Macroeconomic indicators for the petroleum sector

- Share of GDP
- Share of investment
- Share of exports
- Share of total revenues

*preliminary national planning budget figures

Facts 2002 figure 1.1

Source: Statistics Norway
Investment 1985-2001

Source: Statistics Norway

Facts 2002 figure 1.2
Net cash flow to the state from petroleum operations

Facts 2002 figure 1.3

Source: National account and state budget
Total petroleum production 1981-2001

Facts 2002 figure 1.4 Source: NPD
The state organisation of petroleum operations

Stortinget (Parliament)

Government

Ministry of Finance

Ministry of Petroleum and Energy

Ministry of Labour and Government Administration

Norwegian Petroleum Directorate

Facts 2002 figure 3.1
The organisation of the ministry

Ministry of Petroleum and Energy

The organisation of the ministry

Minister

Political Adviser

State Secretary

Secretary General

Information section

E & P market department

Oil section

Gas section

Industry section

Environmental affairs section

Petroleum department

Section for state participation

Petroleum law and legal affairs section

Energy and water resources department

Economics section

Adm. budgets and accounting department

Secretary General

Facts 2002 figure 3.2
Accrued investment 1985-2001

Source: Statistics Norway

Facts 2002 figure 4.1

Source: Statistics Norway
Estimates for future investment in fields and pipelines 2002-2010

Source: MPE/NPD
Net cash flow from petroleum operations 1977-2000

Source: National accounts and State budget

Facts 2002 figure 5.1

*estimates
Employment in Norway’s petroleum sector

Facts 2002 figure 6.1

Source: Directorate of Labour
Possible value creation from improved oil recovery

OSE*  743
IOR**  470

Recov factor from 44% - 57%

*N oslo stock exchange, february 2001
** Gross present value, size dependent on timing and volumes

Source: OG21
Daily production and break-even prices for various upstream provinces 1998

<table>
<thead>
<tr>
<th>Region</th>
<th>Daily Production (mill b/d)</th>
<th>Break-even Price (USD/bbl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>9.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.7</td>
<td>4</td>
</tr>
<tr>
<td>Gulf of Mexico</td>
<td>3.5</td>
<td>9</td>
</tr>
<tr>
<td>UK</td>
<td>2.8</td>
<td>13</td>
</tr>
<tr>
<td>Norway</td>
<td>3.1</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: Reve / Jacobsen "Et verdiskapende Norge"
Total resource estimate

Facts 2002 figure 7.1

Source: NPD
Total petroleum production 1981-2001

Facts 2002 figure 8.1

Source: NPD
Crude oil production 1981-2001

Source: NPD/MPE
Production forecast for petroleum 2002-2011

Source: NPD/MPE
Forecast for Norwegian crude oil production, 2002-2011

Source: NPD/MPE
Dry gas delivery from the NCS

Source: NPD/MPE
Price of Norwegian crude oil, 1975-2001

Source: MPE
# Production and net export of crude oil incl. NGL 2001

## Production

<table>
<thead>
<tr>
<th>Country</th>
<th>Production</th>
<th>Net export</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>8.70</td>
<td>7.41</td>
</tr>
<tr>
<td>USA</td>
<td>8.10</td>
<td>4.21</td>
</tr>
<tr>
<td>Russia</td>
<td>6.98</td>
<td>3.22</td>
</tr>
<tr>
<td>Iran</td>
<td>3.73</td>
<td>2.62</td>
</tr>
<tr>
<td>Mexico</td>
<td>3.56</td>
<td>2.55</td>
</tr>
<tr>
<td>Norway</td>
<td>3.41</td>
<td>2.44</td>
</tr>
<tr>
<td>China</td>
<td>3.29</td>
<td>2.18</td>
</tr>
<tr>
<td>Venezuela</td>
<td>3.04</td>
<td>1.94</td>
</tr>
<tr>
<td>Canada</td>
<td>2.75</td>
<td>1.79</td>
</tr>
<tr>
<td>UAE</td>
<td>2.58</td>
<td>1.63</td>
</tr>
</tbody>
</table>

Source: Petroleum Economics Ltd.

Facts 2002 figure 9.2
Shipments of Norwegian crude oil 2001*

Total 184,3 mill scm oe

- Norway: 15.3%
- Great Britain: 22.9%
- Netherlands: 14.7%
- France: 12.9%
- USA: 6.5%
- Germany: 7.5%
- Sweden: 5.6%
- Other: 10.0%
- Canada: 4.6%

Source: Norwegian Petroleum Directorate

*to first recipient
Definition of natural gas

Methane ($C_1$)
Ethane ($C_2$)
Propane ($C_3$)
Butane ($C_4$)

Pentanes and heavier fractions also referred to as:
- C5 +
- Natural gasoline
- Condensate

LPGs
NGLs

Source: MPE
Sale of NGL / condensate 2001*

- Denmark: 8.0%
- Finland: 2.2%
- France: 4.5%
- Netherlands: 11.9%
- Norway: 21.5%
- Portugal: 1.4%
- Spain: 1.8%
- Great Britain: 4.0%
- Sweden: 10.1%
- Germany: 2.1%
- USA: 12.9%
- Other: 12.8%
- Belgium: 6.7%

Total 16.4 mill scm oe

* to first recipient

Source: NPD
Norwegian dry gas exports 2001

Germany 38.1%

Total 50.5 bn scm

Source: NPD
Market shares 2001

- Statoil: 25.6%
- Shell: 25.5%
- Esso: 23.2%
- Hydro/Texaco: 19.9%
- JET: 4.4%
- Other: 1.3%

Source: Norwegian Petroleum Institute
Emissions to the air

Diffusive emissions

Gas turbine exhaust

Well testing

Gas flaring

Diesel fuel exhaust

Gas venting

Facts 2002 figure 10.1
Discharges to the sea

- Seewage/household effluents
- Drains
- Drilling discharges
- Spill
- Produced water
- Cooling water
- Displacement water
Licensing round

Nomination → Announcement → Application → Award → Negotiation

Facts 2002 figure 11.1
Awards per year

Facts 2002 figure 12.1 Source: NPD
Exploration wells completed per year

Facts 2002 figure 13.1 Source: NPD