# **OPEC**

#### Organization of the Petroleum Exporting Countries



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## **OPEC Basket average price**

US \$ per barrel

Down 1.76 in March

March 200329.78February 200331.54Year-to-date30.55

#### **March OPEC production**

million barrels per day, according to secondary sources

Algeria	1.09	Kuwait	2.28	Saudi Arabia	9.29
Indonesia	1.04	SP Libyan AJ	1.41	UAE	2.28
IR Iran	3.71	Nigeria	1.90	Venezuela	2.31
Iraq	1.43	Qatar	0.75		

### Supply and demand

million barrels per day

200	Z
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World demand	76.54
Non-OPEC supply	51.63
Difference	24.91

#### 2003

World demand	77.35
Non-OPEC supply	52.66
Difference	24.69
NR Non-OPEC supply inc	ludes OPEC

<u>NB</u> Non-OPEC supply includes OPEC NGLs and non-conventional oils

#### **Stocks**

Slight stock-draw in USA in March

#### **World economy**

World GDP growth revised down to 3.0% for 2003

# Monthly Oil Market Report

# April 2003

Next report to be issued on 19 May 2003

FEATURE ARTICLE: Accommodating supply disruptions (p. i)

Statement by HE Abdullah bin Hamad Al Attiyah

(p. ii)

# Inside

Highlights of the world economy p1
Crude oil price movements p4
Product markets and refinery operations p6
The oil futures market p9
The tanker market p10
World oil demand p12
World oil supply p17
Rig count p19
Stock movements p20
Balance of supply and demand p22

**April 2003** 

#### OIL MARKET HIGHLIGHTS

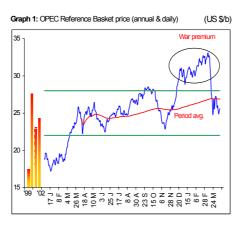
World GDP is forecast to grow by 3.0% in 2003, 0.15% lower than last month's estimate. A drop of around 0.15% in the OECD is mainly attributable to a downward revision in US growth of 0.2% to 2.2%, and in the EU by 0.27% to 1.3% (Euro-zone growth 1.1%), while for Japan, growth was revised up to 0.8%. The Developing Countries' estimate was 0.25% lower, largely due to a 0.38% downward revision in Asia (0.22% in Asia Pacific) and to reduced expectations of growth in India (5.1% from the 5.8% forecast last month). The revisions partly take into account possible losses due to SARS in the Asia Pacific region. In Latin America, the growth forecast was almost the same, in Africa it was 0.1% lower.

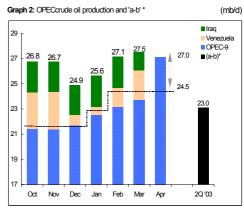
- Recent data for the USA was mixed. Both manufacturing and services contracted in March, but retail sales picked up, largely due to stronger car sales, while consumer sentiment, which had fallen to nine year lows in March, appears to be recovering. The unemployment rate remained unchanged at 5.8% as the economy continued to shed jobs in both manufacturing and services.
- In Japan, economic activity remains flat as a whole, despite some signs of improvement. Retail sales rose in March and the "Tankan" business sentiment report for March indicated that businesses plan to increase spending in the new fiscal year. However, industrial production and core machinery orders fell in February. Exports to the USA decelerated, and a SARS-related reduction in exports to Asia may follow. In the Euro-zone, the European Union lowered its forecast for Euro-zone growth to 1% this year. Germany is expected to achieve only half that average figure.
- OPEC's Reference Basket of seven crudes descended from the 20-year record level reached in February of this year, losing \$1.76/b or 5.6% to average \$29.78/b, to achieve yet another 20-year record-high for March. Thus, it is not surprising that the cumulative year-to-date average for the first quarter of 2003 stood at a record level above the \$30/b mark, and almost 55% higher when compared with the previous year's first quarter. However, in the week ending 10 April, the OPEC Reference Basket fell to \$25.32/b, mainly due to the diminished geopolitical/war premium, which had affected the price before the war in Iraq.
- Product price trends in March were largely shaped by developments in crude oil markets. product prices enjoyed rises during the first half of the month, supported mainly by crude oil price gains, colder weather lingering in the US North-East region and Asian precautionary product stockpiling. These product price gains, however, were erased in the second half of March, as crude oil prices fell sharply and were exacerbated further by milder weather. Consequently, product price losses were steeper than those of their crude oil counterparts, thereby causing refining margins to decline, but nonetheless they remained well in positive territory.
- OPEC area spot-chartering showed a further increase on the back of higher crude oil production, particularly from OPEC Middle Eastern producers in order to meet increasing demand, especially from the USA and to compensate the loss of Venezuelan barrels. Consequently, spot-chartering rose by 1.03 mb/d to 13.67 mb/d in March. The tanker market for crude oil cargoes was extremely affected by geopolitical factors rather than fundamentals in March.
- The 2002 estimate of world oil demand has been revised down marginally. The outbreak of the war in Iraq and of the SARS epidemic are undermining aviation fuel consumption at a higher rate than that of the increase in fuel consumption by the military. The 2003 world oil demand increment has therefore been revised down by 0.04 mb/d to 0.81 mb/d and is projected at 77.35 mb/d.
- Based on secondary sources, OPEC crude oil production was estimated at 27.49 mb/d in March. Non-OPEC oil supply for 2002 was estimated at 47.99 mb/d, 1.50 mb/d higher than the estimated 2001 figure of 46.48 mb/d. 2003 non-OPEC supply is expected to reach a level of 49.04 mb/d, which was revised downwards by 0.12 mb/d and resulted in an increase of 1.05 mb/d over the 2002 estimate.
- In March 2003, US commercial oil stocks displayed a further draw of 2.7 mb to 892.3 mb. However, crude oil stocks registered a considerable build of 7.1 mb. Total oil stocks in the Eur-16 continued the upward trend as they rose by 4.2 mb to 1057.8 mb. This build is due mainly to the increase in crude oil stocks by almost the same amount. Japanese commercial oil stocks showed a decline of 1.3 mb to 164.2 mb in February 2003 due to the draw on distillate stocks, while crude oil stocks registered a moderate build.
- The current supply/demand outlook has resulted in a projection of 75.62 mb/d for world demand in the second quarter of 2003, and total non-OPEC supply plus OPEC NGL is estimated at 52.63 mb/d. This has led to an expected difference of 22.99 mb/d. If the current OPEC production level is maintained, this situation would imply a huge stock build and could exert strong downward pressure on prices.



