

8 August 1997

## HIGHLIGHTS

- Oil markets were much tighter than expected in June and July as the absence of Iraqi exports was compounded by supply shortfalls from several areas and strong demand for US gasoline. Consequently, OECD inventories finished 2Q97 lower than had been anticipated and the 3Q97 stockbuild appears to have begun slowly.
- Global oil demand is estimated to have increased in 2Q97 by 2.7 mb/d or 3.9% to 72.6 mb/d, led by robust US and firm German demand growth in June, complementing ongoing demand growth in Asia and Latin America.
- Non-OPEC supply estimates for 2Q97 and 3Q97 have been significantly reduced (by 0.4 mb/d and 0.6 mb/d respectively) mainly reflecting the recent underperformance in the North Sea and Australia as well as downward revisions to historical data for some developing countries. This resulted in upward revisions to the estimated “call on OPEC crude plus stock change” for 2Q97 and 3Q97 of 0.5 mb/d (to 25.7 mb/d) and 0.8 mb/d (to 25.5 mb/d).
- As a result of tighter market fundamentals, OECD industry stocks advanced by only 0.32 mb/d in June, albeit from upwardly-revised April and May levels. As a result, OECD industry stocks increased in the 2Q97 by just 0.48 mb/d, the smallest second quarter increase in the last decade, other than in the aftermath of the 1991 Gulf War.
- Benchmark crude oil prices in the Atlantic Basin firmed in the second half of July as a result of the tightly-balanced crude supply/demand fundamentals and a sharp increase in spot US gasoline prices, fuelled by robust demand and tightening supplies. In contrast, Asian oil markets remained weak as a result of lower-than-expected product demand, high inventories and regional crude supply pressure.
- Average refining margins for July continued to rise in the US, but declined in Europe and Singapore. In June, aggregate crude throughputs in OECD countries were 950 kb/d or 2.9% higher than a year earlier, averaging 33.31 mb/d. The increase was mainly concentrated in the US and Europe.

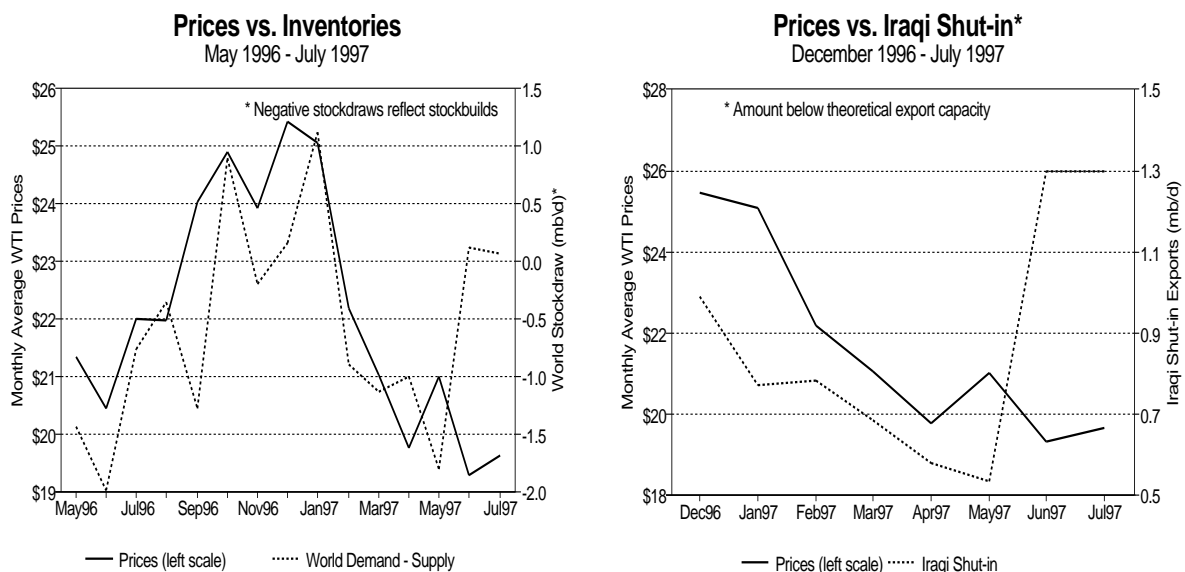
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## IRAQ, INVENTORIES AND OIL PRICES

The two most important factors in the near term oil market are the timing of the return of Iraqi exports under the UN "oil-for-food" programme and the (related) extent of inventory building. The delay in the resumption of Iraqi exports, from early June until early August, has softened the price impact of world supplies that have been running well in excess of world demand. With no Iraqi exports from late May, when the 90-day \$1 billion revenue target was reached, until the end of 2Q97, the global stockbuild (including OECD stockbuilds, floating storage/oil-in-transit and miscellaneous-to-balance) was an estimated 1.2 mb/d versus an expected build in excess of 2 mb/d. With almost half of 3Q97 expected to be gone before the full restart of Iraqi exports, another 55-65 mb will not have gone into inventories, assuming that Iraq had been exporting at current capacity since the beginning of July. Hence the estimated stockbuild for 3Q97, assuming non-Iraqi OPEC crude oil production holds at July levels, is now 1.6 mb/d, again versus an expectation of well over 2 mb/d.

The left-hand graph below tracks monthly average current month West Texas Intermediate prices and the stockdraw implied by estimated monthly world oil demand minus world supply. The patterns in the two plots appear quite similar until April 1997 when prices continued to decline despite a small upward move in the stockdraw line. In the next two months there was an apparent disconnection between prices and inventories, with the lines showing large moves in opposite directions in May and June. A potential explanation is the swing in psychology about the impact of the delay in Iraqi exports on world markets (plotted against prices in the right-hand graph). During June, the absence of Iraqi exports was seen as compressing a fixed number of barrels into a smaller time period, with a negative impact on prices. However, by July further delays were rightfully seen as reducing the total volume going into the market and were favourable for prices.



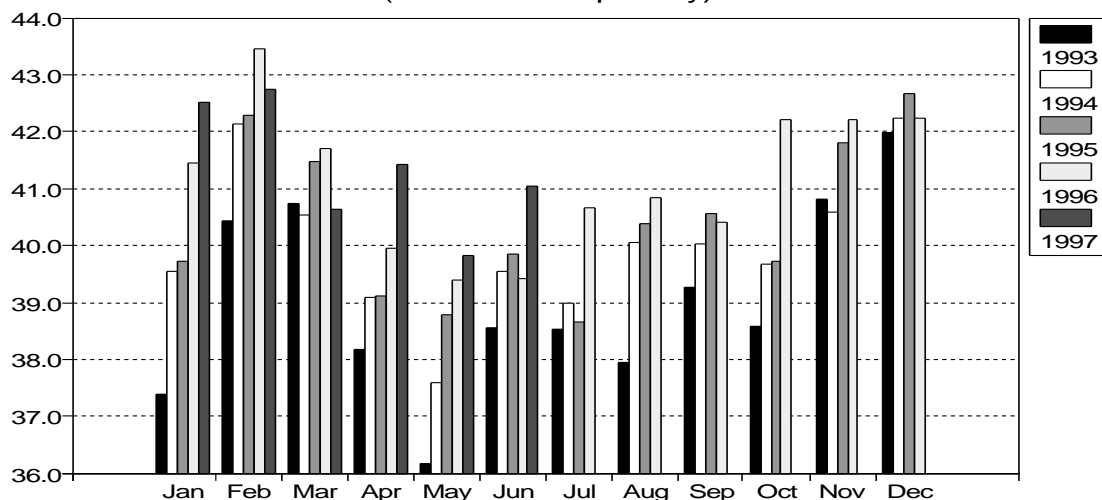
By then, it was generally understood that Iraq will not be able to meet the \$1 billion target for "oil-for-food" exports by the 8 September end of the current 90-day period and that no significant carry-over would be allowed by the UN. There is uncertainty about how much Iraq will be able to export, however, and whether the constraining factor will be the capacity of the ports, the pipelines, or the field production facilities. Whichever the constraining factor, the extent of the "lost barrels" will also depend on the speed with which marketing and delivery arrangements can be put in place. Estimates of the maximum level of exports are in the 1.3-1.6 mb/d range, with the high end reflecting port and pipeline capabilities and the lower end associated with field production capacities given relatively high (i.e. 650-700 kb/d) assumed domestic use (including exports to Jordan). Consequently, every additional week of delay results in about 10 mb that do not go into inventories during 3Q97.

## DEMAND

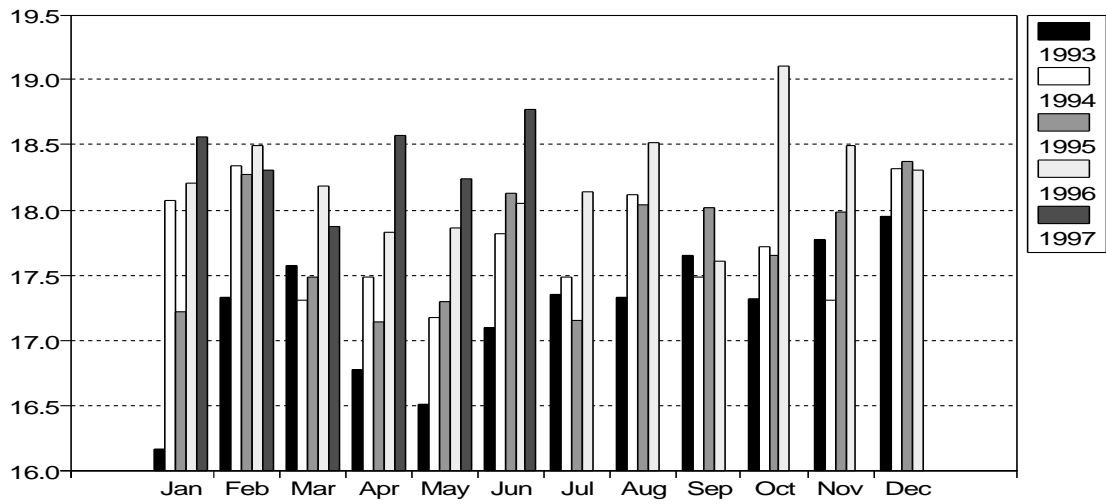
### Summary

- In **June**, US oil deliveries increased by 4.4%, with demand increasing for all major products. Demand also increased strongly, by 3.9%, in the four largest European oil-consuming countries, led by an 18.8% increase in German heating oil deliveries. However, European demand for residual fuel oil was particularly weak due to fuel switching in the Italian and UK power generation sectors. Japanese oil deliveries increased by 2.9%, with demand increasing for all products except diesel and crude for direct use in the power generation sector. In particular, Japanese demand for naphtha and LPG increased by a combined 100 kb/d, reflecting increased petrochemical sector demand.
- OECD demand in **2Q97** is estimated to have increased by 2.9% or 1.2 mb/d to 40.8 mb/d, a 0.2 mb/d upward adjustment from last month's Report. Growth has been comparatively strong, reflecting weak demand a year earlier, a strong German consumer heating oil stockbuild and robust US gasoline demand. In addition, Canadian demand increased by 6.2% in 2Q97, with demand increasing most strongly for residual fuel oil (23.4%).
- The projection of OECD demand in **3Q97** has been revised upwards by 0.1 mb/d from last month's Report to 41.4 mb/d, an annual increase of 1.8% or 0.7 mb/d, reflecting preliminary indications of particularly strong US demand in July. This demand strength may be dampened slightly, however, by weak UK demand following pre-buying in June ahead of tax increases at the start of the July.
- The projected increase in **OECD demand** for oil in 1997 remains at 41.7 mb/d, an annual increase of 0.6 mb/d or 1.4%, with strong North American demand partly counterbalanced by slower demand growth in Europe and the Pacific region. OECD demand in 1998 is projected to increase by 0.5 mb/d or 1.1% to 42.2 mb/d, an upward adjustment from last month's Report, reflecting a reassessment of North American demand growth, given strong demand so far this year. In addition, European demand in 1998 has been upgraded marginally, reflecting a reappraisal of the expected seasonal variation in demand in 1998, following examination of the impact of weather conditions during this year's heating season.
- **Non-OECD** demand in 1997 is projected to increase by 4.2% or 1.3 mb/d to 32.1 mb/d, unchanged from last month's Report. Minor downward revisions to Asian demand in the first half of the year have been almost offset by an upward adjustment to Latin American demand in 2Q97, consistent with stronger-than-anticipated demand growth in Mexico and Brazil. Non-OECD demand growth in 1998 remains unchanged at 4.3% and demand in the year is projected to increase by 1.4 mb/d to 33.5 mb/d.
- **Global demand** in 1997 is unchanged from last month's Report at 73.8 mb/d, an annual increase of 1.9 mb/d or 2.6%. Global demand in 1998 is expected to increase at a similar rate, to 75.7 mb/d, greater than previously anticipated, primarily reflecting an upward adjustment to expected North American demand.

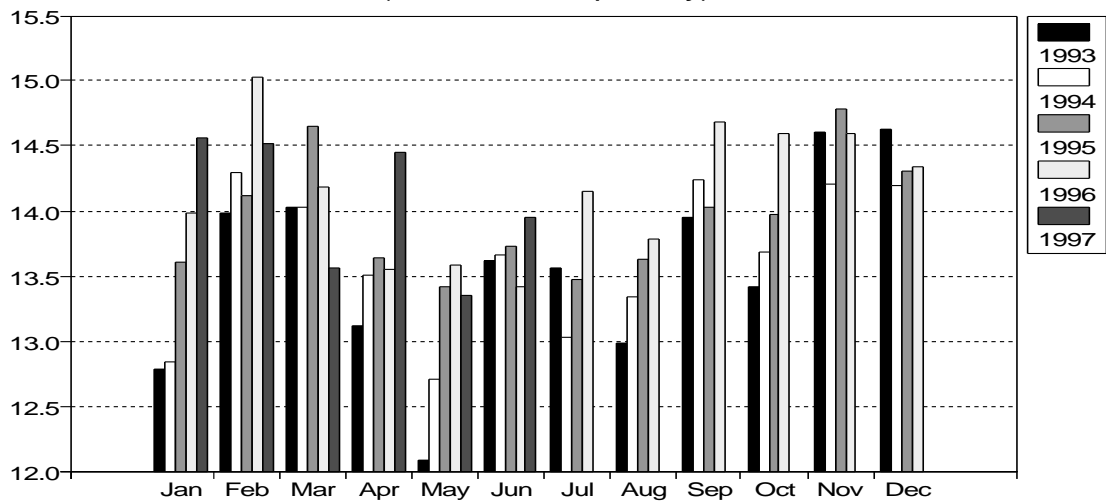
**OECD Oil Demand 1993-1997**  
(million barrels per day)



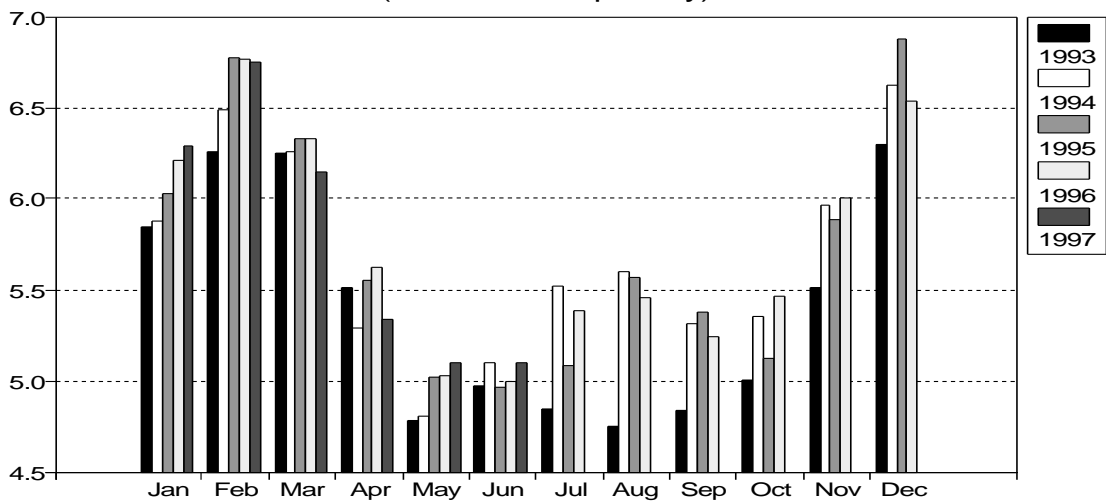
### US Oil Demand 1993-1997 (million barrels per day)



### European Oil Demand 1993-1997 (million barrels per day)



### Japanese Oil Demand 1993-1997 (million barrels per day)



OECD<sup>1</sup>

## Demand in June

The table below provides preliminary estimates for inland deliveries for the seven largest OECD countries in June. Table 3 at the back of the Report gives demand in May for the same countries while Table 2 shows total OECD oil demand in April on a regional basis.

Preliminary Inland Deliveries - June 1997<sup>1</sup>

	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		Residual Fuel Oil		Total Products <sup>2</sup>	
	mb/d	% change	mb/d	% change	mb/d	% change	mb/d	% change	mb/d	% change	mb/d	% change
US <sup>3</sup>	8.15	+0.8	1.63	+4.8	2.27	+2.8	1.08	+9.6	0.78	+5.3	18.83	+4.4
Canada	0.65	+3.7	0.11	-2.7	0.38	+9.3	0.04	-11.4	0.11	+10.3	1.57	+5.4
Japan	0.90	+0.9	0.31	+4.7	0.76	-0.4	0.42	+7.2	0.61	+2.0	4.80	+2.9
France	0.34	-0.3	0.11	+2.2	0.52	+7.1	0.25	+14.3	0.05	-15.3	1.76	+4.2
Germany	0.70	+0.7	0.14	+5.8	0.58	+10.7	0.86	+18.8	0.11	-11.1	2.92	+9.5
Italy	0.41	+3.4	0.07	+6.9	0.33	+2.5	0.07	-8.8	0.38	-13.3	1.65	-2.0
UK	0.54	+6.0	0.24	+7.1	0.33	+13.8	0.14	+0.9	0.06	-52.1	1.58	+0.4
European Four	2.00	+2.4	0.57	+5.7	1.76	+8.6	1.33	+13.8	0.60	-19.5	7.91	+3.9
Total	11.70	+1.2	2.62	+4.7	5.17	+4.7	2.86	+10.8	2.10	-3.9	33.12	+4.1

Sources: US EIA, Japan MITI, France CPDP, Germany MWV, UK PIA, Italy Ministry of Industry, Canada Statistics Canada

<sup>1</sup> Excludes refinery fuel and bunkers (except US)

<sup>2</sup> Includes other products not shown and direct use of crude oil

<sup>3</sup> Fifty states only. Diesel is estimated from preliminary indications of low sulphur gasoil deliveries

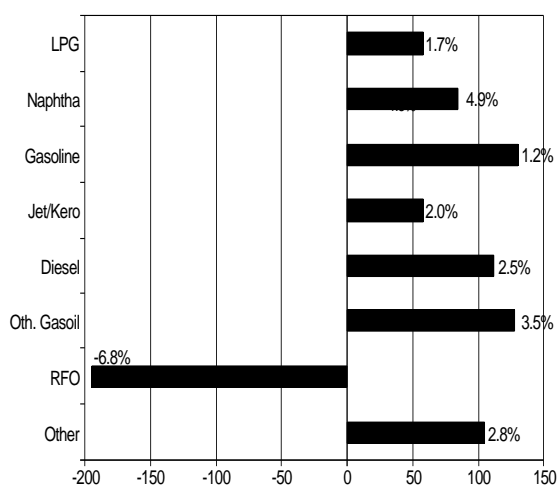
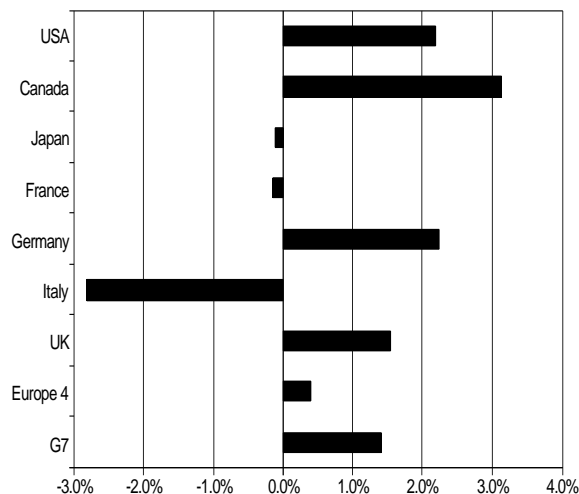
Percentage change is calculated versus June 1996

## Moving Annual Average Change in Oil Demand

(12-Month Moving Average to May 1997)

	LPG	Naphtha	Gasoline	Jet/Kero	Diesel	Other Gasoil	RFO	Other	Total	kb/d
USA <sup>1</sup>	2.5%	21.7%	1.1%	3.0%	4.6%	1.3%	-3.6%	3.6%	2.2%	395
Canada	0.5%	11.5%	1.6%	9.2%	-1.8%	6.4%	5.2%	3.5%	3.1%	59
Japan	1.6%	5.4%	2.6%	-2.9%	0.9%	-1.1%	-7.2%	-0.5%	-0.1%	-7
France	1.0%	-12.0%	-3.3%	3.8%	4.2%	3.7%	-7.2%	1.7%	-0.2%	-3
Germany	-8.2%	5.1%	0.1%	5.8%	2.6%	6.4%	-11.0%	2.6%	2.2%	64
Italy	-2.6%	2.1%	1.3%	-0.7%	-11.1%	13.8%	-8.9%	6.4%	-2.8%	-55
UK	5.2%	-11.0%	2.6%	5.4%	7.4%	3.6%	-17.3%	1.7%	1.5%	28
European Four	-0.4%	-1.5%	0.4%	4.4%	0.9%	6.2%	-10.3%	2.7%	0.4%	35
Total	1.7%	4.9%	1.2%	2.0%	2.5%	3.5%	-6.8%	2.8%	1.4%	481
kb/d	58	85	130	58	112	128	-195	105	481	

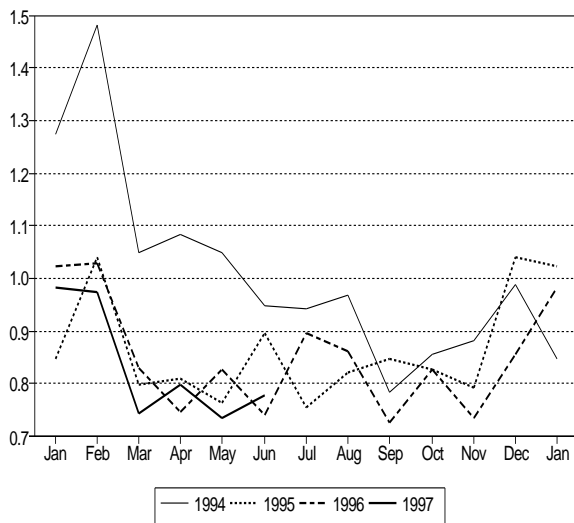
<sup>1</sup> US LPG and Naphtha demand in June 1997 is estimated.

G7 - 12 Month Moving Average  
Incremental Demand (kb/d & %)G7 - 12 Month Moving Average  
Annual Demand Change (%)

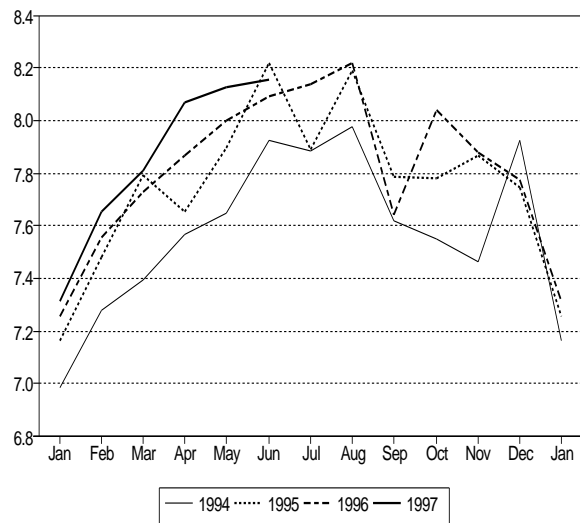
<sup>1</sup> excluding some member countries, see note on back cover.

Total US deliveries increased by 4.4% or 790 kb/d, with demand increasing for all products. Some 57% of total incremental demand was due to a 10.1% increase in "other" product deliveries, which includes LPG and naphtha. In recent months, preliminary data for "other" products have been subsequently revised downwards by an amount equivalent to upward revisions to gasoline, possibly indicating a re-classification of gasoline blending components. The 0.8% or 65 kb/d increase in gasoline deliveries in June appears particularly suspect, given strong demand growth in recent months and retail prices 0.9% lower than a year earlier (see table on page 9). Gasoil deliveries increased by 4.9% or 157 kb/d, with 40% of the growth due to strong diesel deliveries, reflecting lower retail prices than a year earlier, robust economic growth and increased commercial road haulage. The remainder was due to increased deliveries of higher sulphur gasoil. As shown in the table on page 8, the Department of Energy's estimate of gasoil deliveries contrasts with a much stronger 6.1% increase reported by the American Petroleum Institute. Jet/kerosene deliveries increased despite a 11.4% increase a year earlier, reflecting strong growth in the aviation sector, including cargo traffic that is believed to have increased by some 10% in the first half of the year.

**US Residual Fuel Oil Demand**  
(million barrels per day)

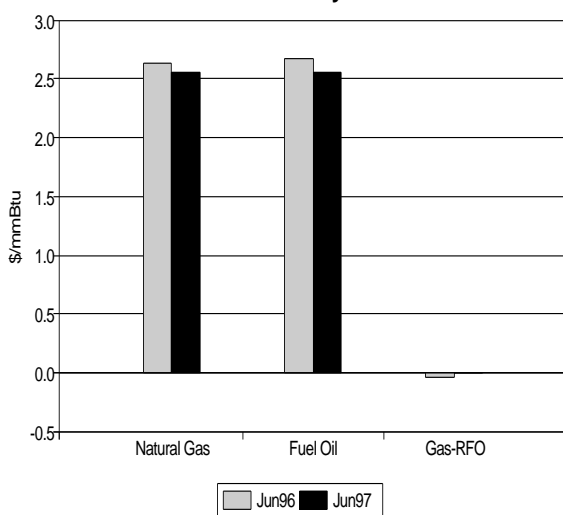


**US Gasoline Demand**  
(million barrels per day)

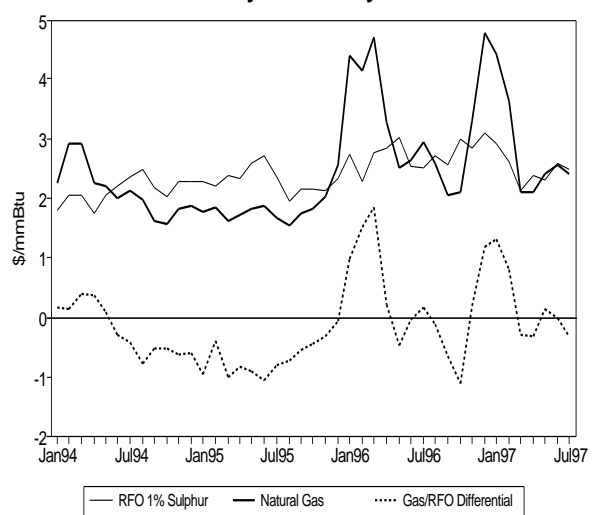


Deliveries of residual fuel oil increased year-on-year for the first time in ten months, compared with a 3.6% decline on a 12-month moving average. Hotter weather than last year on the northeastern seaboard led to increased air-conditioning use and most probably increased use of residual fuel oil in the power generation sector. The Mid-Atlantic and New England regions experienced 17.5% and 72.6% more cooling degree days than last year. A minor change in the price differential between natural gas and

**Gas and Fuel Oil Prices in New York**  
in June versus a year earlier



**New York RFO & Gas Prices**  
January 1994 - July 1997



residual fuel oil in June compared with last year (see graph above) is unlikely to have significantly influenced fuel switching and it is probable that the increased demand for electricity led to increased requirements for both natural gas and fuel oil. Residual fuel oil prices in New York were at parity with natural gas in mid-June compared with a minor premium of \$0.04/mmBtu in June 1996.

The table below highlights the difference between the preliminary monthly US demand data derived from the DOE/EIA's Weekly Petroleum Status Report and data provided by the American Petroleum Institute. For June, the two organisations' estimates of total US demand again diverge, by more than 137 kb/d. More significantly there is a sharp discrepancy in growth among individual oil products. API estimates higher demand for gasoil and gasoline, but lower growth for jet/kerosene, fuel oil and "other" products.

**Comparison Between Estimates of Annual US Oil Demand Growth in June 1997**

	EIA	API	EIA-API kb/d
Gasoline	0.8%	2.0%	-100
Jet/Kerosene	4.8%	4.5%	5
Total Gasoil	4.9%	6.1%	-38
Diesel	na	3.5%	na
Other Gasoil	na	12.0%	na
Residual Fuel Oil	5.3%	2.3%	22
Other	10.1%	6.1%	248
<b>Total</b>	<b>4.4%</b>	<b>3.6%</b>	<b>137</b>

EIA = US Department of Energy, Energy Information Administration  
API = American Petroleum Institute

Demand in the four largest European oil-consuming countries increased by 3.9% or 295 kb/d in June, led by an 18.8% or 137 kb/d increase in German heating oil deliveries. Demand was also supported by the existence of one additional working day. For the region as a whole, demand increased for all products except residual fuel oil, which declined in all four countries by a combined 145 kb/d or 19.5%. Italian fuel oil deliveries fell, following strong purchases by ENEL in May and also reflect continuing replacement of fuel oil with Algerian natural gas. Fuel oil deliveries in the UK were weakened by inter-fuel price competition, and the impact on year-on-year growth of the cessation in March 1997 of *Orimulsion* deliveries to electricity utilities, which had been recorded in official government statistics as a fuel oil. Despite weak fuel oil deliveries, total oil demand in the UK was comparatively strong, consistent with pre-buying of transport fuels ahead of tax and excise increases announced in the Budget on 2 July.

In **France**, demand increased by 4.2% or 70 kb/d, with deliveries increasing for all products except gasoline, residual fuel oil and "other" products. Gasoline deliveries declined despite an additional working day and a 9.4% decline in the previous June, consistent with the continuing dieselisation of the passenger car fleet. In contrast, deliveries of diesel increased markedly, by 35 kb/d or 7.1%. Residual fuel oil deliveries decreased by 9 kb/d due to a 7.2% decline in deliveries to industry and a 44.3% decrease in deliveries to the French electricity company, EDF. Following four successive months of lower year-on-year deliveries, heating oil deliveries increased by 14.3% or 31 kb/d in June. Deliveries had been weak in recent months as a large stockbuild in January at the height of very cold weather was followed by milder-than-normal conditions and lower-than-normal consumption. Although data for consumer stocks are unavailable, it has been assumed that stocks remain high. Deliveries of heating oil in June were not encouraged by a year-on-year price increase of some 5.8%. However, the strength in heating oil deliveries in June was primarily due to a 21.9% decline a year earlier. LPG and naphtha deliveries increased by 8.8% and 7.2% respectively or by a combined 24 kb/d and by rates far greater than the trend. LPG demand for road transport has increased significantly in recent years and the increase in naphtha deliveries mainly reflects weak petrochemical demand a year earlier, when deliveries fell by 4.2%.

**German** oil demand increased by 9.5% or 255 kb/d, primarily due to a strong increase in heating oil deliveries, which contributed 54% of the total increase in oil deliveries. Deliveries increased for all products except residual fuel oil, which decreased by 13 kb/d or 11.1%. The increase in heating oil deliveries was greater than the assumed increase in consumption (based on consumer stock data), and contributed to consumer stocks ending the month some 2.1 mb higher than a year earlier. Nevertheless, current stock levels remain at historically low levels with consumer stocks in June 1996 some 20 mb lower than a year earlier. The consumer stock build appears to have been partly motivated by a perception of



a further weakening of the deutschmark against the dollar and possible tax increases in July. However, fears of tax increases this July were unfounded, as other means of raising government revenue have been targeted.

### Percentage Annual Change in Retail Prices in June 1997<sup>1</sup>

(% per annum change in local currency)

	Gasoline	Diesel	Heating Oil	RFO
USA	-0.9%	na	3.3%	na
Canada	-3.4%	4.8%	na	na
Japan <sup>2</sup>	-2.0%	3.9%	9.4%	13.9%
France	2.7%	4.6%	5.8%	5.1%
Germany	-0.2%	-1.1%	7.1%	9.8%
Italy	1.5%	3.1%	3.5%	-0.4%
UK	10.4%	10.1%	2.0%	-4.2%
European Four Average	3.6%	4.2%	4.6%	2.6%
G7 Average <sup>3</sup>	1.2%	4.2%	5.6%	4.8%

<sup>1</sup> Mid-month prices

<sup>2</sup> Japanese heating oil is represented by kerosene

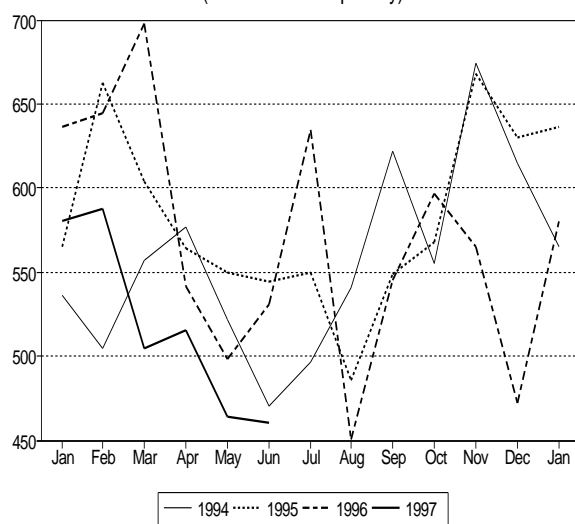
<sup>3</sup> Countries with missing data are excluded from the average calculation

**UK** oil demand increased modestly, by 0.4% or just 7 kb/d, with large increases in road transport fuels mostly offset by a substantial decline in residual fuel deliveries. Deliveries were particularly strong for gasoline and diesel, as wholesalers increased purchases ahead of the Budget that took place on 2 July. Gasoline and diesel deliveries increased by a combined 70 kb/d, at rates far in excess of the trend. Deliveries were also enhanced by an additional working day. The demand impact of significantly higher retail prices than a year earlier (due to a cessation in a retail price war) may have been partly offset by a combination of the pre-buying and markedly increased disposable incomes following windfall profits from numerous insurance and mutual fund companies. Jet/kerosene deliveries also increased strongly as consumers built heating stocks prior to tax increases. While naphtha deliveries remained unchanged, LPG demand fell by 11 kbd or 8.4%. Residual fuel oil deliveries fell by 52.1% or 64 kb/d, primarily due to continuing weak natural gas prices and the cessation in March 1997 of *Orimulsion* use in the power generation sector, which led to a 17.3% decline in fuel oil deliveries on a 12-month moving average.

**Italian** oil deliveries decreased by 2.0% or 34 kb/d, with a significant decline in residual fuel oil deliveries more than offsetting moderate growth for all other products. Gasoline deliveries increased comparatively strongly, reflecting weak demand a year earlier. Jet/kerosene increased by the greater proportion, far in excess of the trend, with this only partly explained by weak demand a year earlier. Residual fuel oil deliveries declined by 58% or 13.3%, compared with the 17.3% decline on a 12-month moving average basis, reflecting ongoing substitution of Algerian natural gas for fuel oil, particularly by ENEL.

