6 December 1996

HIGHLIGHTS

- Global demand in 4Q96 has been revised upwards from last month's Report by 0.1 mb/d to 73.9 mb/d, mainly due to greater-than-expected demand in October in the US and Japan. With OECD demand in 3Q96 having been revised downwards by 0.2 mb/d to 40.6 mb/d, primarily due to a significant adjustment to preliminary US data for September, global demand in 1996 is unchanged at 71.8 mb/d. Annual demand also remains unchanged in 1997 at 73.7 mb/d, an annual increase of 1.9 mb/d or 2.7%, but demand in 3Q97 and 4Q97 has been revised, mainly in line with the similar changes made for 1996.
- A surge in non-OPEC supply carried estimated world oil supply to 73.9 mb/d in November, an increase of over 1.3 mb/d versus a revised 72.6 mb/d in October. Almost 95% of the monthly increase occurred in non-OPEC production with the North Sea and Latin America accounting for about three-quarters of this non-OPEC increase. Absence of maintenance and increasing production from two new Norwegian fields and twelve new UK fields is estimated to have led to increases of 372 kb/d and 337 kb/d respectively in the two sectors. Brazilian offshore production and the recovery of Mexican crude and NGL production following the Cactus gas processing plant explosion this summer were responsible for most of the 150 kb/d monthly increase in Latin American production in November.
- OPEC crude oil production is assessed at 26.14 mb/d in November versus an upwardly-revised 26.07 mb/d in October. Following declines in October, production in both Saudi Arabia and Iran increased by a combined 0.17 kb/d. This was only partly offset by maintenance-related declines in the UAE and Qatar, the former from upwardly-revised October levels. OPEC NGL production is judged to have risen by 60 kb/d to 2.74 mb/d, with 45 kb/d of the increase being due to the return of the Nigerian Oso condensate field from October maintenance.
- As a result of changes to both demand and supply projections, the call on OPEC crude plus stock change for 4Q96 is 0.2 mb/d higher at 26.2 mb/d. However, it is unchanged in 1Q97 at 26.5 mb/d and 0.1 mb/d lower for the year 1997 at 25.2 mb/d, 0.9 mb/d below OPEC's production in November.
- As a result of a 0.3 mb/d increase in OECD stock levels in October, compared with a 0.2 mb/d decrease in October 1995, the shortfall of total OECD stocks versus a year earlier decreased from 83 mb at the beginning of the month to 67 mb at the end. Crude stocks were above or close to the previous year's levels in all three regions. Distillate stocks in the Pacific were somewhat higher than at the end of October 1995, but in Europe and North America they were lower by 28 mb or 12% and 13 mb or 7% respectively. In the first three weeks of November, preliminary data indicate an unusually large reduction of US stocks of 1.1 mb/d.
- The steep decline in benchmark crude oil prices in late October and early November came to an end with the onset of colder-than-normal weather in the US and Europe. Prices increased towards mid-month, led by rising gasoil prices, and remained largely within a $1.00/bbl range for the remainder of the month, almost unaffected by the OPEC meeting and increased prospects for the return of Iraqi crude exports in the near future.
- In November, gasoil prices strengthened again in the Atlantic Basin, albeit remaining appreciably below early-October highs. Unlike in Europe, US gasoline prices increased, due to a combination of low US gasoline stocks and refinery problems. Fuel oil prices strengthened seasonally on both sides of the Atlantic. In Singapore, almost all products strengthened relative to crude, amid rising regional demand.
- Refinery margins remained volatile during November and increased in all major refining centres, mainly as a result of firming product/crude differentials during the month.
- In October, the aggregate refinery throughputs in OECD countries decreased by almost 1 mb/d to 32.5 mb/d. Decreases in Europe, Japan and North America were partly offset by slight increases in Australasia and Canada. Preliminary indications for November suggest that throughputs were higher in Europe and the US and little changed in Japan. In December, refinery maintenance is expected to decrease seasonally in all major refining centres.
- New refineries and refinery expansions are estimated to have added almost 1.7 mb/d or 2.3% to global refining capacity in 1996. For 1997, global refining capacity is expected to increase by an additional 0.94 mb/d or 1.1%.

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DEMAND

Summary

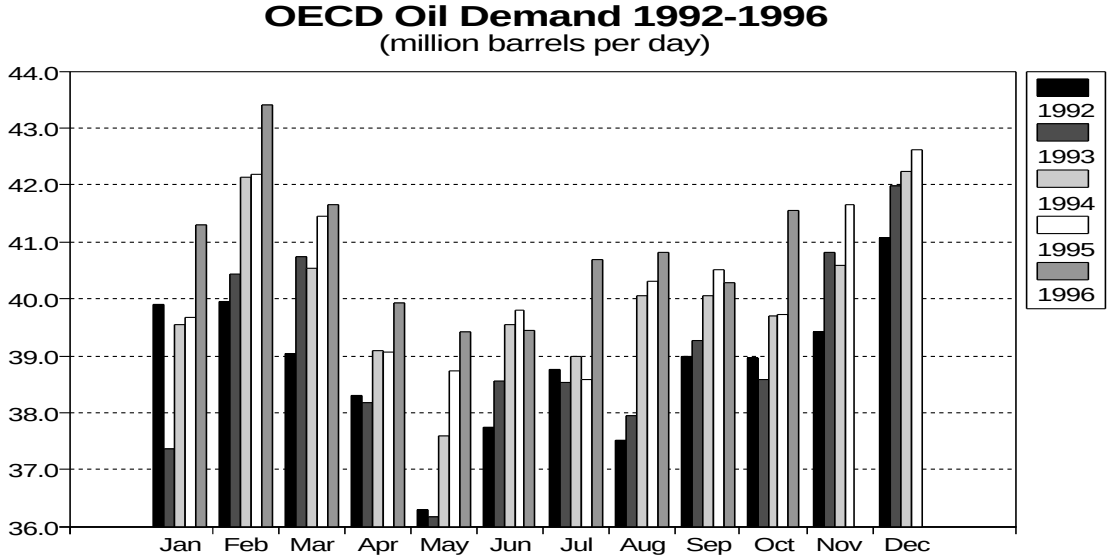
- In October, US oil demand increased by 1.0 mb/d or 5.7% from a year earlier, mainly due to gasoil and "other product" deliveries both increasing by more than 0.4 mb/d. In Europe, oil use in the four largest oil-consuming countries increased by 4.3%, with particularly strong heating oil deliveries in France and Germany somewhat dampened by weak residual fuel oil and "other product" deliveries. In Japan, oil demand rose by 7.7%, mainly due to the effect of cold weather.

- OECD demand in 3Q96 has been revised downwards by more than 160 kb/d, which, following rounding, has led to a 0.2 mb/d downward adjustment to OECD demand to 40.6 mb/d. This significant change was mainly due to a 370 kb/d revision to preliminary US deliveries in September. In addition, Japanese demand was revised downwards, which more than offset minor upward adjustments to demand in the four leading oil-consuming countries in Europe.

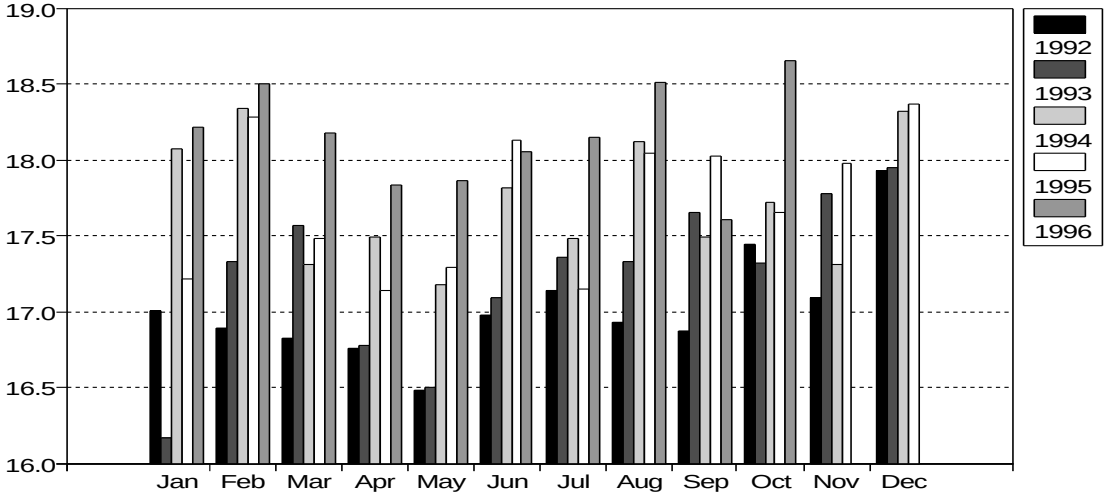
- OECD demand in 4Q96 is projected to rise by 0.7 mb/d or 1.8% to 42.1 mb/d, a 0.1 mb/d upward adjustment, primarily due to greater-than-expected US and Japanese demand in October. The forecast remains sensitive to revision, partly due to uncertainties about the weather. With North American data revised downwards by 0.1 mb/d in 3Q96 and upwards by 0.1 mb/d in 4Q96, OECD demand in 1996 remains essentially unchanged at 41.1 mb/d, an annual increase of 0.7 mb/d or 1.8%.

- Growth in non-OECD oil demand in 1996 is unchanged at 0.9 mb/d or 3.1%, despite some minor adjustments to regional oil use. Other Asian demand in 3Q96 has been revised downwards marginally, following weaker-than-expected Indian deliveries in September. In 2Q96, FSU apparent demand has been revised upwards, consistent with an adjustment to FSU production. Non-OECD demand in 1997 is expected to grow by 4.2% or 1.3 mb/d to 32.0 mb/d.

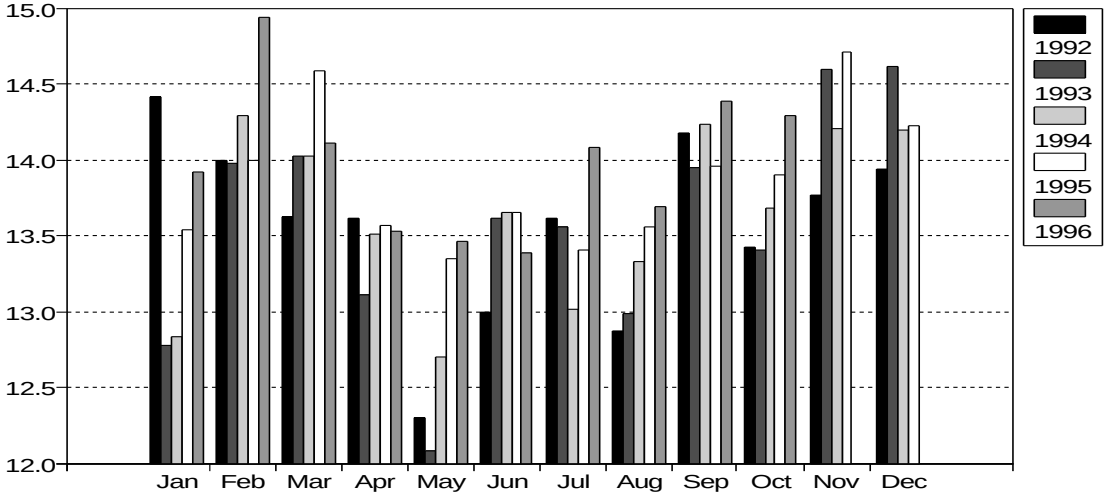
- Consistent with the above changes, global oil demand has been revised downwards by 0.2 mb/d to 70.6 mb/d in 3Q96 and upwards by 0.1 mb/d to 73.9 mb/d in 4Q96. Annual demand remains unchanged in both 1996 and 1997 but demand in 3Q97 and 4Q97 has been revised, mainly in line with similar changes made in 1996.



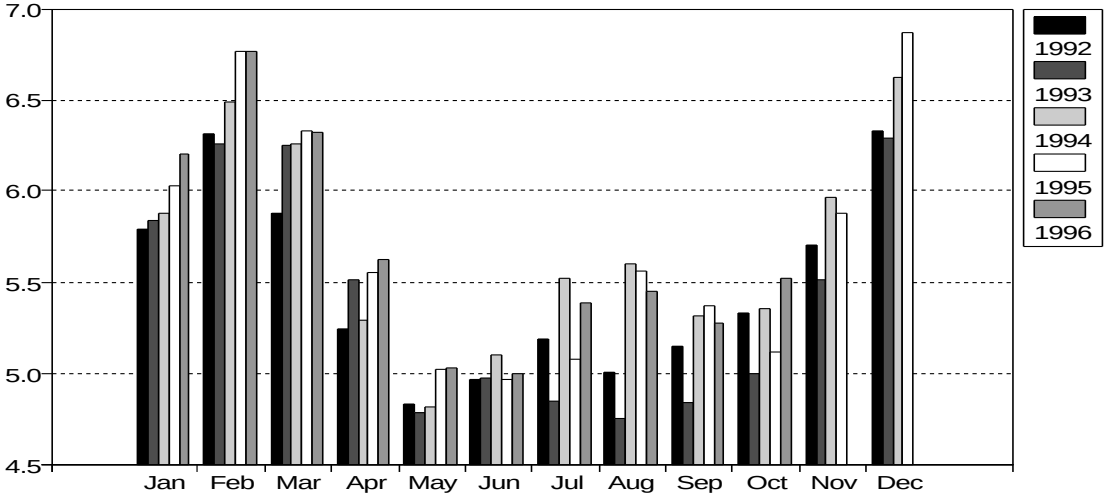
US Oil Demand 1992-1996
(million barrels per day)



European Oil Demand 1992-1996
(million barrels per day)



Japanese Oil Demand 1992-1996
(million barrels per day)



OECD

Demand in October 1996

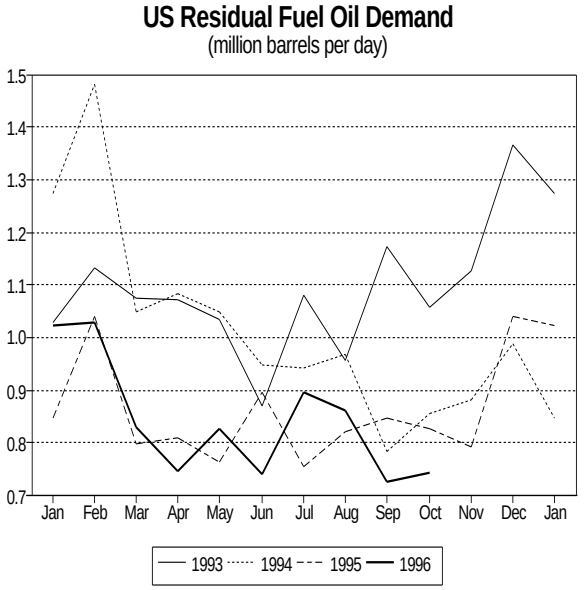
Table 2 at the back of the Report shows total oil demand in August, while Table 3 gives demand in September for the seven largest OECD countries. The table below provides preliminary estimates for inland deliveries for those countries in October.

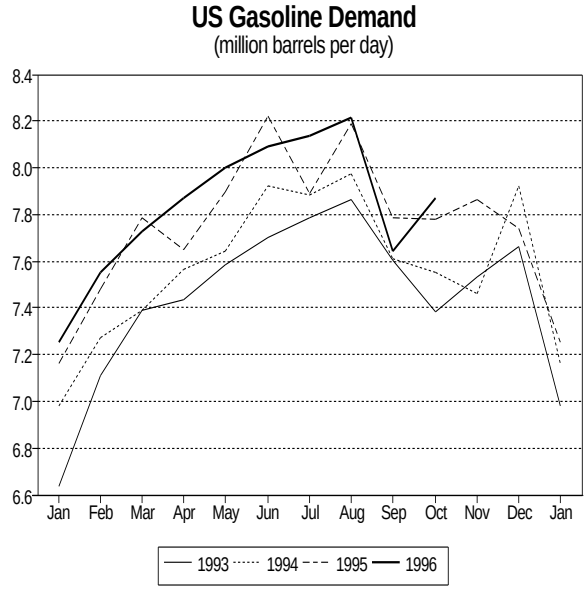
Preliminary Inland Deliveries - October 1996[1]

	Motor Gasoline		Jet/Kerosene		Diesel		Other Gasoil		Residual Fuel Oil		Total Products[2]	
	mb/d	% change	mb/d	% change	mb/d	% change	mb/d	% change	mb/d	% change	mb/d	% change
US[3]	7.88	+1.2	1.67	+9.7	2.40	+14.9	1.13	+11.2	0.74	-10.2	18.65	+5.7
Canada	0.62	+2.7	0.10	+3.0	0.40	+12.0	0.08	+35.6	0.10	-6.5	1.54	+5.4
Japan	0.91	+7.5	0.52	+28.0	0.82	+4.5	0.46	+11.9	0.61	-1.8	5.13	+7.7
France	0.35	+1.4	0.10	+4.1	0.53	+8.6	0.33	+22.9	0.09	+10.9	1.88	+9.3
Germany	0.72	+1.4	0.14	+7.9	0.62	+11.7	0.62	+10.9	0.12	-18.4	2.71	+3.9
Italy	0.43	+6.3	0.07	-0.4	0.32	-13.1	0.19	+15.6	0.48	-2.1	1.89	-0.1
UK	0.52	+1.7	0.24	+8.0	0.31	+9.0	0.16	+4.4	0.12	-2.0	1.69	+4.8
European Four	2.02	+2.5	0.56	+6.2	1.77	+4.9	1.30	+13.5	0.80	-3.6	8.17	+4.3
Total	11.43	+2.0	2.84	+11.6	5.39	+9.6	2.98	12.9	2.26	-5.5	33.49	+5.6

Sources: US EIA, Japan MITI, France CPDP, Germany MWV, UK PIA, Italy Ministry of Industry, Statistics Canada
1 excludes refinery fuel and bunkers (except US)
2 includes other products not shown and direct use of crude oil
3 fifty states only. Diesel is estimated from preliminary indications of low sulphur gasoil deliveries
Percentage change is calculated versus October 1995

In October, total **US** deliveries increased by 1.0 mb/d, primarily due to a 13.7% or 425 kb/d increase in gasoil deliveries and a 9.4% or 415 kb/d increase in "other products". (Given the large gain in "other product" deliveries, in a product category that is often subject to major revision, the initial estimate for October should be treated with caution). Demand increased for all other major products except residual fuel oil, which declined by 10.2% or 85 kb/d. Even allowing for low deliveries last year, heating oil deliveries rose by more than expected or than is explained by weather data, suggesting secondary and tertiary stockbuilding. Weighting regional heating degree day according to the amount of heating oil used, the US experienced normal weather but 33% more heating degree days than last year. Diesel deliveries continued to increase strongly, consistent with higher manufacturing output.





The colder weather than last year may have contributed to strong jet/kerosene deliveries, although a large proportion of the increase in deliveries in the year-to-date has been attributable to lower airfares that have stimulated greater commercial air traffic. Despite relatively strong growth last year, motor gasoline deliveries grew by just less than 100 kb/d. Deliveries in the year-to-date have increased by 0.7%, with the impact of higher retail prices on consumption somewhat offsetting greater use due to higher disposable

incomes. (In October prices were some 14.1% higher than a year earlier). Residual fuel oil deliveries declined, partly reflecting the continuing and widening, unfavourable price differential between fuel oil and natural gas and higher hydroelectric availability. (In New York, the price of 1% sulphur residual fuel oil averaged some $1.21/mmBtu higher than natural gas compared with $0.45/mmBtu higher a year earlier).

In **Europe**, oil demand was strong, partly due to one additional working day compared with last year and colder weather than last year (although the weather was milder than normal). Demand in the four largest European oil-consuming countries increased by 335 kb/d or 4.3%, principally attributable to strong heating oil deliveries in Germany and France, as consumers continued to replenish their low stocks. This was offset to some extent by weak residual fuel oil, LPG and other product deliveries. Jet/kerosene demand continued to grow strongly, in part reflecting heating-related consumption in the UK. Diesel deliveries were strong, partly due to wholesalers taking delivery of the new lower sulphur diesel specification.

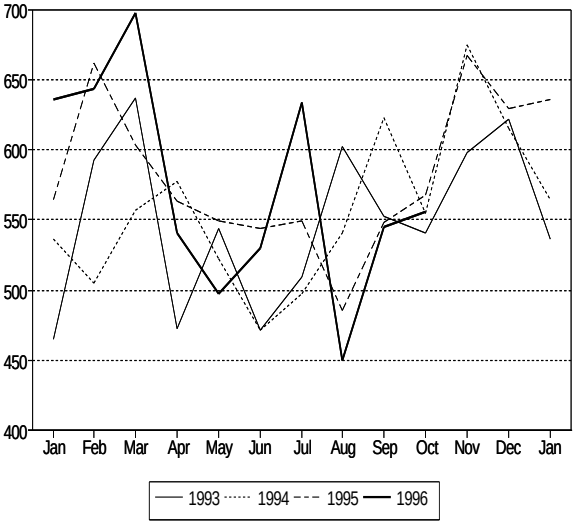
In **France**, demand increased for the fourth successive month and by the greatest proportion since February, primarily due to a 22.9% or 62 kb/d increase in heating oil deliveries. Total deliveries of heating oil since June have grown by 14.6% or 49 kb/d compared with the same period last year, probably indicating a larger-than-normal replenishment of stocks this year. Gasoline deliveries increased for the first month since April, marginally moderating the year-to-date decline of 3.6%. Diesel deliveries continued to increase strongly, taking year-to-date growth to 4.3%. Deliveries of road transport fuels may have been higher than consumption, consistent with greater deliveries ahead of the three-day All Saints holiday weekend at the start of November. Despite a 23.4% increase last October, naphtha deliveries increased by 19.7% or 40 kb/d, insufficient to reverse the 13.5% decline in deliveries in the year-to-date. Residual fuel oil deliveries increased by more than 10%, slightly more than the year-to-date change of 9.2%. Demand for residual fuel oil has grown faster this year than any other major oil product, chiefly due to a 38.9% increase in year-to-date deliveries to the power generation sector. In recent months, however, deliveries to the power generation sector have weakened somewhat and in October were 2.3% lower while deliveries to industry climbed by 12.4%.

In Germany, oil demand increased for the fourth successive month with greater demand for all products except residual fuel oil and "other products". Gasoil deliveries increased by 11.3% or 125 kb/d, divided evenly between diesel and heating oil. Heating oil deliveries rose by 10.9%, a significantly lower rate than in recent months. Consumer stock data indicate that stocks remained unchanged, remaining some 11 million barrels or 7% lower than last year. Gasoline deliveries increased for the first time in three months, in line with the additional working day and consistent with the 1.1% decline in deliveries in the year-to-date. Residual fuel oil demand declined for the thirteenth successive month but at a higher rate than in the year-to-date, reflecting continuing substitution in the industrial and power generation sectors and prices that were 27.3% higher than a year ago.

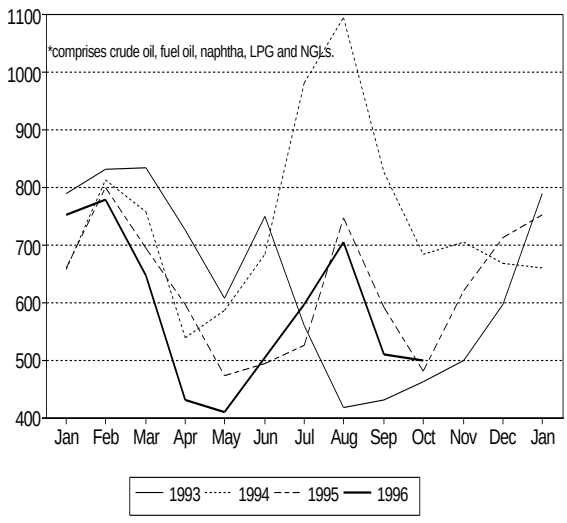
UK oil demand increased strongly for the second successive month, partly reflecting weak demand in the equivalent periods last year, with deliveries this October increasing for all major products except LPG and residual fuel oil. Naphtha deliveries increased by 63.2% or 40 kb/d, with part of the demand strength consistent with fuel switching by the petrochemical sector that contributed to a 11.6% or 17 kb/d decline in LPG deliveries. Demand weakness for LPG occurred despite the likelihood of higher deliveries to the residential sector, consistent with colder weather than last year. Part of the demand strength for jet/kerosene could also be attributable to the weather. The 9% increase in diesel deliveries was greater than the 7.4% growth in the year-to-date, largely reflecting the additional working day and higher uptake by wholesalers of the new low-sulphur diesel fuel. The modest decrease in residual fuel oil deliveries occurred despite a large decline last year and has resulted in a 12.8% decline in deliveries in the year-to-date, reflecting continuing fuel substitution.

This was the third successive monthly decline in **Italian** oil deliveries, consistent with weak economic growth. In October, diesel and residual fuel oil deliveries declined by 48 kb/d and 10 kb/d respectively, which, together with minor reductions in naphtha and "other product" demand, more than offset strong demand for gasoline and LPG. The continuing demand weakness for diesel may relate to the slowdown in the economy, and hence with lower growth in road haulage. However, the weakness in diesel deliveries and strength in heating oil may also be attributable to misreporting, given differential tax treatments of the two fuels. The decline in residual fuel oil deliveries was partly due to a 2.2% increase in deliveries last year. Electricity consumption grew by 0.7% but with hydroelectric output increasing by 28.8%, residual fuel oil use in the power generation sector is believed to have declined.

Italian Fuel Oil Deliveries
(thousand barrels per day)



Japanese Oil Deliveries in Electricity Generation*
(thousand barrels per day)



In **Japan**, oil demand increased by the greatest proportion since November 1993, mainly due to a 28% or 113 kb/d increase in jet/kerosene deliveries. Demand also increased by more than 10% for LPG, heating oil and crude for direct use in the power generation sector. Strong kerosene, LPG and heating oil demand was largely attributable to the country experiencing over 50% more heating degree days than last year, although this was less than normal. Deliveries of crude to the power generation sector increased by 16.7% but residual fuel oil and NGL deliveries declined by 9.5% and 9.1% respectively, resulting in total oil deliveries to the power generation sector increasing by only 4.2%. Direct use of crude by the power generation sector climbed by 14.5%, which contributed to crude stocks ending the month essentially unchanged from a year earlier. In contrast, use of oil products by utilities declined markedly, with residual fuel oil and LPG use falling by 13.9% and 39.5% respectively, and led to an overall 1.5% decline in oil use. Electricity consumption grew by 3.8%, with 6.7% and 1.5% declines in nuclear and oil use more than offset by increases in LNG, coal and hydro use of 22.9%, 9.8% and 6.2% respectively. Motor gasoline deliveries increased by significantly more than the 3.1% growth in the year-to-date, partly due to the moderate increase last year and to retail prices that were some 2.8% lower than last year.

Demand in 3Q96

OECD demand in 3Q96 has been revised downwards by more than 160 kb/d, which, following rounding, has led to a 0.2 mb/d downward adjustment to OECD demand to 40.6 mb/d. The marked change was principally due to a 370 kb/d revision to preliminary US data for September. In addition, Japanese deliveries in September were also revised downwards, by 50 kb/d, which more than offset a 30 kb/d upward revision to September demand in the four leading oil-consuming countries in Europe.

In last month's Report, 3Q96 demand for the seven largest OECD oil-consuming countries was examined on a product-by-product basis. Given major revisions to the data, oil product demand is analysed again.

Third Quarter OECD Oil Demand by Region
(million barrels per day)

			Change	
	3Q95	3Q96	mb/d	%
North America	19.8	20.3 [r]	0.4	2.0
Europe	13.6	14.0	0.4	3.0
Pacific	6.3	6.3	-0.0	-0.3
Total	39.8	40.6 [r]	0.8	2.0

r revised since last Report

North American demand has been revised downwards by 125 kb/d, primarily due to a 370 kb/d adjustment to preliminary US data in September but also a 40 kb/d revision to Canadian demand in the same month. US demand in September declined by 2.3% compared with a decline of 0.3%, as originally

reported by the US DOE. Demand was revised downwards for all products except jet/kerosene, with gasoline declining by 1.9% instead of 0.3% and gasoil decreasing by 3.3% compared with an increase of 1.6%, as originally reported. The latest revision to North American deliveries reverses a similar-sized upward adjustment made in last month's Report.

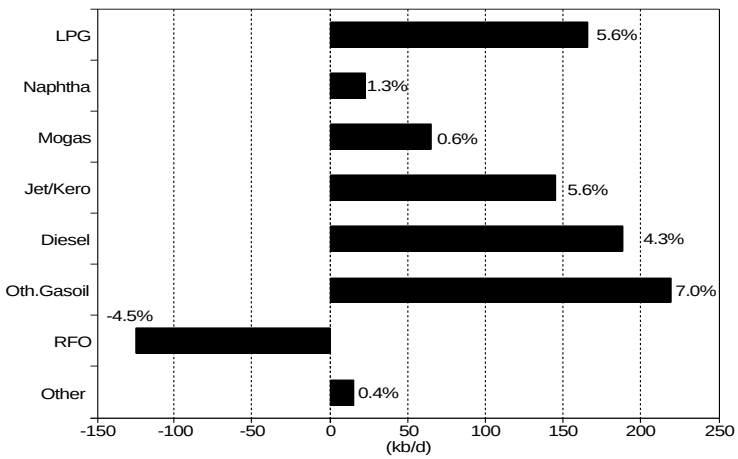
European demand in 3Q96 remains essentially unchanged from last month's Report with a net upward revision to preliminary data for the four largest oil-consuming countries slightly more than offsetting weaker-than-expected demand in the Netherlands and Portugal. As data for September have not yet been received for a number of countries with appreciable oil demand (including Sweden and Turkey), the estimate of European demand in 3Q96 is sensitive to minor revision.

In the **Pacific** Region, oil demand in 3Q96 has been revised downwards by 57 kb/d due to downward revisions to Japanese deliveries in August and September that average 30 kb/d over the quarter, and significantly weaker-than-expected demand in Australia and New Zealand in September. Japanese preliminary data are not often subject to major revision. However, the September data have been revised downwards by 50 kb/d, following adjustments to all products, most noticeably gasoline which is now reported to have declined by 0.7% compared with the 1.1% increase originally reported. Australian deliveries in September declined by 6.5%, mainly reflecting weak LPG and "other product" demand. This reduction was far greater than expected, given moderate growth last year.

