

5 May 1994

## HIGHLIGHTS

- The latest available data confirm both higher OECD demand and a larger commercial stockdraw in 1Q94 than previously estimated. 1Q94 demand in both the US and Japan has been revised up, to 17.9 mb/d and 6.3 mb/d respectively, bringing estimated OECD demand to 40.6 mb/d, a net increase of 0.8 mb/d over 1Q93 and the highest quarterly level for almost 15 years. Mild weather depressed European demand in 1Q94, which is now estimated to have been 13.7 mb/d, unchanged from 1Q93.
- World demand is now projected to rise 0.8 mb/d in 1994 to 68.0 mb/d. Outside the FSU, demand in 1994 is expected to grow 1.5 mb/d given the cold weather boost to demand in 1Q94, strengthening economic recovery and continuing strong demand growth in non-OECD Asia.
- OPEC production is estimated to have remained at around 24.9 mb/d in April, despite a decline in Nigerian output and the beginning of maintenance in the Neutral Zone.
- Preliminary data for 1Q94 indicate a 0.3 mb/d decline in non-OPEC production versus 4Q93 as declining oil output in the FSU more than offset a moderate gain in OECD production and a small increase from non-OECD producers outside the FSU. Within the OECD, unexpectedly sharp declines in US and Canadian production were more than offset by gains in North Sea and Australian production. OPEC production including NGLs is estimated to have averaged 27.1 mb/d in both quarters, with 2.2 mb/d of NGLs production and crude oil production in the 24.8-24.9 mb/d range.
- Preliminary estimates indicate that total OECD industry stocks at the end of 1Q94 were 307.0 million tons (mt), 6.8 mt below year earlier levels. Total gasoline and distillate stocks were close to normal levels and somewhat lower crude stocks were more than offset by an increase in government-controlled stocks in Japan. About 70 per cent of the 6.8 mt reduction was in feedstocks/NGLs/other hydrocarbons and in "other" products and there is the possibility of an upward adjustment to total stocks once actual data is available.
- There was a major recovery in crude prices in April with prices increasing by \$2.60-3.10/bbl before falling back slightly by the end of the month. The increases reflected the generally lower level of stocks and the tight prompt crude market. There were signs that, by the end of April, the prolonged tightness of the Atlantic Basin sour crude market was being alleviated as indicated by the widening of the Brent/Russian Urals differential.
- In March, aggregate European, Japanese and US refinery throughputs declined by 1.0 mb/d reflecting heavy refinery maintenance in Europe and the US and the seasonal decrease in Japanese domestic demand in spring. Preliminary indications for April suggest a sharp increase in throughputs in the US and a smaller increase in Europe, as refiners sought to replace product stocks drawn down in the first quarter, and a marked seasonal decline in Japan.

## DEMAND

### OECD

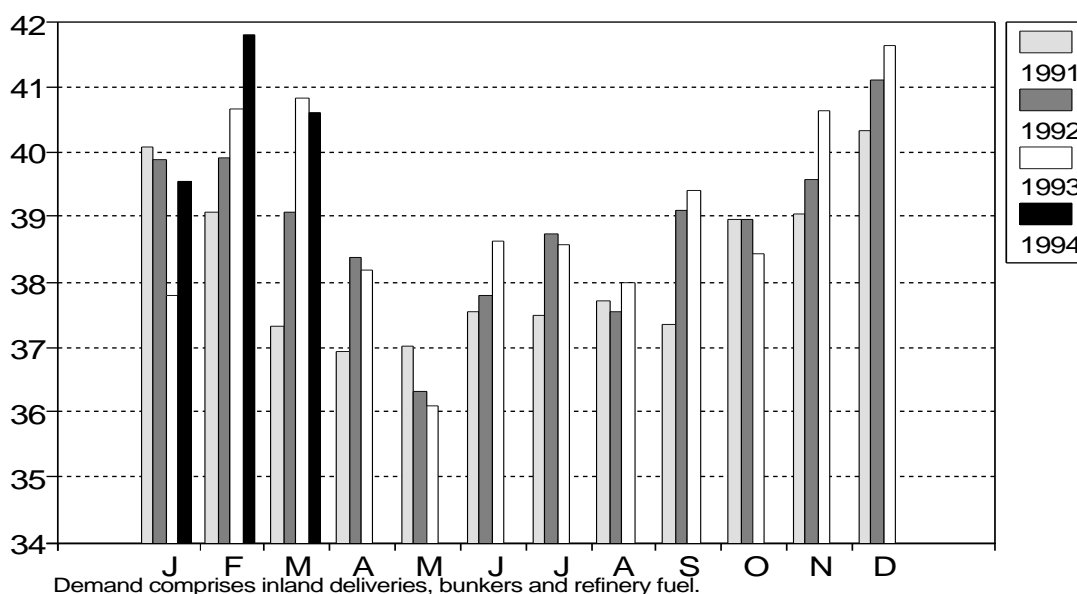
#### Revisions to 1994 Projections

Projected annual OECD oil demand in 1994 now stands at 39.7 mb/d, a net increase of 0.6 mb/d or 1.6 per cent from the average level of 39.1 mb/d in 1993. Over the last six months, since the full-year forecast was first published (*Oil Market Report*, 5 November 1993) there have been a number of revisions to projected demand this year with the overall effect being to raise annual OECD demand by 0.1 mb/d.

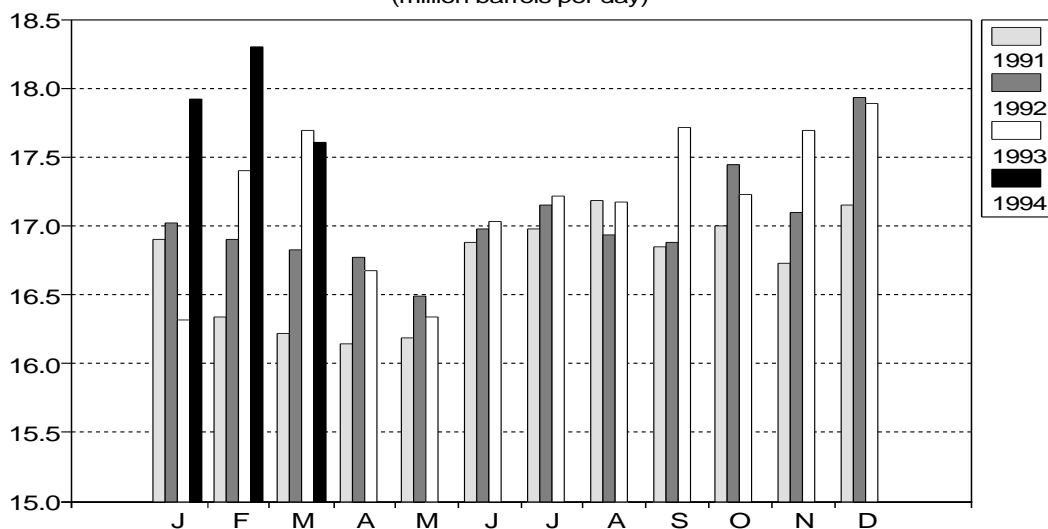
- US demand in 1994 has been revised upwards in recent months due to several factors; the exceptionally cold weather in 1Q94, which added 0.3-0.4 mb/d to original estimates, the continuing strength of natural gas prices relative to those of low sulphur residual fuel oil and indications of stronger economic recovery (notwithstanding the provisional 2.6 per cent real GDP increase in 1Q94). A net annual increase in US demand of almost 0.5 mb/d is now expected, compared to 0.3 mb/d six months ago.
- European demand growth in 1994 has been revised down from 1 per cent to 0.5 per cent in view of the abnormally warm weather in 1Q94, especially in southern Europe, which curbed heating fuel and electricity demand, and the diminished prospects of strong demand growth this year in some of the faster-growing European economies, notably Turkey. It should also be noted that the estimate of European demand in 1993 (13.68 mb/d), on which the 1994 projection is based, is still provisional for a number of countries. The changes introduced in January 1993 to the reporting of intra-EC flows created a number of statistical discrepancies and omissions which are thought to have diminished, at least temporarily, the reliability of some individual country demand data.
- Japanese oil demand is currently expected to grow 0.8 per cent in 1994, compared to initial projections of 1.5 per cent growth. Consumer demand for oil, principally for transport fuels, actually exceeded expectations in 1Q94 despite the fragility of the economic recovery. However, evidence has also accumulated of an acceleration of the longer-term trend away from oil-fired generation of electricity towards nuclear, coal and LNG, each of which increased its share in electricity generation in 1Q94 at the expense of oil.

Although Mexico formally acceded to the OECD on 14 April, it continues to be included in non-OECD Latin America for the time being. Once detailed historical data have been submitted for the period covered in this report, Mexico will be incorporated into OECD North America.

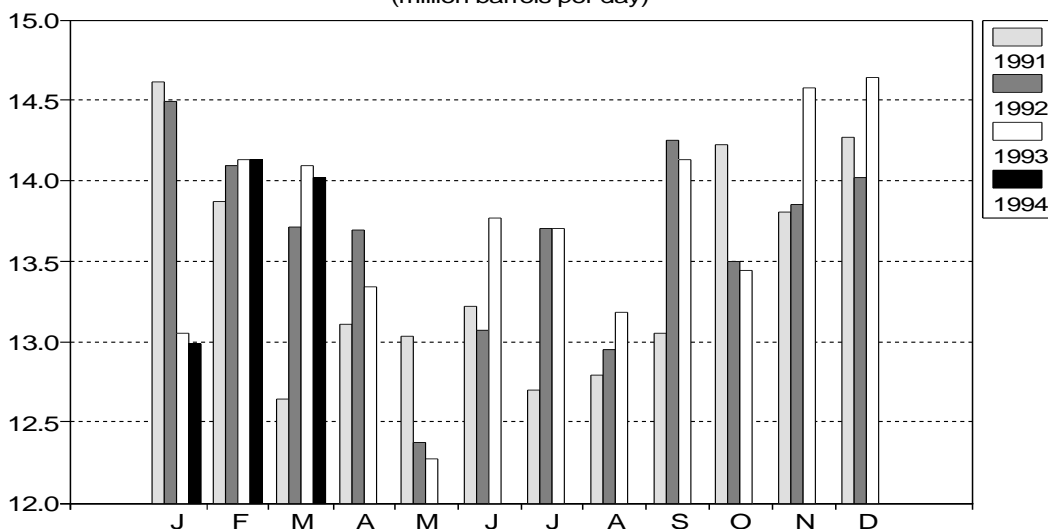
**OECD Oil Demand Jan 1991 - Mar 1994**  
(million barrels per day)



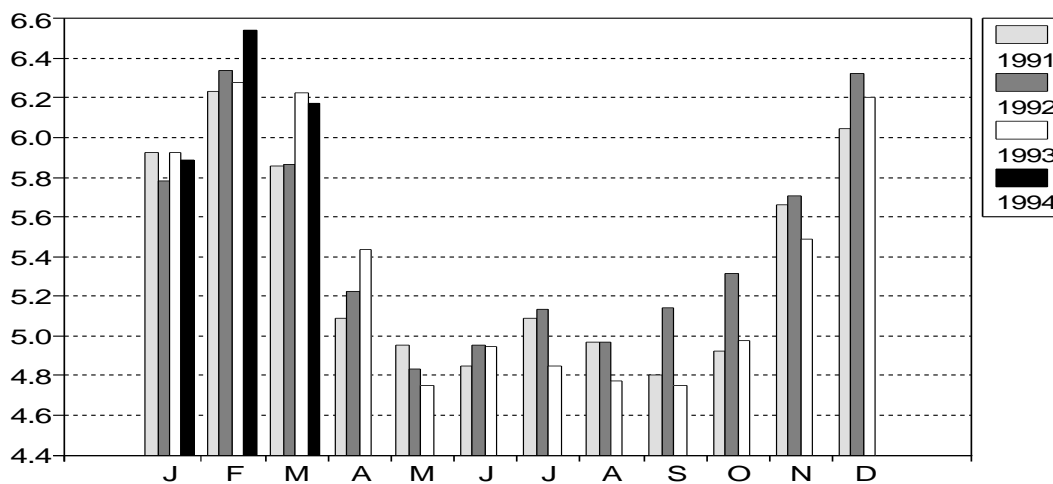
**US Oil Demand 1991 - 1994**  
(million barrels per day)



**European Oil Demand 1991 - 1994**  
(million barrels per day)



**Japanese Oil Demand 1991 - 1994**  
(million barrels per day)



## First Quarter 1994

Cold weather in much of North America between late December and mid-February boosted OECD oil demand in 1Q94 to its highest quarterly level for almost 15 years, provoking an unusually large draw in commercial stocks in the Atlantic Basin which provided the fundamental underpinning for the strong recovery of prices in April. OECD demand declined in March to an estimated 40.6 mb/d, more than 1 mb/d below the exceptional levels seen in February, bringing average demand in 1Q94 to more than 40.6 mb/d, up 2.2 per cent from 1Q93 (see table below). Preliminary data for the US and market sources elsewhere indicate a further decline in April towards a normal seasonal low point in the second quarter.

**OECD Oil Demand 1Q 1994**  
(million barrels per day)

	1Q93	1Q94	% change	Comments
US <sup>+</sup>	17.13	17.92	+4.6	Exceptionally cold January and 1H February
Canada	1.66	1.71	+2.7	Continuing economic growth, cold weather
European Four <sup>*</sup>	8.58	8.48	-1.2	Growth in Germany and the UK, decline in France and Italy
Europe	13.74	13.70	-0.3	Heating fuels demand depressed by warmer than normal weather.
Japan	6.14	6.19	+0.9	Colder than 1Q93 but milder than normal
OECD	39.77	40.64	+2.2	

Demand comprises inland deliveries, bunkers and refinery fuel. Estimates for 1Q94 are based on latest industry and government sources

<sup>+</sup> 50 states (excluding territories)

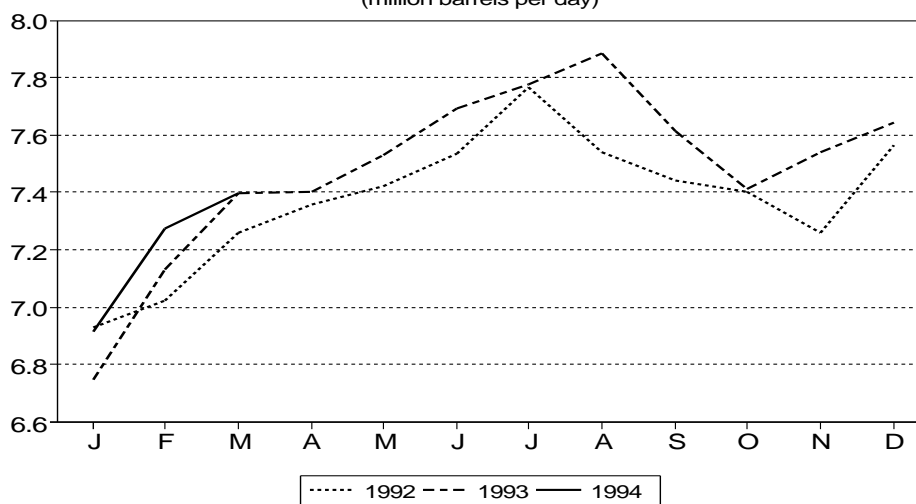
<sup>\*</sup> France, Germany, Italy and the UK

### United States

After the cold weather-related strength of demand in January and February, deliveries in the US 50 states fell in March to about 17.6 mb/d. This represents a marginal decline from the unusually strong demand in March 1993. For the first time in fourteen months, gasoline deliveries failed to record a year-on-year increase, reflecting perhaps the slowdown in 1Q94 in the growth of highway travel associated with the cold January and February weather in the eastern half of the country and the end of the winter oxygenated gasoline season. Distillate deliveries in March also declined year-on-year to about 3.3 mb/d but still showed an increase of 5.6 per cent or almost 0.2 mb/d in 1Q94. About 45 per cent of total distillate deliveries of 3.5 mb/d in 1Q94 had a sulphur content of less than 0.05 per cent weight, the maximum permitted for on-highway diesel since last October.

According to preliminary DOE/EIA data, total deliveries in the first three weeks of April were running at about 17.1 mb/d, compared to 16.7 mb/d in April 1993.

**US Gasoline Demand 1992-1994**  
(million barrels per day)



## Europe

Demand data for the four main European consuming countries (Germany, France, Italy and the UK) show that inland deliveries in March were 8.2 mb/d, about 1 per cent below both the level in February and that in March last year, thus continuing the relatively weak trend observed so far this year. Total deliveries in both France and Italy recorded a significant year-on-year decline (4 per cent and 6 per cent respectively) for the third consecutive month due to unusually weak deliveries of heating oil and residual fuel oil. Only the underlying strength of diesel deliveries (+6 per cent) in Germany, France and the UK prevented a significant fall in gasoil demand.