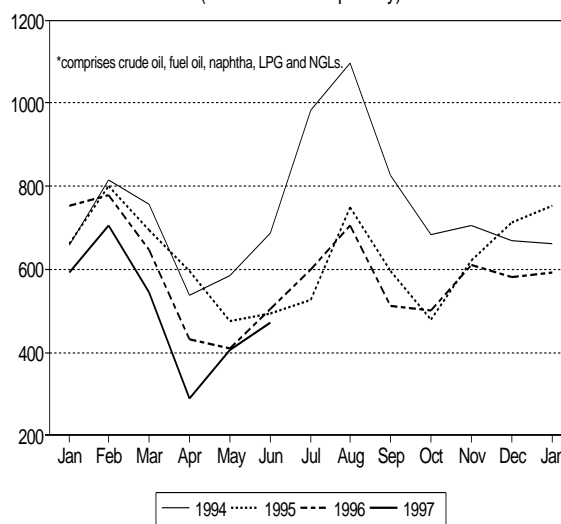
#### Italian Fuel Oil Deliveries

(thousand barrels per day)



#### Japanese Oil Deliveries in Electricity Generation\*

(thousand barrels per day)



**Japanese** oil demand increased by 2.9% or 135 kb/d in June, with deliveries increasing for all products except crude used directly in the power generation sector. In recent months, Japanese demand has been dampened by weak crude and fuel oil deliveries as the electricity utility companies have progressively reduced purchases. This June, total oil deliveries to the power generation sector declined by 7.0%, primarily due to a 6.4% decline in crude oil deliveries and despite residual fuel oil deliveries increasing by 3.3%. Electricity demand increased by 4.2%, in part due to increased air conditioning demand. Due to decreases in hydro, LNG and coal use of 19.8%, 36.2% and 7.0% respectively, the increased demand for electricity was met by a 7.9% increase in nuclear output and a 7.9% increase in oil use, which contributed to oil stocks at the utility companies ending the month some 11.5% lower than a year earlier. Total LPG and naphtha deliveries (including to the power generation sector) increased by 5.2% and 10.2% respectively or by a combined 100 kb/d, consistent with very competitive naphtha prices, a turnaround at petrochemical plants and weak demand a year earlier. Gasoline deliveries increased in line with the trend, but weak regional prices led to above-trend growth in jet/kerosene deliveries.

### Demand in 2Q97

Oil demand in the G7 countries in June was greater than expected due to stronger-than-anticipated demand in Germany. Revisions to last month's preliminary estimate of G7 demand in May have led to a 80 kb/d upward adjustment to G7 demand in that month, with deliveries revised upward in all countries except France and Japan. Recent demand data in April and May from a number of smaller oil-consuming countries have led to an upward adjustment to April demand and a larger downward revision to May deliveries. In particular, Spanish and Swedish demand in May was a combined 163 kb/d lower than anticipated. The estimate of OECD demand in 2Q97 has been revised upwards by 0.2 mb/d to 40.8 mb/d, an annual increase of 2.9% or 1.2 mb/d. Growth has been comparatively strong, reflecting weak demand a year earlier, a strong German consumer heating oil stockbuild and robust US and Canadian demand.

### Second Quarter OECD Oil Demand by Region

(million barrels per day)

	2Q96	2Q97	Change	
			mb/d	%
North America	19.9	20.7 <sup>r</sup>	0.8	4.0
Europe	13.5	13.9 <sup>r</sup>	0.4	2.9
Pacific	6.2	6.1 <sup>r</sup>	-0.0	-0.3
Total	39.6	40.8 <sup>r</sup>	1.2	2.9

<sup>r</sup> Revised from last month's Report

**North American** demand has been revised upwards by 75 kb/d from last month's Report, to 20.7 mb/d. This is an annual increase of 4.0% or 0.8 mb/d, reflecting the combination of stronger-than-anticipated demand in Canada and the US in June and upward revisions to last month's preliminary estimate of demand in May. Canadian demand increased by 6.2% in 2Q97 (and by 8.4% in May), with demand increasing most strongly for residual fuel oil (23.4%). In contrast to recent months, the revision to US demand in May was comparatively small (+10 kb/d) and the June data were only some 56 kb/d greater than estimated in last month's Report, from delivery data for part of the month. Product growth rates should be treated with caution, as US gasoline demand in June appears suspiciously low and is likely to be subsequently revised upwards through the reclassification of a proportion of "other" products. For this reason, a product-by-product analysis of G7 demand in 2Q97 will be included in next month's Report once the preliminary data have been revised, following the receipt of more detailed government data. However, it is clear that the strength in North American demand across almost all oil products and in both the US and Canada is symptomatic of strong economic growth that is thought likely to continue in the second half of the year.

A 46 kb/d upward revision to last month's preliminary estimate of demand in May in the four largest **European** oil-consuming countries combined with stronger-than-anticipated demand in the same countries in June contributed to a 60 kb/d upward revision to the estimate of European demand in 2Q97. In particular, the large increase in German deliveries in June was most unexpected. In the smaller European countries, demand was greater than expected in April, led by strong demand growth in Belgium (9%) and Portugal (19.4%), the latter primarily due to strong residual fuel oil demand. In contrast, demand in the smaller countries in May currently appears to have been weaker than expected, following receipt of data from six of the 15 remaining countries. In particular, Spanish demand was unexpectedly weak, decreasing by 4.1% or 50 kb/d. The estimate of European demand in 2Q97 remains sensitive to revision due to the incomplete data.

### Change in Number of Working Days in 2Q97 and 3Q97 Compared with a Year Earlier<sup>1</sup>

	USA	Canada	Japan	France	Germany <sup>2</sup>	Italy	UK
April	-	2	-	1	2	1	2
May	-1	-1	-	-1	-1	-1	-1
June	1	1	1	1	1	1	1
2Q97	0	2	1	1	2	1	2
July	-	-	-	-1	-	-	-
August	-1	-1	-1	-1	-1	-1	-1
September	1	1	1	1	1	1	1
3Q97	0	0	0	-1	0	0	0

<sup>1</sup> Includes public holidays.

<sup>2</sup> Public holidays in Germany are based on Southern German dates.

Although Japanese demand in June was greater than expected, primarily due to an increase in fuel oil deliveries to the power generation sector, demand in the **Pacific** region in 2Q97 has been revised downwards due to downward adjustments to Japanese demand in April and May and weaker-than-expected demand in Australia. Japanese demand has been adjusted downward by 39 kbd in April, mainly due to revisions to diesel demand (-6.4%) while Australian deliveries decreased by 2.9% in May.

#### Demand in 3Q97

The projected upward revisions to OECD demand in 3Q97 are due to indications of particularly strong US demand in July. **US** demand in July is assumed to have increased by 4.8% or 880 kb/d, led by a 10.2% or 310 kb/d increase in gasoil deliveries and a 5.1% or 420 kb/d increase in gasoline deliveries. In addition, residual fuel oil deliveries are assumed to have increased by 3.6% or 160 b/d, consistent with warmer-than-normal weather that is likely to have led to increased air-conditioning demand, which is typically met by increased oil burn in the northeastern power generation sector. In July, New England and the Mid-Atlantic regions experienced 32% and 23% more cooling degree days than a year earlier. As residual fuel oil prices in mid-July were at a \$0.47/mmBtu premium to natural gas in New York, compared with a \$0.17/mmBtu discount a year earlier, it would be expected that the demand for natural gas from the power generation sector increased by a greater proportion than fuel oil. There is also anecdotal evidence of increased purchases of kerosene by the electricity utilities to meet peaking load requirements at times of maximum electricity demand. **European** demand is projected to increase by the smallest proportion of the three OECD regions, consistent with strong demand last year when consumer stocks of heating fuels were rebuilt. Demand may be dampened in the UK, given pre-buying in June ahead of tax increases at the start of July. In addition, German demand may be weakened following a strong consumer stockbuild of heating oil in June. **Pacific** demand is projected to increase by 2.1%, consistent with weak deliveries a year earlier and indications of a temporary recovery in oil deliveries to the Japanese power generation sector.

#### Third Quarter OECD Oil Demand by Region

(million barrels per day)

	2Q96	2Q97	Change	
			mb/d	%
North America	20.2	20.7 <sup>r</sup>	0.5	2.6
Europe	14.2	14.3	0.1	0.5
Pacific	6.3	6.4	0.1	2.1
Total	40.6	41.4 <sup>r</sup>	0.7	1.8

<sup>r</sup> Revised from last month's Report

#### Demand in 1997 and 1998

OECD demand for oil in 1997 is projected to increase by 0.6 mb/d or 1.4% to 41.7 mb/d, with strong demand in North America in June and July and in Europe in June, slightly offset by weaker demand in the Pacific region in 2Q97. Demand is projected to grow fastest in North America (by 1.9%), despite strong demand growth in 1996, with robust economic activity manifesting itself in strong transport fuel demand growth that is expected to continue in the second half of the year. European oil demand growth is expected to slow from 1.5% in 1996 (despite an expectation of accelerating economic activity), reflecting ongoing substitution of natural gas for fuel oil in southern Europe, high end-user prices due to weaker European currencies against the dollar (excluding the UK) and the prospect of tax increases. In the Pacific region, demand is projected to increase by 0.8%, with weakened oil deliveries to the Japanese

power generation sector more than offset by the impact of economic growth elsewhere in the economy. However, the projection of Pacific demand is highly sensitive to weather conditions, with increased oil use in the Japanese power generation sector likely to arise if a prolonged heat wave or drought occurs.

### OECD Oil Demand in 1997 & 1998

	North America		Europe		Pacific		Total	
	mb/d	change*	mb/d	change*	mb/d	change*	mb/d	change*
1Q97	20.4	0.0	14.2	-0.2	7.3	-0.1	41.9	-0.2
2Q97	20.7 <sup>r</sup>	0.8	13.9 <sup>r</sup>	0.4	6.1 <sup>r</sup>	-0.0	40.8 <sup>r</sup>	1.2
3Q97	20.7 <sup>r</sup>	0.5	14.3	0.1	6.4	0.1	41.4 <sup>r</sup>	0.7
4Q97	21.0	0.2	14.8	0.3	7.1	0.2	42.9	0.6
1997	20.7	0.4	14.3	0.1	6.7	0.1	41.7	0.6
1Q98	20.7	0.3	14.4	0.2	7.4	0.1	42.6 <sup>r</sup>	0.6
2Q98	20.7 <sup>r</sup>	-0.0	13.8	-0.1	6.3	0.1	40.8 <sup>r</sup>	0.0
3Q98	20.9 <sup>r</sup>	0.2	14.5	0.2	6.5	0.1	41.9 <sup>r</sup>	0.6
4Q98	21.3	0.3	15.0	0.2	7.2	0.1	43.5 <sup>r</sup>	0.6
1998	20.9 <sup>r</sup>	0.2	14.4	0.1	6.8	0.1	42.2 <sup>r</sup>	0.5

<sup>r</sup> revised since last Report  
\* mb/d year-on-year change

OECD demand in 1998 is projected to increase by 0.5 mb/d or 1.1% to 42.2 mb/d, an upward adjustment from last month's Report, reflecting a reassessment of North American demand growth, given strong demand so far this year. In addition, European demand in 1998 has been upgraded marginally, reflecting a reappraisal of the expected seasonal variation in demand.

### Oil's Share of Total OECD Energy Demand in 1995

While aggregate oil demand for 1995 has been tracked for some time, the recent publication of the IEA's *Energy Balances of OECD Countries 1994-1995* allows a detailed analysis of oil's share of total energy use in each sector of the economy. The observed changes in oil's market share are due to a combination of inter-fuel competition, long-term substitution and variations in the growth of different parts of the economy. The table below shows oil's share of total energy use in the major sectors of the economy in 1995 and the change in oil's market share versus 1994 and compared with one decade earlier.

#### Oil's Market Share of Total Energy Demand in 1995 on a Sectoral Basis

	Total Inland Demand <sup>1</sup>	Total Final Consumption <sup>2</sup>	Industry	Transport	Res/Com	Non-Energy Use <sup>3</sup>	Electricity Output <sup>4</sup>
<i>North America</i>							
Oil Share in 1995 (%)	37.8	51.8	25.6	96.3	14.8	99.6	2.4
Change in Share 1995 v 1994 (% pt)	-0.5	-0.5	-0.7	-0.1	-0.3	-0.0	-0.9
Change in Share 1995 v 1985 (% pt)	-2.8	1.1	0.8	-0.8	-4.9	0.1	-1.3
<i>Europe</i>							
Oil Share in 1995 (%)	42.6	51.4	31.0	98.2	28.8	98.2	8.9
Change in Share 1995 v 1994 (% pt)	-0.2	-0.2	0.4	-0.0	-0.2	-0.2	0.3
Change in Share 1995 v 1985 (% pt)	-0.1	1.3	-0.3	0.1	-5.9	4.0	-0.0
<i>Pacific</i>							
Oil Share in 1995 (%)	50.9	59.1	41.4	98.0	41.7	100.0	19.1
Change in Share 1995 v 1994 (% pt)	-1.2	0.3	0.7	0.0	-0.2	-	-3.2
Change in Share 1995 v 1985 (% pt)	-1.1	0.5	1.1	0.1	-5.2	-	-4.5
<i>Total OECD</i>							
Oil Share in 1995 (%)	41.2	52.6	30.5	97.1	23.5	99.2	7.1
Change in Share 1995 v 1994 (% pt)	-0.5	-0.3	-0.0	-0.0	-0.2	-0.1	-0.8
Change in Share 1995 v 1985 (% pt)	-1.5	1.2	0.9	-0.4	-4.9	1.2	-1.2

1 Total Inland Demand is the sum of end-uses and the energy used in the transformation of energy into another energy form (eg electricity) including losses in conversion and distribution. Excludes bunkers.

2 Total Final Consumption is the sum of consumption by the different end-use sectors: Industry, Transport, Residential/Commercial and Non-Energy Use.

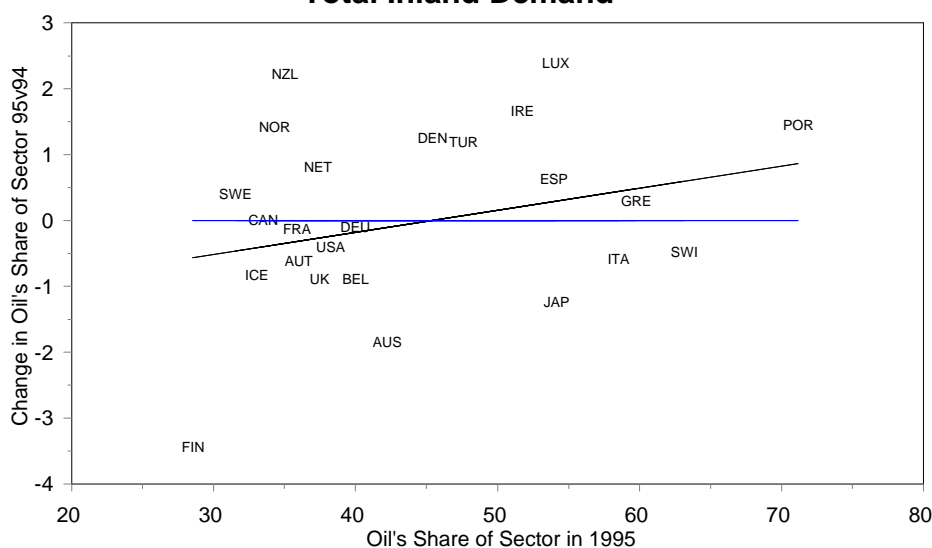
3 Non-Energy Use are mainly oil products used for non-energy purposes eg bitumen and lubricants. Petrochemical feedstocks are included under industry.

4 Electricity Output is the proportion of electricity generated by fuel source, ignoring conversion losses.

Oil's share of total inland demand declined in all three main regions of the OECD in 1994. A combination of continuing long-term oil substitution and short-term substitution arising from inter-fuel price competition and weather conditions altered the pattern of oil use, particularly in the power generation sector. Cold weather in the US in 1Q94 led to a shortage of natural gas to companies with interruptible

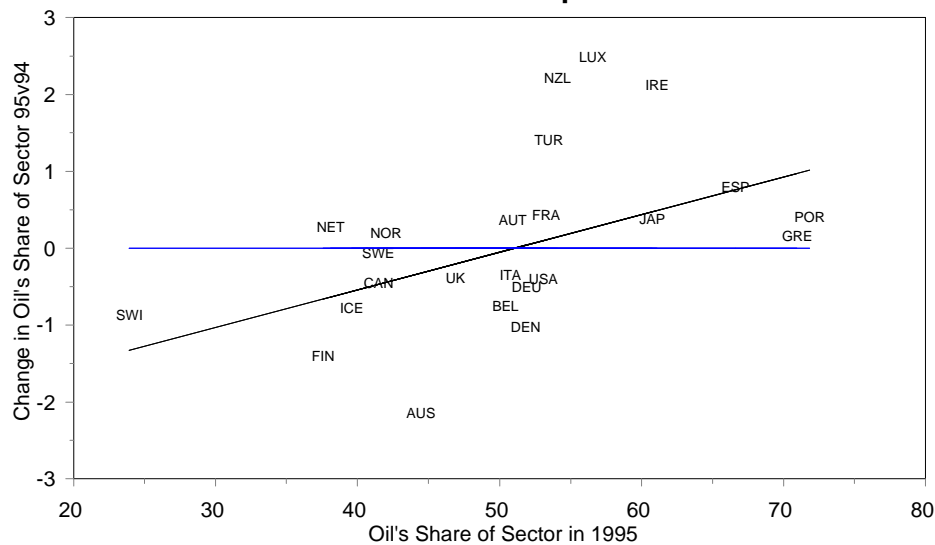
gas contracts, which led to increased fuel oil use. In the following year, oil's share of the US power generation sector declined, following a return to more normal weather. In Japan, a return to normal weather conditions in the summer of 1995, compared with high temperatures and a prolonged drought in the previous summer, resulted in a marked decline in oil use in the power generation sector. Conversely, a drought in southern Europe in 1995, particularly in the Iberian Peninsula, led to an increase in oil's share of the power generation market. Petrochemical feedstock demand has also tended to vary markedly for year to year, following distinct regional business cycles. Increased naphtha and LPG use in the Japanese petrochemical sector in 1995 offset some of the reduction in oil use in the Japanese power generation sector. The variation in weather conditions and business cycles has had a strong effect on the overall oil share in 1995, masking longer-term changes in oil share, particularly due to gas penetration in the residential/commercial and power generation sectors. The effect of longer-term declines in oil share can be seen in the percentage point decline in market share since 1985, shown in the last row of the table above.

### Change in Oil's Share of Total Inland Demand



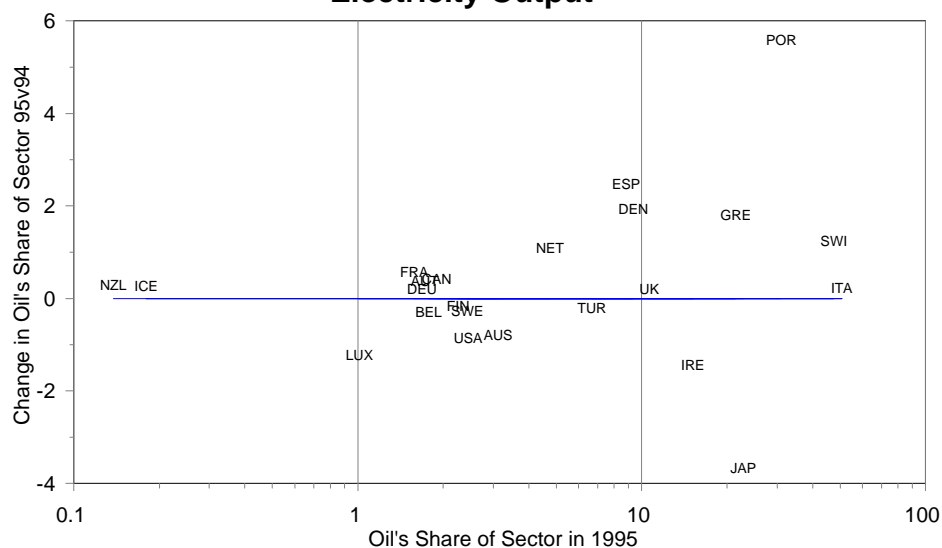
The increasing availability of alternative fuels is best illustrated by the extension of the natural gas infrastructure, particularly in Europe, which has given households, offices and industry an increased opportunity to switch from oil. Electricity has taken an increasing share of residential/ commercial energy demand due to increased non-space-heating demand, for which oil does not compete. Convenience has also been an important consideration in domestic heating, favouring electricity and gas. In addition, environmental concerns have most often favoured electricity and gas over oil and coal from an end-user standpoint. Government policies aimed at increasing oil supply security, diversification of energy supply and improvements in the environment have clearly affected oil substitution, but time lags in the replacement of capital stock tend to increase the time between policy implementation and changes in energy use patterns. It is primarily the comparatively rapid increase in transport energy demand, for which no significant alternative fuel to oil exists, that has limited the overall decline in share of oil in the OECD as a whole. Given the lack of a significant alternative fuel to oil in the road transport sector, further government action to reduce significantly the environmental consequences of consuming oil and of improving energy security through the reduced dependence on oil may be largely restricted to constraining road transport demand and improving vehicle fuel efficiency.

### Change in Oil's Share of Total Final Consumption



The three graphs, above and below, show the change in oil's share of energy use in various sectors of the economy between 1995 and 1994 for all OECD countries. The X-axes order the countries on the basis of oil's share in 1995. The first graph shows oil's share of total inland demand (excluding international marine bunkers), which includes the power generation sector and energy used in the transformation and distribution of energy. Total final consumption (illustrated in the second graph) represents the end-use of energy in which electricity competes. The final graph shows oil's share of electricity output, ignoring conversion losses in the generation process. There appears to be a positive correlation between a country's reliance on oil and the change in oil's market share between 1994 and 1995, which possibly reflects the greater existence of spare oil-burning capacity in countries which are already highly reliant on oil. Therefore, any additional demand for electricity or the absence of alternative fuels to generate electricity can be met more easily by increased oil use in those countries with spare oil-fired capacity. Those countries with a high proportion of hydro or nuclear output in the total generation mix appear to have been more able to reduce their dependence on oil.

### Change in Oil's Share of Electricity Output

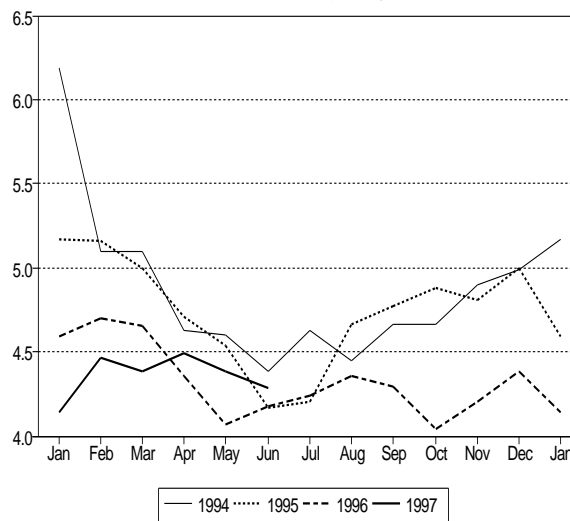


## Non-OECD<sup>2</sup>

### Former Soviet Union

Apparent demand in the former Soviet Union in 2Q97 has been revised downwards by 0.1 mb/d to 4.4 mb/d, reflecting greater net exports in May than originally reported. This decrease in demand was only partly offset by an increase in the estimate of June demand. The projection of FSU apparent demand for 3Q97 has been revised downwards marginally, on the basis of preliminary indications of Russian production and trade in July. FSU apparent demand in 1997 is now projected to increase by 0.3% to 4.4 mb/d. Due to changes to FSU demand in 2Q97 and 3Q97, (and an assumption of unchanged rates of growth in the same quarters in 1998), the projection of FSU demand in 2Q98 and 3Q98 has been revised downwards by 0.1 mb/d. The projection of demand in 1998 has remained essentially unchanged at 4.4 mb/d, an annual increase of 1.0% or 40 kb/d.

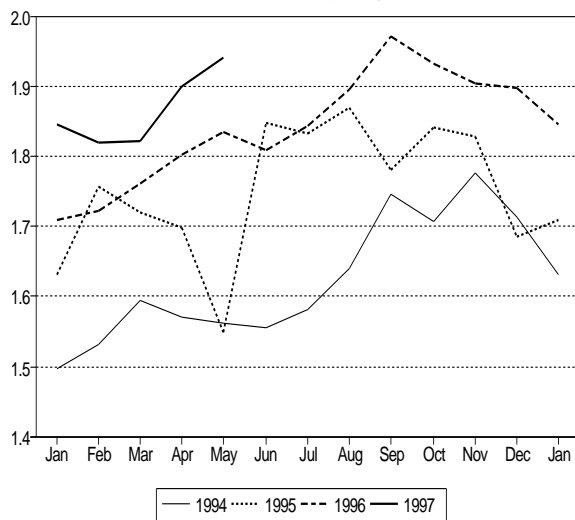
**FSU Oil Demand**  
(million barrels per day)



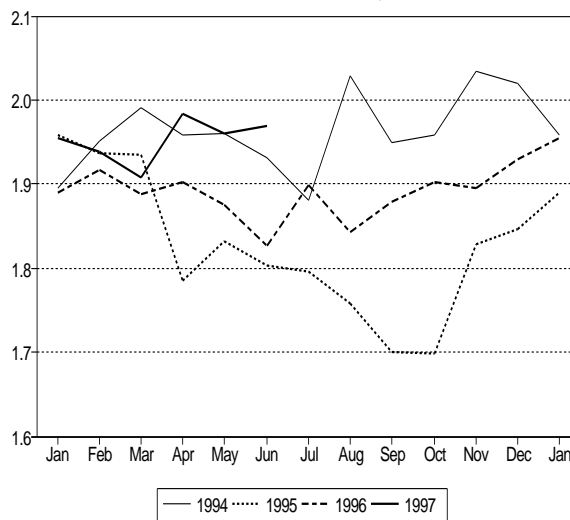
### Brazilian Demand in April and May

Preliminary data published in *Brazil Energy* magazine indicate that inland oil deliveries increased in April and May by 5.6% and 5.9% respectively, both greater than the 12-month moving average in May, of 4.3%. Including estimates of bunkers and refinery fuel use, total Brazilian demand in May is estimated to have grown by 105 kb/d to 1.94 mb/d. Demand grew for all products except "other products" and alcohol used as a gasoline additive. Demand for the latter product declined by 20 kb/d or 8.8% on a year-on-year basis or by 3.3% on a 12-month moving average basis. Demand for naphtha increased faster than any other product, increasing by 73 kb/d or 48.9%, mainly reflecting weak petrochemical demand a year earlier when naphtha deliveries declined by 24.2%. Gasoline deliveries increased by 2.4%, substantially less than the trend, but diesel deliveries increased by 44 kb/d or 8.2%, far greater than the trend. Following strong demand growth for residual fuel oil in March and April of 15.3% and 23.6% respectively, (reflecting increased demand from the power generation sector), fuel oil deliveries in May increased by only 1.3%, suggesting increased hydroelectric availability. Preliminary data for Brazilian demand in June (excluding alcohol used as a gasoline additive) indicate demand growth of 10.6%. Although total demand growth (including alcohol) will be somewhat less than this reported figure, Brazilian demand is now estimated to have increased by a greater amount than previously anticipated and revisions to the estimate of Brazilian demand have contributed to a 0.1 mb/d upward revision to the estimate of Latin American demand in 2Q97.

**Brazilian Oil Demand**  
(million barrels per day)



**Mexican Oil Demand**  
(million barrels per day)



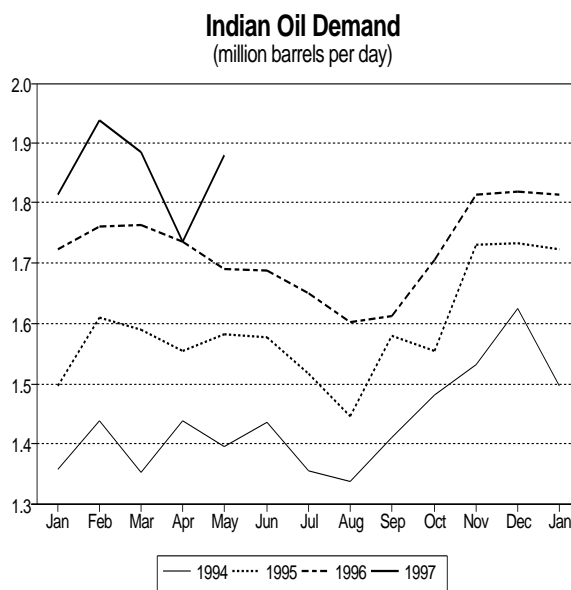
<sup>2</sup> including some OECD member countries, see note on back cover.

### Mexican Demand in June

Preliminary data published by Pemex indicate that inland oil deliveries (excluding refinery fuels) grew by 10.2% in June, far greater than the 12-month moving average of 6.4%. Including estimates of bunkers and refinery fuel use and an adjustment to calibrate the monthly data to the historical series, total Mexican demand in June is estimated to have grown slightly more slowly than inland deliveries, increasing by 140 kb/d to 1.97 mb/d. Demand was strong in June, primarily due to weak growth a year earlier when a 3.6% decline in gasoline deliveries led to an overall modest 0.7% increase in product deliveries. This June, gasoline deliveries increased by 27 kb/d or 5.8%. Almost half of the incremental oil product demand was due to a 16.9% increase in residual fuel oil deliveries, reflecting increased demand from the power generation sector due to a reported shortfall in hydroelectric output in Western Mexico. Mexican oil demand in 2Q97 is estimated to have increased by 7.1%, representing the fifth successive quarter of annual growth and reflecting the continuing recovery from the financial crisis in 1995, which severely dampened demand. Diesel deliveries increased by 9.5% in the quarter, despite strong growth a year earlier, consistent with reported strong economic growth. Demand in 2Q97 has returned to levels last seen in 4Q94, when demand was particularly strong due to increased use of fuel oil in the power generation sector.

### Indian Demand in May

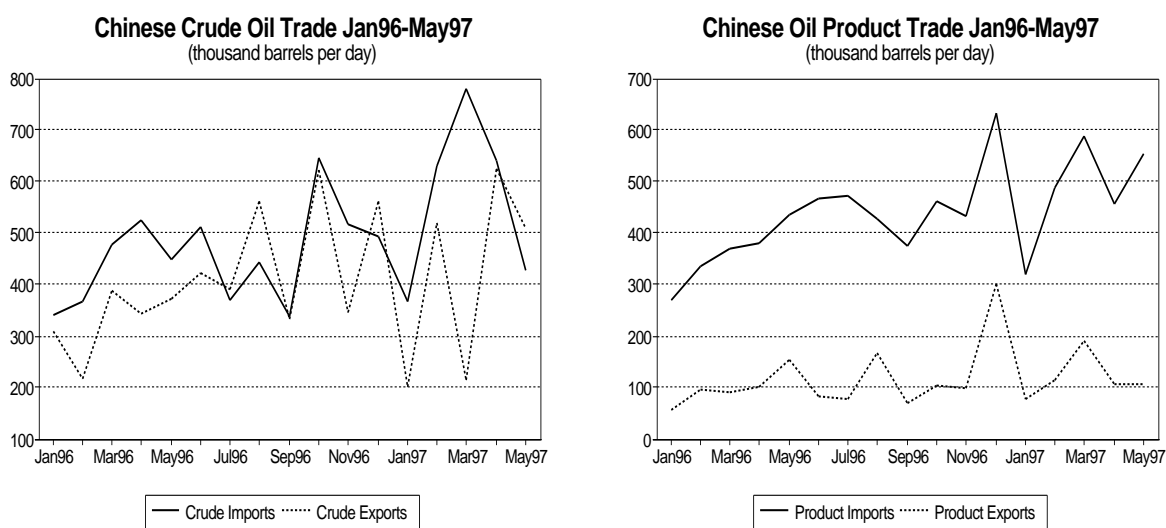
Data published by the Indian Ministry of Petroleum and Natural Gas indicate that Indian inland deliveries were also strong in May, increasing by 12.0%, compared with growth of 6.6% in the year-to-date and 7.0% on a 12-month moving average basis. Including estimates of bunkers and refinery fuel use, Indian demand in May is estimated to have increased by 190 kb/d to 1.88 mb/d. The growth was above trend primarily due to a 17.8% or 128 kb/d increase in high-speed (automotive) diesel deliveries, which contributed nearly 70% of total incremental demand. Strong diesel demand primarily reflects increased use in the agricultural sector (for tractors and water pumping) and also in the road transport sector. LPG and naphtha deliveries increased by 13.4% and 34.3% or a combined 42 kb/d, consistent with increased use of LPG in the residential sector and increased petrochemical capacity. The strong demand in May was unexpected, given 6.7% growth in the previous May, but some of the demand strength may have been due to delayed deliveries in April 1997, when overall deliveries fell by 0.1%. On a 12-month moving average basis, naphtha demand is growing faster than that for any other product, with deliveries increasing by 23.1%, followed by LPG (10.2%) and high-speed diesel (8.8%). The strength in LPG demand reflects government marketing incentives and reduced kerosene price subsidies to discourage kerosene and promote LPG use in the residential sector.



### Chinese Trade

In May, Chinese total net imports were essentially unchanged from the previous month at 365 kb/d, and only 2% greater than a year earlier. Net crude oil trade moved from a net import level in April of 15 kb/d to a net export level of 82 kb/d. While product exports were unchanged from April, product imports increased by almost 100 kb/d, leading to a 28% increase in net product imports. Crude oil exports decreased by 19%, from 625 kb/d in the previous month to 508 kb/d, 43% of which was shipped to Japan (216 kb/d) and 39% to Korea (197 kb/d). Crude imports declined by 33% from the previous month to 426 kb/d, some 5% lower than a year earlier. Typically, Oman provided 32% of crude oil imports, but Angolan imports increased substantially from April levels and contributed some 22% of total crude imports in May. Conversely, combined Indonesian and Iranian imports declined by almost 100 kb/d from April levels, but still contributed a quarter of total crude imports in May. In products trade, China remained a net exporter of gasoline, but net imports of light diesel increased to 60 kb/d. China also continued to be a substantial net importer of residual fuel oil, with imports increasing by 44% from April levels, to 290 kb/d.





### Non-OECD Demand in 1997 and 1998

Non-OECD demand in 1997 is again projected to increase by 4.2% or 1.3 mb/d to 32.1 mb/d. Minor downward revisions to Asian demand in the first half of the year, primarily due to weak Korean demand have been almost offset by an upward adjustment to Latin American demand in 2Q97, due to stronger-than-anticipated demand growth in Mexico and Brazil. Korean demand is estimated to have increased by only 1.9% in 1Q97 and just 5.0% in 2Q97. Non-OECD demand in 1998 remains unchanged at 33.5 mb/d, an annual increase of 4.3% or 1.4 mb/d. Revisions to demand in 1Q97 and an unchanged growth rate in 1998 have led to adjustments to 1Q98 non-OECD demand.

