



OLJE- OG ENERGIDEPARTEMENTET

Petroleum Resources as the Major Driving Force in the Arctic

Odd Roger Enoksen

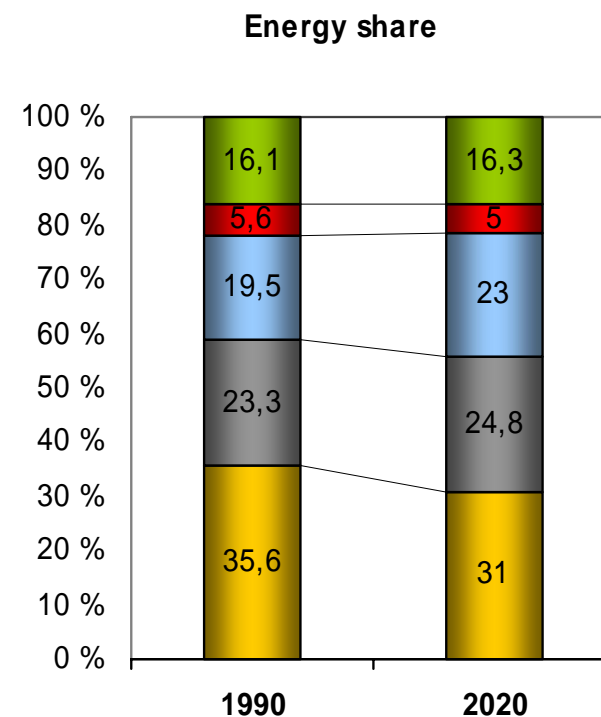
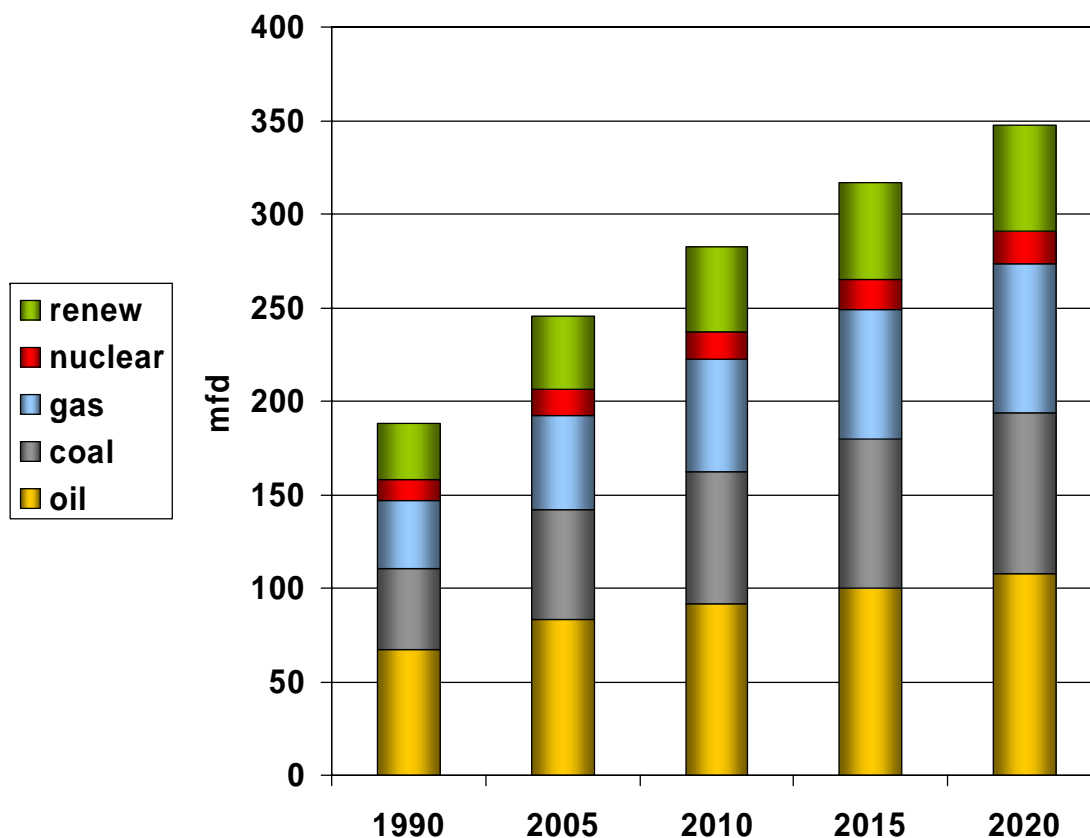
Minister of Petroleum and Energy

