



Norwegian Ministry  
of Petroleum and Energy

# 2016 U.S. - Norway Bilateral National priorities for CCS

Director General William Christensen

9 May 2016



# The Norwegian CCS-Strategy

- *A wide range of activities and measures*

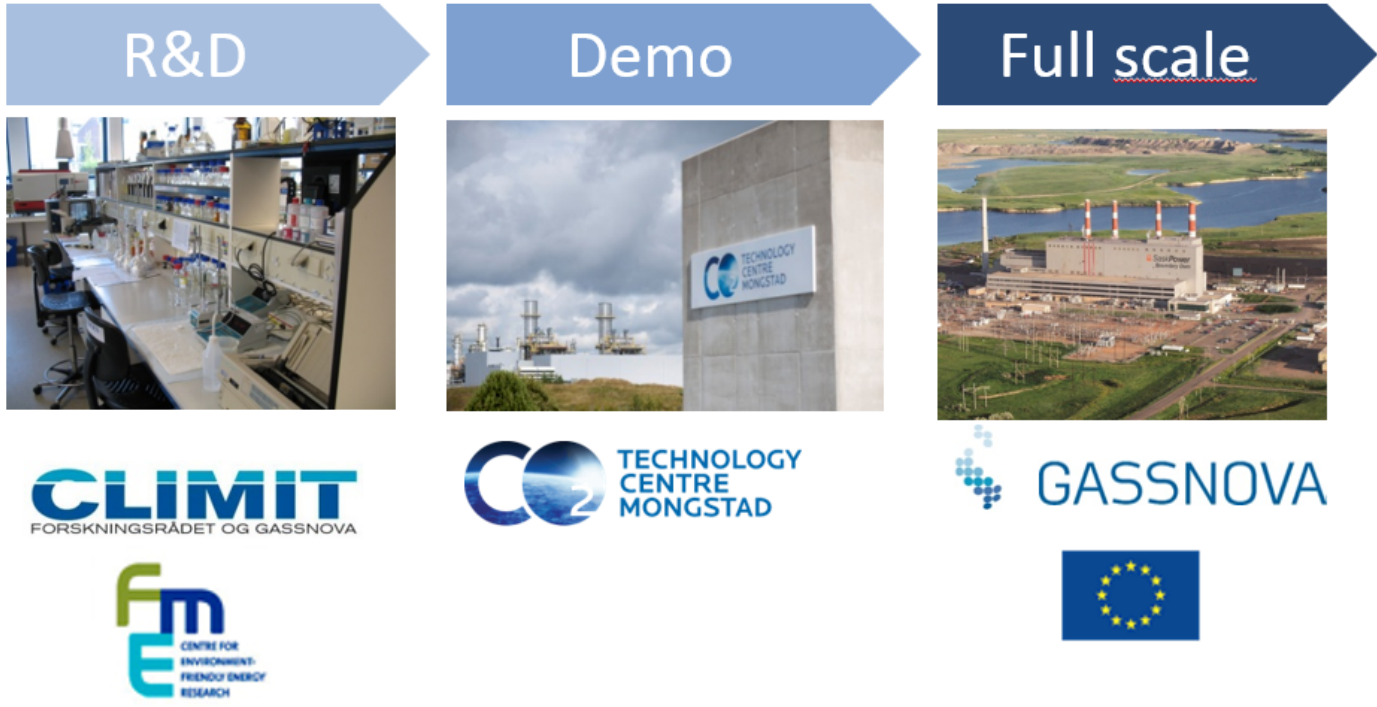
## The Government's political platform:

*"The Government will:*

*"Invest on a broad front to develop cost-effective technology for carbon capture and storage (CCS) and seek to construct at least one full-scale carbon capture [and storage] demonstration plant by 2020".*



