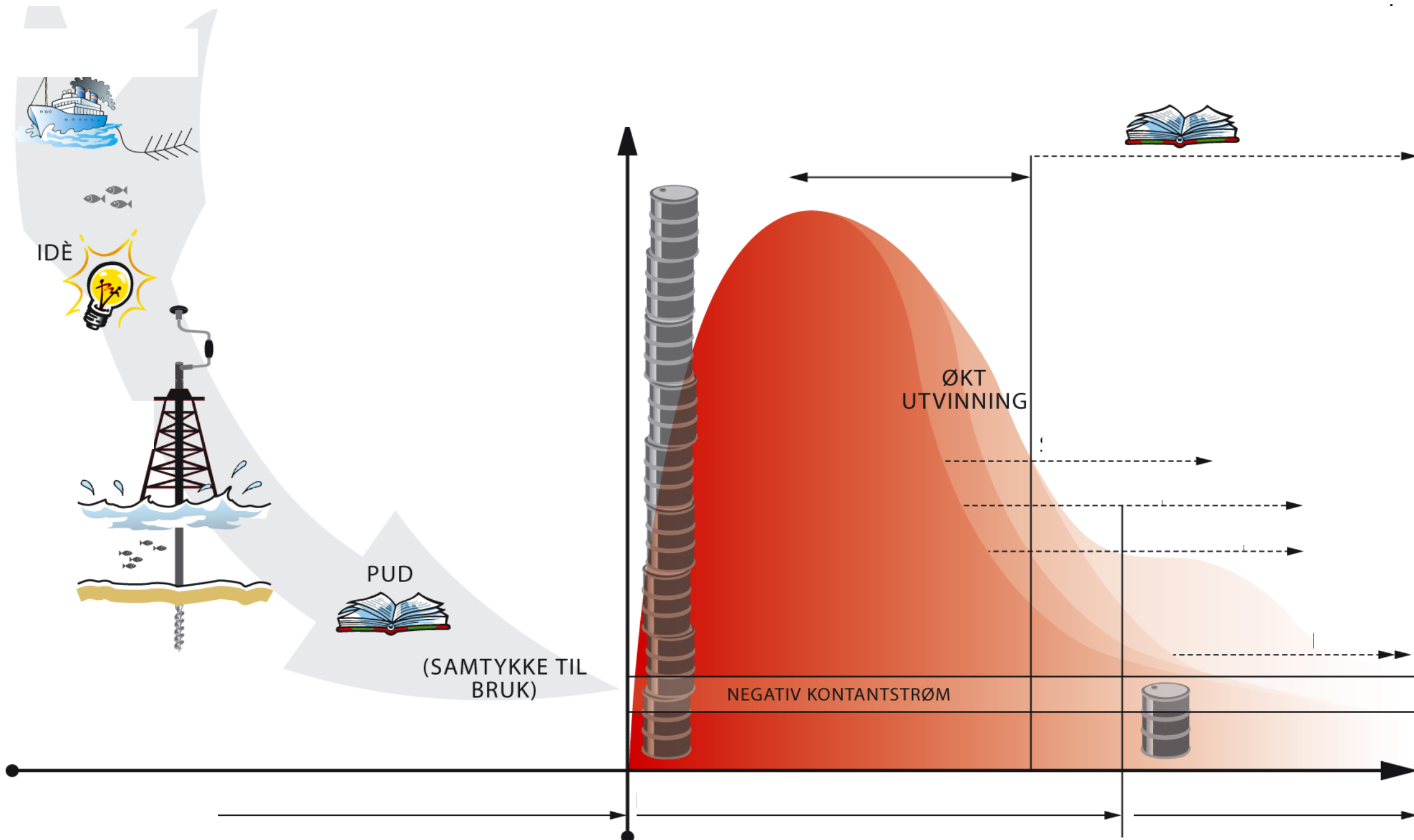


Decommissioning

The Norwegian Petroleum Directorate

