



# Call for market interest for a hydrogen transport infrastructure between the Port of Dunkirk and Belgium

16 October 2024



# Call for market interest for the construction of a hydrogen transport infrastructure between the port of Dunkirk and the Belgian border

Information memorandum Port of Dunkirk – Belgian border

## Disclaimer

This document (the "**Information Memorandum Port of Dunkerque - Belgian Border**") presents certain information concerning the transport of hydrogen, which is considered to be a solution for achieving decarbonisation objectives. The information contained in this document reflects the point of view of GRTgaz S.A. at this stage and is made public for information purposes only and without any commitment on the part of GRTgaz S.A., and should not be considered as giving rise to any contractual relationship between GRTgaz S.A. and any interested party.

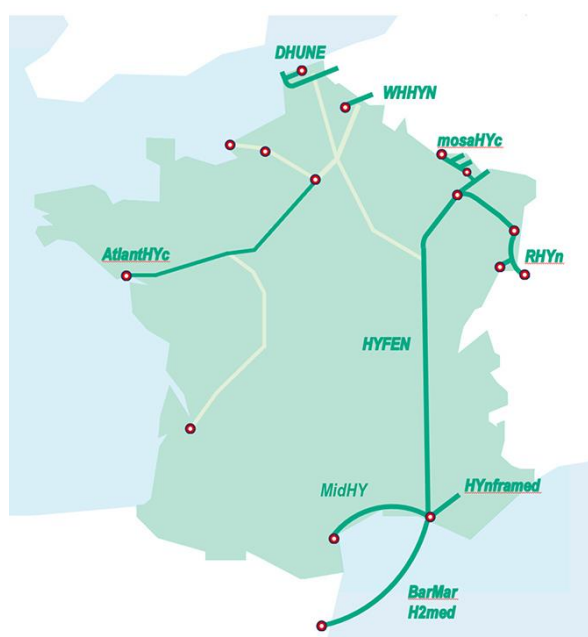
## Context

After conducting the first national consultation on the low-carbon and renewable hydrogen market in 2021-2022 to identify the needs of hydrogen market players in terms of transmission and storage infrastructure, GRTgaz has identified the first ecosystems in which a development dynamic for decarbonised hydrogen is underway. These are mainly industrial basins facing major challenges to reduce CO<sub>2</sub> emissions, where existing fossil hydrogen consumption needs to be decarbonised, or where manufacturers with high emissions are planning to implement decarbonisation projects based on this new, decarbonised energy carrier.

In these first basins, the majority of players stress the importance of a transmission network infrastructure to meet their challenges, namely, on the one hand, to ensure the competitiveness of hydrogen for consumers and, on the other, to provide producers with an outlet serving a large catchment area.

Large industrial port areas are of course at the forefront of these areas where hydrogen transport logistics are expected to develop, driven by key hydrogen production or consumption projects.

Drawing on these lessons, GRTgaz has launched projects in the Fos-Marseille (HYnframed project), Dunkerque (DHUNE project), Valenciennes (WHHYN project), Moselle (MosaHYc project) and Rhine Valley (RHYn project) basins to develop pipeline transmission infrastructure for emerging hydrogen ecosystems.



*Map of GRTgaz hydrogen network projects under development*

These projects, and in particular the DHUNE project, are fully in line with the "national strategy for the development of low-carbon hydrogen in France", which was put out to consultation last November. This strategy considers that decarbonised hydrogen is one of the key solutions for achieving carbon neutrality, particularly in certain industrial sectors where it is a more appropriate energy carrier than electricity, notably in the steel industry, for intensive use in transport or for industrial needs involving high temperatures.

With the presence of France's largest steelworks, representing 40% of steel production in France, the Dunkirk industrial zone is identified in the national strategy as a "massive centralised consumption centre" for hydrogen,

where hydrogen production will be deployed to serve the needs of the zone and where the development of "intra-hub" transport infrastructures is a priority.

The region's institutional players, foremost among them the Communauté Urbaine de Dunkerque and the Grand Port Maritime de Dunkerque, are particularly aware of these issues and have drawn up a decarbonisation roadmap and an ecological transition plan with the aim of achieving carbon neutrality by 2050. The region was also the first industrial zone to officially become a "low-carbon industrial zone" (ZIBAC) in April 2023.

