AK LEGISLATURE SPECIAL COMMITTEE FILES SCOMM 148 3223

## Konrad Jackson

**From:** Shay Wilson
**Sent:** Sunday, October 14, 2007 1:32 PM
**To:** Konrad Jackson
**Subject:** New Pom:Oil & Gas

Justin Powell
1075 Trianon Dr

Fairbanks 99712-2743,
jpowell@acsalaska.net
460-7888
479-1214

I support ACES and want to see Alaska get a fair value for our resources for once. I hope that you can put Alaska's best interests first and not be swayed by the sob stories of big oil as they engage in the most profitable business in the world. We deserve an equitable share for our limited natural resources.

## Konrad Jackson

**From:** Shay Wilson
**Sent:** Sunday, October 14, 2007 1:07 PM
**To:** Konrad Jackson
**Subject:** New Pom:Oil & Gas

Richard Melms
4201 Leyden Rd

Anchorage 99516,richmelms
rdzmelms@alaska.net
907 3456184
907 3456184

Vote for Alaska's best interests not the oil industry! They are making record profits and the State should benefit from that. The previous legistlation was tainted by the actions of the oil industries "lap-dog"
legislators who sold the state out. We will be watching your performance!

**Konrad Jackson**

**From:** POMS@legis.state.ak.us
**Sent:** Thursday, October 04, 2007 12:04 PM
**To:** Konrad Jackson
**Subject:** New Pom:Oil & Gas

Stephen Early
8306 Huckleberry St

Anchorage 99502,
searly@gci.net
907-258-9972
907-440-7951

I wish that our represenitives would quit calling the price of our oil a tax. our represenitives must get across the fact that we are selling the oil to the oil companys.I lobbied all of our legislators for a set price of our oil 25% sounds good.no PPT

## Konrad Jackson

**From:** POMS@legis.state.ak.us
**Sent:** Thursday, September 27, 2007 9:19 PM
**To:** Konrad Jackson
**Subject:** New Pom:Taxation

Sherry Whitstine
Po Box 871985

Wasilla 99687-1985,tswhit

Without a stable tax regime, without the promise of a gas line, without exploration for gas and oil, without more oil production,the economic engines stops No matter what this is a lousy time to rush through a jury-rigged new tax program to support increased spending. This is a lousy time to be stampeded by Sarah.

**Konrad Jackson**

**From:** Rep. Jay Ramras
**Sent:** Monday, October 08, 2007 8:53 AM
**To:** Konrad Jackson
**Subject:** FW: Oil tax

-----Original Message-----
From: Frederick Dean [mailto:deansfs@alaska.net]
Sent: Monday, October 08, 2007 8:00 AM
To: Sen. Gary Wilken; Sen. Gene Therriault; Rep. David Guttenberg; Rep. Scott Kawasaki; Rep. Jay Ramras
Subject: Oil tax

Dear Legislators,

The Governor's proposal for revising the oil tax may contain some relatively small and reasonable improvements. However, I for one (among many?) fail to see why we expose ourselves to the vulnerability and problems that are clearly foreseeable as soon as you base things on "profits." I strongly urge that a fair rate be set but that it be based on production at the well head; then the only thing the State needs to audit is the accuracy of meters. Presumably mechanical devices will be less prone to discover ways to claim interpretive variations than those who make a profession of such work.

This is redundant with my earlier pleas, but the issue seems pretty clear!

Sincerely,
Fred Dean

Frederick C. Dean
810 Ballaine Road, Fairbanks, AK 99709 U.S.A.

Tel. (907) 479-6607 e-mail <deansfs@alaska.net>

# What is ACES?

ACES
Alaska's Clear and Equitable Share

## Tools to Protect the State's Interests

- Competitive Pay for Auditors **Sec. 10. AS 39.25.110**
- Information Needed by the State
  - Cost forecasts **Sec. 49. AS 43.55.040**
  - Expenditure details in a timely manner and useful format
    - **Sec. 46. AS 43.55.030(a)[annual report-producer],**
    - **Sec. 48. AS.43.55.030 [annual report-non-producer], ,**
    - **Sec. 49. AS 43.55.040(5),(6)[explicit power to require info]**
    - **Sec. 51 AS 43.55.110 [electronic filing and payment]**
  - Information sharing between state agencies
    - **Sec. 2. AS 38.05.035(a), Sec. 13. AS 43.05.230(h)**
  - Public disclosure of certain information **Sec 61. AS 43.55.890**

# What is ACES?

ACES
Alaska's Clear and Equitable Share

## Tools continued…

- Clear Rules
  - Define allowable lease expenditures
    - **Sec. 56. AS 43.55.165(a)**
  - Exclude inappropriate deductions (Corrosion / DR&R/ COTP)
    - **Sec. 58. AS 43.55.165(e)**
  - Clarification of Annual Loss Carry-forward of unused Lease expenditures
    - **Sec. 54. AS 43.55.160(e);**
    - **Sec 55 AS 43.55.160(f)**
- Statute of Limitations
  - Extended for completing assessments from 3 to 6 years.
    - **Sec.50. AS 43.55.075**

# What is ACES?

ACES
Alaska's Clear and Equitable Share

## Hybrid Tax System

- Net Tax Base
  - 25% Rate **Sec. 17. AS 43.55.011(g)**
  - Adjustments to Progressivity
    - **Sec. 17. AS 43.55.011(g)[Trigger price];**
    - **Sec. 18. AS43.55.011(h)[rate]**
  - Adjustments to Qualified Capital Credits
    - **Sec. 21. AS 43.55.011(m)[Cook Inlet];**
    - **Sec. 26. AS 43.55.023(a)[2 year spread, geo info to DNR, legacy restriction];**
    - **Sec.27. AS 43.55.023(b) [no legacy carry forward];**
    - **Sec 31. AS 43.55.023(l) [no transferable cert. for tax exempt ];**
  - Improved credit system for explorers
    - **Sec. 37- 43 AS 43.55.025(b)-(l) [Exploration Credit changes]**
    - **Sec. 44 AS 43.55.025(l) [credit for old Seismic data]**
    - **Sec. 45. AS 43.55.028 [Fund to purchase capital and explorer credits]**
  - Elimination of TIE credits (for past expenditures)
    - **Sec. 63. AS 43.55.023 (f)**

# What is ACES?

ACES
Alaska's Clear and Equitable Share

## Hybrid Tax System continued…

- Gross Tax Floor (Not Additive) **Sec.16. AS.43.55.011(f)**
  - 10% on Prudhoe Bay and Kuparuk Fields
  - Will kick in at low oil prices

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Web posted Sunday, September 16, 2007

# Meet Kevin Banks, Alaska's Oil and Gas Division director

**By Tim Bradner**
*Alaska Journal of Commerce*

Alaska Division of Oil and Gas director Kevin Banks has had a busy year as activity in the state's oil fields exploded. The division has struggled to find and keep employees, but is starting to make progress on that front, Banks said. *PHOTO/Tim Bradner/For the Journal*

It has been a hectic year at the state Division of Oil and Gas, the state agency that looks out for Alaska's ownership interests in oil and gas production from state-owned lands. So if things were to slow down a little in Alaska's oil patch after last winter's overheated levels of activity, it wouldn't bother Kevin Banks, who heads the agency.

Construction and other industry activity soared last winter on the Slope. This left explorers and incumbents alike scrambling to find suppliers and equipment, and paying higher-than-expected prices for oilfield services in the hot North Slope oil patch economy.

The year started off with a bang for the oil and gas division, too. When Gov. Sarah Palin took office last December, the two top positions in the division - the director and deputy director - were vacated by resignations. Banks and Kurt Gibson were moved up from the commercial section to take over as acting director and deputy.

Then the governor dropped in her Alaska Gasline Inducement Act, a key initiative that brought Banks, Gibson and other division staff to Juneau to help Palin develop legislation and work with state legislators on her gas pipeline plan.

And then Palin and her resources chief, Commissioner Tom Irwin, handed the division a new responsibility: Insuring the mechanical integrity of petroleum production facilities. This required the establishment and staffing of a new Petroleum Systems Integrity Office within the division.

Amid all this, the division has been scrambling for qualified people to fill positions during a tough economic time for recruiting petroleum professionals - they're all working elsewhere. The governor and Legislature have been generous with financial resources for the division, but hiring has been a major preoccupation.

"Kurt and I technically occupy four positions, acting director and deputy director, as well as petroleum market analyst and petroleum investments manager," Banks said.

He hopes to recruit added commercial staff to fill the latter two positions. The division is also still trying to hire a petroleum engineer to fill the position vacated by the retirement of agency veteran Bill Van Dyke. It has been unable to do so, however. Banks is concerned about others retiring.

"Depending on how you count the numbers, the division could lose 42 percent of its oil and gas staff within the next five years," he said.

On staffing, the division has just brought on two new people: Cody Rice is a new

Permanent Fund ($M USD)
**$39,794**
- 205
**Wednesday's Close**
(Most Recent Available)

AK North Slope Crude
(W.Coast delivery)
**$86.50**
- .21
**Wednesday's Close**
(Most Recent Available)

Petroleum Economist, filling a position that has been vacant almost a year in the division's commercial section. Another new hire in the commercial section is Alan Dennis, who was formerly with ConocoPhillips in Houston. Dennis should be working in the office by October, Banks said.

Filling the petroleum engineer position is a worry.

"We've advertised for a petroleum engineer locally, through the Society of Petroleum Engineering newsletters and Houston, Texas, newspapers and we continue to shake the trees for qualified candidates," Banks said. "Industry-wide demand for people with these skills is very high and state salary levels are a factor."

"Our audit section is also thin. Normal attrition and people moving on to new jobs has taken a real toll and has left us chronically short. We're considering options to change this situation," Banks said.

Similar problems in the division's leasing and permitting section have, for now, been resolved with a few new hires, however.

As for the upcoming winter work season on the Slope, Banks believes things will be a little slower than last winter, based on the pace of permit applications so far this summer. Companies planning work usually apply to regulatory agencies for their permits in late summer.

More requests could still come in, but if things slow a bit it will still be a good, full season of employment for service contractors and support companies, Banks said.

Last year's overheated season may actually have done some damage to the state's attractiveness for exploration because companies that drilled exploration wells experienced some big cost increases. That was because there was intense competition for skilled oilfield labor and equipment, almost everything from drill rigs to rolligons.

Banks is particularly concerned about how Alaska is being viewed in the corporate offices of FEX and its owner, Talisman Energy, as well as Eni. Both companies were active in drilling exploration wells last winter, and Banks hopes that the experience with cost increases won't dampen plans for new work in Alaska.

FEX needs to test potential discoveries it made in the National Petroleum Reserve-Alaska, but the Division of Oil and Gas does not yet know if the company intends to do a full-blown or a more limited program to assess what it found.

Banks does know that Eni is very concerned with cost increases and he is uncertain whether the company will proceed with development of its Nikaitchuq offshore prospect this year. Last year the state rejected Eni's request for royalty modification at Nikia, but that was because the project appeared economically viable under the current state Petroleum Profits Tax. ENI has indicated that its costs are now higher than previously estimated.

Another concern Banks has is the uncertainty over new lease sales in the NPR-A, given the controversy, litigation and delays surrounding every sale proposed by the BLM, the most recent being the federal agency's proposed sale of very prospective leases near the Teshekpuk Lake area of the northeast NPR-A.

"This has got to be a major concern for companies now holding leases in the NPR-A because they need to be able to bid on tracts adjacent to their leases to fill out their land position," for efficient exploration programs, Banks said. BLM is also trying to work out issues related to unitization, which will enable companies to group leases that are expiring in units for further development.

The state is mindful of the pace of exploration and development in NPR-A because Alaska will receive 50 percent of production royalties from the federal reserve.

Yet another concern for Banks is uncertainty over Pioneer Natural Resources Co.'s Facility Access Agreement with Kuparuk River Unit owners that will enable Pioneer to process fluids from its new Oooguruk project in facilities owned and operated by the Kuparuk Unit.

"Oooguruk is still on track for startup in 2008 but we have no direct information about the access agreement," Banks said.

Facility use agreements between established companies on the Slope are common but involve firms that are partners in producing fields and infrastructure. Pioneer's

**Maxed out**
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(more)

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agreement is the first involving a company that is outside the existing producers.

If things break down, the state may have to play a role in getting an access deal, Banks said. But it is preferable that the agreement be worked out between the companies on a purely commercial basis.

Another issue on the division's plate is the ongoing dispute over lease ownership at Point Thomson, a large natural gas and condensate discovery 60 miles east of Prudhoe Bay. The state has cancelled leases at Point Thomson and is locked in protracted litigation with ExxonMobil Corp., BP and Chevron, the companies owning the leases in question.

Banks said that if the state prevails and does get clear title to the leases, his division may explore alternatives to leasing other than the state's conventional areawide lease sales, where unleased acreage is periodically offered. A different approach to leasing might an involve production sharing agreement or other mechanism used elsewhere instead of a conventional oil and gas royalty, he said.

There are many alternatives now in the state's leasing tool-kit including work commitments and net profits share royalties but an entirely new approach may require legislation, Banks said.