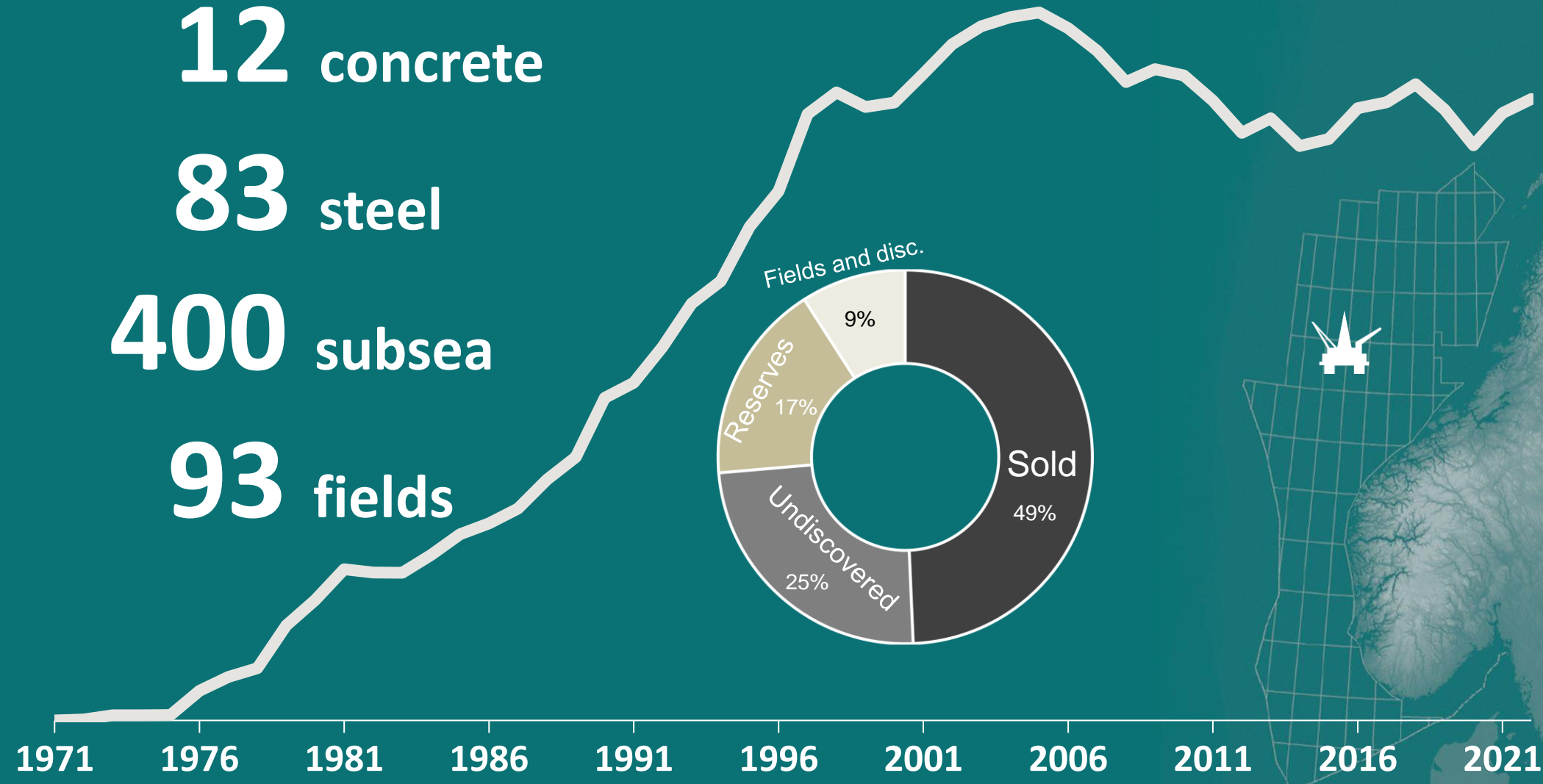
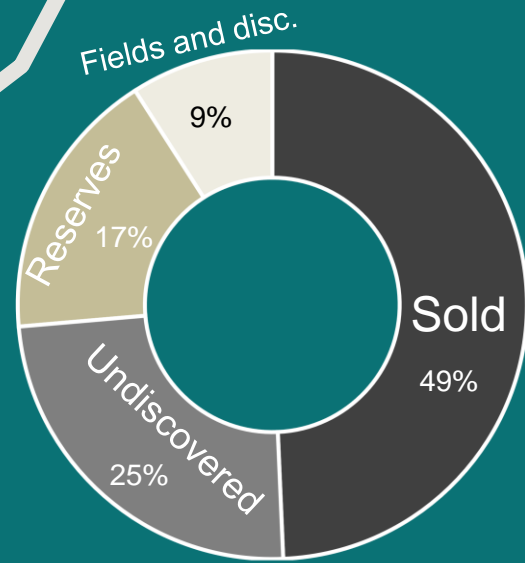