The table and chart below show changes to demand in 3Q96 for eight major products and the seven largest oil-consuming countries that represent 80-85% of total OECD demand. Heating oil was the fastest growing oil product and contributed nearly one-third of total incremental demand in the seven countries combined. In absolute terms, diesel was the second largest contributor and increased by a rate some seven times greater than motor gasoline, reflecting the combination of the impact of buoyant economic activity on commercial road haulage, dieselisation in Europe and, in North America, weak gasoline consumption, partly in response to higher retail prices. Jet/kerosene and LPG demand increased by the same proportion, the former reflecting increased aviation traffic and the latter consistent with some fuel switching from naphtha in the petrochemical sector. Residual fuel oil deliveries fell by more than the 2.5% decline in the year-to-date (to October), consistent with fuel switching and substitution in the power generation sector in recent months compared with weather-related increases in oil consumption at the start of the year.

Changes in 3Q96 Oil Product Demand in the Seven Leading Oil Consuming OECD Countries
% per annum

	LPG	Naphtha	Mogas	Jet/Kero	Diesel	Other Gasoil	Fuel Oil	Other	Total
USA	6.5	15.2	0.6	6.1	7.5	-3.4	2.6	-2.6	2.0
Canada	1.6	8.3	0.5	15.0	-0.3	4.6	-6.7	2.2	2.0
Japan	6.2	3.9	1.3	2.0	0.7	0.8	-10.4	4.0	0.6
France	-4.2	-23.6	-2.9	3.7	5.6	12.6	-13.6	24.9	1.4
Germany	0.1	-0.2	-0.6	2.4	1.6	19.8	-12.7	-3.8	4.5
Italy	4.4	7.9	1.2	11.3	-8.9	18.1	2.9	3.6	2.4
UK	9.2	1.5	2.7	5.9	9.6	8.5	-14.4	5.8	4.0
European 4	3.4	-6.0	0.2	5.2	2.1	16.6	-5.1	7.3	3.2
Total 7	5.6	1.3	0.6	5.6	4.3	7.0	-4.5	0.4	2.1
Change kb/d	166	23	65	145	188	220	-125	15	696



Demand in 4Q96

OECD demand in 4Q96 is projected to increase by 0.7 mb/d or 1.8% to 42.1 mb/d, a 0.1 mb/d upward adjustment from last month's Report, reflecting greater-than-expected US and Japanese demand in October. The outlook is sensitive to revision, given remaining uncertainties about the weather.

Fourth Quarter OECD Oil Demand by Region
(million barrels per day)

	4Q95	4Q96	Change mb/d	Change %
North America	20.1	20.5 [r]	0.4	2.1
Europe	14.3	14.5	0.2	1.4
Pacific	6.9	7.0	0.1	1.5
Total	41.3	42.1 [r]	0.7	1.8

r revised since last Report

North American demand in 4Q96 has been revised upwards by 0.1 mb/d from last month's Report, in line with greater-than-expected demand in October. US oil deliveries for the four weeks up to 22 November are estimated to have grown by 3.6% or 0.64 mb/d, with gasoil deliveries increasing by 12.3% and contributing some 62% of total incremental demand. Jet/kerosene and residual fuel oil deliveries increased by 0.7% and 7.0% respectively, both consistent with the year-to-date. Gasoline demand rose by 0.2%, at a rate far less than in the year-to-date. Demand may have been constrained by retail prices that were 18.6% higher than a year earlier. Strong gasoil demand is consistent with reported colder-than-normal weather particularly in the northeastern seaboard of the US where demand for heating oil is highest. On an heating oil-weighted basis, the US experienced 20% more heating degree days than normal and 4% more than last year. Despite the colder weather, residual fuel oil deliveries increased only marginally, consistent with an unfavourable price differential to natural gas, which was, however, smaller than in November 1995. (In New York, the price differential between 1% sulphur residual fuel oil and natural gas decreased to an average of $0.28/mmBtu this November compared with $0.32/mmBtu last year).

Given particularly strong oil demand in the first week of the four-week period ending 22 November, growth for the whole of November is expected to be lower than the 3.6% reported. Assuming that daily oil deliveries in the remaining days of November were similar to those in the third week of November, oil demand is estimated to have increased in the month by 1.9%. Since the weekly US data have recently been subject to significant revision, the increases shown in the preliminary data for October and November have been only partially incorporated into the forecast of North American demand in 4Q96 and the projection remains sensitive to further upward revision.

In **Europe**, preliminary data suggest that the weather in November was colder than normal but milder than last year. European demand in 4Q96 will be boosted by one additional working day in October and November, offset somewhat by one less working day in December. As discussed above, at the start of November, German tertiary heating oil stocks were some 11 million barrels lower than last year and may well remain below last year's levels for the rest of the quarter. The outlook for European oil deliveries remains sensitive to the weather and industrial unrest in France. A truckers' blockade of some roads and oil refinery depots in November temporarily affected deliveries to wholesalers. Final consumption of diesel and gasoline is believed to have been affected, particularly in the last week of the month, due to the combination of lower diesel use by trucks and fuel shortages at retail stations.

In the **Pacific** region, oil demand in 4Q96 remains highly sensitive to oil use in the Japanese power generation sector and kerosene consumption for residential space heating. In October, deliveries to the power generation sector and kerosene purchases were greater than expected. Preliminary weather data for November show that Tokyo experienced fewer heating degree days than the milder-than-normal weather experienced last November. Unlike in Europe, Japanese deliveries in November will not have been boosted by an additional working day. A key issue is whether the strong demand for road transport fuels in October will continue.

Demand in 1996 and 1997

OECD demand in 1996 is expected to increase by 0.7 mb/d or 1.8% to 41.1 mb/d. OECD and North American demand have been revised downwards by 0.2 mb/d and 0.1 mb/d respectively in 3Q96 and both upwards by 0.1 mb/d in 4Q96, leaving the 1996 projection essentially unchanged from last month's Report.

OECD Oil Demand in 1996 & 1997

	North America		Europe		Pacific		Total	
	mb/d	change *	mb/d	change *	mb/d	change *	mb/d	change *
1Q96	20.4	0.7	14.3	0.3	7.4	0.1	42.1	1.0
2Q96	20.0	0.5	13.5	-0.1	6.2	0.0	39.6	0.4
3Q96	20.3 r	0.4	14.0	0.4	6.3	-0.0	40.6 r	0.8
4Q96	20.5 r	0.4	14.5	0.2	7.0	0.1	42.1 r	0.7
1996	20.3	0.5	14.1	0.2	6.7	0.0	41.1	0.7
1Q97	20.5	0.1	14.4	0.1	7.6	0.2	42.5	0.4
2Q97	20.1	0.2	13.8	0.4	6.3	0.1	40.3	0.7
3Q97	20.7 r	0.4	14.1	0.1	6.4	0.1	41.2 r	0.6
4Q97	20.9 r	0.4	14.7	0.3	7.1	0.1	42.8 r	0.7
1997	20.6	0.3	14.3	0.2	6.9	0.1	41.7	0.6

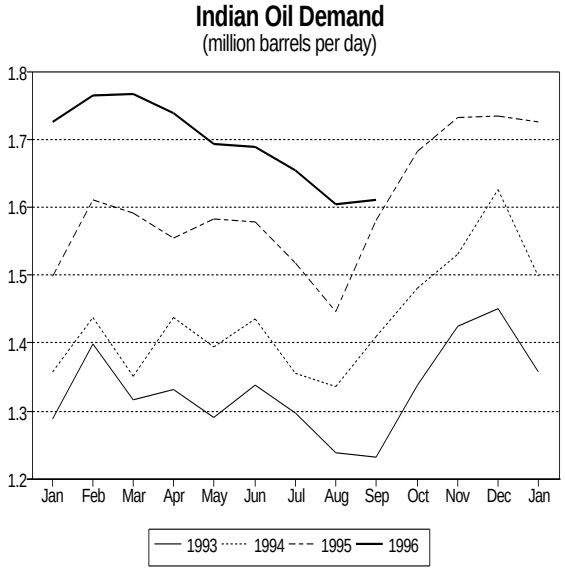
r revised since last Report
* mb/d year-on-year change

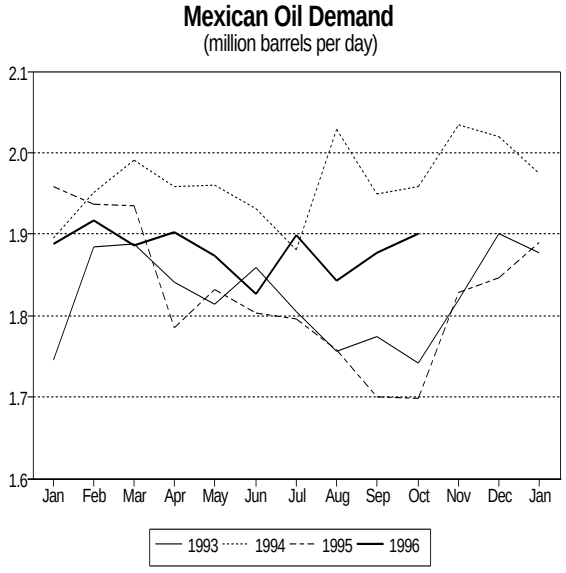
OECD demand in 1997 is forecast to increase by 0.6 mb/d or 1.5% to 41.7 mb/d, unchanged from last month's Report. Following a reappraisal of US demand and allowing for changes in 3Q96 demand, North American demand in 3Q97 has been revised downwards by 0.1 mb/d. Due to rounding, this has resulted in a 0.2 mb/d revision to OECD demand. In 4Q97, both North American and OECD demand have been revised upwards, consistent with the changes to 4Q96.

Non-OECD

Mexican Demand in October 1996

Preliminary data published by PEMEX indicate that inland oil deliveries (excluding refinery fuels) grew by 14.7% in October, representing the seventh successive month of demand increases. Including estimates of bunkers and refinery fuel use and an adjustment to calibrate the monthly data to the historical series, Mexican demand in October is estimated to have grown slightly more slowly than inland deliveries, increasing by 200 kb/d to 1.9 mb/d. Although an acceleration in the growth of oil demand was expected, consistent with economic recovery, demand in October was greater than anticipated. This was mainly due to a 38.3% or 110 kb/d increase in residual fuel oil deliveries, which represented almost 60% of total incremental inland deliveries. Some strength was due to weak demand last year but part was attributable to fuel switching from natural gas following an explosion at a key natural gas processing plant. Despite an increase in oil demand of 8% in 3Q96 and strong growth in October, demand in the year-to-date has increased by only 3.4%, mainly as a result of a 4.0% decline in 1Q96.





Indian Demand in September 1996

Data published by the Indian Ministry of Petroleum and Natural Gas indicate that Indian inland deliveries increased in September by only 1.4%. Including estimates of bunkers and refinery fuel use, Indian demand in July is estimated to have grown by only 30 kb/d to 1.61 mb/d. Demand has risen by some 9.2% in the year-to-date, with the noticeably slower growth this September attributable to strong deliveries last year but possibly an indication that higher prices this September may have constrained consumption. This September, naphtha, other gasoil and residual fuel oil deliveries declined by a combined 30 kb/d. An 11.7% or 12 kb/d decline in naphtha deliveries was offset by a similar-sized increase in LPG deliveries, possibly due to fuel switching in the petrochemical sector. Residual fuel oil declined by 15 kb/d or 7.4%, partly reflecting strong consumption last year. Although gasoline and diesel deliveries increased by 3.8% and 2.9% respectively, the changes in demand were far below the rates achieved in the year-to-date and cannot be explained by the strength of demand last September. This possibly indicates some price-related constraint on consumption. Kerosene deliveries increased by 3.2%, in line with the year-to-date trend and consistent with continued price subsidisation by the central authorities, reflecting its importance to the urban poor.

Non-OECD Demand in 1996 and 1997

Non-OECD oil demand in 1996 is expected to increase by 0.9 mb/d or 3.1% to 30.7 mb/d, unchanged from last month's Report, despite some minor adjustments to regional demand. **Other Asian** demand in 3Q96 has been revised downwards marginally, following weaker-than-expected Indian deliveries in September. In 2Q96, **FSU** apparent demand has been revised upwards in line with an adjustment to FSU production.

Non-OECD demand in 1997 is projected to increase by 4.2% or 1.3 mb/d to 32.0 mb/d. The underlying assumptions affecting the outlook for non-OECD demand in 1997 remain unchanged from last month's Report, with the expected acceleration in demand growth in 1997 largely attributable to the assumed ending of the decline in FSU apparent demand.

Non-OECD Demand in 1996 & 1997

	FSU		Europe		China		Other Asia		L. America		M. East		Africa		Non-OECD	
	mb/d	change *	mb/d	change *	mb/d	change *	mb/d	change *	mb/d	change *	mb/d	change *	mb/d	change *	mb/d	change *
1Q96	4.6	-0.5	1.5	0.1	3.4	0.2	8.8	0.6	6.2	0.0	4.1	0.0	2.2	0.1	30.8	0.5
2Q96	4.1	-0.3	1.4	0.1	3.6	0.3	8.3	0.5	6.3	0.3	4.0	0.1	2.2	0.1	30.1	0.9
3Q96	4.2	-0.3	1.3	0.1	3.6	0.2	8.1	0.5	6.4	0.3	4.2	0.1	2.1	0.1	30.0	1.0
4Q96	4.8	-0.1	1.4	0.1	3.7	0.2	9.0	0.6	6.4	0.3	4.2	0.1	2.2	0.1	31.8	1.2
1996	4.4[r]	-0.3	1.4	0.1	3.6	0.3	8.6	0.6	6.3	0.2	4.1	0.1	2.2	0.1	30.7	0.9
1Q97	4.7	0.1	1.6	0.1	3.6	0.2	9.3	0.6	6.5	0.3	4.2	0.1	2.3	0.1	32.2	1.4
2Q97	4.2	0.0	1.5	0.1	3.8	0.2	9.0	0.7	6.5	0.2	4.1	0.1	2.3	0.1	31.4	1.4
3Q97	4.3	0.0	1.4	0.1	3.8	0.2	8.7	0.5	6.6	0.2	4.3	0.1	2.2	0.1	31.2	1.2
4Q97	4.8	-0.0	1.5	0.1	3.9	0.2	9.7	0.6	6.6	0.2	4.3	0.1	2.3	0.1	33.1	1.3
1997	4.5	0.0	1.5	0.1	3.8	0.2	9.2	0.6	6.6	0.2	4.2	0.1	2.3	0.1	32.0	1.3

* year-on-year change (mb/d)
r revised since last Report

Global Demand in 1996 and 1997

Global demand in 3Q96 has been revised downwards by 0.2 mb/d to 70.6 mb/d, reflecting unexpected revisions to preliminary delivery data for the US and Japan in September. In 4Q96, global demand has been revised upwards by 0.1 mb/d to 73.9 mb/d, consistent with the revision made to OECD demand following receipt of data for October. However, global oil demand in 1996 remains essentially unchanged from last month's Report and is projected to increase by 1.7 mb/d or 2.4% to 71.8 mb/d.

Global demand in 1997 is expected to increase by 1.9 mb/d or 2.7% to 73.7 mb/d, unchanged from last month's Report. However, demand in 3Q97 and 4Q97 have been revised, primarily in line with similar changes made in 1996. While OECD demand growth is still expected to slow in 1997, primarily reflecting an assumed return to normal weather, non-OECD growth is forecast to accelerate, mainly due to the assumed ending of the decline in FSU apparent demand.

SUPPLY

Summary

- OPEC crude production increased in November by 70 kb/d to 26.1 mb/d due to higher production by Saudi Arabia and Iran, which more than offset maintenance-related declines in the UAE and Qatar.
- Again the gain in Non-OPEC supply far outpaced the OPEC increase in November as both seasonal increases in the Northern Hemisphere and new field production in the North Sea, the US Gulf of Mexico, Brazil and West Africa are estimated to have contributed to a monthly increase of over 1 mb/d.
- North Sea crude production is expected to increase by 0.8 mb/d in 4Q96 (more than double some estimates). Total non-OPEC production is projected to increase by 1.7 mb/d in 4Q96 and 1.9 mb/d in 1997, the latter just equalling expected demand growth, thus leaving little room for increased OPEC production. As discussed below the sources of the non-OPEC supply growth are broad-based.
- FSU net exports are estimated to have increased from 2.81 mb/d in October to 2.85 mb/d in November, with 1.16 mb/d of exports from the Black Sea despite several berth outages at Novorossiisk.

Non-OPEC Oil Supply

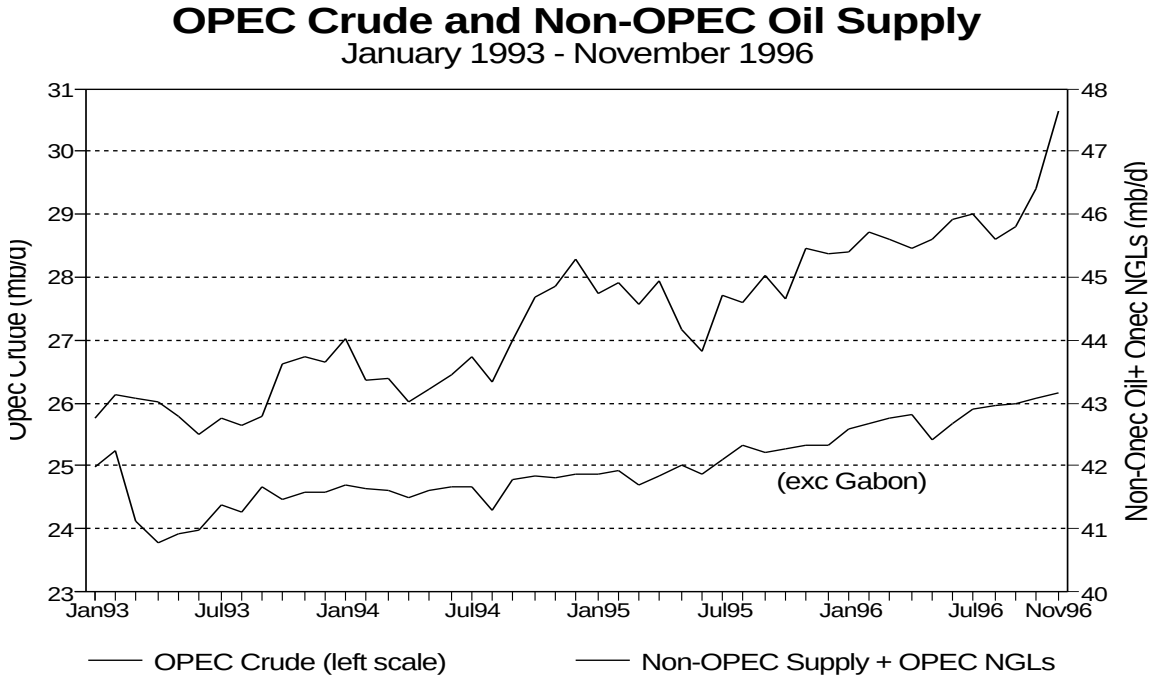
(million barrels per day)

	1995	1996[f]	1997[f]	3Q95	4Q95	1Q96	2Q96	3Q96[p]	4Q96[f]
CRUDE OIL									
North America	8.07	8.03	7.95	7.98	8.05	8.05	7.98	7.97	8.10
United States	6.54	6.48	6.40	6.44	6.51	6.51	6.47	6.42	6.53
Canada	1.53	1.54	1.55	1.54	1.54	1.54	1.52	1.55	1.57
Europe	5.84	6.30	7.09	5.75	6.23	6.16	6.12	6.10	6.82
North Sea	5.42	5.88	6.64	5.34	5.81	5.75	5.70	5.68	6.39
UK*	2.42	2.49	3.01	2.39	2.54	2.45	2.38	2.34	2.81
Norway	2.77	3.14	3.35	2.71	3.04	3.07	3.09	3.09	3.31
Other North Sea**	0.23	0.25	0.28	0.23	0.23	0.24	0.23	0.26	0.27
Other Europe	0.42	0.42	0.45	0.42	0.42	0.41	0.43	0.42	0.43
Pacific	0.56	0.61	0.70	0.58	0.53	0.56	0.60	0.61	0.66
Australia	0.51	0.55	0.65	0.53	0.48	0.52	0.55	0.55	0.59
Other Pacific	0.04	0.05	0.05	0.05	0.04	0.04	0.05	0.06	0.06
Total OECD	14.47	14.93	15.74	14.31	14.81	14.77	14.71	14.68	15.57
Latin America	5.31	5.77	6.13	5.51	5.17	5.69	5.73	5.74	5.93
Asia (inc. China)	4.92	4.94	5.00	4.95	4.99	4.93	4.93	4.89	4.99
Africa (inc. Gabon)	2.33	2.46	2.70	2.35	2.36	2.37	2.42	2.47	2.57
Other Middle East	1.84	1.87	1.93	1.85	1.85	1.84	1.85	1.87	1.90
Central and Eastern Europe	0.24	0.24	0.25	0.24	0.24	0.24	0.24	0.24	0.24
Total Non-OECD (ex. FSU)	14.64	15.27	16.01	14.89	14.60	15.06	15.16	15.21	15.63
Russia	5.98	5.84	5.86	5.99	5.87	5.83	5.83	5.89	5.80
Other Republics	0.82	0.90	0.98	0.84	0.85	0.85	0.89	0.91	0.95
Total FSU	6.79	6.74	6.84	6.83	6.72	6.68	6.72	6.80	6.75
NGLS & OTHER									
United States	2.07	2.13	2.14	2.06	2.05	2.03	2.12	2.13	2.22
Canada	0.87	0.90	0.94	0.83	0.91	0.91	0.85	0.88	0.96
North Sea	0.42	0.42	0.48	0.38	0.45	0.43	0.39	0.37	0.47
Russia	0.18	0.16	0.19	0.17	0.20	0.18	0.16	0.15	0.17
Other Non-OPEC	1.52	1.58	1.74	1.53	1.55	1.59	1.60	1.51	1.62
Total NGLs and Other	5.05	5.18	5.48	4.96	5.16	5.13	5.11	5.04	5.44
Processing Gains	1.46	1.52	1.57	1.44	1.49	1.52	1.50	1.50	1.55
Total Non-OPEC Supply	**42.41**	**43.64**	**45.64**	**42.44**	**42.77**	**43.16**	**43.21**	**43.23**	**44.94**

p preliminary
f forecast
* excluding on-shore production
** Denmark, offshore Netherlands and offshore Germany

Overview of Supply Developments and Revisions

Non-OPEC production is believed to have seen its largest monthly gain since the summer of 1994, increasing by nearly 1.2 mb/d . The increase was spread over a large number of countries, but by far the largest increment was from the North Sea where the end of maintenance in the Gullfaks area of the Norwegian North Sea and new field start-ups in the UK sector are estimated to have added 370 kb/d and 335 kb/d respectively to November non-OPEC production. Latin American oil production is estimated to have risen by just over 150 kb/d, as a continued recovery in crude oil and NGL production in Mexico (from the damage to the country's largest natural gas processing plant in July) contributed 105 kb/d to the monthly gain and production expansion in Brazil's Marlim and Albacora offshore fields added another 35 kb/d. Australian production is believed to have benefitted from the return of Wanaea-Cossack production following repair of a gas export pipeline which helped to raise production by around 50 kb/d. Preliminary weekly data indicate that a similar increase occurred in the US, probably led by new production from Gulf of Mexico fields and seasonal increases in US NGL production.



Expanding offshore production in the South China Sea, at the Congo's N'Kossa field, the Danish Svend field and India's new Ravva field added 10-30 kb/d each, while onshore, Canadian NGLs (+25 kb/d) Colombia (+10 kb/d), Egypt (+15 kb/d), onshore OECD Europe (+20 kb/d) and the smaller West Africa offshore producers (+20 kb/d) contributed an estimated combined increment of 85 kb/d. The only significant declines are thought to have occurred in Russian crude production (which was offset by increased condensate production) and in a few of the OPEC countries (see below).

OPEC crude production increased by about 70 kb/d as gains of a combined 95 kb/d in the Persian Gulf more than offset declines of 25 kb/d among the non-Gulf OPEC producers. The monthly pattern was a reversal of that seen in October when the non-Gulf producers were up 105 kb/d, while the Gulf declined by 35 kb/d.

Revision and Outlook

The estimated surge in November production offers strong support for the view that non-OPEC supply growth for 4Q96 will be on the order of 1.7 mb/d versus 3Q96, rather than a continuation of the more modest 0.63 mb/d rise seen in October. The October figures reflect a revision of 0.35 mb/d from last month's Report. The UK was 0.21 mb/d below expectations and Mexico fell 0.07 mb/d short of expectations. Lower production from Kazakhstan and more recent data on some of the other non-Russian Former Soviet Republics led to a 0.05 mb/d downward revision in estimated October FSU production. China, Australia, Norway and India were also slightly below expectations, but the US, New Zealand and

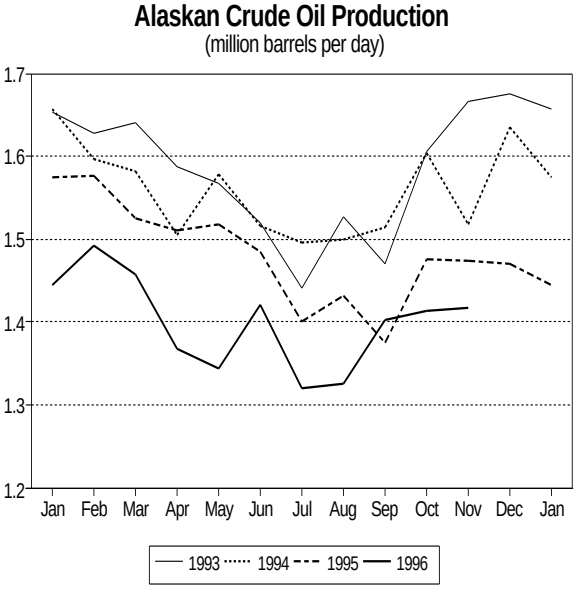
the non-OPEC Middle East producers were revised upwards by a combined 0.12 mb/d. The OPEC production estimate was raised by 40 kb/d as upward revisions to the UAE, particularly the Upper Zakum field and to the Neutral Zone exceeded the downward adjustments for Iran and Qatar.

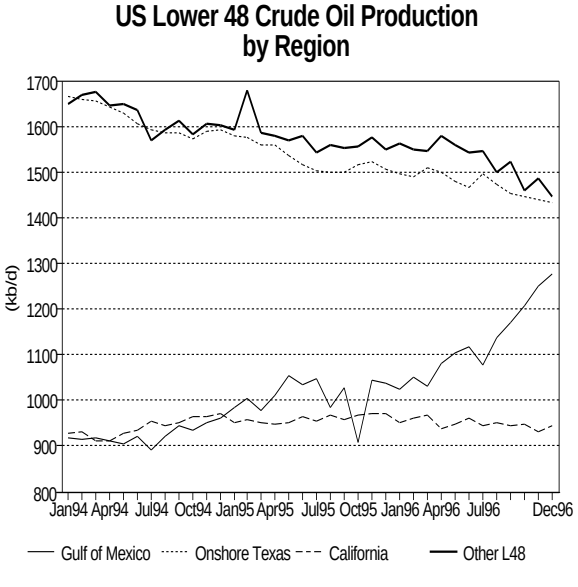
The revision to the 4Q96 non-OPEC supply estimates was much smaller, -0.08 mb/d, but upward revisions outnumbered negative adjustments by eleven to seven, reflecting the positive surprises in November and expectations of strong supply growth in December. Early start-up of some UK fields, a faster than anticipated restart of the Brent Charlie platform and two significant new wells in older Brent fields partly compensated for some of the October revision. Firming up of the timing and production levels for several UK and Norwegian 1997 field developments and positive exploration and development experience in offshore areas around the world have reinforced the view that non-OPEC supply growth next year will be at the high end of the 1.5-2.0 mb/d range. Accordingly, estimates for OECD Europe and Latin America have been revised upwards for most of 1997. Although total non-OPEC production was raised by about 50 kb/d there was no change in the rounded total.

OECD

North America

Alaskan production increased in November, albeit by only 4 kb/d as the Kuparuk, Endicott and Prudhoe Bay fields failed to record seasonal increases as large as expected. Gains of around 20 kb/d had been anticipated for the first two field and about double that for Prudhoe. However, based on data throughout the first 26 days of the month, Prudhoe Bay rose by only 7 kb/d, Endicott by 1 kb/d and Kuparuk production appears to have fallen by 2 kb/d. Total Alaskan crude oil production is estimated to have averaged 1418 kb/d in November. Although this is slightly above October's level, it is a surprising 65 kb/d below November 1995, despite considerable work on the Endicott field and new wells in the Milne Point, Niakuk and Point McIntyre areas.





In contrast to the situation in Alaska, US Lower 48 crude oil production exceeded expectations in November, even though central California production was hampered by a pipeline break and there were periods of bad weather in the Gulf of Mexico. Data for the first three weeks of the month from the US Department of Energy indicate a production level of 5.110 mb/d for November versus 5.062 mb/d in October and 5.114 mb/d in November 1995. Anecdotal evidence suggests that higher oil prices and the benefits of new drilling and production technologies are substantially reducing the decline rates in mature onshore areas, while offshore Gulf of Mexico growth is accelerating. The Gulf of Mexico production surge is quite evident in the right-hand graph above depicting the trends in the major Lower 48 regions.

September oil production in **Canada** was reported to have declined by 81 kb/d from August's level due to 55 kb/d lower NGL production and a drop of 33 kb/d in Alberta conventional oil output. The reduction in NGL output was not expected as natural gas production increased by about 15% from August. Production of synthetic crude oils increased by 20 kb/d. Oil production in October is estimated to have rebounded, with gains of 55 kb/d in NGL production and 65 kb/d in crude oil output, primarily in Alberta. The Alberta Energy and Utility Board reported synthetics production up in October by 3 kb/d as a 15 kb/d increase at the Suncor plant more than offset a 12 kb/d decline at the Syncrude plant. Production for November and December is anticipated to continue growing with a gain of about 20 kb/d in the first month and 35 kb/d in December.

The table below shows the outlook for Canadian production over the next two years compared with the last two years. A 1998 preliminary forecast has been added to highlight the expected contribution from offshore production in the Atlantic. After increasing by over 100 kb/d in 1995, the 1996 growth appears to have moderated to just over 70 kb/d and is shared almost equally between crude oil, NGLs and synthetics. For 1997, the growth is limited to NGL production as gains in heavy crude oil and bitumen production are expected to be mostly offset by reduced lighter oil production and a decrease in Atlantic offshore production due to the closure of the Penuke field in 1996 and the fact that the start of the Hibernia field is scheduled to be relatively late in the year. Synthetics production is expected to hold steady for the year but, with improved operating efficiencies, production could be higher. The escalation of Hibernia's production in 1998 clearly dominates the Canadian oil supply growth.