Preliminary Inland Deliveries<sup>1</sup> March 1994

(million barrels per day)

	Motor Gasoline		Gasoil/Diesel		Residual Fuel Oil		Total Products <sup>2</sup>	
	mb/d	% change	mb/d	% change	mb/d	% change	mb/d	% change
USA <sup>3</sup>	7.39	-	3.27	-3.4	1.07	+1.8	17.67	-0.1
Canada	0.56	+0.5	0.45	+2.8	0.12	-20.3	1.38	-2.3
Japan	0.86	+5.4	1.40	+1.9	0.80	-0.4	5.89	+0.6
France	0.37	-3.5	0.81	-5.8	0.10	-17.2	1.78	-3.9
Germany	0.75	-1.9	1.41	+7.1	0.12	-18.0	2.85	+2.4
Italy	0.40	+7.3	0.47	-12.4	0.50	-13.4	1.79	-5.9
UK	0.56	-0.8	0.48	+3.2	0.18	-6.0	1.76	+3.3
European Four	2.08	-0.3	3.17	-0.2	0.90	-13.1	8.17	-0.8
Total	10.90	+0.3	8.29	-1.0	2.89	-5.3	33.10	-0.2

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

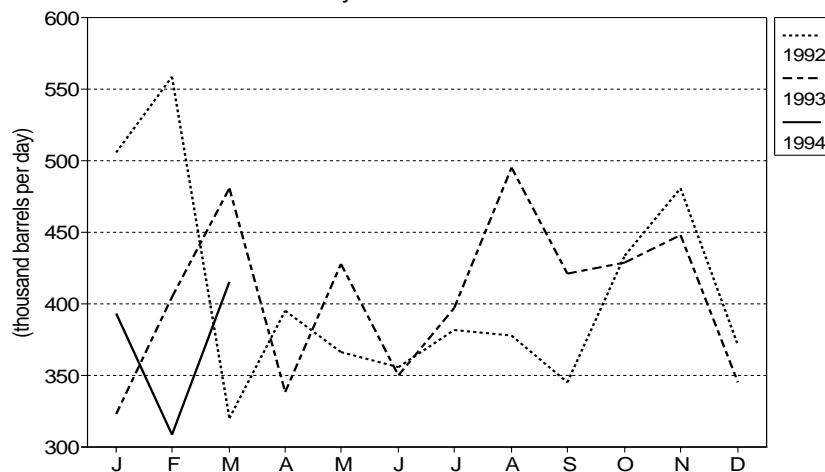
<sup>1</sup> excludes refinery fuel and bunkers (except for US)<sup>2</sup> includes other products not shown and direct use of crude oil<sup>3</sup> 50 states only

Percentage change is calculated versus March 1993

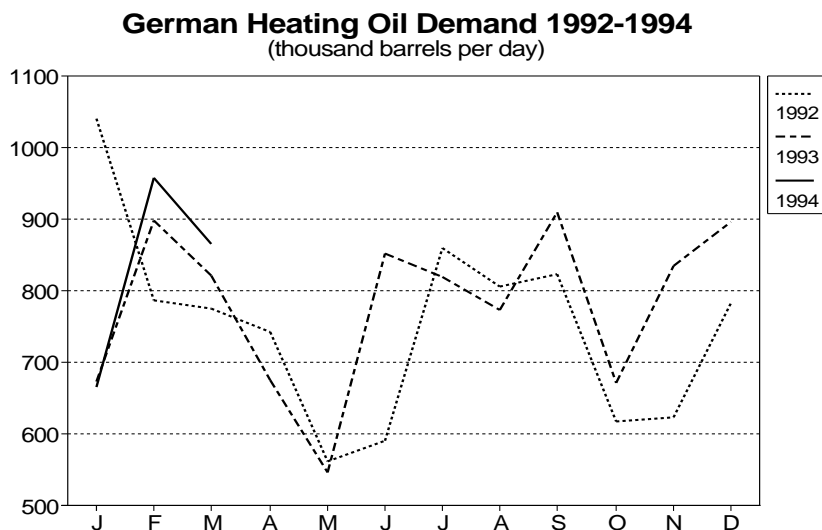
Total European demand in 1Q94 is now estimated to have been 13.7 mb/d, unchanged from 1Q93. Demand for heating fuels in the residential and commercial sector and for residual fuel oil for electricity generation were depressed throughout the quarter by relatively mild weather. Average temperatures in the main oil-consuming countries of western Europe were both higher than in 1Q93 and higher than normal. In France, for example, the number of heating degree-days was 18 per cent below normal and 13 per cent below the total in 1Q93. In contrast to the US where cold weather and competitive prices versus natural gas boosted fuel oil demand in 1Q94, European demand for fuel oil is estimated to have fallen about 5 per cent or 0.1 mb/d year-on-year. Deliveries of fuel oil to ENEL, Europe's largest consumer, from domestic and imported sources declined 4.1 per cent to 0.38 mb/d in 1Q93. In spite of a modest increase in Italian electricity demand in 1Q94 (0.2 per cent to 63.5 TWh), ENEL's output from its thermal (predominantly oil-fired) plants fell more than 4 per cent as oil burning was displaced by increased generation from hydroelectricity.

## ENEL Fuel Oil Demand

January 1992 - March 1994



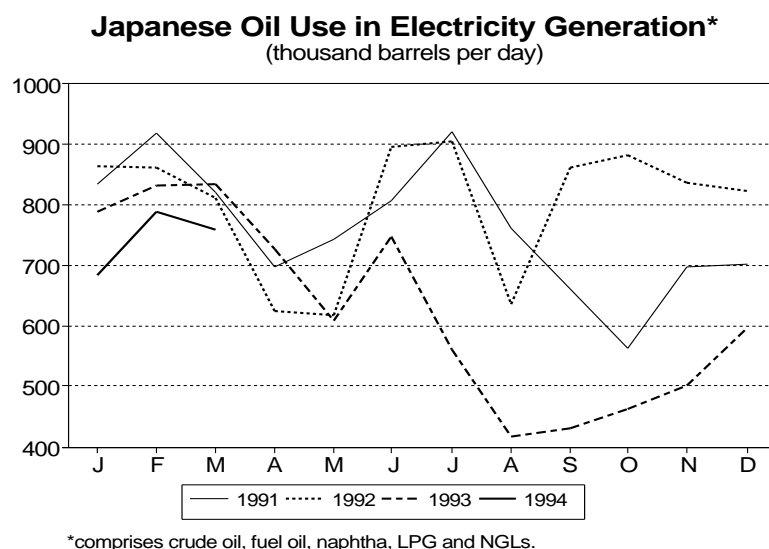
One of the few European markets (apart from diesel) to show any signs of real strength in 1Q94 was, somewhat surprisingly, the German heating oil market. Deliveries rose 4 per cent to almost 10 million tons (0.8 mb/d) in 1Q94 as consumers took advantage of low prices to build stocks. Consumer buying is reported to have continued into April despite the historically high levels of consumer stocks held at the end of March. This recent strength of deliveries is expected to be reflected in lower demand later in 2Q94 and/or in 3Q94.



### Japan

In March, as in February, Japanese inland *product* demand showed a year-on-year increase of 3.5 per cent, continuing the year-on-year recovery observed each month since December. However, preliminary figures also show that deliveries of crude and condensate to utilities and petrochemical companies declined 8 per cent to 0.41 mb/d in 1Q94, leaving aggregate oil demand in Japan in 1Q94 up less than 1 per cent at 6.2 mb/d.

The stronger than expected performance of oil product demand in 1Q94, explained in part by lower average temperatures than in 1Q93, and the slightly improved economic outlook for the rest of the year have prompted a small upward revision since last month to projected Japanese demand in 1994. After declining 1.5 per cent in 1993, demand is now expected to rise 0.8 per cent this year to 5.42 mb/d. However, this projection is highly sensitive to summer weather conditions, peak cooling season demand for electricity and nuclear plant operating rates as well as the strength of economic recovery.



\*comprises crude oil, fuel oil, naphtha, LPG and NGLs.

Despite a long-term trend towards other fuels, 25-30 per cent of Japanese electricity demand continues to be met from oil, principally fuel oil and crude oil. In 1993, oil use in electricity generation averaged 625 kb/d, down 22 per cent from 800 kb/d in 1992, due to the cool, wet summer. So far this year, electricity output from Japan's regional power companies has shown signs of a strong recovery after rising only 0.8 per cent in 1993. In the first three months, output was up 2.7 per cent, reflecting colder first quarter weather and the fragile recovery in industrial activity. However, utilities' *consumption* of fuel oil and low sulphur crude oil in 1Q94 is estimated to have fallen 0.6 per cent to 730 kb/d as LNG, coal and nuclear have continued to displace oil. Utilities' demand for oil, as measured by *deliveries*, has fallen more steeply year-on-year, implying that they have drawn down their stocks of fuel oil and crude over the quarter.

### Asia

Provisional demand figures for 1993 for the two largest oil-consuming Asian economies (excluding China), Korea and India, show growth of 10 per cent and 2.5 per cent respectively, marginally higher than estimated three months ago (*Oil Market Report, 4 February*). Asian demand outside China is now estimated to have grown almost 7 per cent or 0.45 mb/d last year to more than 6.8 mb/d.

### India

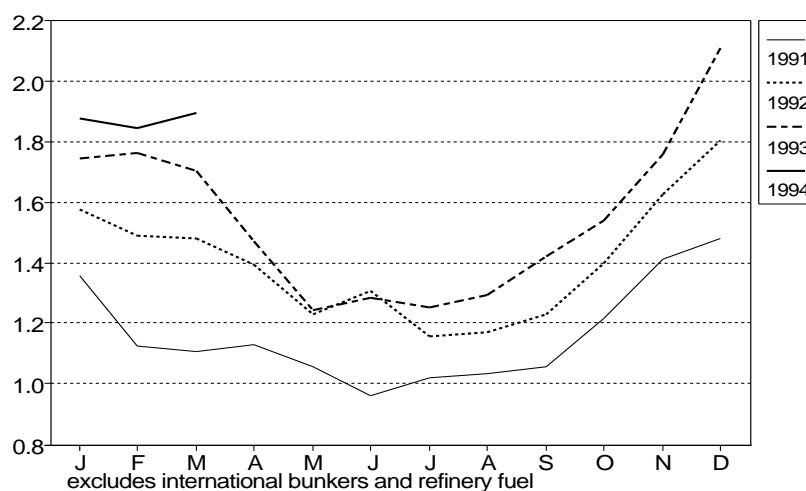
According to figures from the Oil and Natural Gas Commission, domestic product demand rose 2.5 per cent in 1993 to 1.22 mb/d. Refining fuel and bunkers account for a further estimated 0.1 mb/d. Following a period between 4Q92 and 2Q93 in which domestic oil use was almost stagnant, demand grew at an annualised rate of 5 per cent in the last six months of 1993. The size and frequency of India's import tenders so far in 1994, particularly for kerosene and gasoil, suggest that this stronger trend has continued well into this year.

Gasoline deliveries grew 5.9 per cent in 1993, much faster than diesel fuel demand (+3.6 per cent), thereby reversing the relative growth rates seen in 1991 and 1992. As in so many other OECD and non-OECD countries, residual fuel oil demand actually fell last year, by 3.6 per cent to 160 kb/d. This abrupt lightening of the domestic demand barrel led to a sharp increase last year in HSFO exports from Indian coastal refineries into the Singapore market.

### Korea

Oil demand growth in Korea slowed down slightly in 1Q94. According to preliminary government data, inland product deliveries increased 8.0 per cent year-on-year, compared to the 10 per cent annual growth recorded last year. Light and middle distillate demand once again recorded the fastest rates of growth (see table below). Inland deliveries of kerosene, the main domestic heating fuel, rose 22 per cent to 0.27 mb/d as colder weather reinforced the established upward trend and gasoline increased 14 per cent to 0.12 mb/d. Naphtha deliveries in 1Q94 exceeded expectations in rising 11 per cent to 0.34 mb/d, possibly in anticipation of petrochemical cracker maintenance scheduled for 2Q94.

**Korean Oil Demand Jan 1991 - Mar 1994**  
(million barrels per day)



## Korean Oil Demand 1990-1Q 1994

(thousand barrels per day)

	1990	1991	1992	1993	1Q93	1Q94	% change 1Q94 v. 1Q93
LPG	98	118	147	163	196	209	+6.8
Gasoline	65	79	96	116	105	119	+13.7
Naphtha	130	180	265	296	304	337	+11.0
Kerosene	68	70	94	119	186	227	+22.2
Diesel	267	314	348	378	421	455	+8.2
Fuel Oil	286	336	383	399	466	465	-0.2
Others	62	67	71	75	59	62	+5.0
Total Inland	976	1163	1405	1546	1736	1874	+8.0
Ref. Fuel/Bunkers	93	129	146	164			
Total Demand	1069	1292	1551	1710	n.a.	n.a.	
Annual Growth %	+21.2	+20.9	+20.0	+10.3			

Source: Korean Energy Economics Institute

\* estimated

The slower rate of increase of oil demand in 1Q94 is largely the result of an unusual year-on-year *decline* in fuel oil use in electricity generation despite the unexpectedly strong increase in electricity demand (13.1 per cent). Both imported coal and LNG increased their share of fuel inputs at the expense of fuel oil. Since 4Q93, Korean buyers, like those in Japan, have taken advantage of the recent increase in regional availabilities of LNG for use in both power generation and domestic/commercial heating.

## Thailand

As in Korea, provisional oil demand data for 1Q94 indicate a marginal reduction in the rapid rate of growth below the trend rate of 11-13 per cent per annum observed since 1992. Figures released by the Petroleum Authority of Thailand show a year-on-year increase of 9 per cent to 0.56 mb/d in product deliveries in 1Q94. It is still too soon to say whether this marks a significant slowdown in demand growth which has averaged almost 14 per cent per annum in the last six years.

## China

Customs figures for 1Q94 released at the end of April show that China remained a net oil importer for the fourth consecutive quarter. The sharp drop in 1Q94 in both crude and product imports is believed to reflect primarily the surge in *declared* arrivals in 4Q93 rather than the effects of the tighter import controls announced in early March (*Oil Market Report*, 8 April). The import ban is expected to have depressed physical imports in April and May rather than 1Q94 given the 1-2 month lag between the time of purchase and arrival in China.

Underlying Chinese oil demand is currently expected to grow more slowly in 1994 than in 1993, rising about 7 per cent to almost 3.2 mb/d with net imports expected to average 0.2 mb/d.

## China's Oil Exports/Imports 1990-1Q94

(million barrels per day)

	1990	1991	1992	1Q93	1993	1Q94
Exports						
Crude	<b>0.48</b>	<b>0.45</b>	<b>0.43</b>	0.33	<b>0.39</b>	0.35
Products	<b>0.11</b>	<b>0.10</b>	<b>0.11</b>	0.09	<b>0.09</b>	0.06
	<b>0.59</b>	<b>0.55</b>	<b>0.54</b>	0.42	<b>0.48</b>	0.41
Imports						
Crude	<b>0.06</b>	<b>0.12</b>	<b>0.23</b>	0.09	<b>0.32</b>	0.20
Products	<b>0.06</b>	<b>0.09</b>	<b>0.16</b>	0.16	<b>0.35</b>	0.24
	<b>0.12</b>	<b>0.22</b>	<b>0.39</b>	0.25	<b>0.67</b>	0.44
Net Exports/(Imports)	<b>0.47</b>	<b>0.33</b>	<b>0.15</b>	0.17	<b>(0.19)</b>	(0.03)

Source: China's Customs Statistics

## SUPPLY

### Summary

- OPEC crude oil production in April is thought to have roughly matched the March level of 24.9 mb/d. Civil unrest in Nigeria seems to have had a significant effect on West African oil supplies, but higher output from Libya and Indonesia consistent with improved demand in Mediterranean and Asian markets compensated for about two-thirds of the 75 kb/d estimated Nigerian decline. Small increases by a few other producers offset most of the rest of the decline.
- Non-OPEC supply is estimated to have decreased by about 240 kb/d in April. Weather-related problems in Canada, maintenance in the North Sea, Alaska, and at one of Canada's synthetic crude oil plants and technical problems at three UK offshore platforms during the month all limited OECD output. Increased April production levels in Latin America, Asia, and Oman are thought to have raised non-OECD crude oil output, despite an accident-related decline in Egyptian offshore output.
- Russian oil supply remained depressed in March, but may have begun to recover in April following the 1Q94 reductions caused by transportation and domestic storage problems. Government loans to farmers to fund fuel purchases for spring planting are reported to be helping to clear out the excess inventories at Russian refineries as well as giving the refiners some money to pay for additional crude oil. This is expected to reverse some of the shut-ins induced by payment problems and to avert threatened oil-field worker strikes.
- Non-OPEC supply outside the FSU is projected to show a continuation of the large first quarter year-on-year increase for the remainder of 1994, as a result of the impact of new North Sea fields brought into production in the last half of 1994 and 1Q94 and significant increases in Latin American production. OECD production for 1994 is estimated to exceed 1993 levels by more than 0.6 mb/d. The projected increase in Latin American production in 1994 is 0.3 mb/d, with several countries contributing to the gains. Production in China and Malaysia in Asia, Angola in Africa and Oman and Yemen in the Middle East are also expected to increase, leading to the gains in each of the major non-OPEC producing regions detailed in Table 1.

### Non-OPEC Oil Supply

(million barrels per day)

	1990	1991	1992	1Q93	2Q93	3Q93	4Q93	1993	1994 <sup>e</sup>
<i>Non-OPEC Crude Oil</i>									
United States	7.36	7.42	7.17	6.98	6.83	6.70	6.85	6.84	6.63
Canada	1.34	1.32	1.36	1.39	1.42	1.47	1.44	1.43	1.38
North Sea	3.59	3.78	4.08	4.15	4.09	4.38	4.89	4.38	5.05
UK*	1.79	1.72	1.76	1.80	1.70	1.93	2.23	1.92	2.34
Norway	1.62	1.86	2.12	2.16	2.20	2.25	2.44	2.26	2.46
Other North Sea**	0.18	0.19	0.20	0.20	0.19	0.20	0.23	0.20	0.25
Other OECD	1.02	1.05	1.03	0.97	0.99	0.98	0.92	0.97	1.03
<b>Total OECD</b>	<b>13.31</b>	<b>13.56</b>	<b>13.64</b>	<b>13.49</b>	<b>13.34</b>	<b>13.53</b>	<b>14.10</b>	<b>13.62</b>	<b>14.08</b>
Latin America	4.74	4.84	4.93	4.91	4.99	4.98	5.13	5.01	5.27
Asia (incl. China)	4.38	4.44	4.54	4.65	4.66	4.61	4.71	4.66	4.73
Africa	1.80	1.82	1.87	1.87	1.87	1.83	1.87	1.86	1.87
Other Middle East	1.31	1.41	1.48	1.55	1.55	1.61	1.73	1.61	1.76
Non-OECD Europe	0.30	0.26	0.25	0.25	0.25	0.25	0.25	0.25	0.25
<b>Total Non-OECD (ex. FSU)</b>	<b>12.51</b>	<b>12.77</b>	<b>13.06</b>	<b>13.22</b>	<b>13.32</b>	<b>13.29</b>	<b>13.70</b>	<b>13.38</b>	<b>13.88</b>
Russia	10.12	9.02	7.70	6.97	6.85	6.49	6.32	6.66	5.76
Other Republics	0.93	0.92	0.88	0.81	0.81	0.80	0.80	0.80	0.76
<b>Total FSU</b>	<b>11.05</b>	<b>9.94</b>	<b>8.58</b>	<b>7.78</b>	<b>7.66</b>	<b>7.29</b>	<b>7.12</b>	<b>7.46</b>	<b>6.52</b>
<i>NGLs &amp; Other</i>									
United States	1.64	1.75	1.83	2.00	1.96	1.95	1.94	1.96	1.98
Canada	0.62	0.66	0.70	0.70	0.77	0.77	0.79	0.76	0.77
North Sea	0.22	0.24	0.26	0.30	0.26	0.28	0.38	0.30	0.45
Russia	0.24	0.24	0.22	0.21	0.20	0.20	0.19	0.20	0.19
Other Non-OPEC	1.30	1.35	1.33	1.38	1.40	1.39	1.41	1.40	1.40
<b>Total NGLs &amp; Other</b>	<b>4.02</b>	<b>4.24</b>	<b>4.34</b>	<b>4.58</b>	<b>4.58</b>	<b>4.59</b>	<b>4.71</b>	<b>4.62</b>	<b>4.79</b>
<i>Processing Gains</i>	1.35	1.35	1.45	1.45	1.45	1.45	1.45	1.45	1.45
<b>Total Non-OPEC Supply</b>	<b>42.24</b>	<b>41.85</b>	<b>41.07</b>	<b>40.52</b>	<b>40.35</b>	<b>40.15</b>	<b>41.07</b>	<b>40.52</b>	<b>40.72</b>

e estimated

\* excluding on-shore production

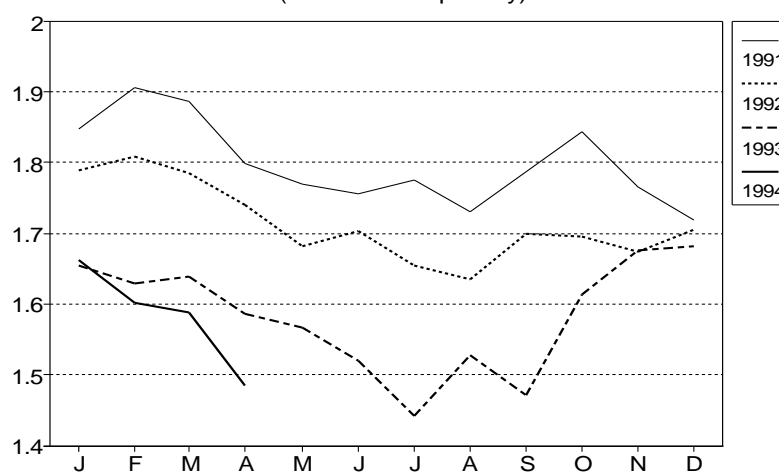
\*\* Denmark, off-shore Netherlands and off-shore Germany

## OECD

### United States

US crude oil production was more than 200 kb/d below 1993 levels in February and March according to recently-released data from the US DOE and weekly data for April indicate an even larger year-on-year decline. **Alaskan** production, which had been showing year-on-year increases for several months, was lower than the prior year's month in February and March due to weather-related closures of the Valdez port. The April decline is related to mid-month maintenance work on the TAPS pipeline which reduced Alaskan output from 1.6 mb/d to 1.3 mb/d and obscured the small contribution from the new Lisburne Production System Niakuk field at the end of the month. Production in the **Lower-48** states has been constrained by transportation problems for offshore California production and some shut-in of marginal low-productivity wells in Texas, Oklahoma, Kansas and Illinois that is thought to have continued into April. On the plus side, the Augur field offshore Louisiana began production at the end of March and is projected to increase production to nearly 40 kb/d by year-end.