#### Non-OECD Demand in 1997 & 1998

	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*
1Q97	4.3	-0.3	1.6	0.1	3.6	0.2	9.3	0.5	6.5	0.2	4.2	0.1	2.4	0.1	31.9 <sup>r</sup>	0.9
2Q97	4.4 <sup>r</sup>	0.2	1.5	0.1	3.8	0.2	9.0	0.6	6.7 <sup>r</sup>	0.3	4.2	0.1	2.4	0.1	31.9	1.6
3Q97	4.2	-0.1	1.4	0.1	3.8	0.2	8.7	0.6	6.7	0.2	4.4	0.1	2.3	0.1	31.5	1.1
4Q97	4.5	0.3	1.5	0.1	3.9	0.2	9.7	0.7	6.7	0.2	4.4	0.1	2.4	0.1	33.1	1.6
1997	4.4	0.0	1.5	0.1	3.8	0.2	9.2	0.6	6.6	0.3	4.3	0.1	2.4	0.1	32.1	1.3
1Q98	4.4	0.0	1.6	0.0	3.9	0.2	9.9	0.6	6.8	0.3	4.3	0.1	2.5	0.1	33.3 <sup>r</sup>	1.4
2Q98	4.4 <sup>r</sup>	0.0	1.5	0.0	4.0	0.2	9.7	0.7	6.9 <sup>r</sup>	0.2	4.3	0.1	2.5	0.1	33.3	1.4
3Q98	4.2 <sup>r</sup>	0.0	1.4	0.0	4.0	0.2	9.3	0.6	7.0	0.2	4.5	0.1	2.3	0.1	32.8	1.3
4Q98	4.6	0.1	1.5	0.0	4.1	0.2	10.3	0.7	6.9	0.2	4.5	0.1	2.5	0.1	34.5 <sup>r</sup>	1.4
1998	4.4	0.0	1.5	0.0	4.0	0.2	9.8	0.6	6.9	0.2	4.4	0.1	2.4	0.1	33.5	1.4

\* year-on-year change (mb/d)

<sup>r</sup> revised since last Report

### Global Demand in 1997 and 1998

The annual increase of 1.9 mb/d or 2.6% in global demand in 1997 to 73.8 mb/d is essentially unchanged from last month's Report as downward revisions to non-OECD demand in 1Q97 have been slightly more than offset by upward adjustments to OECD demand in 2Q97 and 3Q97. Global demand in 1998 is projected to increase by 2.5%, 1.8 mb/d higher than in 1997, leading to a 0.1 mb/d upward revision from last month's Report, to 75.7 mb/d. Small adjustments have been made to the quarterly demand levels, primarily to reflect 1997 revisions, particularly in North and Latin America.

#### Global Demand in 1997 and 1998

	Demand	Annual Change		Changes from last month's Report
	(mb/d)	(%)	(mb/d)	(mb/d)
1Q97	73.9	0.9%	0.7	-
2Q97	72.6	3.9%	2.7	-
3Q97	72.8	2.6%	1.8	-
4Q97	75.9	3.1%	2.3	-
1997	73.8	2.6%	1.9	-
1Q98	75.9	2.7%	2.0	-
2Q98	74.1 <sup>r</sup>	2.0%	1.5	0.1
3Q98	74.7 <sup>r</sup>	2.6%	1.9	0.1
4Q98	77.9 <sup>r</sup>	2.6%	2.0	0.1
1998	75.7 <sup>r</sup>	2.5%	1.8	0.1

\* year-on-year change (mb/d)

<sup>r</sup> revised since last Report

## SUPPLY

### Summary

- **World oil supply** recovered to 73.6 mb/d in July from a downwardly-revised 73.0 mb/d in June. North Sea supplies were less affected by maintenance, rising by almost 0.3 kb/d, and production from Australia and Canada added another 0.1 mb/d to OECD oil supply. OPEC production increased by 0.2 mb/d to 26.5 mb/d but remained 0.7 mb/d below the recent peak of 27.2 mb/d in April due to the lack of Iraqi exports during the month. Oil supply from the developing countries was marginally lower, as Colombian output reductions related to guerrilla activities offset gains in Mexico and elsewhere, and a decline in Russian production exceeded small increases in the other Republics of the FSU.
- A number of **downward revisions** have been made to non-OPEC supply components to reflect re-evaluations of historical data and a more conservative view of prospects for the North Sea and some developing countries. Non-OPEC supply in 2Q97 and 3Q97 is now projected at 44.11 mb/d and 44.47 mb/d, 0.4 mb/d less and 0.6 mb/d less, respectively, than in last month's Report.
- Combined with the strong demand growth discussed in the Demand section, the impact of these supply revisions on the **"call on OPEC oil plus stock change"** is an increase of more than 0.5 mb/d in the last three quarters of 1997 and throughout 1998. The estimated "call" is now 25.7 mb/d in 2Q97 and 25.5 mb/d in 3Q97. For the full year 1997, the "call" is 26.2 mb/d but is expected to fall slightly to 25.9 mb/d in 1998.
- **Net FSU exports** reached an estimated 3 mb/d in July despite the effect of maintenance on Baltic product exports and lower Druzhba pipeline crude throughputs as Urals crude was called on to meet the shortfall in Iraqi exports to the Mediterranean. June export estimates were also revised upwards due to a less-than-expected impact of bad weather and an oil spill at the Black Sea port of Novorossiisk.

### Non-OPEC Oil Supply

(million barrels per day)

	1996	1997 <sup>f</sup>	1998 <sup>f</sup>	2Q96	3Q96	4Q96	1Q97	2Q97 <sup>p</sup>	3Q97 <sup>f</sup>
<b>CRUDE OIL</b>									
North America	8.03	8.02	8.26	7.95	7.99	8.09	8.05	7.96	7.96
United States	6.47	6.43	6.53	6.43	6.42	6.48	6.45	6.42	6.38
Canada	1.56	1.59	1.73	1.52	1.57	1.61	1.60	1.54	1.59
Europe	6.20	6.41	6.93	6.12	6.11	6.41	6.38	6.07	6.15
North Sea	5.79	6.00	6.50	5.70	5.69	6.01	5.96	5.67	5.75
UK*	2.45	2.50	2.80	2.38	2.34	2.61	2.55	2.22	2.44
Norway	3.09	3.22	3.40	3.09	3.09	3.13	3.15	3.19	3.03
Other North Sea**	0.25	0.28	0.31	0.23	0.26	0.27	0.26	0.27	0.27
Other Europe	0.41	0.41	0.43	0.43	0.42	0.41	0.42	0.40	0.41
Pacific	0.59	0.67	0.76	0.60	0.61	0.59	0.59	0.64	0.72
Australia	0.54	0.60	0.69	0.55	0.55	0.52	0.52	0.56	0.66
Other Pacific	0.05	0.07	0.08	0.05	0.06	0.07	0.07	0.07	0.07
<b>Total OECD</b>	<b>14.82</b>	<b>15.10</b>	<b>15.95</b>	<b>14.67</b>	<b>14.71</b>	<b>15.09</b>	<b>15.02</b>	<b>14.67</b>	<b>14.84</b>
Latin America	5.76	6.14	6.51	5.75	5.76	5.86	6.00	6.06	6.16
Asia (inc. China)	5.03	5.11	5.21	5.03	4.99	5.07	5.11	5.13	5.09
Africa (inc. Gabon)	2.42	2.57	2.76	2.37	2.45	2.48	2.51	2.53	2.58
Other Middle East	1.86	1.85	1.84	1.85	1.87	1.88	1.85	1.84	1.86
Central and Eastern Europe	0.25	0.25	0.24	0.24	0.24	0.25	0.25	0.25	0.25
<b>Total Non-OECD (ex. FSU)</b>	<b>15.31</b>	<b>15.92</b>	<b>16.56</b>	<b>15.24</b>	<b>15.31</b>	<b>15.54</b>	<b>15.71</b>	<b>15.82</b>	<b>15.93</b>
Russia	5.84	5.83	5.82	5.84	5.88	5.82	5.78	5.92	5.81
Other Republics	0.91	1.00	1.17	0.90	0.92	0.94	0.94	0.97	1.00
<b>Total FSU</b>	<b>6.75</b>	<b>6.82</b>	<b>6.99</b>	<b>6.74</b>	<b>6.80</b>	<b>6.76</b>	<b>6.72</b>	<b>6.89</b>	<b>6.81</b>
<b>NGLS &amp; OTHER</b>									
United States	2.13	2.22	2.22	2.12	2.13	2.22	2.19	2.20	2.22
Canada	0.90	0.92	0.97	0.86	0.90	0.92	0.93	0.83	0.93
North Sea	0.41	0.42	0.44	0.39	0.37	0.45	0.43	0.37	0.38
Russia	0.19	0.20	0.21	0.18	0.17	0.20	0.21	0.19	0.18
Other Non-OPEC	1.58	1.62	1.82	1.62	1.54	1.54	1.57	1.59	1.63
<b>Total NGLs and Other</b>	<b>5.20</b>	<b>5.36</b>	<b>5.66</b>	<b>5.17</b>	<b>5.11</b>	<b>5.32</b>	<b>5.33</b>	<b>5.18</b>	<b>5.34</b>
Processing Gains	1.52	1.57	1.64	1.50	1.50	1.55	1.57	1.56	1.56
<b>Total Non-OPEC Supply</b>	<b>43.60</b>	<b>44.77</b>	<b>46.80</b>	<b>43.32</b>	<b>43.43</b>	<b>44.25</b>	<b>44.34</b>	<b>44.11</b>	<b>44.47</b>

<sup>p</sup> preliminary

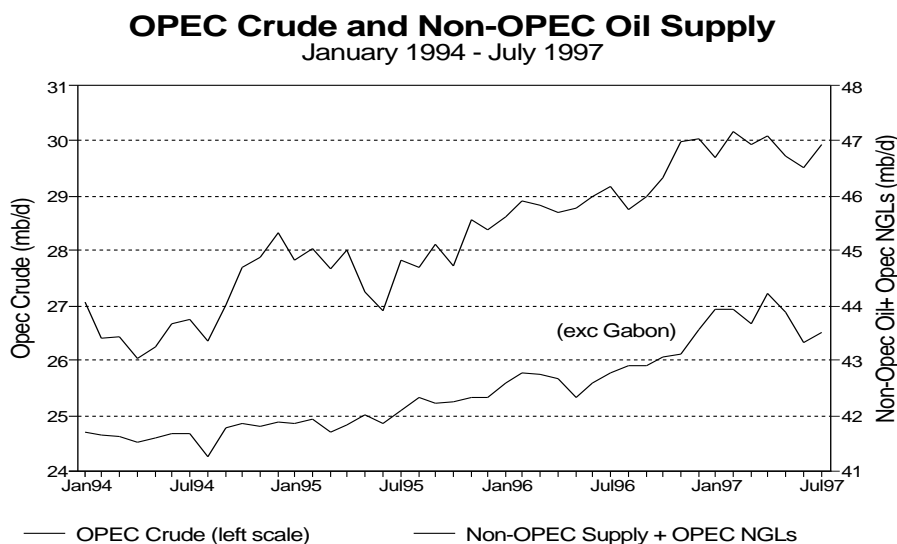
<sup>f</sup> forecast

\* excluding on-shore production

\*\* Denmark, offshore Netherlands and offshore Germany

## Overview of Supply Developments and Revisions

July production benefited from a lull in North Sea maintenance activities, which allowed an increase of 295 kb/d from June levels, as well as higher production from Australia's Carnarvon Basin and from the two Canadian synthetic crude oil plants. Total non-OPEC production rose by about 375 kb/d despite a 40 kb/d decline in FSU production and 15 kb/d lower output from developing countries. OPEC crude production gained 170 kb/d as a result of higher output in all but three of the countries: Nigeria, the UAE and Libya. The largest gains were in Iran (+75 kb/d) and the Neutral Zone (+40 kb/d). OPEC NGLs also increased, by about 35 kb/d.



Overall North Sea gains of 295 kb/d were more than 80% accounted for by UK output increases that were led by the return of Forties System fields from maintenance. In Norway, the impact of the return to full production of the Oseberg System was partly offset by problems in the Statfjord-Gullfaks area Snorre field, resulting in a gain of about 55 kb/d. Elsewhere in the OECD, Australia and Canada added 75 kb/d and 65 kb/d respectively to July production, while US production was marginally lower and other European and Pacific OECD countries matched June production levels.

The month's decline in non-OECD production was led by Colombia's drop of 70 kb/d and 55 kb/d lower estimated Russian production. Pipeline bombings and attacks on oil production facilities have limited current production in Colombia and slowed down the throughput growth on the new Ocesa pipeline that was put into service in June. Increases in Mexico (+25 kb/d), Ecuador (+15 kb/d), Argentina and Brazil (+10 kb/d each) offset most of the Colombian decline. Asian supply increased slightly, as higher Indian and Malaysian output more than offset a small decline in Chinese production. Non-OPEC Middle East also increased slightly but non-OPEC African production was modestly lower.

### Revisions

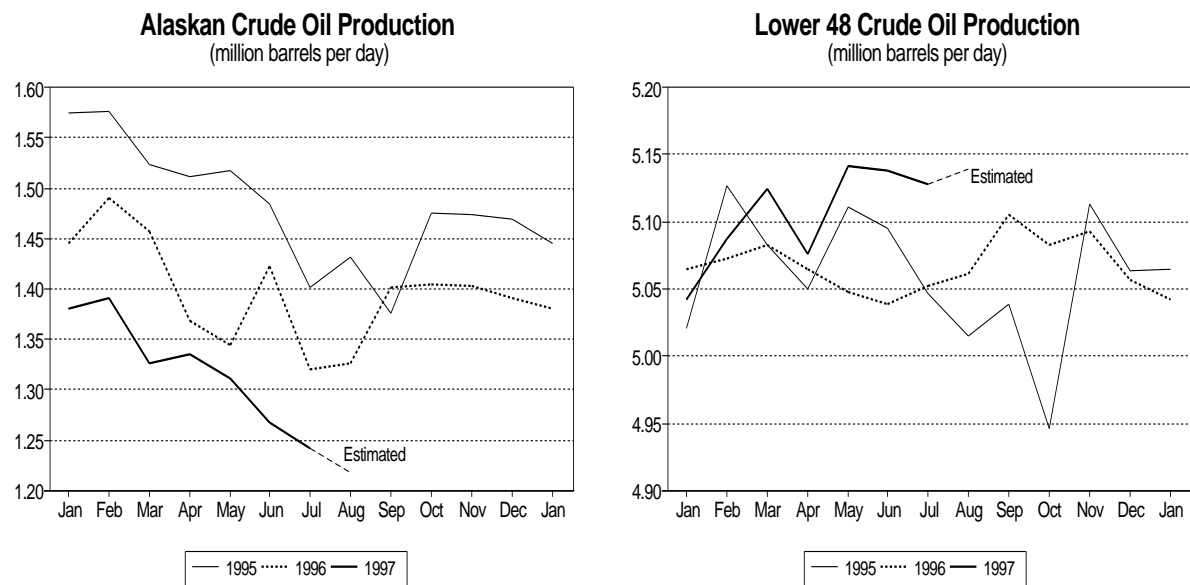
The July supply increases are primarily the result of major downward revisions to estimates of June and 2Q97 production. The 2Q97 downward revision of 0.4 mb/d is spread among several regions, with 0.1 mb/d adjustments to the North Sea, Australia, China, non-OPEC Middle East and non-OPEC Africa, the latter two relating to revisions in historical data for Syria and Angola. These revisions have generally been carried forward into 3Q97 and, when combined with the impact of additional delays in North Sea field start-ups and new Colombian production, result in a 0.6 mb/d lower estimate of 44.5 mb/d for 3Q97, a level that had been expected to be achieved in 2Q97.

Revisions to May and June data were each in excess of 500 kb/d. The May revisions were split about equally between OECD and non-OECD countries, with the largest adjustments to the North Sea (-85 kb/d), China (-80 kb/d) and Australia (-55 kb/d). Revisions to historical data for Syria (-60 kb/d), Angola (-50 kb/d), Papua New Guinea (-40 kb/d) and Yemen (-25 kb/d) were also reflected for the first time in the new May estimates. Conversely, the June revision of 515 kb/d was dominated by the UK North Sea (-270 kb/d), due to heavier than expected maintenance, with Australia (-90 kb/d) and Norway (-85 kb/d) also revised significantly downwards. Estimated 1998 non-OPEC supply of 46.8 mb/d, which is 435 kb/d lower than in last month's Report, also includes a slowdown in the rate of increase in offshore Brazilian production.

**OECD<sup>1</sup>***North America*

US oil production is estimated to have been 8.60 mb/d in July, 7 kb/d lower than the revised June average of 8.61 mb/d. July output included 6.37 mb/d of crude (-35 kb/d), 1.91 mb/d of NGLs (+44 kb/d) and 0.32 mb/d of other hydrocarbons (-16 kb/d). Most of the drop in crude production was due to a 25 kb/d decline in Alaska, where output averaged 1.24 mb/d. Prudhoe Bay field production fell by 29 kb/d to 648 kb/d, with the main factor continuing to be the relatively warm weather in an otherwise uneventful month (temperatures on the North Slope averaged 49°F). Kuparuk supply rose by 13 kb/d to 253 kb/d, recovering from scheduled maintenance in June. Inventories at the Valdez loading terminal stood at 3.3 million barrels on the last day of July, in the normal range.

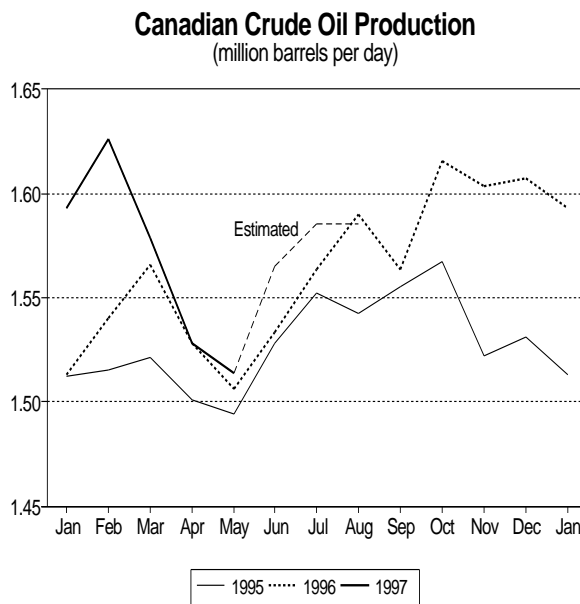
Trans-Alaska Pipeline System Pump Stations 2 and 6 were permanently taken out of service in July, following similar shutdowns of Pump Stations 8 and 10 last year. Gradually declining production, along with the use of a drag-reducing agent to cut flow turbulence inside the line, has made closing the costly pump stations possible. Production in Alaska is expected to stabilise over the next few years however as new fields come onstream. Also, a new miscible gas injection project at Prudhoe Bay, known as the Miscible Injectant Expansion (MIX), is scheduled to come into operation in late 1999, with the equipment transported to the North Slope via sealift in the summer of 1999. At a cost of \$160 million, MIX will boost Prudhoe Bay production by 20 kb/d and will add 50 million barrels to proven reserves.



Total crude production in the lower 48 states averaged 5.13mb/d in July, a decline of 10 kb/d. During the middle of the month, Hurricane Danny attracted much attention but the impact of the storm on production in the Gulf of Mexico was minimal. Preliminary estimates suggest that about 200 kb/d of oil production was shut in for two days as a precautionary measure, resulting in "lost" production of 13 kb/d over the month. Importantly, Mars field production was unaffected. As a result, Gulf of Mexico production was flat at 1.24 mb/d, rather than showing an expected slight increase. The 1.24 mb/d figure includes 1.16 mb/d from Federal waters, 76 kb/d from Louisiana state waters and 4 kb/d from Texas state waters. Although forecasting annual patterns in hurricane frequency and severity is an inexact science, the apparent onset of the El Niño effect in the Pacific has, in the past, tended to decrease the overall impact of the hurricane season in the Gulf of Mexico. Total production from Federal Gulf of Mexico waters is expected to increase from 1.13 mb/d during 2Q97 to 1.18 mb/d and 1.24 mb/d in 3Q97 and 4Q97 respectively. Mars field output, currently at 100 kb/d, is now not expected to increase to the 140 kb/d level until late in the year. Conversely, the Ram-Powell field, with a plateau production level of 60 kb/d, is scheduled to begin production this month from the first of four pre-drilled wells, versus previous expectations for the field to come onstream during 4Q97. Estimated July crude production levels elsewhere in the Lower 48 states include 914 kb/d in California and 1.46 mb/d in Texas, both unchanged from June.

<sup>1</sup> excluding some member countries, see note on back cover.

Production data for **Canada** for May indicate total oil production of 2.29 mb/d, down 75 kb/d compared to the April figure of 2.37 mb/d. Synthetic crude output decreased by 34 kb/d compared to April. Although maintenance ended at the larger of the two plants, where output rose by 38 kb/d, the smaller Suncor facility dropped by 72 kb/d, since it was shut down for most of the month. Output of conventional crude in Alberta fell by 32 kb/d to 1.05 mb/d, and has fallen each month since February, when it averaged 1.15 mb/d. This is not thought to be a reversal of upward trends in total Alberta production. Decreases in heavy crude prices relative to light crude prices have reportedly caused some low-margin heavy crude production to be temporarily shut in. Saskatchewan production rose by 11 kb/d to 360 kb/d. Heavy crude production there is from newer fields, which often have a lower cost structure and therefore higher per-barrel profit margins. Output of NGLs in Canada fell seasonally, by 27 kb/d to 609 kb/d, as related natural gas production declined.



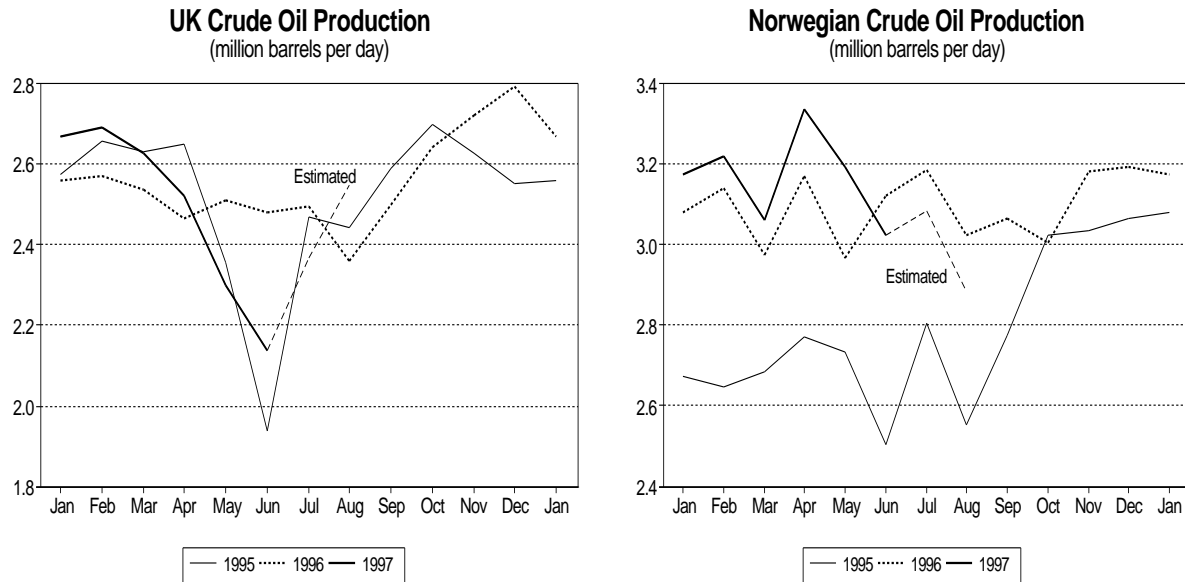
June oil production was estimated to have been 137 kb/d higher than May, at 2.43 mb/d. Most of the increase was from a 100 kb/d post-maintenance rebound at the synthetic crude plants. Alberta production of conventional crude and bitumen was also estimated to have increased by 51 kb/d. These gains were thought to have been partially offset by another 14 kb/d seasonal fall in NGL supply.

#### North Sea

June **UK** offshore oil production averaged 2.24 mb/d, a drop of 163 kb/d from the May level of 2.40 mb/d (revised down by 43 kb/d). The June forecast had been for 2.51 mb/d. The main factors were longer maintenance on Forties System fields, which started in late May and continued into June, and subsequent repairs to correct problems discovered during maintenance at the Scott and Nelson fields. Forties System output averaged 542 kb/d, down 242 kb/d from May. Production at the Miller, Scott and Nelson fields fell by 43 kb/d, 38 kb/d and 125 kb/d respectively. As described in last month's Report, defects had been found in Scott's subsea flowlines and Nelson had corrosion problems in a gas compressor. Brent System production averaged 395 kb/d. Since production at the Brent field's Charlie platform was 32 kb/d, the forecast for Charlie has been revised downward to reflect expectations of continued production of around 30 kb/d. In 1996, Charlie underwent a six-month extended work programme and output following its return to production in 4Q96 had been expected to be in the 80-100 kb/d range. Ninian System output was 228 kb/d as the Ninian field, which normally produces around 50 kb/d, apparently was down for maintenance, since no production was reported for June. It was an uneventful month in the Flotta and Fulmar Systems. Beryl System supply fell by 12 kb/d, with maintenance on the Beryl field apparently continuing into a second (unplanned) month. Among the offshore fields, J-block production rose from 23 kb/d to 40 kb/d with Judy and Joanne output headed up to plateau levels of 90 kb/d later this year. Earlier disagreements pertaining to the disposition of associated gas production have been resolved. Supply from the Captain field averaged 35 kb/d, versus the anticipated 60 kb/d. It has been reported that Captain will not attain its plateau level of 60-65 kb/d until late this year, due to the fact that the water-injection system is not yet operating at full levels.

UK offshore oil output in July is estimated to have averaged 2.49 kb/d, a gain of 254 kb/d over June. Most of the increases are thought to have occurred in the Forties System, which rebounded to 825 kb/d. However, problems experienced in June continued at the Scott field, which was reported to have produced 100 kb/d, and at Nelson, which is estimated at 110 kb/d. Based on an evaluation of recent performance prior to the problems, which are assumed to be fixable, the outlook for Nelson and Scott respectively has been revised to 145 kb/d (from 165 kb/d) and to 155 kb/d (from 160 kb/d). July output in the Brent, Ninian and Flotta Systems is estimated to have increased by a combined 45 kb/d. Supply from offshore-loaded fields is believed to have fallen by 85 kb/d, mostly due to maintenance at Alba (-55 kb/d) and at Fife/Fergus (-13 kb/d). August production is forecast at 2.69 mb/d, with known maintenance programmes having an impact of roughly 65 kb/d. The MacCulloch and Durward/Dauntless developments are

expected onstream this month and the startup of a six-month extended production test at the Mariner heavy oil field is anticipated. Recent field performance has been used to adjust field forecasts with the general direction being downwards. Besides Brent C, Nelson and Scott, mentioned above, the Magnus field outlook has been changed from 87 kb/d to 80 kb/d. Also, first oil from Foinaven is now not assumed to begin until April of next year. Production levels in 4Q97 and for the full year are now projected to be 3.11 mb/d and 2.76 mb/d, respectively. The full year average is only 62 kb/d higher than the 1996 figure.



**Norwegian** oil production in June averaged 3.17 mb/d, a drop of 169 kb/d from May levels. The June forecast had been for 3.25 mb/d. Scheduled maintenance programmes in Oseberg area fields apparently lasted longer than planned and had a more severe impact upon production levels than expected, with total Oseberg System output falling by 200 kb/d to 455 kb/d. Available work plans had indicated that a drop of only 120 kb/d would occur. Oseberg field production fell by 131 kb/d, to 356 kb/d. In the Haltenbanken area, Heidrun field output averaged just 214 kb/d, again performing well below expectations of 250 kb/d. Offsetting the Oseberg and Heidrun underperformance, the Ekofisk Area produced 339 kb/d, 45 kb/d higher than the previous month and higher than the forecast by the same amount. Supply from the Statfjord/Gullfaks area averaged 1.22 mb/d, a drop of 68 kb/d compared to May. The drop had been expected, as the April and May levels were not considered sustainable. As expected, the Vigdis field, which was shut in on 23 May due to problems in the gas compression system, did not produce any oil in June.

July Norwegian oil production is estimated to have averaged 3.22 mb/d, a gain of 53 kb/d compared to June. No scheduled maintenance programmes were thought to have taken place in July but various problems were reported at the Vigdis, Snorre, and Gullfaks fields, all located in the Statfjord-Gullfaks area. The Vigdis field, with planned plateau production of 90 kb/d, only produced 10 kb/d in July. It came back onstream on 10 July, produced for one week at 40 kb/d and was shut down again on 17 July due to another problem in the gas compression system. Although no date for resumption of production has been given, the second half of August has been assumed, with production this month at 35 kb/d. Vigdis production, however, remains a wildcard at this time. The Snorre field, which averaged 200 kb/d in 2Q97, was shut in for five days from 20 July, following a power failure on the platform. Monthly output is now estimated at 168 kb/d compared to the previous forecast of 215 kb/d. The Gullfaks field was also reported to have had unspecified problems that caused loading delays of a day or two during the month, and a downward adjustment of 30 kb/d was made to the 450 kb/d field. August production is forecast at 2.99 mb/d, with the biggest maintenance impacts of the year expected (over 350 kb/d). Start-up of the 160 kb/d Norne field is still anticipated in August. Full year 1997 production is now forecast at 3.36 mb/d, a gain of 124 kb/d over the 1996 average.

**Danish** crude oil production averaged 229 kb/d in June, a drop of 7 kb/d compared to the May figure. The main changes were at the Tyra field, which dropped 7 kb/d, and at the Harald field, which increased 6 kb/d in its third month of operations. The Svend field was off by 4 kb/d. Variations at other fields were 3 kb/d

or less. In July, Danish output is estimated to have fallen to 217 kb/d, with assumptions made for scheduled field maintenance programmes, while the forecast for August calls for supply of 237 kb/d, with all fields operating normally. **Dutch** offshore crude oil production averaged 31 kb/d in June, compared to 30 kb/d in July. Dutch supply is estimated at 32 kb/d for July and forecast at 31 kb/d for August.

#### Other OECD Europe

The 1998 oil production forecast for Other OECD Europe is shown in the table below. The most important components of this often overlooked region are UK onshore production and Italian production. The **UK onshore** sector basically consists of the Wytch Farms field, which should average 101 kb/d this year, and various other small fields that add another 7 kb/d. During June, July and the first half of August, Wytch Farms production has been about 15 kb/d below its usual, relatively steady 104-106 kb/d, due to work taking place on one of the production wells. This accounts for the slight dip in 1997 production. However, the outlook for the field is stable as many advanced technologies are being employed there, including extended reach drilling to offshore reservoirs from onshore drill sites and miscible gas injection. The last of 14 wells drilled into the offshore Sherwood reservoir is currently under way and the completion of this programme is expected to keep output steady through 1998 and possibly into 1999.

In **Italy**, the 1997 oil production level of 122 kb/d consists of 118 kb/d crude, 1 kb/d NGLs and 3 kb/d of non-conventional oil, with crude production poised for growth. Output of 112 kb/d in 2Q97 is expected to increase in coming years due to new production from the Val d'Agri Oil Centre in the Southern Apennine region. The most recent information from operators involved in the development points to a slower pace of development than was assumed when the project was announced in 1996. There are three fields: Monte Alpi, Cerro Falcone and Tempa Rossa. Monte Alpi is the most advanced, with 7.5 kb/d of current production, transported via truck. By the end of 1998, a 150 kb/d capacity pipeline will be completed from the Oil Centre to a refinery at Taranto. However, oil production will not significantly increase until the middle of 1999, because capacity expansions at the Oil Centre will lag the pipeline completion by about six months. In mid-1999, Monte Alpi output is intended to increase to 45 kb/d, followed by increases to 65 kb/d by the end of 1999 and to 105 kb/d by the end of 2000. In the meantime, test wells at Cerro Falcone and Tempa Rossa will be producing during 1997 and 1998, adding occasional small increments to Italian production. Cerro Falcone is more completely appraised than Tempa Rossa, where a development decision has not yet been reached but is expected before the end of 1997. Also, the offshore production from Italy's Aquila field in the Adriatic Sea is expected to commence during 3Q97, adding 17 kb/d to production. Total Italian crude production is expected to average 130 kb/d in 1998, 148 kb/d in 1999 and 170 kb/d in 2000.

#### Other OECD Europe Oil Production 1995-1998

(thousands of barrels per day)

	1994		1995		1996		1997		1998	
	Level	Change	Level	Change	Level	Change	Level	Change	Level	Change
Italy	88	2	96	8	104	7	122	19	136	14
UK Onshore	98	22	101	4	111	10	107	-3	112	5
German Onshore	69	-4	66	-3	64	-2	70	6	66	-4
Turkey	71	-4	68	-3	66	-2	65	-1	61	-4
France	68	1	61	-7	59	-2	47	-13	45	-2
Netherlands Onshore	28	-2	22	-6	20	-1	25	5	21	-4
Austria	22	-1	21	-1	20	-1	19	-1	17	-2
Greece	11	-1	9	-2	9	-1	10	2	11	1
Spain	21	-4	17	-3	16	-1	7	-10	5	1
Total	476	9	462	-14	469	6	472	4	475	2
Memo:										
Crude Oil	428	14	417	-10	425	8	423	-3	428	6
NGLs	27	-2	24	-3	23	-1	24	0	20	-4
Other	21	-2	20	-0	20	0	26	6	26	-0

#### Pacific

**Australian** oil production in May totalled 650 kb/d, up 34 kb/d compared to April. Gippsland Basin production rose by 21 kb/d for the second month in a row, to 242 kb/d. Production from recent field start-ups at West Tuna and Bream B is the primary factor, aided by ongoing development work and infill drilling at older fields. However, the Gippsland Basin is a mature area and production is expected to resume a slow decline in the coming months. In the Carnarvon Basin (+12 kb/d), the Wandoo B field, which came onstream in March, increased output to 36 kb/d (+15 kb/d). A large increase (+13 kb/d) also

occurred at the North Rankin and Goodwyn condensate fields, which produced 116 kb/d. Due to planned maintenance, Griffin did not produce any oil in May, a loss of 31 kb/d. Wanaea/Cossack produced 69 kb/d (+7 kb/d) while output from the Cooper-Eromanga and Bonaparte Basins was flat, at 35 kb/d and 18 kb/d respectively.

In June, Australian oil production is estimated to have decreased slightly to 644 kb/d. Gippsland Basin supply is thought to have fallen by 7 kb/d, while Carnarvon Basin output rose by the same amount. North Rankin is judged not to have been able to maintain the May increase, but 5 kb/d gains at Thevenard Island, Harriet and Goodwyn offset the loss. As maintenance continued, the Griffin field does not appear to have produced any oil for the second consecutive month. Wanaea/Cossack is assumed to have produced 70 kb/d (+1 kb/d), as two days of scheduled maintenance had a minimal impact on output. In July, Australian oil production is provisionally estimated to have increased to 720 kb/d but there is substantial room for downward revisions, which could easily exceed 50 kb/d. The 720 kb/d total includes 65 kb/d from Griffin. Late in July, it was reported that there had been reduced output during the month but no figures were reported. It is also not known when in

**Australian Crude Oil Production**  
(thousand barrels per days)



July the field restarted. Wanaea/Cossack production of 65 kb/d is also included in the July total, off slightly due to "brief" early month scheduled maintenance. It is also unclear what impact the end-of-month high winds had on production. Wanaea/Cossack has two weeks of maintenance scheduled for this month as well, with half-production planned during the period. Industry sources also indicated that Wanaea/Cossack has six-to-nine weeks of downtime planned for early 1998, to attempt to resolve the ongoing gas export system problems. Since this implies no solution until after that work programme is completed, the Wanaea/Cossack forecast has been revised from 108 kb/d to 71 kb/d for the last four months of this year. In addition, the Griffin forecast for 2H97 has been adjusted from 70 kb/d to 65 kb/d. Australian oil supply in 1997 is now projected to average 655 kb/d, a gain of 63 kb/d over 1996.