Canadian Oil Production 1994-1998
(thousand barrels per day)

	1994	1995	1Q96	2Q96	3Q96	4Q96	1996	1997	1998	Annual Changes 95-94	96-95	97-96	98-97
Crude Oil Production													
Alberta	**1084**	**1100**	**1097**	**1073**	**1104**	**1100**	**1094**	**1086**	**1065**	***16***	***-6***	***-7***	***-21***
Light & Medium	730	710	694	671	673	682	680	653	622	*-21*	*-30*	*-27*	*-31*
Heavy	220	241	251	256	272	262	260	277	285	*22*	*19*	*17*	*8*
Bitumen	134	149	151	147	160	157	153	156	158	*15*	*4*	*2*	*2*
Saskatchewan	**296**	**319**	**341**	**338**	**357**	**376**	**353**	**369**	**378**	***23***	***34***	***16***	***9***
Light	99	101	99	94	112	124	107	115	118	*2*	*7*	*8*	*3*
Heavy & Medium	197	218	242	243	245	252	246	254	260	*21*	*27*	*8*	*6*
Other Provinces	**103**	**101**	**97**	**103**	**105**	**102**	**102**	**103**	**207**	***-2***	***0***	***1***	***105***
British Colombia	34	35	35	39	42	41	40	41	41	*1*	*4*	*1*	*0*
Northwest Territories	31	29	28	28	28	30	29	28	28	*-2*	*-0*	*-0*	*-0*
Atlantic Offshore	23	21	19	21	18	15	18	19	125	*-1*	*-3*	*0*	*106*
Manitoba	11	11	10	10	11	11	10	10	9	*-0*	*-1*	*-0*	*-1*
Ontario	5	5	5	5	5	5	5	5	5	*0*	*-0*	*-0*	*-0*
Total Crude Oil	**1483**	**1520**	**1534**	**1515**	**1566**	**1578**	**1548**	**1558**	**1650**	***37***	***28***	***9***	***93***
NGLs													
Pentanes Plus	161	155	163	154	155	173	161	167	175	*-6*	*7*	*6*	*8*
Ethane	155	171	185	179	178	187	182	183	180	*15*	*12*	*1*	*-3*
Propane	138	166	181	173	165	177	174	178	190	*28*	*8*	*4*	*12*
Butane	78	94	97	92	90	99	95	97	100	*16*	*1*	*3*	*3*
Condensates	6	6	7	6	7	7	7	7	7	*1*	*0*	*0*	*0*
Total NGLs	**538**	**591**	**633**	**604**	**594**	**643**	**618**	**633**	**652**	***53***	***27***	***15***	***19***
Synthetics													
Syncrude	193	205	201	186	215	232	220	220	225	*12*	*15*	*0*	*5*
Suncor *	62	76	80	77	71	93	85	85	88	*14*	*9*	*0*	*3*
Totla Synthetics	**254**	**281**	**281**	**263**	**287**	**324**	**305**	**305**	**313**	***27***	***24***	***0***	***8***
Total Canadian Oil	**2275**	**2392**	**2448**	**2381**	**2446**	**2545**	**2472**	**2495**	**2615**	***117***	***79***	***24***	***120***

* including production of distillates for direct sale

There are several other offshore field developments underway or considered likely over the next ten years. The second table is adapted from IEA's recently-released *Global Offshore Oil Production to 2000* with preliminary projections added out to 2005 to give a better flavour of the momentum that is underway in

the Canadian (and other) offshore areas. The Terra Nova field contributes only 6 kb/d in 2000, but reaches 100 kb/d by 2003. Liquids production from the Sable Island gas development project is also expected to be just starting in 2000. Three other likely developments are shown in the table but it appears highly likely that other projects will be identified over the next five years that could be in production before 2005.

Canadian Offshore Oil Production 1992-2005
(thousand barrels per day)

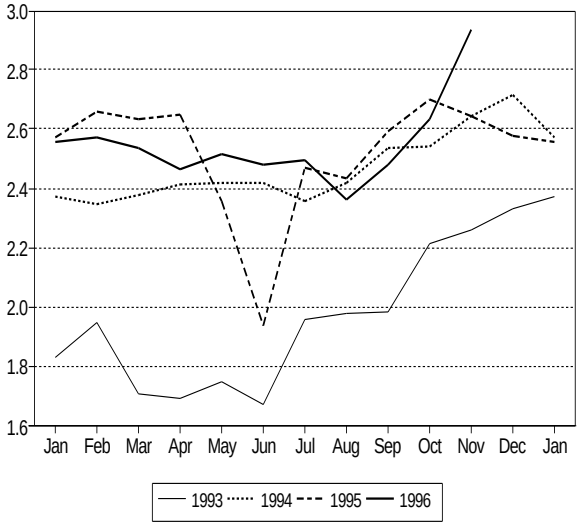
Field	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Cohasset	10	12	17	16	16	---	---	---	---	---	---	---	---	---
Panuke	---	7	6	4	---	8	---	---	---	---	---	---	---	---
Balmoral	---	---	---	1	2	---	---	---	---	---	---	---	---	---
Hibernia	---	---	---	---	---	11	125	128	133	135	132	130	125	120
Terra Nova	---	---	---	---	---	---	---	---	6	65	85	100	100	94
Sable Island (NGLs)	---	---	---	---	---	---	---	---	5	10	15	15	25	25
Whiterose	---	---	---	---	---	---	---	---	---	---	10	20	25	25
West Bonne Bay	---	---	---	---	---	---	---	---	---	---	---	12	15	15
Flying Foam	---	---	---	---	---	---	---	---	---	---	---	---	---	10
Total	**10**	**19**	**23**	**21**	**18**	**19**	**125**	**128**	**144**	**210**	**242**	**277**	**290**	**289**

Source: IEA, Monthly *Oil Market Report*; (1992-1997); IEA, *Global Offshore Oil Prospect to 2000*, November 1996; IEA estimates 2001-2005

North Sea

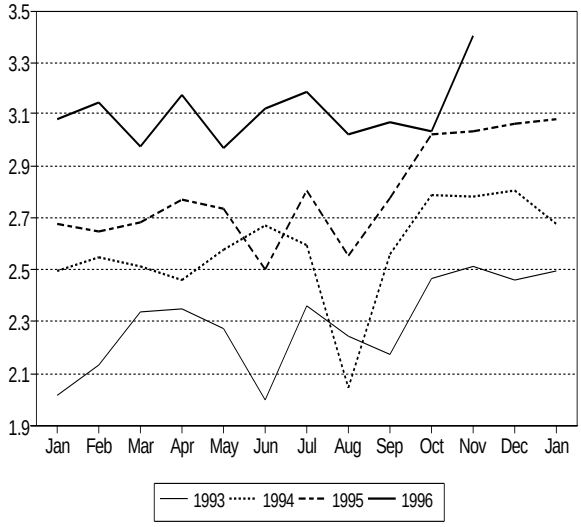
North Sea production reached 6.29 mb/d in October, equalling February's yearly high, but about 200 kb/d below expectations. Nearly all of the shortfall was in the UK sector as Norwegian production was within about 20 kb/d of the preliminary estimate and Danish production slightly exceeded expectations. The lower-than-expected UK production was spread among a large number of fields each of which was a little below anticipated levels. The only obvious technical problem related to a two-day production shutdown at the Magnus field. The dominant event for the month was the maintenance at the Gullfaks and Tordis fields in the Norwegian sector, which lowered output from the Statfjord-Gullfaks area by over 200 kb/d. However, more than half of the decline was compensated for by the return of Heidrun production to near capacity levels before a problem with the gas flaring apparatus reduced production at the end of the month. Small increases from two new fields kept the Norwegian decline versus September to 25 kb/d.

UK Crude Oil Production
(million barrels per day)



Note: November 1996 preliminary, December 1996 estimated

Norwegian Crude Oil Production
(million barrels per day)



Note: December 1996 estimated

As shown in the graphs above, November is believed to have seen a definitive upward move in North Sea production from both the UK and Norwegian sectors, with no maintenance scheduled and rapid production growth from several new fields. Total North Sea oil production is estimated to have averaged 6.98 mb/d for the month and an additional 350 kb/d increase is expected in December.

October UK oil production increased by 200 kb/d, about half as much as expected. The largest share of the increase came from the smaller systems and individual offshore-loaded fields, which accounted for just over 100 kb/d of the increase. Forties and Brent system production each increased, by around 55 kb/d and 30 kb/d respectively, while production from the Flotta and Ninian system fell by about 10 kb/d each. NGL production increased seasonally by just over 35 kb/d. The Forties system increase was centred on the Nelson field's 29 kb/d rise, which represented a return to near July's 180 kb/d level. The new Andrew and Cyrus fields, which started up this summer, added another 11 kb/d to a record 66 kb/d and the Thelma field average 8 kb/d in its first month of production after commencing production on 8 October. The Brent system benefitted from the return of the Brent Charlie platform on 21 October. Brent field production increased by 10 kb/d and smaller gains from the Osprey and Pelican fields raised the Brent system production by 28 kb/d to 475 kb/d. All 15 fields in the Brent system equalled or exceeded September production levels. Among the offshore-loaded fields, Alba showed the largest increase, of 18 kb/d to 76 kb/d, still well below the expanded capacity of nearly 100 kb/d. Production from the Teal-Guillemot fields has not been reported as storage on the *Anasuria* FPSO is being filled in advance of the first cargoes, but a monthly average of about 18 kb/d of output from the first South Teal and Guillemot A wells is assumed. An increase in the UK share of Statfjord production, following the return from maintenance activities in September, and a full month of production from the new Fergus field each added 8 kb/d. Meanwhile the end of the three-month extended well test on the Pierce-Medan field reduced output by an estimated 16 kb/d. The longer six month well test on the Banff field is reported to have maintained output at the 35 kb/d target level for the second month and is expected to hold that level throughout next January.

Preliminary estimates of November UK production show a 330 kb/d increase, with all systems increasing by at least 25 kb/d. The largest rise, about 95 kb/d, is believed to have occurred in the Forties system with a third of the increase coming from new fields and two thirds from better performance at existing fields. The Telford-Marmion and Arkwright satellites started up with a combined average for the month of an estimated 20 kb/d and the Thelma satellite is believed to have increased to 20 kb/d in its second month. Brent production continued to rise as the Brent Charlie platform was brought back towards a targeted 80 kb/d by the end of the year. The Murchison and Hutton field each added a new well, M-38 and H-38 respectively, with expected capacities of 13,000 kb/d and 15,000 kb/d. The Flotta and Ninian systems are seen advancing 35 kb/d and 25 kb/d respectively and offshore-loaded production is expected to benefit from increases at the Alba, Guillemot-Teal and Harding fields. The upward production trends are projected to continue in December, resulting in an additional 220 kb/d gain to over 3.0 mb/d for total UK production.

According to estimates from companies, **Norwegian** production for October is assessed to have averaged 3.17 mb/d, a decline of 25 kb/d from September, due to the delay of maintenance on the Gullfaks and Tordis fields into 4Q96. Production from the main Gullfaks field fell by just over 200 kb/d to less than 50% of recent output. The Tordis satellite was 44 kb/d lower at 30 kb/d, compared with a year high in January of 92 kb/d and September production of 74 kb/d. Some of the Gullfaks area decrease was compensated for by a 50 kb/d increase from the Statfjord field and its two satellites fields after maintenance in August and September. The Heidrun field also increased sharply following maintenance in September, reaching 252 kb/d according to trade sources or 260 kb/d according to the Norwegian Petroleum Directorate measurements taken at the "fiscal metering point" at the Mongstad terminal. The discrepancy is probably related to differences in the timing of measurement which changes the reported of the impact of a partial shutdown near the end of the month when a flare tip used to burn off natural gas was damaged. October production from Heidrun was 111 kb/d. Higher output was also recorded for the Troll, Ekofisk and Sleipner areas, with each 10-15 kb/d above September levels.

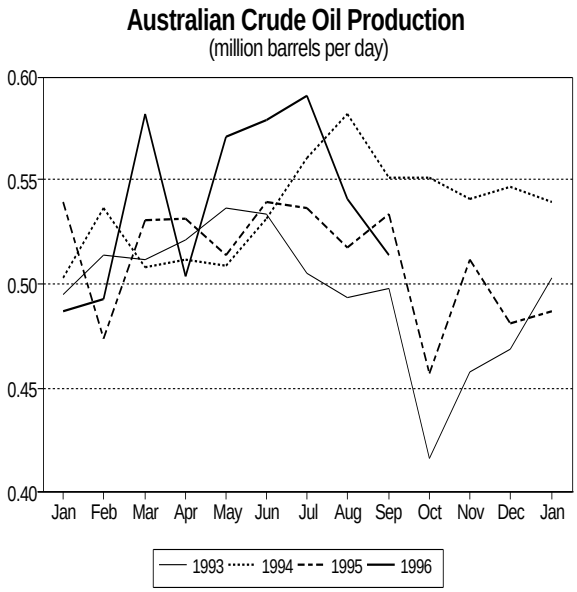
November Norwegian production is estimated to have increased by 372 kb/d to 3.55 mb/d. The primary reason is the return of Gullfaks system, which should have added about 245 kb/d to the main field production and 45 kb/d to Tordis output. Allowing for a small decline at Statfjord, the Statfjord-Gullfaks area is seen increasing by 288 kb/d in November. Production from the Ekofisk & Southern Area, the Oseberg-Troll Area and the Sleipner-Frigg Area are each believed to have risen by 25-30 kb/d, with the Yme and Valhall fields, and the new East Troll and Sleipner West fields, accounting for most of the gains.

Danish oil production reached a new record in October, rising another 6 kb/d to over 227 kb/d. The new Svend field is now producing more than double the original estimated peak of 15 kb/d. The Roar field, which started up in January, achieved new highs for both oil and gas output, with oil production above 8 kb/d. Increases at the Tyra and Gorm fields both exceeded expectations, while the rise in production for the Skjold field was slightly less than anticipated. More increases are expected for November and December in conjunction with seasonally higher natural gas production and due to the benefits of platform work at the Dan and Gorm processing centres. Production is projected to reach 237 kb/d in December and to average 231 kb/d for 4Q96, an increase of 14 kb/d versus 3Q96. **Dutch** production declined slightly in October, to 35 kb/d compared with 36 kb/d in September. Only the P18 condensate field recorded a monthly increase, as gas production increased seasonally.

Pacific

Data from the **Australian** Department of Primary Industry and Energy and the Australian Petroleum Production and Exploration Association indicate September total oil production of 581 kb/d, a decline of 28 kb/d from August and nearly 60 kb/d below the July peak. Output had been expected to reach 630 kb/d. Maintenance on the Jabiru production vessel began in early September and output for the month averaged only 1 kb/d versus normal production levels of 15-20 kb/d. Work on the gas export pipeline serving the Wanaea-Cossack production vessel continued to inhibit flows from the two-field complex, holding output below 74 kb/d or about 11 kb/d less than August's production. Output from the two Northwest Shelf Development Project (NWSDP) condensate fields, Goodwyn and North Rankin was also about 11 kb/d lower than in August and below expectations, accounting for about half of the production shortfall. Small monthly increases in Thevenard Island and Griffen field production resulted in a net decline for the Carnarvon Basin of 15 kb/d. A slight increase in onshore Cooper-Eromanga Basin output nearly matched a small decrease in Gippsland Basin production.

Australian oil production in October and November is seen increasing by 35 kb/d and 50 kb/d respectively, with higher output from the NWSDP and Griffen accounting for about half of the October gain as work on the Wanaea-Cossack gas line continued and the Jabiru FPSO remained in port. Completion of the Wanaea-Cossack repairs in early November is estimated to have allowed production from the *Cossack Pioneer* to increase by 20 kb/d to just under 100 kb/d. Griffen field production is also thought to have increased, by about 15 kb/d in advance of maintenance scheduled in December. By December, the *Cossack Pioneer* is expected to reach its new capacity of 120 kb/d, resulting from debottlenecking work on the gas system while the pipeline was being repaired. Increases in Gippsland Basin production (due to initial production from the recently installed Bream B and West Tuna platforms and the return of the Jabiru FPSO) are expected to be offset by the Griffin maintenance.



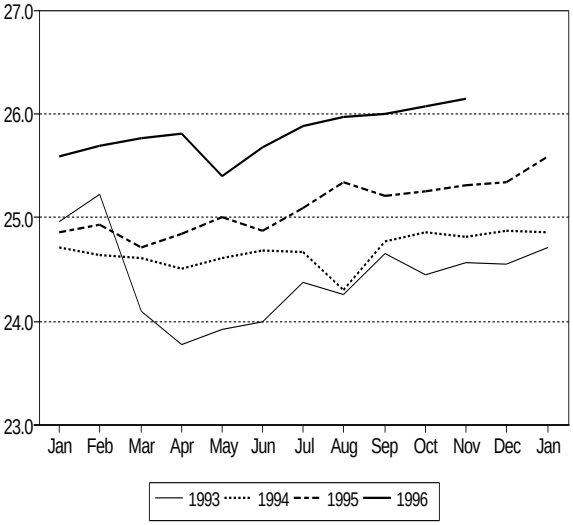
Longer-term prospects were bolstered by a highly successful well drilled on the eastern flank of the Laminaria East discovery. The Buffalo-1 well produced 11,790 b/d, surpassing the Laminaria East discovery well's 11,100 b/d. It was the eighth oil and gas discovery in the area among the two dozen exploratory wells drilled in the Timor Gap since mid-1994. Conversely, the high profile Lynx 1-A gas-condensate exploration well on the Northwest Shelf near North Rankin appears to have been a major disappointment.

OPEC

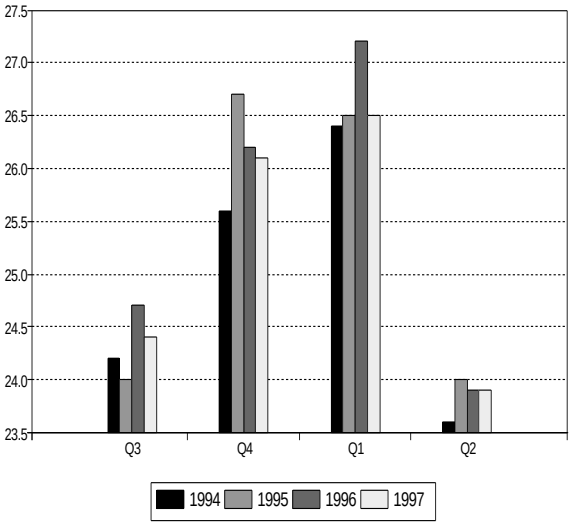
OPEC's meeting in late November confronted a market sending out distinctly mixed signals. Evidence has been building for a sustained increase in non-OPEC supplies, both seasonally and as part of a longer term trend based on technological advances and a generally improved business environment. At the same time the oil market has been absorbing additional volumes of both OPEC and non-OPEC oil with relative ease, primarily because of strong demand and low inventories that are expected to result in a larger share

of daily oil needs being met out of current refinery production of oil products rather than inventories (see special feature in 8 November Report). For their part, OPEC countries as a group appear to have continued to slowly increase crude oil and NGL production, which for November are estimated to stand at 26.1 mb/d and 2.7 mb/d respectively.

OPEC Crude Oil Production
(million barrels per day)



Quarterly Call on OPEC Crude + Stock Change
(million barrels per day)



For November, tanker-tracking data indicate moderate increases for Saudi Arabia and Iran following declines in October. Output was also higher for Kuwait, the Neutral Zone, Libya and Algeria, while field maintenance reduced production from the UAE and Qatar and small declines are estimated to have occurred in Indonesia and Nigeria. The net result was an increase of about 70 kb/d to 26.14 mb/d.

Following a 50 kb/d decline in October, the **Saudi Arabian** increase of 100 kb/d to 8.0 mb/d (including 170 kb/d of production from the Saudi Abu Safa field sold on behalf of Bahrain, but excluding the Saudi Neutral Zone share) was primarily indicated by high levels of tanker loadings in the second week of the month, suggesting production levels of over 8.9 mb/d, similar to the fourth week of October and at the upper end of the band of normal fluctuations. **Iranian** production also increased, by about 65 kb/d to 3.72 mb/d, following declines of 15 kb/d in October and 80 kb/d in September. Crude oil production is also thought to have increased in **Kuwait** and the **Neutral Zone** in November, by 20 kb/d and 12 kb/d respectively. All of the Neutral Zone increase occurred onshore, as the offshore Khafji and Hout fields were both down slightly but by less than expected. The onshore increases are expected to continue in December as new wells on shallow Eocene deposits are brought onstream. Outside the Persian Gulf, **Libyan** production is believed to have increased by 10 kb/d to 1.4 mb/d and **Algerian** crude oil output continued to rise, by 5 kb/d to 845 kb/d.

Maintenance-related production declines occurred in the **UAE's** Murban field and **Qatar's** Maydan-Mahzam and Bul Hanine offshore fields, reducing crude oil output from those two countries by 42 kb/d and 15 kb/d to 2.19 mb/d and 490 kb/d respectively. Murban output had been increased to nearly 945 kb/d in October in advance of the maintenance, but it is thought that other fields were reduced to compensate. November Murban production averaged 870 kb/d. In Qatar, the 55 kb/d Maydan-Mahzam offshore field underwent maintenance from 15 October to 4 November and the 85 kb/d Bul Hanine field is currently undergoing a one-month maintenance that reportedly began on 12 November. Some of the maintenance decline was offset by increasing production from the al-Rayyan field. **Indonesian** crude production appears to have fallen back to 1.39 mb/d after increasing to 1.42 mb/d in October and **Nigerian** crude oil output is believed to have been about 10 kb/d lower due to reduced production from the Bonny and Escravos areas and smaller than expected gains from new offshore fields. Nigerian crude oil production in November was 2.19 mb/d, including about 50-70 kb/d of onshore NGLs mixed in with crude oil streams. Offshore condensate from Nigeria's Oso field increased by 45 kb/d to 110 kb/d following maintenance in October, accounting for nearly all of the 60 kb/d estimated increase in OPEC NGLs and other non-crude oil supply in November.

Former Soviet Union (FSU)

Production

Russian production was marginally lower in October based on data provided by the Interfax news service. Crude production declined by an estimated 30 kb/d, with the Noyabr'sk and Tatneft production companies accounting for the largest portion of the decrease. Joint-venture output is also believed to have been lower as Russian trade authorities appear to be attempting to assure domestic companies first access to export facilities. About two-thirds of these declines were offset by a sharp increase in crude oil production by Gazprom affiliates. Russian crude oil production is projected to continue to decline modestly in the last two months of the year, but expected seasonal increases in condensate production should more than offset the November decrease and part of the December crude oil decline.

Production from **Kazakhstan** declined slightly in October, due to continued depressed output from the giant Karachaganak gas condensate field. Production from other areas was generally flat to slightly higher. The Tenmgizchevroil joint-venture continued to produce at over 100 kb/d, with output of 104 kb/d versus 105 kb/d in September. Tengizchevroil output was only 60 kb/d at the beginning of the year due primarily to constraints in obtaining access to the Russian pipeline system. **Azerbaijani** production is reported to have increased by 3 kb/d in October to 192 kb/d, with small increases in both onshore and offshore production.

The table below breaks out Kazakhstan's oil production by major producing entity and shows the forecasts for the rest of 1996 and 1997. Production recovered in the second half of 1996, in line with higher production and exports from the Tengizchevroil joint-venture. Estimated production of nearly 500 kb/d in 4Q96 is about 65 kb/d above levels in 1Q96. For the whole year 1996, total Kazakh oil production is projected to rise by between 40-50 kb/d. Next year's projected increase is about twice as large, with Tengizchevroil and the Karachanganak condensate field responsible for largest share of the increase.

Kazakh Oil Production 1994-1997
(thousand barrels per day)

	1994	1995	1Q96	2Q96	3Q96	4Q96	1996	1997	*Chg 96-97*
Municipal Companies									
Mangistau	106	92	88	90	92	92	90	93	*+3*
Uzen	67	58	46	56	62	59	56	59	*+3*
Emba	33	33	31	31	33	32	32	33	*+1*
Aktyubinsk	53	52	52	49	52	53	51	57	*+6*
Tengiz	16	17	17	16	19	18	18	18	*+1*
Karazhanbas	19	13	13	11	14	16	14	15	*+8*
YUTEK	35	39	52	50	50	49	50	58	*+2*
Joint-Ventures									
Tengizchevroil	45	51	73	90	99	111	93	120	*+27*
Arman	0	3	4	3	4	5	4	4	*0*
Other	0	89	86	84	90	97	89	14	*+8*
Total Crude Oil	379	362	378	401	428	444	413	472	*+59*
Condensates	55	52	56	31	32	54	43	72	*+29*
Total Kazakh Oil	**434**	**414**	**434**	**432**	**460**	**498**	**456**	**544**	***+88***

Net Exports

FSU exports of crude and products continued to be strong in November and total net exports are estimated at 2.85 mb/d. Exports via Black Sea ports were as high as 1.16 mb/d despite several berth outages due to bad weather and maintenance at the port of Novorossiisk. There was a rise in seaborne crude exports in the fourth week of November, which may be attributed to purchases made by Mediterranean refiners before the major closure for maintenance at Novorossiisk scheduled to take place in December. Product exports were also robust with both fuel oil and gasoil exports exceeding 300 kb/d. The tariff on fuel oil exports that the Russian government has been planning to impose was yet to be introduced at the end of November.

1994-1996 Net FSU Exports
(million barrels per day)

	1994	1995	1996 f	1Q96 r	2Q96 r	3Q96 p	July r	Aug r	Sept r	Oct r	Nov p
Black Sea Exports*	1.04	0.98	†	1.02	1.27	1.19	1.15	1.23	1.18	1.10	1.16
Baltic Exports	0.56	0.61	†	0.65	0.84	0.80	1.00	0.73	0.67	0.91	0.82
Total Seaborne	**1.60**	**1.59**	†	**1.67**	**2.11**	**1.99**	**2.16**	**1.96**	**1.84**	**2.01**	**1.98**
Druzhba Pipeline**	0.81	0.83	†	0.75	0.77	0.90	0.85	0.90	0.95	0.86	0.95
Total Exports	**2.41**	**2.42**	†	**2.43**	**2.88**	**2.89**	**3.00**	**2.86**	**2.80**	**2.87**	**2.93**
Imports	0.03	0.04	†	0.03	0.03	0.06	0.06	0.06	0.05	0.06	0.08
Net FSU Exports	**2.39**	**2.39**	**2.52**	**2.39**	**2.85**	**2.83**	**2.94**	**2.80**	**2.75**	**2.81**	**2.85**
NB: Crude Oil	1.91	1.91	†	1.92	2.12	2.20	2.23	2.20	2.18	2.13	2.25
Oil Products	0.47	0.48	†	0.48	0.74	0.63	0.71	0.60	0.57	0.68	0.60

* Includes a small amount of non-Russian crude oil exports
† Data not available
f Forecast
** Crude oil only
p Preliminary
r Revised

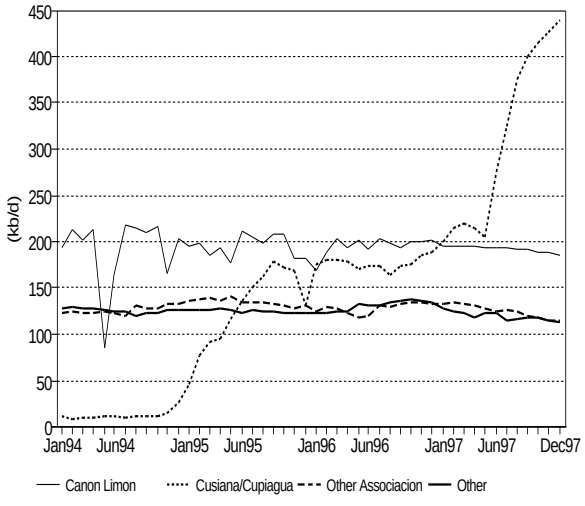
Other Non-OPEC

Latin America

PEMEX reported a relatively small increase in **Mexican** crude oil and NGL production for October. The combined increase of only 20 kb/d was less than one-third of the expected rise as crude oil output declined by 4 kb/d while NGL production rose by 24 kb/d. Bad weather in the early part of the month may have hampered production and loadings. Although overall crude oil exports increased in October to a year-high of 1.66 mb/d, all of the increase was in the Olmeca and Isthmus grades. The heavy Maya blend produced offshore declined by 30 kb/d. Conversely, November production is estimated to have increased by 105 kb/d, with crude up around 30 kb/d and NGLs increasing by about 75 kb/d as further refurbishment of natural gas processing facilities at the damaged Cactus plant and elsewhere permit the handling of more of the seasonal increase in natural gas flows. Crude oil production is benefiting from the ongoing "Cantarell Project" which is debottlenecking the major Gulf of Campeche processing facilities. Weather permitting, December Mexican crude oil production could exceed 3 mb/d and NGL output may reach the 490 kb/d achieved in 1Q96 before the explosion in the Cactus natural gas processing plant.