Tim Bradner can be reached at tim.bradner@alaskajournal.com

# Oil and Gas Reporting and Disclosure In Selected Countries

***Focus On Cost / Field Detail Reporting***

# Summary

- **In the vast majority of regimes around the world companies are required to disclose detailed data**
  - Prospective (plans) and actual
  - Typically down to well / field level detail
- **Data is provided to both resource-management and fiscal/taxation authorities**
  - Intra-governmental sharing
  - Greater flow to, rather than from, fiscal authorities
- **Reporting and public disclosure are two separate issues**
  - Public reporting is common
  - Though typically in aggregated or summary form

# Why Does Alaska Need To Receive Data ?

- **Required in order to properly manage the State's resources**
  - "The energy resources of this State belong to the people of Alaska[1]"
- **Full understanding of technical and commercial factors**
- **Ability to plan and control**
  - Exploitation policy
  - Budget
- **These are universal principles**
  - Not unique to Alaska

[1] Adapted from Accountability principle of Alberta Royalty Review Panel

# Forms Of Reporting and Sharing

- **Production and well data**
  - Monthly or as completed
- **Annual or Semi-Annual field-level information**
  - Typically collected by Ministry / Regulatory Body
- **Tax returns**
  - Collected by fiscal authority
- **Intra-Governmental Sharing**
  - Degree of sharing varies by country
  - Typically greater sharing by Ministry / Regulatory Body than by fiscal authority

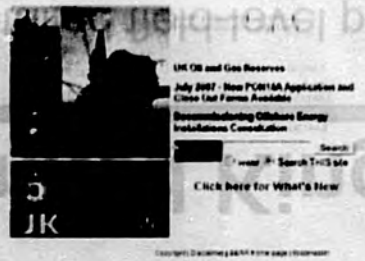
# Public Reporting

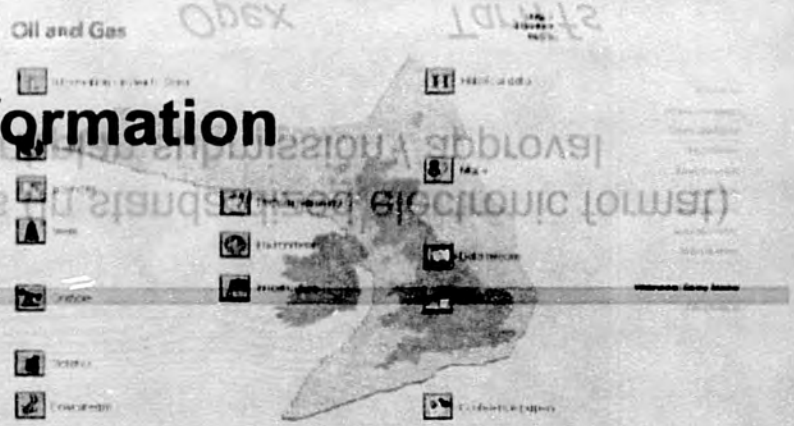
- **Mostly in aggregated / summary form**
- **Some countries provide field-level summaries**
  - Reserves
  - Capex
    - More often as total, but sometimes as annual time series
- **Opex rarely disclosed at field-level, although subscription services do provide this**
  - Data quality dependent upon various sources, including "oil company guidance"
  - Sometimes occurs in stock market documentation released by (usually) smaller companies

# Examples Of Data Disclosure (Production and Cost Focus)

# UK Summary

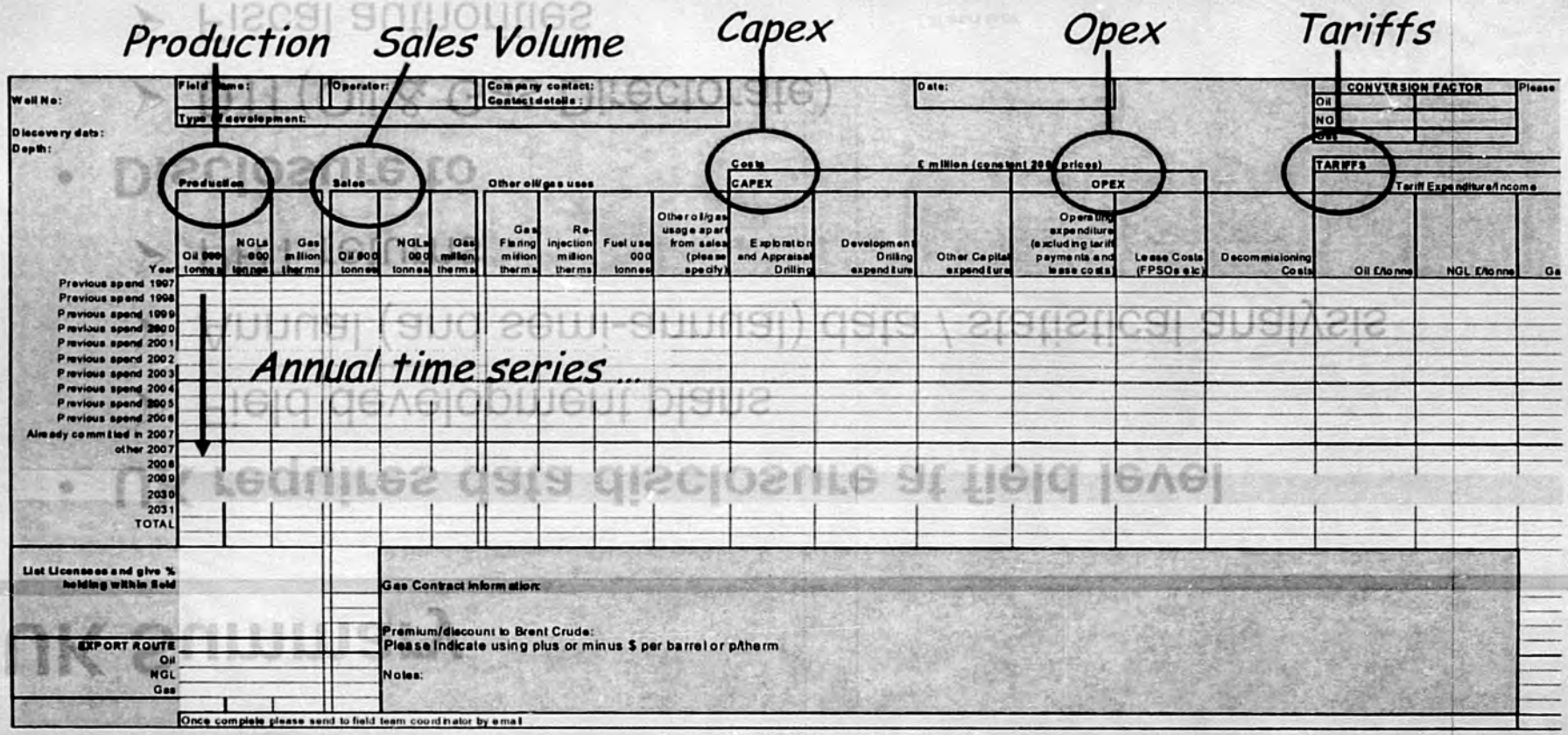
- **UK requires data disclosure at field level**
  - Field development plans
  - Annual (and semi-annual) data / statistical analysis
  - PRT returns
- **Disclosure to**
  - DTI (Oil & Gas Directorate)
  - Fiscal authorities
- **Publication of aggregated information**



# United Kingdom

Detailed field-level production and cost projections (in standardized electronic format) are required as part of the Field Development plan submission / approval



# United Kingdom

## Annual UKCS Income and Expenditure summarized on an annual basis

**Income from and Expenditure on UK Continental Shelf Exploration, Development and Operating Activities**
**(£ million)**

*Sales* — Income — Expenses — *Opex* — Capital Expenditure — *Capex* — Prices

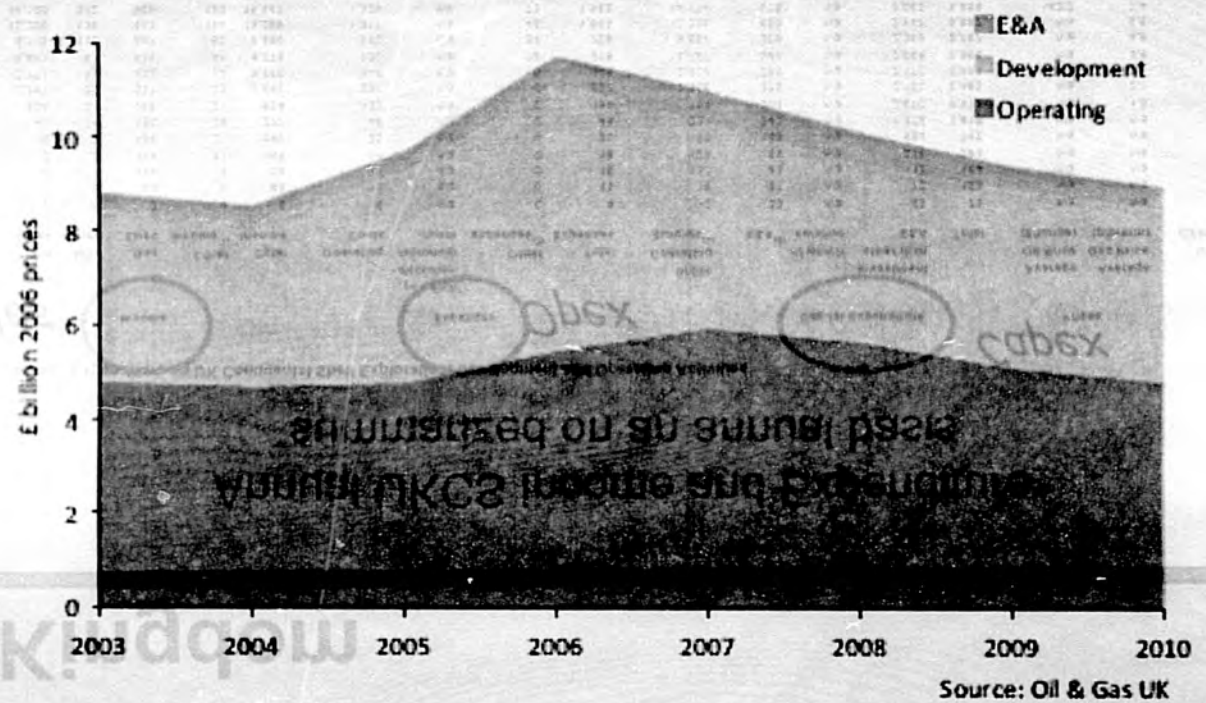
| | Oil Sales | NGL Sales | Gas Sales | Other Income[1] | Total Income | Operating Costs | of which decommissioning costs | Other expenses[2] | Total Expenses | Gross Operating Surplus[3] | E&A[4] | of which seismic | Investment other than E&A | Total | Average Oil Price ($/tonne) | Average Gas Price (p/therm) | GDP Deflator (2003=100) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1970 | 0 | 0 | 0 | 4 | 5 | 6 | n/a | 0 | 6 | -2 | 20 | n/a | 53 | 73 | n/a | n/a | 9.9 |
| 1971 | 0 | 0 | 60 | 5 | 65 | 11 | n/a | 0 | 11 | 74 | 57 | n/a | 72 | 129 | n/a | n/a | 10.6 |
| 1972 | 0 | 1 | 114 | 9 | 124 | 15 | n/a | 0 | 15 | 110 | 43 | n/a | 112 | 164 | n/a | n/a | 11.7 |
| 1973 | 0 | 2 | 153 | 11 | 146 | 18 | n/a | 0 | 18 | 129 | 69 | n/a | 215 | 284 | n/a | n/a | 12.6 |
| 1974 | 0 | 3 | 166 | 21 | 190 | 20 | n/a | 0 | 20 | 170 | 163 | n/a | 584 | 787 | n/a | n/a | 14.4 |
| 1975 | 43 | 16 | 193 | 29 | 277 | 46 | n/a | 0 | 46 | 231 | 242 | n/a | 1,374 | 1,616 | n/a | n/a | 18.3 |
| 1976 | 624 | 21 | 289 | 21 | 924 | 130 | n/a | 0 | 130 | 794 | 301 | n/a | 2,570 | 2,872 | n/a | 1.9 | 21.1 |
| 1977 | 2,157 | 29 | 317 | 23 | 2,662 | 207 | n/a | 0 | 207 | 2,356 | 375 | n/a | 2,107 | 2,482 | n/a | 2.1 | 24.0 |
| 1978 | 2,771 | 35 | 432 | 12 | 3,240 | 346 | n/a | 0 | 346 | 2,904 | 281 | n/a | 2,170 | 2,451 | n/a | 3.1 | 26.8 |
| 1979 | 5,841 | 53 | 538 | 44 | 6,276 | 502 | n/a | 16 | 519 | 5,757 | 241 | n/a | 2,064 | 2,305 | n/a | 3.8 | 30.7 |
| 1980 | 8,715 | 132 | 647 | 82 | 9,580 | 692 | n/a | 34 | 726 | 8,854 | 379 | n/a | 2,388 | 2,767 | n/a | 4.9 | 36.7 |
| 1981 | 12,206 | 135 | 843 | 114 | 13,298 | 1,017 | n/a | 45 | 1,065 | 12,235 | 550 | n/a | 2,847 | 3,397 | n/a | 6.5 | 40.8 |
| 1982 | 14,139 | 312 | 956 | 160 | 15,567 | 1,309 | n/a | 73 | 1,382 | 14,174 | 675 | n/a | 3,055 | 3,864 | 142.0 | 7.4 | 43.9 |
| 1983 | 15,456 | 526 | 1,117 | 185 | 19,928 | 1,495 | n/a | 67 | 1,562 | 16,767 | 593 | n/a | 2,853 | 3,446 | 148.3 | 8.4 | 46.3 |
| 1984 | 19,827 | 659 | 1,293 | 256 | 22,193 | 1,733 | n/a | 62 | 1,796 | 20,336 | 1,356 | n/a | 3,169 | 4,684 | 164.9 | 10.3 | 48.4 |
| 1985 | 19,264 | 682 | 1,709 | 384 | 21,988 | 2,248 | n/a | 76 | 2,324 | 19,664 | 1,445 | n/a | 2,754 | 4,288 | 155.3 | 11.9 | 51.1 |
| 1986 | 9,905 | 356 | 1,527 | 455 | 11,870 | 2,144 | n/a | 57 | 2,201 | 9,476 | 1,035 | n/a | 2,415 | 3,447 | 73.3 | 12.6 | 52.9 |
| 1987 | 9,513 | 359 | 1,593 | 533 | 12,004 | 2,137 | n/a | 65 | 2,162 | 10,282 | 809 | n/a | 2,044 | 2,863 | 81.7 | 12.4 | 55.7 |
| 1988 | 7,364 | 343 | 2,045 | 659 | 10,280 | 2,063 | n/a | 56 | 2,119 | 8,130 | 1,126 | n/a | 2,128 | 3,266 | 63.4 | 13.1 | 58.2 |
| 1989 | 7,214 | 272 | 2,167 | 547 | 10,220 | 2,333 | n/a | 57 | 2,390 | 7,833 | 1,182 | n/a | 2,638 | 3,817 | 51.1 | 14.2 | 63.6 |
| 1990 | 8,432 | 277 | 2,377 | 405 | 11,491 | 2,592 | n/a | 46 | 2,638 | 8,552 | 1,617 | n/a | 3,478 | 5,116 | 94.6 | 14.3 | 68.5 |
| 1991 | 7,771 | 385 | 2,569 | 476 | 11,420 | 3,296 | n/a | 66 | 3,364 | 8,073 | 1,566 | n/a | 5,101 | 7,067 | 85.0 | 15.9 | 73.0 |
| 1992 | 7,430 | 380 | 3,016 | 626 | 11,453 | 3,312 | n/a | 53 | 3,365 | 8,088 | 1,608 | n/a | 5,428 | 8,036 | 81.9 | 15.8 | 76.0 |
| 1993 | 8,110 | 523 | 3,569 | 699 | 12,899 | 3,661 | n/a | 47 | 3,708 | 9,191 | 1,213 | n/a | 4,661 | 5,874 | 95.9 | 16.0 | 78.0 |
| 1994 | 9,964 | 529 | 3,836 | 974 | 14,502 | 3,660 | n/a | 40 | 3,699 | 10,401 | 939 | 150 | 3,671 | 4,609 | 77.0 | 16.3 | 79.2 |
| 1995 | 9,981 | 514 | 4,141 | 1,166 | 15,802 | 3,913 | n/a | 37 | 3,950 | 11,852 | 1,088 | 204 | 4,388 | 5,440 | 81.1 | 16.3 | 81.4 |
| 1996 | 11,960 | 749 | 5,295 | 1,243 | 19,186 | 3,978 | n/a | 31 | 4,009 | 15,127 | 1,097 | 190 | 4,364 | 5,461 | 97.3 | 15.6 | 84.2 |
| 1997 | 10,327 | 703 | 5,254 | 1,279 | 17,563 | 4,150 | n/a | 34 | 4,184 | 13,377 | 1,154 | 191 | 4,263 | 5,417 | 87.4 | 16.7 | 86.6 |
| 1998 | 7,467 | 551 | 5,313 | 1,453 | 14,806 | 4,190 | n/a | 111 | 4,301 | 10,505 | 782 | 125 | 4,555 | 5,768 | 59.8 | 16.2 | 88.5 |
| 1999 | 10,267 | 727 | 5,031 | 1,436 | 17,460 | 4,249 | n/a | 382 | 4,631 | 12,830 | 487 | 66 | 3,063 | 3,620 | 93.0 | 13.7 | 90.9 |
| 2000 | 16,275 | 1,117 | 6,606 | 1,459 | 25,456 | 4,360 | n/a | 106 | 4,466 | 21,020 | 345 | 40 | 2,750 | 3,095 | 126.1 | 15.8 | 92.1 |
| 2001 | 13,646 | 963 | 8,140 | 1,436 | 24,186 | 4,347 | n/a | 49 | 4,396 | 19,789 | 420 | 34 | 3,670 | 4,090 | 125.7 | 19.0 | 94.1 |
| 2002 | 13,625 | 584 | 8,199 | 1,397 | 24,110 | 4,536 | n/a | 48 | 4,643 | 19,475 | 389 | 45 | 3,556 | 3,945 | 123.8 | 16.4 | 97.0 |
| 2003 | 13,366 | 1,136 | 7,554 | 1,539 | 23,602 | 4,496 | n/a | 8 | 4,504 | 19,098 | 334 | 42 | 3,412 | 3,746 | 130.9 | 17.4 | 100.0 |
| 2004 | 12,477 | 1,256 | 7,443 | 1,179 | 23,364 | 4,684 | 740 | 67 | 4,751 | 18,613 | 395 | 57 | 3,302 | 3,698 | 154.0 | 21.0 | 102.6 |
| 2005 | 15,656 | 1,584 | 8,502 | 1,451 | 28,893 | 5,113 | 412 | 128 | 5,241 | 23,452 | 460 | 34 | 4,371 | 4,831 | 215.9 | 27.6 | 104.9 |