The 1998 outlook for Australia and the rest of the OECD Pacific region is summarized in the table below. Australian oil production next year is expected to average 748 kb/d, a gain of 93 kb/d over this year. Most of the gains will come from the Carnarvon Basin (+69 kb/d), with more consistent production from Griffin and increased output from Wanaea/Cossack after the first quarter. There will also be a full year of Wandoo B supply, with the Stag satellite being added during the year. Other important increases will come from the Bonaparte Basin-Timor Gap area, which will increase by 26 kb/d due to new production from the Elang/Kakatua development in the Timor Sea. Production from the Gippsland Basin is expected to fall slightly to 215 kb/d (-6 kb/d). In **New Zealand**, 1997 production will increase by 24 kb/d to 70 kb/d, as a result of new production from the Maui B field. This level of output will increase slightly next year, to 75 kb/d.

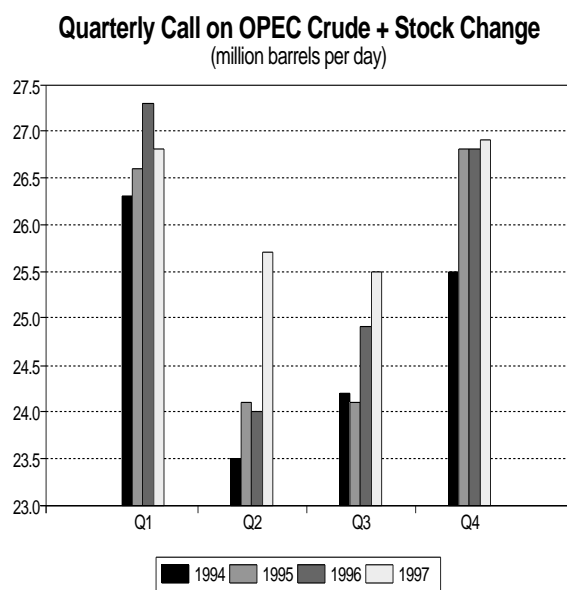
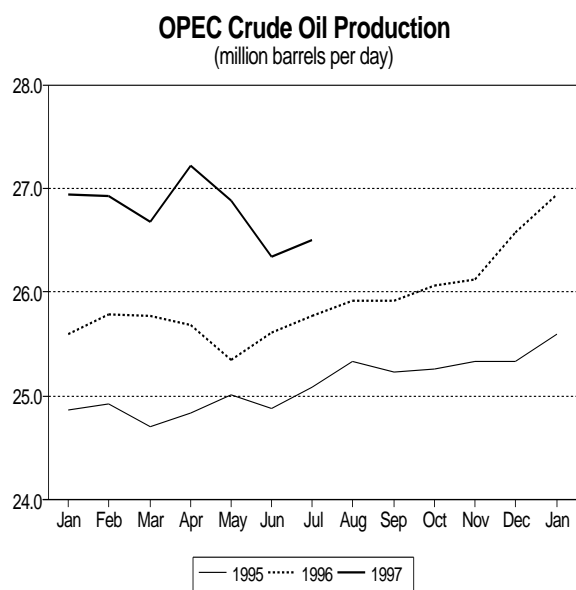
**OECD Pacific Oil Production 1995-1998**  
(thousands of barrels per day)

	1994		1995		1996		1997		1998	
	Level	Change	Level	Change	Level	Change	Level	Change	Level	Change
Australia	603	46	576	-26	592	15	655	63	748	93
New Zealand	72	-1	47	-25	46	-1	70	24	75	5
Japan	19	-5	19	0	19	0	20	1	25	5
<b>Total</b>	<b>693</b>	<b>40</b>	<b>642</b>	<b>-51</b>	<b>657</b>	<b>15</b>	<b>745</b>	<b>88</b>	<b>848</b>	<b>103</b>
Memo:										
Crude	587	37	557	-29	580	23	671	90	763	93
NGLs	78	3	75	-3	69	-6	71	2	74	3
Other	29	0	11	-18	8	-2	4	-4	11	7



## OPEC

OPEC crude production in July is estimated to have increased by 170 kb/d to 26.5 mb/d, due mostly to increments from the Middle Eastern OPEC members. With a continued absence of Iraqi exports, total OPEC crude supply only marginally exceeded the downwardly revised figure of 26.33 mb/d for June. Estimates derived from tanker tracking data point to a gain in production for **Iran** (+75 kb/d). Indications are that production in **Saudi Arabia** rose by 25 kb/d. The Saudi figures include supply from the Abu Safah field, which is sold on behalf of Bahrain, but exclude their share of output from the Neutral Zone. **Neutral Zone** production also posted a gain (+40 kb/d), as Hout field output of 40 kb/d rebounded from June maintenance. **Kuwaiti** supply increased marginally (+10 kb/d), offsetting a similar decrease in the **UAE**. Output in **Qatar** of 620 kb/d rose slightly (+5 kb/d). Recent reports in the trade press put Qatari production as high as 650 kb/d, including 96 kb/d from the al-Shaheen field, but other sources indicated that al-Shaheen output was only 60 kb/d. Confirmation of the higher figure may result in an upward revision for Qatar. **Iraqi** production remained unchanged at 550 kb/d.

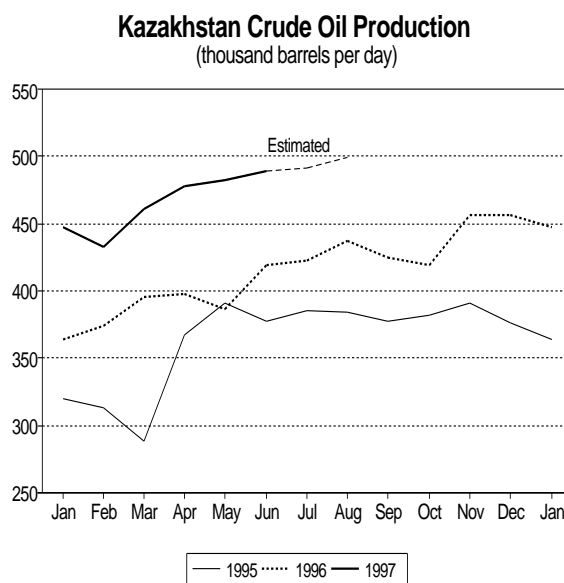
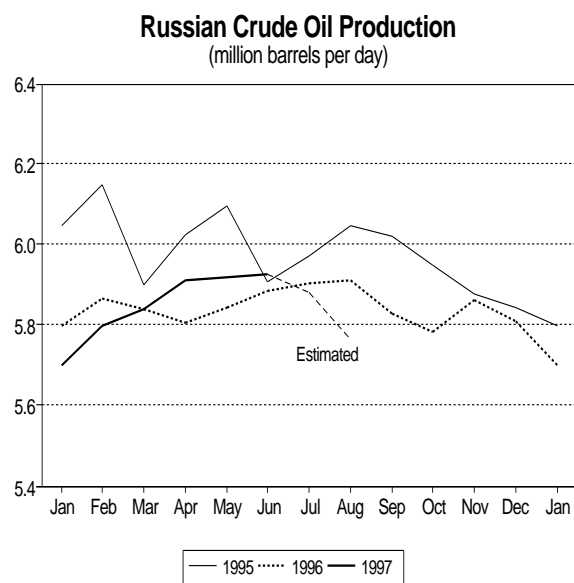


Non-Middle Eastern OPEC members increased production by 23 kb/d, with all of the increase coming from **Venezuela**, where production averaged 3.19 mb/d in July, and changes in other countries offset each other. There was a drop in **Nigerian** output of 20 kb/d, as delays in payments by the Nigerian state oil company to joint-venture partners resulted in some deferrals or slowdowns in routine development work. Slight gains were seen in **Algerian** production (+10 kb/d) and in **Indonesian** supply (+15 kb/d). The Indonesian figure excludes production of roughly 65 kb/d of heavy Duri crude, which is burned at the field to produce the steam for enhanced recovery (steam injection) operations. Next year, natural gas will start to be piped into the field to produce the steam, which will in effect increase Duri output by 65 kb/d, since that amount will no longer be burned. **Libyan** supply dropped slightly to 1.43 mb/d in July (-5 kb/d).

## Former Soviet Union (FSU)

### Production

Based on initial production data from Russia, Kazakhstan and Azerbaijan, FSU oil supply in June averaged 7.23 mb/d, equal to the May figure. **Russian** oil production averaged 6.12 mb/d, an increase of 11 kb/d from the level in May. Preliminary indications last month that June Russian production had dropped by 200 kb/d did not prove correct. In fact, Russian supply was remarkably steady during the second quarter, hovering between 6.11 and 6.12 mb/d in each of the three months. Combined production of 3.82 mb/d from the top six Russian oil companies, which account for 63% of supply, rose by 17 kb/d. Output from Lukoil, Surgutneftegas, Yukos, Tyumen Oil Company and Tatneft all rose slightly, while output from Sidanco fell marginally. July output in Russia is estimated to have fallen by 52 kb/d to 6.07 mb/d.



Crude production in **Kazakhstan** in June averaged 489 kb/d, a gain of 6 kb/d from the downwardly revised May figure. The Tengiz joint-venture project produced 150 kb/d, down 3 kb/d on the previous month. Production from the Tengiz field is still expected to rise to 187 kb/d by year end. During July, a contract was awarded for the construction of a fifth processing train at the field. The new equipment is to be commissioned by the end of 1999 and will boost production capacity to 240 kb/d. July production in Kazakhstan is estimated to have been the same as in June. **Azerbaijani** crude production averaged 180 kb/d in June, of which 149 kb/d was from offshore fields. This component is expected to start to grow in September, from the “early oil” phase of the large Azeri/Chirag/Guneshli project. July Azerbaijani production is estimated at 186 kb/d.

#### 1995-1997 Net FSU Exports (million barrels per day)

	1995	1996	1997 <sup>f</sup>	4Q96	1Q97	2Q97 <sup>p</sup>	Mar	Apr	May	June <sup>f</sup>	July <sup>p</sup>
Black Sea Exports*	0.98	1.14	†	1.08	1.07	1.16	1.07	1.03	1.29	1.16	1.52
Baltic Exports	0.61	0.77	†	0.80	0.83	0.92	0.86	0.89	0.75	1.12	0.84
<b>Total Seaborne</b>	<b>1.59</b>	<b>1.91</b>	†	<b>1.88</b>	<b>1.90</b>	<b>2.08</b>	<b>1.93</b>	<b>1.92</b>	<b>2.04</b>	<b>2.28</b>	<b>2.36</b>
Druzhba Pipeline**	0.83	0.87	†	1.07	0.90	0.82	0.88	0.85	0.87	0.73	0.70
<b>Total Exports</b>	<b>2.42</b>	<b>2.78</b>	†	<b>2.95</b>	<b>2.80</b>	<b>2.89</b>	<b>2.81</b>	<b>2.77</b>	<b>2.90</b>	<b>3.01</b>	<b>3.06</b>
Imports	0.05	0.06	†	0.08	0.07	0.07	0.07	0.04	0.06	0.06	0.06
<b>Net FSU Exports</b>	<b>2.37</b>	<b>2.72</b>	<b>2.76</b>	<b>2.88</b>	<b>2.74</b>	<b>2.82</b>	<b>2.74</b>	<b>2.73</b>	<b>2.84</b>	<b>2.95</b>	<b>3.00</b>
NB: Crude Oil	1.91	2.12	†	2.25	2.14	2.12	2.10	2.10	2.18	2.07	2.29
Oil Products	0.46	0.61	†	0.62	0.60	0.70	0.64	0.63	0.66	0.88	0.72

\* includes a small amount of non-Russian crude oil exports

† data not available

f forecast

\*\* crude oil only

p preliminary

r revised

#### Net Exports

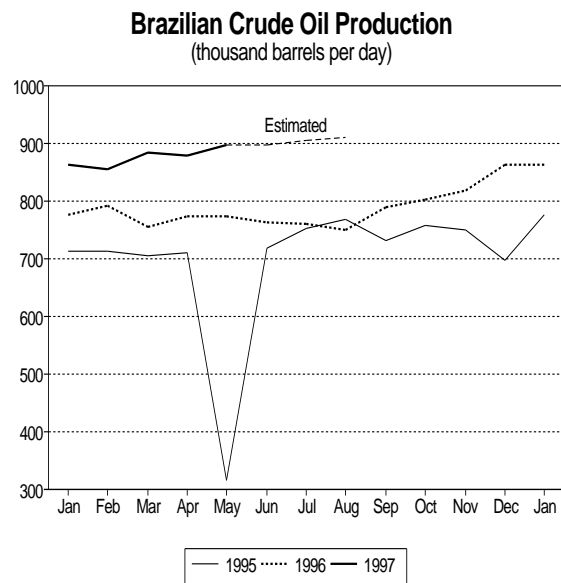
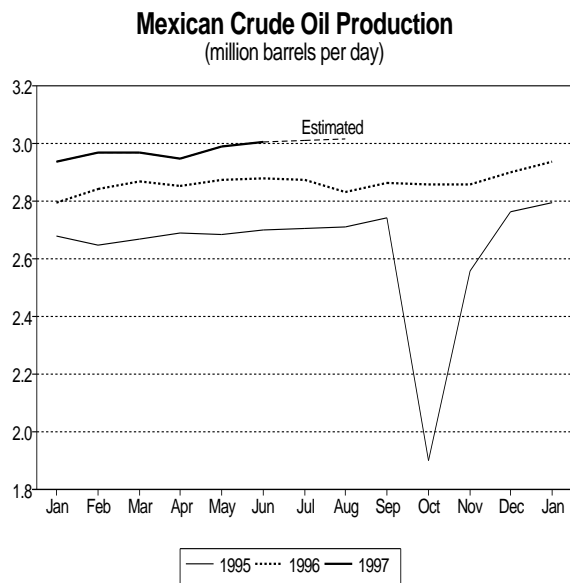
Net FSU exports rose to 3 mb/d in July, an increase of 50 kb/d from upwardly-revised June levels. The impact of an oil spill, pipeline maintenance and bad weather on June exports was much less than previously thought. Estimated June Black Sea exports have been raised from 0.89 mb/d to 1.15 mb/d and Baltic exports from 0.91 mb/d to 1.12 mb/d. The revisions were split about equally between crude oil exports and product exports. The previous estimate for pipeline exports was maintained. For July, the changes in northern and southern exports went in opposite directions, with Black Sea exports increasing by 370 kb/d and Baltic exports decreasing by 280 kb/d, with the impact felt mostly on product exports. Total net FSU product exports were reduced by 160 kb/d from June levels. Conversely, seaborne crude oil exports, primarily from the Black Sea, rose by 250 kb/d as favourable weather and limited maintenance allowed increasing amounts of Urals crude to meet demand created by the absence of Iraqi oil in the Mediterranean market. About 30 kb/d of the seaborne crude exports was offset by lower Druzhba pipeline

exports to Central & East Europe, where flooding reportedly led to precautionary reductions in refinery and pipeline operations. Druzhba exports are now just 700 kb/d, or less than half of capacity, following the reduction in June when the old Leuna refinery was taken out of service. The new Leuna refinery is not expected to start up until October.

## Other Non-OPEC<sup>2</sup>

### Latin America

**Mexican** oil production in June averaged 3.38 mb/d, the same as in May. Crude production rose by 18 kb/d but NGL supply fell unexpectedly by 13 kb/d. For the last nine months, NGL output has stagnated within a range of 358-382 kb/d. Before the accident at the Cactus gas plant in August 1996, NGL production had been in the 470-480 kb/d range. Projections have Mexican oil supply increasing gradually to 3.48 mb/d by December 1997. Mexican crude exports averaged 1.70 mb/d in June, 39 kb/d higher than May exports.



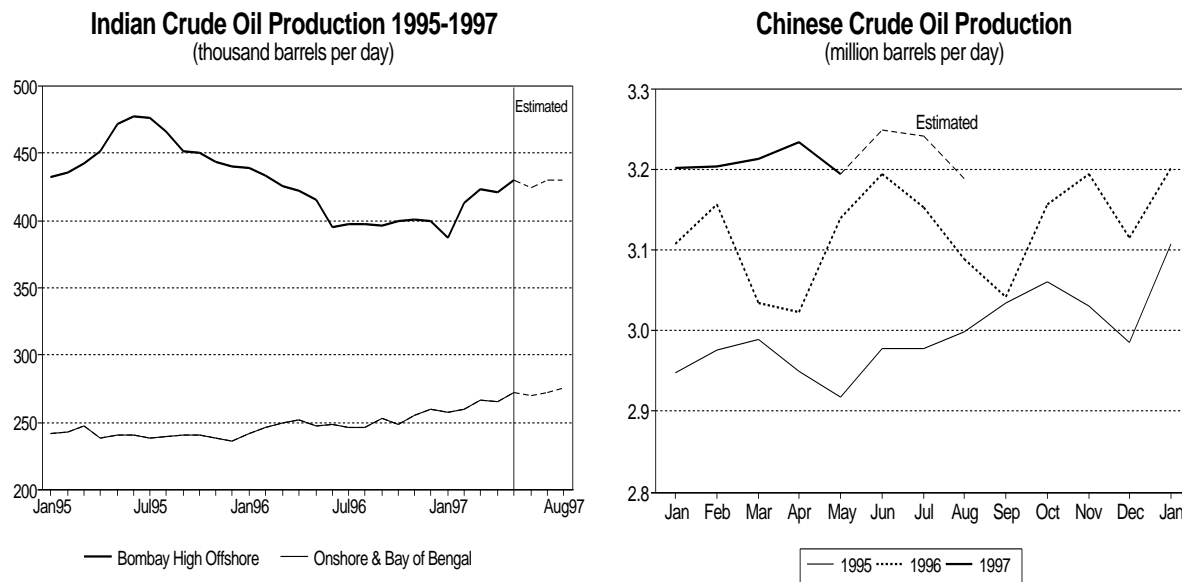
**Brazilian** oil production in May averaged 897 kb/d, an increase of 19 kb/d over April's 878 kb/d. Most of the increase (17 kb/d) came from the prolific offshore Campos Basin, where steady gains are expected for the rest of 1997 and 1998. As noted in last month's Report, there was uncertainty regarding the pace of production increases, and this month the pace of the increases in 1998 has been reduced, due to information received from Brazilian state company Petrobras. Average 1998 production was reduced from 1.17 mb/d to 1.04 mb/d versus an expected 1997 average of 910 kb/d. While eventual plateau levels have not changed, plans indicate a deliberate approach to building up production, as well as a desire to begin production early, before pre-drilling wells. This will not only start earning revenues sooner and gather data concerning reservoir performance, but will also reserve Petrobras' rights to the fields under the new rules governing the upstream sector. (The Brazilian Senate passed the bill removing Petrobras' monopoly on 16 July and President Cardoso is expected to sign the bill quickly.) In addition, a tightening deepwater rig market will make pre-drilling of wells and the accompanying fast production increases more difficult to achieve, in Brazil and elsewhere around the world.

Crude production in **Ecuador** was 357 kb/d in June and averaged 383 kb/d over the first half of 1997. Crude supply is estimated at 370 kb/d in both July and August, as mudslides halved throughput on Ecopetrol's 40 kb/d line to the port of Tumaco in Colombia. **Colombian** oil production in July was thought to have averaged 558 kb/d, down 71 kb/d compared to June. Repeated and heavily-damaging guerrilla attacks on the Cano Limon-to-Covenas pipeline caused production at the 180 kb/d Cano Limon field to be shut in for 10 days, or a third of the month, resulting in a 60 kb/d production loss. Although the new Ocesa pipeline from the Cusiana and Cupiagua fields is now in service, indications are that throughput will not reach the first-plateau 260 kb/d level until September, a month later than previously thought. July Cusiana supply was estimated at 195 kb/d but production start-up at the Cupiagua field is being delayed by guerrilla attacks.

<sup>2</sup> including some OECD member countries, see note on back cover.

### Asia

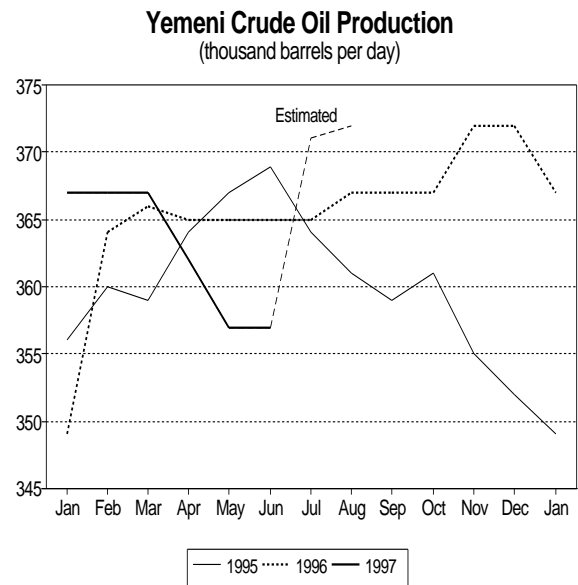
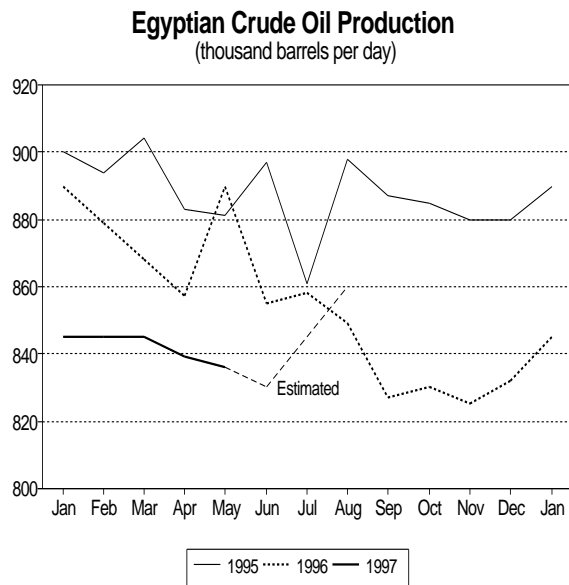
In May, **Indian** crude production averaged 702 kb/d, a gain of 15 kb/d on the previous month's upwardly revised figure of 685 kb/d. Production gains were distributed among the Bombay High offshore region, which accounts for two-thirds of Indian production, and the onshore production areas. More noteworthy, however, was the small but growing production from joint ventures. In April and May, joint-venture output has averaged 35 kb/d, more than twice the levels seen during 1996. Indian output was seen as holding fairly steady at 695 kb/d and 702 kb/d in June and July, respectively.



**Chinese** crude oil production in May averaged 3.19 mb/d, a drop of 40 kb/d compared to the April figure. Production from the main producing regions of Daqing (1.12 mb/d), Shengli (567 kb/d) and Liaohe (171 kb/d) was virtually unchanged from April. The decline was due to the offshore sector, which dropped from 359 kb/d to 316 kb/d. It is possible that maintenance caused the dip in output levels. Routine maintenance work last took place during September 1996 and had been forecast for the same month this year but it may have taken place earlier. **Papua New Guinea** production from the Kutubu field was reported at 74 kb/d in July. It has fallen steadily from 102 kb/d in January of this year. Production from the new Moran field is not expected to come onstream until 4Q97 with the Gobe field to follow early in 1998. Supply from these two fields will be blended with Kutubu, as they are of a similar light, sweet quality. Papua New Guinea output is expected to rise to an average of 120 kb/d in 1998 as a result of these increments.

### Africa and Other Middle East

Crude oil production in **Egypt** dropped from 836 kb/d in May to 830 kb/d in June, while combined condensate and NGL output was flat at 71 kb/d. During June, the new Qarun field in the Western Desert was tied into the pipeline network and production from the field is expected to have quickly increased from 10 kb/d to 40 kb/d. Thus, although data are not yet available, Egyptian crude output is assumed at 845 kb/d in July and is forecast to reach 860 kb/d for August. Eventually, output from Qarun is expected to increase further, to 65 kb/d, but this will not happen in 1997. Crude production in **Tunisia** was reported at 90 kb/d in June and little change is expected for the remainder of this year. **Angolan** crude production averaged 720 kb/d in July, 60 kb/d below previous estimates. New data resulted in Angolan supply being revised downward (by 55 kb/d) for all of 1996, 1997 and 1998. Output from the Cabinda region is still expected to grow steadily, resulting in a forecast average of 833 kb/d for 1998, compared to 729 kb/d for this year. After 1998, new deepwater fields will start to become a factor in increasing production. Production in **Equatorial Guinea** was reported at 43 kb/d in July, from the Zafiro field. Development work is ongoing and the year-end target of 80 kb/d appears well within reach.



**Yemeni** production was reported at 357 kb/d in June, down from 367 kb/d in the first quarter and 362 kb/d in May. Marib production has declined this year and is down to 160 kb/d, while the Masila field is holding steady at 180-185 kb/d. Some growth is continuing at the Jannah field, where output has risen from 12 kb/d to 15-20 kb/d, with further gains to 30 kb/d coming soon. The Shabwa field adds another 2.5 kb/d. Near term prospects for Yemen are for stable output, with 1998 expected to average 366 kb/d, down 2 kb/d on 1997. However, there may be some downside potential. **Syrian** production was reported at 560 kb/d in July, with the field breakdown thought to be 350 kb/d from Al Furat, 150 kb/d from Souedieh and 60 kb/d from Deir es Zor. The two larger fields are having trouble holding production steady and the only new field in Syria is the 5 kb/d East Ash Sham field. Output for 1996, 1997 and 1998 was adjusted downwards by 60 kb/d, with an 18 kb/d decrease now expected for next year.

## OECD STOCKS

### Industry Stock Changes in June

The increase in OECD industry stocks in June was much less than anticipated as strong demand and lower-than-expected supplies, primarily from the North Sea, compounded the expected absence of Iraqi exports and limited the monthly stockbuild to just 0.32 mb/d. A stockbuild in excess of 1 mb/d had been anticipated for June. As a result, the 2Q97 OECD stock change is now estimated to have been +0.48 mb/d, the lowest stockbuild since 1991 and only the third time in the last eleven years that the 2Q stockbuild was less than 0.5 mb/d. Consequently, it appears that the question of where additional stockbuilds will go, discussed in last month's Report, may not arise for a few months.

For June, a 0.39 mb/d reduction in European crude oil stocks offset much of the 0.54 mb/d total product stockbuild, centred in North American distillates. Total North American stocks rose by a healthy 1.18 mb/d, but European and Pacific inventories fell by 0.62 mb/d and 0.23 mb/d. The North American and European changes were from upwardly-revised May estimates, while the Pacific decline was from lower May levels.

#### Preliminary Industry Stock Changes in June

(million barrels per day)

	North America	Europe	Pacific	Total
Crude Oil	+0.28	-0.39	+0.01	-0.10
Gasoline	+0.24	-0.10	-0.05	+0.10
Distillates	+0.43	-0.06	-0.04	+0.33
Fuel Oil	-0.06	-0.08	0.02	-0.11
Other Products	+0.27	0.00	-0.04	+0.23
Total Products	+0.87	-0.23	-0.10	+0.54
Other Oils*	+0.03	0.00	-0.15	-0.12
Total Oil	+1.18	-0.62	-0.23	+0.32

\* includes other products, feedstocks, NGLs and other hydrocarbons

As shown in the table below, estimated stock levels for April and May were revised upward by 14.2 mb and 12.3 mb, with most of the April changes occurring in Europe (+10.2 mb), reversing about half of the large downward revisions made last month. The European adjustments were concentrated in the smaller European countries. Nearly 10 mb of the aggregate OECD April upward revision was in crude oil, while product stock estimates were raised by about half that amount. Conversely, the May revisions were all to product inventory estimates, once again dominated by European adjustments.

#### Revision to April and May OECD Industry Stock Levels

(million barrels)

	North America	Europe	Pacific	Total
<i>April</i>				
Crude Oil	+2.8	+6.0	+1.0	+9.8
Products	+0.1	+4.4	+5.0	+5.0
Other Oils	+0.6	-0.2	-1.0	-0.6
Total Oil	+3.5	+10.2	+0.5	+14.2
<i>May</i>				
Crude Oil	+0.4	+0.8	-4.7	-3.5
Products	+2.1	+13.8	+2.3	+18.1
Other Oils	+6.6	-8.8	-0.3	+2.3
Total Oil	+9.1	+5.8	-2.7	+12.3

\* includes other products, feedstocks, NGLs and other hydrocarbons

### Preliminary Stock Levels at the End of June

Total OECD industry stocks increased by 10 mb in June to 2462 mb from the revised May level. Stocks were 68 mb above year earlier levels, but 22 mb below the end-June 1995 level. Crude oil inventories held by industry almost equalled the June 1996 level, as North American stocks were 26 mb higher and combined European and Pacific crude stocks were lower by about the same amount, but product inventories were substantially higher than a year ago. As shown in the table below, North American product stocks were 42 mb higher and Pacific product inventories 12 mb higher than at the end of

June 1996, whereas the level of European product stock levels just matched last year's. Among the products, middle distillates accounted for 44 mb of the year-on-year difference with half in North America and the other half shared between Europe and the Pacific. Total gasoline inventories were near year-earlier levels as North American and Pacific stocks were each 4 mb over last year, but European gasoline stocks were 7 mb lower.

### Year-on-Year End-June OECD Industry Stock Comparisons

	(million barrels)			
	North America	Europe	Pacific	Total
Crude Oil	+26	-19	-7	+1
Products	+42	0	+12	+54
Other Oils	+5	+1	+8	+13
Total Oil	+73	-18	+13	+68
vs. 1995	-11	-11	+1	-22

\* includes other products, feedstocks, NGLs and other hydrocarbons

### Regional Stock Developments

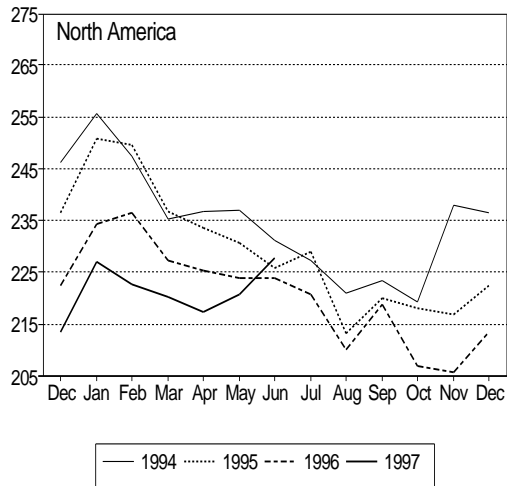
**US** crude oil inventories rose by 280 kb/d in June despite very high levels of refinery throughputs, as crude oil imports increased much faster than refinery crude runs and domestic crude oil production declined slightly. The high refinery utilisation rates were able to more than satisfy robust US gasoline demand growth, allowing gasoline inventories to rise by 237 kb/d despite lower gasoline imports. As a consequence of the gasoline-oriented refinery production, stocks of middle distillates rose by 427 kb/d and other products by 267 kb/d, both to levels substantially above those of June 1996. Data for the first 25 days of July indicate a substantial stockdraw in the US, primarily for crude oil. Lower levels of crude imports, reduced domestic supply and high runs lowered crude oil stocks to 308 mb in the 50 States for the week ending 25 July. Gasoline inventories also declined due to strong demand during the 4 July holiday weekend, and the apparent start of a strong domestic vacation travel season.

In sharp contrast to the June US inventory gains, **European** stocks fell sharply. The 625 kb/d decline was concentrated in Germany (-350 kb/d) and France (-190 kb/d), but there were also unexpected declines in Italy and the "EC10" (the EU countries less Germany, France, the UK, Italy and the Netherlands). Total oil stocks in the UK and the Netherlands were essentially unchanged. European crude oil inventories fell by about 390 kb/d, while products decreased by 230 kb/d. The crude oil declines were largest in France (-150 kb/d) and the Netherlands (-125 kb/d), but there were 50 kb/d crude stockdraws in Germany and the UK and EC10 countries drew 45 kb/d from their crude stocks during the month. The absence of Iraqi oil in the Mediterranean market and lower North Sea output are thought to be primarily responsible for the crude stockdraw, with the flooding in Central Europe and reduced throughput on the Druzhba pipeline also likely to have had an impact. Among oil products, gasoline showed the largest decline (-95 kb/d) as decreases in Germany, France and Italy more than offset small increases in the UK (related to 2 July tax increases) and the EC10. Residual fuel stocks fell by about 80 kb/d, again mostly in the EC10. German and Italian residual fuel oil stocks were also reduced, the latter related to lower stocking requirements by the electricity sector due to greater use of natural gas. The largest single stockdraw was in German middle distillate stocks (-215 kb/d) as chances of an expected tax increase subsided. Some of the German decline was offset by a 125 kb/d build in Dutch middle distillate stocks. As a result, total European distillate inventories fell by only 55 kb/d, less than those of gasoline or residual fuel. With the absence of Iraqi oil in July, additional underperformance by North Sea fields and even lower Druzhba throughputs (see Supply section), a further draw in European crude oil stocks is possible. However, the June decline in German distillate inventories is not expected to have been repeated and gasoline exports to the US appear to have declined in July, so that product stocks could trend higher during 3Q97.