Brazilian Crude Oil Production
(thousand barrels per day)

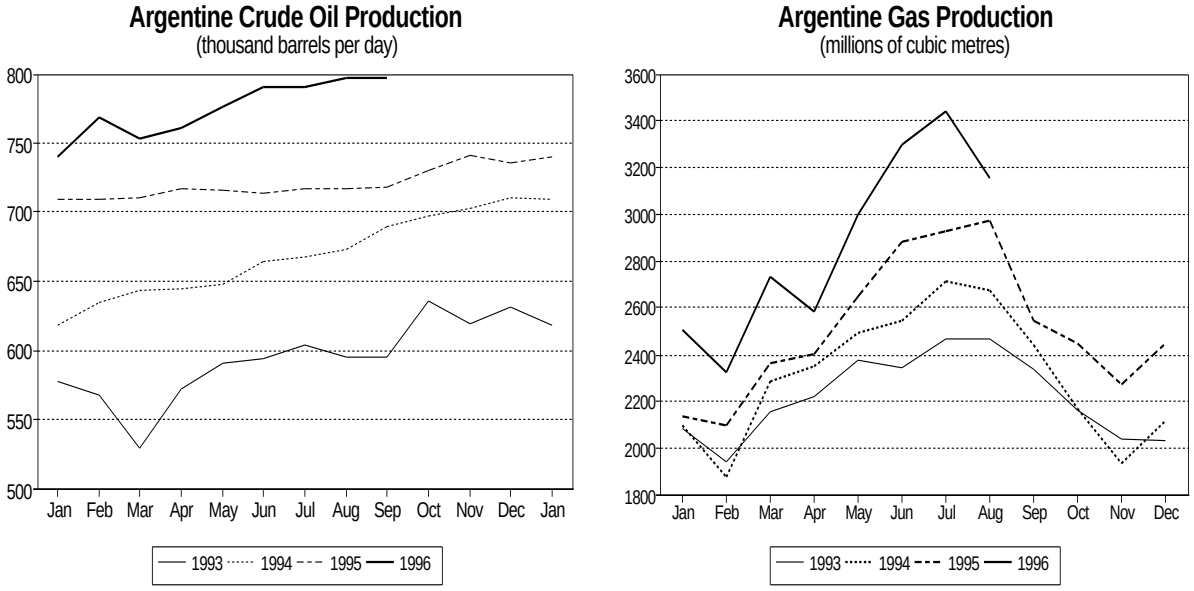
Colombian Oil Production by Area
Jan94-Dec97



Brazil is already in the midst of a major production expansion, from the Campos Basin Albacora and Marlim fields. Petrobras announced a new daily oil production record of over 900 kb/d in early November (excluding 195 kb/d of alcohol fuels but thought to include about 35 kb/d of NGLs). Continuation of the initial-phase well hookups to the new Albacore P25 converted semi-submersible and completion of repair work at the Marlim complex should allow production to continue to increase throughout the rest of the quarter and into 1997. Five other new floating production units are due onstream during 1997 (see table

on page 27 of last month's Report), two each on the Marlimand Albacora fields and one on the Barracuda field. The graph on the left below shows the 4Q96 and 1997 monthly forecast for Brazilian crude oil production compared with the last three years. Prospects beyond 1997 are even brighter, with several new finds including what is thought to be another field (Roncador) of over a billion barrels reported last month, with the two discovery wells having estimated flow rates of 10,000 b/d.

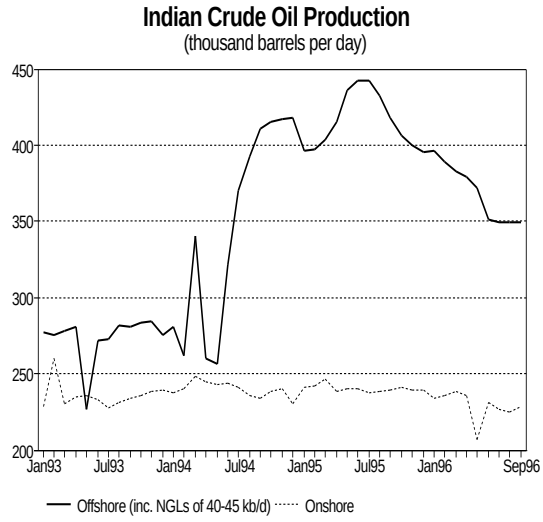
Latest data from the **Colombian** state oil company Ecopetrol show crude oil production up by 11 kb/d in September to 637 kb/d, not quite back to the 640 kb/d peak in July before bombing of the TransAndino pipeline in southern Colombia. Despite the continuing disruption in service from that pipeline and sporadic bombings of other lines, Ecopetrol's own production reached a yearly high of 122 kb/d in September and Cusiana-Cupiagua production increased by 9 kb/d to 174 kb/d. Some of the gain was offset by 5 kb/d lower Cano Limon output, but other association contract holders saw a net gain to 132 kb/d, also a yearly high. Cano Limon production in 4Q96 is projected to recover to 200 kb/d and Cusiana-Cupiagua output is expected to increase by 10 kb/d versus 3Q96 to 183 kb/d. As shown on the right-hand graph above, however, the next major move in Colombian production should occur sometime around the middle of next year with the completion of the 500 kb/d Oceansa Pipeline, allowing a full utilisation of Cusiana capacity and the next tranche of Cupiagua production.

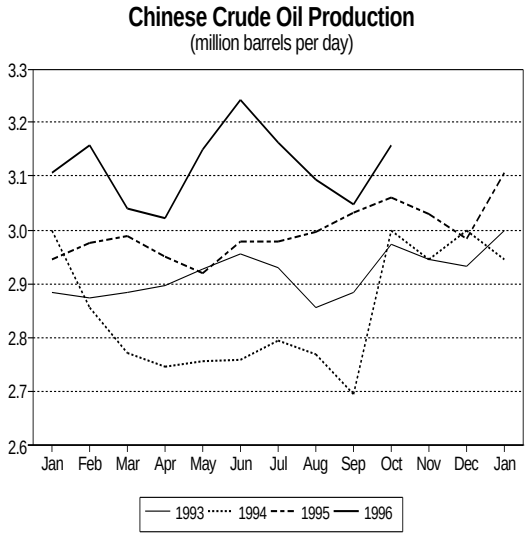


One of the surprises so far this year has been the increasing production of **Argentine** oil and gas. It had been thought that after the initial increase resulting from workover of older fields following privatisation, the geological maturity of the major producing areas would cause production to begin to decline. As can be seen in the graphs above, contrary to those expectations, the production gains have not only continued, but appear to be accelerating. Growth is occurring not only in the newer production provinces along the south central coast, but also in the aging Nequen, Mendoza and Salta Provinces. New horizontal drilling techniques and advanced completion methods may be achieving for these regions what appears to be occurring in the US Lower 48 onshore areas (see above). However, since most of the Argentine fields did not have secondary recovery techniques in place at the onset of production, as is the practice in the US, the scope for increases may be greater in Argentina.

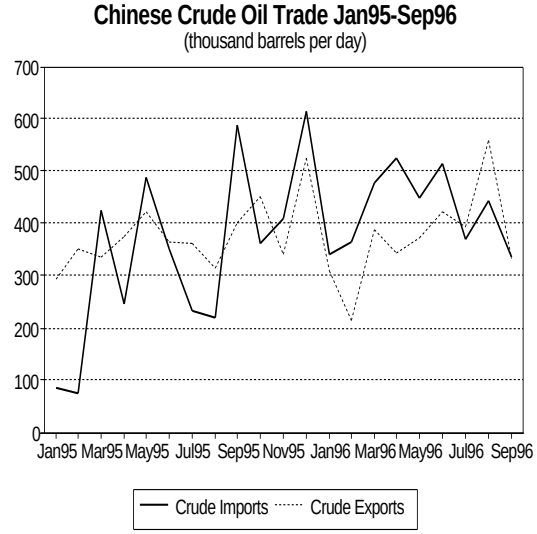
Asia

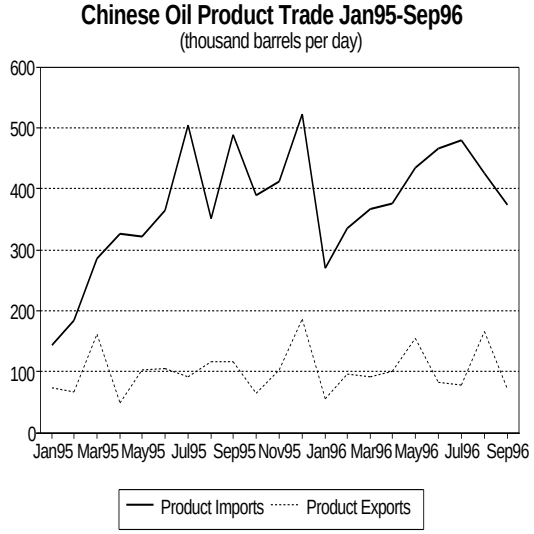
Indian production increased slightly in September as onshore gains more than offset an additional decline in offshore production, despite a one day strike in Assam State on 13 September and two days of strikes at the end of the month in Duliajan. The decrease in offshore output was softened by the start-up of the Ravva field just off the Godavari coast in the Bay of Bengal.





Offshore production in **China** rose by 115 kb/d to 325 kb/d in October, but remained 50-75 kb/d below capacity, probably due to storms in early October. Onshore production decreased slightly to 2.83 mb/d, leading to a net 110 kb/d gain for the month. Onshore increases in Daqing and the western Yunggar and Tarim Basins (the latter following a sharp increase of 33 kb/d in September) were offset by a 8 kb/d drop in Liaohe field production and small declines in five other areas. Exploration successes continued in the offshore area with reports in mid-November of another condensate discovery in the southern Beibu Gulf at the Wenchang 9-1 field.





Chinese net imports in September were 308 kb/d, a typical level for recent months. Imports and exports of both crude and products decreased. Crude imports of 337 kb/d (down from 443 kb/d in August) were the lowest in 1996. Crude exports fell by 230 kb/d to 332 kb/d. There were no exports to Korea (compared with 117 kb/d in August) and exports to Japan and Australia were reduced. Product exports decreased from 166 kb/d to 70 kb/d, with gasoline exports reducing from 57 kb/d to only 2 kb/d. Imports of diesel oil, the second largest component of product imports, almost halved to 62 kb/d and were one-third of those in October 1995. The largest component of imports, fuel oil, remained at 155 kb/d.

Africa and Other Middle East

Crude oil production in **Oman** continued at just under 900 kb/d in October and November and is expected to hold current levels throughout December. Additional developments in the West African offshore are likely, given promising finds off **Equatorial Guinea** and continued evaluation of successful wells in **Congolese** and **Angolan** waters.

OECD STOCKS AND THE MISCELLANEOUS TO BALANCE

Industry Stock Changes in October

Preliminary estimates indicate that OECD industry stocks increased by 0.3 mb/d in October. As shown in the table below, crude oil stocks rose by 0.7 mb/d, with significant increases occurring in the Pacific and North America. Middle distillate stocks rose in Europe but were essentially unchanged in both North America and the Pacific.

Preliminary Industry Stock Changes in October
(million barrels per day)

	North America	Europe	Pacific	Total
Crude Oil	0.3	0.0	0.4	0.7
Gasoline	-0.2	-0.1	0.0	-0.3
Distillates	0.0	0.2	0.0	0.2
Fuel Oil	0.1	0.1	0.0	0.2
Other Oil*	-0.2	0.0	-0.3	-0.5
Total Oil	0.0	0.2	0.1	0.3

* includes other products, feedstocks, NGLs and other hydrocarbons

Industry Stock Levels at the End of October

The 0.3 mb/d increase in total stock levels compared with a 0.2 mb/d decline in October 1995. As a result, the year-on-year shortfall decreased from 83 mb at the end of September to 67 mb, equivalent to two days of forward demand. 42 mb of this shortfall was in Atlantic Basin distillate stocks, with European stocks being 28 mb or 12% below the level of a year earlier. In contrast, crude stocks were above or close to previous year levels in all three regions.

Regional Stock Developments in October

In **North America**, following the reduction in September, crude oil stock levels rebounded as a result of higher imports and lower refinery throughputs to end the month only slightly below year earlier levels. Due to somewhat higher demand and lower production, gasoline stocks declined but at the end of the month were only 2% lower than a year earlier. Despite refineries producing record yields of distillate, the rate of seasonal stockbuild slowed significantly, reflecting strong demand. Partly as a result of the increased pipeline capacity made available to transport distillate from the US Gulf to the critical East Coast area (PADD I), the shortfall of PADD I gasoil stocks compared with a year earlier decreased from 33% to 29%. Fuel oil stocks increased by 6% and ended the month above the previous year's level for the first time since September 1994.

US DOE weekly statistics indicate that total stocks decreased by 1.1 mb/d in the first three weeks of November, an abnormally sharp decline for the time of year. Crude and gasoline stocks fell by 0.6 mb/d and 0.2 mb/d respectively, while distillate stocks were essentially unchanged and fuel oil stocks rose slightly. On 22 November, distillate (including jet/kerosene), crude oil and gasoline were reported to have been lower than a year earlier by 12.2%, 5.2% and 4.6% respectively.

In **Europe**, the decline in crude oil stocks that had occurred over the previous two months came to an end, reflecting higher crude production and lower refinery throughputs. At the end of the month, stocks were a total of 15 mb lower than a year earlier in Italy, the UK, Germany and the Netherlands, but for Europe as a whole they were 11 mb higher, primarily due to the significantly higher levels in Norway and Turkey. Following the sharp increase in September, gasoline stocks decreased slightly in October, consistent with large volumes of exports to North America. Despite the decline, stocks ended the month 2% higher than a year earlier. The pattern of distillate stock developments was the reverse of that for gasoline, falling in September and then rising in October, reflecting increased refinery yields and large volumes of imports from the US that more than offset the effect of strong demand. Despite the increase in stocks, at the end of the month, stocks were 12% lower than a year earlier with the largest reductions occurring in the Netherlands, France and Germany, which were lower by 32%, 17% and 25% respectively. Fuel oil stock levels increased by 0.1 mb/d, consistent with generally weak demand, but continued to be lower than a year earlier.

In the **Pacific**, crude oil stock levels rose sharply, reflecting increased imports and lower refinery throughputs. At the end of the month they were higher than year-earlier levels for the first time since May. With higher demand offset by higher production, gasoline stock levels were essentially unchanged and continued to be slightly lower than a year earlier. With the increase in demand exceeding the increase in supply, distillate stocks decreased marginally but ended the month 6% higher than a year earlier. Fuel oil stock levels increased slightly and continued to be close to the previous year's levels.

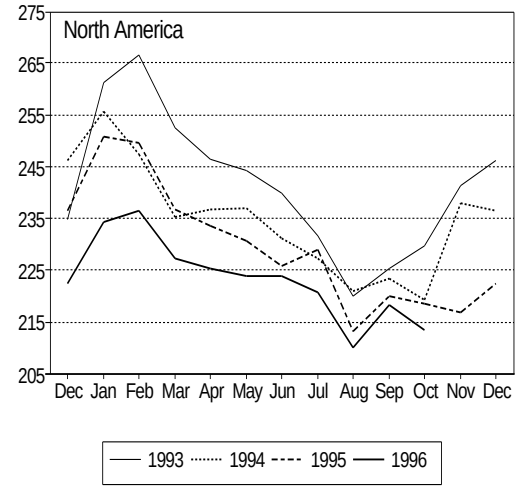
Miscellaneous to Balance

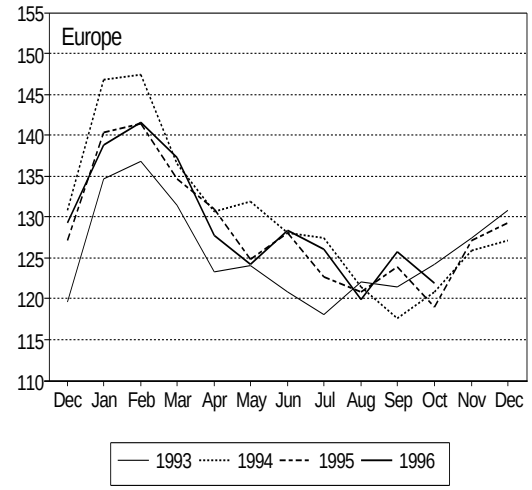
The Miscellaneous to Balance for 3Q96 in Table 1 is 0.9 mb/d, the largest positive quarterly volume recorded since the Gulf Crisis. As discussed on page 31 of the *User's Guide to the IEA Oil Market Report* dated 6 September 1996, the miscellaneous to balance item is a combination of changes in non-reported stocks in OECD and non-OECD areas and the balancing items required due to errors in the estimates of demand, supply and stocks. It should be remembered that, particularly for demand, the 3Q96 data include a large proportion of estimated or projected data and it is unclear at present whether the estimates of global demand or OECD stockbuild are too low or global supply is too high or some combination of these factors. While it seems likely that the magnitude of the 3Q96 miscellaneous to balance factor will decrease as better data become available, as discussed in the 8 October 1996 Report's article on global supply/demand seasonality, the factor may include a real, seasonal increase in non-OECD stock levels, such as Table 1 indicates for summer 1995 and 2Q96.

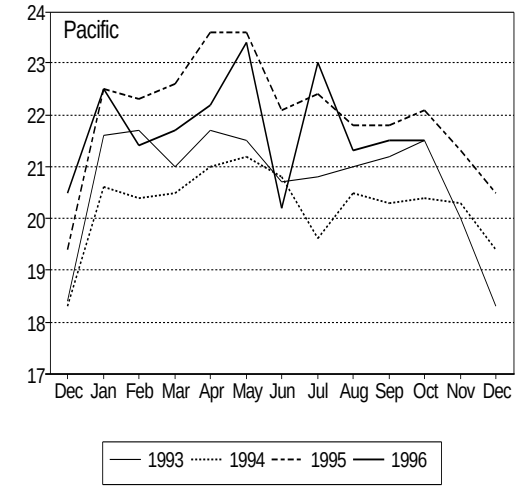
Regional OECD Industry End-Month Stocks: Gasoline and Middle Distillates

(million barrels)

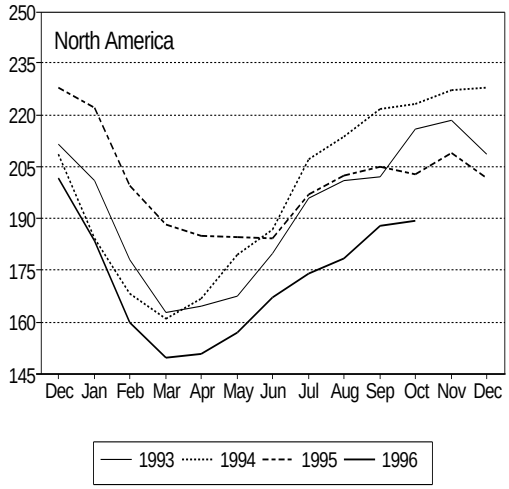
Gasoline

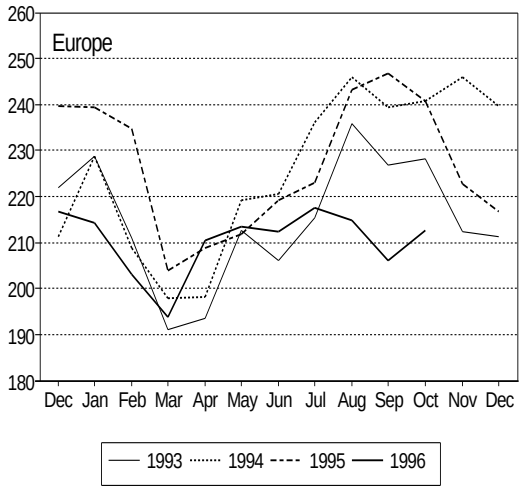


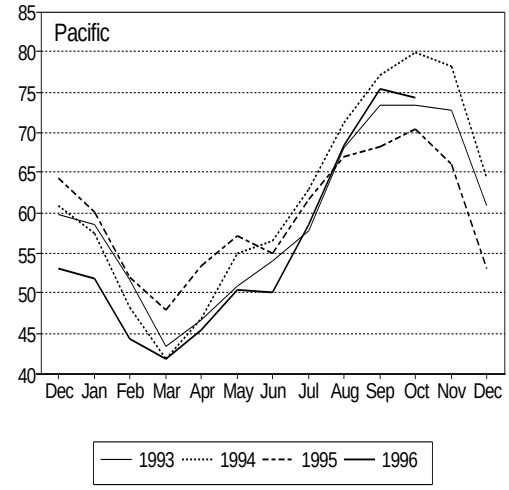




Middle Distillates



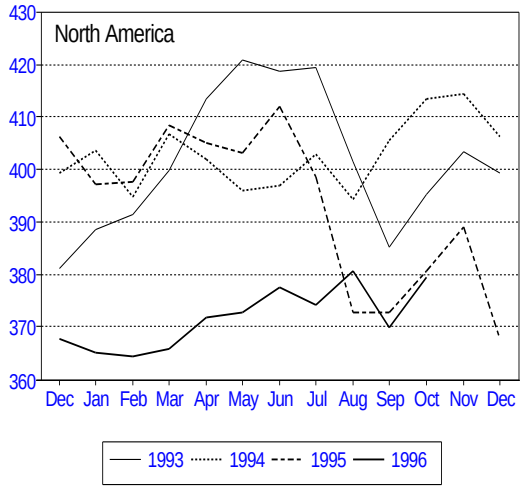


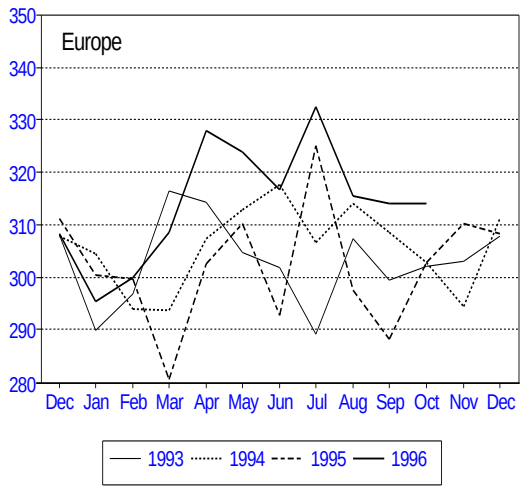


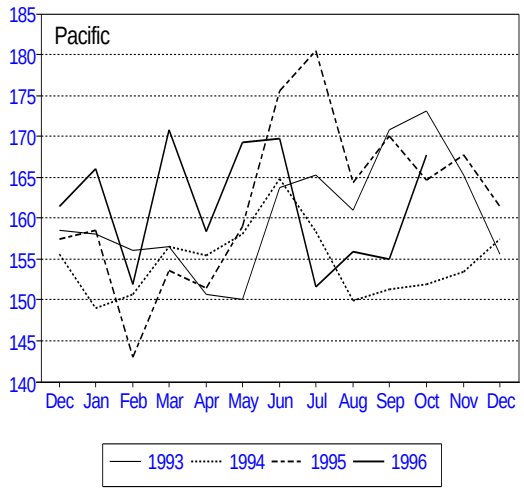
Regional OECD Industry End-Month Stocks: Crude Oil and Fuel oil

(million barrels)

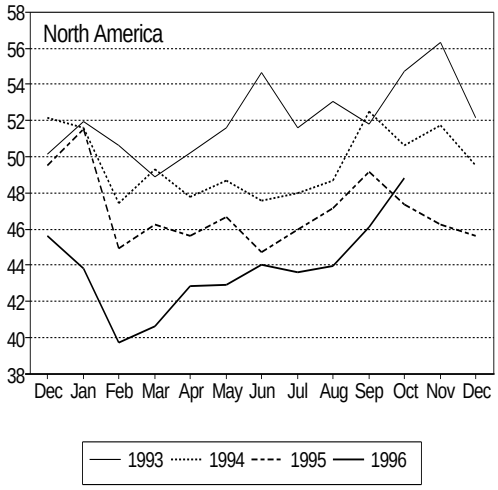
Crude Oil

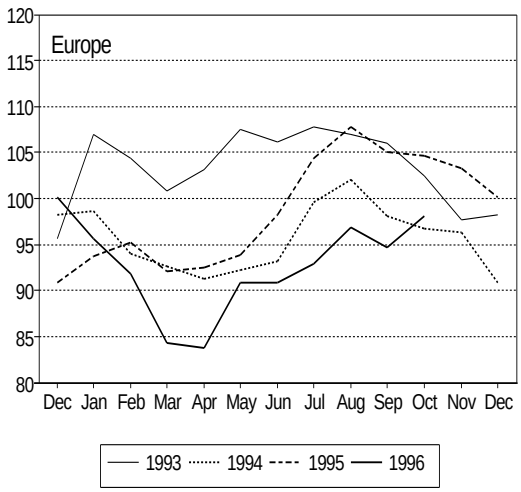


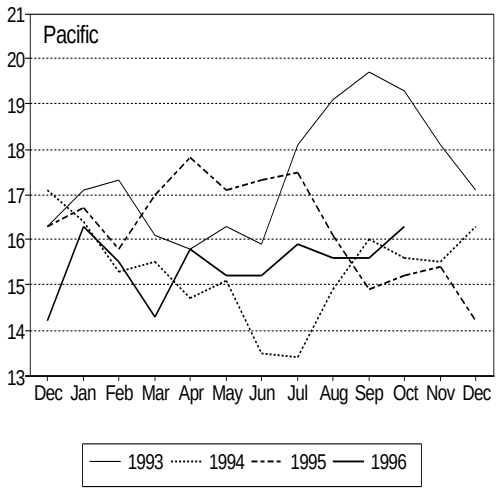




Fuel Oil



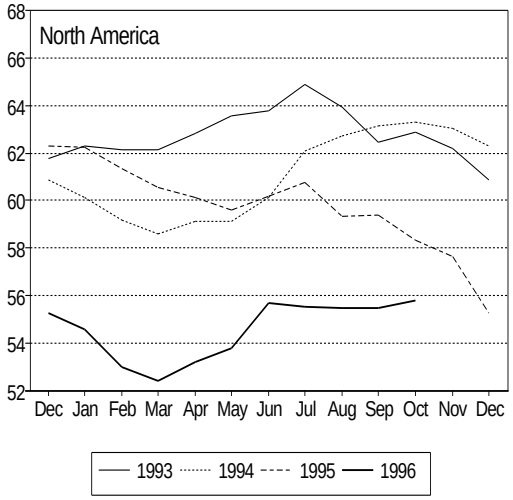


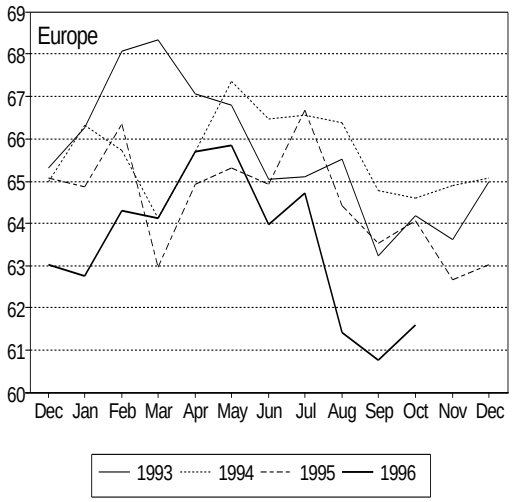


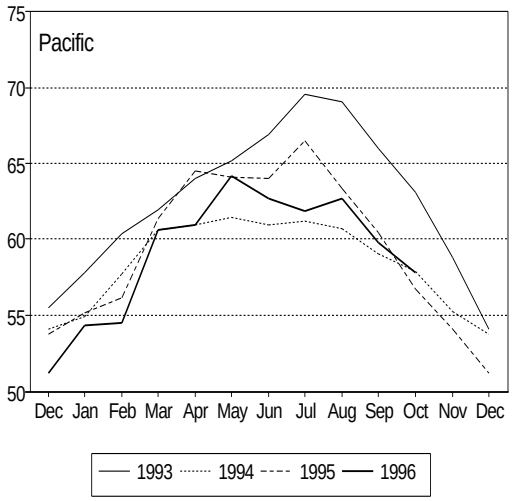
Regional OECD End-Month Industry Stocks

(in days of forward demand and million barrels)

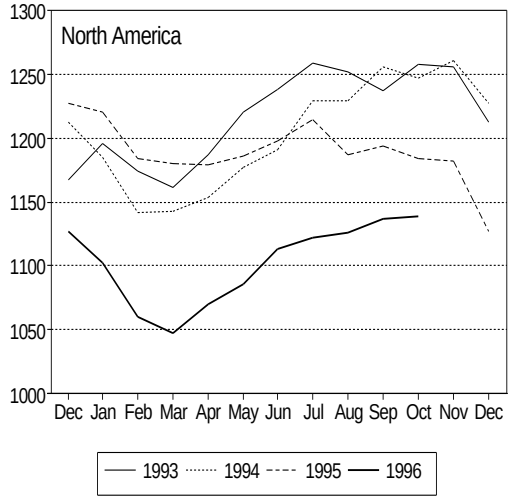
Days[1]

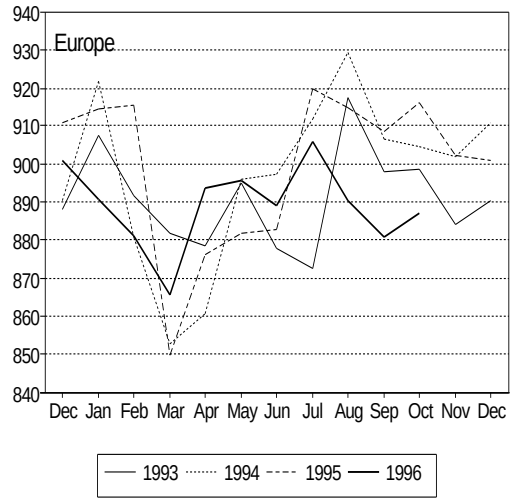


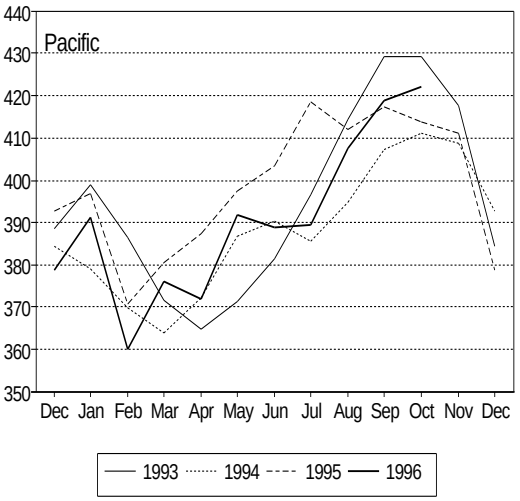




Million Barrels





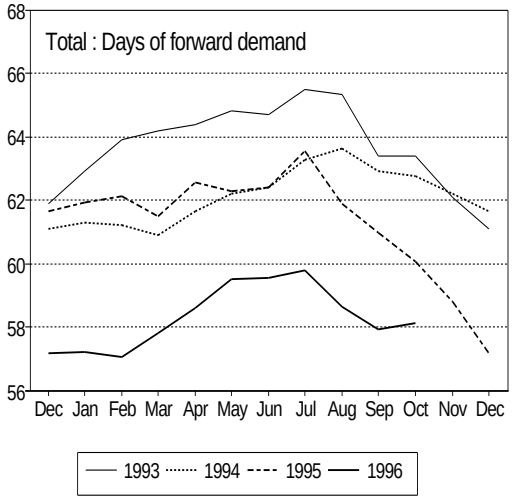


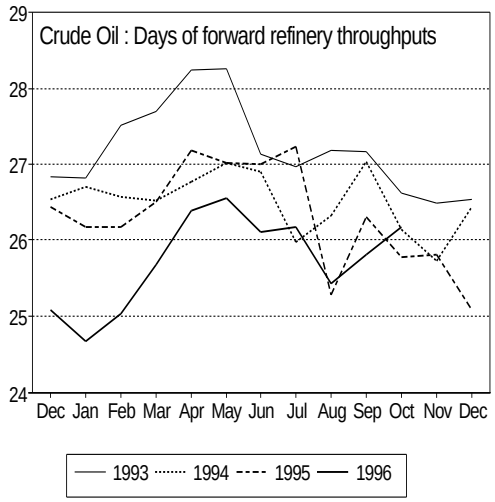
[1] Days of total stocks are based on demand for the next three months.