**Alaskan Crude oil Production 1991-1994**  
(million barrels per day)



Reported **NGL** production data for the first two months of the year indicate a more than 100 kb/d drop from 1993 monthly levels, despite higher natural gas production. For March and April the declines are estimated to have exceeded 150 kb/d. Poor economics are causing gas processing plants to leave considerable amounts of ethane in gas streams because the high costs of extraction are not justified by the relatively low value of the ethane in competition with low-priced oil feedstocks for petrochemical processes.

US oil production is projected to continue its decline in the remainder of 1994, despite the benefits to Alaskan production of the second phase of the GHX gas-handling process at Prudhoe Bay. Alaskan production is projected to increase by about 50 kb/d in 1994 versus 1993 levels that were depressed by the lower production in the summer of 1993 to facilitate the installation of the first phase of GHX. The GHX project is expected to stabilise North Slope production for a few years, before the natural decline rate begins to dominate. Elsewhere, the decline in Texas production is projected at 100 kb/d in 1994, about the same level of decline as 1993. Increasing production from a few new offshore oil fields is assumed to allow small increases in Gulf of Mexico production, but production in the remainder of the Lower-48 states is projected to decline by 150 kb/d this year due to the maturity of the fields and the limited of drilling activity.

### Canada

Canadian crude oil production is giving evidence of having reversed course over the last two months after showing moderate year-on-year gains in the first two months of the year. Unusually muddy conditions related to the spring thaw have lead to restrictions on the truck traffic in Alberta used to deliver wellhead production to feeder pipelines. Conventional light and medium quality crude production in Alberta is estimated to have dropped from just over 700 kb/d reported for February to about 650 kb/d in March. Heavy oils and bitumen are likewise thought to have declined in March and April. The other major factor in recent Canadian oil supply is a longer than expected maintenance shutdown at the Syncrude plant, that

reduced output by roughly 25 kb/d in March and is estimated to have resulted in a 70 kb/d month-on-month drop in April.

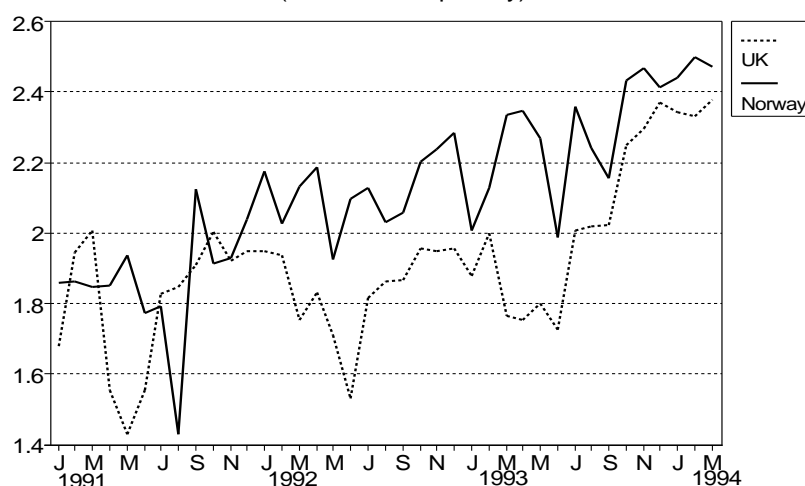
Production of conventional oil in Saskatchewan, which is approximately one-quarter of that of Alberta, was reported to be up by nearly ten per cent year-on-year in January and February, but is estimated to have roughly matched last year's levels since. Production from the other five producing provinces accounts for under 100 kb/d and also appears to have been up for the first two months and roughly even with March and April of 1993. Production from the Cohasset and Penuke fields off the Atlantic Provinces terminated for the iceberg season after January and is expected to be inactive for about three months. The production vessel for the fields is brought into port during the season of high risk from icebergs. Contrary to the experience in the US, Canadian NGL production was reported to have been up 6-8 per cent for the first two months of this year and is estimated to have stayed slightly above last year's levels in March and April. Canadian NGL production also showed strong growth in 1993.

The outlook for the remainder of 1994 is for a small decline in total oil production as continued growth in NGLs and the expectation of better operating performance at the two synthetic crude oil plants in Alberta fail to offset the natural declines in Alberta and Saskatchewan conventional oil production, especially for the heavier oils. Mature areas in Manitoba, Ontario and British Columbia are also projected to decline. Atlantic offshore production from the two existing fields will depend on weather conditions but is expected to at least match last year's levels. The Northwest Territory and Yukon areas have some potential for increases after stagnant production levels for the last few years, a majority of the new hydrocarbon supply from Canada will most likely come from development of natural gas and associated NGL production.

#### North Sea

March crude oil production in the **UK** sector increased approximately 50 kb/d according to data from company and trade sources, as increases from the new Alba and Nelson fields and a recovery in the Tiffany and Toni fields compensated for an unexpected 25 kb/d decline from February levels at the Hudson field and maintenance at Flotta system fields. There were also small declines reported for a number of other fields. A small Fulmar satellite field, Medwin, began production on the last day of March and the Scott field, which began production last August, reached its peak level of 180 kb/d for the first time in March.

**UK/Norwegian Crude Oil Production 1991-1994**  
(million barrels per day)



April production is believed to have declined by over 100 kb/d from March due to a combination of scheduled maintenance and technical problems at the Brent Alpha platform and the Nelson field, as well as bad weather at the Sullom Voe loading port late in the month. There is likely to be a brief recovery in production in May before a significant number of scheduled maintenance outages in June. Another small satellite field in the Forties system will probably come on in May and will be the last new field in the UK sector in 1994, unless the Dunbar field comes on-stream just before the end of the year. Nonetheless, the growing contribution from the 19 fields that commenced production in 1993 and early 1994, particularly the Nelson field, is expected to keep total UK oil production 0.4-0.6 mb/d above 1993

quarterly levels during the rest of 1994. An NGL production increase of over 60 kb/d is projected to contribute to the total as wet gas production, particularly from the Central North Sea Transport System (CATS), increases.

**Norwegian** output in March is reported to have dropped by nearly 30 kb/d due to lower production volumes from the Oseberg, Ula and Brage fields. Draugen production increased marginally after extensive work in February and early March to facilitate higher sustained production levels through the remainder of the year. Snorre output reached a new high of 220 kb/d, up about 20 kb/d from February. Production in the first half of the year is projected to remain 300-400 kb/d above the respective 1993 quarters, but extensive maintenance concentrated in August is likely to hold the third quarter year-on-year gain to under 150 kb/d, despite the commencement of production from the Tordis field in late July. With Tordis production reaching 90 kb/d in 4Q94, total Norwegian output is expected to top 2.75 mb/d, 0.23 mb/d above 4Q93.

Both **Denmark** and the **Netherlands** appear to have produced about 5 kb/d more in March than in February. The Dan and Tyra fields in the Danish sector and the F3-FB field in the Dutch sector recovered from unexpected declines in February and the new Dutch Horizon field recorded a new high of 15 kb/d in March. For the first and second quarters of 1994, crude oil output from Denmark and the Netherlands appears to be exceeding 1993 quarterly levels by a combined 70 kb/d, with the increase split equally between the two countries. The year-on-year increases are projected to remain at about those levels in 3Q94, but will likely be only half as large in 4Q94 due to the higher 4Q93 base levels.

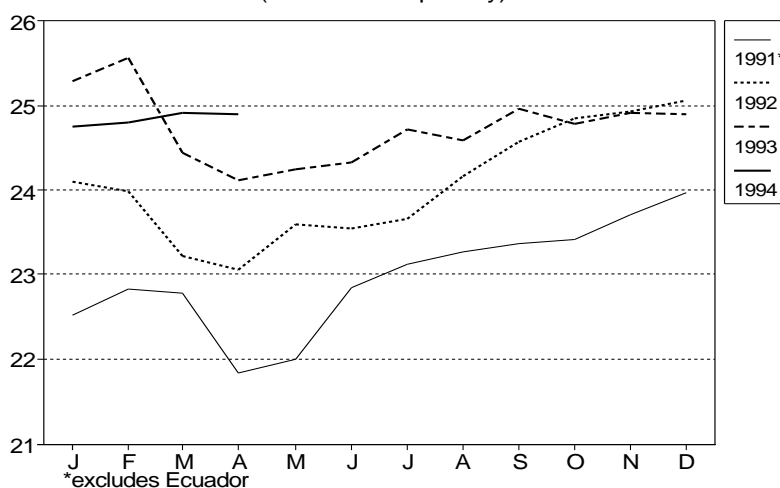
#### Australasia

**Australian** crude oil production in February and March is estimated to have increased by about 10 kb/d in each month to 510 kb/d and 520 kb/d, respectively. Full month production from Jabiru and Griffen in February and, in March, the absence of the start-up problems that limited initial Griffen production are thought to have accounted for the bulk of the production increases. Based on these estimates, Australian production for the first quarter appears to have been up by about 35 kb/d from 1Q93. The year-on-year increase is expected to nearly double in the 2Q94 because of increased output from the Bonaparte and Carnarvon Basins on the Northwest Shelf. With continued increases from new Thevenard Island fields and higher output from the Griffen field, Australian output for the year is projected to increase by 45 kb/d.

#### OPEC

OPEC production appears to have remained at roughly 24.9 mb/d again in April, as higher output from Indonesia and **Libya** and small gains from OPEC's two smallest producers, **Gabon** and **Qatar**, kept aggregate output at March's levels, despite declines in Nigeria resulting from civil unrest. A maintenance-related decline in the **Neutral Zone's** offshore Hout and Khafji fields is thought to have been fully compensated for by increases in Saudi Arabian and **Kuwaiti** production. **Saudi** officials are reported to have confirmed a move towards increasing higher value light crude production at the expense of lower value heavy crude production as a way to increase revenues. Saudi Arabia has also announced its intention to begin producing and marketing their new ultra-light crude oil late this year or early next year.

**OPEC Crude Oil Production 1991-1994**  
(million barrels per day)



**Indonesian** production appears to have benefitted from higher Asian demand, with Indian imports increasing and additional cargoes going into China following the sharp curtailment of Chinese imports in the first quarter. In addition, the building of inventories in anticipation of the start-up of the EXOR N<sup>o</sup>.1 refinery in West Java later this year is thought to have raised the demand for Duri and Minas crudes.

The civil disturbances in **Nigeria** intensified during the last month, leading to the shut-down of facilities feeding the Forcados terminal in western Nigeria. There is some uncertainty about the incremental impact of the disruptions on oil supply, since the unrest has been sporadically affecting production in Nigeria for some time, and because of the uncertain impact of increased government attention to company production allocations. The net effect on April output is estimated to have been a reduction of about 75 kb/d, from March's 2050 kb/d.

### **Former Soviet Union (FSU)**

#### *Production*

Russian production in March remained depressed by payments problems and export difficulties related to the Bosphorus tanker accident and bad weather in the Black Sea. Crude oil producers have shut-in production because refiners do not have the money to pay for crude oil, since the refiners have not been paid for product sold earlier. Refiners cut throughputs early this year due to the absence of paying customers and relatively full storage tanks.

Total FSU production in March is preliminarily estimated at 6.93 mb/d, roughly equal to the depressed February level. Russian production may have begun to improve somewhat in April as loading problems in the Black Sea eased and some additional crude oil is reported to have moved to domestic refineries late in the month to meet demand for tractor fuel. Government agricultural loans are thought to be putting needed cash into the Russian supply system, allowing refiners to reduce inventories and use the cash to purchase additional crude oil. To the extent that depressed production levels reported for February and March were more a result of the payments and export logistics problems rather than physical problems in the fields, production levels would be expected to improve somewhat in the next few months.

Year-on-year Russian production declines of over 1 mb/d in the first half of 1994 are projected to be about 0.2 mb/d less in the second half of the year, resulting in an annual decline for 1994 of around 0.9 mb/d versus a 1.1 mb/d drop in Russian output between 1992 and 1993. Crude oil and NGL production in the non-Russian republics is expected to decline by roughly 50 kb/d in 1994.

#### *Exports*

More complete trade and tanker tracking data imply FSU net exports of 1.8 mb/d in 1Q94, up 0.1 mb/d from last month's estimate. Seaborne exports of crude from Black Sea ports rose considerably in April, in line with normal seasonal patterns, as reflected in the deterioration in the price of prompt Urals crude in the Mediterranean late in the month. The recent indications emanating from Russian government sources of a possible significant relaxation of the elaborate system of export quotas, licenses and tariffs in the foreseeable future means that there is some upward sensitivity to current FSU export projections over the remaining months of the year.

### **Other Non-OPEC**

#### *Latin America*

**Mexican** crude oil production increased slightly in March to 2.73 mb/d and is thought to have held at that level during April. Mexican officials reiterated their intentions to raise production levels in line with demand increases, so as to keep crude oil export volumes at 1.35 mb/d. **Brazil's** new fields and enhanced production levels from older fields in the deep-water Campos Basin are maintaining production at over 700 kb/d, with further increases expected later in the year. **Ecuador** has begun producing from fields in the Amazon region of eastern Ecuador and is expected to add about 40 kb/d to the current 340 kb/d production level by the end of 1994.

Total Latin American oil production is projected to increase by nearly 0.3 mb/d in 1994 to just over 6.0 mb/d, with Mexican and Brazilian projected annual increases of about 70 kb/d and gains of 50 kb/d in **Argentina** and **Colombia**. Production gains are expected to be centred in the Cuisiana/Cupiagua fields in Colombia and the rich Mexican offshore Gulf of Campeche area. Ecuador will add a projected 30 kb/d to the Latin American increase this year, with continued field development in the upper Amazon to take advantage of infrastructure recently put in place.

### *China*

**Chinese** production in January and February was unexpectedly high, topping 2.9 mb/d in both months with some reports suggesting a level of over 3.0 mb/d. For the first quarter, output is projected to have exceeded 1Q93 levels by a full 100 kb/d. Combined production from three major East Coast fields which account for roughly 70 per cent of Chinese crude production, Daqing, Shengli and Liaohe, was reported to have been down slightly, as Shengli declines overshadowed small gains in the other two fields. However, reported production increases in January in smaller onshore fields and especially from the offshore in February were sufficient to generate the year-on-year gains. There also appears to have been a small contribution from the western Tarim Basin. These data indicate that Chinese production was not much affected by the surge in imports of crude oil and product late last year.

### *Asia*

Elsewhere in Asia, production gains in 1994 are expected to be somewhat more modest, amounting to a total of about 40 kb/d. Relatively static **Malaysian** production and an increase of 15 kb/d in **Vietnamese** production are projected for 1994. The Vietnamese increase is somewhat lower than previously thought and below Vietnamese government targets. Based on recent drilling experience, the offshore Vietnamese waters now appear to be much more gas-prone than oil-prone. Similarly, **Indian** government optimism about significant oil production gains from the Bombay High Neelam field have met with scepticism from most industry observers. The current assumption is for the Bombay High developments to merely stabilise total Indian crude oil production at around 525 kb/d. **Papua, New Guinea** which saw a production increase of over 70 kb/d in 1993, is projected to average about 135 kb/d in 1994.

### *Africa*

African production could improve in the latter half of the year, if Egyptian production can be restored and the situation with the Angola guerrillas stabilises. Annual average production for Africa in 1994 is projected to remain at roughly 2.05 mb/d. The damage to an offshore Gulf of Suez platform in late April may limit **Egyptian** output and a recent government policy announcement of an 860 kb/d ceiling on crude oil production are expected to constrain Egyptian output for much of 1994. **Angolan** production is projected to increase by about 20 kb/d this year and the **Congo** is expected to add around 10 kb/d.

### *Non-OPEC Middle East*

**Omani** production is expected to increase to over 800 kb/d in the second quarter, following the voluntary reduction to 775 kb/d in 1Q94. Full year 1994 production is projected to average just over 800 kb/d, with 4Q94 reaching 825 kb/d or about 10 kb/d above 4Q93. The recent rapid increase in **Yemeni** production is expected to moderate later this year, but could still lead to a projected gain of over 100 kb/d in 1994, to about 325 kb/d, while **Syrian** output is forecasted to remain near the 600 kb/d level. The total increase in Non-OPEC Middle Eastern production in 1994 is projected to be about 150 kb/d.

## OECD STOCKS

Preliminary estimates indicate that total OECD industry stocks decreased by 1.6 mb/d during March. As shown in the table below, there were seasonal declines in all three regions with the largest decrease occurring in North America. Consistent with the decrease in crude throughput in all regions, the decline in stocks was wholly reflected in product stocks with crude oil stocks increasing by 0.2 mb/d and feedstock/NGL/other hydrocarbons stocks decreasing by the same amount. Taking into account an upward revision to the initial estimate of the stockdraw in February, our preliminary estimate for the 1Q94 stockdraw is 1.4 mb/d.

**Preliminary Industry Stock Changes in March**  
(mb/d)

	North America	Europe	Pacific	Total
Crude Oil	0.1	0.0	0.1	0.2
Gasoline	-0.4	-0.2	0.0	-0.6
Distillates	-0.1	-0.2	-0.2	-0.5
Fuel Oil	0.0	-0.1	0.0	0.0
Other Oil*	-0.4	-0.1	-0.2	-0.7
Total Oil	-0.8	-0.5	-0.3	-1.6

\* includes other products, feedstocks, NGLs and other hydrocarbons  
Totals may not add due to rounding

At the end of the first quarter, OECD industry stocks are estimated to have been 307.0 million tons (mt), 6.8 mt below year earlier levels and the lowest end of March level since 1986. Crude oil stocks were 1.8 mt lower than a year earlier but this was more than offset by a 2.6 mt increase in government-controlled stocks in Japan. Gasoline stocks were 1.0 mt lower in North America but this was largely offset by 0.9 mt higher stocks in Europe. In spite of the strong seasonal draw during the first quarter, distillate stocks at the end of March were 1.6 mt higher than a year earlier with most of the increase occurring in Europe (where distillate stocks on 31 March 1993 were at historically low levels). Fuel oil stocks continued to be lower than previous year levels in all three regions. The largest decreases were in feedstocks/NGLs/other hydrocarbons (down 2.0 mt) and "other" products (down 2.9 mt), in part reflecting a steep draw in US stocks during March. Recognising the difficulties in estimating these latter stock movements, it should be recognised that there is the possibility of an upward adjustment to the total end of March stock levels when actual data become available. This possibility is reinforced by the high level of 0.5 mb/d for the "other and miscellaneous to balance" in Table 1 for 1Q94. This suggests that the OECD industry stockdraw may be overstated (although clearly there is also the possibility that 1Q94 demand is currently underestimated or supply is overestimated or some combination of the three).