**Notes**
(1) Revenues from pipelines and terminals, and other revenues of operators and production licensees
(2) Other costs of operators and production licensees not attributable to oil or gas fields
(3) Gross Operating Surplus = Total Income less Total Expenses
(4) E&A costs include Exploration and the cost of Appraisal wells drilled prior to development approval
The figures exclude change in stocks and book value of stocks

# United Kingdom

Medium-term forecasts derived from annual returns

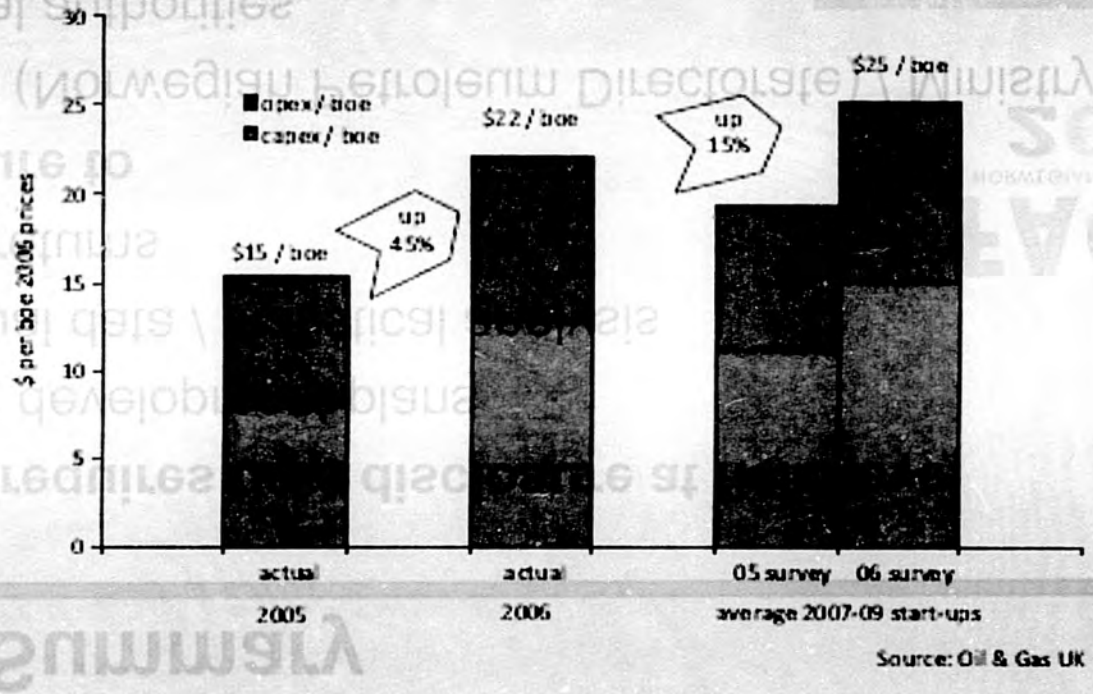
***Figure 30: UKCS Expenditure Forecast 2003-2010***



# United Kingdom

## Cost trends

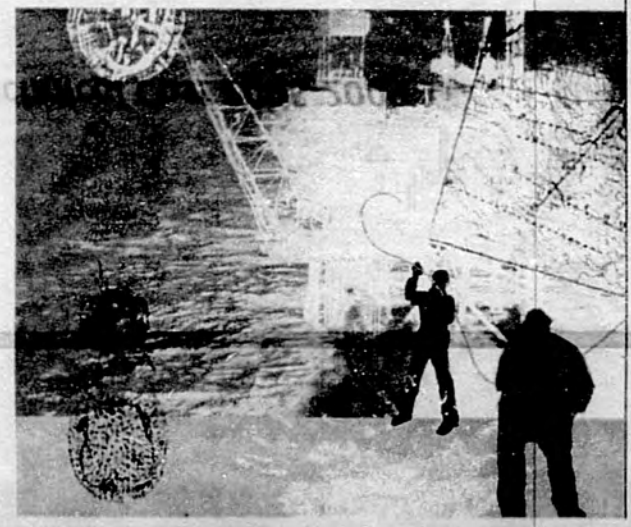
***Figure 33: UKCS New Developments' Unit Technical Cost 2005-2009***




Source: Oil & Gas UK

# Norway Summary

- **Norway requires data disclosure at field level**
  - Field development plans
  - Annual data / statistical analysis
  - Tax returns
- **Disclosure to**
  - NPD (Norwegian Petroleum Directorate) / Ministry
  - Fiscal authorities
- **Publication of aggregated information**



# Norway

## Field / discovery listing of resource volumes

**Tilstedeværende ressursar i felt**
*In-place resources in fields*

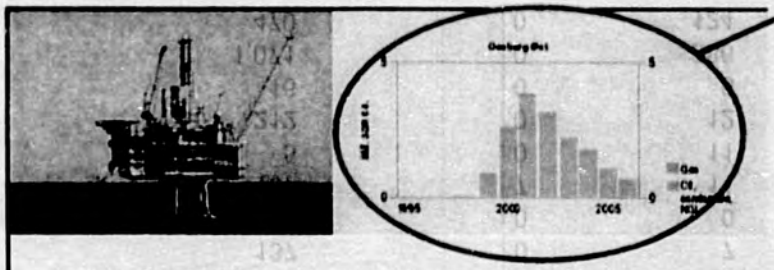
OLJEDIREKTORATET

| Felt | Olje mill Sm3 *Oil million Sm3* | Assosiert væske NGL/Kondensat mill Sm3 *Associated liquids million Sm3* | Assosiert gass mrd Sm3 *Associated gas (billion Sm3)* | Fri gass mrd Sm3 *Free gas billion Sm3* |
|---|---|---|---|---|
| ALBUSKJELL | 36 | 0 | 56 | 0 |
| ALVHEIM | 81 | 0 | 8 | 9 |
| BALDER | 137 | 0 | 7 | 0 |
| BLANE | 3 | 0 | 0 | 0 |
| BRAGE | 137 | 7 | 11 | 3 |
| COD | 5 | 0 | 11 | 0 |
| DRAUGEN | 212 | 0 | 12 | 0 |
| EDDA | 16 | 0 | 5 | 0 |
| EKOFISK | 1,071 | 0 | 286 | 0 |
| ELDFISK | 470 | 0 | 124 | 0 |
| EMBLA | 43 | 0 | 15 | 0 |
| ENOCH | 2 | 0 | 0 | 0 |
| FRAM | 58 | 0 | 8 | 8 |
| FRIGG | 0 | 1 | 0 | 150 |
| FRØY | 35 | 0 | 8 | 0 |
| GIMLE | 8 | 0 | 0 | 0 |
| GLITNE | 24 | 0 | 1 | 0 |
| GRANE | 209 | 0 | 3 | 0 |
| GULLFAKS | 583 | 0 | 69 | 0 |
| GULLFAKS SØR | 154 | 43 | 36 | 118 |

# Norway

Detail on field-by-field basis

*Production forecast by year*



## Oseberg Øst

| | |
|---|---|
| Block and production licence | Block 30/6 - production licence 053, awarded 1979 |
| Discovered | 1981 |
| Development approved | 11.10.1996 by the King in Council |
| On stream | 08.05.1999 |
| Operator | Norsk Hydro Produksjon AS |
| Licensees | Mobil Development Norway AS 4,70 % |
| | Norsk Hydro Produksjon AS 34,00 % |
| | Norske Conoco Phillips AS 2,40 % |
| | Petoro AS 38,00 % |
| | Statoil ASA 13,30 % |
| | Total E&P Norge AS 16,00 % |
| Recoverable reserves | Original: Remaining as of 31.12.2006: |
| | 37,8 million scm oil 11,7 million scm oil |
| | 0,4 billion scm gas |
| Production | Estimated production in 2007: |
| | Oil: 1,0 billion scm |
| Investment | Total investment is expected to be NOK 14,2 billion (2007 values) |
| | NOK 8,8 billion have been invested as of 31.12.2006 (2007 values) |
| Operating organisation | Bergen |
| Main supply base | Mongstad |

**Development:**
Oseberg Øst is an oil field located east of Oseberg in the northern part of the North Sea. The field has been developed with an integrated fixed facility with accommodation, drilling equipment and first stage separation of oil, water and gas. The sea depth in the area is 160 metres.

**Reservoir:**
The main reservoir consists of two structures, separated by a sealing fault. The structures contain several oil-bearing layers of varying reservoir characteristics within the Middle Jurassic Brent group.

**Recovery strategy:**
The field is produced with pressure maintenance using both water injection and WAG (water alternating gas) injection.

**Transport:**
The oil is sent by pipeline to the Oseberg Field Centre for further processing and transport through the Oseberg Transport System (OTS) to the Sture terminal. The gas is mainly used for injection, gas lift and fuel.

**Status:**
Various measures for increased oil recovery are being evaluated in an ongoing process. A new drilling campaign is expected to yield increased production. The first well in the new drilling campaign is planned to be set on stream in February 2008.