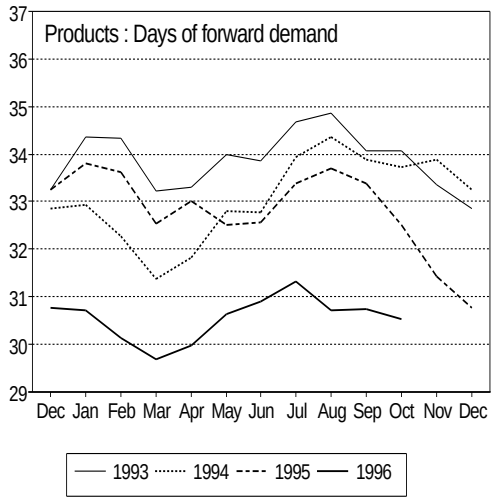
Total OECD End-Month Industry Stocks

(in days and million barrels)

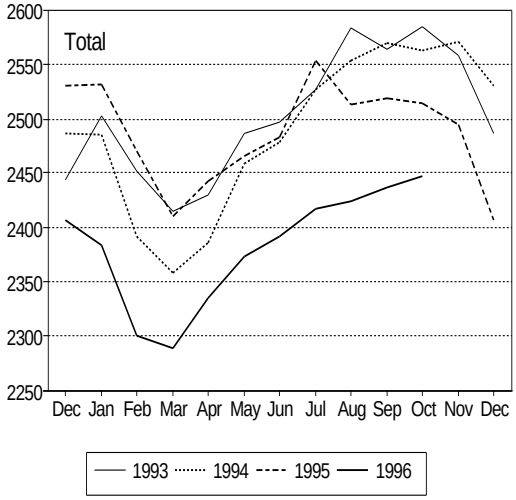
Days[1]

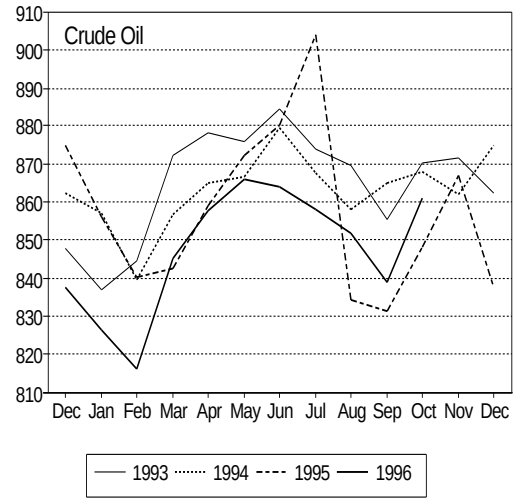


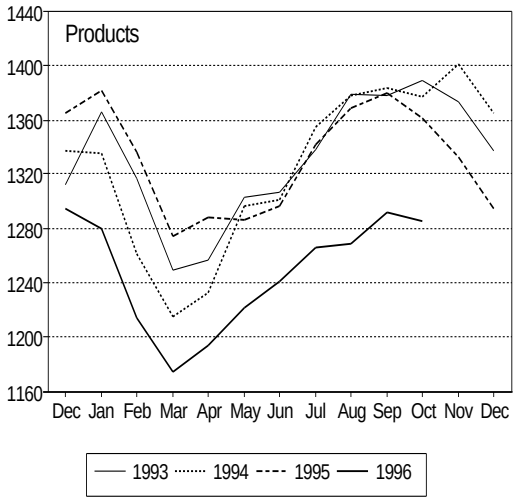




Million Barrels







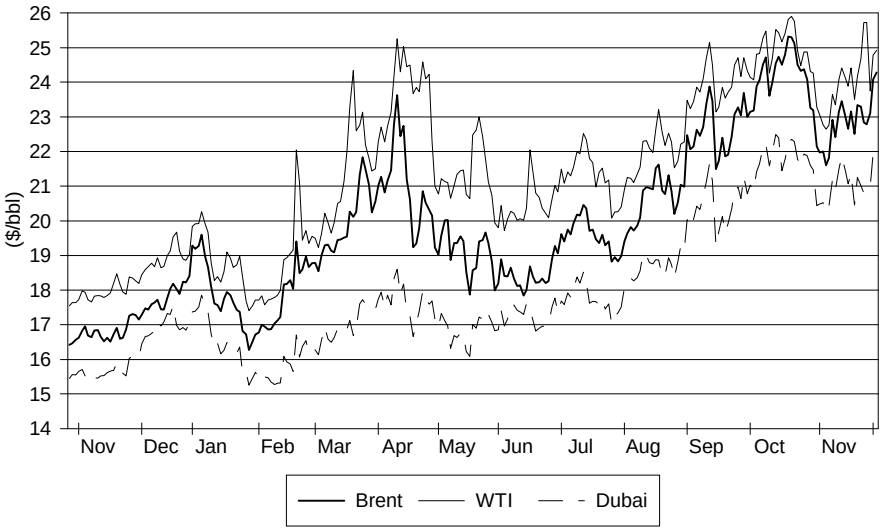
[1] Days of total and product stocks are based on demand for the next three months. Days of crude oil stocks are based on refinery throughputs for the next month

OIL PRICES AND REFINERY ACTIVITY

Summary

- The steep decline of benchmark crude oil prices in late October and early November came to a sudden end in the first full week of November when the onset of colder-than-normal winter weather on both sides of the Atlantic focused the market's attention once more on the low gasoil inventory levels in the Atlantic Basin. In line with sharply rising gasoil prices, Atlantic Basin benchmark crudes increased by about $1.50/bbl from November lows and remained mainly within a $1.00/bbl range around $23.00/bbl and $24.00/bbl for Brent and WTI respectively during the rest of the month, little affected by the end-November OPEC meeting and the increased prospects of Iraqi "oil-for-food" exports potentially starting by the end of the year.
- Prices for sour crudes in the Mediterranean strengthened relative to those of Brent during most of the month as a result of weather-related tightening of Urals supplies combined with buying ahead of extensive port maintenance at Novorossiisk planned for two weeks during December. Apart from a brief period in early November, the Brent/Dubai differential remained at a level wide enough to discourage the export of Brent-related West African crudes to Asia. This, together with the closed transatlantic arbitrage possibility led to increased exports of West African grades into European markets. Prices of light, sweet Asian grades continued to strengthen amid increasing demand for crude from Asian refiners.
- Strong demand continued to keep Asian gasoil prices firm during November and Atlantic Basin gasoil prices increased again with the onset of cold winter weather in an environment of low stocks. While European and Asian gasoline prices came under pressure from seasonally weakening demand, US gasoline prices continued to increase during the month, mainly supported by low stock levels and unplanned outages of gasoline production capacity at refineries. LSFO prices increased seasonally in Europe as a result of firm demand and in the US in line with soaring natural gas prices.
- Refining margins remained volatile in November and on average increased in all major refining centres as average product prices, to some extent, lagged the October and early November decline in crude prices. While the differential between the cracking and hydroskimming margins narrowed in Europe, consistent with the seasonal strengthening of fuel oil prices, it widened in Singapore where the prices of all major products strengthened relative to crude.
- In October, the aggregate refinery throughputs in OECD countries decreased by almost 1 mb/d to 32.5 mb/d. Decreases in Europe, Japan and North America were offset by slight increases in Australasia and Canada. Throughput levels in November are assessed to have increased in Europe and the US and to have remained little changed in Japan.
- New refineries and refinery expansions are estimated to have added almost 1.7 mb/d or 2.3% to global refining capacity in 1996. 75% of these additions came on stream in Asia. For 1997, global refining capacity is estimated to increase by 0.94 mb/d or 1.1%, with the Asian share decreasing to some 54%.

Spot Crude Oil Prices



CIF Crude Import Costs

Table 8 shows that the preliminary weighted average CIF cost for crude imported into IEA countries in September was $21.75/bbl, $0.61/bbl higher than in August. The corresponding estimates for October and November are $23.50/bbl and $23.25/bbl respectively.

Spot Crude Oil Prices

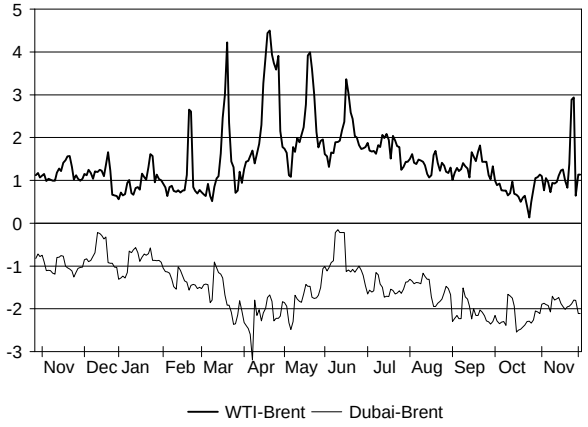
The steep decline in benchmark crude oil prices from five-year highs reached in the middle of October came to a sudden end in the first full week of November, when the onset of below-normal temperatures in Europe and the US triggered a firm rise in Atlantic Basin gasoil prices. This weather change coincided with an unexpectedly large draw of US crude inventories and, mainly as a result, prices for Atlantic Basin benchmark crudes increased by about $1.50/bbl over a period of a few days. For most of the rest of November, Brent and WTI prices remained within a $1.00/bbl range around $23.00/bbl and $24.00/bbl respectively, almost unaffected by the end-November OPEC meeting and the news concerning the increased likelihood of the commencement of Iraqi "oil-for-food" crude exports, potentially beginning as early as end-December. However, as has frequently occurred during this year, WTI prices briefly spiked ahead of the expiry of the WTI contract on the NYMEX, when short covering by market participants caused spot WTI prices to peak at $25.72/bbl. Unlike those of Atlantic Basin and sweet Asian benchmark crudes, Dubai prices decreased during the last three weeks of the month after initially rising in early November in line with those of other benchmark crudes.

Spot Crude Oil Prices and Differentials
(monthly and weekly averages, $/bbl)

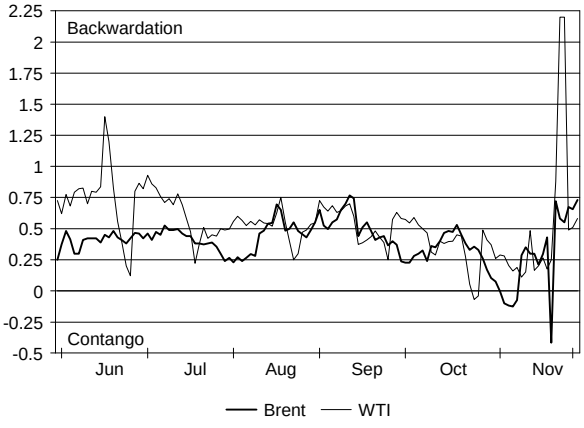
					Week Ending:					
	Sep	Oct	Nov	Change	25 Oct	01 Nov	08 Nov	15 Nov	22 Nov	29 Nov
Brent Dated	22.69	24.15	22.71	-1.44	24.73	22.93	22.08	23.01	23.03	22.91
Dubai	20.47	21.75	20.97	-0.79	21.99	21.17	20.60	21.42	21.03	20.90
WTI	24.01	24.89	23.92	-0.97	25.18	23.96	22.96	23.99	24.13	25.06
Brent over Dubai	2.22	2.40	1.74		2.74	1.76	1.48	1.59	2.00	2.02
WTI over Brent	1.32	0.74	1.21		0.45	1.03	0.87	0.98	1.10	2.15
Brent 1st month minus 2nd month	0.52	0.32	0.22		0.37	0.12	-0.11	0.31	0.21	0.60
WTI 1st month minus 2nd month	0.55	0.36	0.51		0.13	0.36	0.21	0.23	0.35	1.63

The overhang in spot Brent availability in early November, which was partly caused by the early return of Brent C from maintenance and its steeper-than-expected production escalation (see Supply section above), led to a brief contango in the 15-day market early in the month, as shown in the right-hand graph below and to a discount of dated Brent to the 15-day market during most of the month. However, this crude overhang cleared towards mid-month, in line with increased European crude demand, primarily due to refiners returning from autumn maintenance but also reflecting higher European refining margins. Despite the closed transatlantic arbitrage possibility for North Sea crudes since early October (see left-hand graph below), about 1 mb of North Sea grades were reportedly traded to the US Gulf Coast, helping to alleviate Northwest European supply pressures. Apart from this brief period of contango for Brent, both Brent and WTI remained in backwardation during November, mainly reflecting low crude inventories on both sides of the Atlantic. However, the average level of backwardation has decreased in recent months as shown in the table above.

WTI/Brent/Dubai Differentials
($/bbl)



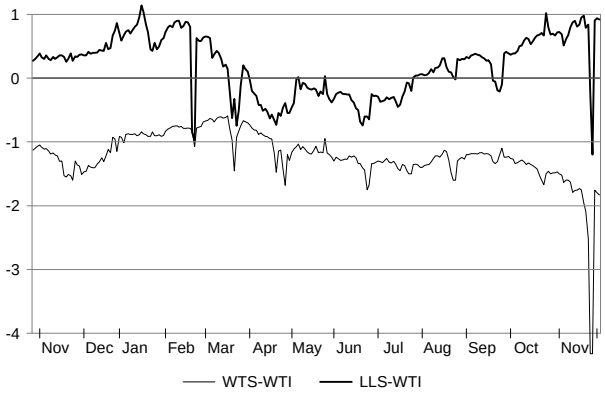
Forward Brent and WTI Differentials
First month minus Second month ($/bbl)



WTI prices decreased on average by less than those of Brent and remained supported by a combination of low inventories, firm demand for heating oil and, unlike in Europe, firming gasoline prices. The closed transatlantic arbitrage possibility and the strong demand for sweet, gasoil-rich grades led to a further widening of the premia for indigenous sweet crudes such as Light Louisiana Sweet over WTI and a widening of the sweet-sour crude differential, which came under increasing pressure from further crude sales from the US Strategic Petroleum Reserve and ample availabilities of Venezuelan crude (see graph to the right).

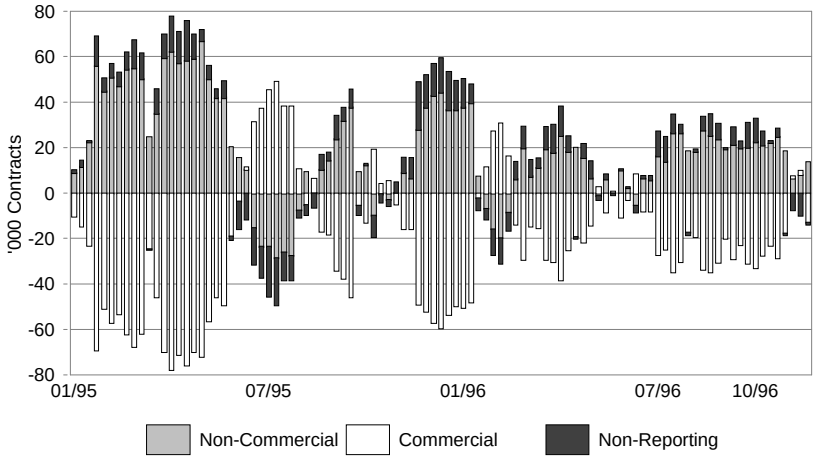
US Crude Differentials

($/bbl)



Consistent with the weakness in physical crude markets in late October and early November, non-commercial traders liquidated their sizeable net long position in WTI contracts on the NYMEX by selling around 30 million barrels worth of WTI futures and changed to a net short position of some 3 million barrels compared to a net long position of some 50 million barrels at the same time last year. As shown in the graph below, it was to a large extent the non-reporting category of non-commercial traders that disposed of their net long position, whereas the category of "large" non-commercial traders (funds and financial institutions) kept some of their net length in crude positions.

Distribution of Net Open Positions of WTI Contracts on the NYMEX



Sour crude prices in the Mediterranean gained strength relative to those of dated Brent throughout the month after having decreased sharply in October. The Brent/Urals differential narrowed from the October low of $1.13/bbl to $0.25/bbl by the end of November, mainly reflecting restricted supplies of Urals out of the main Black Sea export terminal of Novorossiisk due to weather-related loading delays and active Urals trading ahead of the two week closure of the main Urals loading berth at Novorossiisk during December (reportedly scheduled to start on 9 December). The increasing move of marginal Iranian crude barrels to Asian markets also contributed to the tightening of sour crude supplies in the Mediterranean and the Brent/Iranian Heavy spread moved in line with that of Urals, narrowing from the October low of $1.95/bbl to $1.24/bbl by the end of November.

The average Brent/Dubai differential narrowed slightly in November for the first time since June, with Brent prices decreasing on average by more than those of Dubai. However, in the last three weeks of November the differential widened from the month's low of $1.71/bbl to $2.11/bbl by the end of the month, mainly due to declining Dubai prices, reflecting ample availability of Arabian Gulf crudes in line with the high level of refinery maintenance in the Arabian Gulf (see left-hand graph on the previous page) and, possibly, the gradual increase of Alaskan North Slope (ANS) crude flows into northeast Asia.

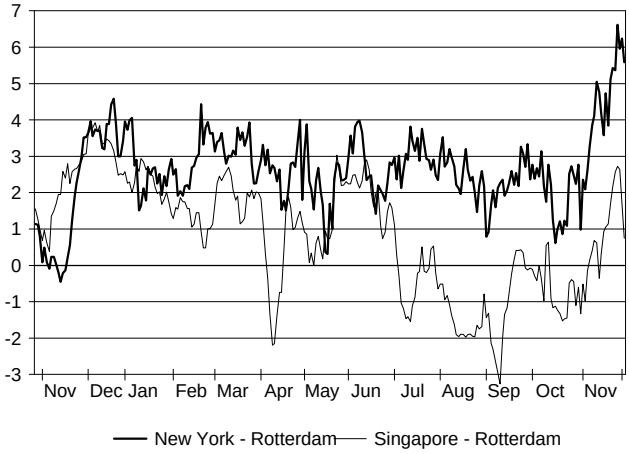
For most of the month, West African crude exports continued to be confined to Europe and Africa due to the wide Brent/Dubai differential, which discouraged exports to Asia, the narrow WTI/Brent differential, which discouraged exports to North America, and the strong demand for gasoil-rich sweet crude in Europe. The exception was a brief period in the first week of November, when the Dubai/Brent spread briefly narrowed and the arbitrage window to the East opened and some West African grades were reportedly traded to a number of Asian countries.

In general, prices for Asian crudes followed the pattern of those in the Atlantic Basin but remained less volatile. Ample regional crude availability was met by firm crude demand due to increased refining activity as some refineries returned from turnarounds and regional refining margins continued to increase. The unattractive economics for the import of Brent-related West African crudes into Asia contributed to an upward pressure on prices for regional sweet grades and the average Tapis/Brent differential widened by $0.49/bbl to $2.08/bbl. Minas prices appreciated by even more than those of Tapis relative to Brent and the average *discount* for Minas to Brent of $0.73/bbl in October turned to a *premium* to Brent of $0.19/bbl in November. The increasing strength in crude prices in Asia was also supported by the prospects of rising regional crude demand ahead of the seasonal peak in Asian refining throughputs in January/February.

Spot Product Prices in November

European spot **gasoline** prices, which gained support during October due to strong demand from the UK ahead of anticipated budgetary retail tax increases, decreased appreciably during November when this increased demand ended leaving lower regional demand and ample supplies. The steep increase in the profitability of the transatlantic arbitrage possibility into the US (see graph to the right), which opened in late October, provided the only support to European gasoline prices and formed a floor to their decline. The regular-gasoline/Brent spread in Rotterdam contracted to near parity level by the end of the month (see graph on page 35), reflecting the weakness of gasoline prices in Northwest Europe. This weakness was also evident in the appreciable decrease in the gasoline barges/cargoes differential in Rotterdam, a sign of low inland gasoline demand.

Spot Gasoline Differentials
($/bbl)



Unlike in Europe, spot gasoline prices on the US East Coast continued their upward trend, averaging appreciably above October price levels (see table below). The strength of US gasoline prices was mainly the result of low and decreasing stocks combined with the unplanned outages of gasoline production capacity in Venezuela and at a number of US refineries and reduced supplies to the region from the US Gulf through the Colonial pipeline system. The average gasoline/WTI differential consequently increased from its two-year low in October by $2.45/bbl to 5.03/bbl for November. The growing strength of US gasoline prices during most of the month continued to attract gasoline imports, which averaged near-peak summer levels of more than 430 kb/d for the four-week period up to 22 November. However, towards the end of the month, gasoline supply concerns eased when unplanned refinery outages came to an end and prospects for continuing high import volumes from Europe remained strong. As a result, regular gasoline prices in New York Harbour fell back to a discount to gasoil and gasoline/crude spreads decreased.

Unlike in Europe, spot gasoline prices in Singapore drifted higher during November and averaged higher than in October, despite ample regional spot availability and muted local demand. Support was mainly derived from export possibilities to Australasia, where demand increased due to planned refinery maintenance and ahead of the summer driving season in the southern hemisphere. The gasoline/Dubai differential increased by $1.55/bbl to an average of $4.60/bbl but remained almost $2.00/bbl lower than during the same month last year.

Spot Product Prices
(monthly and weekly averages, $/bbl)

	Gasoline				Gas Oil				Low Sulphur Residual Fuel Oil			
	Rotterdam	Med	NY Harbour	Singapore	Rotterdam	Med	NY Harbour	Singapore	Rotterdam	Med	NY Harbour	Singapore
Sep	23.91	24.66	26.10	22.82	30.14	28.74	28.37	27.86	17.33	17.66	18.54	18.59
Oct	25.50	26.61	27.47	24.80	31.52	30.12	30.28	29.99	19.15	19.27	21.07	19.75
Nov	24.67	26.10	28.95	25.56	29.50	28.33	29.57	30.75	19.51	19.72	21.01	19.19
Nov-Oct	-0.83	-0.50	1.49	0.77	-2.02	-1.79	-0.71	0.76	0.36	0.45	-0.06	-0.56
Week ending:												
25 Oct	26.58	27.58	28.27	25.52	30.68	29.50	30.11	30.07	19.29	19.30	21.74	19.62
01 Nov	26.03	27.10	28.19	25.23	29.48	28.21	28.70	30.39	19.08	18.67	20.65	19.02
08 Nov	25.07	26.41	28.04	24.93	28.85	27.45	28.04	30.29	18.88	18.67	19.33	18.19
15 Nov	25.28	26.63	29.81	25.60	29.83	28.64	29.87	30.81	19.34	19.80	20.53	18.97
22 Nov	24.28	25.83	28.82	25.68	29.99	28.99	30.53	30.79	19.85	20.22	22.15	19.95
29 Nov	23.74	25.27	29.80	26.38	29.46	28.34	30.01	31.44	20.18	20.57	22.48	19.82

For the second successive month, spot **naphtha** prices in Northwest Europe and the Mediterranean remained supported by firm transatlantic arbitrage demand for exports into the US and strong regional demand for paraffinic naphtha, with its attractiveness as a petrochemical feedstock increased relative to LPG and condensate as prices of the latter increased seasonally. In early November, Rotterdam naphtha prices surpassed those of regular gasoline and the average naphtha/Brent differential was at the highest level in 17 months. Naphtha prices also firmed in Singapore, amid firm demand from northeast Asian petrochemical plants and increased demand from India.

The **reforming margin** in Northwest Europe became negative again in the second half of November when the increasing strength of European naphtha prices combined with weakening European gasoline prices. However, in Singapore strong gasoline prices caused the average reforming margin to remain little changed, decreasing only slightly to $2.17/bbl. Nonetheless, the Singapore gasoline/naphtha differential remained below the threshold of reforming profitability for the fourth month and refiners reportedly kept reforming throughputs at levels set by the refinery's hydrogen requirements.

The steep decline in European and US **gasoil** prices that started in October at a time of milder-than-normal weather and slightly rising stock levels, came to an end in the first full week of November with the sudden onset of cold winter weather in the US and Europe and prices increased by about $2.50/bbl in New York Harbour and $1.50/bbl in Rotterdam from early November lows (albeit after shedding more than $4.00/bbl and $6.00/bbl respectively during the October decline). In the second half of the month, gasoil prices in the US and Europe remained within a comparatively narrow band before dipping slightly at the month's end in line with those of crude.

The heating oil contract for the near-months on the NYMEX and the gasoil contract on the IPE remained in backwardation throughout November and thus continued to discourage stockbuilding.

In Europe, trading of physical gasoil was thin due to a squeeze of the gasoil contract on the IPE. Rather than the usual monetary settling of the account, a record of 865 kt (6.45 million barrels) of gasoil was physically delivered into the November IPE contract at its expiry. Spot gasoil prices were supported early in the month (when prices bottomed) and again in late November (when IPE-related volumes hit the market) by the opening of the arbitrage window to Asia and a number of gasoil cargoes were reportedly traded to Asia. Prices also gained some limited support from weather-related decreases in Russian gasoil supplies. The gasoil/Brent differential averaged $6.79/bbl in November, about $3.95/bbl higher than during the same month last year.

Average premia for the new European low sulphur diesel grade (mandatory in EU countries since 1 October) to gasoil decreased from October highs in both the Mediterranean and Northwest Europe, mainly as a result of the new grade's consolidation in the supply chain and good availability from indigenous production. Exports of low-sulphur diesel from Russia have reportedly increased in recent weeks.

US gasoil prices moved to a large extent in line with those in Europe and remained affected by a tight supply/demand balance. Steep increases in gasoil production levels, which were on average some 0.3 mb/d higher than last November, were to a large extent offset by exceptionally strong gasoil demand,

leaving little room to add to the very low US gasoil inventory levels. The gasoil/WTI spread averaged $5.65/bbl in November compared to an average of $3.76/bbl for the same month last year.

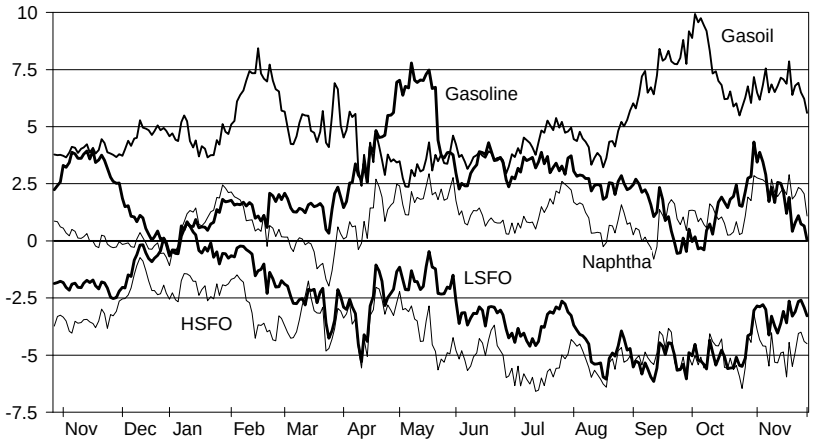
Spot gasoil prices in Singapore were higher than those in the Atlantic Basin for the second successive month. Unlike in Europe and the US, gasoil prices averaged higher in November than in October and spot gasoil prices continued to move higher, reaching the highest level since the Gulf War. Strong regional demand, in particular from China (where import tariffs were reportedly reduced) and Indonesia (which experienced delays in the start-up of refineries from planned turnarounds), caused Asian gasoil prices to strengthen and to remain largely unaffected by crude price developments and gasoil price swings in the Atlantic Basin. As a result of the peak in Asian refinery turnarounds in October and the peak in refinery turnarounds in the Arabian Gulf during November, regional gasoil supplies remained tight. The gasoil/Dubai differential in Singapore averaged $9.78/bbl compared to $6.24/bbl during the same month last year.

Spot **kerosene** prices generally moved in line with those of gasoil in both the US and Europe, with the kerosene/gasoil differential little changed during the month. However, compared to October, in November the average kerosene/gasoil differential contracted in Europe, with less kerosene required for blending of European low-sulphur diesel, and widened in the US from unseasonably low October levels.

In Asia, kerosene prices remained under downward pressure in the first half of the month amid ample supplies and mild weather that curtailed demand. Kerosene prices traded at, and at times even below, parity with strong gasoil prices. However, in the second half of the month, regional kerosene demand increased appreciably with the onset of winter weather in northern Asian countries and the lowering of Chinese import tariffs. This caused Singapore kerosene prices to increase steeply towards the end of November. The upward pressure on kerosene prices was reinforced by refinery problems in Taiwan and Indonesia and the kerosene/gasoil differential widened to more than $2.00/bbl towards the end of the month.

Product / Brent Differentials

Rotterdam ($/bbl)



Average European **LSFO** prices increased slightly, despite the decline in average crude prices. Strong LSFO demand from Italy's ENEL ahead of peak winter electricity demand combined with scarce spot availability (despite higher refinery throughput levels of light, sweet crudes) and firming fuel oil prices in the US. As a result, spot LSFO prices strengthened during the month, particularly, in the Mediterranean. The average LSFO/Brent differential in Rotterdam narrowed in November by $1.81/bbl but remained some $1.17/bbl wider than during last November (see graph above).

In the US, LSFO prices decreased in late October and early November, reflecting limited demand, mild weather and rising stocks at utilities. However, in the second week of November they regained strength with the onset of winter weather when utility demand increased in response to soaring natural gas prices that made fuel oil more competitive than natural gas. (Natural gas prices increased sharply with the advent of cold weather at a time of low stocks and the front-month natural gas contract on the NYMEX hit an all-time-high prior to the expiry of the December contract.)

Asian **LSWR** prices decreased in the first half of the month, in line with the decrease in crude prices and ample availability, but increased in relation to those of crude in the second half of November, when firm demand for exports to the US and rising regional demand combined with a lower allocation of LSWR by Indonesia for December than in November.