#### ACCOMMODATING SUPPLY DISRUPTIONS

- Crude oil prices retreated sharply in March in advance of the US-led war in Iraq, and WTI lost more than \$10/b by 21 March, within a span of seven days. The large geopolitical/war premium, which has affected the oil price for months leading up to the war, practically disappeared, and the OPEC Reference Basket is now oscillating at around \$25/b, the mid range of the OPEC price band (see Graph 1). While the average OPEC Reference Basket in March 2003, before the outbreak of war, was above the OPEC price band, the twelve-month average at the end of March 2003 remained within the price band.
- Although the justification of perceptions on the futures market obviously played a
  role, the fundamentals of increasing oil supply and the abundance of crude oil
  availability in the physical market were important factors in the softening of prices.
- The co-ordinated efforts of producers and consumers, and reassurances from OPEC regarding its commitment of continued supply, are visible in the market with increased production, significant volumes of oil in transit, and large stocks on hold, that are ready to be used. OPEC's crude oil production, based on secondary sources, already surpassed 27 mb/d in February and registered 27.5 mb/d in March, corresponding to an oil output increase of 2.6 mb/d within two months. The speedy production recovery in Venezuela, together with currently high production levels in other OPEC Member Countries, is expected to accommodate the present supply disruption from Iraq, despite temporary partial production outages observed recently in Nigeria (see Graph 2).





 $^{\star}$  (a-b) is the difference between world oil demand and Non-OPEC supply

- Regarding the short- to medium-term outlook, attention towards uncertainties is now directed towards the global economy, and it appears that fundamentals are again to become increasingly an underlying factor in the direction of the market in the coming months. Crude oil inventories in the OECD region in the first quarter are still considered to be abnormally low, relative to the average of the last five years, and the US gasoline market, in particular, could put some upward pressure on prices. On the other hand, OPEC's current production, if sustained for the entire second quarter, could be much higher then the levels indicated in the global oil balance—the so called 'a-b'— (see Graph 2).
- The market, which is still in backwardation, may soon change as oil-on-water is expected to appear increasingly in the commercial on-land oil stocks. If, then, 'softening' prices follow a sliding trend, it might be a sign of over-production. This is currently the subject of careful attention on the part of OPEC, and producers in general, to ensure continuing stability in the market, both in terms of adequate supply and reasonable prices.

April 2003

#### Statement

#### by

#### HE Abdullah bin Hamad Al Attiyah\*

Immediately following the commencement of hostilities in Iraq, HE Abdullah bin Hamad Al-Attiyah issued the following statement.