Arctic Frontiers Conference 22 January 2007



Energy use 1990-2020

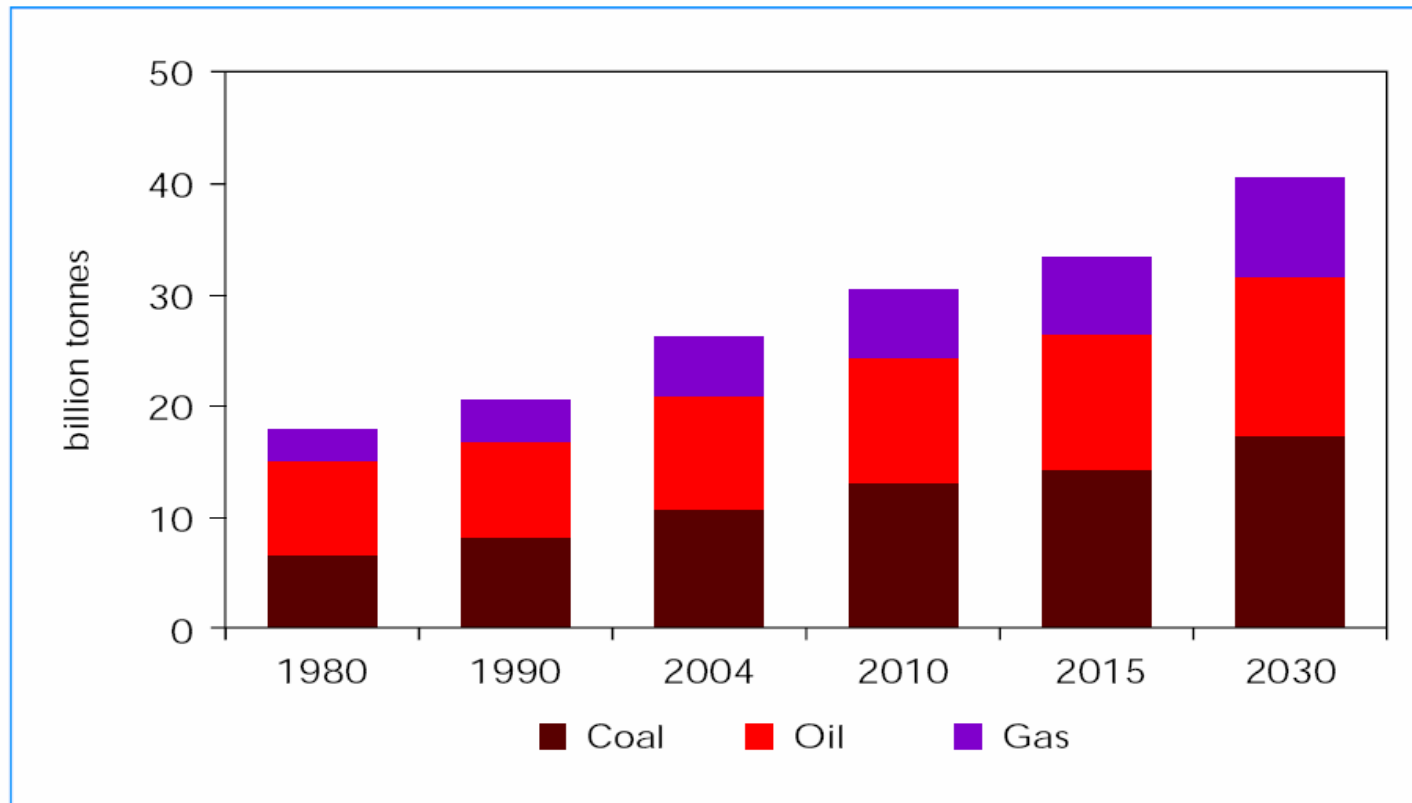
growth in energy demand: 40 % from 2005 to 2020, 80 % from fossile energy



source: PIRA Energy

Global emissions – What lies in front of us?

Global emissions of climate gases are increasing:
IEA reference scenario

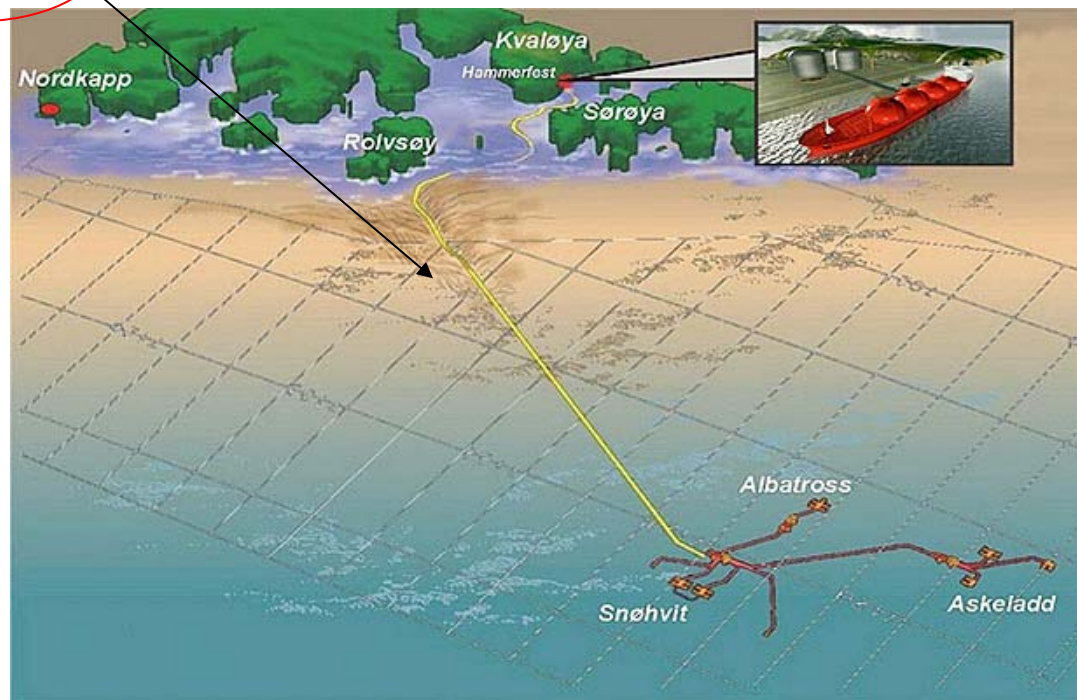


Source: IEA

CO₂ capture and storage

20 - 28 percent of overall climate gas emission reduction within 2050 (Source: IEA)

Snøhvit

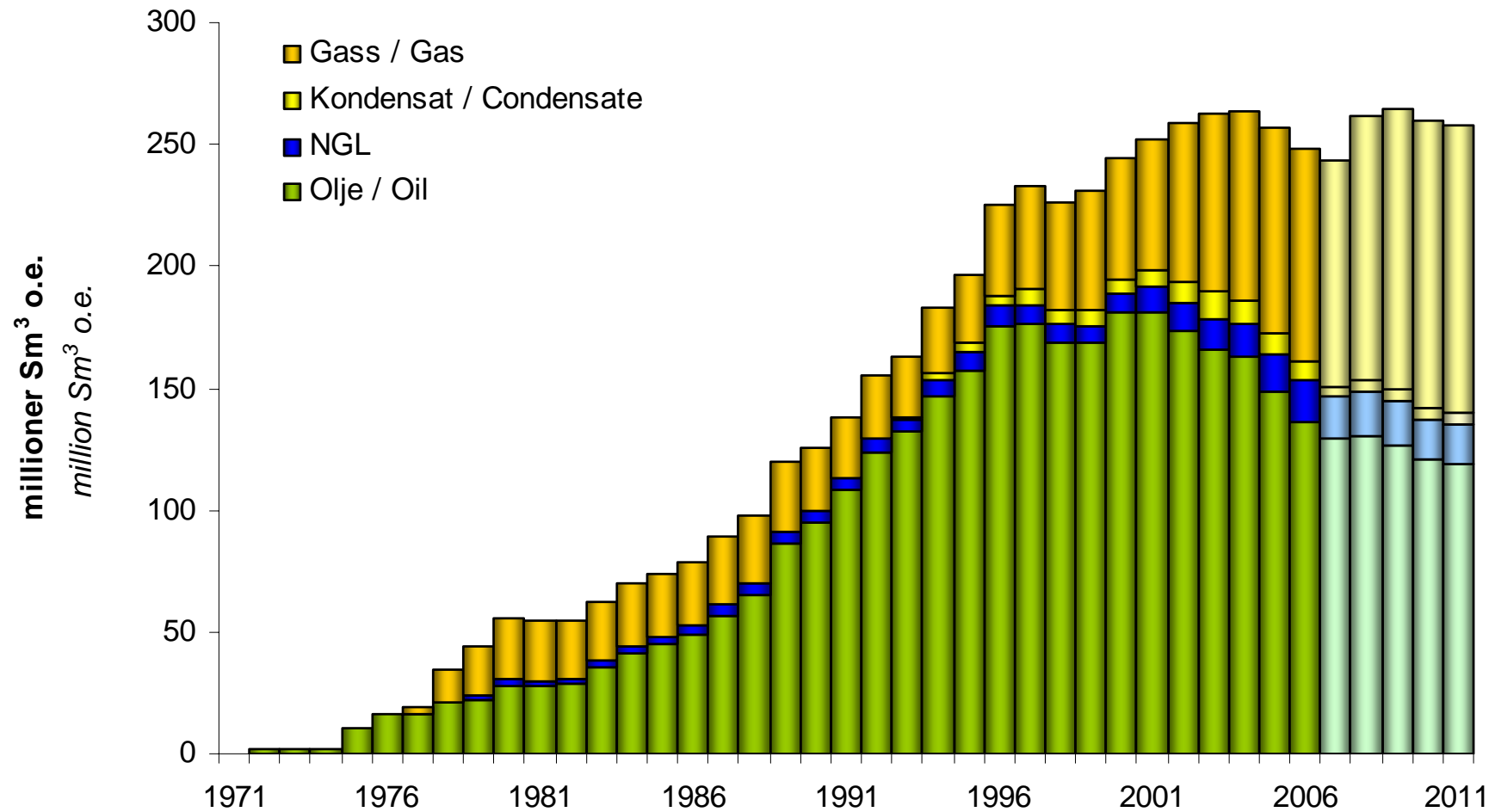


Sleipner

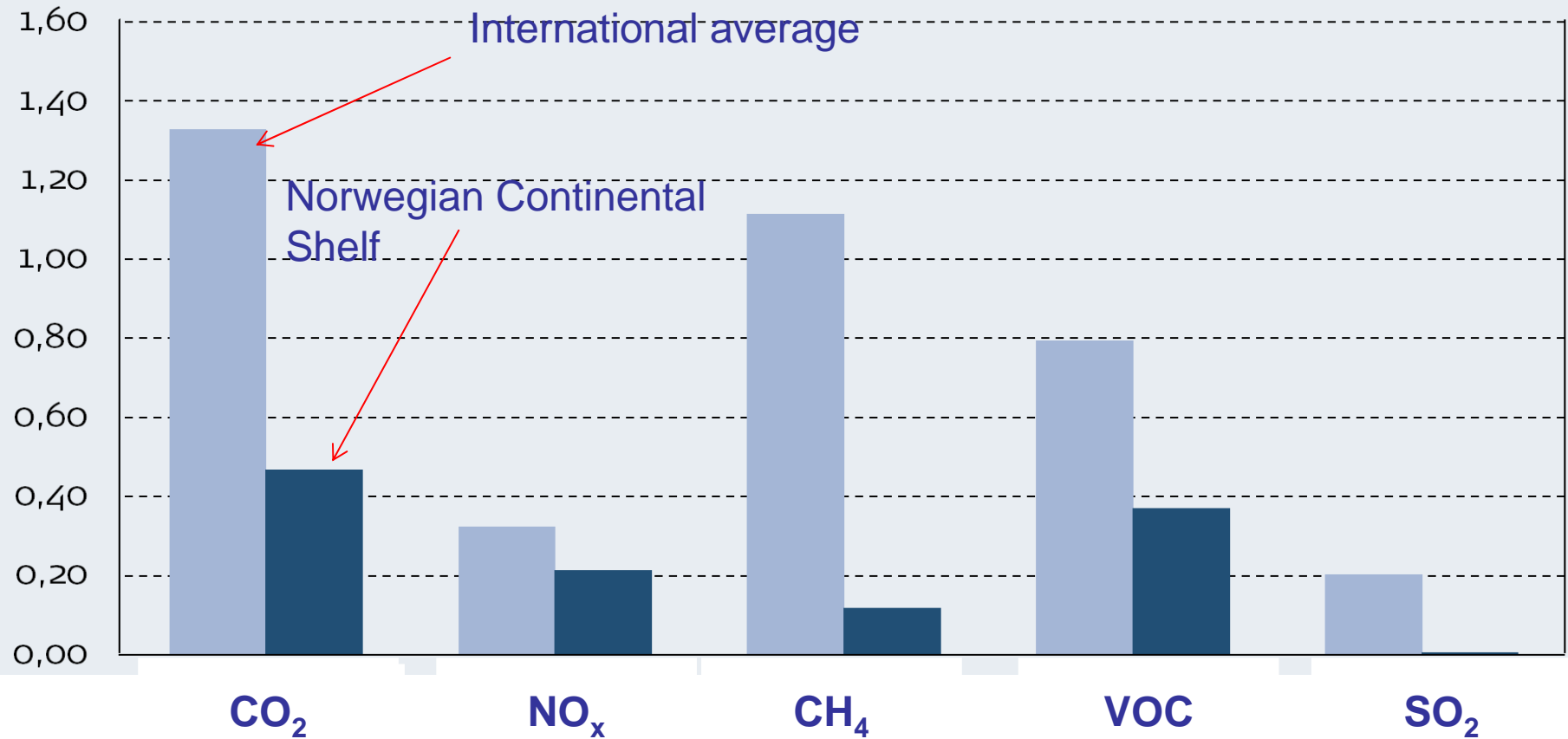
Source: Statoil



Norwegian Petroleum Production



Emissions from offshore petroleum production



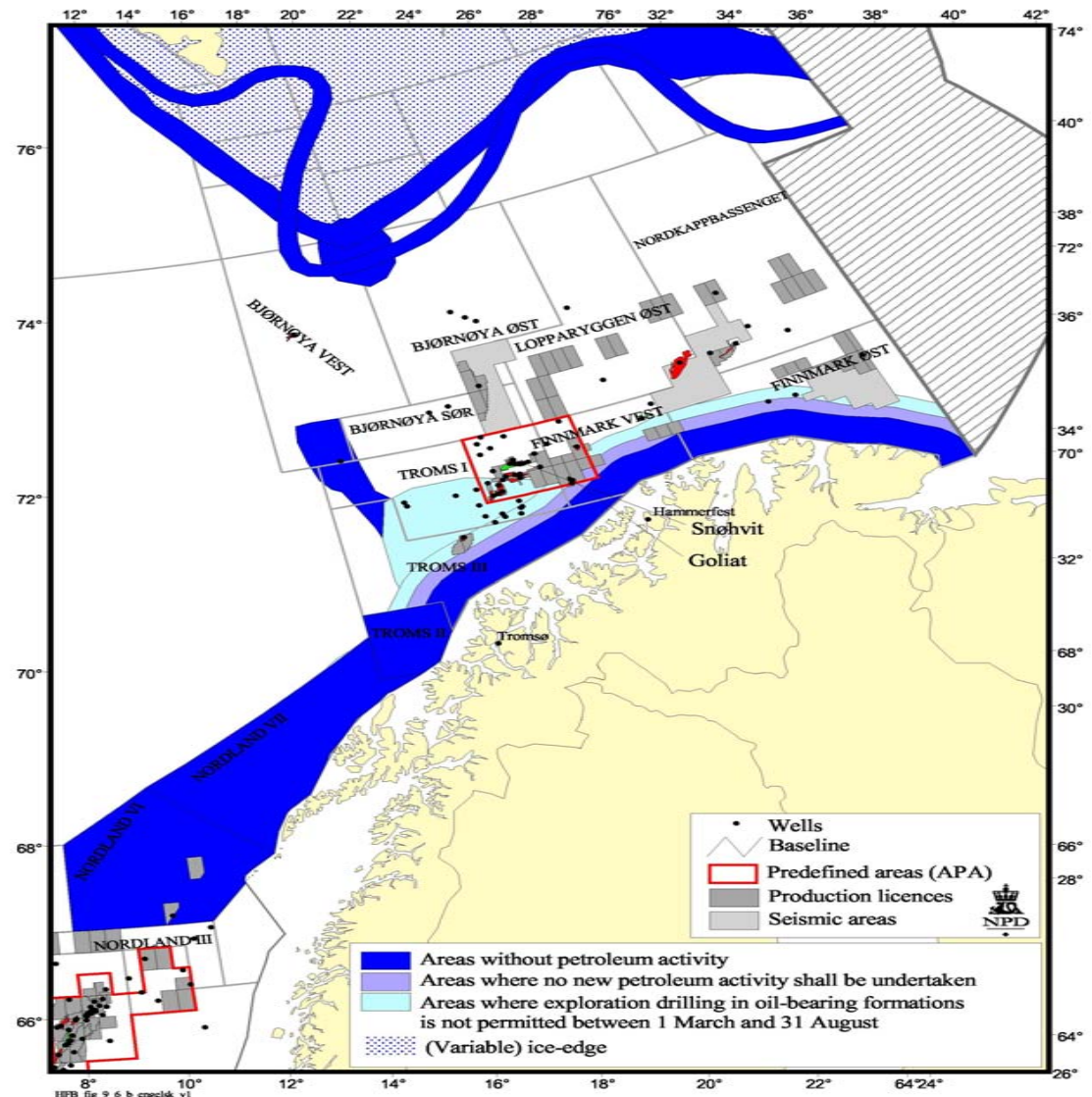
Source: OLF

A strategy for the north – a new perspective



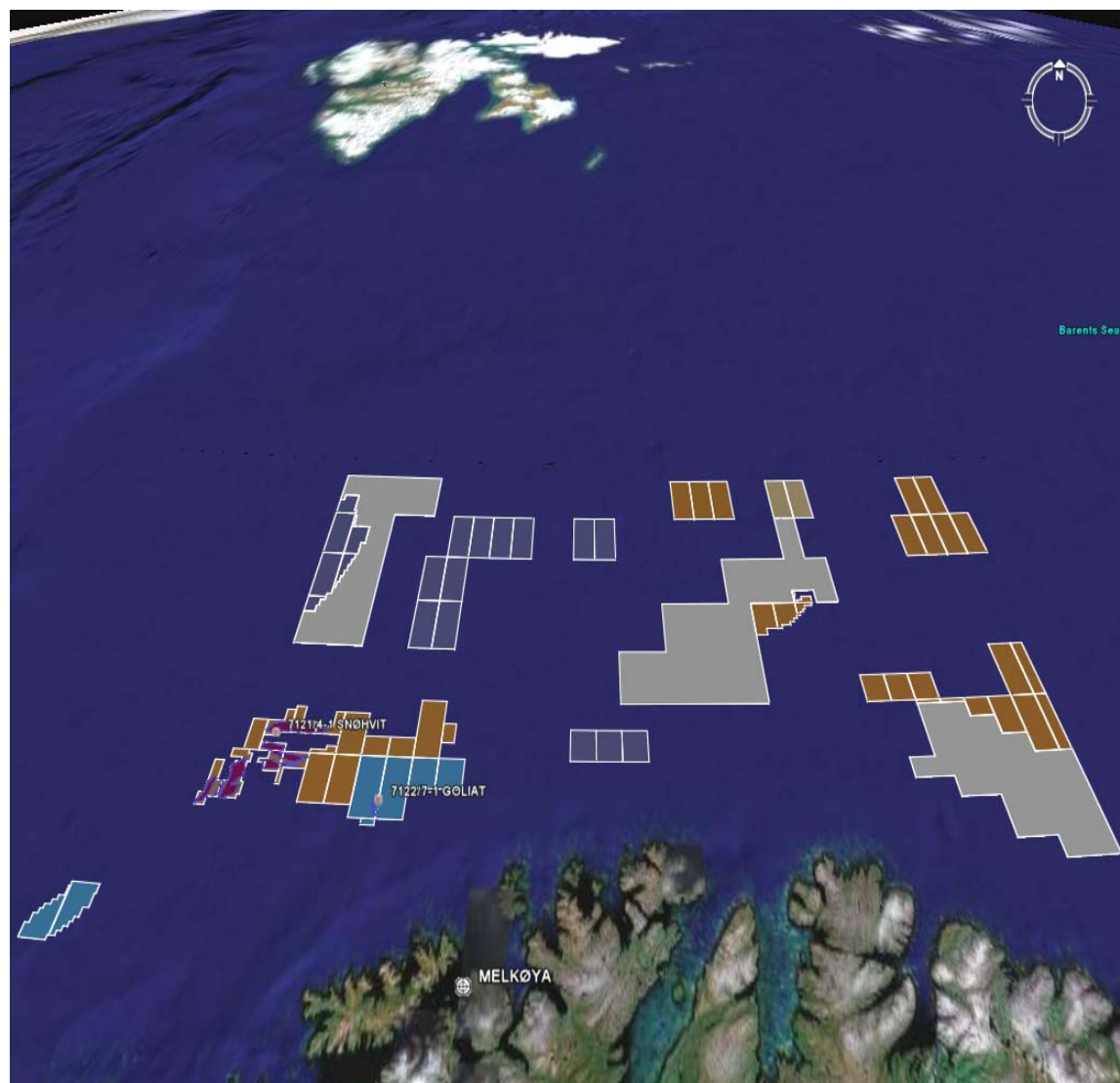
Integrated Management of the Marine Environment in the Lofoten - Barents Sea area

- Eco-system based management of the natural resources in Lofoten - Barents Sea
- Main conclusion: The Barents Sea environment is in a satisfactory state
- Places a sound basis for a long-term exploitation of natural resources in the Barents Sea
 - 19th Licensing Round first implementations of the management plan
- Dynamic process, first revision in 2010