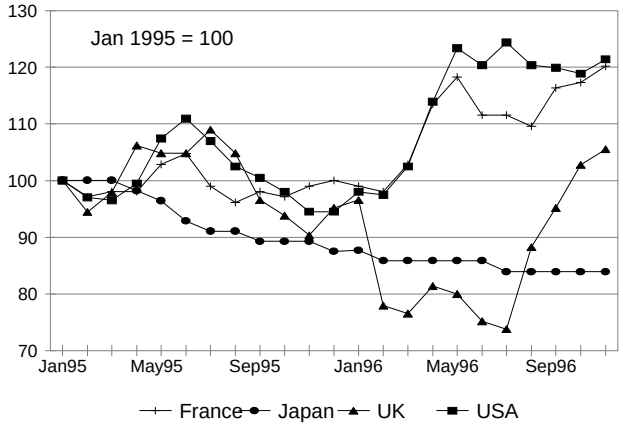
As a result of weaker regional HSFO and bunker demand, in particular in the Mediterranean (where major refinery maintenance in Portugal came to an end), combined with ample regional and Russian supplies, average European **HSFO** prices decreased for the first time since June. The downward pressure on prices was somewhat alleviated in mid-November when the arbitrage possibility to the US briefly opened and some fuel oil was reportedly traded to the US. The LSFO/HSFO differential in Rotterdam increased for the first time since August from near parity to an average of $1.55/bbl and widened in the Mediterranean by $1.31/bbl to $2.56/bbl. HSFO prices in the US decreased from five-year highs in October, following the pattern of LSFO prices. However, they did not increase as much as LSFO in the second half of the month, causing the LSFO/HSFO differential to widen slightly to $2.03/bbl.

Despite an amply-supplied market, spot HSFO prices in Singapore increased slightly in the first half of the month, reflecting firm regional demand, especially from China and Indonesia. Prices gained further strength in the second half of the month when supplies tightened in line with decreasing import cargoes from the Middle East.

End-User Product Prices

In November, mid-month end user prices for **gasoline** showed an inconsistent pattern, with prices rising in the US, Canada, Italy, the UK and France and declining in Germany and Spain, while prices remained unchanged in Japan. The largest increase in gasoline prices occurred in the US and Canada, mainly reflecting the renewed strength in spot US gasoline prices, and US end-user gasoline prices almost reached the year's highs seen during this spring. In Italy, gasoline prices increased after the industry ended a temporary freeze on gasoline pump prices and the latter were brought in line with the spot market. Gasoline prices in the UK continued to recover from the price-war-related low levels in the first half of the year. Gasoline prices in France and the UK reached the highest level of the year to date.

End-User Gasoline Prices
Local Currency Basis - Excluding Tax



While, except in the UK, pre-tax gasoline prices in Northwest European countries and the US were significantly higher than during the same month last year, prices increased by less in Mediterranean countries. Prices in Japan were lower than last year as a result of the further deregulation of the petroleum market in April.

In line with the late October/early November decline in Atlantic Basin spot gasoil markets, **automotive diesel** and **heating oil** prices for domestic consumers decreased in all countries, apart from Japan where prices remained unchanged and Canada where automotive diesel prices increased slightly. Heating oil prices decreased in general by more than those for automotive diesel. This was mainly the result of the change to winter specification diesel fuel, which is more costly to produce than summer grade material. The steepest decline in automotive diesel and heating oil prices occurred in Germany and Spain. However, compared on a pre-tax basis to the same month last year, diesel and heating oil prices remained appreciably higher. The steep increase in US heating oil prices in October led to the highest US end-user heating oil prices for the year up to October.

Mid-month **heavy fuel oil** prices for industry decreased in Germany, Spain and Italy, and increased in France and the UK, but remained unchanged in Japan.

Refining Margins in November

Refining margins continued to be very volatile in November as a result of the sharp, relative changes in crude and product prices. In general, average margins increased in all major refining centres as crude prices decreased by more than those of products.

In Rotterdam, refining margins increased appreciably, with the hydroskimming margin rising slightly more than the cracking margin. In addition to the effect of product price decreases lagging those of crude oil, Rotterdam margins were supported by the increases in naphtha and LSFO prices relative to crude, which mainly benefitted the hydroskimming margin.

Refining Margins in Major Refining Centres
(monthly and weekly averages, $/bbl)

					Week Ending:					
	Sep	Oct	Nov	Change	25 Oct	01 Nov	08 Nov	15 Nov	22 Nov	29 Nov
NW Europe										
Brent (Hydroskimming)	-0.20	-0.01	1.32	1.32	-0.69	0.85	1.37	1.26	1.28	1.29
Brent (Cracking)	0.90	1.15	2.38	1.22	0.59	2.15	2.56	2.38	2.25	2.15
Mediterranean										
Urals (Hydroskimming)	0.95	0.93	1.46	0.53	0.29	1.73	1.89	1.70	1.61	1.26
Urals (Cracking)	2.10	2.15	2.57	0.43	1.53	2.95	3.03	2.76	2.55	2.05
US Gulf Coast										
Brent (Cracking)	-0.08	-0.01	1.40	1.41	-0.50	0.86	1.42	1.76	1.24	1.20
WTI (Cracking)	-0.23	0.65	1.62	0.97	0.63	1.38	2.04	2.22	1.52	0.49
Singapore										
Dubai (Hydroskimming)	0.05	-0.06	1.10	1.16	-0.22	0.56	1.02	0.62	1.13	1.79
Dubai (Cracking)	1.69	2.02	3.34	1.32	2.02	2.84	3.21	2.92	3.34	4.07

Sour crude refining margins in the Mediterranean increased by less than those in Northwest Europe, mainly as a result of the strengthening of sour crude prices in the Mediterranean relative to those of Brent, the marker crude for the Rotterdam refining margin. However, as in Rotterdam, refining margins in the Mediterranean were supported by strong LSFO and naphtha prices. Both the hydroskimming and the cracking margin in the Mediterranean continued to average above the level of corresponding margins in Northwest Europe, but the difference narrowed considerably.

On the US Gulf Coast, the WTI cracking margin increased appreciably when WTI prices decreased steeply in late October and early November and decreased again when WTI prices rebounded in the second half of the month. On average, the WTI cracking margin increased to the highest level in 17 months, to some extent also supported by the rise in gasoline prices relative to those of crude.

The average Singapore Dubai hydroskimming and cracking margins increased consistent with the gradual strengthening of almost all major product prices relative to those of crude. The upward pressure on margins was particularly evident in the rise in gasoil/crude and gasoline/crude spreads. The differential between the cracking and hydroskimming margins increased further in November, consistent with strengthening prices for light products relative to those of fuel oil.

Refinery Crude Throughputs in October

The aggregate refinery throughputs for October in OECD countries decreased by almost 1 mb/d to 32.5 mb/d from September's upwardly-revised figures. Decreases of 0.48 mb/d in Europe, 0.34 mb/d in Japan and 0.20 mb/d in the US were marginally offset by slight rises in Canada and Australasia. However, total October throughputs were 1.2 mb/d or 3.7% higher than a year earlier.

Preliminary data suggest that total crude throughputs in distillation units in Europe decreased by 0.48 mb/d to 12.43 mb/d, which was the highest October level for more than eight years. Decreases mainly in Italy, the UK and Portugal, as well as small reductions in Austria, Spain, France and Greece were partly offset by slight increases in the Norway, Turkey and Denmark. European throughputs were 2.2% or 0.28 mb/d higher than a year earlier, reflecting strong gasoil demand and improving refining margins.

Crude throughputs in the US decreased by 0.20 mb/d to 14.28 mb/d, albeit 5% or almost 0.7 mb/d higher than a year earlier, reflecting an exceptionally light turnaround schedule. Strong gasoil demand and low

heating oil stocks continued to keep US throughputs close to full capacity. Refinery utilisation, based on operating refinery capacity, is estimated to have increased by 1.3% from September levels to 96.4%, some 4.5% higher than the level a year earlier.

Japanese crude throughputs decreased by 0.34 mb/d to 3.7 mb/d, consistent with seasonal maintenance. Total throughputs were 4.6% or almost 0.2 mb/d lower than the level of a year earlier. In line with improving regional refining margins, Singapore refiners reportedly discontinued some of the cuts in refinery throughputs introduced in earlier months and throughputs are estimated to have increased to 1.12 mb/d in October.

Refinery Crude Throughput in OECD Countries

	million barrels per day						% change from previous year	
	June	July	Aug	Sept	Oct*	Jan-Oct 1996*	Oct	Jan-Oct
OECD Europe	12.40	12.54	12.57	12.91	12.43	12.51	2.2	3.1
France	1.61	1.64	1.65	1.64	1.60	1.66	3.3	5.8
Germany	2.13	2.17	2.13	2.20	2.18	2.11	7.4	-0.1
Italy	1.42	1.60	1.59	1.80	1.60	1.60	-3.1	0.8
Netherlands	1.17	1.21	1.20	1.03	1.03	1.15	-8.4	2.3
UK	1.78	1.77	1.75	1.85	1.73	1.75	-4.8	4.8
US	14.50	14.35	14.40	14.48	14.28	14.16	5.0	1.3
Canada	1.42	1.39	1.39	1.44	1.46	1.38	26.3	7.8
Japan	3.28	3.98	4.38	4.06	3.72	4.12	-4.6	-0.5
Australia/New Zealand	0.60	0.55	0.45	0.57	0.59	0.54	19.6	-0.7
OECD Total	32.19	32.81	33.20	33.46	32.47	32.71	3.7	1.9

In November, refinery throughputs are thought to have increased in Europe, mainly reflecting the approaching end of seasonal refinery maintenance shutdowns, and to have remained unchanged in Japan, where some of the maintenance shutdowns expected for October were possibly delayed until November. Weekly US statistics up to 22 November suggest that throughput levels increased by about 0.2 mb/d. In Singapore, it is reported that refiners discontinued the remainder of the earlier throughput cuts and refinery throughputs are expected to have reached 1.18 mb/d in November.

Refinery Maintenance Shutdowns

Planned refinery maintenance is scheduled to decrease seasonally in Europe and Asia in the coming three months. In the US, refining maintenance shutdowns in the US Gulf region are currently expected to increase above normal levels in early 1997. However, the extent of maintenance shutdowns is expected to be influenced by the gasoil and gasoline inventory situation.

Refinery Maintenance Shutdowns (Primary Distillation)
(mb/d of Nameplate Capacity)

	December	January	February
Europe	0.14	0.10	0.08
US	0.14	0.69	NA
Persian Gulf	0.04	-	-
Japan	0.06	0.06	0.06
Other Asia / Pacific	0.06	0.09	0.31

IEA estimates (except for US: PIRA Energy Group, New York)

There were three restarts of significant upgrading units during November. Lyondell-Citgo Refining Company reportedly restarted its 95 kb/d catalytic cracking unit at its 265 kb/d refinery in Houston on 18 November after planned seasonal maintenance lasting several weeks. Shell Singapore is reportedly expected to restart a 34 kb/d residue fluid catalytic cracker at its 436 kb/d Pulau Bukom refinery in the first week of December. (The plant was shut down on 1 November for a month-long scheduled turnaround.) On 22 November, Shell Australia reportedly restarted its 50 kb/d catalytic cracker after an advanced maintenance shutdown, previously planned for February 1997. The three-week turnaround was brought forward because the unit was experiencing operational problems. There reportedly are no other planned maintenance shutdowns for any of Shell Australia's units in 1997.

Additions to Refining Capacity

As shown in the table below, a total of almost 1.7 mb/d of additional refining capacity will have started up during 1996, increasing global refining capacity by 2.3%. More than 75% of this new capacity came on stream in Asia and some 22% in the Americas. The addition of 1.27 mb/d of refining capacity in Asia during this year compares to an estimated incremental growth in Asian demand of some 650 kb/d for the whole of 1996 . This steep rise in refining capacity, which more than offsets regional demand growth, explains to a large extent the decrease in Singapore refining margins seen in 3Q96 due to the increasing supply pressure on, in particular, gasoline in Asia.

Refinery Expansions and New Capacity 1996

Country/Refinery	Capacity kb/d	Type	Timing
Thailand - (Shell) Rayong	145	grassroots	2Q96
Thailand - (Caltex) Star	130	grassroots	2Q96
Korea - Hyundai Seosan	190	grassroots	2Q96
Korea - LG Caltex Yosu	270	grassroots	4Q96
Korea - Yukong Ulsan	238	grassroots	4Q96
China - Dalian	100	grassroots	4Q96
India - MPRL Mangalore	60	grassroots	1Q96
India - Bongaigaon/Digboi	32	expansion	
Australia - BP Kwiwana	18	expansion	
Indonesia/Singapore/New Zealand	43	expansion	
UAE - Fujairah Metro	32	relocation of US unit	
Japan Kao Oil Marifu	7	expansion	
Total Asia	**1265**		
US (several locations)	116	expansions	
US (several locations)	127	restart of closed capacity	
Brazil - Petrobras Mataripe	170	grassroots	Late 1996
South America excl. Brazil	87	expansions	
Total Americas (expansion)	**373**		
Cyprus/Morocco	45	expansions	
Grand Total for 1996:	**1683**		

The additions to refining capacity planned for 1997 are shown in the table below. The estimated increase of 940 kb/d or 1.1% of global capacity is appreciably less than in 1996, but still more than the 643 kb/d added during 1995. It is also significantly less than the expected global oil demand growth of 1.9 mb/d. However, the capacity additions shown for both 1996 and 1997 exclude “refinery creep”, the minor additions to capacity achieved by improvements in information technology, refinining technology and refinery operations, which are estimated to average 300-500 kb/d per year. Most of the new refining capacity, some 54% of the total, is again concentrated in Asia. However, in spite of the perceived European refining overcapacity, a grassroots refinery is scheduled to start up in Germany in late 1997.

Refinery Expansions and New Capacity 1997

Country/Refinery	Capacity kb/d	Type	Timing
Iran - Bandar Abbas Refinery	232	rebuilding	Sept 1997
China - Maoming	100	expansion	
Papua New Guinea - Motueka	40	grassroots	
Indonesia - Petramina Sorong	10	grassroots	Spring 1997
Japan (several locations)	48	expansions	
China - Zhenhai Refinery	30	expansion	
Philippines - Petron Bataan	15	expansion	
UAE - Fujairah Fal	35	relocation of Canadian unit	
Total Asia	**510**		
US (several locations)	99	expansions	
US - Tosco Trainer	150	restart of closed capacity	Spring 1997
South America	82	expansions	
Total Americas (expansion)	**181**		
Germany - Leuna	180	grassroots	Late 1997
Poland - Gdansk	30	expansion	
Lybia/Ghana	37	expansions	
Grand Total for 1997:	**938**		

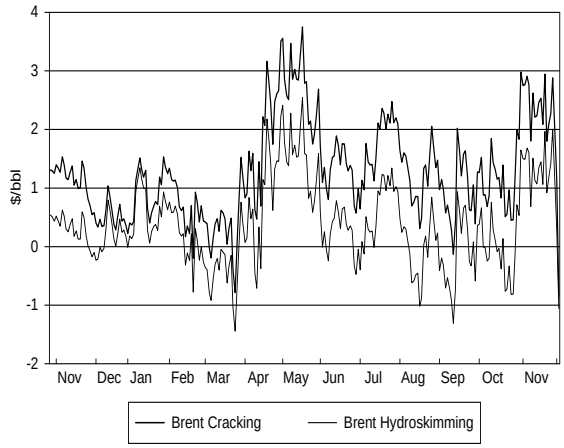
It is estimated that the amount of crude being used to provide the initial inventory for the grassroots refineries amounts to some 100-150 kb/d on a yearly basis for 1996 and some 50 kb/d for 1997.

Industry Developments

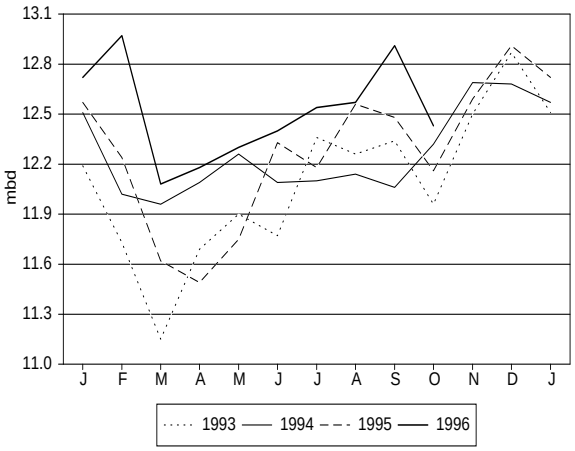
Tosco and Unocal signed a letter of intent on 18 November under which the latter is to sell its US West Coast refining, marketing and transportation assets to Tosco for $1.4 billion. Once the deal is concluded, the independent oil company Tosco will become the fifth-largest refiner in the US (after Chevron, Amoco, Exxon and Mobil) with a total refining capacity of 950 kb/d and will be the largest refiner on the West Coast. Tosco already holds a leading position on the East Coast where it will operate more than a quarter of the region's capacity when the 150 kb/d Trainer refinery (formerly BP's Marcus Hook) starts up again next summer.

Elf UK reportedly signed a memorandum of understanding with Chevron's subsidiary Gulf Oil and with Murphy Petroleum to merge their UK refining and marketing operations in a new joint venture. The new company will consolidate refining interests in Milford Haven in South Wales by ceasing crude processing at the nearby 115 kb/d Gulf refinery in Pembroke. Subject to final agreement, Elf and Gulf will each hold 41.25% of the new company with Murphy Oil holding the remaining 17.50%. The merger will create a retail network of about 1,500 service stations with an estimated 8% share of the UK fuels market. The closure of Pembroke refinery is reportedly scheduled to take place in June 1997.

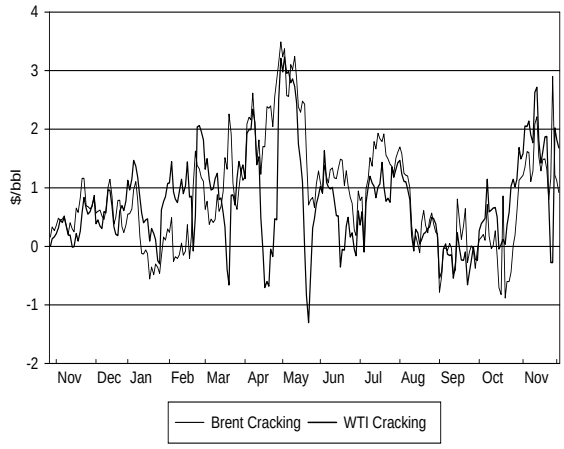
Rotterdam Refining Margins



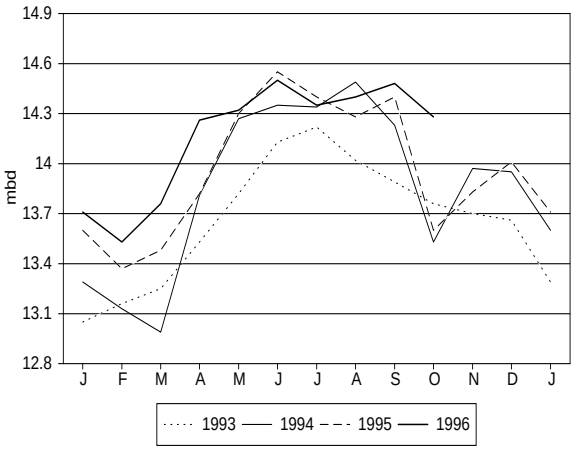
OECD Europe Crude Throughputs



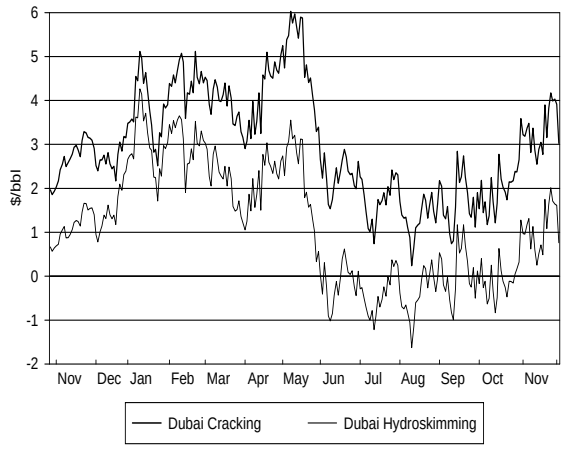
US Gulf Refining Margins



US Crude Throughputs



Singapore Refining Margins



Japan Crude Throughputs

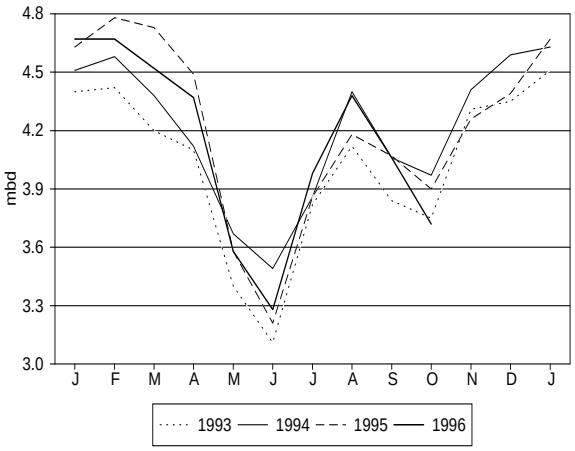


Table 1
WORLD OIL SUPPLY AND DEMAND

(million barrels per day)

	1993	1994	1Q95	2Q95	3Q95	4Q95	1995	1Q96	2Q96	3Q96	4Q96	1996	1Q97	2Q97	3Q97	4Q97	1997
DEMAND																	
OECD																	
North America	19.2	19.8	19.7	19.5	19.8	20.1	19.8	20.4	20.0	20.3	20.5	20.3	20.5	20.1	20.7	20.9	20.6
Europe	13.6	13.6	14.0	13.5	13.6	14.3	13.9	14.3	13.5	14.0	14.5	14.1	14.4	13.8	14.1	14.7	14.3
Pacific	6.3	6.6	7.3	6.2	6.3	6.9	6.7	7.4	6.2	6.3	7.0	6.7	7.6	6.3	6.4	7.1	6.9
TOTAL OECD	39.0	40.0	41.1	39.2	39.8	41.3	40.3	42.1	39.6	40.6	42.1	41.1	42.5	40.3	41.2	42.8	41.7
NON-OECD																	
FSU[1]	5.7	4.9	5.1	4.5	4.5	4.9	4.7	4.6	4.2	4.2	4.8	4.5	4.7	4.2	4.2	4.8	4.5
Europe	1.3	1.3	1.4	1.3	1.3	1.4	1.3	1.5	1.4	1.3	1.4	1.4	1.6	1.5	1.4	1.5	1.5
China[2]	3.0	3.1	3.2	3.3	3.4	3.4	3.3	3.4	3.6	3.6	3.7	3.6	3.6	3.8	3.8	3.9	3.8
Other Asia	6.9	7.4	8.1	7.9	7.6	8.5	8.0	8.8	8.3	8.1	9.0	8.6	9.3	9.0	8.7	9.7	9.2
Latin America	5.7	6.0	6.2	6.0	6.1	6.2	6.1	6.2	6.3	6.4	6.4	6.3	6.5	6.5	6.6	6.6	6.6
Middle East	3.9	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.0	4.2	4.2	4.1	4.2	4.1	4.3	4.3	4.2
Africa	2.1	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.3	2.3	2.2	2.3	2.3
TOTAL NON-OECD	28.5	28.9	30.3	29.1	29.0	30.6	29.8	30.8	30.1	30.0	31.8	30.7	32.2	31.4	31.2	33.1	32.0
TOTAL DEMAND[3]	67.6	68.9	71.3	68.3	68.8	71.9	70.1	72.9	69.7	70.6	73.9	71.8	74.7	71.7	72.4	75.9	73.7
SUPPLY																	
OECD																	
North America	11.0	10.9	11.1	11.0	10.9	11.0	11.0	11.0	11.0	11.0	11.3	11.1	11.2	10.9	10.9	11.1	11.0
Europe	5.1	6.0	6.4	6.0	6.2	6.7	6.3	6.6	6.6	6.5	7.3	6.8	7.7	7.3	7.2	8.3	7.6
Pacific	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8	0.8	0.8
TOTAL OECD	16.8	17.6	18.1	17.7	17.7	18.4	18.0	18.3	18.2	18.2	19.4	18.6	19.7	19.1	18.9	20.2	19.5
NON-OECD																	
FSU	7.9	7.3	7.1	7.1	7.1	7.1	7.1	7.0	7.0	7.1	7.1	7.0	7.2	7.1	7.2	7.4	7.2
Europe	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
China	2.9	2.8	3.0	2.9	3.0	3.0	3.0	3.1	3.1	3.1	3.2	3.1	3.2	3.2	3.2	3.2	3.2
Other Asia	1.8	1.9	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0
Latin America	5.8	5.9	6.1	6.0	6.3	5.9	6.1	6.5	6.5	6.4	6.7	6.5	6.8	6.9	7.0	7.2	7.0
Middle East	1.6	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0
Africa	2.3	2.4	2.5	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.8	2.7	2.9	2.9	3.0	3.1	3.0
Processing Gains[4]	1.4	1.4	1.5	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6
TOTAL NON-OPEC	40.8	41.5	42.4	42.0	42.4	42.8	42.4	43.2	43.2	43.2	44.9	43.6	45.5	45.0	45.2	46.9	45.6
OPEC																	
Crude	24.4	24.7	24.8	24.9	25.2	25.3	25.1	25.7	25.6	26.0							
NGLs	2.3	2.4	2.4	2.4	2.4	2.5	2.4	2.5	2.6	2.7	2.7	2.6	2.7	2.8	2.8	2.9	2.8
TOTAL OPEC	26.6	27.0	27.2	27.3	27.6	27.8	27.5	28.2	28.2	28.6							
TOTAL SUPPLY[5]	67.5	68.6	69.6	69.3	70.1	70.5	69.9	71.3	71.4	71.9							
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	0.1	0.1	-1.3	0.7	0.4	-1.2	-0.3	-1.3	1.1	0.5							
Government	0.1	0.1	0.1	-0.1	0.1	0.1	0.0	0.0	-0.1	-0.1							
TOTAL OECD	0.2	0.2	-1.2	0.7	0.5	-1.2	-0.3	-1.3	1.0	0.4							
Floating Storage/Oil in Transit	0.1	-0.1	-0.3	0.1	0.2	0.3	0.1	-0.3	0.1	0.0							
Miscellaneous to balance[6]	-0.4	-0.4	-0.2	0.2	0.5	-0.5	0.0	0.0	0.6	0.9							
TOTAL STOCK CH. & MISC.	-0.1	-0.3	-1.7	0.9	1.2	-1.4	-0.2	-1.6	1.7	1.3							
Memo items:																	
FSU Net Exports	2.2	2.4	2.0	2.7	2.6	2.2	2.4	2.4	2.8	2.8	2.3	2.6	2.5	2.9	2.9	2.5	2.7
Call on OPEC crude + Stock ch.[7]	24.5	24.9	26.5	24.0	24.0	26.7	25.3	27.2	23.9	24.7	26.2	25.5	26.5	23.9	24.4	26.1	25.2
Total Demand ex. FSU	61.8	64.0	66.2	63.9	64.3	67.0	65.4	68.3	65.5	66.3	69.1	67.3	70.0	67.5	68.2	71.1	69.2
Total demand exc. FSU (% ch)[8]	2.6	3.5	2.6	2.5	1.5	2.0	2.2	3.1	2.6	3.2	3.0	3.0	2.5	3.0	2.7	2.9	2.8

1 Figures for FSU are apparent demand derived from official production figures and quarterly trade data.
2 Annual Chinese demand is estimated from production and (adjusted) trade; quarterly figures represent estimates of domestic oil deliveries and are not derived from trade data.
3 Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply.
4 Net of volumetric gains and losses in refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses.
5 Comprises crude oil, condensates, NGLS, oil from non-conventional sources and other sources of supply.
6 Includes changes in non-reported stocks in OECD and non-OECD areas.
7 Equals total demand minus total non-OPEC supply minus OPEC NGLS. Thus includes "Miscellaneous to balance"for historical time periods.
8 Year on year % growth in global oil demand excluding FSU.

Table 1A
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1

(million barrels per day)

	1993	1994	1Q95	2Q95	3Q95	4Q95	1995	1Q96	2Q96	3Q96	4Q96	1996	1Q97	2Q97	3Q97	4Q97	1997
DEMAND																	
OECD																	
North America	-	-	-	-	-	-	-	-	-	-0.1	0.1	-	-	-	-0.1	0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OECD	-	-	-	-	-	-	-	-	-	-0.2	0.1	-	-	-	-0.2	0.1	-
NON-OECD																	
FSU	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-0.1	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL NON-OECD	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL DEMAND	-	-	-	-	-	-	-	-	-	-0.2	0.1	-	-	-	-0.2	0.1	-
SUPPLY																	
OECD																	
North America	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-0.2	-	0.1	0.1	0.1	0.1	0.1
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OECD	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-	0.1	0.1	-	0.1	0.1
NON-OECD																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	-0.1	-	0.1
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL NON-OPEC	-	-0.1	-	-	-	0.1	-	-	-	-	-0.1	-0.1	0.1	0.1	-	-	-
OPEC																	
Crude	-	-	-	-	-	-	-	-	-	0.1							
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OPEC	-	-	-	-	-	-	-	-	-	-							
TOTAL SUPPLY	-	-	-	-	-	-	-	-0.1	-	0.1							
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-0.1	-	0.1							
Government	-	-	-	-	-	-	-	-	-	-							
TOTAL OECD	-	-	-	-	-	-	-	-0.1	-0.1	0.1							
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-							
Miscellaneous to balance	-	-0.1	-	-	-	-	-	-	0.1	0.1							
TOTAL STOCK CH. & MISC.	-	-	-	-	-	-	-	-	-	0.3							
Memo items:																	
FSU Net Exports	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-	-
Call on OPEC crude + Stock ch.	-	-	-	-	-	-	-	-	-	-0.2	0.2	-	-	-0.1	-0.2	0.1	-0.1
Total Demand ex. FSU	-	-	-	-	-	-	-	-	-	-0.2	0.1	-	-	-	-0.1	0.1	-

When submitting their monthly oil statistics, IEA Member countries periodically update data for earlier years. Similar updates to non-OECD data can occur. While the changes are generally small, due to rounding they can lead to changes to historical data of 0.1 mb/d.