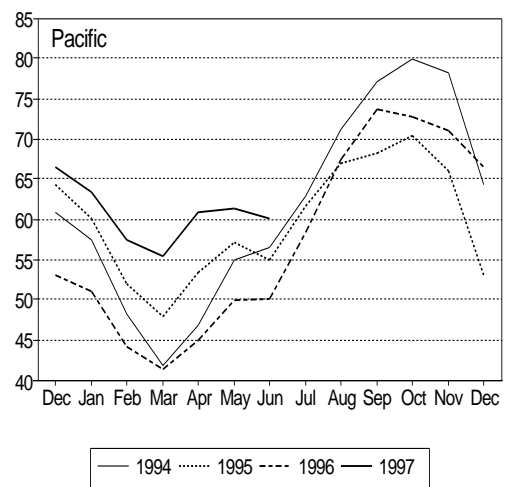
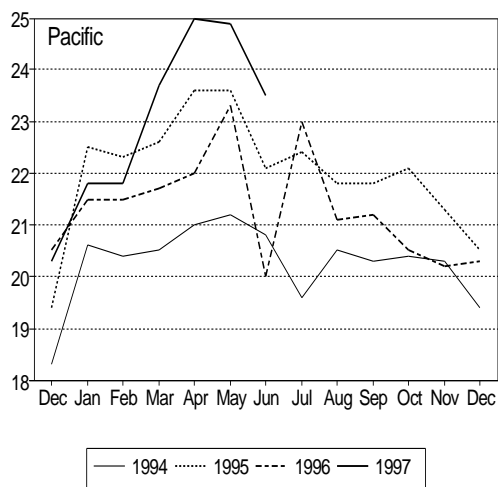
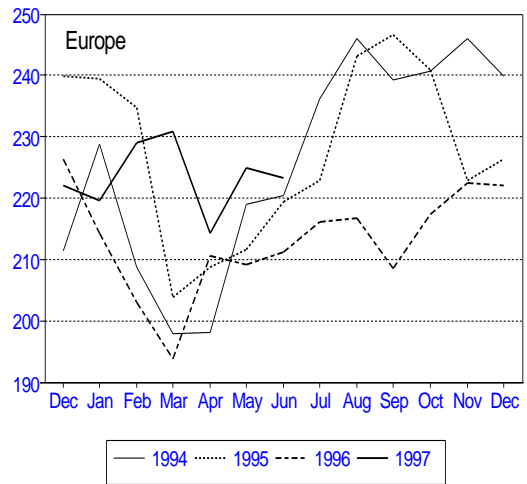
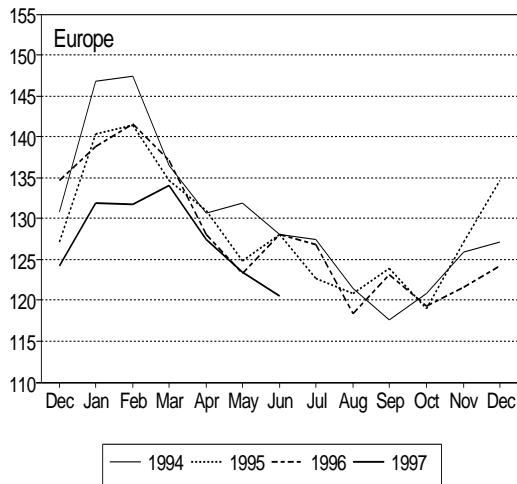
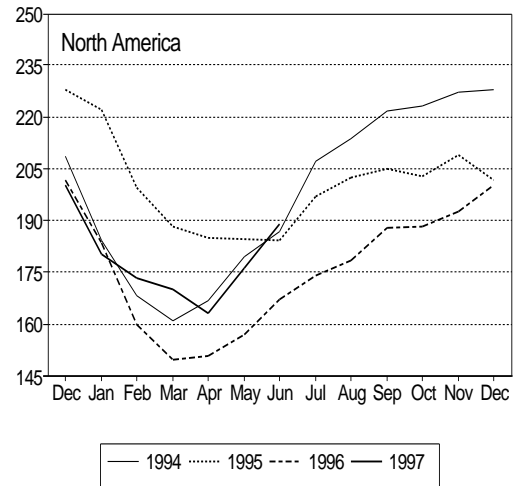
**Japanese** oil stocks fell by 234 kb/d in June, with about 150 kb/d of the decline in inventories of non-crude refinery inputs. Stocks of gasoline (-45 kb/d), distillates (-40 kb/d) and other products (-35 kb/d) also moved lower during the month, while crude oil stocks rose by about 15 kb/d. The June decline follows a revised decline of just over 20 kb/d in May versus a build of about 70 kb/d estimated in last month's Report. Other product inventories in May are now seen falling by 95 kb/d, more than offsetting increases of 55 kb/d for crude oil stocks and 15 kb/d for stocks of other refinery inputs. Conversely the April stockbuild was revised upwards slightly from an already very high level of over 500 kb/d. April distillate inventories grew by 185 kb/d and crude oil and inventories of other refinery inputs rose by 165 kb/d and 115 kb/d respectively.

### Regional OECD Industry End-Month Stocks: Gasoline and Middle Distillates (million barrels)

#### Gasoline



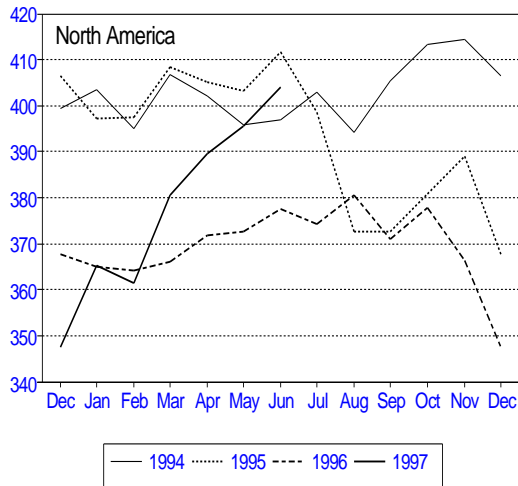
#### Middle Distillates



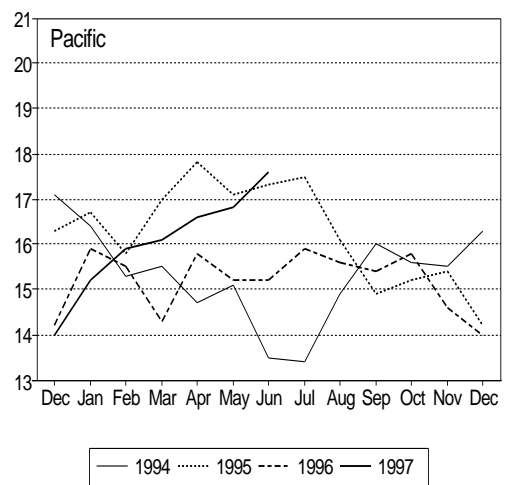
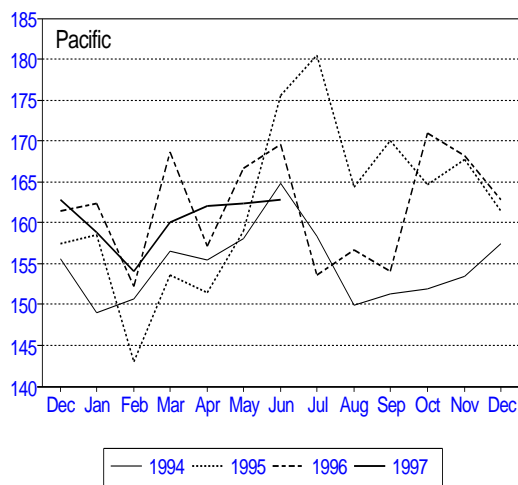
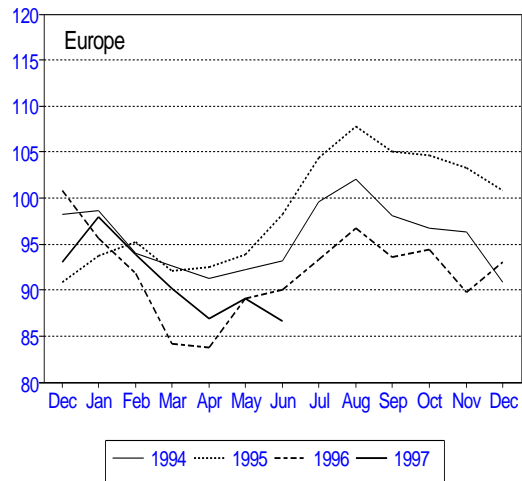
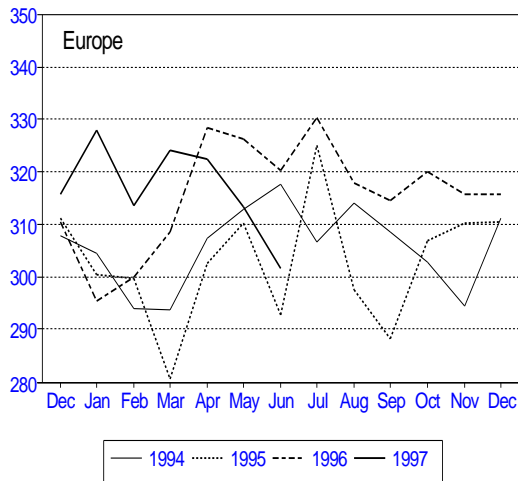
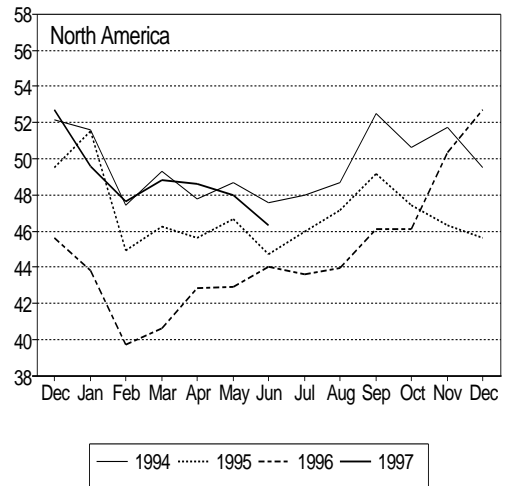


### Regional OECD Industry End-Month Stocks: Crude Oil and Fuel Oil (million barrels)

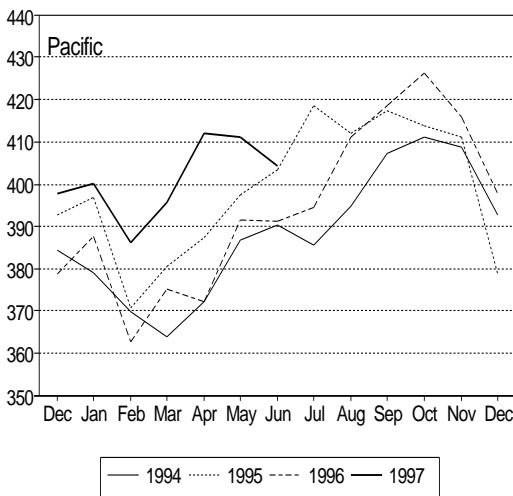
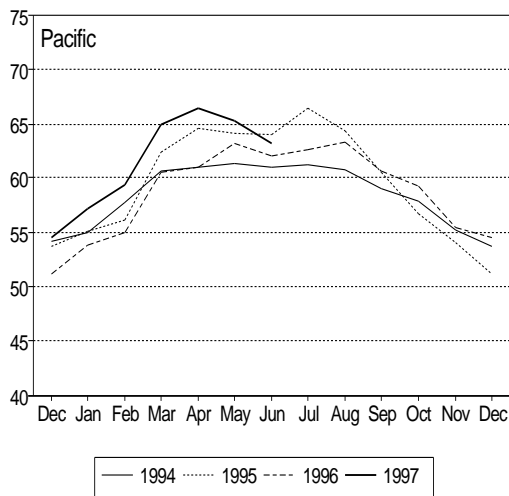
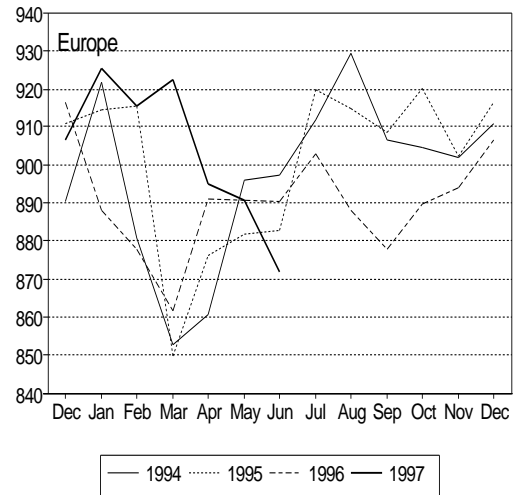
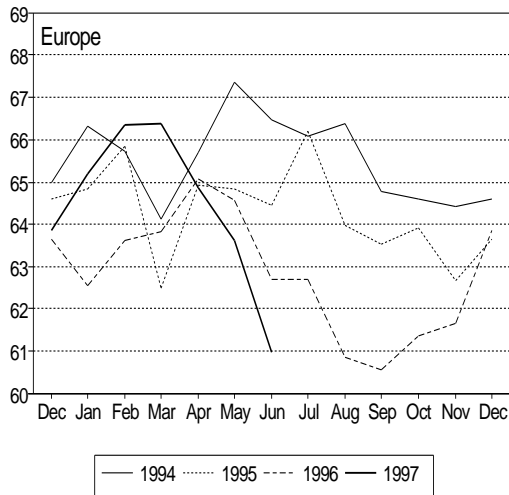
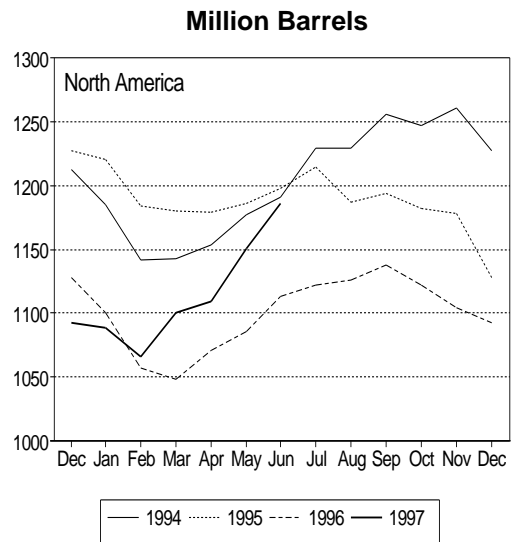
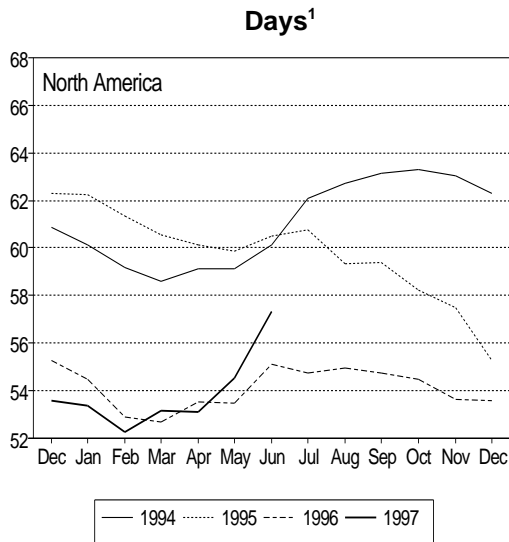
**Crude Oil**



**Fuel Oil**

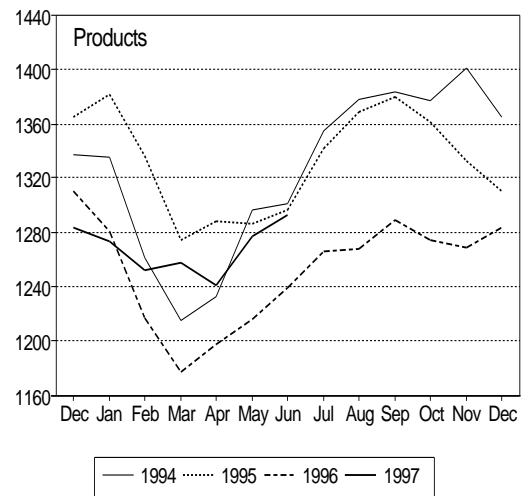
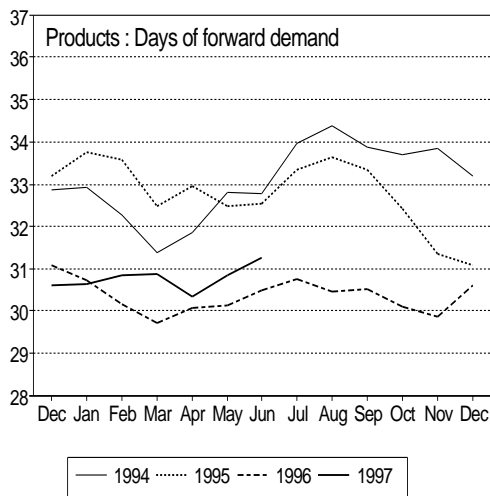
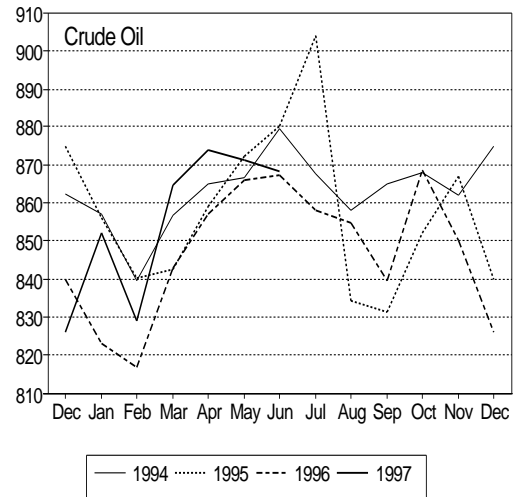
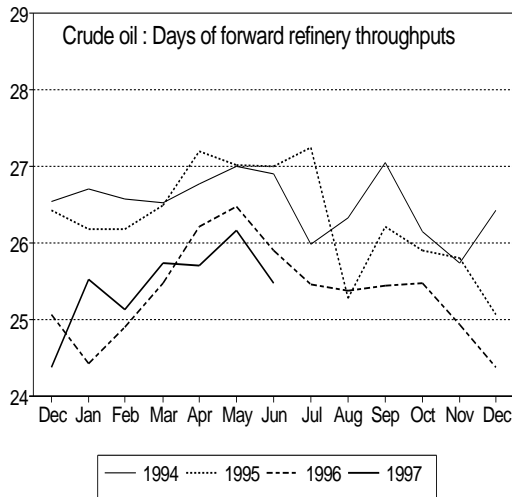
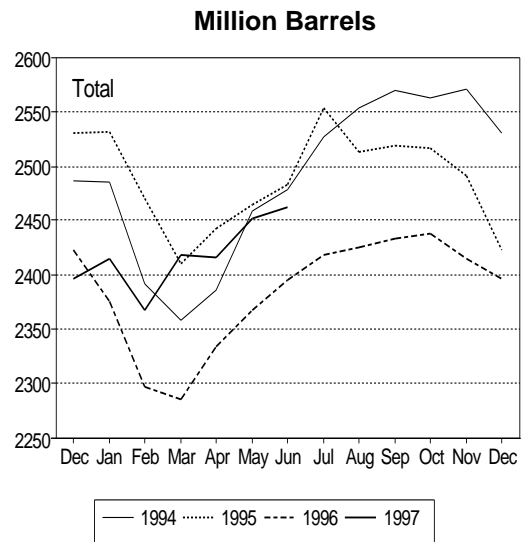
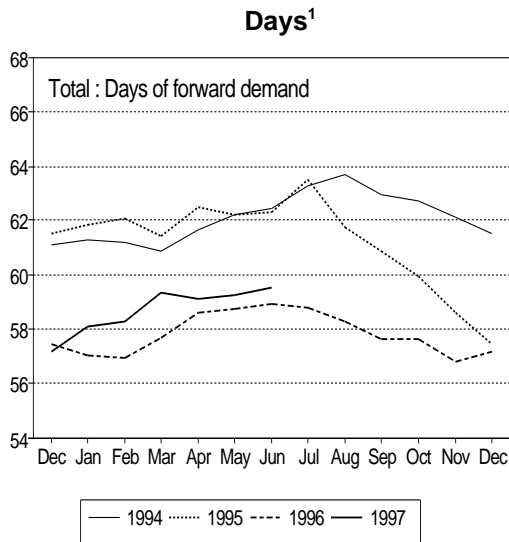


### Regional OECD End-Month Industry Stocks (in days of forward demand and million barrels)



<sup>1</sup> Days of total stocks are based on demand for the next three months.

### Total OECD End-Month Industry Stocks (in days and million barrels)



<sup>1</sup> 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.

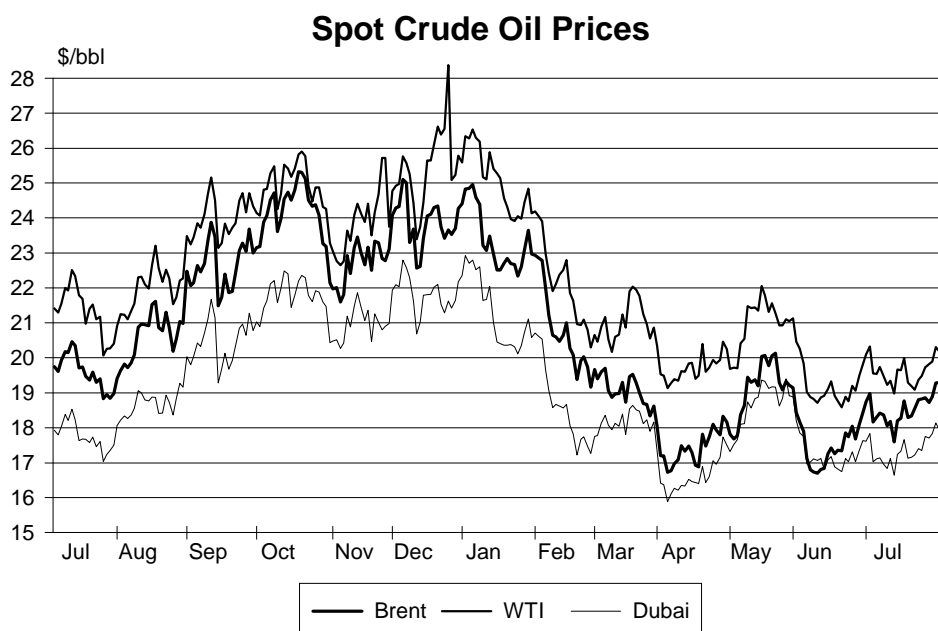
## OIL PRICES AND REFINERY ACTIVITY

### Summary

- Closely balanced **crude** supply/demand fundamentals and uncertainty surrounding the timing of Iraqi crude exports kept Atlantic Basin benchmark crudes Brent and WTI within a narrow band (\$18/bbl-\$19/bbl and \$19/bbl-\$20/bbl respectively) during most of the month. Atlantic Basin crude markets tightened gradually as a result of three main factors: strong crude demand from refiners, in particular in the US; unplanned and planned North Sea maintenance; and the diversion of large volumes of West African crude to Asia. Towards the end of July and in early August, crude prices were pulled out of the prevalent price range by sharply rising US gasoline prices. The Mediterranean sour crude market remained tight due to the continuing absence of Iraqi crude exports. In contrast to the Atlantic Basin, Asian crude markets came under severe downward pressure as a result of weak regional product demand, refinery throughput cuts, and the influx of sizeable volumes of West African crudes. As a result, there were sharp reductions in official selling prices for almost all Mideast Gulf grades to Asia.
- **US product** markets were supported by unexpectedly strong gasoline and distillate demand, with prices for gasoline and distillate increasing by more than those of crude. In Europe, gasoline and naphtha markets firmed in line with arbitrage possibilities to the US and Asia respectively, while gasoil markets remained under pressure from seasonally weak regional demand and closed arbitrage possibilities. Despite large scale refinery maintenance shutdowns and refinery throughput cuts (in at least Singapore and China), Asian product markets remained under firm supply pressure as a result of weak regional product demand. Singapore gasoil prices briefly declined to a three year low.
- Average refining **margins** increased in the US as a result of the strong and rising gasoline and distillate prices. In contrast, they declined appreciably in Europe and in Singapore, reflecting the strength in Atlantic Basin crude markets and the weakness in Asian product markets respectively.
- In June, the aggregate refinery **throughputs** in OECD countries are estimated to have decreased by 0.33 mb/d to 33.31 mb/d from May's appreciably upwardly-revised figures (up 0.39 mb/d), but remained 0.95 mb/d or 2.9% higher than a year earlier. A marginal increase in US throughputs was more than offset by a decrease in Japan. Throughput levels in July appear to have decreased in the US, while increasing slightly in Europe and more strongly in Japan.

### CIF Crude Import Costs

Table 8 shows that the preliminary weighted average CIF cost for crude imported into IEA countries in May was \$18.43/bbl, \$0.39/bbl higher than in April. The corresponding estimates for June and July are \$18.19/bbl and \$18.40/bbl respectively.



## Spot Crude Oil Prices

Despite looming uncertainty surrounding the timing of the resumption of Iraqi crude exports, prices for Atlantic Basin benchmark crudes Brent and WTI remained unexpectedly resilient in July. Prices moved within a narrow band (\$18/bbl to \$19/bbl and \$19/bbl to \$20/bbl respectively) during most of the month, reflecting closely-balanced supply/demand fundamentals in the Atlantic Basin. Strong demand from refiners, in particular in the US and in Europe, absorbed all of the available prompt crude supply as US throughputs were more than 600 kb/d higher than last year for the third month in a row. Meanwhile, supplies in the Atlantic Basin were negatively affected by planned and unplanned North Sea production outages, supply disruptions in Colombia, severe weather in the US Gulf and the effect of earlier arbitrage sales that diverted more than 1 mb/d of West African crude out of the Atlantic Basin to Asia during July. These factors combined with strong US demand to form a firm floor under prices and in the second half of the month crude prices trended upwards, led by a sharp rise in US gasoline prices.

In contrast to the Atlantic Basin, Asian crude markets were perceived to be oversupplied, as a consequence of regional refinery run-cuts and the arrival of large volumes of West African crudes. As a result, there were sharp reductions in official selling prices for almost all Mideast Gulf grades to Asia. However, prices for the light, sweet regional benchmark crude Tapis remained within a comparatively narrow band of \$0.30/bbl, around the average of \$19/bbl, supported by the atypical *export* of light, sweet regional grades to the US and planned and unplanned outages of Australian offshore production.

### Spot Crude Oil Prices and Differentials

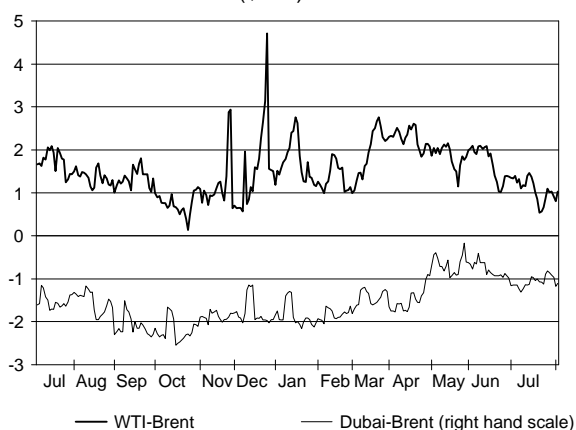
(monthly and weekly averages, \$/bbl)

	May	Jun	Jul	Change	Week Ending:					
					27-Jun	04-Jul	11-Jul	18-Jul	25-Jul	01-Aug
Brent Dated	19.14	17.58	18.54	0.96	17.89	18.58	18.27	18.22	18.67	19.14
WTI	20.99	19.28	19.63	0.36	19.08	19.95	19.47	19.51	19.37	20.11
Dubai	18.65	17.28	17.37	0.09	17.16	17.52	17.03	17.20	17.38	17.90
Tapis	21.18	19.88	19.05	-0.83	19.03	19.16	18.90	18.91	19.03	19.46
Brent over Dubai	0.50	0.30	1.17		0.72	1.06	1.24	1.02	1.30	1.23
WTI over Brent	1.84	1.70	1.09		1.20	1.36	1.20	1.29	0.70	0.97
Brent 1st month minus 2nd month	-0.03	-0.23	0.13		-0.19	0.16	0.12	0.02	0.15	0.24
WTI 1st month minus 2nd month	-0.06	-0.17	-0.12		-0.24	-0.04	-0.13	-0.10	-0.25	-0.04

The tightening of prompt North Sea crude supplies, which was primarily due to firm demand for crude exports to the US and to the Mediterranean (to replace Iraqi barrels) and planned and unplanned production outages, caused physical **Brent** prices to change from contango into backwardation, as shown in the right-hand graph below. While the near months' spread in the physical 15-day market changed into backwardation for most of July, the same spread remained in a shallow contango in the paper market on the IPE, reflecting the market's unease with the slipping date for the resumption of Iraqi crude exports.

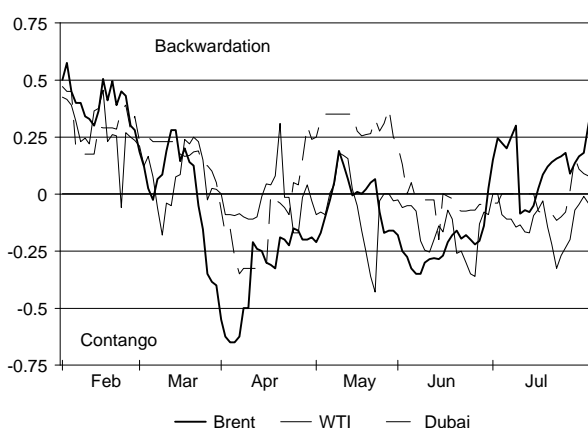
#### WTI/Brent/Dubai Differentials

(\$/bbl)



#### Forward Differentials

First month minus Second month (\$/bbl)



Once started up again, Iraqi oil is expected to flow at capacity, as discussed in the Supply section. The transatlantic arbitrage possibility for North Sea crudes to the US remained marginal during July, as shown in the left-hand graph above. The narrowing of the WTI/Brent differential was however offset by a decline in transatlantic tanker rates, and North Sea crude reportedly continued to be traded to the US.

During July, **WTI** prices fluctuated within a relatively narrow band between \$19/bbl and \$20/bbl. High refinery throughputs, unexpectedly strong product demand and short-term crude supply anxiety, fuelled by the temporary loss of Colombian supplies and threatening weather in the US Gulf related to Hurricane Danny, provided support for prices. However, market sentiment generally remained bearish. There were recurrent brief price dips whenever news implied progress in UN/Iraqi procedural negotiations. Towards the end of the month, WTI prices broke out of their prevalent trading range, led by the sharp increase in US gasoline prices. Throughout the month, WTI prices remained in shallow contango, both in the physical and futures markets.

Prices for Asian sour benchmark crude **Dubai** closely tracked the development in Brent markets, as indicated by the almost flat Brent/Dubai differential in the left-hand graph above. Inter-month Dubai spreads moved into backwardation (see right-hand graph above) following a larger-than-expected Dubai purchase by the Indian Oil Corporation (IOC) in its latest tender. Facing uncertain Iraqi crude availability, IOC is believed to have taken all seven September-loading Dubai cargoes that were offered into its late July tender. Despite the widening of the Brent/Dubai differential to around \$1/bbl during most of July versus under \$0.40/bbl during the third week of June, some 700 kb/d of Brent-related **West African grades** were reportedly traded to Asia for August lifting, thus contributing to tightening crude supplies in the Atlantic Basin.

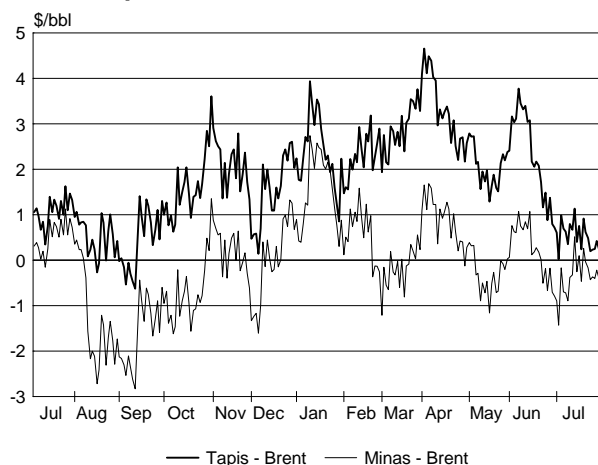
The Mediterranean sour crude market remained tight due to the continuing absence of Iraqi crude exports. Regional refiners deferred crude purchases to the last possible moment in anticipation of the potential resumption of Iraqi exports and then had to cover crude requirements on short notice in the spot market. Demand for **Urals** crude increased appreciably and Urals was traded at a comparatively narrow discount to Brent, between \$0.55/bbl and \$0.75/bbl.

Prices for light, sweet Asian benchmark crude **Tapis** came under downward pressure when regional refinery throughput cuts combined with the arrival of more than 1 mb/d of West African crude. However, production problems at offshore Australian fields Griffin and Wanea-Cossack (see Supply section) and the opening of an unusual transpacific arbitrage possibility for *exports* of light, sweet Asian grades to the US, halted the decline in Tapis prices. During most of the month, prices remained within a narrow \$0.30/bbl band around the average of \$19/bbl. Unlike those of Tapis, prices for heavy sweet Asian benchmark crude **Minas** increased from early July levels of around \$17.80/bbl to \$18.50/bbl at the end of July, supported by firm Japanese demand for direct burning of crude by electric utilities.

Minas prices gained additional support from tight LSWR supplies (as an alternative to direct burning crude) and lower Indonesian export allocations for August. The average Tapis/Brent differential contracted appreciably from \$2.30/bbl in June to just \$0.51/bbl in July.

Weak Asian crude markets, which softened due to low regional product demand, rising middle distillate inventories and the influx of large volumes of West African crudes, led producers of almost all **Mideast Gulf** grades to announce sharp reductions in official selling prices. Saudi Arabia made sharp cuts to its lighter grades for Asian loading in August, while Kuwait increased the discount on its official selling prices below Saudi Arabian prices for the first time in over four years. However, firm sour crude markets in Europe prompted Saudi Arabia and Kuwait to raise the formulas for Europe-bound cargoes loading in August.

**Tapis and Minas Differential to Brent**

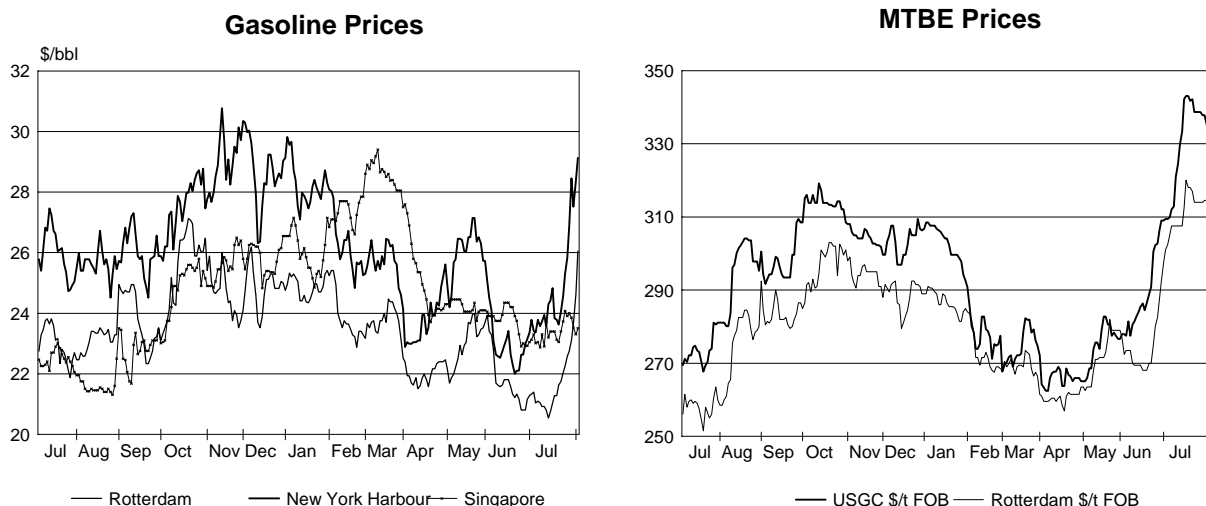


Freight rates for North Sea crude cargoes (UK- Northwest Europe) decreased gradually in July to familiar levels following abnormal mid-June highs. Meanwhile, freight rates from the Persian Gulf to the Far East increased sharply, to peak in mid-July at the highest level since the Gulf War.

### Spot Product Prices in July

During most of the first four weeks of the month, US **gasoline** prices firmed gradually as a result of unexpectedly strong US gasoline demand and receding gasoline imports (490 kb/d for the four-week average ending 25 July versus 590kb/d in June) resulted in tightening supplies and declining inventory levels. However, in the last week of July, prices increased sharply (see left-hand graph below) on reports of US gasoline stocks declining to well below the psychologically sensitive 200 mb level and news of planned and unplanned refinery unit outages in the US, Venezuela and Rotterdam, renewing concerns about the adequacy of US gasoline supplies. The regular gasoline/WTI differential in New York Harbour increased from an average of \$3.50 in the first week of the month to an average of \$7.31/bbl in the last week of July, compared with an average of \$4.58/bbl last July.

The increasing tightness in US gasoline supplies was aggravated during July by an acute tightness of MTBE (methyl tertiary butyl ether), an octane boosting gasoline blending component mainly used for RFG blending. Strong US summer gasoline demand and unscheduled plant outages on the US Gulf Coast and in Germany as well as planned maintenance shutdowns of large export facilities in Rotterdam, Venezuela and Saudi Arabia kept MTBE supply scarce and boosted prices, shown in the right-hand graph below, to the highest level in more than two years.