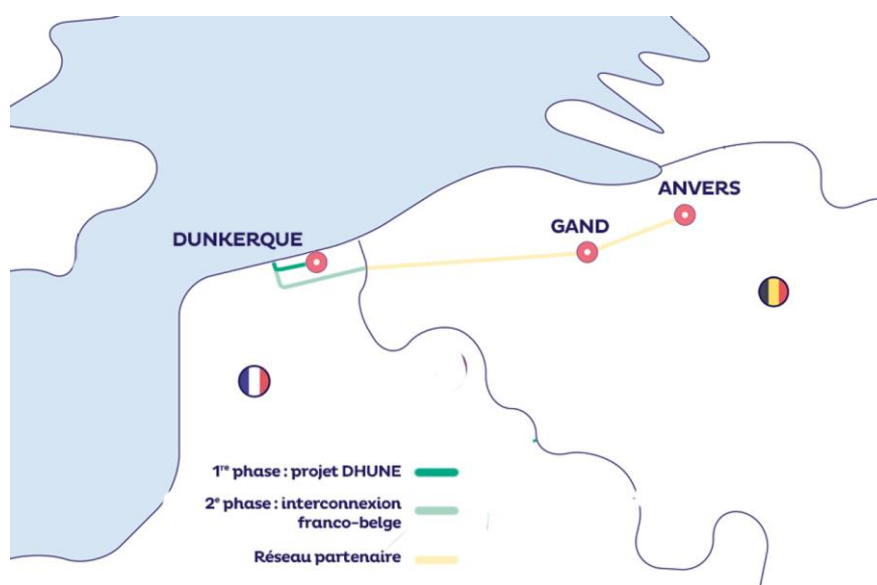
Against this dynamic backdrop, in September 2022 GRTgaz launched a call for market interest<sup>1</sup>, with the aim of confirming the interest of market players in a hydrogen pipeline transport infrastructure in the Port and enabling the DHUNE network project to be sized, by anchoring it in the needs of the industrial players present in the Port. A number of hydrogen production project developers have responded to this call for interest, and long-established industrial sites in the area have also confirmed their interest.

In view of the positive feedback from the market on the value of the infrastructure project, GRTgaz carried out a feasibility study in 2023, which established the dimensions of the infrastructure and an initial assessment of its cost, taking into account the needs expressed during the call for market interest phase. This feasibility study was carried out with the support of the ADEME (via the ZIBAC dossier led by the Dunkirk area, under the guidance of Euraénergie).

Since the beginning of 2024, the basic engineering studies have been under way, a prerequisite for submitting the administrative file to obtain authorisation to build and operate the transport infrastructure.

Today, the development of hydrogen production and consumption projects on both sides of the Franco-Belgian border, and the analysis of the balance between supply and demand for renewable and low-carbon hydrogen in the medium term in this area at the heart of the European energy market, have led GRTgaz and Fluyxs, the transmission system operators in France and Belgium respectively, to propose, in a coordinated way, a cross-border hydrogen transmission infrastructure project to interconnect the hydrogen clusters in Dunkirk (and the DHUNE project), Ghent and Antwerp.

In this way, GRTgaz and Fluxys are working together to offer an interconnected hydrogen transmission infrastructure that will connect major North Sea ports with this new low-carbon energy carrier.



*Map of the future interconnected Franco-Belgian hydrogen transport network*

<sup>1</sup> See the details of this call for tenders at the following link: <https://www.grtgaz.com/nos-actions/open-season-hydrogene-dunkerque>.

In the longer term, this cross-border network project could develop in France beyond the Port of Dunkirk and the border area to the hinterland and further afield to other French regions as the market develops and a national hydrogen transport network is implemented.

Finally, it should be noted that this network project was recognized as a "Project of Common Interest" (PCI) by the European Commission in 2024.