"We recall that, at the 124th Meeting of the OPEC Conference, it was decided that Member Countries are to respond to any supply crisis.

In light of the events unfolding in Iraq and the interruption of supplies from an OPEC Founder Member, in my capacity as President of the Conference, I have consulted with Their Excellencies, the Heads of Delegation to the OPEC Conference, with whom I have discussed the implementation of the above-mentioned Conference decision.

As a result of those consultations, I am herewith reiterating OPEC's resolve to make up for any supply shortfall resulting from developing events.

To this end, Member Countries have pledged to use, in the interim, their available excess capacities to ensure continued supply.

In taking such measures, OPEC is, once again, acting in conformity with an objective set forth in its Statute since the establishment of the Organization in 1960, namely to secure an efficient, economic and regular supply of petroleum to consuming countries.

While OPEC will continue to closely monitor and react to market developments, it is hoped that the measures taken will contribute to market stability and support world economic recovery."

\* \* \*

<sup>\*</sup>President of the Conference and Minister of Energy and Industry, Qatar





#### HIGHLIGHTS OF THE WORLD ECONOMY

#### **Economic growth rates 2003**

%

 World
 G-7
 USA
 Japan
 Euro-zone

 3.0
 1.6
 2.2
 0.8
 1.1

#### Industrialised countries

United States of America

Both manufacturing and services fell in the USA in March, but retail sales picked up and consumer sentiment appears to be on the mend

Despite recently improved consumer sentiment and a pick-up in retail sales in March, the sluggishness seen in the first three months of the year may extend into the second quarter. Both manufacturing and services activity contracted in March. Moreover, the economy still suffers from excess production capacity, and high levels of consumer debt. Industrial production plummeted by 0.5% in March after a drop of 0.1% in February. Capacity utilization in manufacturing fell to 74.8% from 75.6% in February. The Institute of Supply Management's (ISM's) index of manufacturing activity contracted for the first time in five months to 46.2, from 50.5 in February. In addition, the services sector, which had faired better than manufacturing, also slumped in March, with the ISM's index of nonmanufacturing activity dipping to 47.9 from 53.9 in February. Both figures reflect the cautiousness of consumers and businesses amidst growing geopolitical uncertainty. In the same vein, orders for manufactured goods fell sharply in February by 1.5% to \$321.16 bn following a revised 1.7% increase in January. Orders for durable goods, such as cars and appliances shrank by 1.6%. At the same time, the labour market continued to show signs of stagnancy. The US economy lost 108,000 jobs in March following an upwardly revised loss of 357,000 in February. The services sector shed 94,000 jobs, while manufacturing lost 36,000 jobs. The unemployment rate remained unchanged at 5.8%. Moreover, new home sales unexpectedly fell in February to the slowest pace in two-and-a-half years, however, it is expected to contribute positively to the economy this year, as is government spending, particularly the big increase in defence and homeland security spending. On the positive side, one notes the unexpected rebound in retail sales in March by 2.1% to \$311.5 bn following a revised drop of 1.3% in February. Excluding cars (around 22% of total sales), sales rose 1.1% after falling a revised 0.6% in the previous month, indicating that much of the gain in March was due to a rebound in car sales of 5.6% following a drop of 4.2% in February. Moreover, consumer sentiment, which had been falling for several months, appears to be recovering. The closely watched University of Michigan's consumer sentiment index rose to 83.2 from 77.6 in March.

Japar

The Japanese economy remains weak, despite some signs of sporadic improvement

The Bank of Japan left its monthly evaluation of the economy unchanged for a fifth month, stating that economic activity remains flat, despite some signs of improvement, with greater uncertainty due to Iraq-related developments. Moreover, although Japan has not reported any cases of SARS, the spread of the epidemic is having some economic impact in other parts of Asia. Since exports to Asia have underpinned overall exports, there is reason for concern for Japanese exports, as exports to the USA have sharply decelerated. government is forecasting GDP growth to slow to 0.6% in the fiscal year starting 1 April, from the 0.9% in the previous year, with unemployment seen to average a high 5.6%. Industrial output fell a seasonally-adjusted (sa) 1.7% on the month in February, but inventories sank to their lowest level since November 1988, partly due to an increase in offshore production and assembly. Moreover, core machinery orders, an early indicator of business investment, fell by 9.6% in February as companies curbed spending in anticipation of a war in Iraq. The Bank of Japan's quarterly "Tankan" index of sentiment at large manufacturers fell 1 point to minus 10 in March. Large companies appeared more optimistic about the business year starting 1 April, when they plan to increase spending by 2.9%, following a cut of 12.9% in the previous year, which, if realised, will be the first gain in three years. This optimism may reflect the reported rise in profits by companies surveyed by the Finance Ministry in February in which profit was reported to have risen by 14.2% in the fourth quarter of 2002. In contrast, consumer sentiment plummeted and unemployment fell unexpectedly to 5.2% in February. On the positive side, one also notes the rise in retail sales of 1.9% in March, although spending by salaried workers fell a sa 1.1% in February from January, and 1.6% from a year ago, a reflection of falling incomes.