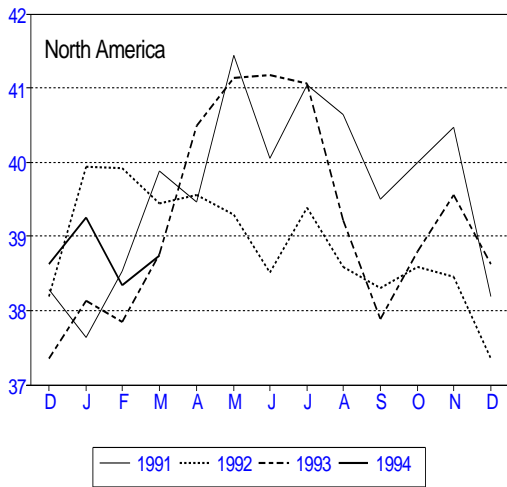
In **North America**, crude oil stocks rose by 0.1 mb/d consistent with lower refinery throughputs and higher imports. Gasoline stocks decreased by 0.4 mb/d in spite of the high level of gasoline imports as production continued to be at low levels. By the end of March, gasoline stocks were 1 mt lower than a year earlier. Following the steep decline in January and February due to the period of extremely cold weather, distillate stocks decreased by less than 0.1 mb/d to reach typical levels at the end of the first quarter. Following the downward trend which began in December, fuel oil stocks increased marginally reflecting the reduction in fuel oil demand. Weekly US DOE petroleum data indicate that, during the first three weeks of April, US stocks of crude oil and gasoline both increased by 0.1 mb/d while fuel oil stocks decreased by the same amount and distillate stocks were essentially unchanged.

In **Europe**, crude oil stock levels were almost unchanged during March and ended the quarter somewhat lower than the historically high level at the end of March 1993. Gasoline stocks fell by 0.2 mb/d reflecting higher demand, lower production and exports to the United States. Following the 0.7 mb/d decline in February, distillate stocks decreased by 0.2 mb/d consistent with weaker demand. At the end of March distillate stocks were 1.2 mt higher than a year earlier. Fuel oil stocks declined marginally and ended the quarter slightly below the previous year's levels.

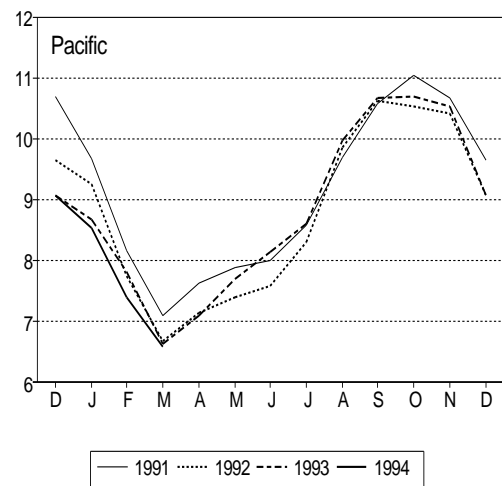
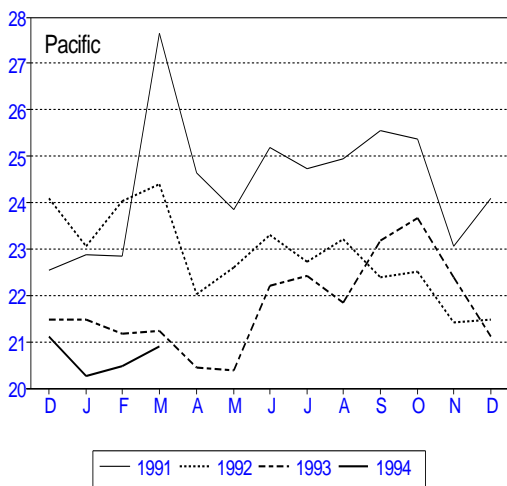
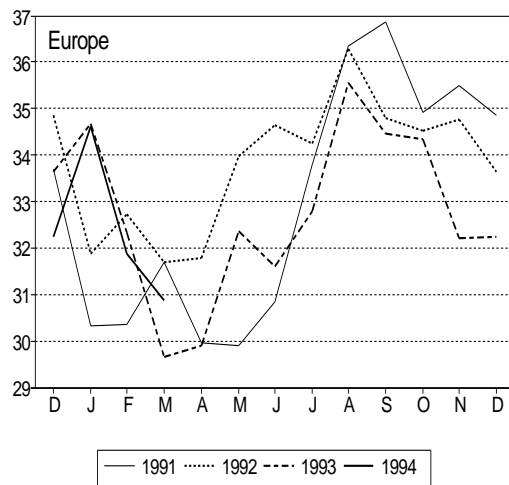
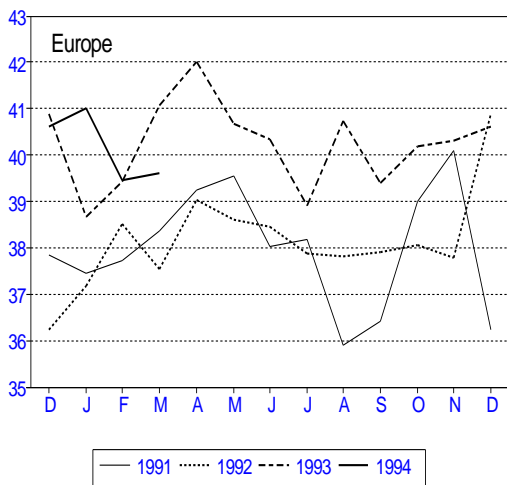
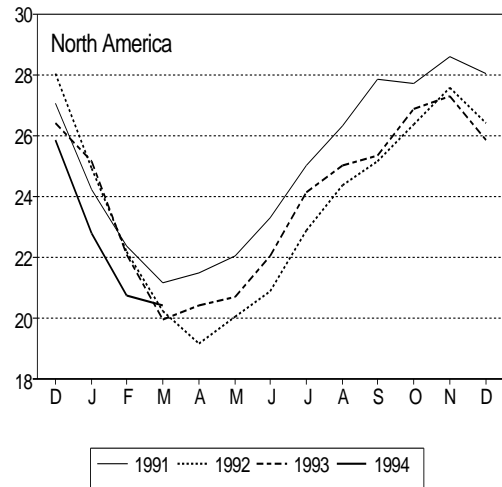
In the **Pacific** region, crude oil stocks rose slightly in March as both imports and refinery throughputs increased. There was no increase in Japanese government-controlled stocks for the first month since September 1993. With higher demand matched by higher production, gasoline stock levels continued to be virtually unchanged. Distillate stock levels decreased by 0.2 mb/d, consistent with strong demand, and ended the quarter at essentially the same level as a year earlier. Like gasoline, fuel oil stocks were unchanged reflecting both higher demand and production.

### OECD Industry End Month Stocks (million metric tons)

#### Crude Oil

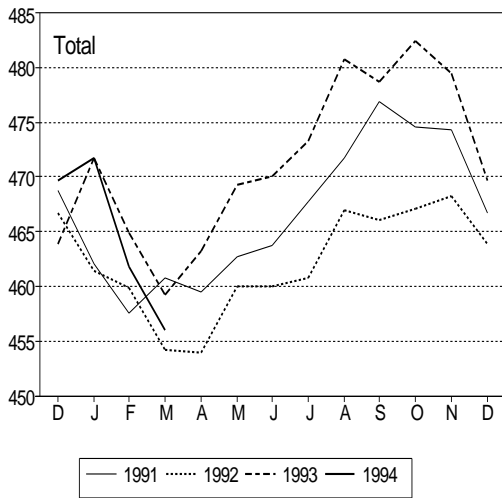


#### Middle Distillate

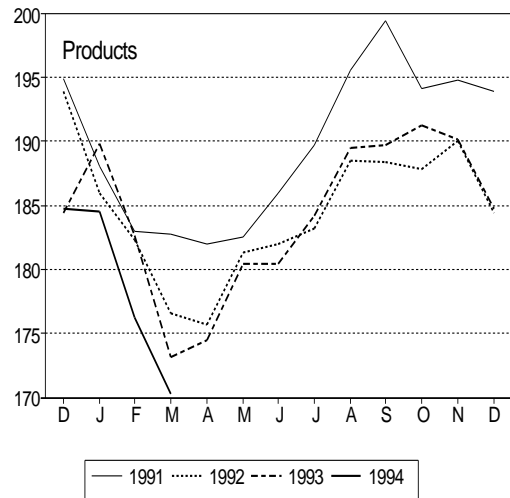
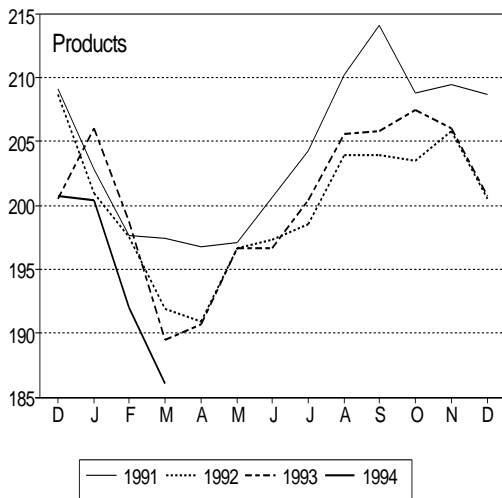
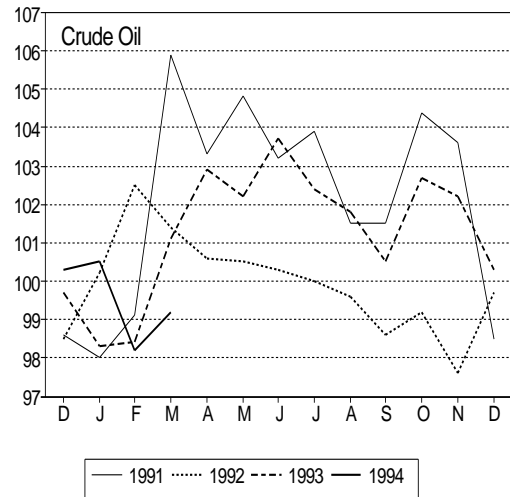
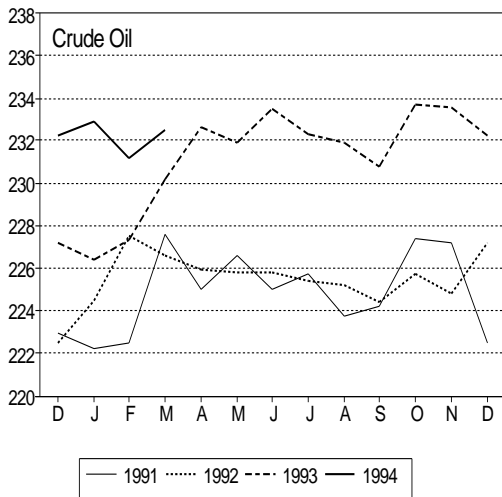
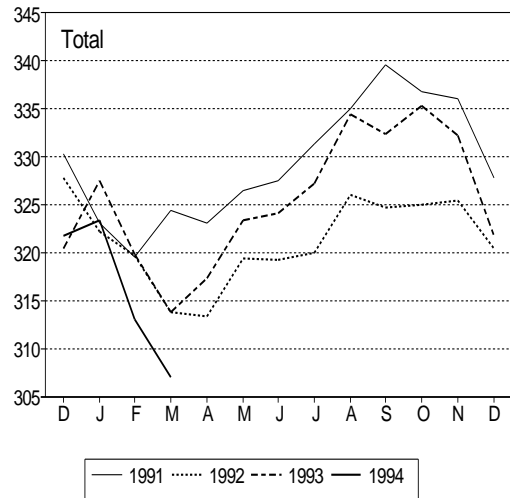


### OECD End Month Stocks (million metric tons)

**Total Stocks**



**Industry Stocks**



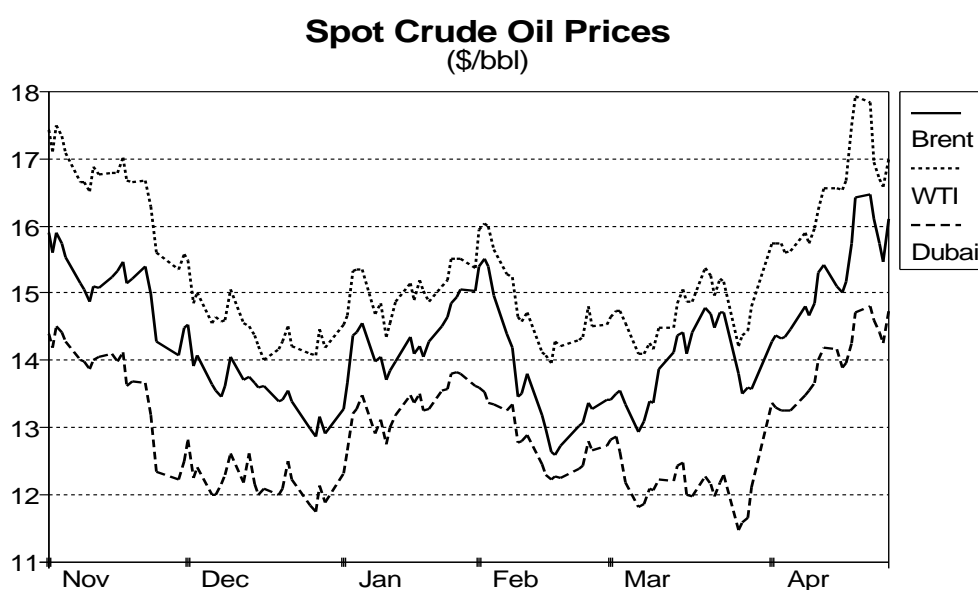
## PRICES

### CIF Crude Import Costs

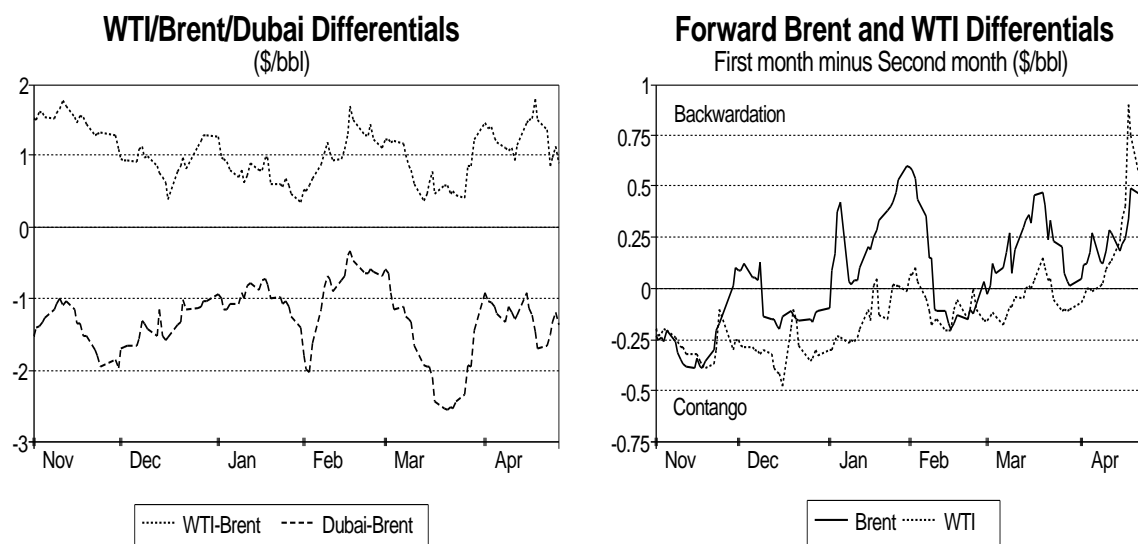
Table 7 shows that the weighted average CIF cost for crude imported into IEA countries in February was \$13.85/bbl, \$0.29/bbl higher than the January figure. The weighted average CIF prices are estimated to have been \$13.20/bbl in March and \$14.00/bbl in April.

### Spot Crude Oil Prices

In April, benchmark crude prices, which had initially declined following the OPEC meeting in late March, increased by \$2.60-3.10/bbl reaching the highest levels since last October before falling back slightly at the end of the month. The increases reflected generally lower stock levels, particularly in the US, the increased demand for crude oil as many refineries return from maintenance on both sides of the Atlantic, a reduction in North Sea crude availability, in part due to the beginning of the oil field maintenance programme, the expectation of strong US demand in the coming months and an anticipated reduction in Nigerian crude supply. In April, dated Brent averaged \$15.20/bbl, \$1.30/bbl higher than in March.



The WTI/dated Brent differential, which had widened towards the end of March, narrowed in the middle of the month, but widened again in the second half, providing a temporary arbitrage opportunity to move North Sea crude into the US prior to the differential narrowing again at the end of the month. The dated Brent/Dubai differential, which had narrowed sharply following the Indian Oil Corporation May tender for eight Dubai cargoes at the end of March, remained at a narrow level for most of the month reflecting continuing tight availability of Dubai, in part due to European buying of Middle East crudes in anticipation of higher refinery throughputs after the period of refinery maintenance. The differential widened somewhat near the end of the month as the dated Brent price increased sharply relative to forward prices before narrowing again slightly.



The price differentials between dated Brent and Russian Urals/Iranian crudes remained narrow for most of April, in part reflecting another loading problem in the Black Sea due to bad weather, which repeatedly disrupted Urals exports during the winter. However, the Russian Urals price decreased relative to dated Brent towards the end of the month as exports recovered.

In Asia, the Malaysian Tapis price decreased relative to the benchmark Brent price while the Indonesian Minas price, which declined sharply relative to Brent crude in March, remained at relatively low levels. The weak Asian crude prices in part reflected spring refinery maintenance in both Japan and Korea. With the differential between prices of US crudes and Indonesian crudes remaining wide since mid-March, several cargoes of Indonesian crudes were reported to have been traded into the US. In the US, the ANS price in the West coast increased in April relative to the benchmark WTI price (see graph on page 21) reflecting a maintenance related decrease in ANS production and lower Canadian crude supply in the West coast coupled with a continuing decrease in Californian production which resulted from the pipeline closure following an earthquake in January (see supply section).

The Brent price for prompt delivery increased appreciably relative to the price for forward delivery during most of April reflecting a strong demand for prompt barrels. As the graph above shows, the Brent market has mostly remained in backwardation (prompt prices being higher than forward prices) so far this year unlike last year. The WTI market, which had been in contango for most of the previous 17 months (prompt prices being lower than forward prices), came into backwardation early in April, and briefly widened to close to \$0.90/bbl near the end of the month before narrowing again.