In contrast to the US, gasoline prices in Rotterdam continued to decline in early July under pressure from a narrow arbitrage possibility to the US and ample regional supplies. However, by mid-month, prices had started to increase appreciably, following those in the US as the transatlantic arbitrage possibility improved (see left-hand graph above), tightening regional supplies. The steep increase in MTBE prices in Europe also contributed to firming European gasoline prices. In the Mediterranean, gasoline prices continued to gain support from export possibilities to the eastern Mediterranean and Nigeria where domestic refinery problems worsened, creating the need for a large volume of imports. The regular gasoline/Brent differential in Rotterdam increased from an average of \$2.70 in the first week of the month to an average of \$4.21/bbl in the last week of July.

Singapore gasoline prices, unlike those in the US and Europe, remained within a comparatively narrow, upward trending band during most of the month. Prices gained support, albeit amid ample regional supplies, from demand into Indonesia and Chinese Taipei, and gasoline was reportedly exported from Korea to Saudi Arabia. The average gasoline/Dubai differential decreased from \$6.49/bbl in June to \$6.01/bbl in July, reflecting the steeper increase in Dubai prices compared to those of gasoline in Singapore.

European **gasoil** prices remained little changed during most of the month, but increased slightly in the last week of July, largely tracking the price developments in Atlantic Basin benchmark crudes. Although prices remained under downward pressure from seasonally slack regional demand and continued closed

arbitrage possibilities for exports to Asia since late May, the decline in Russian gasoil exports, in particular from the Black Sea into the Mediterranean, provided some relief to well-supplied European markets. Gasoil and kerosene exports from the Latvian port of Ventspils are expected to drop appreciably in August, when a three-week annual railway maintenance, scheduled to start on 4 August, will leave the port supplied only through a products pipeline from Russia. The gasoil/Brent spread in Rotterdam averaged \$3.66/bbl in July compared to \$4.35/bbl in June and \$4.58/bbl last July. The gasoil contract on the IPE remained in contango throughout July.

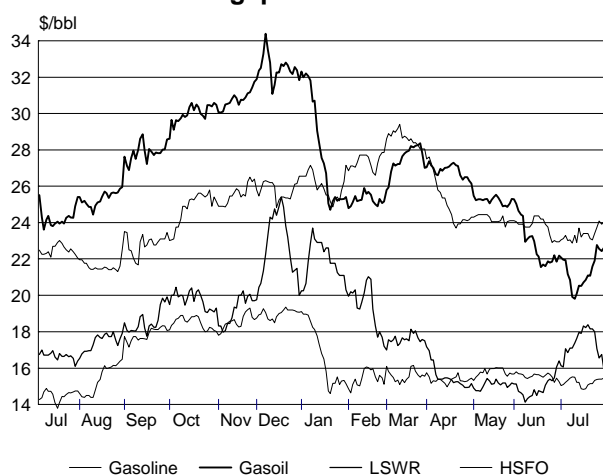
Gasoil prices in New York Harbour, like those in Europe, remained little changed during most of the month and increased slightly in the last week of July. High refinery runs led to unusually high levels of gasoil production (3.46 mb/d on average for the four-week period ending 25 July) and contributed to the rise in inventory levels to well above those of two years ago (see OECD Stocks section above). Robust distillate demand, in particular for diesel used by the agricultural sector, moderated the downward pressure on US gasoil markets. The gasoil/WTI spread in New York Harbour averaged \$2.63/bbl, almost unchanged from June. The heating oil contract on the NYMEX also remained in contango throughout July.

The downward pressure on the Singapore gasoil market increased further in early July as ample regional supplies were met by extremely weak demand, in particular from two of the largest regional consumers, India and China. High gasoil inventory levels increased further and free gasoil storage capacity declined appreciably, reportedly forcing refiners to reduce throughputs. As a consequence, gasoil prices declined to just below \$20/bbl (see graph to the right), lower than in the Mediterranean and the lowest level in three years. These low price levels triggered the opening of gasoil export possibilities to South America, ironically reversing the flow of gasoil into Asia in recent months. In the second half of July, gasoil prices increased again to the \$22/bbl level prevalent in the latter part of June, with gasoil exports and the effect of refinery run-cuts alleviating some of the regional gasoil oversupply and regional demand picking up again. The average gasoil/Dubai differential in Singapore decreased from \$5.59/bbl in June to \$4.08/bbl in July, compared to \$6.89/bbl last July.

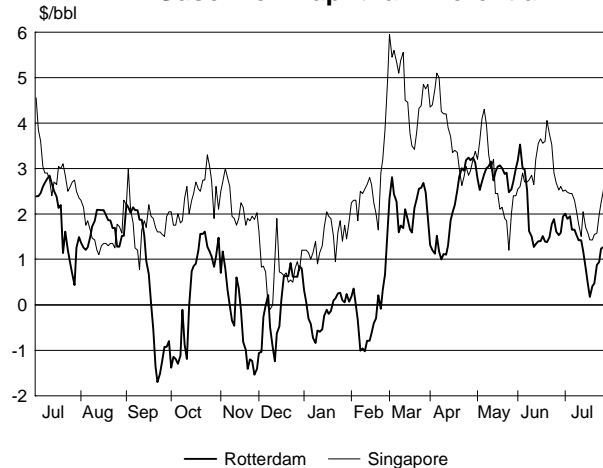
Spot **naphtha** prices in Singapore recovered slightly from a nine-month low in late June amid ample regional supply and limited spot requirements. Supply pressure increased, in particular as refiners started to maximise the production of naphtha at the expense of distillate. Nonetheless, the average naphtha/Dubai differential in Singapore increased from \$3.45/bbl in June to \$4.03/bbl in July, more than double the level of last July.

In July, European naphtha prices increased for the first time in two months. Strong demand from Asia increased the incentive for arbitrage exports to the East and contributed to tightening availabilities in Europe. The **reforming margin** in Northwest Europe declined further in July and remained below the threshold for reforming profitability, as naphtha prices increased by more than those of gasoline. In Singapore, the reforming margin decreased appreciably, as shown in the graph to the right, reflecting the strength of Asian naphtha markets relative to those of gasoline.

Singapore Product Prices



Gasoline - Naphtha Differential





Spot **kerosene** prices in Europe generally moved in line with those of gasoil, with the kerosene/gasoil differential trending slightly higher in the second half of the month. The main event in European kerosene markets was a three-day, mid-month strike at British Airways (Europe's single largest jet fuel customer), prompting concern, in retrospect unfounded, about the appearance of surplus kerosene volumes in a thinly traded spot market.

In the US, kerosene prices increased by more than those of gasoil, with the kerosene/gasoil differential in New York Harbour widening from \$1/bbl in early July to around \$1.50/bbl towards the end of the month. A spell of hot weather across the US Atlantic Coast in the first half of the month generated strong kerosene demand from regional utilities for burning in turbines to meet peak electricity demand for air conditioning. Despite the strong demand, US kerosene prices remained under downward pressure from high refinery production rates (an all time high of 1.67 mb/d was achieved during the week ending 18 July) contributing to rising kerosene inventory levels.

In the first three weeks of the month Singapore kerosene prices moved in line with those of gasoil, trading at a premium of around \$2/bbl. However, in the last two weeks of July this premium eroded completely and at the end of July kerosene prices fell below gasoil prices. This was mainly the result of the rise in Singapore gasoil prices, contrasted with growing regional kerosene supply pressure, seasonally weak regional demand and rising stock levels. The average kerosene/Dubai differential decreased from \$6.39/bbl in June to \$5.83/bbl in July, compared to \$7.60/bbl last July.

### 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
May	22.93	24.98	26.04	24.21	23.24	21.86	23.56	25.21	13.90	14.37	16.05	15.08
June	21.87	23.11	23.10	23.77	21.93	20.01	21.93	22.87	14.61	14.96	16.22	14.95
July	21.57	23.24	24.54	23.38	22.20	20.54	22.26	21.45	14.74	14.70	16.80	17.19
Jul-Jun:	-0.30	0.13	1.45	-0.39	0.28	0.53	0.33	-1.42	0.14	-0.25	0.58	2.25
Week ending:												
27-June	20.98	21.83	22.49	23.18	21.62	19.72	21.83	21.92	14.68	15.08	16.43	15.50
04 July	21.29	22.13	23.43	23.10	22.34	20.46	22.60	22.03	14.81	15.10	17.07	16.41
11 July	21.00	22.42	23.68	23.03	21.94	19.93	21.89	20.36	14.70	14.61	16.91	17.21
18 July	20.88	22.75	24.19	23.42	22.09	20.34	21.98	20.74	14.71	14.53	17.11	18.15
25 July	21.79	23.80	24.27	23.48	22.07	20.68	22.17	21.97	14.82	14.76	16.76	17.58
01 August	23.35	25.13	27.42	23.72	22.77	21.42	23.03	22.67	14.73	14.65	15.98	15.96

European **LSFO** prices remained little changed for the second successive month, almost unaffected by developments in crude markets. Demand from Italy's ENEL and the eastern Mediterranean combined with the reopening of the arbitrage possibility to the US to help absorb supplies that had threatened to lead to an oversupplied market. Spot **LSFO** prices on the US East Coast remained within a narrow upward-trending band for the first three weeks of the month, supported by strong demand from electric utilities facing peak air-conditioning demand. However, in the last two weeks of June, prices declined as milder weather on the East Coast and the prospect of incoming arbitrage cargoes from Europe undermined earlier price strength.

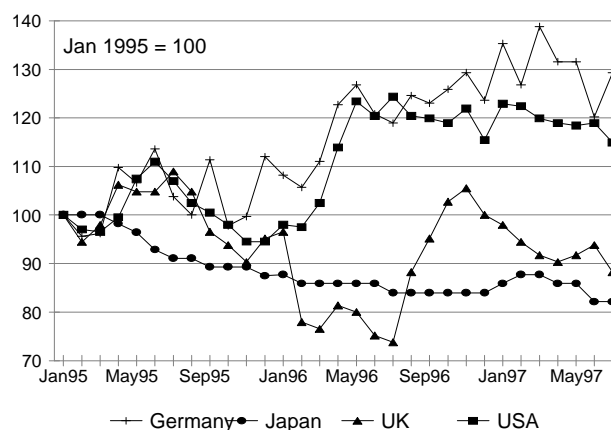
Asian **LSWR** prices continued to increase in the first three weeks of the month, rising by more than \$4.00/bbl from early June lows (see graph on page 40). Firm regional demand, in particular from Japanese utilities, and a lower-than-anticipated July **LSWR** allocation from Indonesia caused supplies to tighten. However, in the last two weeks of the month, **LSWR** prices declined by more than \$2.50/bbl when Japanese demand receded and higher August allocations were announced by Indonesia.

European **HSFO** prices trended slightly higher during July as refinery throughput cuts in the Mediterranean, firm regional bunker demand and exports to the US combined to tighten regional markets. **HSFO** prices in New York Harbour held steady for most of the month. On the US Gulf Coast, **HSFO** prices gained support from demand from Mexico, where a large refinery was in planned turnaround. Spot **HSFO** prices in Singapore were little changed for the sixth successive month, remaining well within their sustained trading range of between \$15.00/bbl and \$16.00/bbl. Prices remained firm as a result of tight supplies due to ongoing regional refinery turnarounds in Korea and Japan.

## End-User Product Prices

In July, mid-month end-user prices for **gasoline** decreased in local currencies in four countries (the US, Canada, France and Italy), remained unchanged in Japan and increased in three countries (the UK, Germany and Spain). While the increase in UK gasoline prices resulted from an increase in excise tax on 2 July (as ex-tax gasoline prices declined in the UK), the increase in German prices was mainly a correction to the sharp decline in gasoline prices in June (shown by the top line in the graph to the right). Gasoline prices among the countries shown in Table 9 declined the most in the US. Conversely, local currency prices were higher in all of the included European countries compared to last June. In US dollar terms, however, gasoline prices were generally lower than last June (with the exception of the UK), reflecting the depreciation of most European currencies against the US dollar. Mid-month **automotive diesel** end-user prices increased in the UK (also due to the 2 July excise tax increase) and in Germany (as a correction to the sharp decline in June), while remaining unchanged in Japan and decreasing slightly in all the other countries shown in Table 9.

**End-User Gasoline Prices**  
Local Currency Basis - Excluding Tax



**Heating oil** prices for domestic consumers increased appreciably in Germany and, to a lesser extent, in Spain, but remained unchanged in France and declined in the UK and Italy. Mid-month **heavy fuel oil** prices for industry declined appreciably in Germany but increased in Spain, France and the UK and remained unchanged in Italy and Japan. With the exception of the UK, pre-tax prices were appreciably lower in US dollar terms in most countries shown in Table 9 compared to the same month last year.

## Monthly End-User Product Price Changes - July 97

Local Currency including Taxes

	Gasoline <sup>1</sup> per Litre	Automotive Diesel <sup>3</sup> per Litre	Domestic Heating Oil per 1000 Litres	HFO for Industry <sup>5</sup> per Metric Ton
US	-0.008 <sup>2</sup>	n.a.	n.a.	n.a.
Canada	-0.006	-0.00	n.a.	n.a.
France	-0.030	-0.03	0.000	5.000
Germany	0.029	0.039	28.3	-7.6
Italy	-3.36	-10.08	-9250	0
Spain	0.314	-0.166	442	481
UK	-0.008	-0.008	-5.71	-0.43
Japan	0	0	0 <sup>4</sup>	0

<sup>1</sup> Premium leaded gasoline for France, Italy, Spain, UK; regular unleaded gasoline for Canada, Germany, Japan and USA

<sup>2</sup> Estimated

<sup>3</sup> VAT excluded where it is refundable: HFO for Industry, Automotive Diesel for Industry

<sup>4</sup> Kerosene

<sup>5</sup> High sulphur fuel oil price for France, Spain, UK and Japan; low sulphur fuel oil price for Germany and Italy

## Refining Margins in July

Average European refining margins decreased significantly in July, reflecting the relative strength in Atlantic Basin crude prices, which on average increased by more than those of products. Margins in the **Mediterranean** decreased by more than those in **Rotterdam**, as shown in the table below. The tightness in sour crude markets in the Mediterranean (reflected in a narrowing Brent/Urals differential), and the closed gasoil arbitrage possibility to Asia exerted firm downward pressure on regional margins and reportedly caused some refiners in the region to reduce crude throughputs. However, during the month, spot margins trended upwards (as shown in the graph on page 46) after gaining support from the rise in regional gasoline and naphtha prices. The differential between the average cracking and hydroskimming margins remained almost unchanged at \$1.18/bbl in Rotterdam and widened only slightly to \$1.24/bbl in the Mediterranean.

Weakening distillate and gasoline prices in the face of rising crude prices have kept Dubai-based refining margins in **Singapore** under severe downward pressure, prompting further run cuts by Singapore refiners. The average Dubai cracking margin in Singapore declined to the lowest level in 12 months and the spread between cracking and hydroskimming margin narrowed by some \$0.15/bbl to \$1.82/bbl.

Average refining margins on the US Gulf Coast increased in July to the highest level in more than two years, with support coming from firm and rising gasoline prices. In early July, and again in the last week of the month, spot margins increased by almost \$1/bbl (see graph on page 46). The Brent cracking margin on the US Gulf Coast largely mirrored price developments in the Brent market.

### Refining Margins in Major Refining Centres

(monthly and weekly averages, \$/bbl)

	May	Jun	Jul	Change	Week Ending:					
					20-Jun	27-Jun	04-Jul	11-Jul	18-Jul	25-Jul
<b>NW Europe</b>										
Brent (Hydroskimming)	-0.27	0.44	-0.31	-0.75	0.34	-0.28	-0.52	-0.44	-0.16	-0.31
Brent (Cracking)	1.17	1.60	0.87	-0.73	1.45	0.72	0.51	0.65	0.98	0.94
<b>Mediterranean</b>										
Urals (Hydroskimming)	0.38	1.02	-0.12	-1.14	1.04	0.13	-0.39	-0.31	0.11	-0.03
Urals (Cracking)	1.93	2.21	1.13	-1.08	2.18	1.13	0.67	0.82	1.30	1.30
<b>US Gulf Coast</b>										
Brent (Cracking)	1.79	1.99	2.12	0.13	1.86	1.21	1.27	2.03	2.30	1.92
WTI (Cracking)	1.57	1.86	2.48	0.62	1.84	1.62	1.56	2.32	2.43	2.58
<b>Singapore</b>										
Dubai (Hydroskimming)	-0.19	0.24	-0.42	-0.66	0.41	0.19	-0.25	-0.30	-0.63	-0.34
Dubai (Cracking)	2.07	2.21	1.40	-0.81	2.32	1.90	1.56	1.32	1.18	1.54

### Refinery Crude Throughputs in June

The aggregate of OECD refinery crude throughputs for June decreased by 0.33 mb/d from May's appreciably upwardly-revised figures, to 33.31 mb/d. A marginal increase in US throughputs was more than offset a decrease of 0.25 mb/d in Japan and marginal decreases in Europe, Canada and Australasia. Nonetheless, total June throughputs were 0.95 mb/d or 2.9% higher than a year earlier. Refinery utilisation in OECD countries averaged just under 90%, 2% points higher than last year.

### Refinery Crude Throughput and Utilisation in OECD Countries

	million barrels per day						% change from		utilisation rate**	
	Feb	Mar	Apr	May	Jun*	Jan-Jun*	Jun-96	Jan-Jun 96	Jun-97	Jun-96
OECD Europe	12.65	12.06	12.58	12.63	12.60	12.59	2.3	1.4	91.6%	89.2%
France	1.75	1.57	1.74	1.80	1.85	1.77	15.6	4.9	106.7%	92.4%
Germany	2.09	2.09	2.08	2.04	1.85	2.03	-13.5	-1.7	87.2%	100.8%
Italy	1.55	1.59	1.46	1.64	1.60	1.59	13.1	1.7	79.1%	69.9%
Netherlands	1.18	1.02	1.20	1.21	1.22	1.17	4.3	-0.3	100.4%	96.2%
UK	1.78	1.74	1.82	1.72	1.74	1.75	-2.6	0.9	94.4%	96.9%
US	13.42	14.05	14.28	15.08	15.12	14.26	4.0	1.6	96.8%	94.6%
Canada	1.44	1.39	1.31	1.43	1.37	1.39	-3.3	3.5	74.5%	76.9%
Japan	4.75	4.53	4.42	3.72	3.47	4.27	5.8	2.0	69.1%	65.9%
Australia/New Zealand	0.75	0.77	0.75	0.78	0.76	0.76	-5.3	5.9	93.4%	98.6%
OECD Total	33.01	32.80	33.35	33.65	33.31	33.28	2.9	1.7	89.9%	87.9%

\* estimate

\*\* based on crude throughput and current operable refining capacity

Preliminary data suggest that **European** refinery throughputs remained almost unchanged at 12.6 mb/d. Decreased throughput levels, mainly in Germany (190 kb/d) and Italy, were offset by minor increases in a number of countries (France, Austria, the UK, Denmark). June throughputs in OECD Europe were 2.3% or 0.27 mb/d higher than a year earlier. European refinery utilisation rates decreased from 91.8% in May to 91.6% in June, but were very different in northwest Europe (95.4%) from southern Europe (84.0%).

After increasing by a staggering 800 kb/d in May, to the highest level for any month since December 1979, crude throughputs in the US increased further in June (by another 40 kb/d) to average a new high of 15.12 mb/d. This resulted in a US refinery utilisation rate of 96.8% based on current operable refining capacity, the highest rate in at least 25 years. Throughputs were 4.0% or 580 kb/d higher than a year earlier. **Japanese** crude throughputs decreased by 0.25 mb/d to 3.47 mb/d, consistent with the peak in Japanese spring refinery maintenance. However, Japanese throughputs were still 5.8% or 180 kb/d higher than in June 1996.

In July, refinery throughputs in Europe are thought to have increased slightly, consistent with lower planned refinery maintenance. Japanese throughputs are expected to have increased more sharply, following the return of refining capacity after spring maintenance, which is thought to have peaked in June. Weekly US statistics up to 25 July suggest that throughput levels decreased slightly but only to just under 15 mb/d, reflecting robust product demand and relatively high refining margins.

### Refinery Maintenance Shutdowns

The bulk of planned refinery maintenance in August and September will be concentrated in the Middle East and in Asia, with about 1.1 mb/d of capacity out of operation, while refinery maintenance in Europe and in the US is expected to remain at seasonally low levels. In October, the focus on refinery maintenance will shift back to Europe, where some 500 kb/d of capacity is planned to shut down for maintenance (see the table below). However, there is some flexibility on the timing of turnarounds and the extent of maintenance shutdowns, which may well be influenced by product markets, refining margins and weather conditions. This is particularly true for Asia, where downward pressure on refining margins reportedly prompted refiners to cut refinery throughputs in July.

#### Refinery Maintenance Shutdowns (Primary Distillation)

(million barrels per day of nameplate capacity)

	August	September	October
Europe	0.07	0.25	0.50
Middle East	0.30	0.41	0.34
Japan	0.16	0.40	0.19
Other Asia/Pacific	0.60	0.30	0.15

IEA estimates

Other Asia/Pacific consists of: Australia, Chinese Taipei, India, Indonesia, Korea, Malaysia, Pakistan, the Philippines, Singapore, Sri Lanka, Thailand

### Downstream Industry Developments

Construction work for a 100 kb/d grassroots refinery has reportedly started in Alexandria, Egypt. The \$1.3 billion refinery, the largest Arab-Israeli joint-venture ever undertaken, is expected to start up in late 1999.

Iran's long-delayed Bandar Abbas refinery was formally inaugurated in July. The 232 kb/d refinery, the country's eighth refinery, will initially be operated at about 70 kb/d with the aim to increase capacity to 116 kb/d later in the year. The refinery's second crude distiller train (116 kb/d) will not start up before spring of next year. The Bandar Abbas refinery was originally due for completion in 1993.

In Germany, the 105 kb/d Leuna refinery (owned by BvS, Germany's state trust agency, which is wrapping up the privatisation of former East German state-owned industry) ended operations as planned at the end of June. The refinery is being replaced by the 175 kb/d Mider refinery (a joint venture between French Elf and BvS), which is expected to start up in October.

Germany's Wilhelmshaven refinery (owned by Louis Dreyfus) completed its scheduled maintenance and expansion shutdown and was started up again in early July. The refinery has boosted its primary distillation capacity by 30 kb/d and can now process up to 210 kb/d.

Poland's 250 kb/d Plock refinery has completed the installation of a 45 kb/d hydrocracker, which will boost the refinery's gasoline and diesel production. The unit started operation in July and will reportedly enable Plock's transportation fuel production to meet EU specifications.

State oil company Petroecuador announced that the Esmeraldas refinery in Ecuador has been shut down in order to carry out expansion work involving the interconnection of several new units, plus annual maintenance. The refinery is due to resume operations with processing capacity increased to 110 kb/d from the current 90 kb/d.

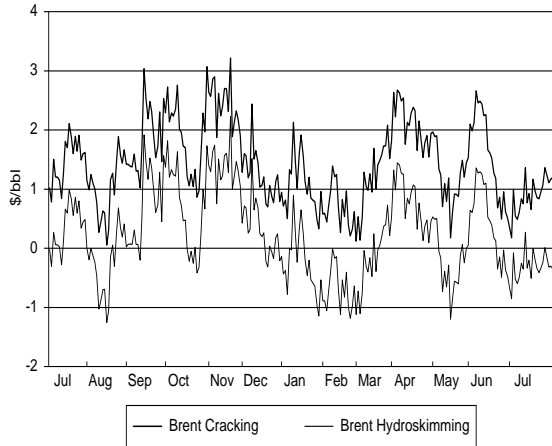
China's city of Guangzhou in southern Guangdong Province will mandate the use of unleaded gasoline instead of leaded petrol as of 1 October. Guangzhou was one of the three major Chinese cities designated to use unleaded gasoline in 1997. Beijing began substituting for leaded gasoline in eight urban districts on 1 June, while Shanghai will ban the use of leaded petrol after 1 December.

Saudi Aramco has reportedly agreed to buy a 27.5% stake in Portugal's state-controlled oil company Petrogal for an undisclosed sum.

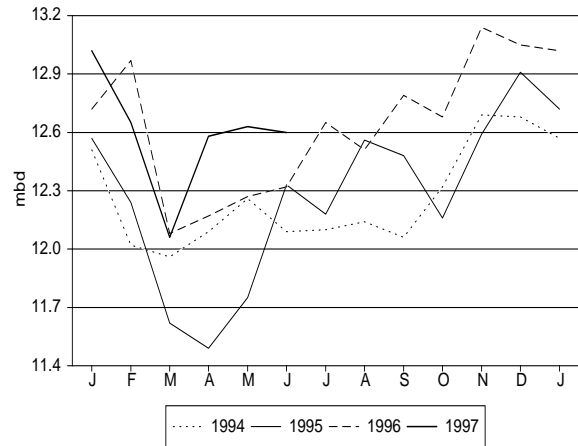
Russian oil company Lukoil entered the US retail gasoline market in late July, opening in the state of Virginia the first of 2,000 stations planned for the next five years. Lukoil owns half of Nexus Fuels of Texas, which will operate the outlets next to supermarkets owned by Food Lion, Shaw's Supermarkets, Richfoods, and Supervalu. Nexus will reportedly buy gasoline on the US spot market and may pursue deals exchanging Lukoil's crude production for US gasoline.

A proposed restructuring plan for Petroleos de Venezuela S.A. (Pdvsa) will reportedly begin on 2 August with the merging of the Amuay and Cardon refineries. Pdvsa's subsidiary Lagoven currently owns and operates Amuay, while another Pdvsa subsidiary (Maraven) runs Cardon. The two refineries, both located in the northwestern region of Venezuela, are the country's largest. Amuay and Cardon have a combined processing capacity estimated at 940,000 b/d. The restructuring plan aims at a new corporate structure that will consist of three units, known as PDV-Exploration and Production, PDV-Manufacturing and Marketing, and PDV-Services.

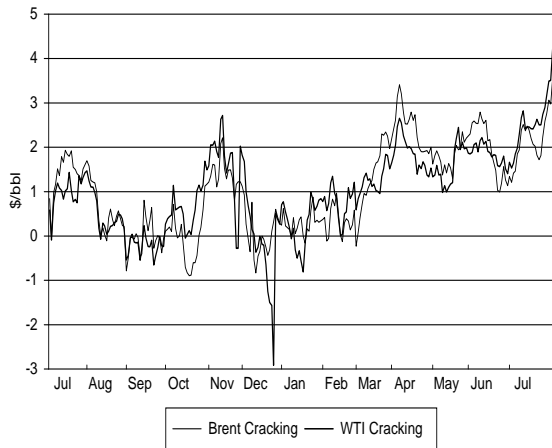
**Rotterdam Refining Margins**



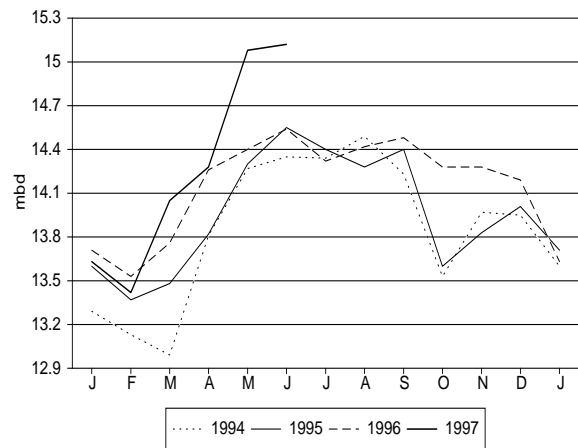
**OECD Europe Crude Throughputs**



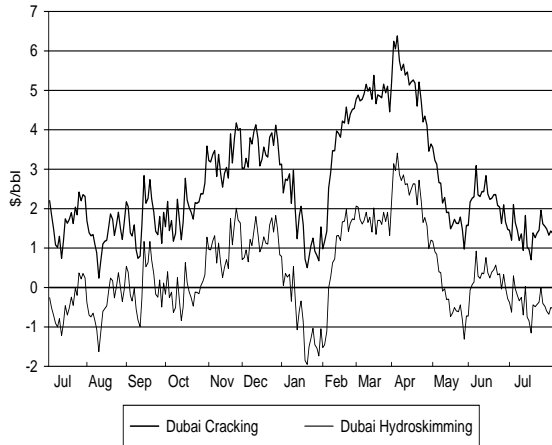
**US Gulf Refining Margins**



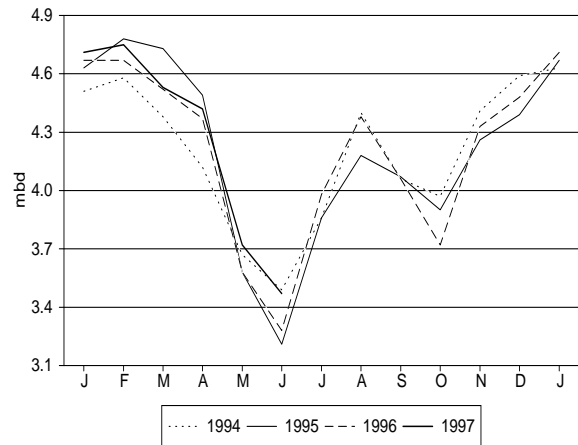
**US Crude Throughputs**



**Singapore Refining Margins**



**Japan Crude Throughputs**



**Table 1**  
**WORLD OIL SUPPLY AND DEMAND**

(million barrels per day)

	1994	1995	1Q96	2Q96	3Q96	4Q96	1996	1Q97	2Q97	3Q97	4Q97	1997	1Q98	2Q98	3Q98	4Q98	1998
<b>DEMAND</b>																	
<b>OECD</b>																	
North America	19.8	19.8	20.4	19.9	20.2	20.8	20.3	20.4	20.7	20.7	21.0	20.7	20.7	20.7	20.9	21.3	20.9
Europe	13.6	13.9	14.4	13.5	14.2	14.5	14.2	14.2	13.9	14.3	14.8	14.3	14.4	13.8	14.5	15.0	14.4
Pacific	6.6	6.7	7.4	6.2	6.3	6.9	6.7	7.3	6.1	6.4	7.1	6.7	7.4	6.3	6.5	7.2	6.8
<b>TOTAL OECD</b>	<b>40.0</b>	<b>40.4</b>	<b>42.2</b>	<b>39.6</b>	<b>40.6</b>	<b>42.2</b>	<b>41.2</b>	<b>41.9</b>	<b>40.8</b>	<b>41.4</b>	<b>42.9</b>	<b>41.7</b>	<b>42.6</b>	<b>40.8</b>	<b>41.9</b>	<b>43.5</b>	<b>42.2</b>
<b>NON-OECD</b>																	
FSU <sup>1</sup>	4.9	4.8	4.6	4.2	4.3	4.2	4.3	4.3	4.4	4.2	4.5	4.4	4.4	4.4	4.2	4.6	4.4
Europe	1.3	1.4	1.5	1.4	1.3	1.4	1.4	1.6	1.5	1.4	1.5	1.5	1.6	1.5	1.4	1.5	1.5
China <sup>2</sup>	3.1	3.3	3.4	3.6	3.6	3.7	3.6	3.6	3.8	3.8	3.9	3.8	3.9	4.0	4.0	4.1	4.0
Other Asia	7.4	8.0	8.8	8.4	8.2	9.0	8.6	9.3	9.0	8.7	9.7	9.2	9.9	9.7	9.3	10.3	9.8
Latin America	6.0	6.1	6.2	6.3	6.5	6.5	6.4	6.5	6.7	6.7	6.7	6.6	6.8	6.9	7.0	6.9	6.9
Middle East	4.0	4.1	4.1	4.1	4.3	4.3	4.2	4.2	4.2	4.4	4.4	4.3	4.3	4.3	4.5	4.5	4.4
Africa	2.1	2.2	2.3	2.3	2.2	2.3	2.3	2.4	2.4	2.3	2.4	2.4	2.5	2.5	2.3	2.5	2.4
<b>TOTAL NON-OECD</b>	<b>28.8</b>	<b>29.9</b>	<b>31.0</b>	<b>30.3</b>	<b>30.4</b>	<b>31.5</b>	<b>30.8</b>	<b>31.9</b>	<b>31.9</b>	<b>31.5</b>	<b>33.1</b>	<b>32.1</b>	<b>33.3</b>	<b>33.3</b>	<b>32.8</b>	<b>34.5</b>	<b>33.5</b>
<b>TOTAL DEMAND<sup>3</sup></b>	<b>68.8</b>	<b>70.3</b>	<b>73.2</b>	<b>69.9</b>	<b>71.0</b>	<b>73.7</b>	<b>72.0</b>	<b>73.9</b>	<b>72.6</b>	<b>72.8</b>	<b>75.9</b>	<b>73.8</b>	<b>75.9</b>	<b>74.1</b>	<b>74.7</b>	<b>77.9</b>	<b>75.7</b>
<b>SUPPLY</b>																	
<b>OECD</b>																	
North America	10.9	11.0	11.0	10.9	11.0	11.2	11.1	11.2	11.0	11.1	11.4	11.2	11.5	11.2	11.4	11.7	11.5
Europe	6.0	6.3	6.6	6.6	6.5	6.9	6.7	6.9	6.5	6.6	7.5	6.9	7.2	7.1	7.2	8.2	7.4
Pacific	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.8
<b>TOTAL OECD</b>	<b>17.6</b>	<b>18.0</b>	<b>18.3</b>	<b>18.2</b>	<b>18.2</b>	<b>18.8</b>	<b>18.4</b>	<b>18.7</b>	<b>18.2</b>	<b>18.5</b>	<b>19.7</b>	<b>18.8</b>	<b>19.4</b>	<b>19.1</b>	<b>19.6</b>	<b>20.8</b>	<b>19.7</b>
<b>NON-OECD</b>																	
FSU	7.2	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.2	7.1	7.2	7.2	7.3	7.4	7.3	7.5	7.4
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	2.8	3.0	3.1	3.1	3.1	3.2	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.2	3.3	3.2
Other Asia	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.3	2.3	2.2
Latin America	5.9	6.1	6.5	6.6	6.5	6.6	6.5	6.7	6.8	6.9	7.2	6.9	7.2	7.3	7.5	7.6	7.4
Middle East	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Africa	2.4	2.6	2.6	2.6	2.7	2.8	2.7	2.8	2.8	2.8	2.9	2.8	3.0	3.0	3.1	3.1	3.0
Processing Gains <sup>4</sup>	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
<b>TOTAL NON-OPEC</b>	<b>41.6</b>	<b>42.5</b>	<b>43.4</b>	<b>43.3</b>	<b>43.4</b>	<b>44.3</b>	<b>43.6</b>	<b>44.3</b>	<b>44.1</b>	<b>44.5</b>	<b>46.1</b>	<b>44.8</b>	<b>46.0</b>	<b>46.1</b>	<b>46.7</b>	<b>48.3</b>	<b>46.8</b>
<b>OPEC</b>																	
Crude	24.7	25.1	25.7	25.5	25.9	26.3	25.8	26.8	26.8								
NGLs	2.4	2.4	2.5	2.6	2.7	2.7	2.6	2.7	2.8	2.9	2.9	2.8	2.9	3.0	3.0	3.0	3.0
<b>TOTAL OPEC</b>	<b>27.0</b>	<b>27.5</b>	<b>28.2</b>	<b>28.1</b>	<b>28.5</b>	<b>28.9</b>	<b>28.5</b>	<b>29.6</b>	<b>29.6</b>								
<b>TOTAL SUPPLY<sup>5</sup></b>	<b>68.6</b>	<b>70.0</b>	<b>71.6</b>	<b>71.5</b>	<b>72.0</b>	<b>73.2</b>	<b>72.1</b>	<b>73.9</b>	<b>73.7</b>								
<b>STOCK CHANGES AND MISCELLANEOUS</b>																	
<b>REPORTED OECD</b>																	
Industry	0.1	-0.3	-1.8	1.2	0.4	-0.4	-0.1	0.3	0.5								
Government	0.1	0.0	0.4	-0.1	-0.1	-0.1	0.0	0.0	0.0								
<b>TOTAL OECD</b>	<b>0.2</b>	<b>-0.3</b>	<b>-1.3</b>	<b>1.1</b>	<b>0.3</b>	<b>-0.5</b>	<b>-0.1</b>	<b>0.3</b>	<b>0.5</b>								
Floating Storage/Oil in Transit	-0.1	0.1	-0.3	0.1	0.0	-0.1	-0.1	0.2	0.2								
Miscellaneous to balance <sup>6</sup>	-0.3	-0.1	0.0	0.3	0.6	0.1	0.3	-0.4	0.4								
<b>TOTAL STOCK CH. &amp; MISC.</b>	<b>-0.2</b>	<b>-0.3</b>	<b>-1.6</b>	<b>1.6</b>	<b>1.0</b>	<b>-0.5</b>	<b>0.1</b>	<b>0.0</b>	<b>1.1</b>								
<b>Memo items:</b>																	
FSU Net Exports	2.4	2.4	2.4	2.8	2.8	2.9	2.7	2.7	2.8	2.9	2.7	2.8	2.9	3.0	3.1	2.9	3.0
Call on OPEC crude + Stock ch. <sup>7</sup>	24.9	25.4	27.3	24.0	24.9	26.8	25.7	26.8	25.7	25.5	26.9	26.2	26.9	25.0	25.0	26.6	25.9
Total Demand ex. FSU	64.0	65.5	68.5	65.7	66.7	69.5	67.6	69.5	68.3	68.7	71.4	69.5	71.5	69.7	70.5	73.4	71.3
Total demand exc. FSU (% ch) <sup>8</sup>	3.5	2.4	3.2	2.6	3.5	3.4	3.2	1.5	3.9	2.9	2.8	2.8	2.8	2.1	2.7	2.7	2.6