Table 2

OECD REGIONAL OIL DEMAND

(million barrels per day)

	May			June			Second Quarter			July			August		
	1995	1996	%	1995	1996	%	1995	1996	%	1995	1996	%	1995	1996	%
North America															
LPG	1.99	2.14	7.7	1.95	2.07	6.2	2.01	2.12	5.4	1.84	2.07	12.4	1.99	2.15	8.1
Naphtha	0.28	0.28	-2.1	0.25	0.29	12.1	0.27	0.28	2.8	0.29	0.30	1.6	0.28	0.33	17.2
Motor Gasoline	8.59	8.69	1.2	8.93	8.79	-1.5	8.59	8.67	0.9	8.58	8.85	3.1	8.93	8.96	0.4
Jet/Kerosene	1.64	1.60	-2.6	1.54	1.72	11.8	1.58	1.66	5.2	1.61	1.72	7.0	1.67	1.75	5.0
Gasoil	3.37	3.61	6.9	3.70	3.64	-1.7	3.53	3.69	4.5	3.14	3.48	10.9	3.49	3.64	4.4
Residual Fuel Oil	0.94	1.01	7.1	1.07	0.94	-12.3	1.00	0.95	-4.7	0.92	1.08	17.0	1.03	1.05	1.9
Other Products	2.55	2.63	2.9	2.74	2.74	0.2	2.53	2.61	3.0	2.79	2.78	-0.5	2.84	2.86	0.7
Total	**19.37**	**19.95**	**3.0**	**20.18**	**20.18**	**0.0**	**19.52**	**19.98**	**2.4**	**19.18**	**20.28**	**5.7**	**20.22**	**20.74**	**2.6**
Europe															
LPG	0.82	0.81	-0.7	0.78	0.75	-3.7	0.85	0.82	-3.5	0.75	0.78	4.2	0.74	0.78	6.5
Naphtha	1.13	1.11	-1.5	1.08	1.00	-7.3	1.12	1.02	-8.9	1.07	1.03	-4.3	1.13	1.05	-6.8
Motor Gasoline	3.04	3.04	0.0	3.12	2.97	-4.7	3.03	3.03	-0.1	3.07	3.19	4.0	3.16	3.14	-0.9
Jet/Kerosene	0.83	0.89	7.3	0.85	0.89	3.9	0.83	0.88	5.6	0.92	0.96	4.5	0.92	0.96	4.8
Gasoil	4.48	4.49	0.4	4.61	4.49	-2.4	4.56	4.57	0.2	4.41	4.71	7.0	4.42	4.69	6.1
Residual Fuel Oil	1.97	1.92	-2.5	1.98	1.96	-0.9	2.03	1.98	-2.5	2.04	2.07	1.7	1.99	1.89	-4.8
Other Products	1.09	1.14	4.9	1.23	1.28	3.8	1.11	1.15	4.0	1.15	1.29	12.1	1.20	1.19	-1.4
Total	**13.35**	**13.41**	**0.5**	**13.66**	**13.35**	**-2.2**	**13.52**	**13.44**	**-0.6**	**13.41**	**14.04**	**4.7**	**13.56**	**13.70**	**1.1**
Pacific															
LPG	0.70	0.66	-6.1	0.66	0.65	-0.8	0.71	0.69	-2.3	0.61	0.63	3.2	0.62	0.64	3.4
Naphtha	0.74	0.72	-3.2	0.72	0.68	-5.8	0.74	0.72	-1.8	0.70	0.79	12.5	0.78	0.79	1.8
Motor Gasoline	1.21	1.24	1.8	1.21	1.20	-0.2	1.19	1.23	2.9	1.28	1.32	3.6	1.40	1.40	-0.5
Jet/Kerosene	0.53	0.58	10.3	0.52	0.54	4.7	0.57	0.64	11.9	0.52	0.55	5.0	0.53	0.54	2.9
Gasoil	1.37	1.42	3.6	1.43	1.40	-2.1	1.41	1.45	3.0	1.41	1.49	6.1	1.43	1.42	-0.6
Residual Fuel Oil	0.77	0.70	-9.5	0.77	0.72	-6.3	0.80	0.73	-9.1	0.82	0.82	-0.8	0.92	0.78	-14.9
Other Products	0.69	0.69	-0.6	0.65	0.71	10.4	0.73	0.70	-3.7	0.68	0.73	7.7	0.86	0.79	-8.9
Total	**6.03**	**6.01**	**-0.3**	**5.96**	**5.92**	**-0.6**	**6.16**	**6.17**	**0.3**	**6.02**	**6.33**	**5.2**	**6.54**	**6.36**	**-2.7**
OECD															
LPG	3.51	3.61	2.9	3.38	3.47	2.6	3.56	3.62	1.8	3.20	3.48	8.7	3.34	3.57	6.9
Naphtha	2.15	2.11	-2.2	2.06	1.97	-4.4	2.13	2.02	-4.9	2.06	2.11	2.2	2.18	2.17	-0.7
Motor Gasoline	12.84	12.97	1.0	13.25	12.97	-2.1	12.82	12.93	0.8	12.93	13.37	3.4	13.50	13.50	0.0
Jet/Kerosene	3.00	3.07	2.4	2.91	3.15	8.2	2.98	3.18	6.6	3.05	3.23	5.9	3.11	3.25	4.6
Gasoil	9.23	9.52	3.2	9.74	9.54	-2.1	9.50	9.71	2.2	8.95	9.69	8.2	9.34	9.76	4.4
Residual Fuel Oil	3.69	3.63	-1.5	3.82	3.62	-5.2	3.83	3.66	-4.4	3.78	3.97	4.9	3.93	3.72	-5.4
Other Products	4.33	4.46	2.9	4.62	4.73	2.6	4.36	4.46	2.2	4.62	4.80	3.9	4.91	4.84	-1.5
Total	**38.74**	**39.37**	**1.6**	**39.79**	**39.46**	**-0.8**	**39.20**	**39.59**	**1.0**	**38.61**	**40.65**	**5.3**	**40.32**	**40.80**	**1.2**

Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply.

Jet/kerosene comprises jet kerosene and non-aviation kerosene grades. Gasoil comprises diesel, light heating oil and other gasoils.

North America comprises US 50 States, territories and Canada.

Figures above are unadjusted trade data submitted to the IEA Secretariat in the Monthly Oil and Gas Questionnaire. Regional total for Europe may differ slightly from those in Table 1 since the latter incorporate adjustments from other sources.

Table 3

OIL DEMAND IN SELECTED OECD COUNTRIES

(million barrels per day)

	Second Quarter			July			August			September			Third Quarter		
	1995	1996	%	1995	1996	%	1995	1996	%	1995	1996	%	1995	1996	%
United States															
LPG	1.75	1.83	4.7	1.58	1.80	14.1	1.73	1.87	8.4	1.89	1.86	-1.8	1.73	1.84	6.5
Naphtha	0.20	0.21	6.6	0.22	0.21	-0.9	0.21	0.24	17.0	0.19	0.25	32.0	0.20	0.24	15.2
Motor Gasoline	7.92	7.99	0.8	7.89	8.14	3.1	8.19	8.22	0.4	7.79	7.64	-1.9	7.96	8.00	0.6
Jet/Kerosene	1.47	1.54	4.9	1.49	1.59	6.5	1.54	1.60	4.2	1.53	1.64	7.8	1.52	1.61	6.1
Gasoil	3.09	3.23	4.6	2.73	3.05	11.5	3.04	3.18	4.6	3.28	3.18	-3.3	3.02	3.14	3.9
Residual Fuel Oil	0.82	0.77	-6.3	0.76	0.90	18.8	0.82	0.86	5.0	0.85	0.72	-14.7	0.81	0.83	2.6
Other Products	2.27	2.35	3.2	2.48	2.46	-1.0	2.52	2.53	0.6	2.50	2.31	-7.6	2.50	2.44	-2.6
Total	**17.52**	**17.91**	**2.2**	**17.15**	**18.14**	**5.8**	**18.04**	**18.51**	**2.6**	**18.03**	**17.60**	**-2.3**	**17.74**	**18.09**	**2.0**
Japan															
LPG	0.62	0.61	-1.1	0.52	0.56	6.6	0.53	0.57	6.8	0.53	0.56	5.4	0.53	0.56	6.2
Naphtha	0.73	0.72	-1.8	0.69	0.78	12.6	0.77	0.78	1.8	0.74	0.72	-2.2	0.73	0.76	3.9
Motor Gasoline	0.84	0.88	4.1	0.94	0.98	3.8	1.04	1.04	0.1	0.89	0.89	-0.1	0.96	0.97	1.3
Jet/Kerosene	0.48	0.54	13.2	0.42	0.44	4.8	0.43	0.44	2.3	0.49	0.49	-0.7	0.44	0.45	2.0
Diesel*	0.72	0.75	5.2	0.75	0.79	5.5	0.76	0.74	-1.9	0.76	0.74	-2.1	0.75	0.76	0.5
Other Gasoil*	0.46	0.45	-3.0	0.44	0.46	5.1	0.44	0.45	1.0	0.48	0.47	-2.4	0.45	0.46	1.1
Residual Fuel Oil	0.74	0.68	-7.8	0.77	0.75	-2.6	0.87	0.74	-15.5	0.83	0.72	-12.4	0.82	0.74	-10.4
Direct use of Crude Oil	0.25	0.22	-13.9	0.23	0.31	38.1	0.37	0.35	-3.7	0.28	0.28	-1.7	0.29	0.32	7.9
Other Products	0.33	0.36	8.5	0.32	0.32	-1.1	0.35	0.34	-3.6	0.37	0.40	6.8	0.35	0.35	0.8
Total	**5.18**	**5.21**	**0.7**	**5.08**	**5.39**	**6.0**	**5.56**	**5.45**	**-2.0**	**5.37**	**5.27**	**-1.9**	**5.34**	**5.37**	**0.6**
Germany															
LPG	0.12	0.10	-19.2	0.11	0.11	2.5	0.11	0.11	8.9	0.12	0.11	-10.0	0.11	0.11	0.1
Naphtha	0.34	0.32	-5.8	0.30	0.31	5.4	0.31	0.32	2.9	0.32	0.29	-8.8	0.31	0.31	-0.2
Motor Gasoline	0.72	0.71	-1.4	0.71	0.73	1.9	0.72	0.71	-1.4	0.72	0.71	-2.3	0.72	0.71	-0.6
Jet/Kerosene	0.13	0.13	0.2	0.14	0.15	0.7	0.14	0.14	3.5	0.14	0.14	3.1	0.14	0.14	2.4
Diesel	0.45	0.44	-2.2	0.44	0.45	3.1	0.46	0.44	-3.8	0.46	0.49	5.6	0.45	0.46	1.6
Other Gasoil	0.79	0.78	-1.6	0.77	0.85	10.7	0.80	0.98	21.6	0.80	1.01	27.1	0.79	0.95	19.8
Residual Fuel Oil	0.18	0.17	-6.1	0.20	0.18	-11.6	0.19	0.17	-9.7	0.20	0.17	-16.8	0.20	0.17	-12.7
Other Products	0.17	0.17	-0.2	0.17	0.19	12.9	0.20	0.16	-19.2	0.20	0.20	-2.2	0.19	0.18	-3.8
Total	**2.90**	**2.82**	**-3.0**	**2.84**	**2.97**	**4.5**	**2.93**	**3.04**	**3.8**	**2.96**	**3.11**	**5.1**	**2.91**	**3.04**	**4.5**
Italy															
LPG	0.09	0.09	-3.8	0.08	0.09	20.1	0.09	0.09	0.9	0.10	0.10	-4.9	0.09	0.09	4.4
Naphtha	0.13	0.13	-3.7	0.12	0.13	14.1	0.13	0.13	-0.2	0.12	0.13	10.5	0.12	0.13	7.9
Motor Gasoline	0.42	0.43	1.1	0.43	0.46	7.5	0.44	0.44	-0.5	0.44	0.42	-3.4	0.44	0.44	1.2
Jet/Kerosene	0.07	0.07	4.4	0.07	0.08	14.9	0.07	0.07	9.6	0.07	0.08	9.4	0.07	0.08	11.3
Diesel	0.32	0.32	0.7	0.32	0.33	3.6	0.27	0.24	-7.9	0.35	0.27	-21.6	0.31	0.28	-8.9
Other Gasoil	0.12	0.10	-15.3	0.13	0.14	8.4	0.12	0.13	2.7	0.18	0.24	36.6	0.14	0.17	18.1
Residual Fuel Oil	0.55	0.52	-5.4	0.55	0.63	15.3	0.49	0.45	-7.3	0.55	0.54	-0.7	0.53	0.54	2.9
Other Products	0.11	0.11	-2.0	0.13	0.14	1.7	0.09	0.09	0.6	0.12	0.13	8.0	0.12	0.12	3.6
Total	**1.82**	**1.77**	**-2.7**	**1.83**	**2.01**	**10.1**	**1.69**	**1.64**	**-2.8**	**1.93**	**1.92**	**-0.2**	**1.81**	**1.86**	**2.4**
France															
LPG	0.10	0.09	-8.9	0.08	0.09	1.3	0.08	0.08	-5.4	0.10	0.09	-7.9	0.09	0.09	-4.2
Naphtha	0.21	0.17	-20.3	0.24	0.17	-31.5	0.24	0.19	-18.8	0.19	0.15	-19.2	0.22	0.17	-23.6
Motor Gasoline	0.37	0.36	-4.2	0.40	0.39	-2.0	0.39	0.38	-2.0	0.36	0.35	-4.9	0.39	0.37	-2.9
Jet/Kerosene	0.10	0.11	8.3	0.12	0.12	6.0	0.12	0.12	3.5	0.11	0.11	1.4	0.11	0.12	3.7
Diesel	0.47	0.48	2.5	0.46	0.51	10.3	0.43	0.45	5.0	0.47	0.48	1.5	0.45	0.48	5.6
Other Gasoil	0.31	0.30	-4.6	0.38	0.37	-0.1	0.26	0.33	29.2	0.38	0.43	13.9	0.34	0.38	12.6
Residual Fuel Oil	0.12	0.15	18.7	0.13	0.11	-11.8	0.13	0.11	-16.2	0.14	0.13	-13.0	0.13	0.12	-13.6
Other Products	0.15	0.20	36.0	0.15	0.22	45.3	0.17	0.18	6.8	0.16	0.20	24.8	0.16	0.20	24.9
Total	**1.85**	**1.86**	**0.8**	**1.96**	**1.99**	**1.3**	**1.82**	**1.85**	**1.9**	**1.92**	**1.94**	**1.1**	**1.90**	**1.93**	**1.4**
United Kingdom															
LPG	0.16	0.18	8.8	0.17	0.17	-3.0	0.15	0.18	19.0	0.16	0.18	13.5	0.16	0.18	9.2
Naphtha	0.07	0.07	-5.5	0.05	0.06	12.1	0.07	0.07	0.4	0.08	0.07	-5.1	0.07	0.07	1.5
Motor Gasoline	0.51	0.52	2.9	0.49	0.53	7.8	0.52	0.51	-0.6	0.50	0.51	1.0	0.50	0.52	2.7
Jet/Kerosene	0.22	0.23	8.1	0.22	0.24	9.0	0.23	0.24	5.4	0.25	0.26	3.4	0.23	0.25	5.9
Diesel	0.27	0.29	7.6	0.26	0.30	15.9	0.27	0.29	6.5	0.28	0.30	6.5	0.27	0.30	9.6
Other Gasoil	0.18	0.18	0.3	0.16	0.18	11.1	0.17	0.18	2.4	0.18	0.20	12.3	0.17	0.18	8.5
Residual Fuel Oil	0.17	0.16	-3.6	0.16	0.12	-24.3	0.18	0.14	-21.7	0.16	0.16	4.8	0.17	0.14	-14.4
Other Products	0.20	0.18	-6.3	0.19	0.20	3.7	0.18	0.19	6.2	0.19	0.20	7.5	0.19	0.20	5.8
Total	**1.77**	**1.81**	**2.6**	**1.71**	**1.80**	**5.1**	**1.77**	**1.80**	**1.8**	**1.79**	**1.89**	**5.2**	**1.76**	**1.83**	**4.0**
Canada															
LPG	0.25	0.27	10.5	0.25	0.26	2.0	0.25	0.26	6.8	0.31	0.30	-3.0	0.27	0.27	1.6
Naphtha	0.08	0.07	-6.7	0.08	0.08	8.7	0.07	0.09	18.0	0.07	0.06	-3.4	0.07	0.08	8.3
Motor Gasoline	0.60	0.61	1.5	0.63	0.65	3.4	0.67	0.68	0.8	0.62	0.60	-2.9	0.64	0.64	0.5
Jet/Kerosene	0.08	0.09	10.4	0.09	0.11	17.7	0.10	0.12	18.6	0.10	0.11	8.5	0.10	0.11	15.0
Diesel	0.15	0.15	0.0	0.15	0.15	0.0	0.16	0.16	0.0	0.17	0.16	-0.7	0.16	0.16	-0.3
Other Gasoil	0.26	0.27	5.6	0.22	0.25	12.7	0.24	0.26	4.6	0.28	0.27	-2.0	0.25	0.26	4.6
Residual Fuel Oil	0.10	0.10	0.3	0.10	0.11	16.4	0.13	0.11	-17.0	0.13	0.11	-13.7	0.12	0.11	-6.7
Other Products	0.23	0.23	0.9	0.28	0.29	4.2	0.29	0.30	2.1	0.25	0.25	0.0	0.27	0.28	2.2
Total	**1.74**	**1.80**	**3.1**	**1.79**	**1.90**	**5.9**	**1.91**	**1.96**	**2.6**	**1.91**	**1.86**	**-2.4**	**1.87**	**1.91**	**2.0**

Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply.

Jet/kerosene comprises jet kerosene and non-aviation kerosene grades. Gasoil comprises diesel, light heating oil and other gasoils.

US figures do not include territories.

* In Japan, the breakdown between Diesel and Other Gasoil in the latest month is estimated using the same split between the two products as last year.

Table 4

WORLD OIL PRODUCTION

(million barrels per day)

	1995	1996[f]	1997[f]	4Q95	1Q96	2Q96	3Q96[p]	4Q96[f]	Sep96	Oct96[p]	Nov96[p]
OPEC[1]											
Crude Oil											
Saudi Arabia	7.94			7.92	7.95	7.84	7.93		7.95	7.90	8.00
Iran	3.65			3.68	3.69	3.62	3.71		3.67	3.65	3.72
Iraq	0.55			0.55	0.55	0.55	0.55		0.55	0.55	0.55
UAE	2.19			2.16	2.20	2.20	2.22		2.25	2.28	2.19
Kuwait	1.84			1.84	1.84	1.79	1.80		1.80	1.80	1.82
Neutral Zone	0.43			0.43	0.46	0.47	0.48		0.51	0.51	0.52
Qatar	0.45			0.46	0.47	0.48	0.49		0.51	0.51	0.49
Nigeria	1.93			2.01	2.09	2.13	2.15		2.15	2.20	2.19
Libya	1.41			1.40	1.38	1.39	1.40		1.41	1.39	1.40
Algeria	0.76			0.79	0.78	0.81	0.83		0.84	0.85	0.85
Venezuela	2.58			2.71	2.89	2.94	3.02		3.03	3.03	3.03
Indonesia	1.34			1.34	1.38	1.41	1.38		1.35	1.42	1.39
Total Crude Oil	25.06			25.30	25.68	25.62	25.95		26.00	26.07	26.14
NGLs[2]	2.42	2.62	2.81	2.48	2.51	2.55	2.69	2.73	2.70	2.68	2.74
TOTAL OPEC	27.48			27.78	28.18	28.18	28.64		28.70	28.75	28.88
NON-OPEC[1,3]											
OECD											
North America	11.01	11.05	11.03	11.01	10.99	10.96	10.98	11.28	11.03	11.18	11.25
United States	8.61	8.61	8.54	8.57	8.54	8.59	8.55	8.75	8.64	8.68	8.72
Canada	2.40	2.44	2.49	2.44	2.45	2.37	2.43	2.53	2.39	2.51	2.53
Europe	6.31	6.77	7.63	6.73	6.64	6.56	6.51	7.35	6.54	6.73	7.47
UK	2.79	2.86	3.44	2.94	2.83	2.73	2.67	3.22	2.72	2.91	3.25
Norway	2.91	3.28	3.50	3.19	3.21	3.22	3.23	3.45	3.20	3.17	3.55
Others	0.61	0.62	0.69	0.61	0.60	0.61	0.61	0.67	0.62	0.65	0.67
Pacific	0.67	0.74	0.82	0.64	0.68	0.74	0.74	0.79	0.71	0.75	0.80
Australia	0.58	0.62	0.71	0.54	0.58	0.62	0.62	0.66	0.58	0.62	0.67
Others	0.10	0.12	0.11	0.10	0.10	0.12	0.12	0.13	0.13	0.13	0.13
Total OECD	17.99	18.55	19.48	18.38	18.31	18.25	18.23	19.41	18.28	18.67	19.52
Non-OECD											
Former USSR	7.12	7.03	7.21	7.09	7.00	7.00	7.07	7.06	7.02	6.98	7.08
Russia	6.15	6.00	6.05	6.07	6.01	5.99	6.04	5.97	5.98	5.96	5.98
Others	0.97	1.03	1.16	1.02	0.99	1.01	1.03	1.09	1.03	1.02	1.11
Asia	5.06	5.12	5.21	5.14	5.10	5.10	5.07	5.18	5.02	5.14	5.17
China	2.99	3.14	3.18	3.03	3.10	3.14	3.10	3.20	3.05	3.16	3.19
Malaysia	0.76	0.72	0.71	0.81	0.72	0.71	0.72	0.72	0.72	0.72	0.72
India	0.70	0.65	0.69	0.69	0.68	0.64	0.63	0.65	0.63	0.64	0.65
Others	0.61	0.61	0.64	0.62	0.60	0.61	0.62	0.62	0.62	0.62	0.62
Europe	0.27	0.27	0.28	0.27	0.28	0.27	0.27	0.28	0.27	0.27	0.28
Latin America	6.06	6.53	6.96	5.90	6.47	6.52	6.44	6.68	6.45	6.52	6.67
Mexico	3.07	3.31	3.40	2.84	3.31	3.35	3.23	3.36	3.21	3.23	3.34
Brazil	0.91	1.02	1.24	0.96	1.00	0.99	0.99	1.09	1.02	1.06	1.09
Argentina	0.76	0.82	0.80	0.78	0.80	0.82	0.84	0.83	0.84	0.83	0.83
Colombia	0.59	0.64	0.76	0.61	0.63	0.63	0.64	0.67	0.65	0.66	0.67
Ecuador	0.38	0.39	0.41	0.38	0.39	0.39	0.38	0.38	0.38	0.38	0.38
Others	0.35	0.35	0.36	0.35	0.34	0.34	0.35	0.36	0.36	0.36	0.36
Middle East[4]	1.87	1.90	1.96	1.88	1.87	1.88	1.91	1.93	1.92	1.93	1.93
Oman	0.86	0.89	0.91	0.87	0.87	0.88	0.90	0.91	0.91	0.91	0.91
Syria	0.59	0.60	0.62	0.59	0.60	0.60	0.60	0.61	0.60	0.61	0.61
Yemen	0.37	0.36	0.38	0.37	0.35	0.35	0.36	0.36	0.36	0.36	0.36
Africa	2.59	2.73	2.97	2.62	2.63	2.69	2.74	2.84	2.76	2.79	2.83
Egypt	0.95	0.93	0.97	0.95	0.94	0.93	0.91	0.92	0.89	0.90	0.92
Angola	0.65	0.72	0.80	0.67	0.67	0.72	0.72	0.75	0.73	0.75	0.75
Gabon	0.35	0.35	0.36	0.35	0.36	0.36	0.35	0.35	0.35	0.35	0.35
Others	0.65	0.73	0.84	0.66	0.66	0.68	0.76	0.82	0.78	0.80	0.82
Total Non-OECD	22.97	23.58	24.59	22.90	23.34	23.45	23.50	23.97	23.44	23.63	23.96
Processing Gains[5]	1.46	1.52	1.57	1.49	1.52	1.50	1.50	1.55	1.50	1.55	1.55
TOTAL NON-OPEC	42.41	43.64	45.64	42.77	43.16	43.21	43.23	44.94	43.22	43.85	45.02
TOTAL SUPPLY	**69.89**			**70.55**	**71.35**	**71.38**	**71.86**		**71.92**	**72.60**	**73.91**

1 Gabon is identified separately as a non-OPEC producer country throughout the period covered by this table for the purposes of comparison.
2 Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Orimulsion, and non oil inputs to Saudi Arabian MTBE.
3 Comprises crude oil, condensates, NGLs and oil from non-conventional sources.
4 Includes small amounts of production from Israel, Jordan and Bahrain.
5 Net of volumetric gains and losses in refining (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.
p preliminary
f forecast

Table 4A
OIL SUPPLY IN OECD COUNTRIES[1]
(thousand barrels per day)

	September		3rd Quarter 96		October		November		4th Quarter 96f		1997f	
	Level	Change[2]	Level	Change	Level	Change	Level	Change	Level	Change	Level	Change
United States												
Alaska	1404	78	1349	-28	1414	10	1418	4	1436	86	1392	-15
California (inc. offshore)	945	-8	947	-2	949	4	932	-17	942	-5	919	-31
Texas	1453	-20	1474	-7	1446	-7	1440	-6	1440	-34	1323	-150
Offshore Gulf of Mexico	1169	32	1127	26	1208	39	1251	43	1246	118	1436	308
Other US Lower 48	1524	24	1523	-37	1460	-64	1487	27	1464	-59	1331	-194
NGLs[3]	1878	12	1859	32	1885	7	1900	15	1917	57	1824	-5
Other Hydrocarbons	267	-8	271	-23	315	48	295	-20	305	34	313	16
Total	**8639**	**110**	**8551**	**-39**	**8676**	**37**	**8723**	**46**	**8750**	**199**	**8537**	**-70**
Canada												
Alberta Light & Medium	640	-37	664	-7	690	50	680	-10	682	18	653	-25
Alberta Heavy	275	6	270	15	272	-3	258	-14	262	-9	277	17
Alberta Bitumen	156	-2	159	13	160	4	150	-10	157	-3	156	2
Saskatchewan	353	-7	353	16	362	9	373	11	370	16	375	25
Other Conventional	99	-6	101	-2	103	4	103	0	102	1	92	-9
NGLs	563	-55	594	4	618	55	644	26	643	49	633	18
Syncrudes	300	20	286	26	302	3	318	16	317	31	305	20
Total	**2386**	**-81**	**2428**	**64**	**2507**	**121**	**2526**	**19**	**2532**	**103**	**2491**	**48**
United Kingdom[4]												
Brent Fields	447	-33	463	0	475	28	547	72	545	82	514	20
Forties Fields	882	14	870	-13	936	54	1030	94	1018	149	1034	112
Ninian Fields	322	82	293	-20	310	-12	336	26	332	39	323	9
Flotta Fields	224	33	217	3	216	-8	249	33	243	25	243	14
Other Offshore Fields	500	32	492	-13	601	101	671	70	669	178	892	360
NGLs	241	21	228	-16	277	36	314	37	313	85	317	54
Total	**2616**	**148**	**2563**	**-59**	**2815**	**199**	**3146**	**331**	**3120**	**557**	**3325**	**568**
Norway[4]												
Ekofisk/Ula Area	512	-12	512	9	519	8	544	25	545	33	521	11
Oseberg Area	923	21	921	24	931	8	961	29	953	32	939	20
Statfjord-Gullfaks-Snorre	1249	157	1197	-35	1044	-205	1332	288	1239	42	1153	-70
Haltenbanken	262	-129	343	-3	389	126	391	2	398	56	460	104
Sleipner/Frigg	123	8	120	13	150	27	177	27	171	51	280	150
Plant Condensate (as NGLs)	6	-2	8	-0	10	4	10	0	10	3	7	-1
Lighter NGLs	123	-9	130	4	131	8	132	1	132	3	135	3
Total	**3199**	**34**	**3230**	**10**	**3174**	**-25**	**3546**	**372**	**3450**	**220**	**3495**	**217**
Other OECD Europe												
Other North Sea	270	10	263	30	278	8	286	8	286	23	293	44
Onshore U.K.	102	-10	109	1	97	-5	102	5	104	-6	115	8
Italy	98	-12	102	3	105	7	115	10	113	11	130	28
Turkey	66	-1	67	-3	67	1	66	-1	67	-0	64	-3
Other	141	-6	143	-5	143	2	145	2	146	3	144	-0
NGLs	21	13	14	-21	24	2	29	5	27	13	32	-2
Non-Conventional Oils	21	0	21	1	30	9	31	1	31	9	29	6
Total	**720**	**-5**	**720**	**6**	**744**	**24**	**775**	**30**	**774**	**54**	**808**	**80**
Australia												
Gippsland Basin	196	-2	200	-1	201	5	208	7	208	8	193	-10
Cooper/Eromanga	34	1	35	-0	34	-0	35	0	34	-1	34	-1
Carnarvon Basin	264	-15	286	4	292	29	342	49	329	43	395	106
Bonaparte Basin	13	-12	22	-4	13	-1	13	-0	15	-7	22	1
Other Fields	6	-0	6	0	6	0	6	-0	6	0	6	-0
NGLs	67	-0	68	-1	70	3	65	-5	65	-3	61	-5
Total	**581**	**-28**	**617**	**-3**	**617**	**36**	**668**	**51**	**657**	**40**	**711**	**91**
Other OECD Pacific												
New Zealand	56	15	46	8	55	-1	50	-5	51	5	36	-6
Japan	10	-1	10	-1	11	1	11	0	11	1	11	0
NGLs	13	0	13	1	14	1	13	-1	13	0	14	1
Synthetic Fuels	53	1	53	-1	54	1	55	1	55	2	51	-1
Total	**132**	**15**	**122**	**7**	**134**	**2**	**129**	**-5**	**130**	**9**	**111**	**-5**
OECD												
Crude Oil	14710	195	14678	-27	14926	216	15693	767	15570	892	15743	826
NGLs	2923	-16	2921	11	3040	117	3120	80	3135	213	3037	62
Non-Conventional Oils	641	13	631	3	701	61	699	-2	707	76	698	41
Total	**18274**	**193**	**18231**	**-12**	**18668**	**394**	**19512**	**844**	**19412**	**1182**	**19478**	**929**

1 Subcategories refer to crude oil only unless otherwise noted.
2 All changes are period to period not year-on-year.
3 To the extent possible, condensates derived from natural gas processing plants are included with NGLs, whereas field condensates are counted as crude oil.
4 North Sea production is grouped by area including all fields being processed through the named facility, i.e. not just the field of that name.

