The Shelf in 2018

10 January 2019 | Director General Bente Nyland
High activity

• Heading for a new production record in 2023
• Investments will increase in 2019
• Reduced costs
• High growth in reserves
• More exploration
• Record number of production licences
• Highest resource growth from discoveries since 2014
• Medium-sized companies playing a larger role
Investments
Oil price

Source: EIA, Europe Brent Spot Price FOB
Continued high investments – growth in 2019
Substantial reduction in average well cost
Stable activity level in next five-year period
– total costs
Headed for new production record in 2023
Production forecast up to 2030
Great diversity
Small and medium-sized companies account for a larger share of production
Development and operation
Many fields in production and well-developed infrastructure
Aasta Hansteen
– new field in production gives new infrastructure in the northern Norwegian Sea

Photo: Equinor
Development plans submitted in 2018
– significant investments yield substantial values

Troll fase 3
Illustration: Equinor

NOVA
Illustration: Wintershall

Johan Sverdrup byggetrinn 2
Illustration: Equinor

New, stand-alone facilities
Further development and use of existing infrastructure
Development plans approved in 2018 – further development of the Shelf

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Operator</th>
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<tbody>
<tr>
<td>Johan Castberg</td>
<td>Equinor</td>
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<tr>
<td>Ærfugl</td>
<td>Aker BP</td>
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<td>Fenja</td>
<td>Neptune</td>
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<td>Nova</td>
<td>Wintershall</td>
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<tr>
<td>Troll (Troll phase 3)</td>
<td>Equinor</td>
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<td>Snorre (SEP)</td>
<td>Equinor</td>
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<tr>
<td>Skogul</td>
<td>Aker BP</td>
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<td>Yme (new development)</td>
<td>Repsol</td>
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<td>Valhall West Flank</td>
<td>Aker BP</td>
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- New, stand-alone facilities
- Further development and use of existing infrastructure
Njord + Fenja + Bauge
– new future in mature area

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Approved PDO 2018
Approved PDO 2017
More and better use of data and new technology creates values

Photo: Aker BP
Honour and glory for increased growth in reserves...
Continued growth in oil reserves requires decisions

![Graph showing oil reserves growth from 2013 to 2023. The graph includes lines for New developments and IOR, with a goal for reserves growth indicated.](image)
Emission-reducing measures
Will store CO$_2$
– first application for exploitation permit on the Shelf
Exploration
Record number of awards in 2018

PRODUCTION LICENCES

87
High exploration activity
Most wells in areas near infrastructure
11 discoveries – good resource growth
More than half remains

- Undiscovered resources: 25%
- Contingent resources in discoveries: 4%
- Contingent resources in fields: 5%
- Reserves: 19%

Produced: 47%

Total resources: 15.6 billion Sm³ oe
Industry must explore for gas

- **Undiscovered**
- **Resources in discoveries**
- **Resources in fields**
- **Sold**

**Sales gas, billion Sm³**

- **1995:**
  - **North Sea:** 245 million Sm³
  - **Norwegian Sea:** 395 million Sm³
  - **Barents Sea South:** 685 million Sm³
  - **Barents Sea North:** 545 million Sm³

- **2025:**
  - **North Sea:** 480 million Sm³
  - **Norwegian Sea:** 345 million Sm³
  - **Barents Sea South:** 480 million Sm³
  - **Barents Sea North:** 825 million Sm³

**Resources, million Sm³ o.e.**

- **North Sea:** 245 million Sm³
- **Norwegian Sea:** 395 million Sm³
- **Barents Sea South:** 685 million Sm³
- **Barents Sea North:** 545 million Sm³
The Northern areas – important for making major discoveries

- Mapping in the Barents Sea North reveals major structures
- Mapping continues in the northeast towards Russia
Seabed minerals – a new chapter?
The Norwegian oil and gas story – barely halfway

- High activity
- Headed for record production in 2023
- More gas to Europe
Thank you for your attention!

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