

Source: AP Photo

Norway's challenge: Leaving oil and gas in the ground

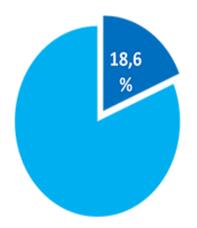
Guri Bang, CICERO Berlin 18 September, 2015

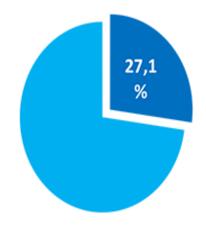
The role of oil extraction in the economy

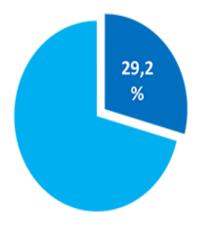
- Oil first discovered in 1969, production started in 1971
- Extraction has steadily increased
- 1 917 000 barrells per day (August 2015)
- 240 000 jobs (population 5 million)
- Political majority support increased extraction

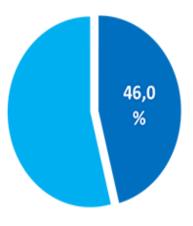
The role of oil extraction in the economy

Source: Ministry of Oil and Energy









Petroleumssektorens andel av BNP

Petroleumssektorens andel av statens inntekter

Petroleumssektorens andel av totale investeringer

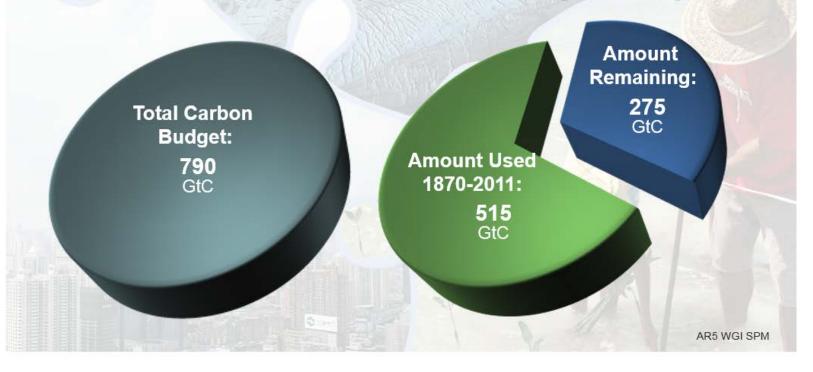
Petroleumssektorens andel av total eksport

Changed circumstances: Climate change

 IPCC 2013: To avoid dangerous anthropogenic interference with the climate system the majority of fossil fuels must be left in the ground

The window for action is rapidly closing

65% of our carbon budget compatible with a 2° C goal already used









Factors that influence the likelihood for a transition away from oil dependency

- Energy reserves
- Institutional structure to support extraction
- Government policy
- Public demand for policy change

Energy resources

- Largest holder of oil reserves in Europe (5.83 billion barrels in 2014)
- Largest holder of natural gas reserves in Europe (excluding Russia) (74 trillion cubic feet in 2014)
- Large provider of oil and natural gas consumed in Europe
- Third largest exporter of natural gas in the world following Russia and Quatar (2014)
- Twelfth largest net exporter of oil (2014)
 - U.S. Energy Information Administration (EIA)

Institutional structure

- State ownership: Statoil and Petoro
- Licencing process for leases
- 76% tax on surplus after investment
- Tax deductions for exploration activities:
 78% on costs
- Favorable production terms: State covers 89,3% of establishment costs
- Favorable conditions for investment: 30 years licence
- Institutional stability

Government's extraction policy

- Political majority in support of increased extraction and production for many years
- Changing positions in the Labour party
- Green Party is rising fast in elections
- Concerns about diversification of the economy
- Oil price fall revealed economic vulnerability
- Sovereign wealth fund: 6600 billion
- Climate policy: CO2 tax, emissions trading

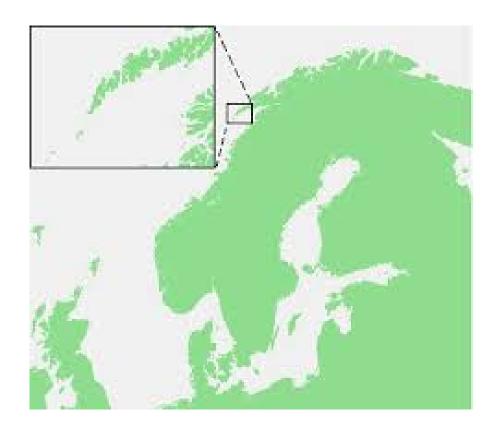
Public demand

- Envirnmental NGOs, campaigns
- Oil industry/Statoil

Jobs vs. Environmental protection

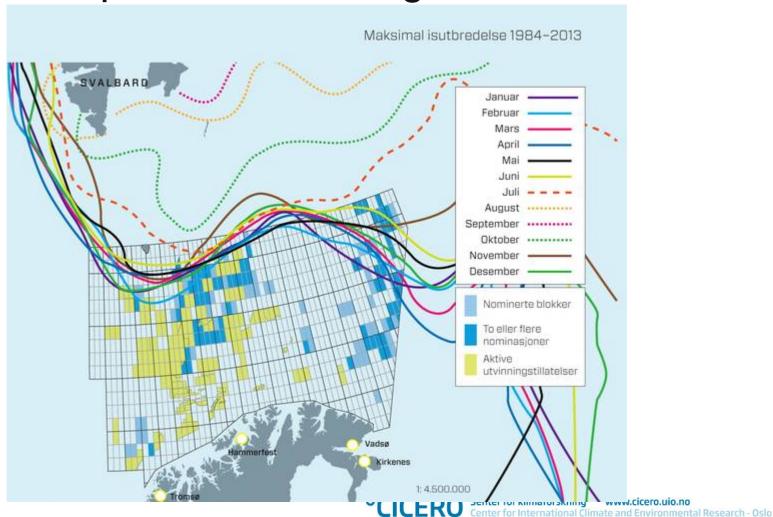
Examples of changing positions

Lofoten and Vesterålen



Examples of changing positions

Arctic exploration: moving the ice rim



Examples of changing positions

Sovereign wealth fund out of coal