### Spot Crude Oil Prices and Differentials Monthly and Weekly Averages (\$/bbl)

	Feb	Mar	Apr	Change	Week ending:					
					25 Mar	01 Apr	08 Apr	15 Apr	22 Apr	29 Apr
Brent Dated	13.73	13.90	15.20	1.30	14.68	13.62	14.35	15.01	15.48	15.97
Dubai	12.80	12.14	13.95	1.81	12.16	11.70	13.28	13.77	14.20	14.56
WTI	14.79	14.68	16.45	1.77	15.19	14.45	15.68	16.08	17.04	17.01
Brent over Dubai	0.92	1.76	1.25		2.52	1.92	1.07	1.24	1.29	1.41
WTI over Brent	1.07	0.78	1.25		0.51	0.83	1.33	1.07	1.55	1.05
Brent 1st month minus 2nd month	0.07	0.21	0.25		0.34	0.08	0.15	0.20	0.30	0.35

### Spot Product Prices

In Europe and the US, monthly average prices of all major light products (except the US gasoil price) increased in April with gasoline prices increasing sharply, while prices of heavy fuel oils decreased in both markets. In Singapore, prices of all major products increased.

The **gasoline** price in both the US and Europe increased at the beginning of the month and then remained fairly stable until declining near the end of the month. The price differential between the US and Europe remained wide enough for most of April to provide an arbitrage opportunity to move gasoline from Europe to the US, and a number of cargoes of gasoline were reported to have been traded. The gasoline price in Singapore increased sharply at the beginning of the month reflecting regional refinery maintenance and the continuing shutdown of the fluid catalytic cracker at the 240 kb/d Japanese Tonen refinery. Although the distillation units at the refinery came back to operation at the beginning of April, the 80 kb/d cracker has been out of service since an accident at the end of February.

The **gasoil** price in Europe increased in the first half of April reflecting cold weather as well as refinery maintenance, while the US price declined at the beginning and then remained relatively stable. As a result of these different price developments, European gasoil prices in volumetric terms continued to be higher than gasoline prices while, in the US, gasoline prices became close to gasoil prices, the latter following typical seasonal price developments. The gasoil price in Singapore increased during most of April reflecting strong regional demand and refinery maintenance in Korea and Japan. The sharp increase in the Singapore price resulted in the price becoming higher relative to prices in both Europe and the US Gulf coast, and several cargoes of gasoil were reported to have been traded into Asia from both regions.

Most **heavy fuel oil** prices increased in the three markets, broadly in line with crude prices, in part reflecting regional refinery maintenance. In Singapore, the price of high sulphur heavy fuel oil (HSFO) became higher than that of low sulphur waxy residue partly reflecting strong regional bunker demand. The Russian **E-4 feedstock** premium over European HSFO increased sharply in the first half of April as lower hydroskimming margins increased attractiveness of feedstocks for refiners (see graph).

### Spot Product Prices

(Monthly and Weekly Averages, \$/bbl)

	Gasoline*			Gasoil			Low Sulphur Residual Fuel Oil*		
	Rotterdam	NY Harbour	Singapore	Rotterdam	NY Harbour	Singapore	Rotterdam	NY Harbour	Singapore
Feb	16.54	18.38	20.01	18.97	23.00	20.59	13.32	17.57	11.55
Mar	16.77	18.48	19.11	18.76	20.30	19.59	12.66	13.51	10.77
Apr	18.58	19.97	22.14	20.05	20.03	21.07	12.10	13.02	11.74
Change over month	1.81	1.49	3.03	1.28	-0.27	1.48	-0.56	-0.49	0.97
Week ending:									
25 Mar	17.26	18.97	18.42	19.19	20.29	19.67	12.17	11.91	10.48
01 Apr	17.07	18.18	18.86	18.70	19.82	19.44	11.88	12.11	10.35
08 Apr	18.26	20.04	21.16	19.51	20.21	20.45	11.83	12.52	11.09
15 Apr	18.57	19.90	22.38	20.05	19.94	20.94	11.69	12.70	11.42
22 Apr	18.55	19.85	22.86	20.34	20.01	21.55	12.13	13.26	11.92
29 Apr	18.95	20.10	22.16	20.28	19.95	21.35	12.73	13.63	12.54

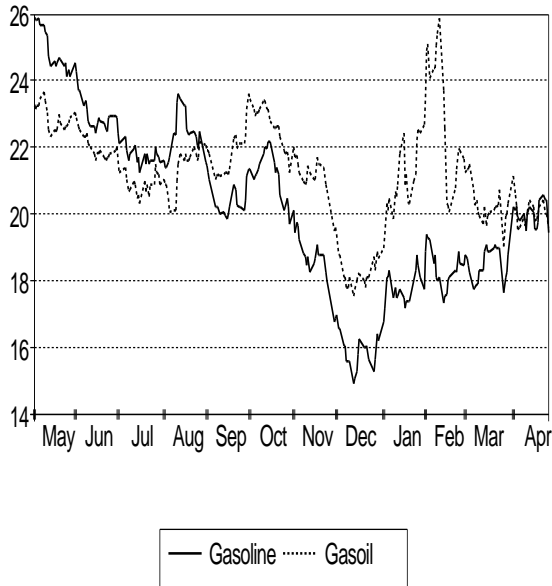
\* Gasolines are unleaded regular in Rotterdam and New York Harbour, and leaded regular in Singapore. The specification of gasoline in New York Harbour changed from 9.0 RVP to 13.5 RVP as of 7 September 1993. Low Sulphur Residual Fuel Oils are 1.0 per cent LSFO in Rotterdam and New York Harbour, and low sulphur waxy residue in Singapore.

### End-User Product Prices

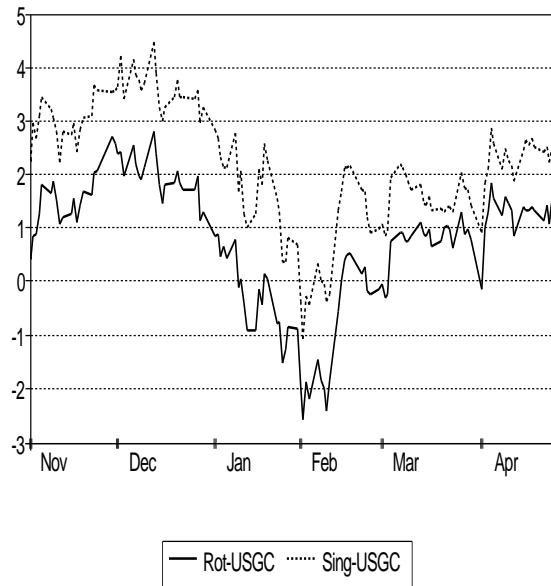
In April, end-user prices of heavy fuel oil for industry in all major European countries decreased consistent with lower international spot prices, with prices in France, Germany and Spain decreasing by close to 10 per cent. The Japanese fuel oil price also decreased by 10 per cent. The UK domestic heating oil price increased by 9 per cent primarily due to a tax increase of about 60 per cent related to the imposition of VAT on domestic fuels for the first time. In Germany pre-tax prices of gasoline, automotive diesel fuel and domestic heating oil all increased by 9-10 per cent.

Table 7 shows average IEA CIF crude costs, spot crude and product prices and Table 8 shows end-user prices.

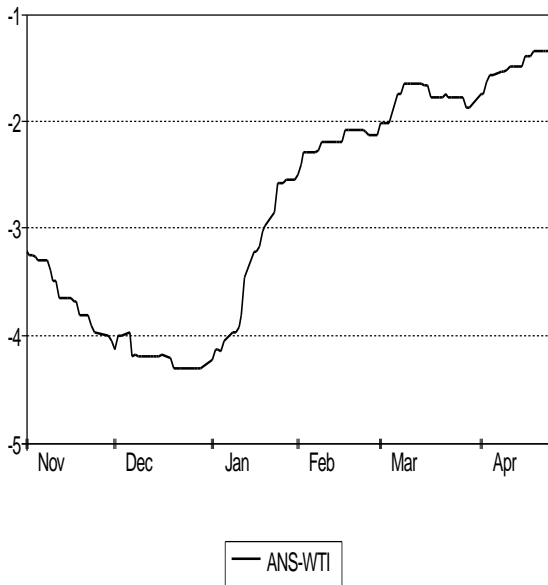
**New York Harbour Spot Product Prices**  
(\$/bbl)



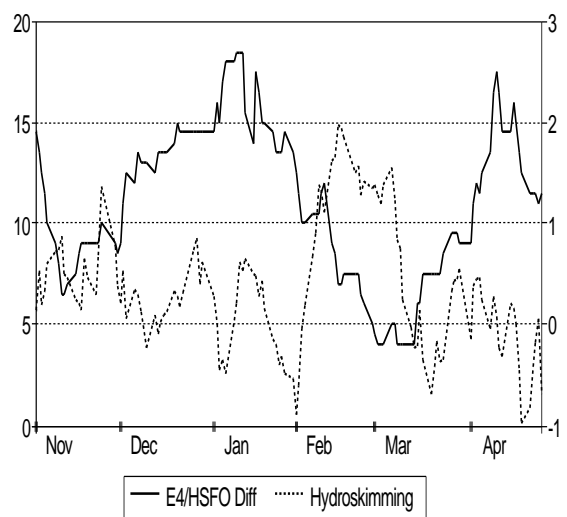
**Gasoil Price Differentials**  
(\$/bbl)



**West Coast ANS/WTI Differentials**  
(\$/bbl)



**E4/HSFO Differential & Refinery Margin**  
(\$/tonne, \$/bbl)



\* E4/HSFO on the left Y axis in \$/tonne, and Hydroskimming Margin on the right Y axis in \$/bbl.

## REFINERY ACTIVITY

### Refining Margins

Monthly average cracking refining margins decreased in the US in April as prices of gasoil and low sulphur fuel oil decreased relative to crude prices. In Europe, the average cracking margin remained little changed as the decrease in the low sulphur fuel oil price was offset by sharp increases in gasoline prices. On the other hand, the hydroskimming margin decreased, due to the higher yield of low sulphur fuel oil. In Singapore, the hydroskimming margin for Dubai crude remained little changed as increases in the prices of gasoline and high sulphur fuel oil relative to the Dubai price were offset by relative decreases in other products.

### Refining Margins in Major Refining Centres

(\$/bbl)

	Feb	Mar	Apr	Change	Week ending:					
					25 Mar	01 Apr	08 Apr	15 Apr	22 Apr	29 Apr
NW Europe										
Brent (Hydroskimming)	1.06	0.39	-0.10	-0.49	-0.40	0.44	0.28	-0.05	-0.22	-0.41
Brent (Cracking)	2.50	1.95	1.88	-0.07	1.36	2.18	2.26	2.00	1.78	1.49
US Gulf Coast										
Brent (Cracking)	2.74	2.31	1.96	-0.36	1.94	2.52	2.98	2.24	1.43	1.20
WTI (Cracking)	2.44	2.32	1.67	-0.65	2.24	2.48	2.54	2.03	0.89	1.23
ANS (Cracking)	2.49	2.08	1.30	-0.78	1.84	2.25	2.08	1.68	0.60	0.84
Singapore										
Dubai(Hydroskimming)	1.06	1.01	1.08	0.07	0.92	1.33	1.06	1.24	1.16	0.87

### Refinery Crude Throughputs

The aggregate refinery throughputs of Europe, Japan and the US decreased by 1.0 mb/d from 29.9 mb/d in February to 28.9 mb/d in March with throughputs decreasing in all three regions. The aggregate level was 0.3 mb/d or 0.9 per cent higher than the level in March 1993 with throughputs in Europe and Japan higher than a year earlier.

Total crude inputs to distillation units in OECD European countries decreased by 0.5 mb/d from 12.2 mb/d in February to 11.7 mb/d in March partly reflecting heavy refinery maintenance. Throughputs in all major countries except France decreased. Nonetheless, European throughput levels in March were 4.8 per cent higher than a year earlier.

Crude throughputs in the US decreased from 13.1 mb/d in February to 12.8 mb/d in March reflecting heavier refinery maintenance in March than in February. This winter, maintenance in the US was planned to be the heaviest in March and the March throughput level was 3.3 per cent lower than the level a year earlier. Utilisation of operating capacity in the US (excluding idle plant, but including capacity temporarily out of service for maintenance) was 89 per cent in March.

Japanese crude throughputs decreased from 4.6 mb/d in February to 4.4 mb/d in March following the normal seasonal pattern. The shutdown of distillation units at the Tonen refinery following the explosion at a fluid catalytic cracker at the end of February may have also contributed to the decrease in total Japanese throughputs as it put over 200 kb/d capacity out of service on average in March. Consistent with this unexpected shutdown, there was an increase in product imports, the level of which was about 6 per cent higher than that a year earlier. The volume of total product imports surpassed that of a year earlier for the first time since last May. The throughput level in March was 4.3 per cent higher than the level in March 1993. Utilisation of operating capacity declined to 96 per cent.

Preliminary indications for April suggest somewhat higher throughput levels in Europe. Weekly US statistics indicate that the throughput level in April increased sharply to about 13.5 mb/d, consistent with the end of the period of heaviest refinery maintenance. In Japan, crude throughputs in April are believed to have decreased sharply as the period of strong demand in winter came to an end. Refinery maintenance was also planned to start in April, putting about 300 kb/d of capacity out of service. At the Tonen Kawasaki refinery, the second distillation unit (175 kb/d capacity) which had been out of operation since the explosion, restarted at the beginning of April, while the fluid catalytic cracker is expected to come back into operation in the middle of May.

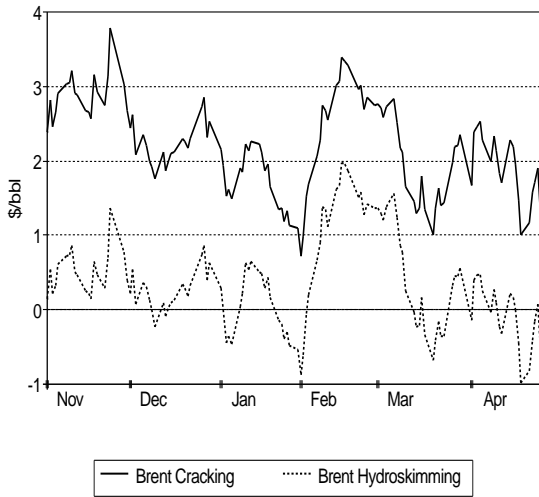
In the Far East, heavy spring refinery maintenance is planned not only in Japan but also in Korea, which currently has a refinery capacity of about 1.7 mb/d. As in Japan, Korean refinery maintenance is planned to be concentrated heavily in June, when close to a third of the capacity will be out of operation. The spring maintenance this year is planned to be heavier than last year unlike in Japan (see last month's Oil Market Report).

### Refinery Crude Throughputs in OECD Countries

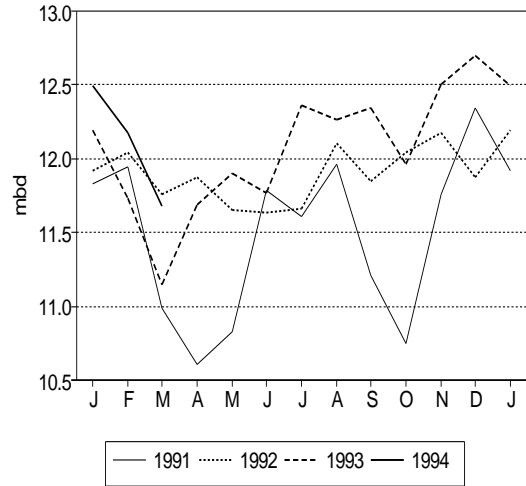
	million barrels per day						% change from previous year	
	Nov	Dec	Jan	Feb*	Mar*	Jan-Mar 94	Mar	Jan-Mar 94
OECD Europe	12.50	12.70	12.49	12.17	11.68	12.11	4.8	3.6
France	1.68	1.73	1.61	1.54	1.62	1.59	14.2	8.6
Germany	2.12	2.25	2.17	2.16	2.09	2.14	12.2	7.9
Italy	1.74	1.76	1.63	1.60	1.48	1.57	1.7	-1.9
Netherlands	1.14	1.17	1.14	1.15	1.00	1.10	4.8	3.7
UK	1.75	1.75	1.82	1.57	1.52	1.64	-10.3	-3.4
US	13.70	13.66	13.29	13.13	12.81	13.08	-3.3	-0.6
Japan	4.31	4.35	4.51	4.58	4.38	4.49	4.3	3.5

\* estimated

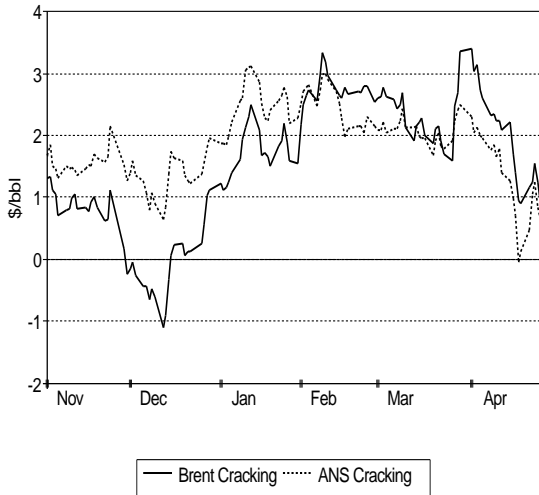
**Rotterdam Refining Margins**



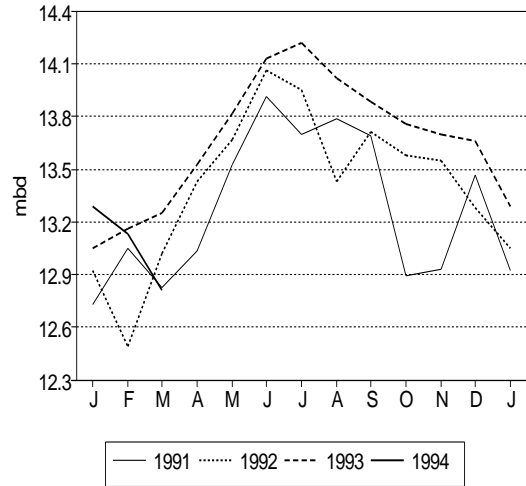
**OECD Europe Crude Throughputs**



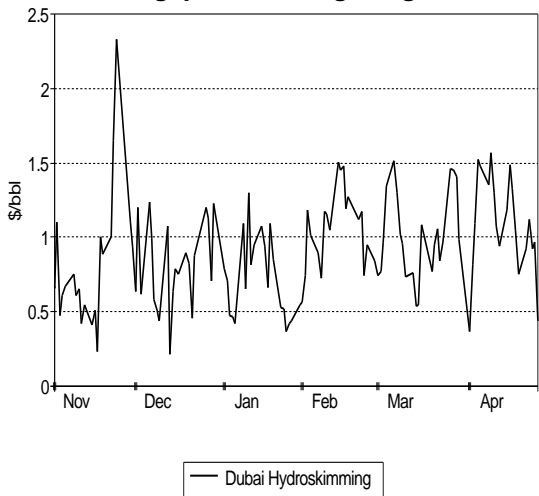
**US Gulf Refining Margins**



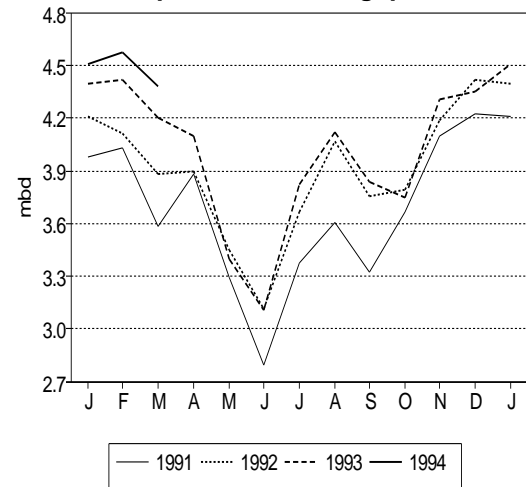
**US Crude Throughputs**



**Singapore Refining Margins**



**Japan Crude Throughputs**



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

(million barrels per day)