The NCS



12 concrete
83 steel
400 subsea
93 fields



The Rules

- **National laws and regulations**
 - The petroleum law
 - The petroleum regulation
 - HSE- regulations
 - Environmental protection act
- **International agreements**
 - UNCLOS (United Nations Convention on Law of the Sea)
 - OSPAR (Oslo/Paris Convention)
 - IMO (International Maritime Organisation)

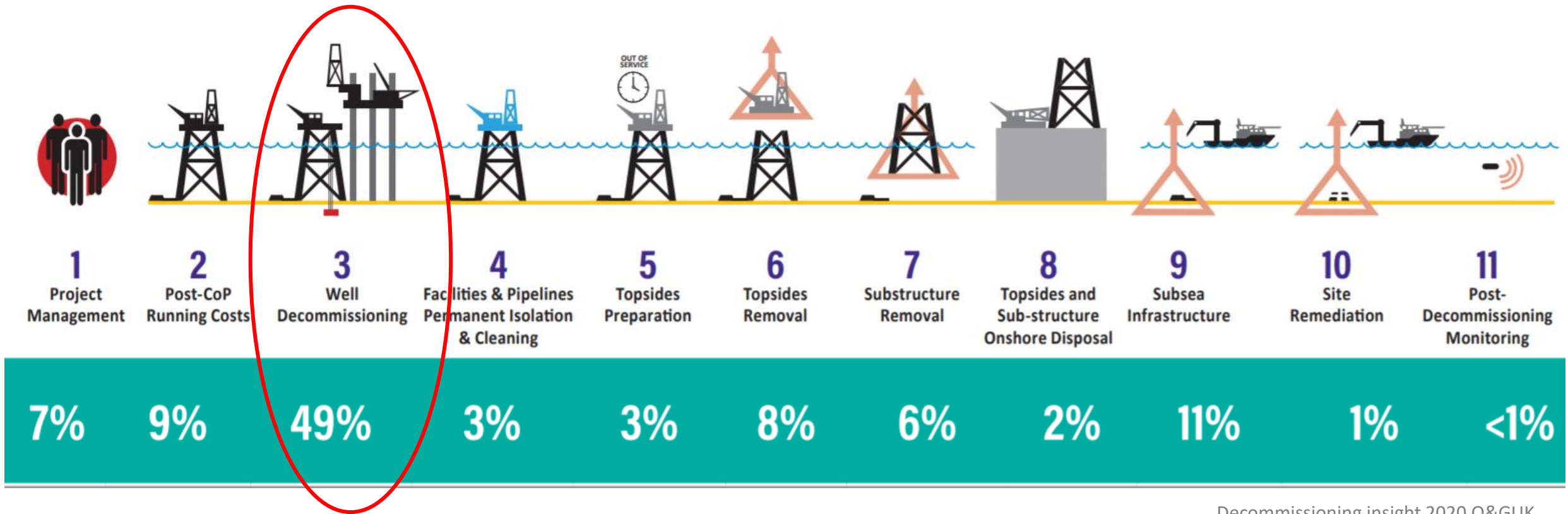


Decommissioning Plan

- **Disposal plan**
 - Technical issues
 - Financial aspects
 - Alternatives
- **Impact assessment**
 - Expected consequences
 - Public consultation

