



European
Commission

Project of common
interest:

13.1

CO2 TransPorts will establish infrastructure to facilitate large-scale capture, transport and storage of CO2 from the Rotterdam, Antwerp and North Sea Port areas

Cross-border carbon dioxide network

CATEGORY
Carbon Dioxide

CLUSTER
n/a: n/a

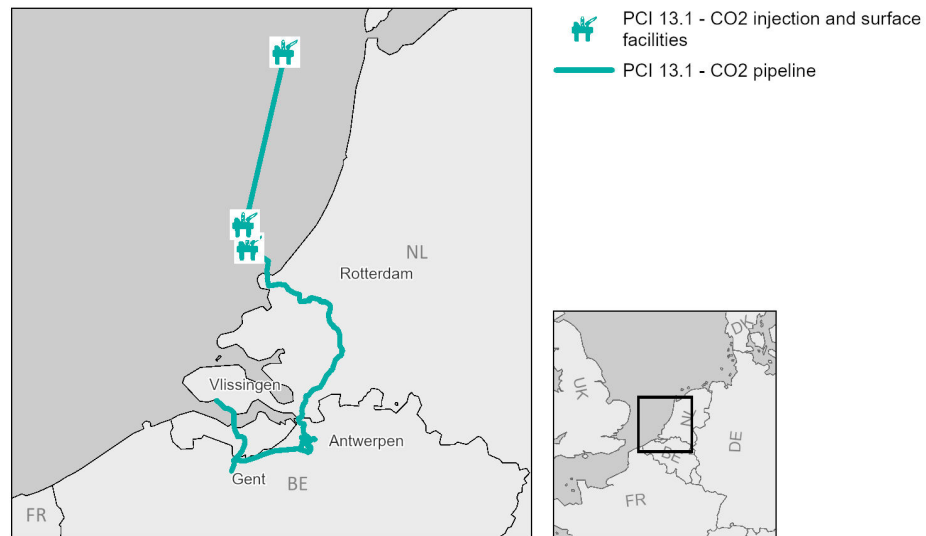
COUNTRIES CONCERNED
Netherlands(NL)
Belgium(BE)

PROMOTERS
Havenbedrijf Rotterdam N.V
(NL)
North Sea Port (BE/NL)
Havenbedrijf Antwerpen NV
van publiek recht (BE)

PCI WEBSITE(S)
[CO2 reduction through storage under the North Sea - Porthos \(porthosco2.nl\)](#)

LOCATION
Rotterdam (NL), Antwerp
(BE), North Sea Port (BE/NL)

COMMISSIONING DATE
2026



Source: PLATTS, GISCO, European Commission

Technical description

CO2TransPorts is comprised of multiple pipelines proposed to be developed in two distinct project phases. Phase 1 of this PCI is focused on the development of local CO2 collection infrastructure in the Rotterdam and Antwerp port areas. In the Netherlands, the pipeline segment ('Rotterdam CO2 Collection Network') will be developed for both the transport and storage of CO2 in the Rotterdam region. In Belgium, the pipeline segment ('Antwerp CO2 Collection Network') will consist of local CO2 collection pipelines being developed in the Antwerp region, which will be stored before 2027.

Phase 2 is focused on developing the 'International Backbone (Antwerp to Rotterdam)', which is the primary piece of cross-border pipeline infrastructure. The international pipeline will stretch from the most northern point of the Antwerp port area, cross the Dutch-Belgian border and connect to Rotterdam's pipeline in the eastern part of the port. Further, the Belgian collection network ('Belgium National Backbone') will also be expanded beyond Antwerp to connect to numerous industrial clusters. As Phase 3 is in concept phase, no construction dates are available.

The volumes collected in the Antwerp area before 2027 will be associated with the Northern Lights PCI. For the launching volumes of the collection network in Rotterdam, offshore storage is provided in the P-18 depleted gas fields off the coast of The Hague. Capacity of these fields is 37 Mt of CO2 and it can accommodate a supply rate of the order of 2-3 Mt/y and possibly up to 5 Mt/y. It is therefore planned to utilise the P18 fields to their maximum storage capacity over the initial 15-year operational period at a storage rate of 2.5 Mt/y.

The infrastructure elements comprising this PCI are:



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- Dedicated CO2 collection pipelines in the Antwerp and Rotterdam areas, excluding upstream pipelines, as well as fixed facilities for liquefaction, buffer storage and CO2 converters in view of its further transportation by pipeline or other modes of transport.
 - Surface and injection facilities associated to the P-18 fields.
 - Any equipment or installation for the operation of the project, including protection, control and monitoring systems.

LAST UPDATE
May 2024

Energy

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Benefits and contribution to objectives referred to in TEN-E Article 1

The project will contribute to climate change mitigation by reducing the carbon dioxide emissions. It also increases the resilience and security of transport and storage of carbon dioxide including efficient use of resources, by enabling the connection of multiple carbon dioxide sources and storage sites via common infrastructure.

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1. Implementation status

Under construction

2. Timeline of the implementation plan (*)

2.1 Estimated timeline for the completion of feasibility and design studies for the project

Project stage	Start date	End date
Feasibility study	2018	2019
FEED study	2019	2020

2.2 Estimated timeline for obtaining the approval by the national regulatory authority and the Final Investment Decision

Project stage	Date of request	Date of decision
Approval by the NRA	NO_DATA	NO_DATA
CBCA (if applicable)	NOT_APPLICABLE	NOT_APPLICABLE
Exemption (if applicable)	NOT_APPLICABLE	NOT_APPLICABLE

Final Investment Decision	2020
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2.3. Estimated permit granting schedule¹

Date of request	Date of decision
NO_DATA	NO_DATA

This schedule should be in line with the permit granting schedule required by Article 10 4(b) of the TEN-E Regulation, where applicable. According to this Article, a permit granting schedule has to be drawn up by the competent authority in close cooperation with the project promoter and other authorities concerned.

2.4. Estimated timeline for construction and commissioning

Activities	Start date	End date
Construction	2021	2026

Commissioning date	2026
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(*) Please note that all dates in this document refer to the latest dates of each implementation stage for the entire PCI/PMI, considering all infrastructures included in the project. The implementation status reflects the least advanced status of all PCI/PMI infrastructures.

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PCI costs and EU funding

PCI costs
NO DATA

CEF Actions contributing to this PCI

Action	Awarded amount	Link to Action Fiche
12.3-0022-NL-S-M-18	6,518,350 EUR	https://ec.europa.eu/assets/c/inea/project_fiches/cef/cef_energy/12.3-0022-NL-S-M-18.pdf
12.3-0022-NL-W-M-20	102,135,856 EUR	https://ec.europa.eu/assets/c/inea/project_fiches/cef/cef_energy/12.3-0022-NL-W-M-20.pdf
12.3-0027-BENL-S-M-20	5,785,000 EUR	https://ec.europa.eu/assets/c/inea/project_fiches/cef/cef_energy/12.3-0027-BENL-S-M-20.pdf

Other sources of EU funding

Programme	Awarded amount	Link to Action Fiche
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