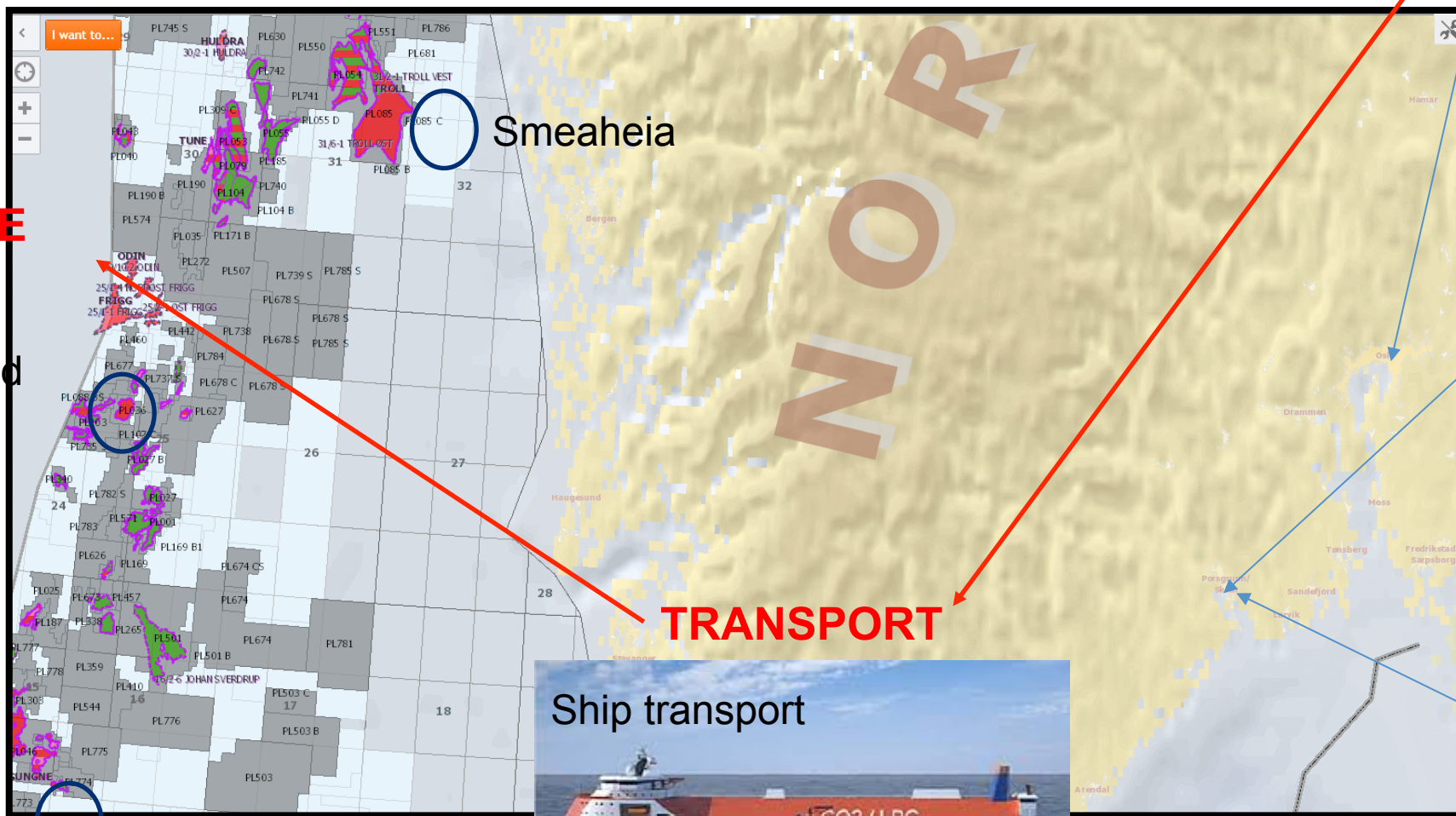
# The Norwegian CCS-Strategy



# Feasible CCS-projects in Norway?

**STORAGE**

Heimdalfield



Utsira

**TRANSPORT**

Ship transport



Energigjenvinningsetaten,  
Household waste incineration



Yara, Ammonia production



Norcem, Cement production



# Framework conditions

## Framework conditions – key principles:

- Transport and storage of CO<sub>2</sub>: the state's responsibility
- Capture: cost and risk to be shared between state and industry
- Years of operation: 20-25 years

No gold plating



# The road ahead



# MoU - ongoing work

Work in technical focal areas:

- Large Scale CO<sub>2</sub> capture
- CO<sub>2</sub> Storage, Monitoring and Verification
- CO<sub>2</sub> EOR
- Cross cutting R & D Collaboration



# MoU - moving ahead

- **9 May bilateral meeting important;**
- Explore new opportunities & define the way forward
- Enhance the MoU as a collaborative arena through broader involvement of experts
- Engage stakeholders stronger into focal area follow-ups together with designated Area Leads
  - 9 May work group sessions & plenary discussions  
key platforms for interaction







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**Thank you for your attention!**



## Recent and planned bilateral meetings

- MoU-collaboration revigorated in Washington D.C. August 2012
- Follow-up workshops
  - Washington D.C. August 2013
  - Milestone Mongstad May 2014
- Next meeting in Washington D.C. and Pittsburg/NETL 9 – 12 June



# MoU signed in 2004

**MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE ROYAL MINISTRY OF PETROLEUM AND ENERGY OF  
THE KINGDOM OF NORWAY  
AND THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA  
ON  
COLLABORATION IN THE FIELD  
OF  
ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION**

The Royal Ministry of Petroleum and Energy of the Kingdom of Norway and the Department of Energy of the United States of America and the (hereinafter referred to as the Parties);

FOR THE ROYAL MINISTRY OF  
PETROLEUM AND ENERGY OF  
THE KINGDOM OF NORWAY:



FOR THE DEPARTMENT OF ENERGY  
OF THE UNITED STATES OF  
AMERICA:

