

# Petroleum management in Norway

## An international perspective

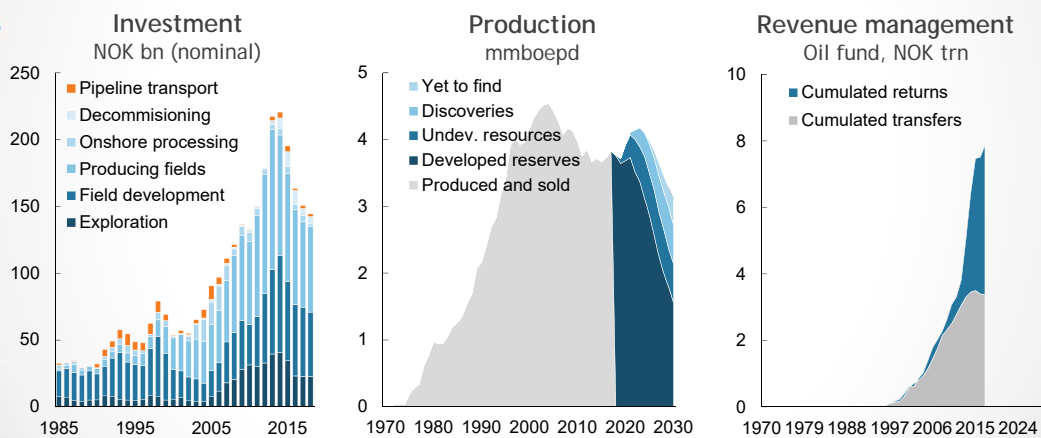
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PETRAD: National Management of Petroleum Resources  
 Stavanger, 26 February 2018

# Petroleum management in Norway

## The core of the matter



Sources: Statistics Norway (investment) and the Norwegian Petroleum Directorate (production).

# Petroleum management in Norway

The core of the matter



Establishment (1965-1980)

Development (1981-2000)

Expansion (2001-2014)



Sources: Statistics Norway (investment) and the Norwegian Petroleum Directorate (production).

# The interest of the people

Natural resources entered the national strategy

## National supervision and control

1. **National supervision and control** must be ensured for all operations on the NCS
2. Petroleum discoveries must be exploited in a way which **makes Norway as independent as possible** for others for its supplies of crude oil

3. **New industry** will be developed on the basis of petroleum. The development of an oil industry must take necessary account of existing industrial activities and the protection of **nature and the environment**

## Nature and environment

**Flaring** of exploitable gas on the NCS must not be accepted except during brief periods of testing

6. Petroleum from the NCS must as a general rule be **landed in Norway**, except in those cases where socio-political considerations dictate a different solution

## State involvement

**The state must become involved** at all appropriate levels and contribute to a coordination of Norwegian interests in Norway's petroleum industry as well as the creation of an integrated oil community which sets its sights both nationally and internationally

**COMMANDING ACHIEVEMENTS**



8. **A state oil company** will be established which can look after the government's commercial interests and pursue appropriate collaboration with domestic and foreign oil interests
9. A pattern of activities must be selected **north of the 62<sup>nd</sup> parallel** which reflects the special socio-political conditions prevailing in that part of the country
10. Large Norwegian petroleum discoveries could present **new tasks for**

## Foreign policy



Source: Norwegian Ministry of Petroleum and Energy, Norwegian Petroleum Directorate.

# Institutions and policies

Best practice developed from research and international experience



St. meld. nr. 25  
(1975-76)  
Petrobrukskomiteens plan i det norske samfunn



# Accommodating technology development

International technology lab facilitated by tax system



Ekofisk tank  
1973  
The first concrete structure

Statpipe  
1985  
Crossing the Norwegian Trench

Snorre  
1992  
Floating production platforms

Troll  
1996  
Concrete platforms in deep water. Multilateral drilling

Åsgard  
1999  
Subsea installations and production ships

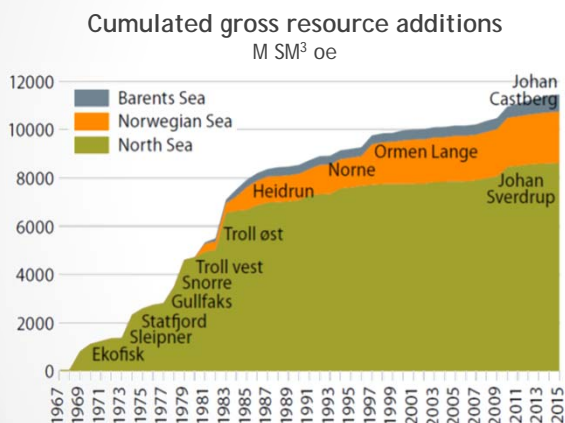
Snohvit and Ormen Lange  
2007  
Multiphase transport. Remote operation

Tordis  
2008  
Subsea operation



## High quality resource potential

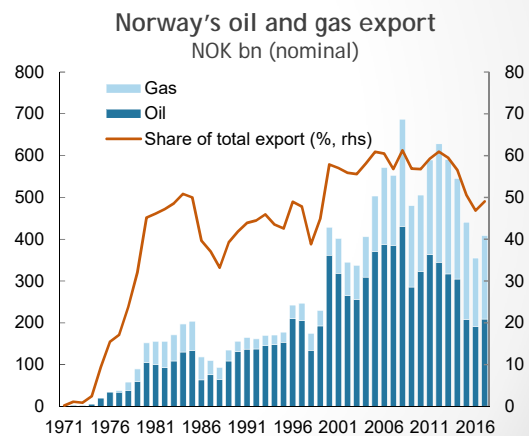
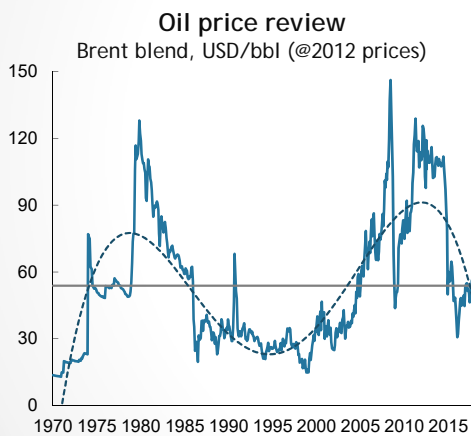
Large discoveries gave rise to a new industry



Source: Norwegian Petroleum Directorate.

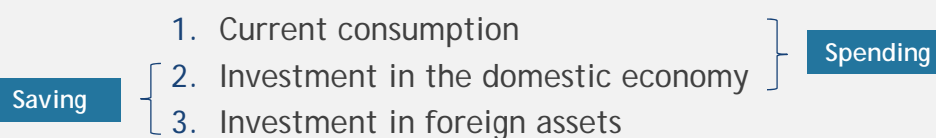
## Favourable markets

Demand could be taken for granted



## Resource revenue management

Striking the right balance: Three main options



- Saving support national wealth and economic growth
- Success stories most often imply high rates of saving
  - Failures do not

## Framework and organisations

Triad of fiscal instruments and institutions

Petroleum  
taxation



MINISTRY OF FINANCE

The State's Direct Financial Interest

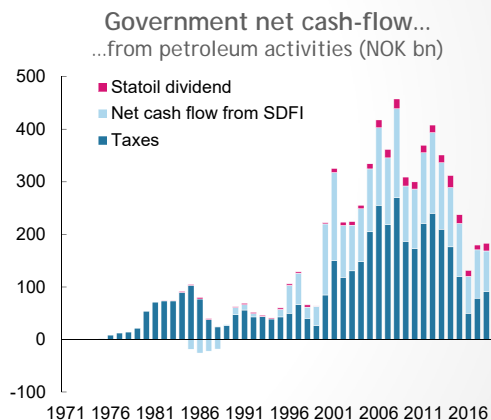
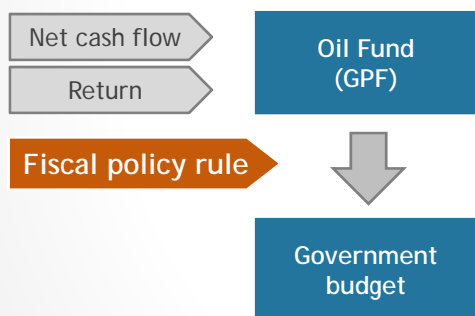


Government Pension Fund - Global



## Oil fund mechanism and fiscal policy rule

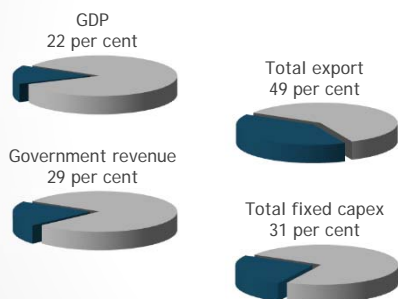
Separation of accrual and spending of oil and gas revenues



## An industry that makes a difference

Balancing the rate of extraction against diversity concerns

Macroeconomic key figures 2015  
Oil and gas share in...



Investments: Two times Rio 2016  
...every year

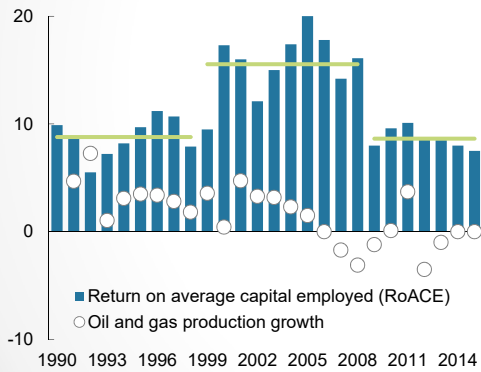




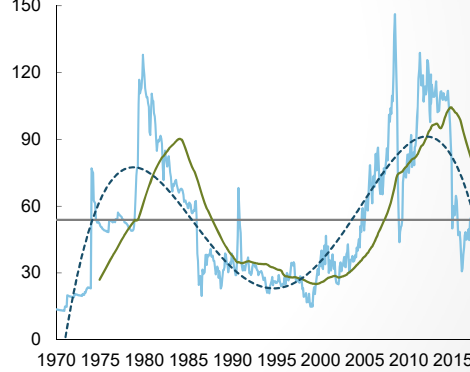
## Short-term challenge: Profitability

Returns were eroded by escalating costs and falling oil price

Profitability and production growth  
International oil companies (1990-2015)



Oil price in review  
Brent blend, USD/bbl (@2012 prices)



\*Sources: Deutsche Bank (2013), UBS Warburg (2014), Mohn, K. and B. Misund. 2011. Shifting sentiments in oil and gas investments: an application to the oil industry. *Applied Financial Economics* 21 (7), 469-479.

## Longer-term challenge: Growth

Constraints related to supply and demand

Resources scarcity ...  
... raises challenges for reserve replacement



Climate policy uncertainty...  
... raises risk around demand and prices



# Petroleum management in Norway

## An international perspective

- A small, open petro economy
  - Endowments and institutions
  - Clever policy design
  - Accomodating technology
  - Supportive markets
- Resource revenue management
- Opportunities and challenges



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