## **CO2 Storage** Kalundborg

A project by Equinor, Ørsted & Nordsøfonden

Onshore storage of CO2 in Denmark - key learnings from ten months in CO2 Storage Kalundborg

DTU CCS conference 26th May Ulrik Olbjørn

## Equinor – A leading company in the energy transition NET ZERO BY 2050



#### STRATEGY

## High value growth in renewables Optimised oil & gas portfolio

#### LOW CARBON AMBITIONS

**30–50**MILLION TONNES PER ANNUM CO<sub>2</sub> transport and storage capacity by 2035 Equinor share

**3–5** MAJOR INDUSTRIAL CLUSTERS Clean hydrogen projects by 2035

50 % OF GROSS INVESTMENTS Renewables and low carbon solutions by 2030



## Major CCS infrastructure projects in NWE



#### Northern Lights



- CO2 is liquefied, shipped, and injected into the Norwegian Continental Shelf at the receiving terminal in Norway
- Startup phase 1 in Q4 2024
- Capacity of 1.5 MT CO2/year
- Startup phase 2: 2027-28
- Capacity of 5 MT CO2/year

#### CO2 Highway Europe



- Pipeline from continental Europe to storages on NCS
- Building large scale to bring unit cost down
- Startup planned in Q4 2029
- Capacity of 25-30 MT
  CO2/year

#### CO2 Storage Kalundborg



- Exploration licence onshore
  Denmark awarded June 2024
- 4 years program to assess/confirm geological storage potential
- Significant storage potential expected to be confirmed
- Emissions from Denmark and surrounding countries
- Startup planned in Q4 2029



### Project timeline

🔶 Community diαlogue



2025



**2. Exploration wells** Data acquistion and formation testing

2nd Well

2027

Dialogue Stakeholders, community and land owners



A project by

2030

Equinor, Ørsted

& Nordsøfonden

**CO2 Storage** 

Kalundborg

#### 1. Seismic acquisition



1st Well

2026



## Most competitive CO2 storage in NWE?

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- Early assesment shows significant potential
- Prime location
  - In Denmark with strong political drive
  - Ship based from Jutland, Baltic sea
  - CO2 volumes Zeeland potential pipeline from Copenhagen
  - Existing terminal that can be de-bottlenecked
- Onshore gives opportunity to scale gradually as market develops



2,1 km



# The potential storage is deep with a CO₂ Storage Kalundborg A project by Equinor, Ørsted & Nordsøfonden good cap rock





## **3D Seismic acquisition**



## Dialogue with community

CO2 Storage Kalundborg

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KALUNDBORG KOMMUNE | NYHED

#### Borgere presser på for politisk stillingtagen til CO2-lagring - men der er bare et problem

Mens CO2 Storage Kalundborg undersøger undergrunden, kræver borgere politisk stillingtagen. Men kan lokalpolitikerne overhovedet gøre en forskel?



Borgere i Kalundborg kræver politiske tilkendegivelser fra kommunalbestyrelsen om CO2-lagring. Foto: Mathias Jepsen



### Media and SoMe



Projektchef, CO<sub>2</sub> Storage Kalundborg 19 News





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lerstenslag

sandsten

со,

sikkert i over 30 år i lande som Teknologien er gennemtestet og

#### **CO2 Storage** Kalundborg

Undersøgelser er nu i gang

A project by Equinor, Ørsted & Nordsøfonden

#### Påstand

"Der er tale om en uprøvet teknologi."

teknologi, som har været anvendt Norge, Canada, USA og Australien. underlagt omfattende regulering.

> Vi har haft en dag, hvor vi har vist vores vibrationslastbiler frem.

CO₂ Storage Kalundborg

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& Nordsøfonden



Capture plant ~3years

Kontakt os, hvis I har yderligere spørgsmål om undersøgelserne:

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