Table 5

OECD INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Jun96	Jul96	Aug96*	Sep96*	Oct96*	Oct93	Oct94	Oct95	Q495	Q196	Q296	Q396
North America												
Crude	378	374	381	370	379	395	413	381	-0.05	-0.02	0.13	-0.08
Gasoline	224	221	210	218	213	230	219	218	0.03	0.05	-0.04	-0.06
Middle Distillate	167	174	178	188	189	216	223	203	-0.04	-0.57	0.19	0.23
Residual Fuel Oil	44	44	44	46	49	55	51	47	-0.04	-0.05	0.04	0.02
Total Products[3]	584	592	587	611	600	683	658	638	-0.38	-0.80	0.43	0.29
Total[4]	1113	1122	1126	1137	1138	1257	1247	1184	-0.74	-0.87	0.72	0.25
Europe												
Crude	317	332	316	314	314	302	303	303	0.22	0.01	0.09	-0.03
Gasoline	128	126	120	126	122	124	121	119	0.06	0.11	-0.10	-0.03
Middle Distillate	212	218	215	206	213	228	241	241	-0.33	-0.24	0.20	-0.07
Residual Fuel Oil	91	93	97	95	98	102	97	105	-0.05	-0.18	0.07	0.04
Total Products[3]	516	519	517	509	515	538	544	556	-0.33	-0.37	0.16	-0.08
Total[4]	889	906	890	881	887	899	905	916	-0.08	-0.38	0.26	-0.09
Pacific												
Crude	170	152	156	155	168	173	152	165	-0.09	0.10	-0.01	-0.16
Gasoline	20	23	21	22	21	22	20	22	-0.01	0.01	-0.02	0.01
Middle Distillate	50	58	68	75	74	73	80	70	-0.17	-0.12	0.09	0.27
Residual Fuel Oil	15	16	16	16	16	19	16	15	-0.01	0.00	0.01	0.00
Total Products[3]	141	155	164	172	170	169	174	167	-0.21	-0.16	0.14	0.34
Total[4]	389	389	408	419	422	429	411	414	-0.42	-0.03	0.14	0.32
Total												
Crude	864	858	852	839	861	870	868	848	0.07	0.09	0.21	-0.27
Gasoline	372	370	351	366	357	376	360	360	0.07	0.17	-0.15	-0.07
Middle Distillate	429	450	461	469	476	517	544	514	-0.53	-0.93	0.48	0.43
Residual Fuel Oil	150	152	156	156	163	176	163	167	-0.10	-0.24	0.12	0.07
Total Products[3]	1241	1266	1268	1292	1286	1389	1376	1361	-0.92	-1.33	0.73	0.56
Total[4]	2391	2417	2424	2436	2447	2585	2562	2514	-1.24	-1.28	1.12	0.49

OECD GOVERNMENT-CONTROLLED STOCKS[5] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES[3] in mb/d			
	Jun96	Jul96	Aug96*	Sep96*	Oct96*	Oct93	Oct94	Oct95	Q495	Q196	Q296	Q396
North America												
Crude	584	583	578	574	574	586	592	592	0.00	-0.03	-0.05	-0.12
Europe												
Crude	133	134	134	134	134	135	134	134	0.00	0.00	-0.01	0.01
Products	185	186	187	186	186	186	187	184	-0.01	0.04	-0.02	0.01
Pacific												
Crude	299	299	299	300	300	252	272	296	0.07	0.01	0.00	0.00
Total												
Crude	1017	1016	1011	1007	1007	973	998	1021	0.07	-0.02	-0.06	-0.11
Products	185	186	187	186	186	186	187	184	-0.01	0.04	-0.02	0.01
Total[4]	1203	1202	1198	1193	1193	1158	1185	1205	0.06	0.02	-0.08	-0.10

* Estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known). They include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing Stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 6

INDUSTRY STOCKS[1] ON LAND IN SELECTED COUNTRIES

(million barrels)

	May			June			July			August			September		
	1995	1996	%	1995	1996	%	1995	1996	%	1995	1996	%	1995	1996	%
United States															
Crude	332.4	304.8	-8.3	327.9	314.3	-4.2	315.6	309.6	-1.9	307.8	315.2	2.4	305.8	304.3	-0.5
Motor Gasoline	208.0	205.1	-1.4	204.6	204.6	0.0	207.1	201.5	-2.7	192.2	191.5	-0.4	198.5	200.4	1.0
Middle Distillate	160.5	135.3	-15.7	158.6	143.2	-9.7	170.4	148.4	-12.9	175.5	152.9	-12.9	178.5	162.9	-8.8
Residual Fuel Oil	38.6	34.3	-11.1	36.0	34.9	-2.9	36.8	34.8	-5.5	37.9	35.8	-5.6	39.6	37.6	-5.1
Other Products	140.6	121.9	-13.3	147.9	130.9	-11.5	159.0	136.4	-14.2	162.5	137.9	-15.1	159.9	140.5	-12.1
Total Products	547.7	496.7	-9.3	547.1	513.6	-6.1	573.3	521.1	-9.1	568.1	518.1	-8.8	576.5	541.4	-6.1
Other [2]	140.0	132.1	-5.6	142.2	133.2	-6.4	143.8	136.2	-5.3	146.8	136.4	-7.1	145.6	134.3	-7.8
Total	**1020.0**	**933.6**	**-8.5**	**1017.3**	**961.1**	**-5.5**	**1032.8**	**966.9**	**-6.4**	**1022.6**	**969.8**	**-5.2**	**1028.0**	**980.0**	**-4.7**
Japan															
Crude	143.2	151.2	5.5	159.4	152.7	-4.2	163.0	136.4	-16.3	149.9	140.1	-6.5	150.7	138.1	-8.4
Motor Gasoline	14.9	13.9	-7.3	13.4	11.6	-13.7	12.3	11.6	-5.6	12.3	11.7	-5.0	12.8	12.0	-5.8
Middle Distillate	48.5	40.5	-16.5	46.9	42.3	-9.7	51.5	47.9	-7.0	57.0	58.6	2.9	58.3	63.3	8.5
Residual Fuel Oil	14.2	12.7	-10.5	14.3	12.6	-12.0	14.8	12.9	-12.7	13.0	13.1	0.6	12.2	12.5	2.3
Other Products	48.1	49.7	3.4	44.9	49.7	10.8	46.4	52.8	13.8	53.5	54.2	1.3	53.1	54.7	3.1
Total Products	125.7	116.8	-7.1	119.5	116.3	-2.7	125.1	125.2	0.2	135.8	137.6	1.3	136.3	142.5	4.5
Other [2]	82.4	73.3	-11.0	77.4	71.9	-7.1	79.1	75.6	-4.4	78.4	80.8	3.0	78.2	84.3	7.8
Total	**351.3**	**341.2**	**-2.9**	**356.3**	**340.8**	**-4.3**	**367.2**	**337.3**	**-8.1**	**364.1**	**358.5**	**-1.5**	**365.2**	**364.8**	**-0.1**
Germany															
Crude	22.8	20.9	-8.3	20.7	20.9	1.0	23.1	19.1	-17.5	22.1	21.1	-4.6	18.8	22.1	17.5
Motor Gasoline	10.0	9.7	-3.4	10.8	11.4	5.6	11.0	11.2	1.9	11.5	8.6	-24.6	12.1	9.5	-21.1
Middle Distillate	17.5	15.6	-11.0	17.0	15.3	-10.4	17.4	18.5	6.0	17.8	15.6	-12.4	19.0	14.2	-25.5
Residual Fuel Oil	9.5	8.9	-6.2	10.1	8.3	-17.8	10.5	8.3	-21.2	10.1	9.1	-10.8	9.7	9.1	-5.6
Other Products	12.6	11.2	-10.7	11.8	11.9	1.2	12.0	11.6	-3.7	11.9	11.5	-3.6	12.0	11.1	-7.7
Total Products	49.6	45.4	-8.5	49.7	46.9	-5.7	50.9	49.5	-2.8	51.3	44.8	-12.8	52.8	43.9	-16.8
Other [2]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**72.3**	**66.2**	**-8.4**	**70.4**	**67.8**	**-3.7**	**74.0**	**68.6**	**-7.4**	**73.4**	**65.9**	**-10.3**	**71.6**	**66.0**	**-7.8**
Italy															
Crude	42.6	39.5	-7.3	42.7	39.6	-7.2	45.8	37.5	-18.0	45.8	36.5	-20.4	39.7	36.2	-8.9
Motor Gasoline	23.1	21.2	-8.0	22.2	21.0	-5.5	21.5	21.6	0.6	19.6	21.0	6.9	19.6	23.0	17.4
Middle Distillate	34.7	35.1	1.0	36.0	34.9	-3.0	35.2	33.4	-4.9	36.4	37.4	2.8	36.9	39.2	6.5
Residual Fuel Oil	22.3	23.0	3.0	24.3	24.9	2.1	24.4	25.2	3.2	26.6	26.9	1.1	23.4	27.0	15.5
Other Products	7.7	9.9	28.5	7.4	9.4	28.0	8.7	8.5	-2.3	9.5	8.4	-12.2	9.4	7.4	-21.0
Total Products	87.8	89.1	1.5	89.9	90.2	0.3	89.8	88.8	-1.1	92.1	93.7	1.6	89.2	96.7	8.3
Other [2]	5.2	4.7	-9.2	5.6	4.5	-19.1	5.4	5.2	-3.9	5.2	5.4	4.6	4.6	5.7	22.3
Total	**135.6**	**133.3**	**-1.7**	**138.1**	**134.3**	**-2.8**	**141.0**	**131.5**	**-6.7**	**143.2**	**135.6**	**-5.3**	**133.5**	**138.5**	**3.7**
France															
Crude	37.2	40.3	8.3	41.0	37.6	-8.4	47.2	43.4	-8.0	38.0	43.8	15.3	39.1	38.1	-2.6
Motor Gasoline	18.7	20.9	11.9	21.7	21.3	-1.9	16.3	20.2	24.0	16.1	17.1	5.8	17.1	17.3	0.9
Middle Distillate	36.3	39.3	8.1	40.3	38.7	-4.2	34.6	36.3	4.8	41.4	33.1	-20.0	41.9	30.5	-27.3
Residual Fuel Oil	8.1	8.9	11.0	7.8	8.2	4.9	8.4	8.2	-2.4	9.4	8.4	-10.5	8.6	8.4	-2.9
Other Products	8.1	8.5	5.0	8.9	8.5	-5.2	8.5	8.4	-0.4	9.3	10.7	15.6	9.4	10.9	16.1
Total Products	71.2	77.7	9.1	78.7	76.6	-2.8	67.8	73.2	7.9	76.2	69.3	-9.0	77.1	67.1	-13.0
Other [2]	12.2	12.6	3.2	13.4	13.5	0.5	13.3	13.0	-2.2	13.1	12.5	-4.5	13.2	12.5	-5.9
Total	**120.6**	**130.6**	**8.2**	**133.2**	**127.6**	**-4.2**	**128.3**	**129.6**	**1.0**	**127.3**	**125.6**	**-1.3**	**129.5**	**117.7**	**-9.1**
United Kingdom															
Crude	33.5	32.8	-2.2	26.5	32.6	22.9	33.7	35.9	6.4	30.9	31.2	1.2	32.3	35.4	9.8
Motor Gasoline	15.9	14.7	-7.4	15.1	15.2	0.1	15.1	14.2	-6.1	15.9	14.5	-8.3	15.8	15.4	-2.4
Middle Distillate	18.8	18.4	-2.3	18.1	18.8	3.8	18.6	18.2	-2.2	19.2	18.0	-6.5	19.1	17.4	-9.3
Residual Fuel Oil	8.8	7.5	-14.7	8.5	6.5	-23.0	9.2	7.0	-23.8	9.1	7.0	-23.3	8.4	6.8	-18.5
Other Products	12.8	11.7	-9.2	12.1	12.4	2.6	12.8	11.7	-8.0	12.2	11.7	-3.6	12.9	10.8	-15.9
Total Products	56.3	52.2	-7.3	53.8	52.9	-1.7	55.7	51.1	-8.2	56.4	51.3	-9.1	56.2	50.4	-10.2
Other [2]	17.4	16.6	-4.6	17.1	15.2	-11.5	15.8	14.3	-10.0	16.1	14.8	-8.0	16.0	15.2	-4.9
Total	**107.2**	**101.6**	**-5.2**	**97.5**	**100.7**	**3.3**	**105.2**	**101.3**	**-3.8**	**103.3**	**97.3**	**-5.8**	**104.4**	**101.0**	**-3.2**
Canada															
Crude	62.4	59.5	-4.6	75.4	54.7	-27.4	74.6	56.1	-24.8	56.4	56.9	0.8	58.5	57.1	-2.4
Motor Gasoline	21.1	17.2	-18.4	19.7	17.7	-10.2	20.4	17.6	-13.5	19.3	17.0	-12.2	19.9	16.5	-17.4
Middle Distillate	20.4	18.0	-11.9	21.9	20.3	-7.1	22.9	22.3	-2.5	23.6	21.8	-7.5	23.1	21.4	-7.7
Residual Fuel Oil	4.0	4.6	15.6	4.7	5.0	6.5	5.2	4.9	-6.9	5.2	4.2	-19.6	5.5	4.5	-17.1
Other Products	19.5	17.6	-9.8	18.6	16.9	-9.0	18.3	16.0	-12.4	17.7	15.6	-12.1	16.9	16.7	-1.0
Total Products	65.1	57.5	-11.7	65.0	60.0	-7.6	66.8	60.9	-8.9	65.8	58.6	-11.1	65.4	59.1	-9.7
Other [2]	14.4	11.4	-20.6	16.2	13.7	-15.4	16.6	14.3	-13.9	18.1	16.8	-7.7	17.9	16.8	-6.5
Total	**141.8**	**128.4**	**-9.5**	**156.5**	**128.4**	**-17.9**	**158.0**	**131.2**	**-17.0**	**140.4**	**132.2**	**-5.9**	**141.8**	**132.9**	**-6.3**

1 Stocks are primary national territory stocks on land (excluding utilitity stocks and including pipeline and entrepot stocks where known). They include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Other includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

Table 7
TOTAL STOCKS ON LAND IN OECD COUNTRIES

('millions of barrels' and 'days')

	End September 1995		End December 1995		End March 1996		End June 1996 [4]		End September 1996 [3]	
	Stock[1] Level	Days Fwd[2] Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
Canada	141.8	75	131.6	70	131.0	73	128.4	-	-	-
United States	1619.7	90	1562.9	85	1481.9	83	1545.5	-	-	-
NORTH AMERICA	1785.2	89	1718.2	84	1636.7	82	1697.7	84	1710.3	84
Australia	42.7	52	39.1	49	40.1	48	39.0	-	-	-
Japan	657.7	110	630.5	98	626.5	120	640.2	-	-	-
New Zealand	9.4	57	7.8	51	8.6	67	9.0	-	-	-
PACIFIC	709.8	102	677.3	92	675.3	109	688.2	109	718.5	103
Austria	16.9	71	16.9	71	15.7	70	15.7	-	-	-
Belgium	29.7	56	28.5	46	24.9	49	26.9	-	-	-
Denmark	27.4	116	26.2	108	19.4	84	19.2	-	-	-
Finland	21.7	109	28.5	172	24.0	169	22.7	-	-	-
France	157.6	79	155.3	75	153.0	82	156.2	-	-	-
Germany	303.5	108	302.3	103	299.2	106	298.6	-	-	-
Greece	22.6	56	21.7	57	20.3	59	20.9	-	-	-
Ireland	7.8	64	7.3	58	6.2	51	7.2	-	-	-
Italy	139.4	67	141.5	69	135.7	77	140.1	-	-	-
Luxembourg	0.8	22	0.7	18	0.7	19	0.8	-	-	-
Netherlands	116.5	146	107.0	138	97.1	124	105.2	-	-	-
Norway	45.1	236	48.6	234	56.4	277	58.6	-	-	-
Portugal	18.7	64	18.8	74	19.3	72	18.2	-	-	-
Spain	92.3	75	94.2	84	89.7	79	92.7	-	-	-
Sweden	32.8	85	31.9	73	32.2	90	31.3	-	-	-
Switzerland	47.4	183	45.0	188	44.4	187	45.1	-	-	-
Turkey	42.0	68	42.9	73	46.7	80	47.8	-	-	-
United Kingdom	104.4	57	101.1	55	101.9	56	100.7	-	-	-
EUROPE[5]	1226.4	86	1218.4	85	1186.7	88	1207.8	86	1201.0	84
Total	3721.5	90	3613.9	86	3498.6	88	3593.7	89	3629.8	87
DAYS OF IEA NET IMPORTS[6]	-	132	-	128	-	122	-	125	-	-

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known). They include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.
2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used in the IEA's Emergency Sharing System.
3 End June 1996 stock level based on preliminary data.
4 End June and end September 1996 forward demand figures are IEA Secretariat forecasts.
5 Data not available for Iceland.
6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions. Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government[1] controlled	Industry	Total	Government[1] controlled	Industry
	Millions of Barrels			Days of Fwd. Demand[2]		
Q393	3717	1153	2564	92	29	63
Q493	3649	1162	2486	90	29	61
Q194	3534	1175	2359	91	30	61
Q294	3655	1177	2478	92	30	62
Q394	3750	1180	2570	92	29	63
Q494	3720	1190	2530	91	29	62
Q195	3608	1198	2410	92	31	62
Q295	3676	1192	2484	92	30	62
Q395	3722	1202	2520	90	29	61
Q495	3614	1208	2406	86	29	57
Q196	3499	1210	2289	88	31	58
Q296	3594	1203	2391	89	30	59
Q396	3630	1193	2436	87	29	59

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.
2 Days of forward demand calculated using actual demand except in June 1996 and September 1996 (when latest forecasts are used).

Table 8
AVERAGE IEA CIF CRUDE COST AND SPOT CRUDE AND PRODUCT PRICES
($/bbl)

	1993	1994	1995	3Q95	4Q95	1Q96	2Q96	3Q96	Jun96	Jul96	Aug96	Sep96	Oct96	Nov96
Crude Oil Prices														
IEA CIF Average Import	16.37	15.65	17.19	16.42	16.91	18.59	19.78	20.40	18.82	19.48	20.14	21.75	23.50*	23.25*
FOB Spot														
Brent (Dated)	17.00	15.80	17.02	16.18	16.92	18.54	19.51	20.96	18.43	19.58	20.60	22.69	24.15	22.71
WTI (1st month)	18.44	17.19	18.41	17.83	18.12	19.64	21.80	22.43	20.45	21.31	21.96	24.01	24.89	23.92
Urals (Del. Med.)	15.39	15.23	16.62	15.50	16.50	18.52	18.66	20.10	17.25	18.55	19.86	21.90	23.44	22.05
Dubai (1st month)	14.93	14.75	16.10	15.31	15.83	16.43	17.26	18.96	17.25	17.74	18.66	20.47	21.75	20.97
OPEC Basket	16.32	15.53	16.88	15.98	16.70	18.44	19.18	20.30	18.37	19.29	19.94	21.68	23.28	22.20*
Product Prices[1]														
Rotterdam, Barges FOB														
Premium 0.15 g/l	22.45	20.18	21.25	20.81	20.50	21.18	25.52	24.83	23.16	24.45	24.49	25.56	27.26	26.65
Regular Unleaded	20.70	18.65	19.75	19.38	19.14	19.76	23.86	23.31	21.61	22.94	23.09	23.91	25.50	24.67
Naphtha	18.47	17.30	18.15	17.43	17.14	19.02	20.85	21.90	19.38	20.99	21.43	23.27	25.18	25.00
Jet/Kerosene	23.37	20.95	21.60	21.57	22.38	25.07	23.78	27.48	22.69	25.01	26.21	31.21	33.53	31.26
Gasoil	22.28	19.80	20.47	20.49	21.04	23.97	23.16	26.41	22.05	24.16	24.93	30.14	31.52	29.50
Fuel Oil 1.0%S	13.50	14.00	15.76	13.69	15.39	17.20	16.90	16.35	15.13	15.91	15.82	17.33	19.15	19.51
Fuel Oil 3.5%S	10.22	13.01	14.82	12.97	14.16	15.66	15.41	15.57	13.48	13.80	15.27	17.65	19.10	17.96
Gross Product Worth[2]	19.80	18.45	19.55	18.75	18.99	20.49	22.67	23.35	20.91	22.44	22.93	24.68	26.53	26.19
Brent Cracking Margin	1.70	1.60	1.42	1.43	0.98	0.65	1.97	1.30	1.33	1.77	1.23	0.90	1.15	2.38
Mediterranean - Basis Italy, Cargoes FOB														
Premium 0.15 g/l	22.35	20.23	20.99	20.59	20.71	21.09	25.86	24.80	23.66	24.66	24.70	25.02	26.97	26.51
Naphtha	17.17	15.71	16.35	15.61	15.20	17.07	18.91	20.13	17.46	19.15	19.82	21.42	23.30	23.06
Jet/Kerosene	21.74	19.26	19.94	19.74	21.17	23.48	22.38	26.00	21.45	23.45	24.76	29.79	30.86	29.00
Gasoil	21.51	18.71	19.39	19.15	20.53	22.27	22.42	25.06	20.82	22.56	23.88	28.74	30.12	28.33
Fuel Oil 1.0%S	13.72	13.93	15.48	13.42	15.65	17.32	17.33	16.44	15.49	16.24	15.42	17.66	19.27	19.72
Fuel Oil 3.5%S	9.43	11.98	13.95	11.80	14.03	15.14	13.70	14.51	10.51	13.22	13.76	16.55	18.02	17.16
Gross Product Worth[3]	18.87	17.46	18.39	17.63	18.70	20.04	21.24	22.23	19.32	20.87	21.49	24.31	25.89	24.93
Urals Cracking Margin	3.14	1.89	1.44	1.80	1.87	1.19	2.26	1.81	1.73	2.00	1.31	2.10	2.15	2.57
NY Harbour, Barges														
Premium Unleaded 93	23.69	23.65	24.81	24.73	23.78	24.35	28.17	28.00	26.52	28.48	27.41	28.12	29.87	31.22
Regular Unleaded 87	21.58	20.54	22.57	22.38	21.29	22.65	26.34	25.88	24.33	25.89	25.64	26.10	27.47	28.95
Jet/Kerosene	23.33	22.20	21.76	21.78	23.37	26.27	26.01	27.13	23.32	24.45	27.03	29.90	30.67	30.62
No.2 (Heating Oil)	22.04	20.68	20.72	20.41	22.08	25.21	24.45	25.69	21.60	23.35	25.35	28.37	30.28	29.57
Fuel Oil 1.0%S (Cargo)	14.63	15.05	16.06	14.71	16.24	19.36	18.23	17.93	16.96	17.90	17.35	18.54	21.07	21.01
Fuel Oil 3.0%S (Cargo)	11.21	12.25	14.47	12.82	13.85	14.94	15.17	15.49	14.55	14.99	15.21	16.28	19.44	18.98
Gross Product Worth[4]	20.17	19.54	20.33	19.80	19.60	21.96	22.39	22.03	21.11	21.07	21.51	23.50	25.11	25.74
WTI Cracking Margin	0.63	1.24	0.82	0.87	0.38	0.89	0.99	0.41	0.53	0.95	0.50	-0.23	0.65	1.62
Singapore, Cargoes														
Gasoline[5]	24.01	21.10	22.11	22.30	21.47	21.61	25.01	22.32	23.60	22.55	21.59	22.83	24.80	25.56
Naphtha	17.22	16.34	17.54	16.69	16.26	17.51	19.53	20.22	18.75	19.61	20.01	21.04	22.44	23.39
Jet/Kerosene	24.42	21.74	22.72	21.13	25.10	28.68	25.32	27.75	23.83	25.34	28.10	29.82	30.23	31.26
Gasoil	24.02	20.87	21.60	20.63	22.08	25.87	25.47	25.86	24.32	24.40	25.32	27.86	29.99	30.75
LSWR (0.3%)[7]	14.90	13.58	14.74	13.80	15.64	16.21	17.86	17.57	17.53	16.68	17.43	18.59	19.75	19.19
HSFO (3.5%S 180cst)	11.83	13.17	14.98	13.14	15.18	17.15	15.63	15.89	14.08	14.46	15.39	17.82	18.47	18.55
HSFO (3.5%S 380cst)	10.81	12.37	14.30	12.49	14.50	15.93	14.64	15.21	13.14	13.73	14.67	17.21	17.75	17.79
Gross Product Worth[6]	20.22	18.76	19.74	18.87	19.79	21.96	22.39	22.03	21.11	21.07	21.51	23.50	25.11	25.74
Dubai Cracking Margin	4.13	2.97	2.35	2.15	2.62	4.09	3.79	1.58	2.29	1.74	1.32	1.69	2.02	3.34

* = Estimated.

1 Product prices are mean values and are converted to $/bbl using following conversion factors.
Rotterdam: 8.35 bbl/MT for premium leaded gasoline, 8.46 bbl/MT for regular unleaded gasoline, 8.82 bbl/MT for naphtha, 7.88 bbl/MT for jet fuel, 7.46 bbl/MT for gasoil, 6.49 bbl/MT for 1.0%S LSFO and 6.31 bbl/MT for 3.5%S HSFO.
Singapore: 6.46 bbl/MT for 3.5%S HSFO.

2 Calculated using Brent cracking yield of a typical refinery in Rotterdam.
3 Calculated using Urals cracking yield of a typical refinery in the Mediterranean.
4 Calculated using WTI cracking yield of a typical refinery in US Gulf Coast.
5 Changed form regular 0.15 g/l to unleaded 95 as of 2 February 1995.
6 Calculated using Dubai cracking yield of a typical refinery in Singapore.
7 As from 1 April 1996 mixed/cracked LSWR fob Indonesia.

Table 9

END USER PRICES FOR PETROLEUM PRODUCTS[1]
November 1996

	National Currency						US Dollars					
			% ch Prev. Month		% ch Year Ago				% ch Prev. Month		% ch Year Ago	
	Price	Tax	Price	Excl. Tax	Price	Excl. Tax	Price	Excl. Tax	Price	Excl. Tax	Price	Excl. Tax
GASOLINE[2] Price per Litre												
France	6.318	5.068	0.6	2.5	7.1	21.4	1.238	0.245	1.8	3.7	2.6	16.2
Germany	1.576	1.186	-0.2	-0.8	5.8	23.4	1.044	0.258	1.1	0.5	-0.7	15.8
Italy	1910	1416	1.0	3.3	2.1	7.3	1.262	0.326	1.8	4.2	7.6	13.1
Spain	118.4	81.1	-1.5	-3.9	5.1	8.0	0.933	0.294	-0.1	-2.6	0.8	3.6
UK	0.639	0.486	0.8	2.7	10.6	16.8	1.061	0.254	5.5	7.5	17.5	24.2
Japan	104	57	0.0	0.0	-2.8	-6.0	0.927	0.419	0.2	0.2	-11.7	-14.6
Canada	0.577	0.286	1.1	2.1	11.4	21.3	0.431	0.217	1.8	2.9	12.5	22.4
USA[3]	0.345	0.101	1.5	2.1	18.6	28.4	0.345	0.244	1.5	2.1	18.6	28.4
AUTOMOTIVE DIESEL[4] Price per Litre												
France	3.762	2.292	-0.5	-1.34	16.9	38.7	0.737	0.288	0.7	-0.1	12.0	32.8
Germany	1.063	0.620	-3.5	-8.1	10.8	30.7	0.704	0.294	-2.3	-6.9	4.0	22.6
Italy	1242.86	747.47	-1.3	-3.28	7.3	20.4	0.821	0.327	-0.6	-2.5	13.0	26.9
Spain	81.96	43.20	-3.2	-6.5	15.7	33.0	0.646	0.305	-1.9	-5.2	11.0	27.6
UK	0.515	0.343	-0.6	-1.7	16.3	32.3	0.855	0.286	4.0	2.9	23.6	40.7
Japan	78	34	0.0	0.0	10.3	19.8	0.698	0.394	0.2	0.2	0.2	8.8
Canada	0.550	0.216	0.5	0.6	8.1	12.5	0.410	0.249	1.3	1.4	9.1	13.5
USA	..	..	..	..	..	..	..	..	..	..	..	..
DOMESTIC HEATING OIL Price per 1000 Litres												
France	2344.7	904.7	-2.5	-3.4	18.9	26.3	459.5	282.2	-1.3	-2.1	13.9	21.0
Germany	530.5	149.2	-7.5	-8.9	32.0	41.4	351.6	252.7	-6.3	-7.8	23.8	32.7
Italy	1438000	977070	-0.7	-1.8	9.4	28.9	950.4	304.6	0.1	-1.0	15.2	35.8
Spain	50991	19633	-4.4	-6.1	27.7	41.0	401.8	247.1	-3.2	-4.8	22.4	35.3
UK	175.90	36.33	-4.8	-5.5	27.7	31.5	292.2	231.8	-0.3	-1.1	35.8	39.8
Japan[5]	45938	1338	0.0	0.0	15.8	15.8	409.4	397.5	0.2	0.2	5.2	5.2
Canada	..	..	..	..	..	..	..	..	..	..	..	..
USA[6]	280.8	..	8.5	..	21.8	..	280.8	..	8.5	..	21.8	..
HFO FOR INDUSTRY[4, 7] Price per Metric Ton												
France	877.9	156.9	2.3	2.9	31.2	40.1	172.0	141.3	3.61	4.1	25.7	34.1
Germany	227.0	30.0	-7.0	-7.9	17.3	20.1	150.4	130.6	-5.80	-6.8	10.0	12.7
Italy	294000	45000	-1.0	-1.2	13.1	15.8	194.3	164.6	-0.22	-0.4	19.1	22.0
Spain	23695	2150	-3.8	-4.2	27.9	31.0	186.7	169.8	-2.54	-2.9	22.6	25.6
UK	101.03	18.20	1.3	1.6	18.6	20.9	167.8	137.6	5.99	6.3	26.1	28.5
Japan	19516	568	0.0	0.0	20.0	20.0	173.9	168.9	0.18	0.2	9.0	9.0
Canada	..	..	..	..	..	..	..	..	..	..	..	..
USA	..	..	..	..	..	..	..	..	..	..	..	..

1 Mid Month Prices
2 Premium leaded gasoline for France, Italy, Spain, UK; regular unleaded gasoline for Canada, Germany, Japan and USA
3 Estimated
4 VAT excluded where it is refundable: HFO for Industry, Automotive Diesel for Industry
5 Kerosene
6 Previous month data
7 High sulphur fuel oil price for France, Spain, UK and Japan; low sulphur fuel oil price for Germany and Italy

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Readers are referred to the Users' Guide, that was published in conjunction with the Annual Statistical Supplement on 6 September 1996, for information on the data sources, definitions, technical terms and general approach used in preparing the Report. It should be noted that the spot crude and product price assessments are based on daily Platt's prices, converted when appropriate to $US per barrel according to the Platt's specification of products (© 1996 Platt's a division of McGraw-Hill Inc.).

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