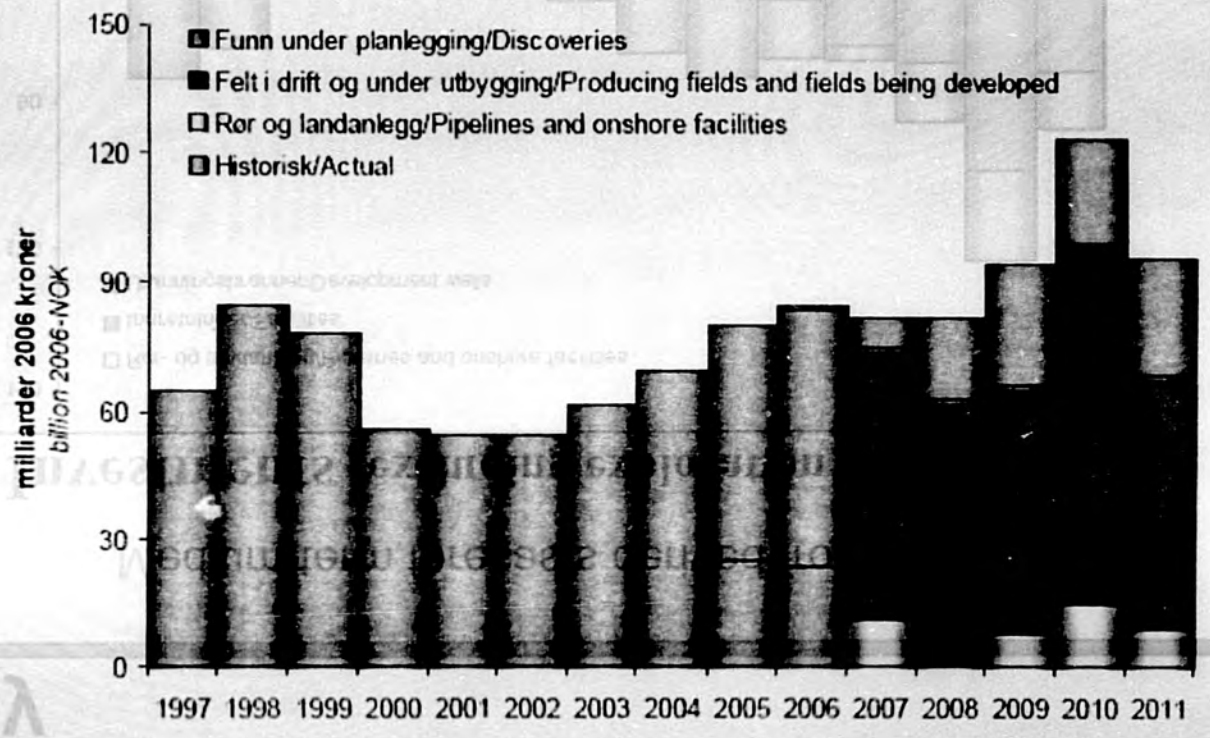
*Reserves and EUR*

*Total capital investment*
- *historical*
- *expected ultimate*

# Norway

Medium-term forecasts derived from annual returns

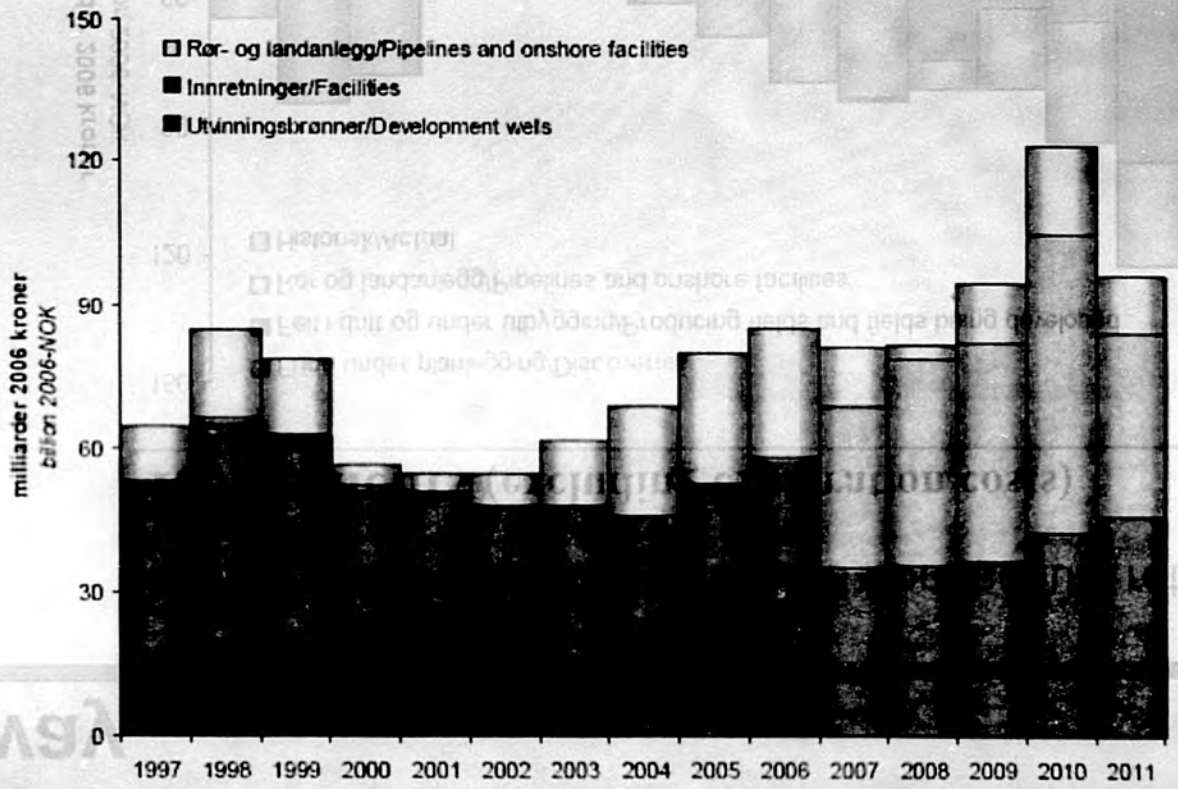
## Investments (excluding exploration costs)



# Norway

Medium-term forecasts derived from annual returns

## Investments (excluding exploration costs)



# Norway

Source of Investment

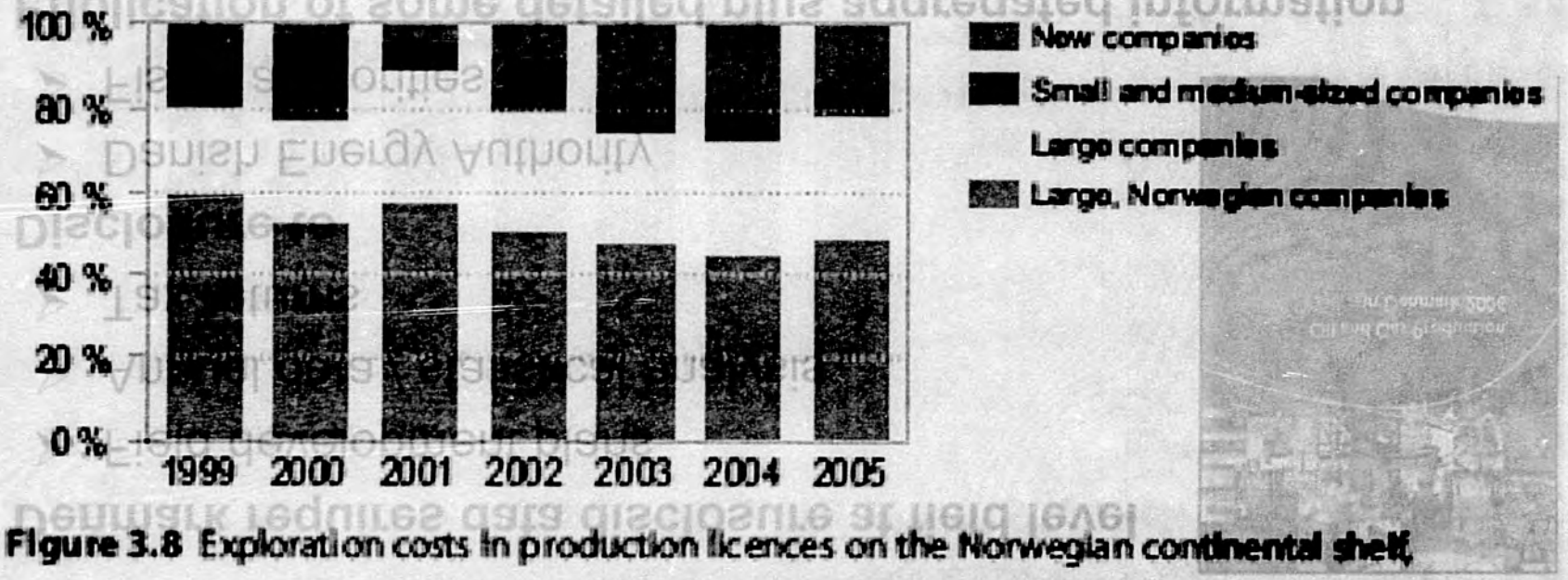



**Figure 3.8** Exploration costs in production licences on the Norwegian continental shelf, distributed according to the size of the companies

*(Source: Norwegian Petroleum Directorate)*

# Denmark Summary

- **Denmark requires data disclosure at field level**
  - Field development plans
  - Annual data / statistical analysis
  - Tax returns
- **Disclosure to**
  - Danish Energy Authority
  - Fiscal authorities
- **Publication of some detailed plus aggregated information**

# Denmark

## Field listing of annual capital investments .. both historical ..

Table 7.4 Investments, DKK million, nominal prices

| | 2002 | 2003 | 2004 | 2005 | 2006* |
|---|---|---|---|---|---|
| Cecilie | 223 | 660 | 309 | (18) | 4 |
| Dagmar | - | - | - | - | 148 |
| Dan | 437 | 943 | 750 | 750 | 684 |
| Gorm | 242 | 107 | 108 | 291 | 304 |
| Halfdan | 2,412 | 1,779 | 1,124 | 683 | 1,293 |
| Harald | 0 | 4 | 22 | 53 | 1 |
| Kraka | 3 | - | 2 | - | - |
| Nini | 285 | 1,288 | 319 | 163 | 19 |
| Roar | - | - | - | - | - |
| Rolf | - | 37 | 4 | - | 1 |
| Siri | 111 | 406 | 425 | 73 | 140 |
| Skjold | 5 | 77 | 8 | 11 | 4 |
| South Arne | 849 | 764 | 762 | 310 | 451 |
| Svend | 223 | - | - | - | - |
| Tyra | 85 | 305 | 459 | 1,020 | 1,520 |
| Tyra Southeast | 569 | 82 | 96 | 45 | - |
| Valdemar | (1) | 200 | 52 | 553 | 992 |
| NOGAT pipeline | - | 766 | 664 | 12 | - |
| Not allocated | 31 | (31) | 2 | 5 | 97 |
| Total | 5,475 | 7,386 | 5,105 | 3,951 | 5,658 |

*Estimate

# Denmark

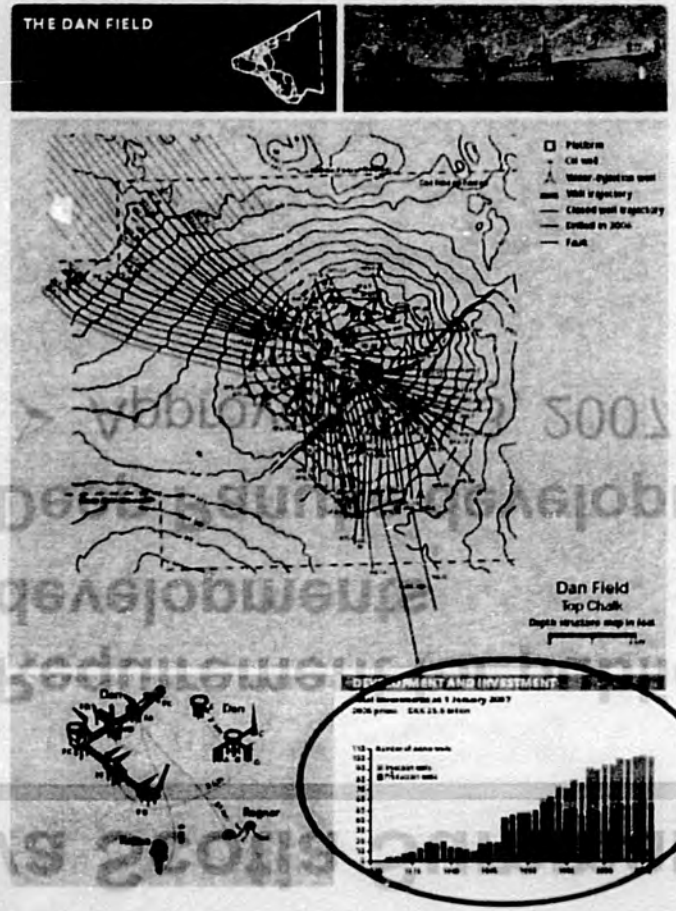
.. and projected

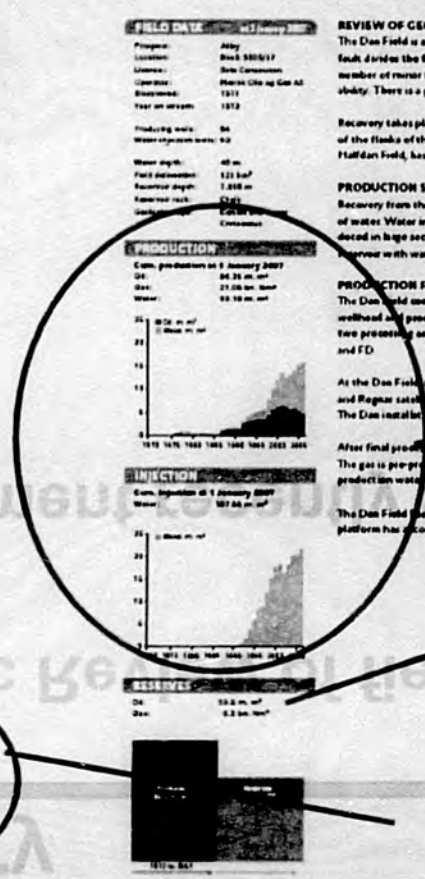
Table 7.5 Estimated investments in development projects, 2007-2011, DKK billion, 2006 prices

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| **Ongoing and approved** | | | | | |
| Adda | - | 0.1 | 0.6 | - | - |
| Alma | - | 0.6 | 0.5 | - | - |
| Boje | - | - | - | 0.8 | - |
| Cecilie | - | - | - | - | - |
| Dagmar | - | - | - | - | - |
| Dan | 0.9 | 0.6 | - | - | - |
| Elly | 0.3 | 1.6 | - | - | - |
| Gorm | 0.1 | 0.0 | - | - | - |
| Halfdan | 2.0 | 0.9 | 0.1 | - | - |
| Harald | 0.0 | 0.1 | - | - | - |
| Kraka | 0.3 | - | - | - | - |
| Lulita | - | - | - | - | - |
| Nini | 0.1 | - | - | - | - |
| Regnar | - | - | - | - | - |
| Roar | - | - | - | - | - |
| Rolf | - | - | - | - | - |
| Siri | 0.3 | - | - | - | - |
| Skjold | - | - | - | - | - |
| South Arne | 0.8 | - | - | - | - |
| Svend | - | - | - | - | - |
| Tyra | 0.4 | 0.4 | 0.4 | 0.0 | 1.3 |
| Tyra Southeast | 0.5 | - | - | - | - |
| Valdemar | 1.6 | 0.7 | - | - | - |
| **Total** | **7.3** | **5.1** | **1.5** | **0.8** | **1.3** |
| | | | | | |
| Planned | - | - | - | - | 0.8 |
| Possible | - | 0.7 | 4.7 | 6.6 | 4.0 |
| **Expected** | **7.3** | **5.8** | **6.2** | **7.4** | **6.2** |