## Call for market interest

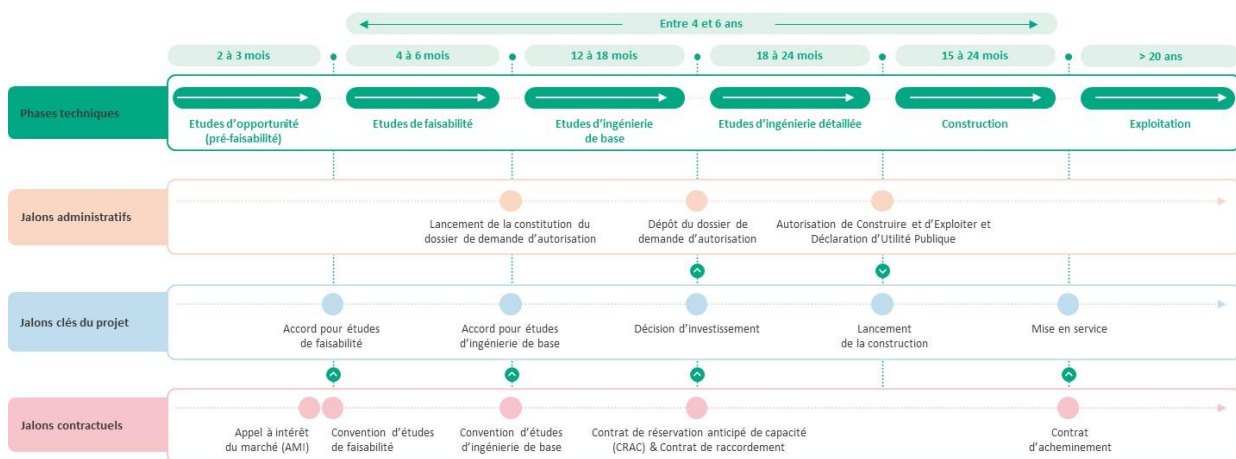
GRTgaz has therefore decided to launch a call for market interest, otherwise known as *Open Season*, aimed at confirming the economic interest in a hydrogen pipeline transport infrastructure, from the Port of Dunkirk (connecting with the DHUNE network project, currently in the basic engineering phase) to the Belgian border, interconnected with the hydrogen transport network project in Belgium, proposed in parallel by Fluxys to the hydrogen clusters in Ghent and Antwerp, using the same open season approach.

Information on the call for market interest being conducted in parallel by Fluxys is available at the following link: <https://www.fluxys.com/en/hydrogen/empowering-you/customer-interactions/call-for-market-interest-h2-cross-border-2024>

This Call for Market Interest is a transparent and non-discriminatory call for interest, open to all players wishing to participate, whether or not they responded to the Call for Market Interest for the DHUNE project for a transport network in the Dunkirk industrial port area, organised in 2022.<sup>2</sup>

## Main stages in the development of a network project

The Call for Market Interest is the first key stage in the development of a hydrogen transport network project.



*Main development phases of a GRTgaz network project*

During this first phase of the call for market interest, stakeholders are invited to **express their interest** on the basis of the elements communicated in this "**Information Memorandum Port of Dunkerque - Belgian Border**", supplemented by the "**Infrastructure Proposal Port of Dunkerque - Belgian Border**" and the "**Hydrogen**

<sup>2</sup> See the details of this 1<sup>er</sup> call for tenders at the following link: <https://www.grtgaz.com/notre-transition-energetique/hydrogene/open-season-hydrogene-dunkerque>

**Specifications Proposal Port of Dunkerque - Belgian Border"**, available at the following link, as well as the elements communicated by our partner Fluxys for the part of the project that will be developed in Belgium.

This first phase is non-binding, in the sense that it does not commit GRTgaz to implementing the proposed infrastructure project (particularly if the economic conditions are not met), or the players responding to the call for market interest to subscribe transmission capacity.

During this phase, players will be asked for an initial estimate of their transmission requirements (consumption or production). The confidentiality of the information exchanged will be guaranteed by the signing of an NDA.

At the end of the call for market interest period, GRTgaz and Fluxys will jointly analyse the results and consolidate the interest received. If sufficient interest is expressed, GRTgaz and Fluxys will coordinate their proposals for the next commercial stages, in order to carry out the initial technical feasibility studies, which will make it possible to establish the infrastructure's dimensions and an initial assessment of its cost, and to prepare the administrative application for permitting. Study agreements will be signed between GRTgaz and the counterparties interested in carrying out the network project, guaranteeing the confidentiality of the data exchanged and setting out the parties' mutual contractual and financial commitments for carrying out these preliminary studies.

This non-committal phase may require iterations, depending on the maturity of the projects in the hydrogen ecosystem: bilateral or group discussions with the participants in these phases will take place to gradually refine the design of the infrastructure and propose an economic and contractual model associated with the transport service.

