

Porthos

Towards the first large-scale
CO₂ transport and storage
infrastructure in the European Union



7th International Workshop on Offshore Geologic CO₂ Storage

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Porthos
CO₂ TRANSPORT & STORAGE



Hudson Bay

Labrador Sea

MB

NL

ON

QC

Denmark

United Kingdom

Ireland

Germany

France

ND

MN

NB

PE

SD

WI

MI

VT

ME

NS

NE

IA

IL

IN

OH

PA

NY

NH

MA

States

KS

MO

WV

MD

DE

VA

NC

OK

AR

TN

NC

TX

MS

AL

SC

FL

North Atlantic Ocean

Gulf of Mexico

Cuba

Puerto Rico

Spain

Portugal

Morocco

Algeria

Western Sahara

Mauritania

Mali

Niger

Tunisia

Guatemala

Porthos status overview

Shareholders

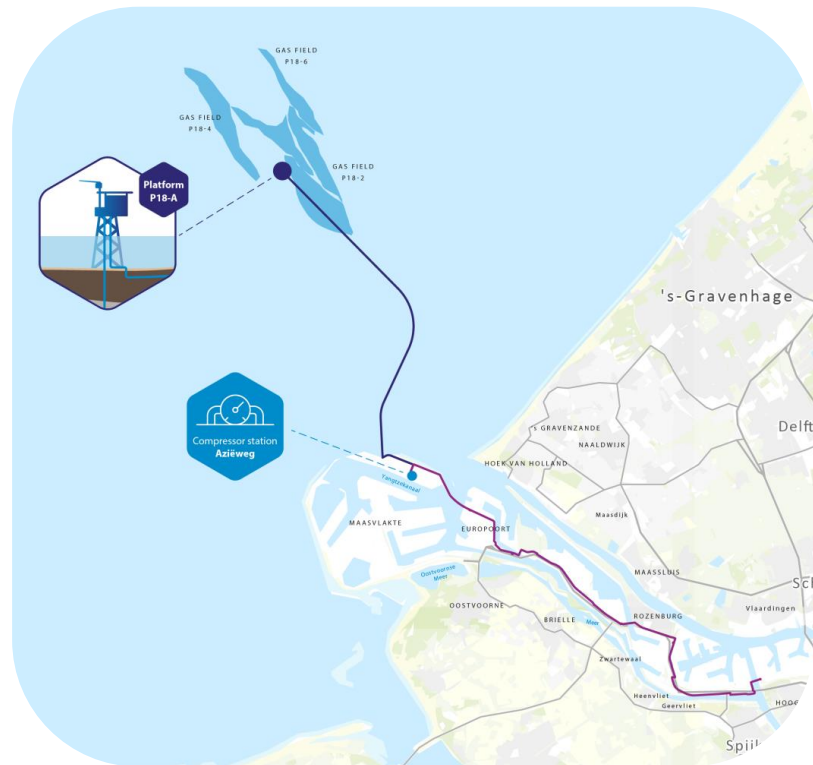
- EBN, Gasunie, Port of Rotterdam Authority

Scope

- Infrastructure for CO₂ transport and storage
 - 37 Mton, ~2.5 Mton per year for 15 years
 - Additional capacity in infrastructure for future development
- CO₂ capture by customers:
 - Air Liquide, Air Products, ExxonMobil, Shell

Milestones

- 17 October 2023: final investment decision (FID)
- January 2024: start of construction
- 2026: ready for operations



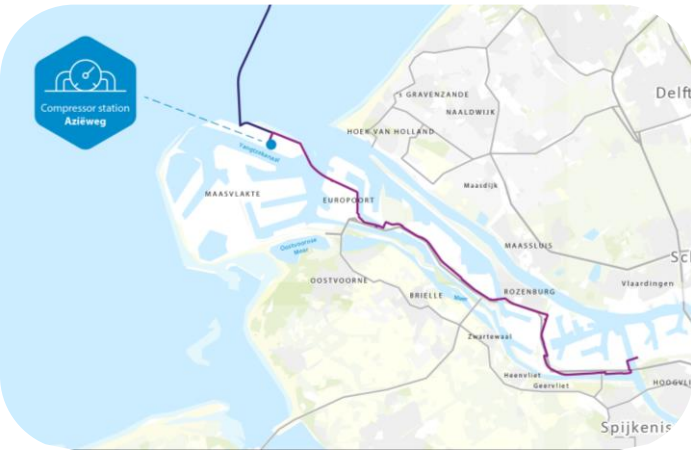
Construction has started

Start of Construction	First half of 2024
Crossing the sea defense	First half of 2024
Onshore pipeline	2024 - 2025
Compressor station	2024 - 2025
Seawater intake building	2024 - 2025
Platform modifications	2025
Well modifications	2025
Offshore pipeline	Mid 2025
Commissioning & Startup	First half 2026
Porthos System Operational	2026