# Denmark

## Detail on field-by-field basis




*Production and injection history*

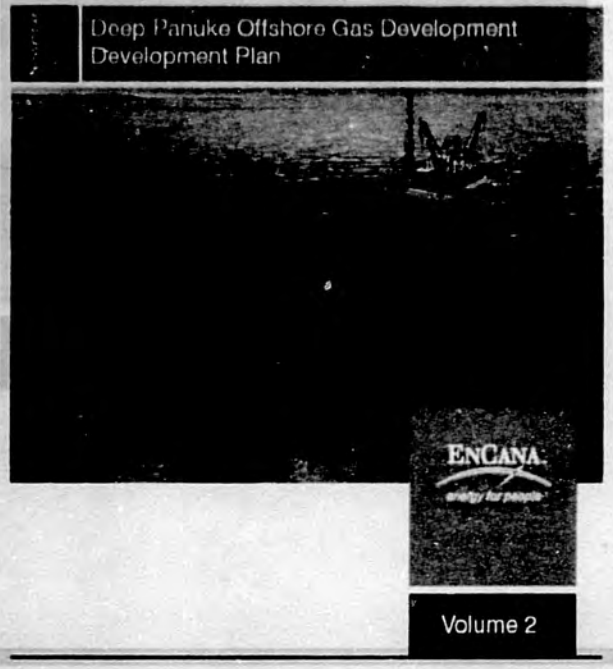
*Reserves and EUR*

*Total capital investment and development drilling*

# Nova Scotia Summary

- **Requirement for public Review of field developments**
- **Deep Panuke development recently submitted**
  - Approved Oct 3, 2007

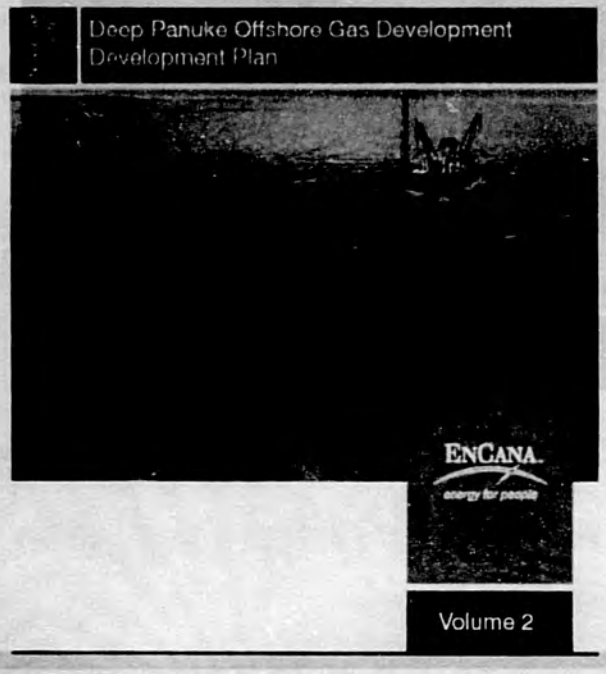
# Nova Scotia Deep Panuke




Includes sales gas forecast …

| Table 6.1 Sales Gas Forecast | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Year | P90 | | P50 | | P10 | | Mean | |
| | ($10^6$ sm3/d) | (MMscf/d) | ($10^6$ sm3/d) | (MMscf/d) | ($10^6$ sm3/d) | (MMscf/d) | ($10^6$ sm3/d) | (MMscf/d) |
| 2010 | 5.7 | 202 | 5.7 | 201 | 5.7 | 202 | 5.7 | 201 |
| 2011 | 8.5 | 300 | 8.4 | 300 | 8.5 | 300 | 8.5 | 300 |
| 2012 | 7.0 | 249 | 8.5 | 300 | 8.4 | 300 | 8.2 | 291 |
| 2013 | 4.5 | 159 | 6.4 | 228 | 8.4 | 300 | 6.2 | 219 |
| 2014 | 3.1 | 110 | 4.8 | 171 | 7.7 | 275 | 5.0 | 177 |
| 2015 | 2.2 | 79 | 3.8 | 136 | 6.0 | 213 | 4.0 | 143 |
| 2016 | 1.6 | 58 | 3.1 | 110 | 4.7 | 168 | 3.4 | 119 |
| 2017 | 1.3 | 45 | 2.5 | 90 | 4.1 | 145 | 2.7 | 97 |
| 2018 | 1.1 | 40 | 2.1 | 76 | 3.3 | 118 | 2.3 | 81 |
| 2019 | 0.0 | 0 | 1.6 | 58 | 2.9 | 103 | 1.9 | 67 |
| 2020 | 0.0 | 0 | 1.5 | 52 | 2.4 | 86 | 1.6 | 55 |
| 2021 | 0.0 | 0 | 1.5 | 52 | 2.1 | 73 | 1.3 | 47 |
| 2022 | 0.0 | 0 | 1.3 | 45 | 1.7 | 62 | 1.3 | 45 |
| 2023 | 0.0 | 0 | 1.1 | 40 | 1.6 | 55 | 1.1 | 41 |
| 2024 | 0.0 | 0 | 0.0 | 0 | 1.4 | 50 | 0.0 | 0 |
| 2025 | 0.0 | 0 | 0.0 | 0 | 1.4 | 51 | 0.0 | 0 |
| 2026 | 0.0 | 0 | 0.0 | 0 | 1.3 | 47 | 0.0 | 0 |
| 2027 | 0.0 | 0 | 0.0 | 0 | 1.2 | 41 | 0.0 | 0 |
| 2028 | 0.0 | 0 | 0.0 | 0 | 1.1 | 38 | 0.0 | 0 |

# Nova Scotia Deep Panuke




## … and cost forecast by expenditure type

### 6.3.1 Development Phase Expenditures

Estimates for the development phase include costs incurred by EnCana, as operator of the Project, from the fourth quarter 2006 to first gas production, scheduled to occur in the fourth quarter of 2010.

The costs shown in Table 6.2 are for the M&NP option, and exclude any costs associated with the MOPU, which will be included as operating costs payable during the production life of the Project.

The SOEP Subsea Option would see a reduction in the cost of the export pipeline during the Development Phase. However, there would be an increase in operating costs for tariffs charged as a result of using the SOEP pipeline. At this time, these costs are not defined.

| Table 6.2 Development Phase Expenditures | C$ Millions 2006 |
|---|---|
| EnCana Project Management & Engineering | 115 |
| Subsea | 135 |
| Export Pipeline | 200 |
| Drilling and Completions | 160 |
| *Subtotal:* | 610 |
| *Contingency* | 90 |
| **Total Cost to First Gas** | **700** |

**Annual operating costs, including the field centre (MOPU) lease, are estimated at $150 million per year, +/-25%.**

# Nova Scotia

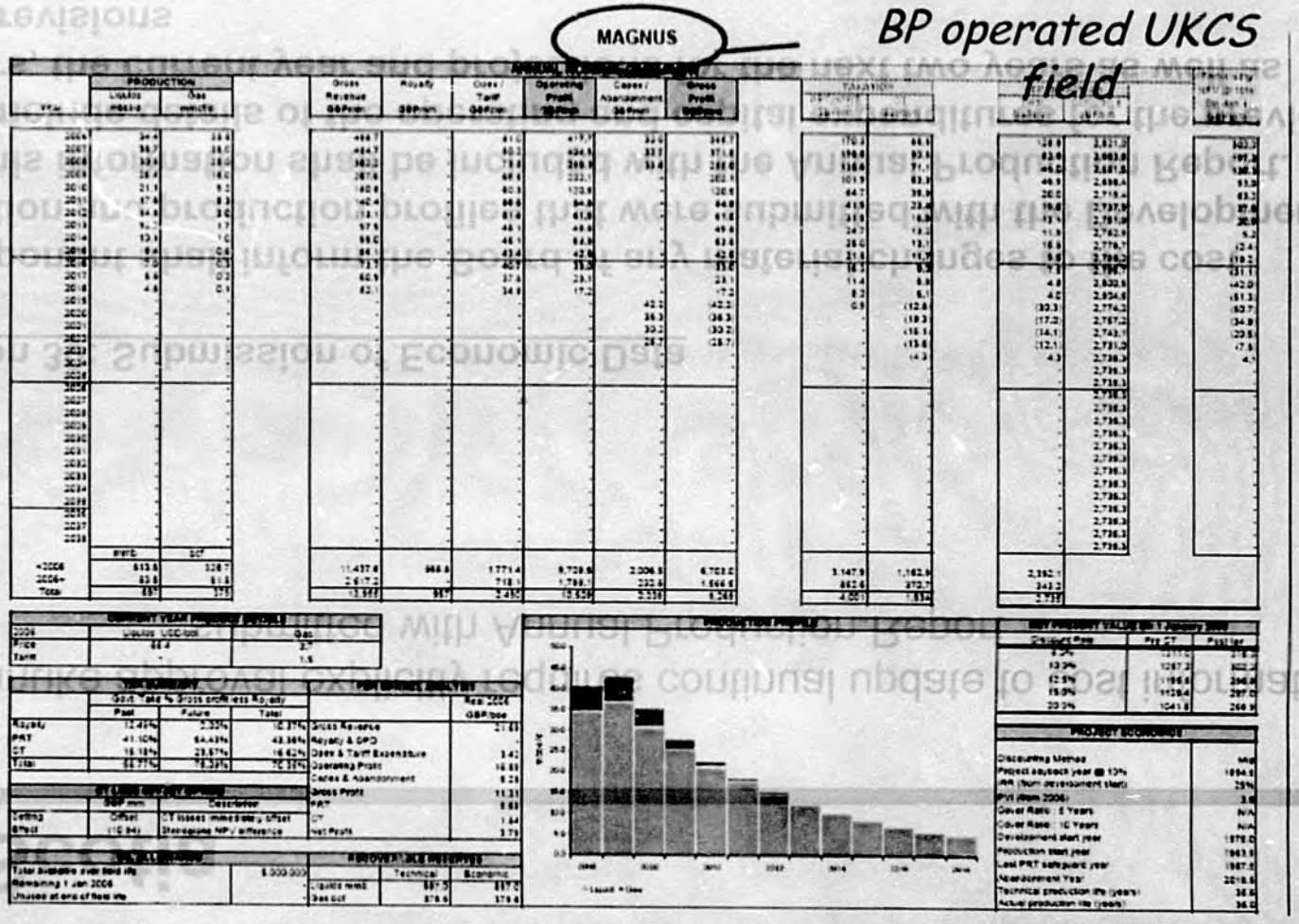
Deep Panuke approval explicitly requires continual update to cost information submitted with Annual Production Report

**Condition 30: Submission of Economic Data**

**The Proponent shall inform the Board of any material changes to the cost information and production profiles that were submitted with the Development Plan. This information shall be included with the Annual Production Report. This should include details of the operating and capital expenditures for the previous two years, the current year and projections for the next two years as well as reserve revisions**

# Publicly Available Sources

Example detailed field cashflow available from Deloitte's subscription service




Source: Deloitte Petroleum Services

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*Technical and Management Advisers to the Petroleum Industry Internationally Since 1962*
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RAR/jlm/C1492.00/gcah.292.07 October 19, 2007

# MEMORANDUM

**RE: Oil and Gas Reporting and Disclosure in Selected Countries**

As part of the review of its oil and gas fiscal system, the State of Alaska is exploring ways to improve the administration of its 'net' based taxes. Many believe the State is at a disadvantage to the oil companies in auditing their compliance as little data are routinely provided to the State. As such, Gaffney, Cline and Associates (GCA) has been asked to prepare a brief overview of how the acquisition, distribution and publication of oil company data are handled in other oil and gas producing regimes.

## SUMMARY

Provision by oil companies to host governments of detailed information pertaining to petroleum licenses and activities thereunder is routine around the world, usually as a condition of the license or contract under which the petroleum rights are granted. Certain data, including costs, may also be required (or covered, as well) by fiscal regulations governing different forms of taxation beyond general income tax provisions.

The information normally required to be provided encompasses the range from physical samples to activity plans and operating and financial data. The form of provision may vary, but formats consistent with electronic data exchange are developed for certain information. Where provided, data are generally at a well or field level of granularity.

Data provision is governed by various different confidentiality provisions, although sharing between different state/government entities appears more the standard than the exception. Basic geologic data are held confidential for periods of 2-5 years; although in some circumstances this may be as long as 10 years.

Data on fields under development and producing fields tend to either be released straight away, or are only released in aggregate form. For the most part, detailed data are only released on historical field or well production. Historical capital and operating cost data tend to be aggregated by country for disclosure, on an annual historical basis.

Limited amounts of data are also provided on a forecast basis. This is mixed between aggregated data and field-level data. Most of the field data so offered is reserves, but Denmark actually reports capital expenditure forecasts by field. No published forecast operating cost data has been identified.

Field data are typically submitted pursuant to two time-based criteria: at the time field exploration, appraisal or development plans are submitted, or a major revision to those plans is

incorporated, and on an annual basis for tracking and monitoring. Typically both situations will include production, capital and operating costs.

In its overview of reporting, GCA focused its efforts on reviewing practice in the petroleum producing countries of the North Sea, Canada, and Timor-Leste (where GCA recently assisted in the drafting of the Petroleum Act, the Petroleum Fiscal Act and associated regulations, drawing on "best practice" from around the world), although selected other examples are also included.

Considerable additional detail is available from websites and publications that go beyond the overview here, and should be studied further before detailed laws and regulations are drafted in Alaska.

## DISCUSSION

### Ownership of Data

Bar very minor exceptions, it is only in the United States that private entities own mineral rights. In Alaska, the state owns the rights to minerals making it similar to all other international locations.

