Chapter 1
The largest oil producers and exporters in 2005
(incl. NGL/condensate)

Production

<table>
<thead>
<tr>
<th>Country</th>
<th>Production (Mill barrels/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>9,47</td>
</tr>
<tr>
<td>Russia</td>
<td>9,44</td>
</tr>
<tr>
<td>USA</td>
<td>7,27</td>
</tr>
<tr>
<td>Iran</td>
<td>3,91</td>
</tr>
<tr>
<td>Mexico</td>
<td>3,76</td>
</tr>
<tr>
<td>China</td>
<td>3,63</td>
</tr>
<tr>
<td>Canada</td>
<td>3,03</td>
</tr>
<tr>
<td>Norway</td>
<td>2,97</td>
</tr>
<tr>
<td>Venezuela</td>
<td>2,64</td>
</tr>
<tr>
<td>Kuwait</td>
<td>2,51</td>
</tr>
</tbody>
</table>

Export

<table>
<thead>
<tr>
<th>Country</th>
<th>Export (Mill barrels/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>7,38</td>
</tr>
<tr>
<td>Russia</td>
<td>6,44</td>
</tr>
<tr>
<td>Norway</td>
<td>2,74</td>
</tr>
<tr>
<td>Iran</td>
<td>2,34</td>
</tr>
<tr>
<td>Kuwait</td>
<td>2,18</td>
</tr>
<tr>
<td>Venezuela</td>
<td>2,12</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2,09</td>
</tr>
<tr>
<td>UAE</td>
<td>2,09</td>
</tr>
<tr>
<td>Mexico</td>
<td>1,66</td>
</tr>
<tr>
<td>Libya</td>
<td>1,38</td>
</tr>
</tbody>
</table>

Source: Petroleum Economics Ltd.
Macroeconomic indicators for the petroleum sector

- The petroleum sector's share of GDP: 25%
- The petroleum sector's share of state revenues: 33%
- The petroleum sector's share of total investment: 24%
- The petroleum sector's share of total exports: 52%

Source: Statistics Norway, Ministry of Finance
The size of the Government Pension Fund – Global at 31.12.2005 and as share of GDP

Source: Statistics Norway, Norwegian public accounts
Historic investments and forecasted future investments

Source: NPD/MPE

- Not decided projects
- Approved and decided investments in fields/discoveries and pipelines/onshore plants

Bill. 2006 NOK value

Ministry of Petroleum and Energy
Chapter 2
National organisation of the petroleum sector

Stortinget (Parliament)

The Government

Ministry of Petroleum and Energy

Ministry of the Environment

Ministry of Labour and Social Inclusion

Ministry of Fisheries and Coastal Affairs

Ministry of Finance

The Norwegian Petroleum Directorate

The Norwegian Pollution Control Authority

The Petroleum Safety Authority Norway

The Norwegian Coastal Administration

Government Pension Fund - Global

The Petroleum Tax Office

Petro AS

Gassco AS

Gassnova

Statoil ASA
Chapter 3
Exploration wells spudded on the NCS 1966-2005

Source: Norwegian Petroleum Directorate
Undiscovered resources

Source: Norwegian Petroleum Directorate
Awards in pre-defined areas

North Sea announcement 2006

Source: Norwegian Petroleum Directorate
Awards in pre-defined areas

Norwegian Sea announcement 2006

Source: Norwegian Petroleum Directorate
Awards in pre-defined areas
Barents Sea announcement 2006

Source: Norwegian Petroleum Directorate
Norwegian and Russian part of the Barents Sea

Source: Norwegian Petroleum Directorate
**Pre-qualified/new companies since 2000**  
*(As of 1st quarter 2006)*

<table>
<thead>
<tr>
<th>Aker Energy*</th>
<th>Idemitsu</th>
<th>Pelican*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altinex</td>
<td>Kerr McGee</td>
<td>Pertra</td>
</tr>
<tr>
<td>Anadarko</td>
<td>Lasmo*</td>
<td>Petoro</td>
</tr>
<tr>
<td>BG Norge</td>
<td>Lundin</td>
<td>Petro-Canada</td>
</tr>
<tr>
<td>Centrica</td>
<td>Marubeni</td>
<td>Premier Oil</td>
</tr>
<tr>
<td>CNR</td>
<td>Mærsk</td>
<td>Revus</td>
</tr>
<tr>
<td>Discover Petroleum</td>
<td>Noble Energy</td>
<td>Ruhrgas</td>
</tr>
<tr>
<td>DNO</td>
<td>Noreco</td>
<td>Sumitomo</td>
</tr>
<tr>
<td>Dong</td>
<td>OER</td>
<td>Talisman</td>
</tr>
<tr>
<td>Endeavour</td>
<td>Oranje Nassau</td>
<td>Wintershall</td>
</tr>
<tr>
<td>Gaz de France</td>
<td>Paladin</td>
<td></td>
</tr>
</tbody>
</table>

* Companies that no longer exists as individual companies
Exploration costs in production licences awarded in NSA and APA distributed according to the size of the companies
Ministry of Petroleum and Energy

Annual gross increase in the reserves of oil 1981-2005

Source: Norwegian Petroleum Directorate
Distribution of resources – fields in production

Source: Norwegian Petroleum Directorate
Production trends for the Ekofisk, Varg, Oseberg and Ula fields

Source: Norwegian Petroleum Directorate
Lifetimes for selected fields

- **Veslefrikk**: Expected time of cessation 2005
- **Varg**: Expected time of cessation 2002
- **Statfjord**: Expected time of cessation 1992-1995
- **Gullfaks**: Expected time of cessation 2005
- **Ekofisk**: Expected time of cessation 2005
- **Draugen**: Expected time of cessation 2020
- **Brage**: Expected time of cessation 2025