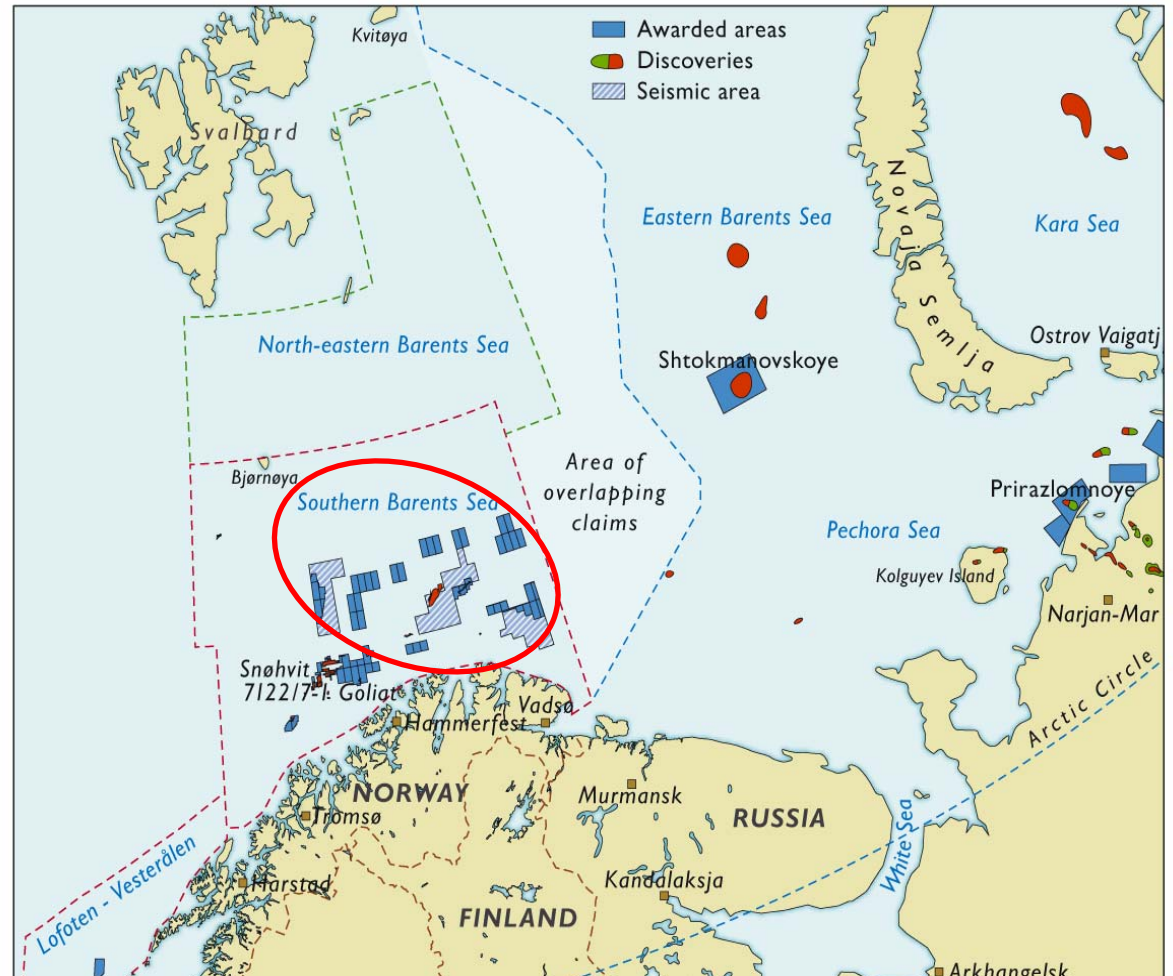
Field development - Snøhvit and Goliat

- **Snøhvit LNG development to be completed by end of 2007**
- **Possible production capacity upgrade at Snøhvit LNG (train II)**
- **Field development plans for Goliat oil discovery ongoing**



Licensing Policy in The Barents Sea Emerging Frontier Area

- Opened for exploration in 1980
- First discovery in 1981
- 70 wells drilled
- Undiscovered resources:
Total: 6,3 BBOE
- Focus:
 - Development of infrastructure in mature parts
 - Update information in frontier areas



The area of overlapping claims equals the size of the Norwegian part of the North Sea (185 000 km²)

Technology and The Arctic

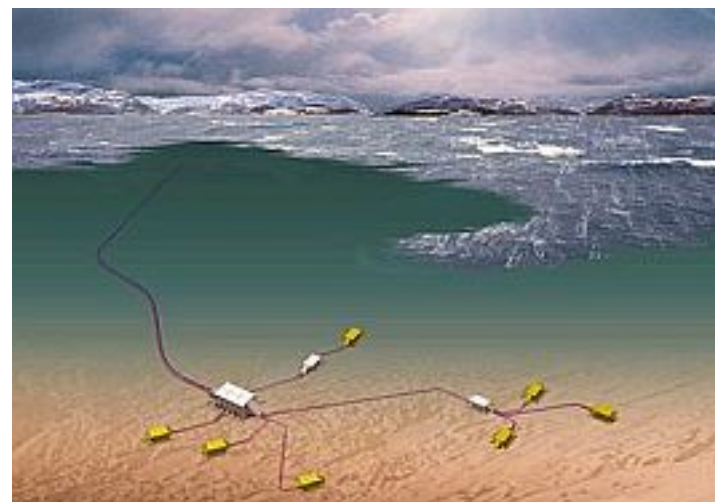
Some challenges are the same:

- efficient exploration
- cost reduction
- increased recovery
- new subsea and downhole production systems

Some challenges are specific

- extreme climate
- ice
- highly remote resources
- environmental sensitivities
- logistics

Sustainable Growth and Development in The High North





Thank you for your attention !