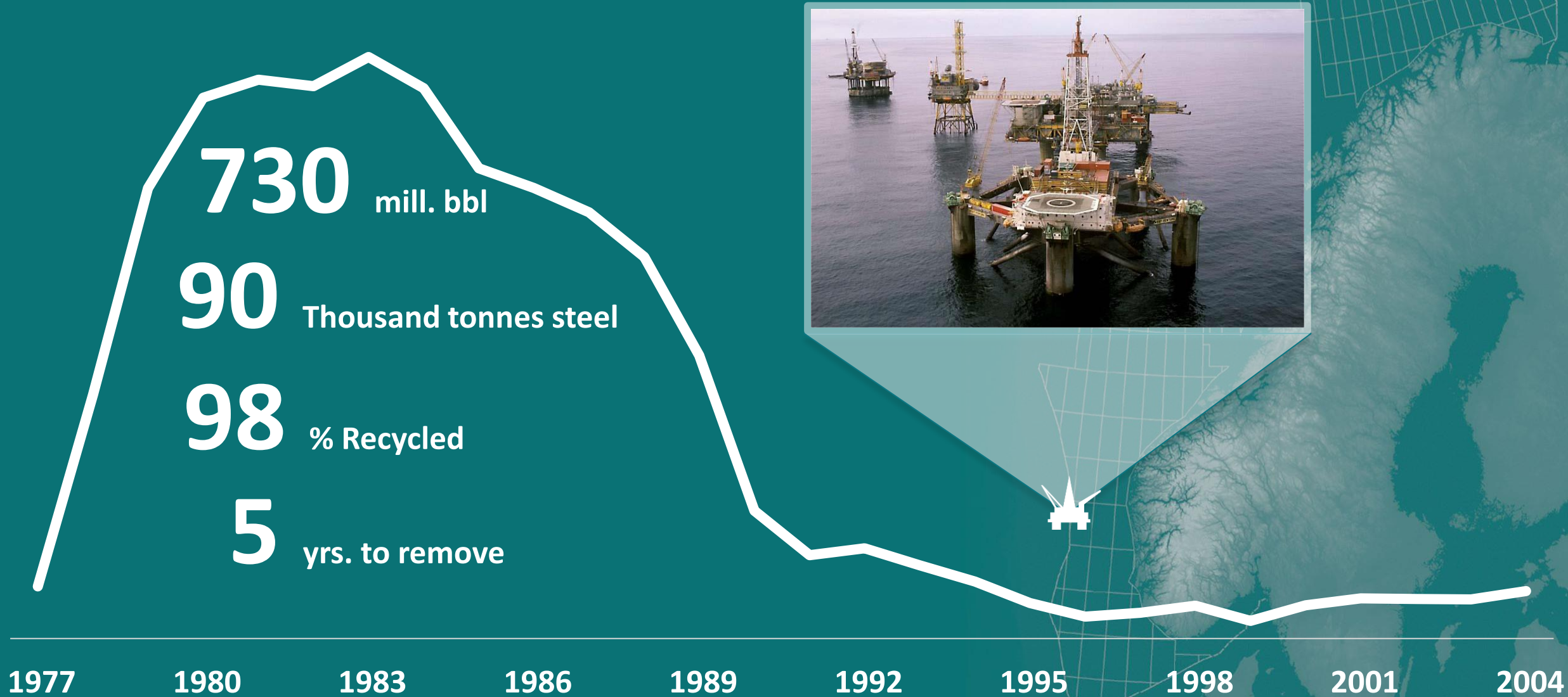


The Cost Structure

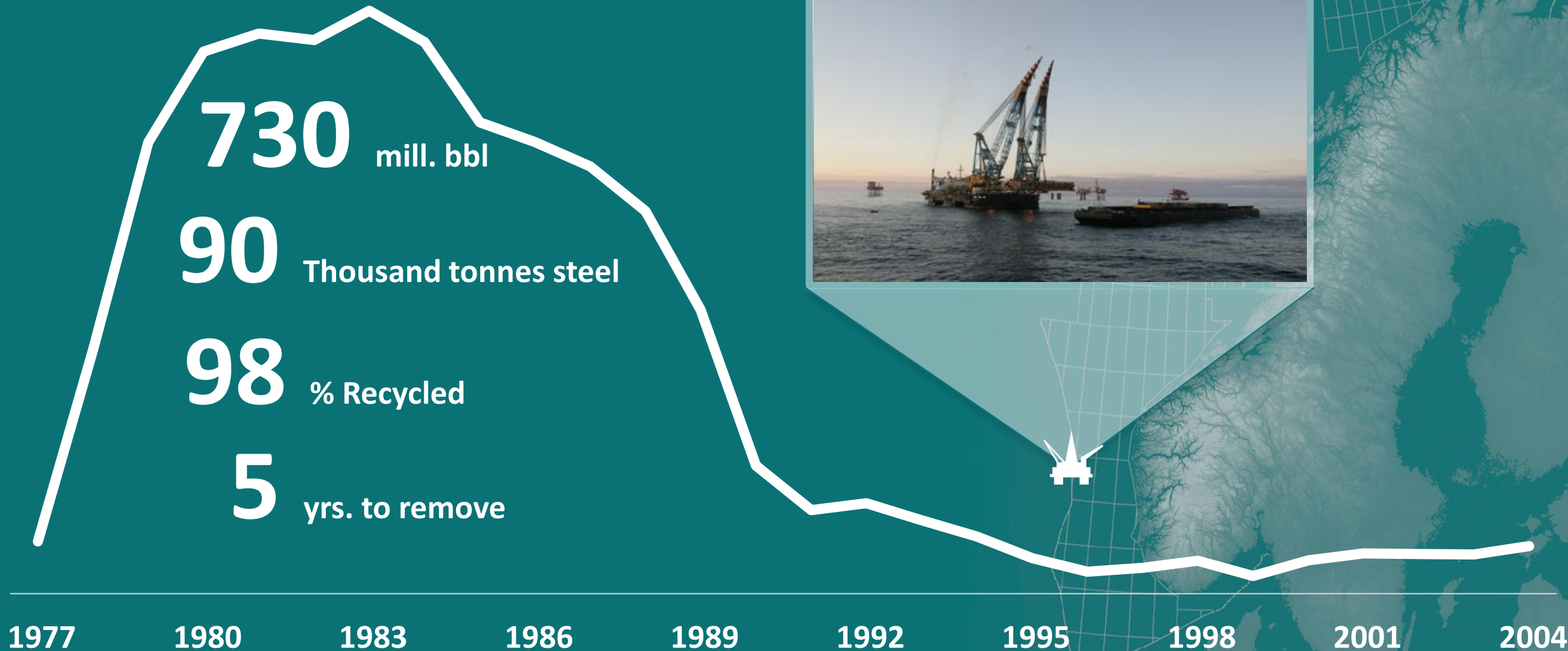


Decommissioning insight 2020 O&GUK

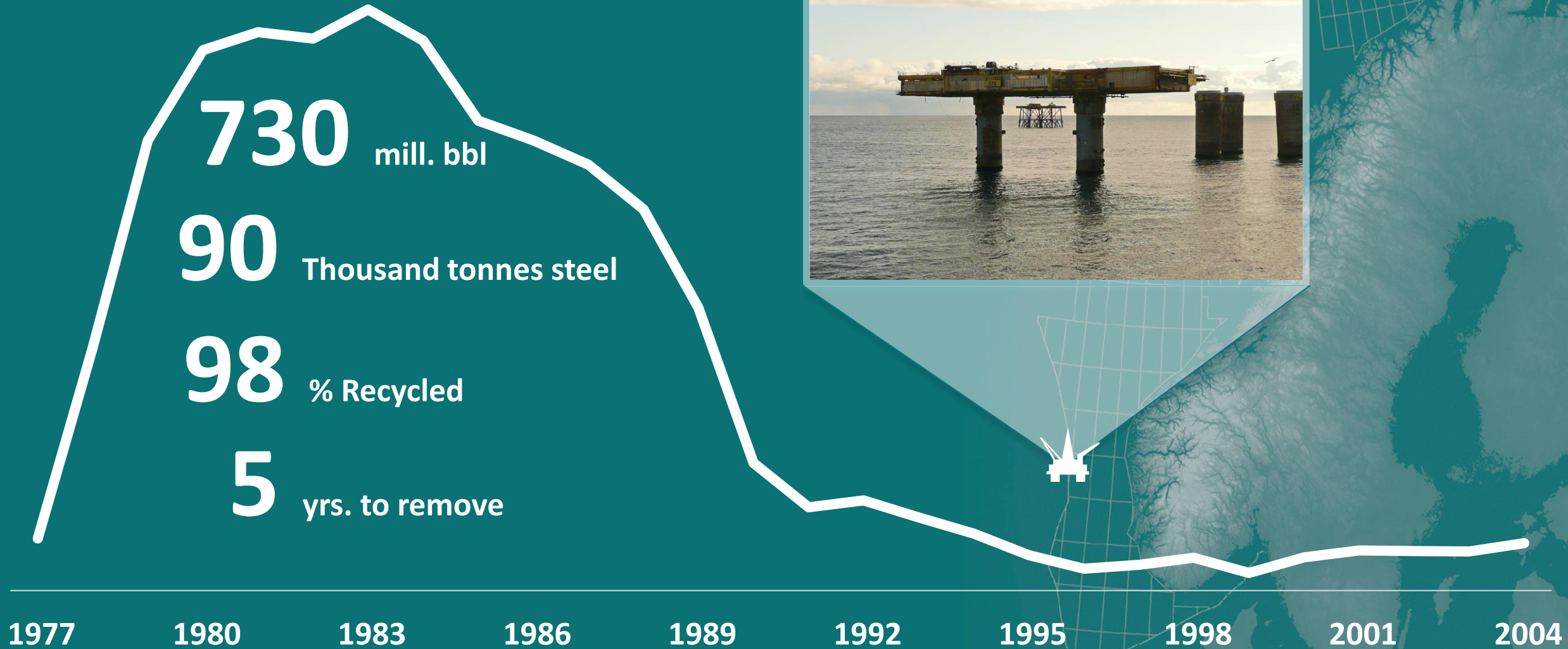
Frigg Decommissioning



Frigg Decommissioning



Frigg Decommissioning



Important Considerations

- When is optimal CoP?
- When to start planning the decommissioning?
- Which regulations, laws and international conventions apply?
- Who monitors the decommissioning stage?
- Cooperation between governmental institutions.



Photo: Ellen Marie Hagevik, Medvind24

Checklist

- Legal requirements
