

# Monitoring CO<sub>2</sub> storage in the Q16-Maas field

---

## Publieke samenvatting / Public summary

### Summary

Following on from previous studies into the suitability of the Q16-Maas gas field for CO<sub>2</sub> storage, this report presents the results of a detailed analysis of the main risks posed by storing CO<sub>2</sub> in this way. The report found that it was feasible to store CO<sub>2</sub> safely and securely in the Q16-Maas gas field, provided injection pressure and temperature were within safe limits. The report discusses the limits.

### Background

CATO is the Dutch national R&D programme for carbon capture, transport and storage and involves a consortium of nearly 40 partners and comprises CATO-1, CATO-2 and now CATO-3. The last of these, of which this project was a part, is funded by industrial partners and various government sources, including TKI, CLIMIT and EU ERA-NET.

### Project objective

The Maasvlakte CCS Project (ROAD, or Rotterdam Opslag en Afvang Demonstratieproject), a flagship project under the EEPR programme, aimed to store the CO<sub>2</sub> captured from the Uniper coal-fired power plant in the Q16-Maas gas field. This report presented a monitoring programme for the injection and storage of CO<sub>2</sub> in the field based on a quantitative risk analysis and contributed to the material for a CO<sub>2</sub> storage licence application.

### Project results

#### Projectinformatie / Project information

##### Projectnummer / Project number

TKITOECA02-T2013-16

##### Subsidiebedrag / Grant amount

€ 80.000,00

#### Algemene informatie / General information

##### Volg Topsector Energie op X / Follow Topsector Energie on X

@TSEnergie

The report found that it was feasible to store CO<sub>2</sub> safely and securely in the Q16-Maas gas field, provided injection pressure and temperature were within safe limits. The report discusses the limits. It also found that an active aquifer would make monitoring the behaviour of CO<sub>2</sub> in the reservoir more challenging than in fields without such an aquifer. The study has been adjusted wherever possible to reflect a later major update of the reservoir model that included improved modelling of the aquifer.

Not all the information could be incorporated and validated, however, and the report required updating before developing the field as a CO<sub>2</sub> storage site. The then-current model predicted that the field could continuously store 200-300kt/year, while CO<sub>2</sub> capture from the nearby Uniper power plant could reach a maximum rate of 1500kt/year. The total storage capacity of the field was estimated at the time at 2.3 MtCO<sub>2</sub>

De data in deze applicatie is afkomstig van de Rijksdienst voor Ondernemend Nederland (RVO) en wordt in samenwerking met de Topsector Energie ontsloten.

Voor meer informatie over de Topsector Energie, ga naar [www.topsectorenergie.nl](http://www.topsectorenergie.nl).

Voor meer informatie over de TSE / Energie-Innovatie regelingen die RVO aanbiedt, ga naar [www.rvo.nl/tse](http://www.rvo.nl/tse).