	1990	1991	1Q92	2Q92	3Q92	4Q92	1992	1Q93	2Q93	3Q93	4Q93	1993	1Q94	2Q94	3Q94	4Q94	1994
<b>DEMAND</b>																	
OECD																	
North America	18.9	18.6	18.7	18.6	18.9	19.4	18.9	19.0	18.6	19.3	19.5	19.1	19.8	19.1	19.7	19.9	19.6
Europe <sup>1</sup>	13.0	13.4	14.1	13.0	13.6	13.8	13.6	13.7	13.1	13.7	14.2	13.7	13.7	13.2	13.8	14.0	13.7
Pacific	6.1	6.2	6.8	5.9	5.9	6.7	6.3	7.0	5.9	5.7	6.5	6.3	7.0	5.9	5.9	6.6	6.3
<b>TOTAL OECD</b>	<b>38.1</b>	<b>38.2</b>	<b>39.6</b>	<b>37.5</b>	<b>38.5</b>	<b>39.9</b>	<b>38.9</b>	<b>39.8</b>	<b>37.6</b>	<b>38.6</b>	<b>40.2</b>	<b>39.1</b>	<b>40.6</b>	<b>38.3</b>	<b>39.3</b>	<b>40.5</b>	<b>39.7</b>
NON-OECD																	
Former USSR <sup>2</sup>	8.5	8.3	8.0	7.0	6.4	6.2	6.9	6.3	5.6	5.2	5.4	5.6	5.3	4.8	4.6	4.8	4.9
China <sup>3</sup>	2.3	2.5	2.6	2.6	2.7	2.7	2.7	2.8	2.9	3.0	3.1	3.0	3.1	3.1	3.2	3.2	3.2
Europe <sup>1</sup>	1.6	1.4	1.3	1.2	1.1	1.2	1.2	1.3	1.2	1.1	1.2	1.2	1.3	1.2	1.2	1.3	1.3
Latin America	5.1	5.3	5.4	5.4	5.5	5.6	5.5	5.5	5.6	5.6	5.7	5.6	5.6	5.7	5.8	5.8	5.7
Asia	5.5	5.9	6.5	6.3	6.0	6.8	6.4	6.9	6.6	6.5	7.1	6.8	7.2	7.0	6.8	7.5	7.1
Middle East	3.5	3.4	3.6	3.6	3.6	3.6	3.6	3.8	3.8	3.8	3.8	3.8	3.9	3.9	4.0	4.0	4.0
Africa	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
<b>TOTAL NON-OECD</b>	<b>28.4</b>	<b>28.6</b>	<b>29.4</b>	<b>28.1</b>	<b>27.3</b>	<b>28.2</b>	<b>28.2</b>	<b>28.7</b>	<b>27.7</b>	<b>27.2</b>	<b>28.4</b>	<b>28.0</b>	<b>28.4</b>	<b>27.8</b>	<b>27.7</b>	<b>28.8</b>	<b>28.2</b>
<b>TOTAL DEMAND<sup>4</sup></b>	<b>66.5</b>	<b>66.9</b>	<b>69.0</b>	<b>65.7</b>	<b>65.8</b>	<b>68.0</b>	<b>67.1</b>	<b>68.3</b>	<b>65.5</b>	<b>66.0</b>	<b>68.7</b>	<b>67.2</b>	<b>69.0</b>	<b>66.1</b>	<b>66.9</b>	<b>69.3</b>	<b>68.0</b>
<b>SUPPLY</b>																	
OECD																	
North America	11.0	11.1	11.2	11.0	10.9	11.1	11.1	11.1	11.0	10.9	11.0	11.0	10.8	10.6	10.8	10.9	10.8
Europe	4.3	4.5	4.9	4.6	4.7	5.1	4.8	4.9	4.8	5.1	5.7	5.2	5.9	5.9	5.8	6.3	6.0
Pacific	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
<b>TOTAL OECD</b>	<b>15.9</b>	<b>16.3</b>	<b>16.8</b>	<b>16.3</b>	<b>16.3</b>	<b>16.9</b>	<b>16.6</b>	<b>16.6</b>	<b>16.5</b>	<b>16.7</b>	<b>17.3</b>	<b>16.8</b>	<b>17.4</b>	<b>17.2</b>	<b>17.3</b>	<b>17.9</b>	<b>17.4</b>
NON-OECD																	
Former USSR	11.5	10.4	9.5	9.2	8.8	8.4	9.0	8.2	8.0	7.7	7.5	7.8	7.1	6.9	6.8	6.7	6.9
China	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	3.0	2.9	3.0	2.9	2.9	3.0	3.0
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
Latin America	5.4	5.6	5.7	5.7	5.7	5.7	5.7	5.7	5.8	5.7	5.9	5.8	5.9	6.0	6.0	6.1	6.0
Asia	1.7	1.7	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9
Middle East	1.3	1.4	1.5	1.5	1.5	1.6	1.5	1.6	1.6	1.6	1.8	1.6	1.7	1.8	1.8	1.8	1.8
Africa	1.9	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.1
Processing Gains <sup>5</sup>	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
<b>TOTAL NON-OPEC</b>	<b>42.2</b>	<b>41.8</b>	<b>41.7</b>	<b>40.9</b>	<b>40.8</b>	<b>41.0</b>	<b>41.1</b>	<b>40.5</b>	<b>40.3</b>	<b>40.1</b>	<b>41.1</b>	<b>40.5</b>	<b>40.8</b>	<b>40.5</b>	<b>40.5</b>	<b>41.2</b>	<b>40.7</b>
OPEC																	
Crude	22.7	23.0	23.8	23.4	24.1	24.9	24.1	25.1	24.2	24.7	24.9	24.7	24.8				
NGLs	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2				
<b>TOTAL OPEC</b>	<b>24.8</b>	<b>25.0</b>	<b>25.8</b>	<b>25.5</b>	<b>26.2</b>	<b>27.1</b>	<b>26.2</b>	<b>27.3</b>	<b>26.4</b>	<b>27.0</b>	<b>27.1</b>	<b>26.9</b>	<b>27.1</b>				
<b>TOTAL SUPPLY<sup>6</sup></b>	<b>67.0</b>	<b>66.9</b>	<b>67.5</b>	<b>66.4</b>	<b>67.0</b>	<b>68.0</b>	<b>67.2</b>	<b>67.8</b>	<b>66.8</b>	<b>67.1</b>	<b>68.1</b>	<b>67.5</b>	<b>67.8</b>				
<b>STOCK CHANGE AND MISCELLANEOUS</b>																	
REPORTED OECD																	
Industry	0.2	0.0	-1.2	0.6	0.6	-0.6	-0.1	-0.7	1.0	0.9	-1.0	0.1	-1.4				
Government	0.0	0.0	0.2	0.0	0.0	0.2	0.1	0.2	0.0	0.0	0.1	0.1	0.1				
<b>TOTAL OECD</b>	<b>0.3</b>	<b>0.0</b>	<b>-1.0</b>	<b>0.6</b>	<b>0.6</b>	<b>-0.4</b>	<b>0.0</b>	<b>-0.5</b>	<b>1.1</b>	<b>0.9</b>	<b>-0.9</b>	<b>0.1</b>	<b>-1.4</b>				
Floating Storage/Oil in Transit	0.2	-0.1	0.0	-0.2	0.2	0.0	0.0	-0.2	0.1	0.1	0.2	0.1	-0.3				
Other & Misc. to balance <sup>7</sup>	0.0	0.1	-0.5	0.3	0.4	0.4	0.1	0.2	0.1	0.1	0.1	0.1	0.5				
<b>TOTAL STOCK CH. &amp; MISC.</b>	<b>0.5</b>	<b>0.0</b>	<b>-1.5</b>	<b>0.7</b>	<b>1.2</b>	<b>0.0</b>	<b>0.1</b>	<b>-0.5</b>	<b>1.3</b>	<b>1.1</b>	<b>-0.6</b>	<b>0.3</b>	<b>-1.2</b>				
Memo item:																	
FSU Net Exports	3.0	2.1	1.5	2.2	2.4	2.2	2.1	1.9	2.4	2.5	2.1	2.2	1.8	2.1	2.2	1.9	2.0

Totals may not add due to rounding.

1 Germany's eastern states are included in OECD Europe throughout the time period covered in this table.

2 Figures for former USSR are estimates of apparent domestic demand derived from official production figures and quarterly trade data.

3 Annual Chinese demand is estimated from production and (adjusted) trade data; quarterly figures represent estimates of domestic oil deliveries and are not derived from trade data.

4 Deliveries from refineries/primary stocks plus international marine bunkers, refinery fuel and crude for direct burning (includes oil from non-conventional sources and other sources of supply).

5 Net of volumetric gains and losses in refining process (excludes net gain/loss in former USSR, China and non-OECD Europe).

6 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.

7 Includes changes in non-reported stocks in OECD and non-OECD areas and crude oil ocean losses.

**Table 2**  
**OECD REGIONAL OIL DEMAND**

(million barrels per day)

	October			November			December			Fourth Quarter			January		
	1992	1993	%	1992	1993	%	1992	1993	%	1992	1993	%	1993	1994	%
<b>North America</b>															
LPG	2.27	2.23	-1.8	2.56	2.46	-4.1	2.61	2.40	-8.0	2.48	2.36	-4.8	2.31	2.78	20.5
Naphtha	0.26	0.23	-10.2	0.24	0.25	3.5	0.26	0.27	3.4	0.25	0.25	-1.3	0.23	0.24	4.3
Motor Gasoline	7.96	8.08	1.5	7.79	8.06	3.5	8.07	8.35	3.5	7.94	8.16	2.8	7.20	7.50	4.1
Jet/Kerosene	1.47	1.49	1.8	1.54	1.58	2.8	1.51	1.67	10.0	1.51	1.58	4.9	1.57	1.65	5.3
Gasoil	3.47	3.49	0.6	3.45	3.64	5.4	3.74	3.85	2.7	3.56	3.66	2.9	3.51	4.13	17.8
Residual Fuel Oil	1.25	1.13	-9.1	1.22	1.17	-4.3	1.48	1.51	1.6	1.32	1.27	-3.6	1.18	1.44	22.2
Other Products	2.62	2.61	-0.6	2.34	2.41	3.0	2.16	2.05	-5.0	2.38	2.36	-0.8	2.03	2.03	0.3
<b>Total</b>	<b>19.30</b>	<b>19.26</b>	<b>-0.2</b>	<b>19.14</b>	<b>19.56</b>	<b>2.2</b>	<b>19.84</b>	<b>20.09</b>	<b>1.3</b>	<b>19.43</b>	<b>19.64</b>	<b>1.1</b>	<b>18.02</b>	<b>19.77</b>	<b>9.7</b>
<b>Europe</b>															
LPG	0.80	0.83	3.3	0.88	0.97	10.7	0.89	0.96	8.2	0.85	0.92	7.5	0.91	0.93	2.5
Naphtha	0.67	0.71	5.7	0.80	0.81	1.1	0.67	0.69	2.8	0.71	0.74	3.1	0.81	0.80	-1.4
Motor Gasoline	3.05	2.91	-4.9	2.93	2.98	1.6	3.09	3.02	-2.1	3.02	2.97	-1.9	2.54	2.51	-1.0
Jet/Kerosene	0.78	0.79	1.2	0.70	0.75	7.4	0.70	0.79	13.4	0.73	0.78	7.1	0.72	0.75	4.6
Gasoil	4.63	4.74	2.5	4.74	5.42	14.3	5.12	5.43	6.1	4.83	5.20	7.6	4.59	4.45	-3.0
Residual Fuel Oil	2.19	2.20	0.1	2.49	2.47	-0.7	2.44	2.57	5.3	2.37	2.41	1.6	2.23	2.24	0.7
Other Products	1.38	1.30	-5.5	1.32	1.26	-4.4	1.12	1.16	3.1	1.27	1.24	-2.6	1.08	1.08	-0.1
<b>Total</b>	<b>13.51</b>	<b>13.47</b>	<b>-0.2</b>	<b>13.85</b>	<b>14.65</b>	<b>5.8</b>	<b>14.03</b>	<b>14.63</b>	<b>4.2</b>	<b>13.79</b>	<b>14.25</b>	<b>3.3</b>	<b>12.87</b>	<b>12.77</b>	<b>-0.8</b>
<b>Pacific</b>															
LPG	0.66	0.65	-1.1	0.70	0.70	-0.9	0.75	0.78	4.0	0.70	0.71	0.8	0.80	0.74	-6.5
Naphtha	0.49	0.48	-3.4	0.52	0.49	-4.9	0.57	0.55	-2.9	0.53	0.51	-3.7	0.56	0.57	1.7
Motor Gasoline	1.13	1.15	1.5	1.13	1.18	3.6	1.26	1.28	2.0	1.17	1.20	2.3	1.04	1.09	4.5
Jet/Kerosene	0.58	0.62	6.2	0.81	0.81	0	1.12	1.18	4.9	0.84	0.87	3.7	1.07	1.07	-0.2
Gasoil	1.36	1.37	0.6	1.43	1.51	5.5	1.56	1.57	0.4	1.45	1.48	2.1	1.34	1.38	3.0
Residual Fuel Oil	0.94	0.80	-15.0	0.97	0.84	-13.6	0.95	0.89	-5.5	0.95	0.84	-11.4	0.95	0.93	-1.7
Other Products	1.00	0.79	-21.4	1.02	0.88	-13.3	1.02	0.90	-11.1	1.01	0.86	-15.3	0.96	0.93	-3.0
<b>Total</b>	<b>6.17</b>	<b>5.85</b>	<b>-5.2</b>	<b>6.58</b>	<b>6.40</b>	<b>-2.7</b>	<b>7.22</b>	<b>7.16</b>	<b>-0.9</b>	<b>6.66</b>	<b>6.47</b>	<b>-2.8</b>	<b>6.72</b>	<b>6.72</b>	<b>0</b>
<b>OECD</b>															
LPG	3.73	3.70	-0.6	4.14	4.13	-0.5	4.25	4.14	-2.5	4.04	3.99	-1.2	4.01	4.45	11.0
Naphtha	1.43	1.42	-0.4	1.56	1.55	-0.5	1.50	1.51	0.8	1.49	1.49	0	1.60	1.61	0.5
Motor Gasoline	12.14	12.13	-0.1	11.85	12.21	3.0	12.41	12.65	1.9	12.14	12.33	1.6	10.78	11.10	3.0
Jet/Kerosene	2.83	2.91	2.6	3.05	3.14	3.1	3.34	3.64	9.0	3.07	3.23	5.1	3.35	3.47	3.4
Gasoil	9.46	9.61	1.5	9.62	10.56	9.8	10.43	10.85	4.0	9.84	10.34	5.1	9.44	9.96	5.6
Residual Fuel Oil	4.38	4.13	-5.8	4.68	4.48	-4.3	4.87	4.97	2.1	4.64	4.53	-2.5	4.36	4.62	6.0
Other Products	5.00	4.70	-6.1	4.68	4.56	-2.6	4.30	4.11	-4.3	4.66	4.46	-4.4	4.07	4.05	-0.6
<b>Total</b>	<b>38.97</b>	<b>38.59</b>	<b>-1.0</b>	<b>39.58</b>	<b>40.62</b>	<b>2.6</b>	<b>41.09</b>	<b>41.87</b>	<b>1.9</b>	<b>39.88</b>	<b>40.36</b>	<b>1.2</b>	<b>37.61</b>	<b>39.26</b>	<b>4.4</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.

Percentage changes are calculated before rounding.

North America comprises US (including territories) and Canada.

Figures above are unadjusted data submitted to the IEA Secretariat in the Monthly Oil and Gas questionnaire. Regional totals for North America and Europe may differ slightly from those in Table 1 since the latter incorporates adjustments based on other government sources.

**Table 2A**  
**OIL DEMAND IN SELECTED OECD COUNTRIES**

(million barrels per day)