- Technical feasibility
- Health, Safety and Environment
- Cost and economics
- Resource management
- Timing of decommissioning
- Reuse of installation
- Environment and other users of the sea
- Politics, public concern and reputation



Plan the Ending at the Beginning

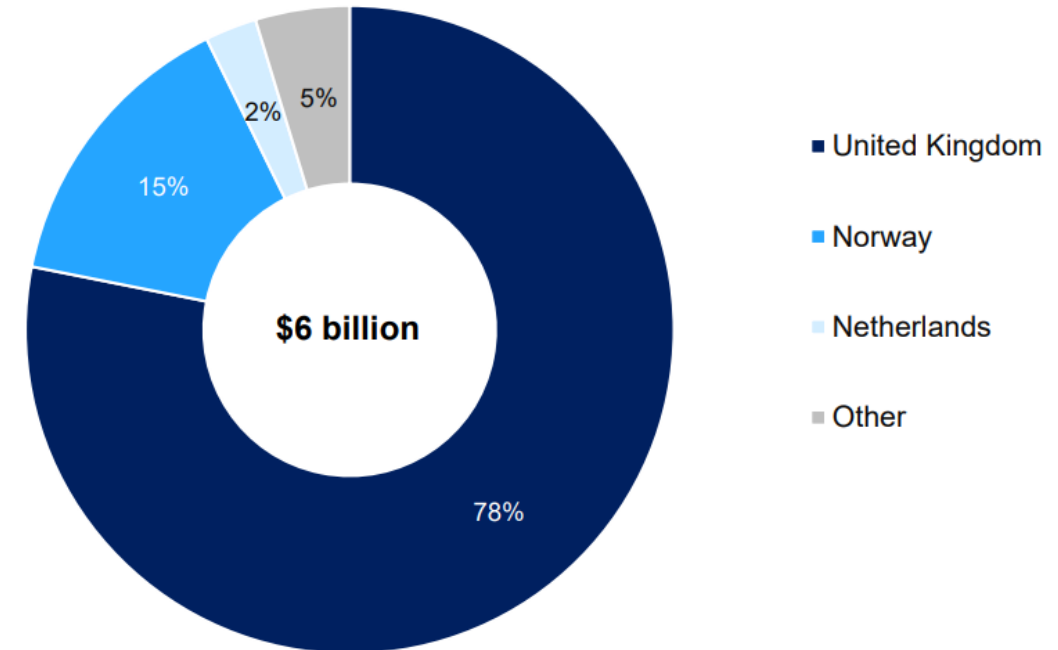
- Start planning the decommissioning at the development stage
- Decommissioning part of the PDO
- Detailed planning between 5 and 2 years before shutdown
- Close dialogue with the IOCs
- Secure the financing



Security Against Default

- State
 - Ensure funding for proper decommissioning
- Being shielded from default
 - In case of sale to a third party

2020-2021 offshore decommissioning commitments in Europe by country
Percent



Source: Rystad Energy ServiceCube

Svein Arne Svilosen
Norwegian Petroleum Directorate (NPD)

Security Mechanisms

- Parent guarantee
- Third party guarantee
- Insurance
- Decommissioning trust fund



Decommissioning Fund

- Decommissioning fund
 - When to start the fund?
 - Who manages the fund?
 - What kind of risk profile?
 - What if the fund is not big enough?
 - Fiscal regime?