States then lease or grant those rights to petroleum companies for a period of time either via a license, concession, service agreement or production sharing agreement. In exchange for receiving the rights to exploit (the state's) hydrocarbon resources, the oil companies are routinely obligated to provide the state with most, if not all, of the data related to their petroleum operations. The legislation, regulations and contracts in most countries specify quite clearly that the state owns all data obtained or produced as part of petroleum operations.

> *Timor-Leste shall have title to all data and information, whether raw, derived, processed, interpreted or analysed, obtained pursuant to any Authorisation.*

Some countries even go so far as to require that physical data, such as reservoir cores, are kept in-country at a state controlled facility.

> *Data and information acquired during the course of Petroleum Operations may be freely exported by Authorised Persons provided that the Ministry may require that an original, or in the case of a core, rock, fluid or other physical sample, a usable portion of the original, of all data and information, both physical and electronic, be kept in Timor-Leste.*

### Submission of Data

A variety of regulations usually stipulate the manner in which data are to be transmitted to the state. Physical data, such as cores or fluid samples, are packaged and labeled for long term storage. These are shipped to a facility designated by the state.

Other data, such as seismic, logs, production and costs, are supplied in two forms. First, the data are generally presented in the form of a routine report required by regulation. Reports are generally submitted in a non-editable format to ensure their integrity. Second, all data are

supplied in their 'raw' format, usually electronically, in a fully usable and editable format. Regulations sometimes prescribe how this is to be done.

> *Material and information which the licensee, operator, contractor etc. possesses or prepares in connection with planning and implementation of petroleum activities pursuant to this Act shall be available in Norway and may be required to be submitted free of charge to the Ministry or to anyone designated by the Ministry. Such material and information shall be submitted in a format decided by the Ministry to the extent this is deemed reasonable. In this connection, the Ministry may also require analyses and studies to be carried out.*

**Types of Data**

As noted earlier, most states maintain ownership to all data acquired in the course of petroleum operations. This data is then supplied to the state. The amount of data coming in is not inconsequential and can add up fast.

Appendix I is a list of the types of data typically supplied to the state. It is by no means exhaustive or complete but is meant to be a representation of what is available.

Once obtained, information may be designated as confidential or commercially sensitive. Depending on the nature of the data, it may be kept confidential for a period of time, usually 5 to 10 years.

| Data Type | Data Acquisition Entity | Concessionaire |
|---|---|---|
| Seismic data | 10 years | 5 years |
| Magneto metric / Gravimetric data | 10 years | 5 years |
| Geochemical data | 10 years | 5 years |
| Well data | 2 years | 2 years |

*Example shown is from Brazil*

**Publication and Public Access**

There is some variance in what a state chooses or is allowed to publish. The World Bank-led initiative on transparency (the Extractive Industries Transparency Initiative) has many countries rethinking their approach, but for the most part, countries still tend to keep most data confidential or aggregated at a level so as to prevent any identification of individual pieces.

There are a couple of exceptions. Timor-Leste recently passed legislation that is probably the most transparent of any government. By law the energy ministry in Timor-Leste is obligated to publish or make available to the public:

*(i) copies of all Authorisations and amendments thereto, whether or not terminated;*
*(ii) copies of all unitisation agreements;*
*(iii) summaries of Authorisations (and amendments thereto, whether or not terminated) and unitisation agreements;*
*(iv) approved Development Plans;*

*(v) all assignments and other dealings consented to in respect of Authorisations, subject to commercial confidence as to the commercial terms;*

*(vi) all exemptions granted from, or agreeing to a variation or suspension of, the conditions of an Authorization;*

*(vii) all such reports from companies acting in compliance with requirements under the Act and Authorisations in such manner and detail as required by their Authorisation and as provided by regulation; and*

*(viii) all such reports by Authorised Persons on payments relating to Petroleum Operations made to the Government of Timor-Leste as are required by law.*

The last item makes public all data (i.e. production rates, capital and operating costs) related to the calculation of royalty, production share and profit oil.

Brazil, in an indirect manner, provides the means by which a knowledgeable person can ascertain the operating costs per company per field.

*The Brazilian petroleum regulatory agency displays regularly in its web site price, production, royalties and windfall profit tax on a field-by-field basis. Based on this it is possible to assess, indirectly, the production cost of a given field. Once the windfall profit tax is known it is possible to calculate the taxable basis. By deducting the taxable basis from gross revenue minus royalties, the balance is total costs (capital plus operating).*

**North Sea Countries' Reporting**

All four of the key North Sea jurisdictions (United Kingdom (UK), Norway, Denmark and Netherlands) have regulations and practices requiring companies to disclose information on a detailed basis. This information includes well and seismic data, plus detailed development plans / updates including production, capital and operating cost forecasts and annual updates / forecasts of the same information.

While the information is supplied by the companies on a detailed, field-by-field (or where required, well-by-well) basis, public reporting is much less detailed. Typically data will be aggregated on a country-wide basis, although in some cases life-of-field numbers (reserves, costs) may be reported. The main exception to this is historical production data, which is generally available on a detailed basis.

Costs reported for regulatory purposes are typically at a field level, and exclude overheads and other non-field allocated costs. Such costs would typically be incorporated in tax filings, and be governed by taxpayer confidentiality.

While not official government data, all North Sea countries have had available very good subscription-service data on a field-by-field basis. The services typically include full annual historic and forecast production, capital and operating cost data, and field economics. While the data sources incorporate all official public releases (from the state to official company publications), they also benefit from "guidance" from the companies themselves. In the latter cases, while not wanting to warrant data or even acknowledge its release, the companies find it useful to see that it is reasonable as they themselves are consumers of the data sets on fields in which they do not have an interest.

The impact of these services is such that they are relied on heavily by investors and planners alike. While no substitute for official data, they have proven to be a significant driver of activity whereby new players can gain a good understanding of participants, the nature of oil and gas fields, and costs prior to entering an area.

Availability of such reporting has now spread to several countries in the world, although the accuracy of data may be variable from country to country, and subject to local considerations regarding allowing data release.

**UK**

The UK has significant regulations covering requirements for the provision of data. This is captured at a field level, both at the time of a Field Development Plan submission (and major revision), plus on an annual or semi-annual survey basis. While collected by the Department of Trade and Industry (DTI), and shared amongst Crown (Government) bodies, disclosure is more limited.

Detailed information is made publicly available on well / field production data. However, both cost (capital and operating) and fiscal (tax and royalty receipts) are disclosed only on an aggregate basis. There are some exceptions where detailed data is provided to persons or commercial organizations undertaking studies for Government bodies; however these are provided under conditions of confidentiality and the underlying detail is not disclosed in the final report.

Supplementary detail provided in Appendix II shows the regulations and format of information provision, and examples of disclosure (with the actual numbers generally being available in tabular format as well).

**Denmark**

Denmark receives detailed field-by-field production and cost data on an annual basis, although it has not standardized reporting by operator, reflecting principally that it only has five operators in the country.

Public disclosure and reporting provides a mix of detail. Country summaries of historic and forecast data are provided, but so is investment detail on a field by field basis, (See Appendix III).

In addition, though, field by field summaries are provided which provide a good background on historic, though limited future data.

Operating costs, on the other hand, are only reported on an aggregate basis.

**Norway**

Norway requires operators to provide detailed field production, capital and operating cost forecasts as part of a development plan, and on an annual basis. Operators are required to submit detailed production and cost forecasts each year in spreadsheet form to the Norwegian Petroleum Directorate (NPD) (See Appendix IV).

Each year the NPD will produce a long report on operations on the Norwegian Continental Shelf, with a lot of production and cost data provided in aggregate form. In addition, however, field summaries are also provided showing reserves and capital (expected total and remaining) for both producing fields and fields in development. No annual-time series is available, although analysis of several years' reports will allow a historic time-series to be developed on a field-by-field basis.

Operating cost data is available only on a consolidated basis, as are statistics on government revenues from royalties and taxes.

**Netherlands**

The Netherlands publishes similar information to the other North Sea countries with regard to production data, although it tends to aggregate it on a license basis, thereby covering possibly several fields rather than a single field. Resource estimates are published with an onshore/offshore split, but not at a field or license detail level.

Historical fiscal revenues are detailed, but no cost information is readily discernable.

Such information is provided to EBN, a state-owned oil and gas company that is a partner in all oil ad gas licenses. However, detailed information of all types is considered commercially confidential and not disclosed publicly.

**Canada (Nova Scotia and Newfoundland-Labrador)**

Canada divides jurisdiction for oil and gas between the Provinces and Federal government. The Western Provinces of Alberta, British Colombia and Saskatchewan each administer their own regimes, while Frontier Lands and the Maritimes operate jointly with the Federal government.

Nova Scotia and Newfoundland-Labrador have similar, though separate, regimes with many common provisions, operating under join boards (Canada-Nova Scotia Offshore Petroleum Board, and Canada Newfoundland-Labrador Offshore Petroleum Board).

The Provinces have strict hard-copy and electronic formatting requirements for all technical data submissions. Detailed by field production reports are filed (and disclosed on a monthly basis) in addition to a weekly progress report of all activities in licensed areas.

The Provinces' Petroleum Boards are required to conduct a Public Review of the Development unless the Board determines a review is not necessary in the public interest. The guidelines for the contents of the Development Plan are relatively comprehensive.

An example of the information disclosure from the proposed development plan for Nova Scotia's Deep Panuke field that is currently under consideration, and providing production forecasts and indicative costs, is shown in Appendix V. Similar disclosure was made previously for the Sable Island Gas Project.

An example of the data disclosure requirements in Newfoundland-Labrador is given in Appendix VI.

In addition to the comprehensive submission and disclosure requirements for the development plan, both Atlantic Canada Provinces mandate public disclosure of all well and geological data after specified periods between 2 and 5 years depending on the type of information.

Attachments

Appendices

| | |
|---|---|
| I: | Types of Data |
| II: | UK Detail |
| III: | Denmark Detail |
| IV: | Norway Detail |
| V: | Nova Scotia Detail |
| VI: | Newfoundland-Labrador Detail |

# Appendix I:

# Types of Data

# CORRECTION

THE FOLLOWING DOCUMENT(S)
HAVE BEEN REFILMED TO
ASSURE LEGIBILITY OR PAGINATION

Central Microfilm Services
Departement of Education & Early Development
State of Alaska

Rev. 6/98

In addition to the comprehensive submission and disclosure requirements for the development plan, both Atlantic Canada Provinces mandate public disclosure of all well and geological data after specified periods between 2 and 5 years depending on the type of information.

Attachments

Appendices

| | | |
|---|---|---|
| I: | Types of Data |
| II: | UK Detail |
| III: | Denmark Detail |
| IV: | Norway Detail |
| V: | Nova Scotia Detail |
| VI: | Newfoundland-Labrador Detail |

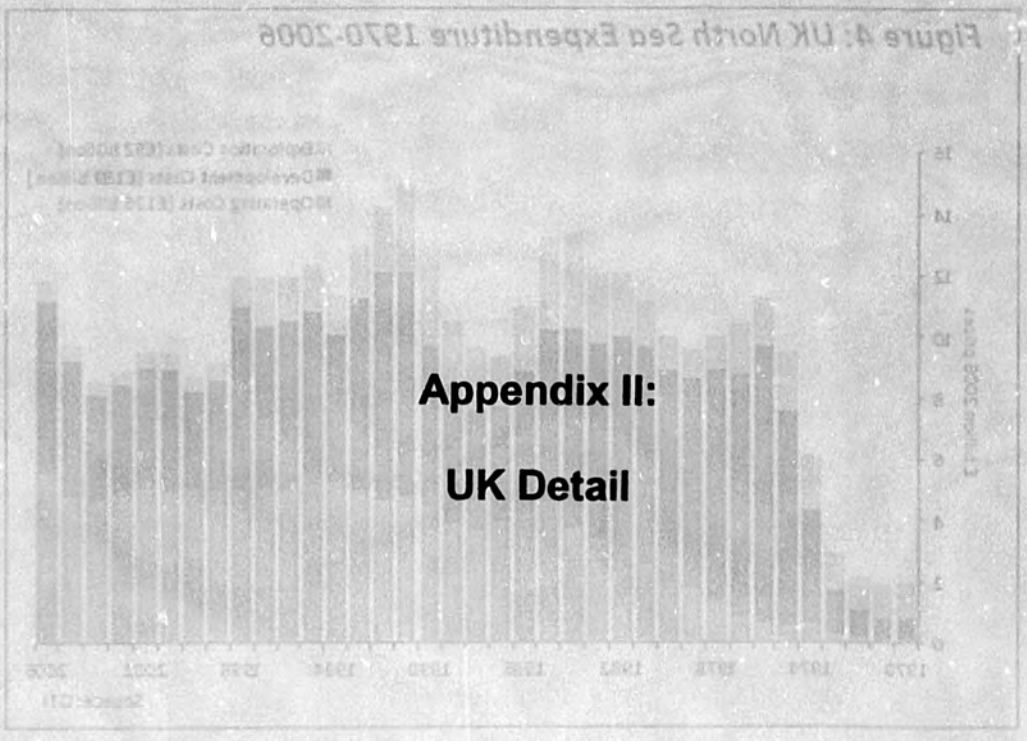
# APPENDICES

# TYPES OF DATA

- **EXPLORATION AND APPRAISAL**
  - Joint Operating Agreements
  - Work Programs and Budgets
  - Seismic
  - Daily Drilling Reports
  - Logs
  - Well tests
  - Geological Models and Maps
- **DEVELOPMENT**
  - Development Plans with Opex and Capex Projections
  - Contracts
  - Construction Progress Reports
  - Drilling Reports
  - Reservoir Characterization
- **PRODUCTION**
  - Work Programs and Budgets
  - Sales, Revenues and Pricing
  - Transportation Agreements
  - Sales Contracts
  - Production
  - Injection
  - Opex (as spent and forecast)
  - Capex (as spent and forecast)
  - Facility Maps and Studies
  - Safety and Environmental reports
  - Training and Development
- **ABANDONMENT**
  - Abandonment Plan and Budget
  - Progress Reports
  - Environmental Clean-up Assessment