	November			December			Fourth Quarter			January			February		
	1992	1993	%	1992	1993	%	1992	1993	%	1993	1994	%	1993	1994	%
<b>United States</b>															
LPG	2.33	2.25	-3.6	2.39	2.18	-8.8	2.28	2.16	-5.0	2.10	2.58	22.9	2.16	2.30	6.5
Naphtha	0.17	0.18	5.5	0.20	0.20	1.8	0.19	0.18	-2.1	0.16	0.18	12.9	0.15	0.19	24.6
Motor Gasoline	7.23	7.46	3.2	7.49	7.75	3.5	7.37	7.58	2.8	6.71	6.96	3.8	7.17	7.27	1.4
Jet/Kerosene	1.45	1.50	3.7	1.43	1.59	10.9	1.42	1.50	5.8	1.49	1.57	5.1	1.54	1.61	4.5
Gasoil	3.04	3.19	5.1	3.32	3.41	2.5	3.14	3.22	2.5	3.10	3.64	17.2	3.44	3.57	3.7
Residual Fuel Oil	1.04	1.01	-2.9	1.29	1.35	4.4	1.15	1.12	-2.4	1.01	1.29	28.2	1.16	1.55	33.6
Other Products	2.14	2.23	4.0	1.99	1.87	-5.9	2.17	2.16	-0.8	1.85	1.87	1.1	2.06	1.94	-6.0
<b>Total</b>	<b>17.40</b>	<b>17.82</b>	<b>2.4</b>	<b>18.12</b>	<b>18.35</b>	<b>1.3</b>	<b>17.72</b>	<b>17.92</b>	<b>1.1</b>	<b>16.42</b>	<b>18.09</b>	<b>10.2</b>	<b>17.67</b>	<b>18.42</b>	<b>4.2</b>
<b>Japan</b>															
LPG	0.63	0.62	-1.4	0.68	0.71	4.0	0.63	0.64	0.2	0.73	0.68	-7.2	0.72	0.75	3.6
Naphtha	0.52	0.49	-4.8	0.56	0.55	-2.9	0.52	0.50	-3.2	0.55	0.56	1.8	0.54	0.56	3.6
Motor Gasoline	0.80	0.82	2.4	0.88	0.91	3.0	0.82	0.85	2.8	0.72	0.75	5.2	0.79	0.81	2.9
Jet/Kerosene	0.73	0.73	0.1	1.04	1.08	4.2	0.76	0.78	3.4	1.00	1.00	0.2	1.03	1.14	10.8
Gasoil	1.22	1.28	5.3	1.35	1.35	0.2	1.24	1.26	2.1	1.16	1.19	2.7	1.35	1.40	3.6
Residual Fuel Oil	0.93	0.80	-14.3	0.91	0.86	-5.7	0.91	0.80	-12.1	0.92	0.89	-3.1	1.00	0.98	-2.1
Other Products	0.89	0.75	-15.4	0.91	0.75	-16.8	0.89	0.72	-19.5	0.84	0.80	-4.2	0.85	0.91	7.4
<b>Total</b>	<b>5.70</b>	<b>5.48</b>	<b>-3.8</b>	<b>6.32</b>	<b>6.20</b>	<b>-1.9</b>	<b>5.78</b>	<b>5.55</b>	<b>-3.9</b>	<b>5.92</b>	<b>5.89</b>	<b>-0.6</b>	<b>6.28</b>	<b>6.54</b>	<b>4.3</b>
<b>Germany</b>															
LPG	0.10	0.12	20.7	0.10	0.12	20.6	0.10	0.11	16.0	0.11	0.12	10.9	0.10	0.13	28.6
Naphtha	0.21	0.19	-10.8	0.18	0.19	8.1	0.19	0.20	3.4	0.20	0.23	15.7	0.22	0.21	-2.1
Motor Gasoline	0.73	0.74	1.5	0.75	0.78	4.5	0.75	0.75	0.5	0.63	0.58	-8.6	0.70	0.68	-3.8
Jet/Kerosene	0.11	0.11	3.1	0.10	0.11	9.4	0.11	0.12	7.9	0.10	0.11	10.9	0.11	0.11	4.8
Gasoil	1.16	1.43	23.3	1.27	1.48	16.6	1.20	1.38	15.1	1.08	1.04	-4.1	1.35	1.43	6.0
Residual Fuel Oil	0.24	0.21	-11.4	0.22	0.22	0.8	0.22	0.20	-8.3	0.22	0.20	-8.6	0.22	0.22	1.3
Other Products	0.27	0.25	-6.1	0.23	0.23	-0.2	0.25	0.25	0.9	0.20	0.20	3.5	0.21	0.22	3.7
<b>Total</b>	<b>2.83</b>	<b>3.07</b>	<b>8.5</b>	<b>2.85</b>	<b>3.14</b>	<b>10.2</b>	<b>2.81</b>	<b>3.01</b>	<b>7.1</b>	<b>2.54</b>	<b>2.48</b>	<b>-2.2</b>	<b>2.91</b>	<b>3.00</b>	<b>3.2</b>
<b>Italy</b>															
LPG	0.11	0.14	23.7	0.10	0.16	47.8	0.11	0.13	20.9	0.13	0.14	7.6	0.15	0.16	6.5
Naphtha	0.07	0.07	4.0	0.06	0.09	39.3	0.07	0.09	28.5	0.09	0.09	-1.2	0.09	0.08	-11.6
Motor Gasoline	0.39	0.42	6.6	0.39	0.39	0.6	0.39	0.40	2.5	0.33	0.34	4.9	0.37	0.38	1.8
Jet/Kerosene	0.07	0.07	2.5	0.07	0.08	17.1	0.07	0.07	8.2	0.07	0.07	2.8	0.08	0.08	-1.7
Gasoil	0.59	0.64	8.6	0.67	0.71	6.9	0.62	0.64	3.9	0.63	0.50	-19.6	0.57	0.62	8.1
Residual Fuel Oil	0.65	0.61	-6.1	0.63	0.63	0.8	0.59	0.60	0.7	0.47	0.53	12.1	0.60	0.49	-18.3
Other Products	0.17	0.17	-2.5	0.15	0.16	7.5	0.17	0.16	-9.0	0.16	0.14	-13.1	0.12	0.14	18.8
<b>Total</b>	<b>2.05</b>	<b>2.11</b>	<b>3.1</b>	<b>2.07</b>	<b>2.22</b>	<b>7.2</b>	<b>2.01</b>	<b>2.08</b>	<b>3.5</b>	<b>1.87</b>	<b>1.81</b>	<b>-3.2</b>	<b>1.98</b>	<b>1.94</b>	<b>-1.9</b>
<b>France</b>															
LPG	0.13	0.15	13.5	0.14	0.15	7.9	0.14	0.14	4.0	0.14	0.14	1.9	0.14	0.15	4.5
Naphtha	0.21	0.19	-8.5	0.16	0.13	-15.2	0.17	0.14	-16.0	0.21	0.17	-17.4	0.21	0.18	-12.6
Motor Gasoline	0.34	0.34	-2.1	0.37	0.34	-8.6	0.36	0.34	-5.8	0.32	0.31	-4.7	0.34	0.32	-6.0
Jet/Kerosene	0.08	0.09	4.5	0.08	0.09	8.0	0.08	0.08	-1.1	0.09	0.09	2.4	0.08	0.08	-3.0
Gasoil	0.79	0.95	20.7	0.90	0.95	5.1	0.84	0.90	7.5	0.90	0.87	-3.5	1.01	0.95	-6.0
Residual Fuel Oil	0.17	0.19	11.1	0.20	0.20	3.1	0.18	0.19	5.1	0.16	0.17	2.1	0.21	0.17	-18.1
Other Products	0.17	0.17	1.9	0.16	0.16	-0.9	0.17	0.17	-3.4	0.14	0.13	-6.3	0.15	0.14	-1.8
<b>Total</b>	<b>1.90</b>	<b>2.08</b>	<b>9.6</b>	<b>2.01</b>	<b>2.02</b>	<b>0.6</b>	<b>1.95</b>	<b>1.97</b>	<b>1.1</b>	<b>1.96</b>	<b>1.87</b>	<b>-4.2</b>	<b>2.15</b>	<b>2.00</b>	<b>-6.8</b>
<b>United Kingdom</b>															
LPG	0.13	0.17	28.1	0.13	0.14	4.8	0.13	0.15	14.0	0.13	0.15	18.7	0.13	0.17	28.4
Naphtha	0.07	0.08	7.1	0.08	0.09	13.1	0.07	0.08	6.7	0.09	0.08	-9.8	0.07	0.08	13.5
Motor Gasoline	0.55	0.57	3.4	0.56	0.52	-7.7	0.56	0.54	-3.2	0.48	0.47	-1.9	0.54	0.53	-2.6
Jet/Kerosene	0.18	0.22	16.4	0.20	0.21	2.8	0.20	0.22	9.0	0.20	0.21	6.7	0.20	0.23	17.2
Gasoil	0.45	0.50	12.0	0.43	0.41	-4.0	0.44	0.45	2.4	0.41	0.42	0.8	0.46	0.48	4.8
Residual Fuel Oil	0.31	0.29	-8.2	0.29	0.32	11.9	0.29	0.28	-2.4	0.26	0.25	-3.9	0.30	0.26	-12.6
Other Products	0.16	0.17	4.0	0.14	0.14	2.9	0.15	0.16	3.1	0.15	0.15	1.9	0.17	0.15	-10.9
<b>Total</b>	<b>1.85</b>	<b>1.98</b>	<b>6.7</b>	<b>1.84</b>	<b>1.84</b>	<b>0.1</b>	<b>1.84</b>	<b>1.87</b>	<b>1.7</b>	<b>1.72</b>	<b>1.73</b>	<b>0.8</b>	<b>1.87</b>	<b>1.90</b>	<b>1.7</b>
<b>Canada</b>															
LPG	0.23	0.21	-9.5	0.22	0.22	0.6	0.21	0.20	-2.6	0.21	0.20	-4.0	0.19	0.22	16.2
Naphtha	0.07	0.07	-1.2	0.06	0.07	8.4	0.07	0.07	1.1	0.07	0.06	-15.7	0.06	0.06	-4.8
Motor Gasoline	0.56	0.59	6.4	0.58	0.60	3.9	0.57	0.59	3.3	0.49	0.54	8.6	0.55	0.57	2.9
Jet/Kerosene	0.09	0.08	-12.1	0.08	0.08	-6.7	0.09	0.08	-10.5	0.08	0.08	8.7	0.08	0.08	-0.6
Gasoil	0.41	0.44	7.8	0.42	0.44	4.6	0.42	0.44	5.8	0.41	0.49	21.8	0.48	0.54	11.9
Residual Fuel Oil	0.18	0.16	-12.4	0.19	0.16	-17.1	0.17	0.15	-11.8	0.17	0.15	-12.9	0.16	0.15	-7.9
Other Products	0.20	0.19	-7.8	0.17	0.18	4.8	0.20	0.20	-1.1	0.18	0.16	-7.5	0.18	0.17	-3.1
<b>Total</b>	<b>1.75</b>	<b>1.74</b>	<b>-0.2</b>	<b>1.72</b>	<b>1.74</b>	<b>1.1</b>	<b>1.71</b>	<b>1.72</b>	<b>0.4</b>	<b>1.60</b>	<b>1.68</b>	<b>5.2</b>	<b>1.71</b>	<b>1.79</b>	<b>4.8</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.

Percentage changes are calculated before rounding.

US comprises 50 states and territories.

**Table 3**  
**WORLD OIL PRODUCTION**

(million barrels per day)

	1992	1993	1994*	2Q93	3Q93	4Q93	1Q94	JAN94	FEB94	MAR94*	APR94*
<b>OPEC</b>											
Crude Oil											
Saudi Arabia	8.22	7.96	7.91	7.91	7.88	7.88	7.88	7.88	7.88	7.93	
Iran	3.43	3.65	3.60	3.70	3.60	3.63	3.65	3.60	3.64	3.63	
Iraq	0.43	0.48	0.45	0.48	0.54	0.51	0.52	0.51	0.51	0.51	
UAE	2.29	2.20	2.20	2.16	2.17	2.15	2.14	2.15	2.15	2.15	
Kuwait	0.88	1.69	1.52	1.79	1.82	1.80	1.81	1.80	1.80	1.84	
Neutral Zone	0.36	0.36	0.30	0.38	0.39	0.38	0.36	0.36	0.40	0.34	
Qatar	0.40	0.42	0.42	0.43	0.41	0.40	0.40	0.40	0.40	0.41	
Nigeria	1.88	1.91	1.83	1.90	1.98	2.04	2.00	2.06	2.05	1.98	
Libya	1.48	1.37	1.35	1.36	1.37	1.31	1.28	1.30	1.35	1.38	
Algeria	0.75	0.75	0.74	0.74	0.75	0.74	0.74	0.74	0.75	0.75	
Gabon	0.29	0.30	0.30	0.29	0.30	0.29	0.29	0.29	0.29	0.30	
Venezuela	2.33	2.31	2.26	2.28	2.36	2.38	2.35	2.40	2.40	2.40	
Indonesia	1.33	1.34	1.36	1.34	1.32	1.31	1.33	1.30	1.29	1.31	
Total Crude Oil	24.06	24.73	24.23	24.75	24.86	24.82	24.75	24.79	24.91	24.90	
NGLs <sup>1</sup>	2.09	2.21	2.22	2.24	2.21	2.24	2.24	2.24	2.24	2.28	
<b>TOTAL OPEC<sup>3</sup></b>	<b>26.15</b>	<b>26.94</b>	<b>26.45</b>	<b>26.99</b>	<b>27.07</b>	<b>27.06</b>	<b>27.00</b>	<b>27.03</b>	<b>27.15</b>	<b>27.18</b>	
<b>NON-OPEC<sup>2</sup></b>											
<b>OECD</b>											
United States	9.00	8.80	8.61	8.79	8.65	8.79	8.62	8.67	8.57	8.60	8.47
Canada	2.06	2.19	2.15	2.19	2.24	2.23	2.17	2.20	2.21	2.11	1.98
UK	2.00	2.18	2.67	1.92	2.19	2.52	2.61	2.61	2.60	2.64	2.60
Norway	2.22	2.37	2.65	2.29	2.35	2.60	2.65	2.61	2.67	2.67	2.59
Australia	0.60	0.56	0.60	0.60	0.57	0.51	0.59	0.56	0.60	0.60	0.61
Other OECD	0.69	0.68	0.74	0.68	0.67	0.71	0.73	0.72	0.72	0.74	0.74
<b>Total OECD</b>	<b>16.56</b>	<b>16.78</b>	<b>17.42</b>	<b>16.46</b>	<b>16.67</b>	<b>17.35</b>	<b>17.37</b>	<b>17.37</b>	<b>17.37</b>	<b>17.36</b>	<b>16.98</b>
<b>Non-OECD</b>											
Former USSR	8.97	7.83	6.87	8.03	7.65	7.48	7.11	7.45	6.93	6.93	7.02
Russia	7.93	6.86	5.95	7.05	6.68	6.51	6.16	6.50	5.98	5.98	6.09
Others	1.05	0.97	0.93	0.98	0.97	0.97	0.95	0.95	0.95	0.95	0.93
China	2.84	2.91	2.96	2.93	2.89	2.95	2.99	2.96	2.98	3.02	2.94
Europe	0.28	0.28	0.28	0.28	0.29	0.28	0.28	0.28	0.28	0.28	0.28
Latin America	5.67	5.77	6.03	5.76	5.74	5.91	5.93	5.92	5.95	5.93	6.00
Mexico	3.12	3.14	3.21	3.13	3.12	3.21	3.19	3.18	3.19	3.20	3.20
Brazil	0.85	0.88	0.94	0.86	0.88	0.91	0.92	0.91	0.93	0.93	0.93
Colombia	0.45	0.46	0.51	0.47	0.44	0.45	0.47	0.47	0.48	0.46	0.50
Ecuador	0.32	0.34	0.37	0.34	0.34	0.35	0.34	0.34	0.34	0.34	0.37
Others	0.93	0.96	1.01	0.95	0.96	0.99	1.01	1.01	1.01	1.01	1.00
Asia	1.77	1.82	1.86	1.80	1.80	1.84	1.86	1.88	1.85	1.86	1.87
Middle East	1.50	1.63	1.79	1.58	1.63	1.75	1.74	1.74	1.74	1.74	1.78
Africa	2.02	2.05	2.05	2.05	2.02	2.06	2.04	2.04	2.04	2.04	2.04
<b>Total Non-OECD</b>	<b>23.06</b>	<b>22.29</b>	<b>21.85</b>	<b>22.43</b>	<b>22.02</b>	<b>22.28</b>	<b>21.95</b>	<b>22.26</b>	<b>21.78</b>	<b>21.79</b>	<b>21.93</b>
Processing Gains <sup>4</sup>	1.45	1.45	1.45	1.45	1.45	1.45	1.50	1.50	1.50	1.50	1.50
<b>TOTAL NON-OPEC</b>	<b>41.07</b>	<b>40.52</b>	<b>40.72</b>	<b>40.35</b>	<b>40.15</b>	<b>41.07</b>	<b>40.82</b>	<b>41.13</b>	<b>40.65</b>	<b>40.65</b>	<b>40.41</b>
<b>TOTAL SUPPLY</b>	<b>67.23</b>	<b>67.46</b>	<b>66.79</b>	<b>67.13</b>	<b>68.14</b>	<b>67.88</b>	<b>68.13</b>	<b>67.68</b>	<b>67.80</b>	<b>67.59</b>	

Totals may not add due to rounding.

1 Includes condensates reported by OPEC countries and oil from non-conventional sources, e.g. Orimulsion.

2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources.

3 Ecuador is identified separately as a non-OPEC producer country throughout the period covered by this table for the purposes of comparison.

4 Net of volumetric gains and losses in refining (excludes net gain/loss in former USSR, China and non-OECD Europe).

\* estimated

**Table 4**  
**INDUSTRY STOCKS<sup>1</sup> AND QUARTERLY STOCK CHANGES**

	RECENT MONTHLY STOCKS <sup>2</sup> in Million Tons					PRIOR YEARS' STOCKS <sup>2</sup> in Million Tons			STOCK CHANGES <sup>3</sup> in mb/d			
	NOV93	DEC93	JAN94*	FEB94*	MAR94*	MAR91	MAR92	MAR93	Q293	Q393	Q493	Q194
<b>North America</b>												
Crude	39.5	38.6	39.3	38.3	38.7	39.9	39.4	38.8	0.20	-0.26	0.06	-0.04
Gasoline	24.0	24.6	26.1	25.4	23.9	23.6	24.5	24.9	-0.10	-0.15	0.22	-0.21
Middle Distillate	27.3	25.8	22.8	20.7	20.4	21.2	20.2	19.9	0.17	0.27	0.04	-0.20
Heavy Fuel Oil	15.9	14.8	14.0	13.6	13.7	16.7	15.6	14.2	0.11	-0.09	0.02	-0.02
Total Products <sup>4</sup>	85.2	82.2	78.6	75.4	72.4	78.3	77.5	75.9	0.56	0.24	-0.09	-0.57
Total <sup>5</sup>	144.9	138.6	136.7	132.6	129.9	136.0	135.2	134.8	0.86	0.09	-0.42	-0.62
<b>OECD Europe</b>												
Crude	40.3	40.6	41.0	39.5	39.6	38.4	37.6	41.1	-0.06	-0.07	0.12	-0.11
Gasoline	16.1	16.6	18.0	18.2	17.5	17.2	17.2	16.6	-0.11	0.01	0.08	-0.05
Middle Distillate	32.2	32.2	34.6	31.9	30.9	31.7	31.7	29.6	0.16	0.23	-0.18	-0.31
Heavy Fuel Oil	24.5	23.7	23.7	22.8	22.5	26.4	22.3	23.3	0.06	0.08	-0.12	-0.09
Total Products <sup>4</sup>	83.0	82.6	86.5	82.7	80.7	85.5	81.4	79.5	0.10	0.38	-0.24	-0.48
Total <sup>5</sup>	130.8	130.6	135.0	129.8	127.7	131.8	126.4	128.4	0.05	0.26	-0.12	-0.60
<b>OECD Pacific</b>												
Crude	22.4	21.1	20.2	20.5	20.9	27.7	24.4	21.2	0.08	0.08	-0.17	0.06
Gasoline	2.9	2.7	2.9	2.9	2.9	2.9	2.9	3.0	0.00	0.01	-0.03	0.00
Middle Distillate	10.5	9.0	8.5	7.4	6.6	7.1	6.7	6.6	0.13	0.21	-0.13	-0.17
Heavy Fuel Oil	2.8	2.6	2.5	2.3	2.3	2.8	2.7	2.4	0.00	0.04	-0.03	-0.02
Total Products <sup>4</sup>	21.9	19.9	19.4	18.1	17.1	19.0	17.8	17.8	0.08	0.32	-0.23	-0.19
Total <sup>5</sup>	56.5	52.5	51.7	50.6	49.3	56.7	52.1	50.5	0.10	0.52	-0.47	-0.20
<b>OECD</b>												
Crude	102.2	100.3	100.5	98.2	99.2	105.9	101.4	101.1	0.22	-0.26	0.01	-0.10
Gasoline	43.0	43.9	47.0	46.5	44.2	43.6	44.7	44.5	-0.21	-0.13	0.28	-0.27
Middle Distillate	70.1	67.1	65.9	60.0	57.9	59.9	58.6	56.2	0.46	0.71	-0.28	-0.68
Heavy Fuel Oil	43.2	41.2	40.2	38.7	38.5	45.9	40.6	39.9	0.17	0.04	-0.12	-0.12
Total Products <sup>4</sup>	190.1	184.7	184.5	176.2	170.2	182.8	176.6	173.1	0.75	0.94	-0.55	-1.25
Total <sup>5</sup>	332.2	321.7	323.4	313.0	307.0	324.4	313.7	313.8	1.02	0.86	-1.01	-1.42