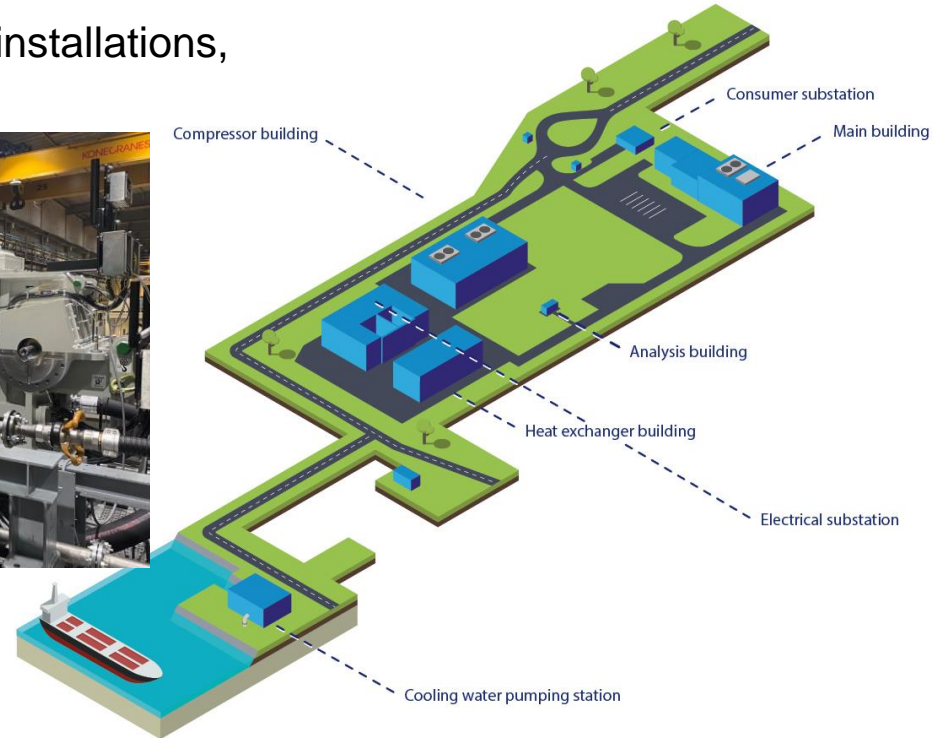
Transport: onshore pipeline

- In the Rotterdam port area
- In existing pipeline corridor
- Length: 30 km
- Diameter: 42"



Transport: compressor station

- Location: Maasvlakte, Rotterdam
- Plot: 2 hectare
- Facilities: compressors, electricity, cooling installations, measure and control systems



Transport: offshore pipeline

- From the compressor station to platform P18-A
- Length: 22 km
- Diameter: 16”



Storage: platform & wells

- From the platform into the P18 gas fields
- Re-use of existing platform and 4 wells
- Natural closing through sealing layers
- 22 km offshore Rotterdam harbor
- Depth: between 3200 and 3500 mTVDss
- Storage Volume: 37.5 Mton
- Injection capacity: 2.5 MPTA



Challenges: Unlocking the potential

Porthos forms the first of its kind

- Legislation (had to be developed)
- Technical feasibility (low pressure depleted gas fields)
- Partnerships (new partnerships)

→ ***First time right***

Porthos forms a steppingstone for CO₂ storage in the Netherlands

- Business development side by side with project development

→ ***Achieving operations as fast as possible, while keeping future options open***

Global market situation

- Competition for resources and pressure on business case

→ ***Smart solutions and partnerships***



Thank you for your attention!

For more information, please visit:
www.porthosCO2.nl



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