If this non-committal phase confirms the interest of the market, GRTgaz will define, in coordination with Fluxys, the conditions for access to the facilities (capacity allocation, indicative tariff) and the conditions for the decision to build the facility, in consultation with the interested parties, in order to launch the committal phase. The schedule for this commitment phase will be defined on the basis of the results of the first phase. It is this commitment phase that will lead to the reservation of capacity through the signature of an Anticipated Capacity Reservation Contract (CRAC), which may trigger the construction of the infrastructure.

The timetable for implementing the various stages will depend on how quickly the projects of the various players in the hydrogen ecosystem mature, and on the ability of project sponsors to commit to subscriptions for transport capacity.

## Proposed infrastructure access principles

GRTgaz proposes to develop, invest in, build and operate an "open" infrastructure for transporting hydrogen by pipeline as proposed in the document "**Infrastructure proposal Port of Dunkirk - Belgian border**", with transparent and non-discriminatory access to the infrastructure, in accordance with the provisions of the Gas Package, which was definitively adopted by Europe in spring 2024 and which must now be transposed into French law.

### *Principle of separation of activities*

Firstly, GRTgaz will apply a principle of separation of activities between production, use and transport of hydrogen, by being positioned exclusively in hydrogen transport activities. This principle of separation is key to guaranteeing a neutral position as a network operator vis-à-vis the other players in the hydrogen market (consumers, producers, etc.).

### *Third-party and non-discriminatory access to the network*

By relying on this exclusive position in the transmission link of the value chain, GRTgaz will guarantee non-discriminatory access to the system for third parties, in order to encourage the development of a growing market.

#### *Transparent third-party access*

In the same way, GRTgaz will guarantee transparent third-party access, with clear and public rules for participation in the Call for Market Interest and rules for access to the infrastructure (allocation of capacity, charging for use).

## Proposed contractual and pricing principles

As regards the commercial and tariff model that will be put in place if the economic interest of the proposed infrastructure is confirmed, GRTgaz will base its approach on the main principles that have enabled the development and European integration of natural gas networks as we know them today, while adopting a pragmatic and agile approach, linked to the specific context of a nascent hydrogen market.

#### *Subscription of entry/exit capacity*

GRTgaz's entry into the development phase of the project will result in a commitment to subscribe entry transmission capacity at hydrogen injection points on the system, exit capacity at hydrogen delivery points, and transmission capacity at the border interconnection point between the French system and the Belgian system. These capacities will be subscribed on an annual basis.

This entry/exit network access model, with independent capacity subscriptions between the entry and exit points, will facilitate the development of an integrated hydrogen ecosystem, by offering a consumer the possibility of being supplied by several producers connected to the network, unlike a point-to-point model where the transport of hydrogen would be fixed from a precise point of production to a precise point of consumption.

This principle of capacity pricing is therefore independent of the flows that will actually be transited on the network.

#### *Long-term commitment*

The decision to invest in infrastructure will be based on long-term capacity subscription commitments from customers, of around 15 years.

#### *Other contractual and pricing commitments*

The more detailed contractual and pricing conditions will be specified in the next stages of the project, before the launch of the commitment phase, based on iterative exchanges with the participants during the initial study phases.

## Proposed transport infrastructure

The proposal is available in the document "**Infrastructure Proposal Port of Dunkirk - Belgian Border**", which can be downloaded from the following link:

<https://www.grtgaz.com/notre-transition-energetique/hydrogene/ami-interconnexion-port-de-dunkerque-et-belgique>

## Hydrogen specification proposal

The proposal is available in the document "**Hydrogen Specifications Proposal Port of Dunkirk - Belgian Border**" available for download at the following link:

<https://www.grtgaz.com/notre-transition-energetique/hydrogene/ami-interconnexion-port-de-dunkerque-et-belgique>

## **Practical information for responding to the expression of interest phase**

All players interested in connecting to this future infrastructure, as hydrogen producers, consumers or shippers, are invited to express their interest by responding to this Call for Market Interest, whoever they may be and whether or not they responded to the national consultation on the low-carbon and renewable hydrogen market.

Interested parties are invited to complete the expression of interest form at the following link:

<https://www.grtgaz.com/notre-transition-energetique/hydrogene/ami-interconnexion-port-de-dunkerque-et-belgique/formulaire>

Players planning to transport hydrogen from one country to another are invited to register their interest with GRTgaz and Fluxys.

In this form, interested parties will have to specify certain information relating to their hydrogen production or consumption project or their need for cross-border transport.

This expression of interest phase opens on 16 October 2024 and closes on 29 November 2024.