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)

	1994	1995	1Q96	2Q96	3Q96	4Q96	1996	1Q97	2Q97	3Q97	4Q97	1997	1Q98	2Q98	3Q98	4Q98	1998
<b>DEMAND</b>																	
OECD																	
North America	-	-	-	-	-	-	-	-	0.1	0.1	-	-	-	0.1	0.1	-	0.1
Europe	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-	-
<b>TOTAL OECD</b>	-	-	-	-	-	-	-	-	0.2	0.1	-	-	0.1	0.1	0.1	0.1	0.1
NON-OECD																	
FSU	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-0.1	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL NON-OECD</b>	-	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-	-	0.1	-
<b>TOTAL DEMAND</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1
<b>SUPPLY</b>																	
OECD																	
North America	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-0.1	-0.3	-0.2	-0.1	-0.2	-0.1	-0.2	-0.1	-0.2
Pacific	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-0.1	-	-	-	-0.1
<b>TOTAL OECD</b>	-	-	-	-	-	-	-	-	-0.2	-0.4	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.2
NON-OECD																	
FSU	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1
Middle East	-	-	-	-	-	-0.1	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Africa	-	-	-	-0.1	-0.1	-	-	-	-0.1	-0.1	-0.1	-0.1	-	-	-	-	-0.1
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL NON-OPEC</b>	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.4	-0.6	-0.6	-0.4	-0.5	-0.4	-0.4	-0.5	-0.4
OPEC																	
Crude	-	-	-	-0.1	-	0.1	-0.1	-0.1	-	-	-	-	-	-	-	-	-
NGLs	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-	-	-0.1	-
<b>TOTAL OPEC</b>	-	-	-	-0.1	-0.1	-	-	-0.1	-0.1	-	-	-	-	-	-	-	-
<b>TOTAL SUPPLY</b>	-	-	-	-	-0.1	-0.1	-	-0.2	-0.5	-	-	-	-	-	-	-	-
<b>STOCK CHANGES AND MISCELLANEOUS</b>																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	0.1	-0.1	-	-	-	-	-	-	-	-
Government	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-	-	-
<b>TOTAL OECD</b>	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-	-
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-	-
Miscellaneous to balance	-	-	-0.1	-0.1	-0.1	-	-	-0.1	-0.3	-	-	-	-	-	-	-	-
<b>TOTAL STOCK CH. &amp; MISC.</b>	-	-	-	-	-0.1	-0.1	-0.1	-0.2	-0.5	-	-	-	-	-	-	-	-
Memo items:																	
FSU Net Exports	-	-	-	-	-	-	-	-	0.1	-	-	-	-	0.2	-	-	0.1
Call on OPEC crude + Stock ch.	-	-	-	-	-	0.1	-	-	0.5	0.8	0.6	0.5	0.5	0.5	0.5	0.6	0.6
Total Demand ex. FSU	-	-	-	-	-	-	-	-0.1	0.2	0.1	-	0.1	-	0.2	0.2	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)

	January			February			March			First Quarter			April		
	1996	1997	%	1996	1997	%	1996	1997	%	1996	1997	%	1996	1997	%
<b>North America</b>															
LPG	2.66	2.68	0.8	2.57	2.60	1.3	2.36	2.14	-9.0	2.53	2.47	-2.2	2.20	2.23	1.3
Naphtha	0.28	0.37	31.8	0.35	0.32	-9.6	0.35	0.33	-6.5	0.33	0.34	3.6	0.28	0.35	24.9
Motor Gasoline	7.87	7.95	1.0	8.19	8.29	1.2	8.34	8.44	1.1	8.14	8.23	1.1	8.51	8.72	2.5
Jet/Kerosene	1.82	1.92	5.0	1.91	1.76	-7.8	1.75	1.71	-2.0	1.82	1.80	-1.5	1.66	1.77	7.1
Gasoil	4.22	4.35	3.1	4.30	3.99	-7.2	3.95	4.03	2.1	4.15	4.13	-0.6	3.82	3.99	4.4
Residual Fuel Oil	1.23	1.20	-2.5	1.25	1.19	-5.1	1.00	0.92	-7.7	1.16	1.10	-5.0	0.90	0.98	9.3
Other Products	2.24	2.29	2.0	2.10	2.35	11.7	2.48	2.39	-3.6	2.28	2.34	2.8	2.45	2.59	5.8
<b>Total</b>	<b>20.33</b>	<b>20.75</b>	<b>2.1</b>	<b>20.67</b>	<b>20.49</b>	<b>-0.8</b>	<b>20.23</b>	<b>19.97</b>	<b>-1.3</b>	<b>20.40</b>	<b>20.40</b>	<b>0.0</b>	<b>19.82</b>	<b>20.64</b>	<b>4.1</b>
<b>Europe</b>															
LPG	1.02	1.13	10.4	1.06	1.01	-5.6	0.94	0.83	-11.6	1.01	0.99	-2.0	0.87	0.91	4.5
Naphtha	1.10	1.04	-5.3	1.08	1.17	8.8	1.09	1.04	-5.0	1.09	1.08	-0.9	0.87	1.01	15.7
Motor Gasoline	2.64	2.65	0.4	2.81	2.84	1.0	2.84	2.85	0.5	2.76	2.78	0.6	3.08	3.13	1.6
Jet/Kerosene	0.82	0.88	7.6	0.86	0.89	3.6	0.84	0.87	3.1	0.84	0.88	4.7	0.85	0.91	6.7
Gasoil	5.15	5.56	7.9	5.85	5.25	-10.3	5.21	4.79	-8.0	5.40	5.20	-3.6	4.70	5.32	13.1
Residual Fuel Oil	2.27	2.27	0.0	2.40	2.30	-4.4	2.32	2.09	-10.0	2.33	2.22	-4.9	2.04	1.99	-2.2
Other Products	0.99	1.02	3.0	0.95	1.06	11.2	0.94	1.09	15.4	0.96	1.06	9.7	1.14	1.18	3.2
<b>Total</b>	<b>13.99</b>	<b>14.54</b>	<b>4.0</b>	<b>15.03</b>	<b>14.52</b>	<b>-3.4</b>	<b>14.18</b>	<b>13.55</b>	<b>-4.4</b>	<b>14.38</b>	<b>14.20</b>	<b>-1.3</b>	<b>13.56</b>	<b>14.45</b>	<b>6.6</b>
<b>Pacific</b>															
LPG	0.79	0.78	-2.0	0.83	0.83	-0.3	0.78	0.76	-2.1	0.80	0.79	-1.5	0.76	0.71	-6.4
Naphtha	0.79	0.85	7.9	0.81	0.82	1.9	0.74	0.87	18.2	0.78	0.85	9.3	0.78	0.82	5.4
Motor Gasoline	1.14	1.19	4.3	1.20	1.24	2.9	1.23	1.24	1.1	1.19	1.22	2.7	1.24	1.27	1.8
Jet/Kerosene	1.20	1.25	4.3	1.30	1.29	-0.9	1.11	0.95	-14.4	1.20	1.16	-3.5	0.81	0.69	-13.8
Gasoil	1.48	1.54	3.9	1.76	1.74	-0.8	1.71	1.65	-3.8	1.65	1.64	-0.5	1.54	1.53	-0.7
Residual Fuel Oil	0.89	0.78	-12.3	0.99	0.87	-12.1	0.87	0.79	-9.5	0.91	0.81	-11.4	0.76	0.68	-10.8
Other Products	0.84	0.81	-3.5	0.86	0.93	8.7	0.85	0.82	-2.9	0.85	0.85	0.5	0.69	0.60	-13.0
<b>Total</b>	<b>7.14</b>	<b>7.21</b>	<b>0.9</b>	<b>7.74</b>	<b>7.72</b>	<b>-0.3</b>	<b>7.28</b>	<b>7.08</b>	<b>-2.7</b>	<b>7.38</b>	<b>7.32</b>	<b>-0.8</b>	<b>6.58</b>	<b>6.30</b>	<b>-4.2</b>
<b>OECD</b>															
LPG	4.47	4.58	2.5	4.46	4.44	-0.6	4.07	3.74	-8.3	4.33	4.25	-2.0	3.83	3.85	0.5
Naphtha	2.17	2.26	4.3	2.24	2.32	3.4	2.18	2.24	2.6	2.19	2.27	3.4	1.93	2.18	12.9
Motor Gasoline	11.66	11.79	1.2	12.21	12.37	1.4	12.41	12.53	1.0	12.09	12.23	1.1	12.83	13.11	2.2
Jet/Kerosene	3.84	4.05	5.3	4.07	3.94	-3.2	3.69	3.53	-4.5	3.86	3.83	-0.8	3.32	3.38	1.9
Gasoil	10.86	11.45	5.5	11.90	10.98	-7.8	10.87	10.47	-3.7	11.20	10.97	-2.0	10.06	10.84	7.7
Residual Fuel Oil	4.39	4.25	-3.2	4.64	4.35	-6.2	4.19	3.80	-9.3	4.40	4.12	-6.2	3.70	3.66	-1.2
Other Products	4.08	4.12	1.1	3.92	4.34	10.9	4.27	4.31	0.8	4.09	4.25	4.0	4.28	4.37	2.1
<b>Total</b>	<b>41.46</b>	<b>42.50</b>	<b>2.5</b>	<b>43.44</b>	<b>42.73</b>	<b>-1.6</b>	<b>41.69</b>	<b>40.61</b>	<b>-2.6</b>	<b>42.17</b>	<b>41.92</b>	<b>-0.6</b>	<b>39.96</b>	<b>41.39</b>	<b>3.6</b>

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.

**Table 3**  
**OIL DEMAND IN SELECTED OECD COUNTRIES**  
 (million barrels per day)

	February			March			First Quarter			April			May		
	1996	1997	%	1996	1997	%	1996	1997	%	1996	1997	%	1996	1997	%
<b>United States</b>															
LPG	2.25	2.25	0.0	2.03	1.83	-9.8	2.20	2.14	-2.8	1.88	1.92	2.2	1.85	1.77	-4.2
Naphtha	0.27	0.25	-9.7	0.27	0.24	-11.2	0.25	0.26	4.1	0.21	0.27	26.1	0.20	0.30	49.0
Motor Gasoline	7.55	7.65	1.3	7.73	7.81	1.0	7.51	7.59	1.0	7.87	8.07	2.5	8.00	8.13	1.6
Jet/Kerosene	1.79	1.64	-8.6	1.64	1.59	-2.6	1.71	1.67	-2.0	1.54	1.65	7.1	1.48	1.55	4.7
Gasoil	3.72	3.42	-8.1	3.45	3.52	1.8	3.62	3.58	-1.1	3.38	3.52	4.1	3.12	3.24	3.9
Residual Fuel Oil	1.03	0.97	-5.5	0.83	0.74	-10.3	0.96	0.90	-6.3	0.75	0.80	7.1	0.83	0.73	-11.0
Other Products	1.88	2.13	13.1	2.24	2.14	-4.4	2.05	2.11	2.8	2.20	2.34	6.3	2.38	2.52	5.7
<b>Total</b>	<b>18.50</b>	<b>18.31</b>	<b>-1.0</b>	<b>18.18</b>	<b>17.87</b>	<b>-1.7</b>	<b>18.29</b>	<b>18.24</b>	<b>-0.3</b>	<b>17.84</b>	<b>18.57</b>	<b>4.1</b>	<b>17.86</b>	<b>18.24</b>	<b>2.2</b>
<b>Japan</b>															
LPG	0.75	0.76	1.3	0.70	0.69	-1.2	0.72	0.72	-0.4	0.68	0.63	-6.9	0.58	0.58	0.6
Naphtha	0.80	0.81	1.9	0.73	0.87	18.4	0.77	0.84	9.4	0.77	0.81	5.5	0.71	0.78	9.6
Motor Gasoline	0.85	0.88	4.7	0.87	0.89	1.4	0.84	0.87	3.5	0.89	0.90	0.9	0.88	0.92	4.7
Jet/Kerosene	1.20	1.19	-1.0	1.01	0.84	-16.8	1.10	1.05	-4.2	0.70	0.59	-16.0	0.48	0.45	-6.4
Diesel*	0.78	0.78	0.1	0.78	0.81	4.1	0.73	0.75	2.9	0.79	0.74	-6.4	0.75	0.75	0.7
Other Gasoil*	0.73	0.70	-3.3	0.69	0.59	-14.3	0.68	0.64	-5.4	0.51	0.51	0.6	0.42	0.42	1.0
Residual Fuel Oil	0.93	0.81	-13.1	0.82	0.76	-7.4	0.87	0.77	-11.2	0.72	0.65	-10.2	0.65	0.67	3.9
Direct use of Crude Oil	0.36	0.39	8.1	0.33	0.29	-11.6	0.35	0.33	-6.4	0.20	0.11	-44.1	0.20	0.18	-7.7
Other Products	0.37	0.42	13.5	0.40	0.41	4.5	0.36	0.40	11.3	0.36	0.36	-2.1	0.37	0.33	-11.9
<b>Total</b>	<b>6.77</b>	<b>6.75</b>	<b>-0.2</b>	<b>6.32</b>	<b>6.15</b>	<b>-2.8</b>	<b>6.43</b>	<b>6.38</b>	<b>-0.7</b>	<b>5.63</b>	<b>5.30</b>	<b>-5.8</b>	<b>5.03</b>	<b>5.09</b>	<b>1.2</b>
<b>Germany</b>															
LPG	0.15	0.10	-34.0	0.11	0.08	-29.1	0.14	0.11	-18.4	0.09	0.09	1.7	0.10	0.09	-11.2
Naphtha	0.33	0.36	9.1	0.36	0.35	-4.4	0.35	0.34	-1.2	0.34	0.37	9.3	0.33	0.41	24.0
Motor Gasoline	0.66	0.65	-0.2	0.68	0.67	-1.7	0.65	0.65	-0.8	0.71	0.74	3.4	0.72	0.70	-2.6
Jet/Kerosene	0.12	0.13	15.2	0.12	0.13	7.5	0.12	0.13	9.2	0.12	0.13	10.7	0.13	0.14	3.5
Diesel	0.38	0.39	4.1	0.42	0.41	-1.8	0.38	0.38	0.6	0.45	0.50	11.5	0.44	0.41	-5.5
Other Gasoil	1.11	0.75	-32.3	0.88	0.76	-14.2	1.00	0.86	-14.0	0.71	1.03	46.5	0.80	0.71	-11.9
Residual Fuel Oil	0.19	0.16	-15.5	0.18	0.15	-15.7	0.19	0.16	-14.8	0.18	0.18	0.3	0.17	0.17	-3.5
Other Products	0.11	0.13	18.1	0.12	0.15	30.5	0.12	0.13	12.7	0.16	0.19	19.7	0.19	0.18	-2.6
<b>Total</b>	<b>3.04</b>	<b>2.68</b>	<b>-11.7</b>	<b>2.87</b>	<b>2.70</b>	<b>-6.1</b>	<b>2.94</b>	<b>2.77</b>	<b>-5.9</b>	<b>2.76</b>	<b>3.24</b>	<b>17.5</b>	<b>2.88</b>	<b>2.80</b>	<b>-2.7</b>
<b>Italy</b>															
LPG	0.16	0.13	-16.4	0.13	0.11	-17.1	0.14	0.13	-11.5	0.10	0.10	3.4	0.08	0.09	10.7
Naphtha	0.14	0.12	-9.0	0.10	0.14	35.4	0.12	0.13	3.9	0.13	0.13	2.1	0.13	0.13	4.5
Motor Gasoline	0.42	0.43	1.3	0.42	0.42	0.4	0.41	0.41	0.3	0.46	0.46	1.1	0.45	0.44	-1.2
Jet/Kerosene	0.07	0.06	-4.0	0.06	0.06	-2.1	0.06	0.06	-3.4	0.06	0.07	13.2	0.08	0.06	-22.7
Diesel	0.37	0.33	-11.5	0.34	0.29	-13.8	0.35	0.30	-14.3	0.32	0.32	-1.3	0.32	0.29	-8.0
Other Gasoil	0.22	0.22	-0.2	0.21	0.17	-20.2	0.20	0.21	4.0	0.12	0.15	24.0	0.11	0.14	28.0
Residual Fuel Oil	0.64	0.59	-8.8	0.70	0.50	-27.7	0.66	0.56	-15.6	0.54	0.52	-4.8	0.50	0.46	-6.7
Other Products	0.09	0.09	-3.5	0.10	0.10	7.4	0.09	0.09	-1.7	0.09	0.11	23.2	0.09	0.15	59.8
<b>Total</b>	<b>2.11</b>	<b>1.97</b>	<b>-6.6</b>	<b>2.05</b>	<b>1.79</b>	<b>-12.7</b>	<b>2.04</b>	<b>1.88</b>	<b>-7.8</b>	<b>1.82</b>	<b>1.86</b>	<b>2.1</b>	<b>1.74</b>	<b>1.76</b>	<b>1.0</b>
<b>France</b>															
LPG	0.15	0.14	-5.1	0.12	0.09	-22.5	0.14	0.13	-0.9	0.10	0.09	-8.2	0.08	0.08	-8.7
Naphtha	0.21	0.28	36.4	0.22	0.16	-28.3	0.21	0.20	-4.0	0.09	0.14	54.3	0.18	0.16	-13.1
Motor Gasoline	0.32	0.32	-0.2	0.33	0.32	-4.1	0.32	0.31	-3.8	0.37	0.37	-0.7	0.36	0.34	-4.0
Jet/Kerosene	0.10	0.10	5.9	0.10	0.10	-1.0	0.10	0.10	4.0	0.11	0.11	3.0	0.11	0.11	-2.1
Diesel	0.45	0.49	7.0	0.46	0.46	0.9	0.45	0.46	2.7	0.49	0.54	9.0	0.47	0.48	2.0
Other Gasoil	0.62	0.48	-22.9	0.39	0.35	-10.7	0.49	0.49	0.5	0.35	0.34	-5.0	0.27	0.23	-14.4
Residual Fuel Oil	0.21	0.19	-8.6	0.19	0.17	-12.2	0.20	0.19	-4.1	0.17	0.16	-7.1	0.14	0.13	-7.0
Other Products	0.14	0.15	8.2	0.17	0.15	-9.8	0.15	0.14	-4.2	0.23	0.17	-26.5	0.20	0.19	-6.4
<b>Total</b>	<b>2.18</b>	<b>2.14</b>	<b>-2.0</b>	<b>1.98</b>	<b>1.80</b>	<b>-9.1</b>	<b>2.05</b>	<b>2.03</b>	<b>-0.9</b>	<b>1.92</b>	<b>1.91</b>	<b>-0.4</b>	<b>1.81</b>	<b>1.71</b>	<b>-5.5</b>
<b>United Kingdom</b>															
LPG	0.17	0.19	12.0	0.16	0.18	9.2	0.16	0.19	14.0	0.19	0.18	-4.8	0.17	0.16	-10.0
Naphtha	0.07	0.05	-32.1	0.10	0.07	-35.1	0.08	0.06	-32.7	0.07	0.06	-20.2	0.07	0.04	-49.4
Motor Gasoline	0.49	0.52	4.7	0.51	0.52	2.7	0.49	0.50	3.3	0.53	0.54	2.4	0.53	0.54	0.9
Jet/Kerosene	0.26	0.27	1.3	0.24	0.24	2.6	0.25	0.26	3.8	0.23	0.25	6.5	0.24	0.23	-1.5
Diesel	0.29	0.31	7.9	0.29	0.30	3.4	0.28	0.30	5.6	0.29	0.32	9.9	0.30	0.30	0.6
Other Gasoil	0.24	0.21	-14.9	0.21	0.18	-14.4	0.22	0.21	-4.8	0.19	0.20	6.1	0.18	0.17	-2.6
Residual Fuel Oil	0.20	0.18	-7.1	0.17	0.12	-30.2	0.17	0.15	-9.3	0.16	0.11	-33.3	0.17	0.11	-31.2
Other Products	0.18	0.19	3.6	0.18	0.19	1.7	0.18	0.19	2.1	0.20	0.19	-4.0	0.19	0.18	-4.6
<b>Total</b>	<b>1.92</b>	<b>1.92</b>	<b>0.2</b>	<b>1.86</b>	<b>1.79</b>	<b>-3.7</b>	<b>1.83</b>	<b>1.85</b>	<b>0.8</b>	<b>1.85</b>	<b>1.84</b>	<b>-0.9</b>	<b>1.85</b>	<b>1.73</b>	<b>-6.2</b>
<b>Canada</b>															
LPG	0.31	0.34	10.7	0.32	0.31	-4.5	0.32	0.33	1.9	0.32	0.31	-3.8	0.27	0.32	15.9
Naphtha	0.08	0.07	-9.3	0.08	0.09	9.1	0.08	0.08	2.2	0.07	0.08	21.3	0.08	0.09	21.7
Motor Gasoline	0.58	0.59	0.1	0.56	0.58	2.5	0.57	0.58	1.9	0.59	0.60	1.8	0.62	0.64	3.0
Jet/Kerosene	0.09	0.09	4.0	0.09	0.09	7.3	0.09	0.10	5.9	0.09	0.09	8.2	0.08	0.10	21.9
Diesel	0.15	0.15	3.6	0.14	0.14	0.0	0.14	0.14	1.1	0.13	0.13	0.0	0.16	0.13	-22.1
Other Gasoil	0.40	0.38	-4.2	0.33	0.35	6.9	0.36	0.38	3.7	0.27	0.30	11.0	0.28	0.33	16.8
Residual Fuel Oil	0.16	0.15	-5.6	0.11	0.12	7.0	0.14	0.14	1.5	0.09	0.12	33.5	0.10	0.13	28.5
Other Products	0.20	0.20	-0.2	0.22	0.23	5.2	0.20	0.20	2.9	0.22	0.23	1.6	0.21	0.23	7.0
<b>Total</b>	<b>1.97</b>	<b>1.98</b>	<b>0.5</b>	<b>1.85</b>	<b>1.91</b>	<b>3.0</b>	<b>1.90</b>	<b>1.95</b>	<b>2.5</b>	<b>1.78</b>	<b>1.86</b>	<b>4.8</b>	<b>1.81</b>	<b>1.96</b>	<b>8.4</b>

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)

	1996	1997 <sup>f</sup>	1998 <sup>f</sup>	3Q96	4Q96	1Q97	2Q97 <sup>p</sup>	3Q97 <sup>f</sup>	May97	Jun97	Jul97
<b>OPEC<sup>1</sup></b>											
Crude Oil											
Saudi Arabia	7.91			7.93	7.90	7.98	7.92		7.99	7.88	7.91
Iran	3.67			3.71	3.66	3.62	3.62		3.48	3.62	3.70
Iraq	0.58			0.55	0.65	1.11	1.05		1.32	0.55	0.55
UAE	2.23			2.22	2.27	2.29	2.23		2.12	2.26	2.25
Kuwait	1.81			1.80	1.81	1.84	1.81		1.78	1.82	1.83
Neutral Zone	0.48			0.48	0.52	0.53	0.52		0.51	0.49	0.53
Qatar	0.49			0.49	0.51	0.56	0.60		0.61	0.62	0.62
Nigeria	2.15			2.15	2.23	2.25	2.29		2.27	2.30	2.28
Libya	1.39			1.40	1.40	1.41	1.43		1.43	1.43	1.43
Algeria	0.82			0.83	0.84	0.85	0.85		0.85	0.84	0.85
Venezuela	2.94			2.94	3.06	3.07	3.14		3.14	3.17	3.19
Indonesia	1.39			1.38	1.40	1.36	1.38		1.40	1.36	1.38
<b>Total Crude Oil</b>	<b>25.84</b>			<b>25.87</b>	<b>26.25</b>	<b>26.84</b>	<b>26.81</b>		<b>26.88</b>	<b>26.33</b>	<b>26.50</b>
NGLs <sup>2</sup>	2.61	2.84	2.98	2.67	2.67	2.73	2.81	2.88	2.81	2.81	2.85
<b>TOTAL OPEC</b>	<b>28.45</b>			<b>28.54</b>	<b>28.92</b>	<b>29.57</b>	<b>29.62</b>		<b>29.69</b>	<b>29.14</b>	<b>29.36</b>
<b>NON-OPEC<sup>1,3</sup></b>											
<b>OECD</b>											
North America	11.05	11.15	11.45	11.02	11.23	11.17	10.99	11.11	10.95	11.04	11.09
United States	8.59	8.65	8.75	8.55	8.70	8.64	8.62	8.59	8.66	8.61	8.60
Canada	2.46	2.51	2.70	2.47	2.53	2.53	2.36	2.52	2.29	2.43	2.49
Europe	6.66	6.87	7.42	6.51	6.90	6.86	6.48	6.58	6.45	6.11	6.41
UK	2.81	2.87	3.19	2.68	3.00	2.94	2.54	2.78	2.51	2.33	2.59
Norway	3.23	3.36	3.55	3.23	3.27	3.29	3.33	3.17	3.34	3.17	3.22
Others	0.61	0.64	0.68	0.61	0.63	0.63	0.62	0.63	0.61	0.61	0.60
Pacific	0.67	0.75	0.85	0.69	0.66	0.67	0.73	0.81	0.74	0.74	0.82
Australia	0.60	0.66	0.75	0.62	0.58	0.58	0.64	0.72	0.65	0.64	0.72
Others	0.07	0.09	0.10	0.08	0.09	0.09	0.09	0.08	0.09	0.10	0.10
<b>Total OECD</b>	<b>18.38</b>	<b>18.77</b>	<b>19.72</b>	<b>18.23</b>	<b>18.79</b>	<b>18.69</b>	<b>18.20</b>	<b>18.50</b>	<b>18.14</b>	<b>17.88</b>	<b>18.31</b>
<b>Non-OECD</b>											
Former USSR	7.07	7.17	7.38	7.10	7.09	7.06	7.23	7.13	7.23	7.23	7.19
Russia	6.04	6.02	6.03	6.06	6.02	5.99	6.11	5.99	6.11	6.12	6.06
Others	1.03	1.14	1.36	1.04	1.07	1.08	1.11	1.14	1.12	1.11	1.13
Asia	5.23	5.34	5.48	5.20	5.28	5.33	5.36	5.32	5.34	5.37	5.38
China	3.12	3.21	3.24	3.10	3.15	3.21	3.23	3.17	3.19	3.25	3.24
Malaysia	0.73	0.75	0.77	0.73	0.75	0.75	0.75	0.75	0.75	0.74	0.75
India	0.74	0.77	0.78	0.73	0.73	0.75	0.77	0.79	0.78	0.78	0.78
Others	0.64	0.62	0.69	0.65	0.65	0.62	0.61	0.61	0.61	0.61	0.61
Europe	0.28	0.28	0.27	0.28	0.29	0.28	0.28	0.28	0.28	0.28	0.29
Latin America	6.54	6.91	7.39	6.51	6.60	6.75	6.82	6.94	6.86	6.83	6.81
Mexico	3.28	3.39	3.50	3.24	3.25	3.33	3.35	3.42	3.38	3.38	3.40
Brazil	1.06	1.20	1.34	1.04	1.11	1.15	1.18	1.20	1.18	1.19	1.19
Argentina	0.83	0.89	0.89	0.85	0.85	0.87	0.89	0.91	0.89	0.90	0.91
Colombia	0.64	0.68	0.86	0.64	0.65	0.64	0.64	0.66	0.64	0.64	0.57
Ecuador	0.39	0.39	0.42	0.38	0.38	0.39	0.39	0.38	0.40	0.36	0.37
Others	0.36	0.37	0.37	0.36	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Middle East <sup>4</sup>	1.89	1.89	1.87	1.90	1.91	1.89	1.87	1.89	1.87	1.88	1.89
Oman	0.89	0.90	0.91	0.90	0.91	0.90	0.90	0.91	0.89	0.91	0.91
Syria	0.58	0.56	0.54	0.58	0.57	0.57	0.56	0.56	0.56	0.56	0.56
Yemen	0.37	0.38	0.38	0.38	0.38	0.38	0.37	0.38	0.37	0.37	0.38
Africa	2.68	2.84	3.04	2.72	2.75	2.77	2.80	2.85	2.81	2.81	2.80
Egypt	0.92	0.92	0.94	0.91	0.90	0.91	0.91	0.93	0.91	0.90	0.92
Angola	0.69	0.73	0.84	0.69	0.70	0.71	0.72	0.73	0.72	0.72	0.73
Gabon	0.36	0.37	0.36	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Others	0.71	0.82	0.90	0.75	0.79	0.78	0.81	0.82	0.81	0.82	0.79
<b>Total Non-OECD</b>	<b>23.70</b>	<b>24.43</b>	<b>25.44</b>	<b>23.70</b>	<b>23.92</b>	<b>24.08</b>	<b>24.36</b>	<b>24.42</b>	<b>24.37</b>	<b>24.41</b>	<b>24.35</b>
Processing Gains <sup>5</sup>	1.52	1.57	1.64	1.50	1.55	1.57	1.56	1.56	1.56	1.56	1.56
<b>TOTAL NON-OPEC</b>	<b>43.60</b>	<b>44.77</b>	<b>46.80</b>	<b>43.43</b>	<b>44.25</b>	<b>44.34</b>	<b>44.11</b>	<b>44.47</b>	<b>44.07</b>	<b>43.85</b>	<b>44.22</b>
<b>TOTAL SUPPLY</b>	<b>72.05</b>			<b>71.97</b>	<b>73.17</b>	<b>73.90</b>	<b>73.73</b>		<b>73.75</b>	<b>72.99</b>	<b>73.58</b>

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<sup>1</sup>**  
(thousand barrels per day)

	June		2nd Quarter 97p		July		3rd Quarter 97f		1997f		1998f	
	Level	Change <sup>2</sup>	Level	Change	Level	Change	Level	Change	Level	Change	Level	Change
<b>United States</b>												
Alaska	1267	-44	1305	-60	1242	-25	1243	-62	1313	-84	1301	-12
California (inc. offshore)	915	-2	904	-13	914	-1	911	7	910	-37	918	8
Texas	1463	-6	1473	-13	1455	-8	1446	-27	1456	-18	1359	-97
Offshore Gulf of Mexico	1239	14	1212	67	1241	2	1264	52	1236	144	1506	270
Other US Lower 48	1521	-8	1530	-6	1518	-3	1511	-19	1518	-38	1448	-70
NGLs <sup>3</sup>	1869	-23	1870	-10	1913	44	1907	37	1902	77	1910	8
Other Hydrocarbons	331	16	329	21	315	-16	310	-18	314	12	310	-3
<b>Total</b>	<b>8606</b>	<b>-53</b>	<b>8622</b>	<b>-14</b>	<b>8598</b>	<b>-7</b>	<b>8593</b>	<b>-29</b>	<b>8648</b>	<b>56</b>	<b>8751</b>	<b>103</b>
<b>Canada</b>												
Alberta Light & Medium	635	31	622	-41	650	15	652	30	648	-30	632	-16
Alberta Heavy	275	40	251	-7	277	2	277	25	267	5	300	33
Alberta Bitumen	193	-20	204	-3	195	2	192	-12	200	37	230	30
Saskatchewan	364	4	358	-12	366	2	373	16	373	18	384	11
Other Conventional	98	-5	101	1	97	-1	94	-7	99	-31	182	82
NGLs	595	-14	613	-44	598	3	617	3	640	20	652	12
Syncrudes	270	100	214	-59	311	41	312	98	279	-0	322	44
<b>Total</b>	<b>2430</b>	<b>137</b>	<b>2363</b>	<b>-165</b>	<b>2494</b>	<b>64</b>	<b>2517</b>	<b>153</b>	<b>2506</b>	<b>18</b>	<b>2702</b>	<b>196</b>
<b>United Kingdom<sup>4</sup></b>												
Brent Fields	395	20	391	-78	403	8	397	5	422	-57	407	-15
Forties Fields	542	-242	741	-212	825	283	903	162	901	-8	984	83
Ninian Fields	228	-28	246	-36	250	22	238	-9	256	-51	228	-29
Flotta Fields	180	19	182	-29	195	15	204	22	206	-16	249	43
Other Offshore Fields	699	83	654	22	598	-101	699	45	718	188	930	213
NGLs	193	-15	217	-64	220	27	240	23	260	4	277	17
<b>Total</b>	<b>2237</b>	<b>-163</b>	<b>2432</b>	<b>-396</b>	<b>2492</b>	<b>254</b>	<b>2680</b>	<b>248</b>	<b>2763</b>	<b>61</b>	<b>3074</b>	<b>311</b>
<b>Norway<sup>4</sup></b>												
Ekofisk/Ula Area	553	56	513	55	482	-72	497	-16	494	-9	441	-52
Oseberg Area	712	-204	858	-85	938	227	889	31	909	-0	862	-47
Stattfjord-Gullfaks-Snorre	1217	-68	1276	84	1130	-87	1077	-199	1200	-1	1218	17
Haltenbanken	396	62	386	-21	375	-21	434	48	460	103	621	161
Sleipner/Frigg	148	-15	152	2	159	11	136	-17	152	30	256	104
Plant Condensate (as NGLs)	9	1	8	1	9	-0	9	1	8	1	7	-1
Lighter NGLs	136	-1	136	5	130	-5	123	-13	135	1	145	10
<b>Total</b>	<b>3170</b>	<b>-169</b>	<b>3329</b>	<b>40</b>	<b>3222</b>	<b>53</b>	<b>3166</b>	<b>-164</b>	<b>3358</b>	<b>124</b>	<b>3550</b>	<b>192</b>
<b>Other OECD Europe</b>												
Other North Sea	275	-6	277	1	263	-11	280	3	287	27	320	33
Onshore U.K.	93	-13	103	-9	94	1	103	-1	107	0	112	5
Italy	110	7	112	3	110	0	120	8	118	18	130	12
Turkey	65	0	66	-0	64	-1	64	-2	65	-3	61	-4
Other	115	-6	123	-6	115	0	119	-4	123	-17	125	3
NGLs	18	-2	21	-6	19	1	21	1	23	0	20	-4
Non-Conventional Oils	23	6	21	1	24	1	25	4	22	2	26	4
<b>Total</b>	<b>699</b>	<b>-15</b>	<b>722</b>	<b>-16</b>	<b>689</b>	<b>-10</b>	<b>732</b>	<b>10</b>	<b>746</b>	<b>27</b>	<b>795</b>	<b>49</b>
<b>Australia</b>												
Gippsland Basin	235	-7	233	36	232	-3	231	-2	221	23	215	-6
Cooper/Eromanga	33	-1	34	2	35	2	34	-0	33	-2	34	1
Carnarvon Basin	284	6	275	8	356	73	368	92	321	46	390	69
Bonaparte Basin	15	-3	17	1	18	3	18	1	17	-3	43	25
Other Fields	5	0	5	0	6	0	5	-0	5	-1	5	-0
NGLs	72	-2	73	12	73	1	67	-5	63	-1	61	-3
<b>Total</b>	<b>644</b>	<b>-6</b>	<b>637</b>	<b>59</b>	<b>720</b>	<b>76</b>	<b>723</b>	<b>86</b>	<b>662</b>	<b>63</b>	<b>748</b>	<b>86</b>
<b>Other OECD Pacific</b>												
New Zealand	68	7	63	2	67	-1	56	-8	61	18	65	4
Japan	11	1	10	-0	11	0	11	1	11	0	11	0
NGLs	14	1	14	-0	13	-1	13	-0	14	2	13	-1
Synthetic Fuels	4	0	4	-1	4	0	4	0	4	-4	11	7
<b>Total</b>	<b>97</b>	<b>9</b>	<b>91</b>	<b>-0</b>	<b>95</b>	<b>-2</b>	<b>84</b>	<b>-7</b>	<b>90</b>	<b>16</b>	<b>100</b>	<b>10</b>
<b>OECD</b>												
Crude Oil	14341	-327	14669	-346	14674	333	14837	168	15096	252	15951	855
NGLs	2914	-54	2961	-109	2984	69	3007	46	3058	104	3099	42
Non-Conventional Oils	628	122	567	-38	654	26	651	84	619	10	670	51
<b>Total</b>	<b>17883</b>	<b>-259</b>	<b>18197</b>	<b>-493</b>	<b>18312</b>	<b>428</b>	<b>18495</b>	<b>298</b>	<b>18773</b>	<b>366</b>	<b>19721</b>	<b>948</b>

<sup>1</sup> Subcategories refer to crude oil only unless otherwise noted.

