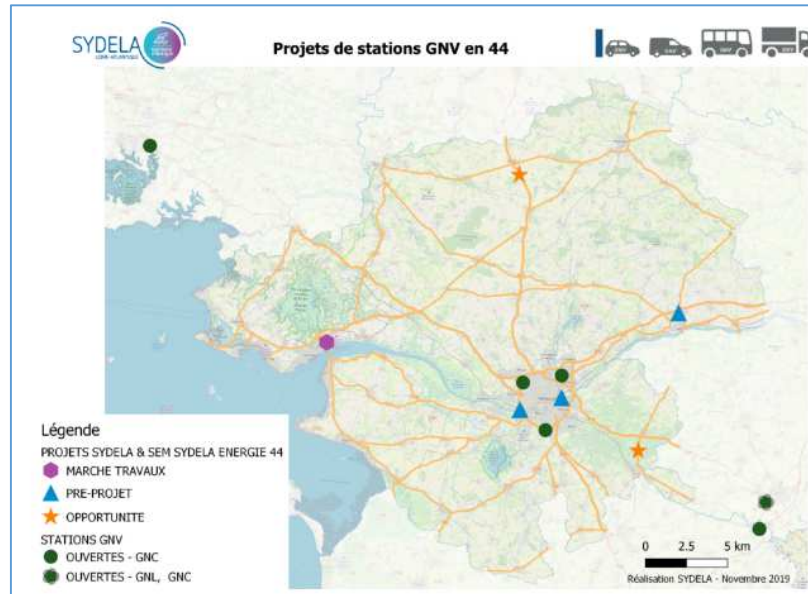
In May 2018, the **Port Authority of Nantes Saint-Nazaire** (GPMNSN) launched a Call of Expression of Interest in order to setting up a NGV filling station on its land, with a 6.000 m² field conveniently located.

This Call proved unsuccessful and no bids were received. The main reasons were mainly economic : land rent, potential demand, etc...

In 2018 too, **ADEME**, the French Agency of the Ecological Transition, launched the third edition of the Call for Project "NGV / BioNGV" Call for helping the purchase of NG vehicles. **SYDELA** (Syndicat départemental d'énergie de la Loire Atlantique), applied. It wants to develop a network of NGV stations on the territory of Loire-Atlantique and adds a station in Saint-Nazaire area.



The SYDELA NGV network in the Loire-Atlantique Department (44)

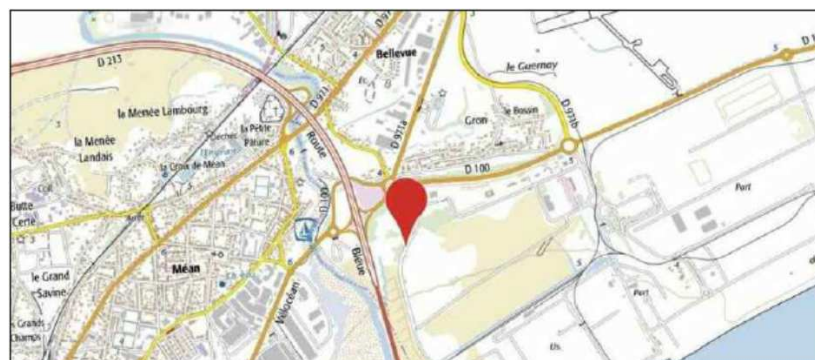


Source : Sydela

In this framework of this **ADEME** Call, the Port Authority itself decided the purchase of three NG vehicles for its own needs. Thanks to the commitment of a total of 18 companies, a sufficient demand was identified for the station. **ADEME** approved the project end 2018 and the construction process could start on the selected parcel.

This public 3 tracks NG station is due to open early 2021, for a 1 M€ cost.

The location of the filling NG station in the Port area



Source : GPMNSN



- **Resources needed**

On the field :

Providing a parcel rented by the Port Authority

Preparing the connexion to the NG National Grid

For the project phase :

Managing a Call of Expression of Interest

Commissioning the feasibility study

Running 3 meetings with stakeholders

Commissioning the station management to a specialist

- **Timescale**

(Start/end date/ongoing)

Start date : early 2018 : Call of Expression of Interest by GPMNSN and launch of ADEME NGV third call

End date 2018 : ADEME positive reply

Ongoing 2019 - 2020 : works

2021 : opening of the NGV public station in Montoir de Bretagne

- **Evidence of success (results achieved)**

The practice illustrates the need for public/private cooperation in the energy transition. The change of fuel of trucks implies a efficient network of stations on the supply side and a sufficient number of trucks on the demand side. The practice managed to deal both on the supply and on the demand. On the supply side, the main asset was the location of the station in order to both be easily accessible for all the users. Thanks to a pre-work of the Port Authority, the land was selected, and even if its own Call failed, the process validated the location and size of the station.

On the demand side, the opportunity was to link the ADEME call with the project in order to federate local truck and bus operators.

- Here: estimation of CO2 emissions saved : station operating in 2021



- **Potential for learning or transfer**

This practice in the field of alternatives fuels as a driver for reducing CO₂ emissions provides useful learnings to other regions dealing with Port activities. First, the process is on the long term when the market isn't enough for implementing a public station. Public entities has to manage to aggregate different demands, from the public side (as garbage or bus companies) and from the private side (truck companies, etc..). Secondly, funding has to be taken into account, especially by helping the vehicles owners to change fuel. Thirdly, a station has to be part in a network, based on a public scheme, in order to ensure a sustainable reliability.

- **Recommendations for implementation in other ports**

The main recommendation is the mutualisation of demands, the selection of the location and the design of the station in order to take into account the development of the traffic.

- **Further information**

- <http://www.sydel.fr/la-mobilite-gaz/>
- <http://www.nantes.port.fr/the-port-authority/environmental-commitment/smooth-ports-project/?L=1>

- **Keywords related to your practice**

CO₂ emissions /Energy transition / alternative fuels / climate change / transport and mobility