**GOVERNMENT-CONTROLLED STOCKS<sup>6</sup> AND QUARTERLY STOCK CHANGES**

	RECENT MONTHLY STOCKS <sup>2</sup> in Million Tons					PRIOR YEARS' STOCKS <sup>2</sup> in Million Tons			STOCK CHANGES <sup>3</sup> in mb/d			
	NOV93	DEC93	JAN94*	FEB94*	MAR94*	MAR91	MAR92	MAR93	Q293	Q393	Q493	Q194
<b>North America</b>												
Crude	79.3	79.3	79.4	79.4	79.6	76.8	76.8	78.1	0.06	0.03	0.02	0.02
<b>OECD Europe</b>												
Crude	17.7	17.7	17.7	17.7	17.7	16.6	17.6	17.7	0.00	0.00	-0.01	0.00
Products	16.0	16.0	15.9	15.8	15.8	14.6	15.3	16.3	-0.01	-0.01	-0.01	-0.01
<b>OECD Pacific</b>												
Crude	34.4	34.9	35.3	35.9	35.9	28.2	30.8	33.4	0.00	0.01	0.11	0.05
<b>OECD</b>												
Crude	131.4	131.9	132.4	133.0	133.3	121.7	125.2	129.1	0.06	0.04	0.11	0.07
Products	16.0	16.0	15.9	15.8	15.8	14.6	15.3	16.3	-0.01	-0.01	0.00	-0.01
Total <sup>5</sup>	147.3	147.9	148.3	148.8	149.1	136.3	140.5	145.4	0.05	0.03	0.10	0.06

\* Estimated

1 Stocks are on land primary stocks excluding unreported entrepot stocks.

2 Closing Stock levels.

3 Conversion factors are country specific and vary over time.

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

5 Total includes crude, products, NGL and feedstocks.

6 Includes government-owned stocks and entity stocks held for emergency purposes.

**Table 5**  
**STOCKS ON LAND IN OECD COUNTRIES**

(millions of metric tons<sup>1</sup> and 'days')

	End March 1993		End June 1993		End September 1993		End December 1993 <sup>2</sup>		End March 1994 <sup>1,2</sup>	
	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
Canada	14.4	71	14.5	67	14.6	68	13.8	-	-	-
United States	198.4	95	207.0	95	206.2	95	204.1	-	-	-
NORTH AMERICA	212.8	93	221.5	93	220.8	92	217.9	90	209.6	90
Australia	4.6	49	4.7	51	5.0	52	4.7	-	-	-
Japan	78.2	122	79.5	130	85.4	121	81.6	-	-	-
New Zealand	1.1	70	1.1	77	1.2	73	1.0	-	-	-
PACIFIC	83.9	111	85.3	119	91.6	112	87.3	98	85.3	114
Austria	2.9	97	2.9	94	2.9	90	2.9	-	-	-
Belgium	4.9	77	5.1	78	5.5	75	5.2	-	-	-
Denmark	3.5	138	3.2	124	3.5	120	3.5	-	-	-
Finland	3.1	118	2.9	95	2.7	86	2.8	-	-	-
France	18.2	76	18.3	80	19.6	77	18.7	-	-	-
Germany	43.6	120	43.8	113	44.1	114	43.4	-	-	-
Greece	4.8	122	4.7	112	4.5	86	4.8	-	-	-
Ireland	1.2	99	1.2	93	1.2	89	1.3	-	-	-
Italy	21.2	91	21.6	89	21.2	77	21.5	-	-	-
Luxembourg	0.4	73	0.4	78	0.4	72	0.4	-	-	-
Netherlands	9.3	96	10.2	100	10.8	109	9.9	-	-	-
Norway	4.7	184	3.8	144	4.9	206	5.7	-	-	-
Portugal	3.1	87	3.1	89	3.2	99	3.0	-	-	-
Spain	9.9	79	9.7	77	10.7	79	9.6	-	-	-
Sweden	4.9	128	5.5	138	5.4	113	5.2	-	-	-
Switzerland	5.2	156	4.8	133	4.7	129	4.3	-	-	-
Turkey	3.5	52	3.7	44	3.3	42	4.0	-	-	-
United Kingdom	18.2	83	18.3	80	17.7	75	18.1	-	-	-
EUROPE <sup>3</sup>	162.4	97	163.3	93	166.3	90	164.3	92	161.2	94
OECD <sup>4</sup>	459.2	97	470.1	97	478.7	95	469.7	92	456.0	95
DAYS OF IEA NET IMPORTS <sup>5</sup>	-	139	-	143	-	146	-	143	-	-

1 End March 1994 stock level based on preliminary data.

2 End December 1993 and end March 1994 forward demand figures are IEA Secretariat forecasts.

3 Data not available for Iceland.

4 May not add due to rounding.

5 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions. Net exporting IEA countries are excluded.

**Table 6**  
**STOCKS ON LAND IN OECD COUNTRIES**

CLOSING STOCKS	Millions of Metric Tons			Days of Forward Demand <sup>3</sup>		
	Total <sup>1</sup>	Government <sup>2</sup> controlled	Companies	Total <sup>1</sup>	Government <sup>2</sup> controlled	Companies
Q185	415	106	309	100	25	74
Q285	422	108	314	98	25	73
Q385	420	115	304	93	25	67
Q485	429	118	311	93	25	67
Q186	416	113	303	94	25	68
Q286	428	114	315	96	25	71
Q386	454	115	338	98	25	73
Q486	444	118	326	94	25	69
Q187	429	119	310	97	27	70
Q287	432	120	312	95	26	68
Q387	453	122	331	96	26	70
Q487	457	126	331	95	26	68
Q188	440	129	311	98	29	69
Q288	454	129	325	98	28	70
Q388	462	129	332	92	26	66
Q488	451	132	319	92	27	65
Q189	445	134	311	97	29	67
Q289	453	134	319	97	29	68
Q389	466	136	331	93	27	66
Q489	456	136	319	93	28	65
Q190	466	138	328	99	29	70
Q290	477	139	338	98	29	69
Q390	478	139	339	100	29	71
Q490	469	138	330	96	28	68
Q191	461	136	324	98	29	69
Q291	464	136	327	98	29	69
Q391	477	137	340	96	28	69
Q491	467	139	328	94	28	66
Q192	454	141	314	96	30	67
Q292	460	141	319	95	29	66
Q392	466	141	325	93	28	65
Q492	464	144	320	93	29	64
Q193	459	145	314	97	31	66
Q293	470	146	324	97	30	67
Q393	479	146	332	95	29	66
Q493	470	148	322	92	29	63
Q194	456	149	307	95	31	64

1 May not add due to rounding.

2 Includes government-owned stocks and entity stocks held for emergency purposes.

3 Days of forward demand calculated using actual demand except in 1994 (when latest forecast is used).

**Table 7**  
**AVERAGE IEA CIF CRUDE COST AND SPOT CRUDE AND PRODUCT PRICES**  
**(\$/bbl)**

	1991	1992	1993	1Q93	2Q93	3Q93	4Q93	1Q94	Nov93	Dec93	Jan94	Feb94	Mar94	Apr94
<b>Crude Oil Prices</b>														
IEA CIF Average Import	19.30	18.49	16.38	17.41	17.53	15.86	14.80	13.54*	15.08	13.66	13.56	13.85	13.20*	14.00*
FOB Spot														
Brent (Dated)	19.99	19.30	17.00	18.21	18.23	16.49	15.08	13.97	15.17	13.56	14.27	13.73	13.90	15.20
WTI (1st month)	21.53	20.54	18.44	19.81	19.76	17.78	16.42	14.84	16.66	14.49	15.04	14.79	14.68	16.45
Dubai (1st month)	16.53	17.18	14.93	15.85	15.93	14.37	13.56	12.74	13.75	12.18	13.28	12.80	12.14	13.95
<b>Product Prices 1</b>														
Rotterdam														
Premium 0.15 g/l	28.37	25.31	22.45	23.12	24.42	22.59	19.67	17.52	20.07	17.19	17.30	17.75	17.50	19.79
Regular Unleaded	26.57	23.75	20.70	21.72	22.82	20.33	17.91	16.42	18.25	15.62	15.96	16.54	16.77	18.58
Naphtha	23.71	20.93	18.47	19.76	20.14	17.66	16.33	15.00	16.68	14.59	14.57	15.40	15.01	15.92
Jet/Kerosene	28.07	24.90	23.37	24.24	23.72	22.41	23.10	20.33	23.63	21.27	20.83	20.35	19.81	20.77
Gasoil	26.96	23.76	22.28	22.90	23.26	21.54	21.39	18.99	21.95	19.47	19.23	18.97	18.76	20.05
Fuel Oil 1.0%S	14.22	14.26	13.50	14.58	14.67	13.13	11.62	12.62	11.46	10.48	11.86	13.32	12.66	12.10
Fuel Oil 3.5%S	12.27	12.90	10.22	11.27	10.95	9.35	9.30	11.28	9.69	8.38	9.51	12.21	12.12	11.56
Gross Product Worth 2	24.63	22.11	20.27	21.03	21.46	19.81	18.76	17.04	19.14	16.87	16.98	17.22	16.92	18.12
NY Harbour														
Super Unleaded 93	29.79	26.86	23.69	23.74	26.04	24.42	20.56	20.85	20.44	17.84	20.75	20.97	20.82	22.40
Regular Unleaded 87	27.54	24.57	21.58	22.33	23.91	21.53	18.55	18.20	18.66	15.86	17.74	18.38	18.48	19.97
Jet/Kerosene	26.65	24.88	23.33	24.34	23.91	22.34	22.72	23.57	23.54	19.83	24.60	25.56	20.56	21.09
No.2 (Heating Oil)	25.56	24.00	22.04	23.41	22.74	21.33	20.65	21.41	21.11	18.23	20.94	23.00	20.30	20.03
Fuel Oil 1.0%S	15.02	15.31	14.63	15.26	15.87	14.28	13.11	15.45	12.75	11.84	15.28	17.57	13.51	13.02
Fuel Oil 3.5%S	11.42	12.34	11.21	11.91	12.17	10.93	9.83	10.73	9.83	9.09	10.70	11.30	10.19	10.17
Gross Product Worth 3	23.91	22.30	20.16	20.79	22.26	19.83	17.76	17.91	17.93	15.39	17.70	18.13	17.88	18.94
Singapore														
Regular 0.15 g/l	28.63	26.56	24.01	24.66	26.59	23.28	21.51	19.31	22.11	19.03	18.80	20.01	19.11	22.14
Naphtha	22.84	20.24	17.22	18.45	19.24	16.38	14.80	13.48	15.16	13.36	13.38	13.72	13.34	14.78
Jet/Kerosene	28.29	25.39	24.42	25.55	25.29	22.77	24.07	21.56	24.74	22.39	22.49	21.45	20.73	21.60
Gasoil	28.20	25.12	24.02	24.97	25.27	22.91	22.92	20.45	23.42	21.09	21.17	20.59	19.59	21.07
LSWR (0.3%S)	15.16	14.72	14.90	16.17	19.16	13.53	10.74	11.00	10.79	8.54	10.68	11.55	10.77	11.74
HSFO (3.5%S 180cst)	14.10	13.44	11.83	12.69	13.23	11.37	10.04	10.56	9.58	9.07	10.94	10.67	10.08	12.25
Gross Product Worth 4	20.06	18.45	17.17	18.24	18.94	16.16	15.32	14.42	15.47	13.84	14.75	14.58	13.93	15.78

\* = Estimated.

1 Product prices 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% LSFO and 6.31 bbl/MT for 3.5% HSFO.

Singapore: 6.46 bbl/MT for 3.5% HSFO.

2 Calculated using Brent cracking yield of a refinery in North West Europe.

3 Calculated using Brent cracking yield of a refinery in US Gulf Coast.

4 Calculated using Dubai hydroskimming yield of a refinery in Singapore.

**Table 8**  
**END USER PRICES FOR PETROLEUM PRODUCTS<sup>1</sup>**  
**April 1994**

	National Currency						US Dollars					
	Price	Tax	%ch Price	Prev.Month Excl.Tax	%ch Price	Year Ago Excl.Tax	Price	Excl.Tax	%ch Price	Prev.Month Excl.Tax	%ch Price	Year Ago Excl.Tax
<b>GASOLINE<sup>2</sup> Price per Litre</b>												
France	5.590	4.537	0.4	1.5	5.9	-10.5	0.955	0.180	-1.1	-0.0	-2.5	-17.4
Germany	1.512	1.177	2.2	9.1	10.6	-9.2	0.884	0.196	1.0	7.7	3.2	-15.5
Italy	1677.0	1286.8	0.4	1.5	5.5	-7.4	1.025	0.239	2.4	3.9	-1.1	-13.1
Spain	106.9	74.4	-0.2	-0.7	6.2	1.2	0.771	0.234	-0.1	-0.8	-11.5	-15.5
UK	0.564	0.415	1.6	5.7	2.8	-7.5	0.831	0.220	0.4	4.8	-2.0	-11.6
Japan	119	57	0.0	0.0	-4.0	-6.1	1.146	0.597	1.2	1.2	3.9	1.7
Canada	0.506	0.261	1.5	2.1	-4.8	-9.3	0.366	0.177	0.3	0.6	-13.1	-17.3
USA <sup>3</sup>	0.279	0.100	1.1	1.7	-5.1	-13.6	0.279	0.179	1.1	1.7	-5.1	-13.5
<b>AUTOMOTIVE DIESEL<sup>4</sup> Price per Litre</b>												
France	3.282	2.122	0.3	0.9	9.5	-7.9	0.561	0.199	-1.2	-0.5	1.1	-14.6
Germany	1.006	0.620	3.3	9.0	6.9	-2.8	0.588	0.226	2.1	7.6	-0.3	-9.2
Italy	1030.25	676.04	0.1	0.2	2.3	-7.1	0.630	0.217	2.1	2.4	-4.0	-12.5
Spain	69.31	40.30	-3.3	-7.5	1.3	-6.8	0.500	0.209	-3.1	-7.5	-15.5	-22.3
UK	0.439	0.277	2.1	5.9	4.4	-4.1	0.646	0.238	0.8	4.4	-0.6	-8.8
Japan	79	34	0.0	0.0	5.3	-8.4	0.761	0.433	1.2	1.2	14.1	-0.7
Canada	0.509	0.212	-0.2	0.0	-2.1	-2.0	0.368	0.215	-1.6	-1.4	-10.7	-10.4
USA	..	..	..	..	..	..	..	..	..	..	..	..
<b>DOMESTIC HEATING OIL Price per 1000 Litres</b>												
France	2056.6	809.4	-0.1	-0.1	-1.9	-6.3	351.3	213.0	-1.6	-1.6	-9.6	-13.7
Germany	453.3	139.1	8.2	10.5	-2.7	-3.4	265.0	183.6	7.0	9.3	-9.3	-9.9
Italy	1223000	871310	-1.3	-3.7	3.5	-4.3	747.5	214.9	0.6	-1.8	-3.0	-10.3
Spain	43312	17449	-2.4	-3.4	-7.7	-13.2	312.4	186.5	-2.2	-3.3	-23.1	-27.7
UK	135.94	26.47	9.0	1.1	-6.5	-16.1	200.1	161.1	7.6	-0.2	-10.9	-20.1
Japan <sup>5</sup>	49440	1440	0.0	0.0	-2.2	-2.2	476.3	462.4	1.2	1.2	5.9	5.9
Canada	377.0	33.0	-2.3	-2.0	-2.3	-2.0	272.4	248.5	-3.7	-3.3	-10.9	-10.6
USA <sup>6</sup>	255.2	..	-1.2	..	-1.1	..	255.2	..	-1.2	..	-1.1	..
<b>HFO FOR INDUSTRY<sup>4,7</sup> Price per Metric Ton</b>												
France	616.8	151.8	-8.9	-11.4	-4.5	-7.9	105.4	79.4	-10.3	-12.8	-11.9	-15.1
Germany	182.0	30.0	-9.9	-11.6	-12.5	-14.6	106.4	88.8	-10.9	-12.6	-18.4	-20.3
Italy	250460	45000	-2.1	-2.6	0.4	0.4	153.1	125.6	-0.2	-0.7	-5.9	-5.8
Spain	16737	2003	-9.9	-11.1	8.6	8.2	120.7	106.3	-9.8	-11.0	-9.5	-9.8
UK	72.90	11.67	-2.3	-2.7	-1.8	-3.8	107.3	90.1	-3.5	-3.9	-6.5	-8.4
Japan	18648	543	-10.4	-10.4	-27.4	-27.4	179.6	174.4	-9.3	-9.3	-21.4	-21.4
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 March data.

7 High sulphur fuel oil price for France, Spain, UK and Japan; low sulphur fuel oil price for Germany and Italy.

## **Sources and Use of Data**

### **Supply, Demand, Stock and Refinery Activity Data**

The historical data in this report are submitted in the monthly oil and gas statistics questionnaire returned by 24 OECD countries consisting of the 23 Member countries of the International Energy Agency (IEA) and Iceland. Mexico continues to be included with the non-OECD countries (in Latin America) pending submission of detailed historical data needed to incorporate Mexico into the OECD. The returns are made during the seven to eight week period following the month to which the figures relate and cover supply, demand and stock data for crude oil and individual oil products. The data are revised as necessary, and notably when more definitive annual data become available.

In addition, the governments of the IEA Member countries submit each month preliminary data to the IEA Secretariat for the three months centred on the month of submission. These figures cover crude oil production, crude oil and product imports, stocks and net supply of oil. The reports are less detailed and are based on data received by Member governments from oil companies.

The statistical material received by the Secretariat is supplemented by a variety of other sources, including industry contacts and the trade press. In addition, the Secretariat projects the world oil demand and non-OPEC supply for the time period shown in Table 1.

### **Price Data**

Monthly average CIF crude import prices are submitted every month by IEA Member countries. Data are averaged for the total IEA Member countries using the quantity of crude imports for individual countries by weight. The spot crude and product price assessments are based on daily Platt's prices, converted where appropriate to US Dollars per barrel according to the Platt's specification of products (© 1994 Platt's, a division of McGraw-Hill Inc.). Graphs in the text are of daily price data, while tables in the text and Table 7 show arithmetic averages by weeks, months, quarters and years. Gross product worth and refining margins are derived from spot crude and product prices, using the Secretariat's own estimates of refinery yields, freight and other costs. End-user prices are mid-month prices submitted monthly by OECD countries. The prices are net of any rebates and usually include transportation costs to the consumer. They include all taxes to be paid by the consumer which are not refundable.

### **Use of Data**

The data used in the report are taken from sources considered by the Secretariat to be reliable, but are inevitably of variable quality. They should therefore always be used with caution, and as indicative of *broad trends* rather than as a numerically accurate description of the world oil markets at any particular moment. In particular:

#### **Data up to the end of last month**

##### **OECD country data**

The most recent month of official statistics available from national administrations is generally the latest shown in Tables 2 and 2A. Figures beyond that period are based on the preliminary data and estimates submitted by the Member countries and are provisional and subject to revision.

##### **Other demand and supply data**

Data for non-OECD oil supply and demand are not formally reported in questionnaire format but are based on published reports by some of the respective governments and other international organisations and contain some estimates by the Secretariat. There is consequently a greater margin for error, even for past periods. Demand figures for the former USSR and China are for "apparent demand"; that is production less net oil exports. As such, they include changes in stocks, losses and volumetric gains in the refinery process.

##### **Stocks and stock changes**

Figures for stocks on land in IEA/OECD countries, including government-controlled stocks, are based primarily on reports from Member governments. Both preliminary and historical data are, however, subject to revision.

#### **Forward projections**

Forward projections of demand and non-OPEC supply are given as a guide to the overall state of the oil market. By definition they are subject to any changes in the assumptions on which they are based.