<sup>2</sup> All changes are period to period not year-on-year.

<sup>3</sup> To the extent possible, condensates derived from natural gas processing plants are included with NGLs, whereas field condensates are counted as crude oil.

<sup>4</sup> 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<sup>1</sup> AND QUARTERLY STOCK CHANGES**

	RECENT MONTHLY STOCKS <sup>2</sup>					PRIOR YEARS' STOCKS <sup>2</sup>			STOCK CHANGES			
	in Million Barrels					in Million Barrels			in mb/d			
	Feb97	Mar97	Apr97	May97*	Jun97*	Jun94	Jun95	Jun96	Q396	Q496	Q197	Q297
<b>North America</b>												
Crude	361	381	390	396	404	397	412	378	-0.07	-0.25	0.36	0.26
Gasoline	223	220	217	221	228	231	226	224	-0.06	-0.06	0.07	0.08
Middle Distillate	173	170	163	176	189	187	184	167	0.23	0.14	-0.34	0.21
Residual Fuel Oil	48	49	49	48	46	48	45	44	0.02	0.07	-0.04	-0.03
Total Products <sup>3</sup>	567	572	572	600	626	631	623	584	0.29	-0.09	-0.34	0.59
Total <sup>4</sup>	1066	1100	1109	1150	1186	1191	1197	1113	0.27	-0.49	0.09	0.94
<b>Europe</b>												
Crude	314	324	322	313	301	318	293	320	-0.06	0.01	0.09	-0.25
Gasoline	132	134	127	123	121	128	128	128	-0.05	0.01	0.11	-0.15
Middle Distillate	229	231	214	225	223	220	219	211	-0.03	0.15	0.10	-0.08
Residual Fuel Oil	94	90	87	89	87	93	98	90	0.04	-0.01	-0.03	-0.04
Total Products <sup>3</sup>	538	535	508	518	511	524	530	511	-0.07	0.22	0.12	-0.27
Total <sup>4</sup>	916	922	895	891	872	897	883	890	-0.14	0.31	0.19	-0.56
<b>Pacific</b>												
Crude	154	160	162	162	163	165	176	170	-0.17	0.10	-0.03	0.03
Gasoline	22	24	25	25	24	21	22	20	0.01	-0.01	0.04	0.00
Middle Distillate	57	55	61	61	60	57	55	50	0.26	-0.08	-0.12	0.05
Residual Fuel Oil	16	16	17	17	18	13	17	15	0.00	-0.01	0.02	0.02
Total Products <sup>3</sup>	148	151	161	159	156	147	144	144	0.33	-0.18	-0.07	0.06
Total <sup>4</sup>	386	396	412	411	404	390	403	391	0.30	-0.23	-0.02	0.09
<b>Total</b>												
Crude	829	865	874	871	868	880	880	867	-0.30	-0.15	0.43	0.04
Gasoline	376	378	370	369	372	380	376	372	-0.10	-0.05	0.22	-0.07
Middle Distillate	460	456	438	463	472	464	458	428	0.45	0.20	-0.36	0.18
Residual Fuel Oil	157	155	152	154	150	154	160	149	0.07	0.05	-0.05	-0.05
Total Products <sup>3</sup>	1252	1258	1241	1277	1293	1301	1296	1239	0.54	-0.06	-0.29	0.39
Total <sup>4</sup>	2367	2418	2416	2452	2462	2478	2484	2394	0.43	-0.40	0.25	0.48

**OECD GOVERNMENT-CONTROLLED STOCKS<sup>5</sup> AND QUARTERLY STOCK CHANGES**

	RECENT MONTHLY STOCKS <sup>2</sup>					PRIOR YEARS' STOCKS <sup>2</sup>			STOCK CHANGES <sup>3</sup>			
	in Million Barrels					in Million Barrels			in mb/d			
	Feb97	Mar97	Apr97	May97*	Jun97*	Jun94	Jun95	Jun96	Q396	Q496	Q197	Q297
<b>North America</b>												
Crude	563	563	563	563	563	592	592	584	-0.12	-0.09	-0.03	0.00
<b>Europe</b>												
Crude	132	132	132	132	132	134	134	133	0.01	-0.02	0.00	0.00
Products	188	190	190	191	191	187	183	185	0.01	0.02	0.03	0.01
<b>Pacific</b>												
Crude	306	307	307	307	307	265	284	299	0.00	0.03	0.05	0.00
<b>Total</b>												
Crude	1002	1003	1003	1003	1003	990	1009	1017	-0.11	-0.07	0.02	0.00
Products	188	190	190	191	191	187	183	185	0.01	0.02	0.03	0.01
Total <sup>4</sup>	1190	1193	1193	1194	1194	1177	1192	1203	-0.10	-0.05	0.05	0.01

\* 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<sup>1</sup> ON LAND IN SELECTED COUNTRIES**

(million barrels)

	January			February			March			April			May		
	1996	1997	%	1996	1997	%	1996	1997	%	1996	1997	%	1996	1997	%
<b>United States</b>															
Crude	303.0	302.4	-0.2	301.5	297.7	-1.2	299.6	314.1	4.8	303.0	320.4	5.7	304.8	327.0	7.3
Motor Gasoline	212.2	208.5	-1.8	213.3	203.5	-4.6	203.2	199.7	-1.7	203.0	197.5	-2.7	205.1	202.0	-1.5
Middle Distillate	158.7	153.3	-3.4	136.7	148.4	8.6	126.9	145.8	14.9	128.4	140.1	9.1	135.3	153.3	13.3
Residual Fuel Oil	35.5	41.9	17.8	31.5	39.9	26.7	31.7	41.3	30.5	33.7	40.6	20.4	34.3	39.2	14.4
Other Products	116.2	110.2	-5.2	108.4	104.8	-3.3	108.8	114.1	4.9	116.1	123.3	6.2	121.9	136.1	11.6
Total Products	522.7	513.8	-1.7	489.9	496.7	1.4	470.6	501.0	6.5	481.1	501.5	4.2	496.7	530.6	6.8
Other <sup>2</sup>	123.9	123.0	-0.8	116.9	124.2	6.3	122.6	133.8	9.1	130.6	133.5	2.2	132.1	140.7	6.5
<b>Total</b>	<b>949.6</b>	<b>939.2</b>	<b>-1.1</b>	<b>908.3</b>	<b>918.6</b>	<b>1.1</b>	<b>892.8</b>	<b>948.9</b>	<b>6.3</b>	<b>914.7</b>	<b>955.4</b>	<b>4.4</b>	<b>933.6</b>	<b>998.3</b>	<b>6.9</b>
<b>Japan</b>															
Crude	147.3	142.4	-3.3	138.2	139.5	0.9	152.3	144.6	-5.1	140.0	145.4	3.9	151.2	147.1	-2.7
Motor Gasoline	13.8	13.1	-5.0	14.2	13.5	-4.7	14.0	14.7	5.5	13.7	15.1	10.5	13.9	14.5	4.4
Middle Distillate	41.7	51.7	24.2	35.1	45.9	31.0	33.4	44.3	32.8	37.0	49.8	34.6	40.5	50.0	23.4
Residual Fuel Oil	13.4	12.6	-5.8	12.7	13.5	6.0	12.1	13.6	12.1	13.0	14.0	7.5	12.7	14.0	9.8
Other Products	51.2	47.2	-7.9	44.4	46.3	4.4	45.7	47.2	3.3	46.3	50.8	9.6	49.7	48.3	-2.8
Total Products	120.0	124.6	3.8	106.4	119.3	12.1	105.2	119.9	14.0	110.0	129.7	17.9	116.8	126.7	8.5
Other <sup>2</sup>	71.8	77.8	8.3	71.0	77.4	9.0	69.7	78.3	12.3	72.2	83.3	15.3	73.3	83.8	14.3
<b>Total</b>	<b>339.1</b>	<b>344.7</b>	<b>1.7</b>	<b>315.6</b>	<b>336.1</b>	<b>6.5</b>	<b>327.2</b>	<b>342.8</b>	<b>4.8</b>	<b>322.1</b>	<b>358.3</b>	<b>11.2</b>	<b>341.2</b>	<b>357.6</b>	<b>4.8</b>
<b>Germany</b>															
Crude	20.8	25.5	22.7	20.1	23.4	16.6	22.2	22.9	3.1	21.2	21.6	2.2	20.9	23.0	10.4
Motor Gasoline	13.0	11.0	-14.8	12.4	13.2	6.3	11.8	14.3	21.8	9.6	13.5	40.2	9.7	12.5	29.6
Middle Distillate	15.9	18.4	16.1	15.2	21.6	42.0	12.3	23.4	90.5	17.8	15.9	-10.6	15.6	22.3	42.9
Residual Fuel Oil	9.8	10.7	8.7	9.4	9.5	0.9	8.2	9.0	9.8	8.4	8.5	0.9	8.9	9.5	7.1
Other Products	12.6	11.8	-6.4	12.1	11.9	-1.1	11.9	11.5	-3.5	11.6	11.1	-5.0	11.2	11.8	4.5
Total Products	51.3	52.0	1.3	49.1	56.3	14.5	44.2	58.2	31.8	47.5	48.9	3.1	45.4	56.1	23.6
Other <sup>2</sup>	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
<b>Total</b>	<b>72.1</b>	<b>77.5</b>	<b>7.5</b>	<b>69.2</b>	<b>79.7</b>	<b>15.1</b>	<b>66.4</b>	<b>81.1</b>	<b>22.2</b>	<b>68.6</b>	<b>70.6</b>	<b>2.8</b>	<b>66.3</b>	<b>79.1</b>	<b>19.4</b>
<b>Italy</b>															
Crude	33.0	35.4	7.2	34.4	33.9	-1.4	34.1	38.0	11.5	35.2	35.4	0.4	39.5	37.2	-5.8
Motor Gasoline	22.8	20.3	-11.1	22.7	19.8	-12.8	23.7	21.5	-9.1	21.1	19.0	-10.1	21.2	20.1	-5.1
Middle Distillate	36.0	36.2	0.7	33.1	35.9	8.4	34.0	37.0	8.8	35.3	33.4	-5.4	35.1	32.6	-6.9
Residual Fuel Oil	23.1	25.0	8.1	24.4	23.5	-3.7	22.6	23.7	4.9	20.0	21.6	7.9	23.0	20.8	-9.4
Other Products	10.3	8.5	-16.6	9.3	8.4	-9.7	9.8	7.4	-25.1	8.9	7.9	-10.9	9.9	9.0	-8.2
Total Products	92.2	90.0	-2.3	89.5	87.6	-2.1	90.0	89.5	-0.6	85.3	81.9	-4.0	89.1	82.7	-7.3
Other <sup>2</sup>	5.4	9.8	80.8	7.2	11.2	55.8	5.8	9.9	71.9	5.8	10.9	88.0	4.7	7.4	55.7
<b>Total</b>	<b>130.6</b>	<b>135.2</b>	<b>3.6</b>	<b>131.1</b>	<b>132.8</b>	<b>1.2</b>	<b>129.8</b>	<b>137.3</b>	<b>5.8</b>	<b>126.3</b>	<b>128.2</b>	<b>1.4</b>	<b>133.3</b>	<b>127.2</b>	<b>-4.6</b>
<b>France</b>															
Crude	34.9	38.0	9.1	37.0	39.5	6.7	38.6	39.9	3.6	45.5	42.8	-5.8	40.3	43.4	7.6
Motor Gasoline	20.2	21.3	5.7	23.4	20.9	-10.5	22.3	19.6	-12.0	20.5	17.3	-15.5	20.8	16.8	-19.2
Middle Distillate	37.0	32.6	-11.7	35.2	35.0	-0.6	34.7	36.0	3.6	36.5	34.6	-5.0	39.3	38.0	-3.2
Residual Fuel Oil	8.0	7.2	-10.0	7.8	7.8	-0.1	7.7	8.1	5.8	8.4	7.6	-9.6	8.9	8.0	-10.2
Other Products	9.2	8.5	-7.0	8.1	8.8	8.7	8.6	8.9	2.9	9.2	8.3	-9.1	8.5	8.2	-4.0
Total Products	74.3	69.7	-6.2	74.5	72.6	-2.6	73.4	72.6	-1.0	74.5	67.9	-8.9	77.5	71.0	-8.4
Other <sup>2</sup>	13.6	14.2	4.5	13.0	12.6	-3.6	12.4	12.5	0.3	12.2	12.9	5.7	12.7	12.2	-4.2
<b>Total</b>	<b>122.8</b>	<b>121.9</b>	<b>-0.7</b>	<b>124.6</b>	<b>124.6</b>	<b>0.0</b>	<b>124.4</b>	<b>125.0</b>	<b>0.5</b>	<b>132.2</b>	<b>123.6</b>	<b>-6.5</b>	<b>130.6</b>	<b>126.6</b>	<b>-3.0</b>
<b>United Kingdom</b>															
Crude	31.7	34.6	9.1	32.2	31.3	-2.9	35.8	34.2	-4.4	35.4	34.9	-1.5	32.8	34.5	5.2
Motor Gasoline	17.7	17.7	0.0	16.2	16.5	1.9	15.4	16.1	4.5	15.1	15.0	-1.1	14.7	14.6	-0.7
Middle Distillate	17.8	17.5	-1.7	15.9	18.7	17.9	16.9	20.2	18.9	18.1	20.0	10.5	18.4	20.4	11.0
Residual Fuel Oil	7.4	6.9	-6.9	6.4	6.7	3.8	6.8	7.1	5.1	7.4	7.0	-6.4	7.5	7.3	-2.1
Other Products	12.4	11.1	-10.6	12.1	11.6	-4.0	11.9	11.1	-6.9	11.9	11.5	-3.2	11.7	12.0	3.3
Total Products	55.3	53.2	-3.9	50.5	53.5	5.8	51.1	54.5	6.7	52.5	53.4	1.7	52.2	54.4	4.1
Other <sup>2</sup>	15.8	15.6	-1.4	16.0	15.6	-2.6	15.1	15.4	2.3	17.0	15.0	-12.0	16.6	14.3	-14.0
<b>Total</b>	<b>102.8</b>	<b>103.4</b>	<b>0.5</b>	<b>98.8</b>	<b>100.4</b>	<b>1.6</b>	<b>101.9</b>	<b>104.1</b>	<b>2.2</b>	<b>104.9</b>	<b>103.3</b>	<b>-1.6</b>	<b>101.6</b>	<b>103.1</b>	<b>1.5</b>
<b>Canada</b>															
Crude	53.7	54.4	1.4	54.4	55.1	1.3	57.8	57.9	0.2	60.3	60.8	0.8	59.5	60.2	1.1
Motor Gasoline	20.6	17.1	-17.1	21.6	17.7	-18.1	22.6	19.0	-15.9	20.9	18.2	-12.6	17.2	17.2	-0.3
Middle Distillate	21.2	23.6	11.4	19.6	21.4	9.1	19.3	20.7	7.1	18.6	19.5	5.0	18.0	19.4	7.9
Residual Fuel Oil	4.3	3.8	-12.0	4.2	3.6	-13.5	4.9	3.5	-29.0	5.1	4.1	-20.5	4.6	4.8	4.2
Other Products	15.4	15.6	1.2	15.6	16.7	7.3	16.9	17.2	1.7	15.9	17.9	12.5	17.6	17.0	-3.0
Total Products	61.5	60.1	-2.3	61.0	59.5	-2.5	63.7	60.3	-5.3	60.4	59.7	-1.3	57.5	58.5	1.8
Other <sup>2</sup>	11.8	11.0	-6.6	9.7	8.9	-8.2	10.2	9.2	-9.8	11.0	9.8	-10.5	11.4	9.8	-14.0
<b>Total</b>	<b>127.0</b>	<b>125.5</b>	<b>-1.2</b>	<b>125.1</b>	<b>123.5</b>	<b>-1.3</b>	<b>131.7</b>	<b>127.5</b>	<b>-3.2</b>	<b>131.7</b>	<b>130.3</b>	<b>-1.1</b>	<b>128.4</b>	<b>128.5</b>	<b>0.1</b>

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 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 June 1996		End September 1996		End December 1996		End March 1997 <sup>4</sup>		End June 1997 <sup>3,4</sup>	
	Stock <sup>1</sup> Level	Days Fwd <sup>2</sup> Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
Canada	128.4	68	133.9	69	124.9	64	127.5	-	-	-
United States	1545.5	85	1553.7	83	1509.5	83	1512.3	-	-	-
<b>NORTH AMERICA</b>	<b>1697.7</b>	<b>84</b>	<b>1711.3</b>	<b>82</b>	<b>1658.2</b>	<b>81</b>	<b>1663.5</b>	<b>80</b>	<b>1749.4</b>	<b>86</b>
Australia	41.1	53	43.2	53	40.9	51	44.1	-	-	-
Japan	640.2	119	664.5	111	651.1	102	649.7	-	-	-
New Zealand	9.0	73	10.6	81	8.4	60	9.0	-	-	-
<b>PACIFIC</b>	<b>690.3</b>	<b>110</b>	<b>718.4</b>	<b>103</b>	<b>700.4</b>	<b>96</b>	<b>702.7</b>	<b>114</b>	<b>711.0</b>	<b>112</b>
Austria	17.9	73	17.2	73	17.9	67	17.9	-	-	-
Belgium	26.9	48	27.4	48	29.3	46	28.4	-	-	-
Denmark	19.2	87	19.1	77	19.2	80	20.2	-	-	-
Finland	22.7	125	23.8	111	26.8	136	24.4	-	-	-
France	156.2	82	147.6	75	154.4	76	156.5	-	-	-
Germany	298.6	98	297.0	103	303.0	109	312.4	-	-	-
Greece	20.9	58	19.7	52	21.8	57	23.4	-	-	-
Ireland	7.2	58	8.2	63	8.6	63	7.8	-	-	-
Italy	140.1	75	144.3	73	134.9	72	142.8	-	-	-
Luxembourg	0.8	23	0.8	20	0.8	20	1.0	-	-	-
Netherlands	105.2	138	97.4	126	106.3	135	108.2	-	-	-
Norway	54.8	248	57.7	252	59.7	271	53.5	-	-	-
Portugal	18.2	60	18.8	67	18.2	65	20.9	-	-	-
Spain	95.4	80	94.1	77	94.4	79	94.5	-	-	-
Sweden	31.3	85	29.7	67	32.5	83	33.0	-	-	-
Switzerland	45.1	156	44.5	153	45.4	169	45.4	-	-	-
Turkey	47.8	70	48.9	73	50.1	83	50.8	-	-	-
United Kingdom	100.7	55	101.7	53	103.8	56	104.1	-	-	-
<b>EUROPE<sup>5</sup></b>	<b>1209.0</b>	<b>85</b>	<b>1197.8</b>	<b>83</b>	<b>1226.9</b>	<b>87</b>	<b>1245.1</b>	<b>90</b>	<b>1195.2</b>	<b>85</b>
<b>Total</b>	<b>3597.0</b>	<b>89</b>	<b>3627.5</b>	<b>86</b>	<b>3585.5</b>	<b>86</b>	<b>3611.3</b>	<b>89</b>	<b>3655.7</b>	<b>89</b>
<b>DAYS OF IEA NET IMPORTS<sup>6</sup></b>	<b>-</b>	<b>127</b>	<b>-</b>	<b>127</b>	<b>-</b>	<b>123</b>	<b>-</b>	<b>123</b>	<b>-</b>	<b>-</b>

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 1997 stock level based on preliminary data.

4 End March and June 1997 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	Millions of Barrels		Total	Days of Fwd. Demand <sup>2</sup>	
		Government <sup>1</sup> controlled	Industry		Government <sup>1</sup> controlled	Industry
Q294	3655	1177	2478	92	30	62
Q394	3750	1180	2570	92	29	63
Q494	3720	1190	2530	90	29	62
Q195	3608	1198	2410	92	31	61
Q295	3676	1192	2484	92	30	62
Q395	3722	1202	2520	90	29	61
Q495	3614	1191	2423	86	28	57
Q196	3495	1210	2285	88	31	58
Q296	3597	1203	2394	89	30	59
Q396	3627	1194	2434	86	28	58
Q496	3585	1189	2397	86	28	57
Q197	3611	1193	2418	89	29	59
Q297	3656	1194	2462	89	29	60

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 1997 (when latest forecasts are used).

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

	1994	1995	1996	2Q96	3Q96	4Q96	1Q97	2Q97	Feb97	Mar97	Apr97	May97	Jun97	Jul97
<b>Crude Oil Prices</b>														
IEA CIF Average Import	15.65	17.19	20.52	19.78	20.45	23.19	21.57	18.22*	21.62	19.55	18.04	18.43	18.19*	18.40*
FOB Spot														
Brent (Dated)	15.80	17.02	20.65	19.51	20.96	23.58	21.10	18.06	20.81	19.10	17.46	19.14	17.58	18.54
WTI (1st month)	17.19	18.41	22.15	21.80	22.43	24.75	22.75	20.00	22.17	21.03	19.74	20.99	19.28	19.63
Urals (Del. Med.)	15.23	16.62	20.06	18.66	20.10	22.96	20.12	16.90	19.92	17.92	16.26	17.95	16.48	17.85
Dubai (1st month)	14.75	16.10	18.54	17.26	18.96	21.51	19.37	17.52	18.64	18.17	16.64	18.65	17.28	17.37
OPEC Basket	15.53	16.88	20.23	19.18	20.30	23.01	20.79	17.81*	20.49	18.69	17.46	18.75	17.37	17.89*
<b>Product Prices<sup>1</sup></b>														
Rotterdam, Barges FOB														
Premium 0.15 g/l	20.18	21.25	24.62	25.52	24.83	26.93	25.92	24.15	25.46	25.64	23.85	24.92	23.69	23.72
Regular Unleaded	18.65	19.75	22.99	23.86	23.31	25.02	24.18	22.28	23.90	23.78	22.03	22.93	21.87	21.57
Naphtha	17.30	18.15	21.70	20.85	21.90	25.01	23.57	19.99	24.07	21.63	19.92	20.08	19.97	20.27
Jet/Kerosene	20.95	21.60	27.05	23.78	27.48	31.88	26.93	23.37	25.94	23.75	23.17	24.21	22.73	23.09
Gasoil	19.80	20.47	25.91	23.16	26.41	30.08	25.45	22.41	24.39	22.51	22.07	23.24	21.93	22.20
Fuel Oil 1.0%S	14.00	15.76	17.52	16.90	16.35	19.62	16.21	14.08	15.77	14.67	13.75	13.90	14.61	14.74
Fuel Oil 3.5%S	13.01	14.82	16.30	15.41	15.57	18.56	15.03	13.20	14.74	13.75	13.17	13.07	13.35	13.90
Gross Product Worth <sup>2</sup>	18.34	19.28	23.34	22.21	23.46	26.57	23.33	20.87	22.68	21.62	20.70	21.51	20.40	20.55
Brent Cracking Margin	1.49	1.15	1.51	1.51	1.41	1.84	0.99	1.63	0.71	1.17	2.11	1.17	1.60	0.87
Mediterranean - Basis Italy, Cargoes FOB														
Premium 0.15 g/l	20.23	20.99	24.56	25.86	24.80	26.49	25.51	23.93	25.33	25.49	23.69	24.98	23.11	23.24
Naphtha	15.71	16.35	19.81	18.91	20.13	23.14	21.96	18.74	22.42	20.15	18.75	18.83	18.65	19.05
Jet/Kerosene	19.26	19.94	25.39	22.38	26.00	29.70	24.70	20.99	23.51	21.69	21.24	21.52	20.21	20.30
Gasoil	18.71	19.39	24.64	22.42	25.06	28.81	23.73	21.07	22.35	21.29	21.35	21.86	20.01	20.54
Fuel Oil 1.0%S	13.93	15.48	18.10	17.33	18.02	19.72	15.91	14.45	15.34	15.19	14.02	14.37	14.96	14.70
Fuel Oil 3.5%S	11.98	13.95	18.00	13.70	25.65	17.51	14.03	12.35	13.93	11.93	12.61	12.30	12.13	12.61
Gross Product Worth <sup>3</sup>	17.46	18.39	22.17	21.24	22.23	25.19	21.87	19.64	21.24	20.31	19.70	20.21	19.02	19.31
Urals Cracking Margin	1.89	1.44	1.80	2.26	1.81	1.93	1.43	2.42	1.00	2.07	3.11	1.93	2.21	1.13
NY Harbour, Barges														
Premium Unleaded 93	23.65	24.81	27.77	28.17	28.00	30.59	28.19	26.56	27.67	27.57	25.23	28.32	26.13	28.42
Regular Unleaded 87	20.54	22.57	25.81	26.34	25.88	28.37	26.77	24.31	26.27	25.74	23.79	26.04	23.10	24.54
Jet/Kerosene	22.20	21.76	27.57	26.01	27.13	30.86	27.21	23.73	26.95	24.36	24.42	24.06	22.72	23.47
No.2 (Heating Oil)	20.68	20.72	26.35	24.45	25.69	30.06	25.93	23.17	25.56	22.98	24.02	23.56	21.93	22.26
Fuel Oil 1.0%S (Cargo)	15.05	16.06	19.21	18.23	17.93	21.34	17.10	15.72	16.99	15.87	14.89	16.05	16.22	16.80
Fuel Oil 3.0%S (Cargo)	12.25	14.47	16.03	15.17	15.49	18.52	14.83	14.43	15.07	13.42	14.07	14.77	14.44	14.96
Gross Product Worth <sup>4</sup>	19.54	20.33	23.06	23.89	23.93	26.57	24.62	22.87	24.02	23.35	22.71	23.66	22.23	23.21
WTI Cracking Margin	1.24	0.82	0.75	0.99	0.41	0.72	0.77	1.76	0.76	1.23	1.87	1.57	1.86	2.48
Singapore, Cargoes														
Gasoline <sup>5</sup>	21.10	22.11	23.58	25.01	22.32	25.38	27.34	24.38	27.35	28.62	25.15	24.21	23.77	23.38
Naphtha	16.34	17.54	20.22	19.53	20.22	23.62	24.36	21.21	24.60	23.90	21.45	21.46	20.73	21.40
Jet/Kerosene	21.74	22.72	28.36	25.32	27.75	31.70	28.97	24.48	28.69	27.36	25.04	24.71	23.67	23.20
Gasoil	20.87	21.60	27.07	25.47	25.86	31.07	26.90	24.98	25.25	27.48	26.85	25.21	22.87	21.45
LSWR (0.3%) <sup>7</sup>	13.58	14.74	18.04	17.86	17.57	20.54	19.61	15.19	19.40	17.58	15.54	15.08	14.95	17.19
HSFO (3.5%S 180cst)	13.17	14.98	16.83	15.63	15.89	18.67	15.91	15.57	15.43	15.58	15.35	15.79	15.56	15.27
HSFO (3.5%S 380cst)	12.37	14.30	15.90	14.64	15.21	17.85	14.89	14.55	14.40	14.55	14.32	14.72	14.60	14.83
Gross Product Worth <sup>6</sup>	18.76	19.74	23.06	22.39	22.03	25.88	24.12	22.11	23.39	24.51	23.03	22.23	21.06	20.38
Dubai Cracking Margin	2.97	2.35	3.10	3.79	1.58	2.96	3.34	3.12	3.42	4.91	5.08	2.07	2.21	1.40

\* = Estimated.

<sup>1</sup> 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 LSWO and 6.31 bbl/MT for 3.5%S HSFO.

Singapore: 6.46 bbl/MT for 3.5%S HSFO.

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



**Table 9**  
**END USER PRICES FOR PETROLEUM PRODUCTS<sup>1</sup>**  
**July 1997**

	National Currency						US Dollars							
	Price	Tax	% ch Prev. Month	Price	Excl. Tax	% ch Year Ago	Price	Excl. Tax	Price	Excl. Tax	% ch Prev. Month	Price	Excl. Tax	% ch Year Ago
<b>GASOLINE<sup>2</sup> Price per Litre</b>														
France	6.353	5.143	-0.6	-2.4	2.5	5.2	1.057	0.201	-3.6	-5.4	-13.1	-10.8		
Germany	1.598	1.188	2.1	7.6	2.4	8.8	0.897	0.230	-1.2	4.2	-13.5	-8.2		
Italy	1907	1416	-0.2	-0.7	0.9	3.0	1.100	0.283	-2.4	-2.9	-11.1	-9.2		
Spain	119.6	81.3	0.3	0.8	1.2	3.4	0.797	0.255	-2.4	-1.9	-14.3	-12.4		
UK	0.680	0.552	4.8	-5.9	16.0	19.6	1.141	0.215	6.7	-4.1	25.4	29.3		
Japan	103	57	0.0	0.0	-1.0	-2.1	0.899	0.401	-0.2	-0.2	-5.5	-6.6		
Canada	0.563	0.288	-1.2	-2.1	-1.6	-3.8	0.408	0.199	-1.2	-2.1	-2.4	-4.6		
USA <sup>3</sup>	0.332	0.101	-2.4	-3.3	-5.4	-7.6	0.332	0.231	-2.4	-3.3	-5.4	-7.6		
<b>AUTOMOTIVE DIESEL<sup>4</sup> Price per Litre</b>														
France	3.591	2.351	-0.8	-2.4	4.3	7.8	0.598	0.206	-3.8	-5.3	-11.6	-8.6		
Germany	1.054	0.620	3.8	9.9	3.6	9.3	0.591	0.244	0.5	6.4	-12.5	-7.7		
Italy	1190.76	747.47	-0.8	-2.2	1.9	5.4	0.687	0.256	-3.0	-4.4	-10.2	-7.1		
Spain	78.85	43.20	-0.2	-0.5	4.7	11.0	0.526	0.238	-2.9	-3.2	-11.4	-6.0		
UK	0.539	0.403	5.3	-5.6	16.7	14.3	0.904	0.228	7.2	-3.8	26.1	23.5		
Japan	80	34	0.0	0.0	2.6	4.5	0.701	0.403	-0.2	-0.2	-2.1	-0.2		
Canada	0.548	0.222	-0.5	-0.9	4.4	4.5	0.397	0.236	-0.5	-0.9	3.5	3.7		
USA	..	..	..	..	..	..	..	..	..	..	..	..		
<b>DOMESTIC HEATING OIL Price per 1000 Litres</b>														
France	2200.7	890.7	0.0	0.0	6.5	8.3	366.2	218.0	-3.0	-3.0	-9.8	-8.2		
Germany	495.8	144.7	7.0	8.8	8.3	10.3	278.2	197.0	3.6	5.3	-8.6	-6.8		
Italy	1374000	966850	-0.8	-2.2	2.8	8.5	792.8	234.9	-3.0	-4.4	-9.4	-4.4		
Spain	47242	19116	1.1	1.6	7.9	11.9	314.9	187.5	-1.7	-1.2	-8.6	-5.3		
UK	149.30	36.86	-3.4	-4.8	-0.7	-3.0	250.5	188.7	-1.6	-3.1	7.3	4.9		
Japan <sup>5</sup>	49234	1434	0.0	0.0	7.9	7.9	429.6	417.1	-0.2	-0.2	3.0	3.0		
Canada	..	..	..	..	..	..	..	..	..	..	..	..		
USA <sup>6</sup>	264.4	..	-2.9	..	3.3	..	264.4	..	-2.9	..	3.3	..		
<b>HFO FOR INDUSTRY<sup>4,7</sup> Price per Metric Ton</b>														
France	705.0	159.9	0.7	0.9	5.4	6.4	117.3	90.7	-2.34	-2.1	-10.7	-9.8		
Germany	217.0	30.0	-3.4	-3.9	2.4	2.7	121.8	104.9	-6.47	-7.0	-13.6	-13.2		
Italy	265000	45000	0.0	0.0	-2.2	-2.7	152.9	126.9	-2.19	-2.2	-13.8	-14.2		
Spain	21363	2150	2.3	2.6	8.5	9.5	142.4	128.1	-0.49	-0.2	-8.1	-7.3		
UK	82.44	20.20	0.3	-0.7	-3.1	-7.0	138.3	104.4	2.16	1.1	4.7	0.5		
Japan	22226	647	0.0	0.0	13.9	13.9	193.9	188.3	-0.17	-0.2	8.7	8.7		
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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## Users' Guide to the IEA Oil Market Report

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.).

Pending submission of the detailed historical data needed to incorporate them into the OECD, the following OECD countries continue to be shown in the relevant non-OECD regions: the Czech Republic, Hungary and Poland in Non-OECD Europe, Korea in Other Asia and Mexico in Latin America.

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