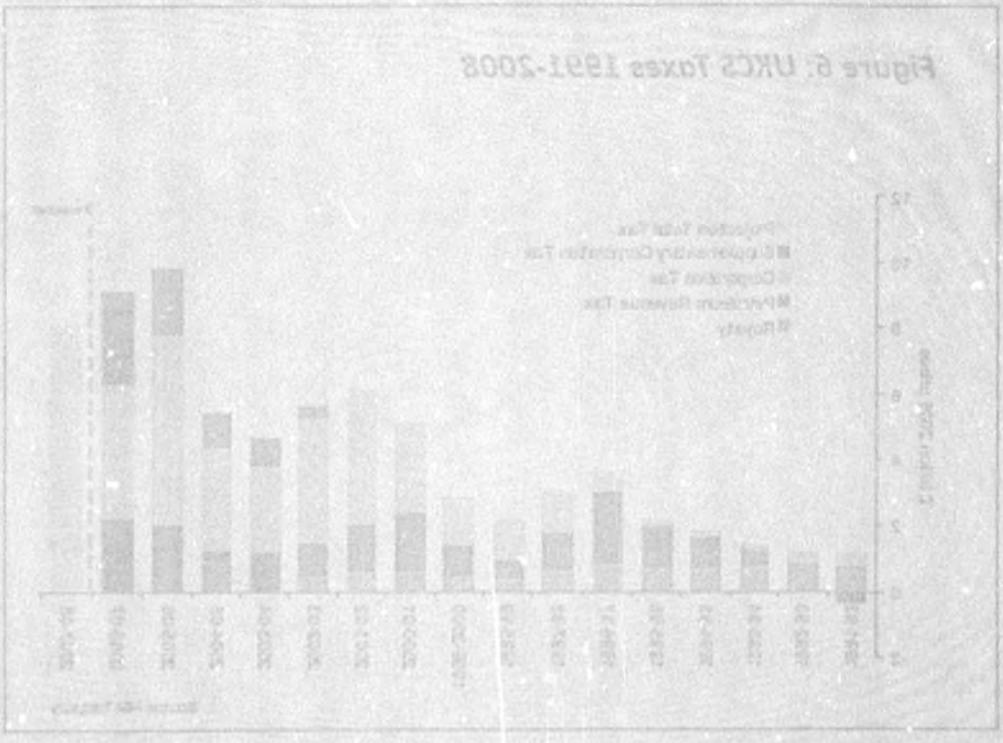
# Appendix I:

# Types of Data

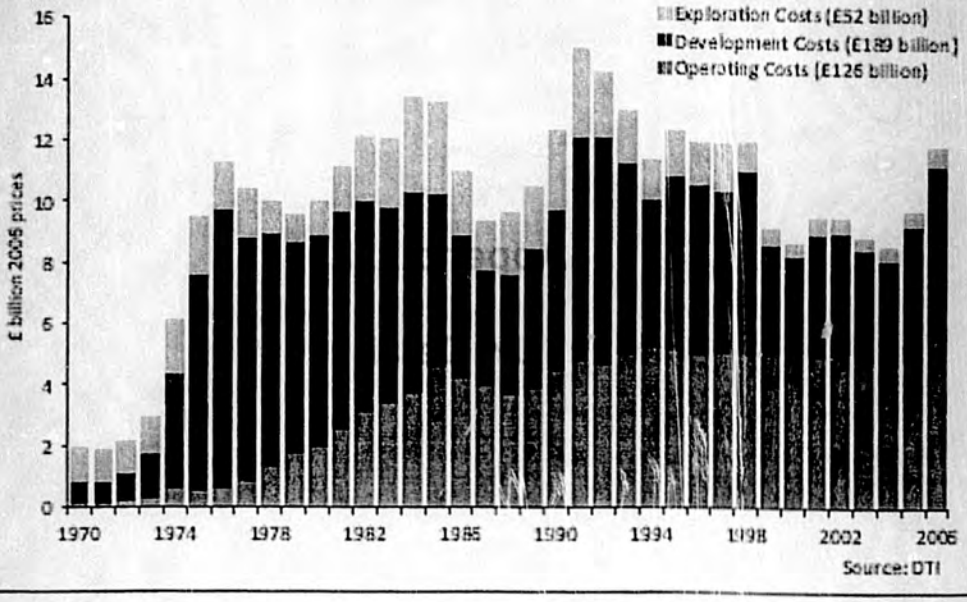


# Appendix II:

# UK Detail



## Figure 4: UK North Sea Expenditure 1970-2006




## Figure 6: UKCS Taxes 1991-2008

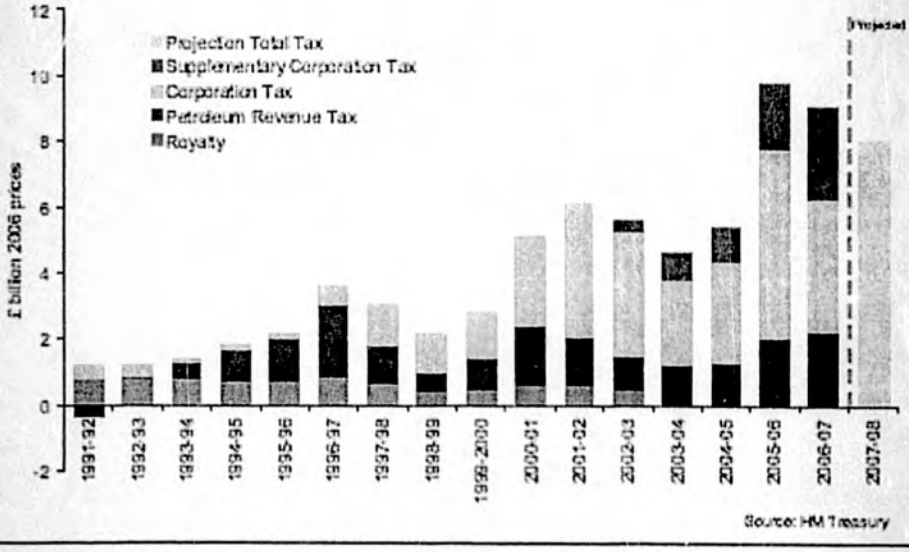
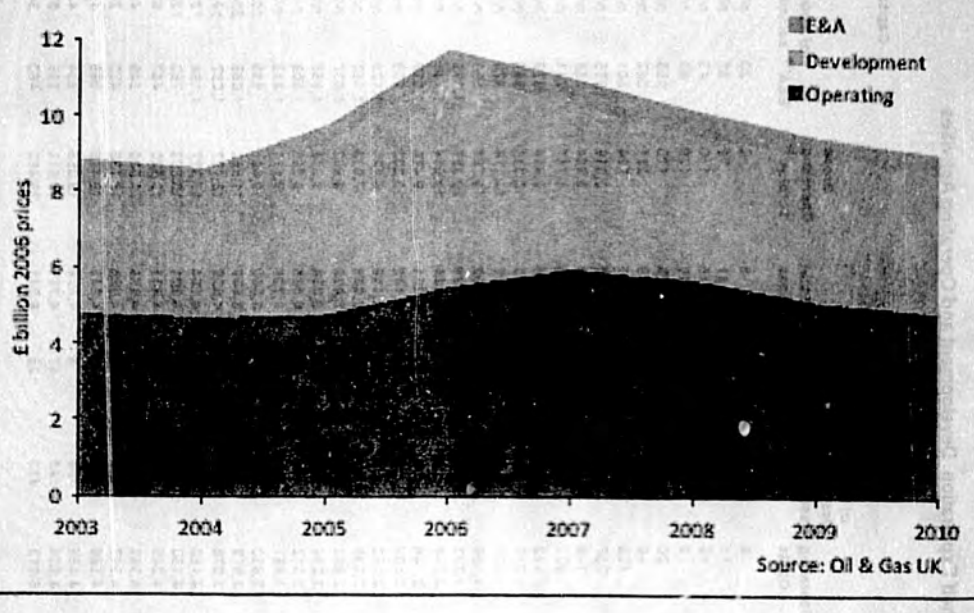


**Figure 30: UKCS Expenditure Forecast 2003-2010**



## Income from and Expenditure on UK Continental Shelf Exploration, Development and Operating Activities

(£ million)

| | Income | | | | | Expenses | | | | | Capital Expenditure | | | | Prices | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Oil Sales | NGL Sales | Gas Sales | Other Income[1] | Total Income | Operating Costs | *of which decommissioning costs* | Other expenses[2] | Total Expenses | Gross Operating Surplus[3] | E&A[4] | *of which seismic* | Investment other than E&A | Total | Average Oil Price (£/tonne) | Average Gas Price (p/therm) | GDP Deflator (2005=100) |
| 1970 | 0 | 0 | 0 | 4 | 5 | 6 | n/a | 0 | 6 | -2 | 20 | n/a | 53 | 73 | n/a | n/a | 9.9 |
| 1971 | 0 | 0 | 60 | 8 | 68 | 11 | n/a | 0 | 11 | 78 | 57 | n/a | 72 | 129 | n/a | n/a | 10.8 |
| 1972 | 0 | 1 | 114 | 9 | 124 | 15 | n/a | 0 | 15 | 110 | 43 | n/a | 112 | 164 | n/a | n/a | 11.7 |
| 1973 | 0 | 2 | 133 | 11 | 146 | 18 | n/a | 0 | 18 | 129 | 69 | n/a | 215 | 284 | n/a | n/a | 12.6 |
| 1974 | 0 | 3 | 166 | 21 | 190 | 20 | n/a | 0 | 20 | 170 | 153 | n/a | 554 | 707 | n/a | n/a | 14.4 |
| 1975 | 43 | 15 | 190 | 29 | 277 | 46 | n/a | 0 | 46 | 231 | 342 | n/a | 1,274 | 1,616 | n/a | n/a | 18.3 |
| 1976 | 624 | 21 | 258 | 21 | 924 | 130 | n/a | 0 | 130 | 794 | 301 | n/a | 2,070 | 2,372 | n/a | 1.8 | 21.1 |
| 1977 | 2,197 | 29 | 317 | 20 | 2,562 | 207 | n/a | 0 | 207 | 2,356 | 375 | n/a | 2,107 | 2,482 | n/a | 2.1 | 24.0 |
| 1978 | 2,771 | 35 | 432 | 12 | 3,250 | 346 | n/a | 0 | 346 | 2,904 | 281 | n/a | 2,170 | 2,451 | n/a | 3.1 | 26.8 |
| 1979 | 5,641 | 53 | 538 | 44 | 6,276 | 502 | n/a | 18 | 519 | 5,757 | 241 | n/a | 2,064 | 2,305 | n/a | 3.8 | 30.7 |
| 1980 | 8,719 | 132 | 647 | 82 | 9,580 | 692 | n/a | 34 | 726 | 8,854 | 379 | n/a | 2,768 | 2,767 | n/a | 4.8 | 36.7 |
| 1981 | 12,206 | 135 | 843 | 114 | 13,298 | 1,017 | n/a | 45 | 1,063 | 12,235 | 550 | n/a | 2,647 | 3,387 | n/a | 5.5 | 40.8 |
| 1982 | 14,129 | 312 | 956 | 160 | 15,557 | 1,309 | n/a | 73 | 1,382 | 14,174 | 575 | n/a | 3,059 | 3,934 | 142.0 | 7.4 | 43.9 |
| 1983 | 15,456 | 529 | 1,117 | 156 | 15,328 | 1,495 | n/a | 67 | 1,562 | 15,767 | 993 | n/a | 2,853 | 3,846 | 145.3 | 8.4 | 46.3 |
| 1984 | 19,927 | 659 | 1,290 | 255 | 22,133 | 1,733 | n/a | 62 | 1,795 | 20,338 | 1,395 | n/a | 3,189 | 4,584 | 164.9 | 10.0 | 48.4 |
| 1985 | 19,204 | 692 | 1,709 | 384 | 21,988 | 2,248 | n/a | 76 | 2,324 | 19,664 | 1,445 | n/a | 2,754 | 4,239 | 159.3 | 11.9 | 51.1 |
| 1986 | 8,909 | 386 | 1,927 | 455 | 11,678 | 2,144 | n/a | 57 | 2,201 | 9,476 | 1,039 | n/a | 2,419 | 3,457 | 73.3 | 12.6 | 52.9 |
| 1987 | 9,513 | 358 | 1,990 | 533 | 12,394 | 2,107 | n/a | 55 | 2,162 | 10,232 | 809 | n/a | 2,044 | 2,853 | 81.7 | 12.4 | 55.7 |
| 1988 | 7,084 | 249 | 2,046 | 689 | 10,208 | 2,060 | n/a | 58 | 2,118 | 8,120 | 1,129 | n/a | 2,129 | 3,258 | 63.4 | 13.1 | 59.2 |
| 1989 | 7,214 | 272 | 2,197 | 547 | 10,220 | 2,330 | n/a | 57 | 2,386 | 7,833 | 1,182 | n/a | 2,635 | 3,817 | 61.1 | 14.2 | 63.7 |
| 1990 | 7,432 | 277 | 2,377 | 405 | 11,491 | 2,992 | n/a | 46 | 2,038 | 8,552 | 1,637 | n/a | 3,478 | 5,116 | 94.6 | 14.3 | 66.5 |
| 1991 | 7,576 | 385 | 2,958 | 476 | 11,428 | 3,296 | n/a | 58 | 3,354 | 8,073 | 1,955 | n/a | 5,101 | 7,067 | 85.0 | 15.9 | 73.0 |
| 1992 | 7,430 | 380 | 3,015 | 626 | 11,463 | 3,312 | n/a | 53 | 3,365 | 8,088 | 1,508 | n/a | 5,428 | 6,936 | 81.9 | 15.8 | 76.0 |
| 1993 | 6,110 | 523 | 3,558 | 699 | 12,690 | 3,651 | n/a | 47 | 3,708 | 9,191 | 1,213 | n/a | 4,661 | 5,874 | 65.9 | 15.0 | 78.0 |
| 1994 | 8,964 | 528 | 3,836 | 974 | 14,302 | 3,860 | n/a | 40 | 3,900 | 10,401 | 939 | 150 | 3,671 | 4,609 | 77.0 | 16.3 | 79.2 |
| 1995 | 9,881 | 614 | 4,141 | 1,166 | 15,802 | 3,913 | n/a | 37 | 3,950 | 11,852 | 1,086 | 204 | 4,255 | 5,440 | 81.1 | 16.3 | 81.4 |
| 1996 | 11,850 | 749 | 5,295 | 1,243 | 19,136 | 3,978 | n/a | 31 | 4,009 | 15,127 | 1,057 | 190 | 4,364 | 5,481 | 97.3 | 16.6 | 84.2 |
| 1997 | 10,327 | 700 | 5,254 | 1,279 | 17,561 | 4,150 | n/a | 34 | 4,184 | 13,377 | 1,164 | 151 | 4,263 | 5,457 | 87.4 | 15.7 | 86.6 |
| 1998 | 7,467 | 551 | 5,313 | 1,453 | 14,806 | 4,150 | n/a | 111 | 4,301 | 10,503 | 762 | 125 | 4,996 | 5,768 | 59.3 | 16.2 | 88.9 |
| 1999 | 10,257 | 727 | 5,031 | 1,436 | 17,460 | 4,249 | n/a | 282 | 4,531 | 12,920 | 457 | 55 | 3,063 | 3,520 | 80.0 | 13.7 | 90.9 |
| 2000 | 15,275 | 1,117 | 6,605 | 1,488 | 25,486 | 4,360 | n/a | 106 | 4,466 | 21,020 | 345 | 40 | 2,750 | 3,096 | 138.1 | 15.8 | 92.1 |
| 2001 | 13,546 | 993 | 8,140 | 1,435 | 24,186 | 4,347 | n/a | 49 | 4,396 | 19,789 | 420 | 34 | 3,570 | 3,990 | 125.7 | 19.0 | 94.1 |
| 2002 | 13,629 | 894 | 8,199 | 1,397 | 24,118 | 4,536 | n/a | 48 | 4,643 | 19,475 | 389 | 46 | 3,598 | 3,988 | 123.8 | 18.4 | 97.0 |
| 2003 | 13,365 | 1,105 | 7,564 | 1,538 | 23,582 | 4,496 | n/a | 8 | 4,504 | 19,056 | 334 | 42 | 3,412 | 3,746 | 130.0 | 17.4 | 100.0 |
| 2004 | 13,477 | 1,256 | 7,443 | 1,178 | 23,364 | 4,564 | 148 | 67 | 4,781 | 18,613 | 356 | 57 | 3,302 | 3,658 | 154.0 | 21.0 | 102.6 |
| 2005 | 15,556 | 1,684 | 8,502 | 1,451 | 29,893 | 5,113 | 412 | 128 | 5,241 | 23,452 | 460 | 34 | 4,371 | 4,831 | 215.8 | 27.6 | 104.9 |