EP



**United Nations
Environment
Programme**



UNEP(DEPI)/MED WG.384/INF.4
6 June 2013

Original: ENGLISH ONLY



MEDITERRANEAN ACTION PLAN

1st Offshore Protocol Working Group Meeting

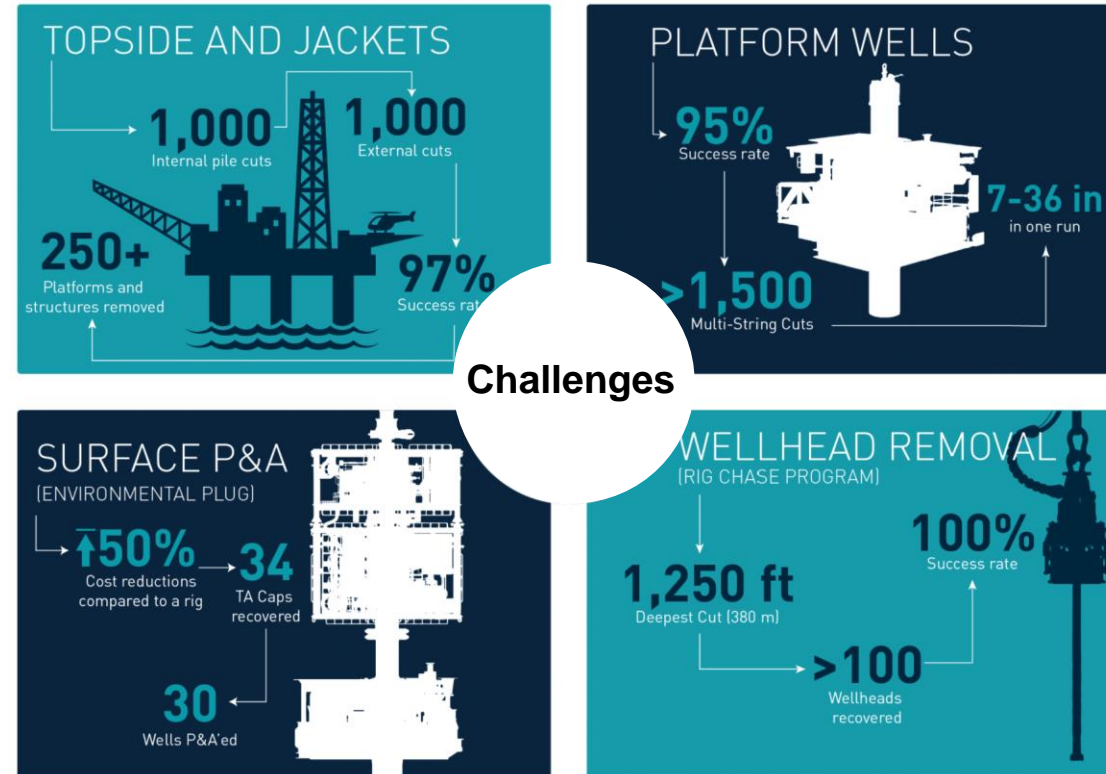
Valletta, Malta, 13-14 June 2013

**DEALING WITH DECOMMISSIONING COSTS OF OFFSHORE OIL AND GAS
FIELD INSTALLATIONS: AN APPRAISAL OF EXISTING REGIMES**

Challenges



- Who is responsible for decommissioning?
- How is decommissioning financed?
- What is the government's responsibility?
- What if companies do not fulfill their obligations?
- What if a well starts leaking 50 years after decommissioning?
- What does your legal framework/contracts say about decommissioning?
- How does a decommissioning fund affect incentives in your fiscal system?





npd.no
factpages.npd.no/no
norskpetroleum.no