Source: Norwegian Petroleum Directorate
Optical fibre cables on the Norwegian continental shelf

Source: Norwegian Petroleum Directorate
Chapter 5
Gas pipelines

Source: Norwegian Petroleum Directorate
Historic and expected Norwegian gas exports

Source: NPD/MPE
Sale of NGL/condensate 2005 by country of first destination

Total 22.7 mill. scm oe

- USA: 24.0%
- Germany: 2.1%
- Sweden: 9.2%
- Turkey: 2.8%
- Mexico: 1.4%
- UK: 7.0%
- Norway: 23.7%
- The Netherlands: 11.7%
- Denmark: 5.7%
- Finland: 2.0%
- France: 3.5%
- Belgium: 4.7%
- Others: 2.1%

Source: Norwegian Petroleum Directorate
Norwegian natural gas exports 2005

Total 82.5 bill.scm

Source: Norwegian Petroleum Directorate
Interactive map of the Norwegian Oil & Gas "World-Class" Clusters

Source: www.intsok.no
Ministry of Petroleum and Energy’s involvement in petroleum research

Source: MPE
OG21’s technology road map for value creation on the Norwegian continental shelf

Source: OG21
Chapter 8
The net government cash flow from the petroleum activities

Source: Norwegian Public Accounts/National Budget
The net government cash flow from the petroleum activities 2005

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct taxes:</td>
<td>159.3</td>
</tr>
<tr>
<td>Royalty, CO₂-tax</td>
<td></td>
</tr>
<tr>
<td>Area fee:</td>
<td>4.4</td>
</tr>
<tr>
<td>SDFI:</td>
<td>111.2</td>
</tr>
<tr>
<td>Statoil dividend:</td>
<td>8.1</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>283.0</strong></td>
</tr>
</tbody>
</table>
Calculation of petroleum tax

Operating income (norm price)
- Operating expenses
- Linear depreciation for investments (6 years)
- Exploration expenses
- CO\(_2\)-tax and area fee
- Net financial costs (limited by the thin capitalisation rule: 20% equity)

= Corporation tax base (tax rate: 28%)
- Uplift (7.5% of investment for 4 years)

= Special tax base (tax rate: 50%)

Source: MPE
Sources of Norwegian emissions of CO₂
2004

- Petroleum activities: 29%
- Road traffic: 23%
- Other industrial processes: 18%
- Firing: 16%
- Other mobile sources: 5%
- Coastal traffic and fisheries: 9%

Source: Statistics Norway
CO₂ emissions from petroleum activities 2004, by source

Stationary sources offshore: 89%
- Process emissions: 5%
- Exploration drilling: 1%
- Production drilling: 2%
- Gas terminals: 3%

Source: NPD
Emissions of taxable CO$_2$ per produced unit

Source: NPD
Emissions of CO$_2$ from the Norwegian petroleum sector

Source: MPE/NPD
Flared gas per produced unit in Denmark, UK and Norway
1994-2003

Source: NPD
Sources of NOx emissions in Norway, 2004

- Road traffic: 19%
- Coastal traffic and fisheries: 40%
- Petroleum activities: 22%
- Other industrial processes: 5%
- Firing: 6%
- Other mobile sources: 8%

Source: Statistics Norway
NOx emissions per produced unit

Source: MPE/NPD
Emissions of NOx from the petroleum sector

Source: MPE/NPD
Sources of Norwegian emissions of nmVOC, 2004

- Petroleum activities: 54%
- Other industrial processes: 22%
- Firing: 5%
- Other mobile sources: 7%
- Coastal traffic and fisheries: 1%
- Road traffic: 11%

Source: Statistics Norway
Sources of nmVOC emissions per produced unit

Source: MPE/NPD
Discharges of chemicals from petroleum activities, by sources, 2004

- Drilling and well chemicals: 73.0%
- Production chemicals: 11.5%
- Gas treatment chemicals: 10.3%
- Pipeline chemicals: 0.4%
- Other chemicals: 4.9%

Source: EnvironmentWeb
Total discharges of chemicals from petroleum activities

Source: EnvironmentWeb
Discharges of black chemicals from petroleum activities

Source: NOIA/EnvironmentWeb
Discharges of red chemicals from petroleum activities

Source: NOIA/EnvironmentWeb
Acute oil discharges of more than one tonne

Source: EnvironmentWeb
Discharges of oil from petroleum activities, by activity, 2004

- Produced water: 69%
- Acute oil discharges: 26%
- Ballast and drainage water: 5%

Source: EnvironmentWeb
Forecast for produced water and discharges of produced water

Source: MPE/NPD
Chapter 10
Petroleum resources and uncertainty in the estimates at 31.12.2005

Source: Norwegian Petroleum Directorate
The NPD’s resource classification

NPD’s resource classification system

Undiscovered resources

8
Prospects

Leads and unmapped resources

Contingent resources

7F
New discoveries that have not been evaluated

Reserves

4F
In the planning phase

4A

3F
Licensees have decided to recover

2F
Approved development and operation plan

1
In production

Historical production

0
Sold and delivered petroleum

Ministry of Petroleum and Energy

Source: Norwegian Petroleum Directorate
Chapter 11
Facilities in the Ekofisk Area

Source: ConocoPhillips
Northern North Sea

Source: Norwegian Petroleum Directorate
Norwegian Sea
Chapter 14
Existing and projected pipelines

Source: Norwegian Petroleum Directorate
Macroeconomic indicators for the petroleum sector

Source: Statistics Norway, Ministry of Finance