**Notes**

(1) Revenues from pipelines and terminals, and other revenues of operators and production licensees.
(2) Other costs of operators and production licensees not attributable to oil or gas fields.
(3) Gross Operating Surplus = Total Income less Total Expenses.
(4) E&A costs include Exploration and the cost of Appraisal wells drilled prior to development approval.
The figures exclude change in stocks and book value of stocks.

| Well No: | Field Name: | Operator: | Company contact: Contact details : | | Date: | | CONVERSION FACTOR | | Please indicate barrel:tonne and scf:therm conversion factors |
|---|---|---|---|---|---|---|---|---|---|
| | Type of development: | | | | | | Oil | | |
| Discovery date: | | | | | | | NGL | | |
| Depth: | | | | | | | Gas | | |

| | | | | | | | | | | | Costs | | £ million (constant 2007 prices) | | | | TARIFFS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Production | | | Sales | | | Other oil/gas uses | | | | CAPEX | | | OPEX | | | Tariff Expenditure/Income | | | | | |
| Year | Oil 000 tonnes | NGLs 000 tonnes | Gas million therms | Oil 000 tonnes | NGLs 000 tonnes | Gas million therms | Gas Flaring million therms | Re-injection million therms | Fuel use 000 tonnes | Other oil/gas usage apart from sales (please specify) | Exploration and Appraisal Drilling | Development Drilling expenditure | Other Capital expenditure | Operating expenditure (excluding tariff payments and lease costs) | Lease Costs (FPSOs etc) | Decommissioning Costs | Oil £/tonne | NGL £/tonne | Gas p/therm | Tariff payment to third parties £ million | Tariff receipts from old fields £ million | Tariff receipts new fields £ million |
| Previous spend 1997 | | | | | | | | | | | | | | | | | | | | | | |
| Previous spend 1998 | | | | | | | | | | | | | | | | | | | | | | |
| Previous spend 1999 | | | | | | | | | | | | | | | | | | | | | | |
| Previous spend 2000 | | | | | | | | | | | | | | | | | | | | | | |
| Previous spend 2001 | | | | | | | | | | | | | | | | | | | | | | |
| Previous spend 2002 | | | | | | | | | | | | | | | | | | | | | | |
| Previous spend 2003 | | | | | | | | | | | | | | | | | | | | | | |
| Previous spend 2004 | | | | | | | | | | | | | | | | | | | | | | |
| Previous spend 2005 | | | | | | | | | | | | | | | | | | | | | | |
| Previous spend 2006 | | | | | | | | | | | | | | | | | | | | | | |
| Already committed in 2007 | | | | | | | | | | | | | | | | | | | | | | |
| other 2007 | | | | | | | | | | | | | | | | | | | | | | |
| 2008 | | | | | | | | | | | | | | | | | | | | | | |
| 2009 | | | | | | | | | | | | | | | | | | | | | | |
| 2030 | | | | | | | | | | | | | | | | | | | | | | |
| 2031 | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | | | |

| List Licensees and give % holding within field | | Gas Contract information: |
|---|---|---|
| EXPORT ROUTE | | Premium/discount to Brent Crude: Please indicate using plus or minus $ per barrel or p/therm |
| Oil | | |
| NGL | | Notes: |
| Gas | | |

Once complete please send to field team coordinator by email

*Example of spreadsheet form of data to be submitted with Field Development Plan or update.*

# Appendix III:

# Denmark Detail

Table 7.4 Investments, DKK million, nominal prices

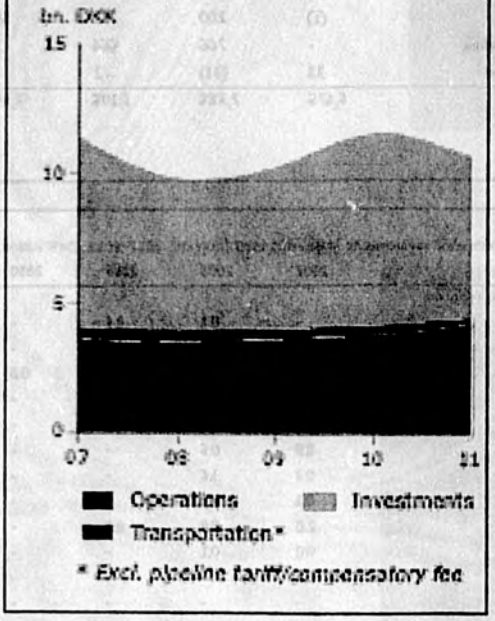
| | 2002 | 2003 | 2004 | 2005 | 2006* |
|---|---|---|---|---|---|
| Cecilie | 223 | 660 | 309 | (18) | 4 |
| Dagmar | - | - | - | - | 168 |
| Dan | 437 | 943 | 750 | 750 | 684 |
| Gorm | 242 | 107 | 108 | 291 | 304 |
| Halfdan | 2,412 | 1,779 | 1,124 | 683 | 1,293 |
| Harald | 0 | 4 | 22 | 53 | 1 |
| Kraka | 3 | - | 2 | - | - |
| Nini | 285 | 1,268 | 319 | 163 | 19 |
| Roar | - | - | - | - | - |
| Rolf | - | 37 | 4 | - | 1 |
| Siri | 111 | 406 | 435 | 73 | 140 |
| Skjold | 5 | 77 | 8 | 11 | 4 |
| South Arne | 849 | 764 | 762 | 310 | 451 |
| Svend | 223 | - | - | - | - |
| Tyra | 85 | 305 | 459 | 1,000 | 1,520 |
| Tyra Southeast | 569 | 82 | 96 | 45 | - |
| Valdemar | (1) | 200 | 52 | 553 | 992 |
| NOGAT pipeline | - | 766 | 664 | 12 | - |
| Not allocated | 31 | (31) | 2 | 5 | 97 |
| Total | 5,475 | 7,386 | 5,105 | 3,951 | 5,658 |

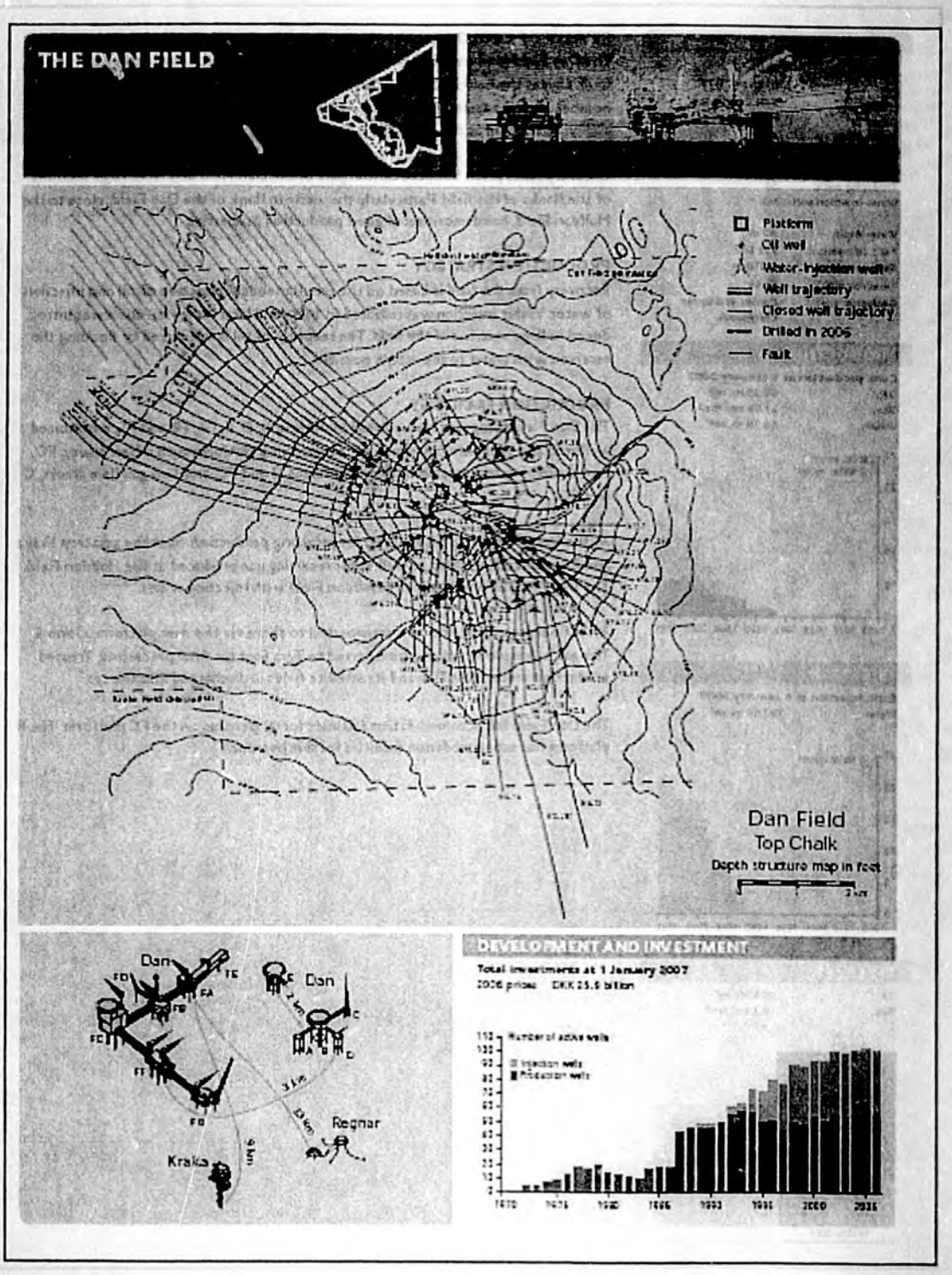
*Estimate

Table 7.5 Estimated investments in development projects, 2007-2011, DKK billion, 2006 prices

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Ongoing and approved | | | | | |
| Adda | - | 0.1 | 0.6 | - | - |
| Alma | - | 0.6 | 0.5 | - | - |
| Boje | - | - | - | 0.8 | - |
| Cecilie | - | - | - | - | - |
| Dagmar | - | - | - | - | - |
| Dan | 0.9 | 0.6 | - | - | - |
| Elly | 0.3 | 1.6 | - | - | - |
| Gorm | 0.1 | 0.0 | - | - | - |
| Halfdan | 2.0 | 0.9 | 0.1 | - | - |
| Harald | 0.0 | 0.1 | - | - | - |
| Kraka | 0.3 | - | - | - | - |
| Lulita | - | - | - | - | - |
| Nini | 0.1 | - | - | - | - |
| Ragnar | - | - | - | - | - |
| Roar | - | - | - | - | - |
| Rolf | - | - | - | - | - |
| Siri | 0.3 | - | - | - | - |
| Skjold | - | - | - | - | - |
| South Arne | 0.8 | - | - | - | - |
| Svend | - | - | - | - | - |
| Tyra | 0.4 | 0.4 | 0.4 | 0.0 | 1.3 |
| Tyra Southeast | 0.5 | - | - | - | - |
| Valdemar | 1.6 | 0.7 | - | - | - |
| Total | 7.3 | 5.1 | 1.5 | 0.8 | 1.3 |
| Planned | - | - | - | - | 0.8 |
| Possible | - | 0.7 | 4.7 | 6.6 | 4.0 |
| Expected | 7.3 | 5.8 | 6.2 | 7.4 | 6.2 |

**Fig. 7.5** Investments in fields, operating and oil transportation costs, 2006 prices




THE DAN FIELD
Platform
Oil well
Water-injection well
Well trajectory
Closed well trajectory
Drilled in 2006
Fault
Dan Field
Top Chalk
Depth structure map in feet
Dan
Dan
Regnar
Kraka
DEVELOPMENT AND INVESTMENT