The European Union lowers its forecast for euro-zone growth to 1% this year and 2.3% next year. Germany is expected to achieve only half that average figure, with anticipated growth of 0.5% this year

Federal budget revenue in Russia exceeds target in the first quarter due to higher oil prices and the revival of economic activity

**Industrial production** rises in Poland and the **Czech Republic** 

#### Euro-zone

The European Union cut its forecast for euro-zone growth to 1% in 2003 from 1.8%, and to 2.3% from 2.6% in 2004, predicted last November. Nevertheless, the European Commission remains committed to the Stability and Growth Pact's tight budget rules. For the euro-zone as a whole, the budget deficit is predicted to rise to 2.5% in 2003, with Portugal's deficit reaching 3.5%, Germany's 3.4% and France's 3.7%. The worsening economic situation has led to some general expectation, as well as an urging from the IMF that the European Central Bank (ECB) ease interest rates further after the 25 basis points cut in early March. However, the ECB appears in no hurry to do so. EU inflation is estimated at around 2.4% in March, based on German and Italian figures, but may prove to be higher, given the higher-than-expected price increases in France. Meanwhile, European manufacturing shrank for the sixth month in seven in March as concern about the war in Iraq hurt demand. An index based on a survey of purchasing managers at about 2,500 companies for Reuters Group Plc fell to 48.4 from 50.1 in February. Industrial production declined in Germany and Italy in February, reversing gains of the previous month, while in France industrial production posted a rise in the first two months of 2003. The French economy probably rose by 0.2% in the first quarter, while the German economy, after stagnating in the last quarter of 2002, may have contracted in the first quarter of 2003 implying a technical recession. Both business and consumer sentiment fell in Germany. The Ifo index, based on a poll of business leaders, deteriorated in March to 88.1 from 88.9 in February, while consumer confidence stayed at an eight-year low amid rising unemployment and geopolitical tensions. Similarly, French consumer confidence fell to its lowest level in more than six years. The German economy is forecast to expand by only 0.5% this year, while unemployment is seen to rise to 4.45 mn this year according to a forecast of the six leading economic research institutes in the country.

#### Former Soviet Union

In Russia, federal budget revenue (excluding the social tax) exceeded the target by 8.3% in the first quarter 2003, reaching \$15.9 bn. Both the Customs Committee and Tax Ministry collected more than planned. The increase was due to higher than expected oil prices and a revival in economic activity. If oil prices continue to average around \$24/b for Urals, then the federal budget surplus could reach 1% of GDP, against the 0.5% originally planned. The index of output of basic goods and services in February increased 6.9% year-on-year (y-o-y) and 6.3% in the first two months of the year, compared with an increase of only 3.0% in the corresponding period in 2002. In January, exports rose by 42.0% y-o-y to \$9.45bn, mostly thanks to the growth in volume and prices of energy exports. Retail trade underwent y-o-y rises at 8.6% in February and 8.4% in the first two months of 2003. Industrial output rose by 4.9% in January, followed by another 6.5% in February against a comparatively much lower 3.7% in 2002. The February non-CIS exports data show a considerable growth at 16.2% y-o-y for oil and 11.6% y-o-y for oil products exports. The growth is attributed to a sharp increase in prices, at 59.4% y-o-y for Urals export blend and at 67.8% for distillates. The inflation rate was 1.1% month-on-month (m-o-m) in March, i.e. y-o-y consumer price growth remained at 14.8%, as in February. Given the rather high 5.2% rate for the first quarter, some analysts expect a full year figure of around 13.7%, higher than the 12% official target. Inflation appears to be driven mainly by soft fiscal policy, energy tariff increases and growth in the money supply.

#### Eastern Europe

In Poland, consumer prices rose by a modest 0.1% in February, the same as that in January. In February, producer prices grew at 0.5% m-o-m, mostly due to a 7% m-o-m hike in production costs of coke and petroleum products. In February, industrial output grew at 4.1% y-o-y, up from 3.5% in January. In line with a seasonal pattern, output decreased at 1.7%. The combined industrial output growth in the first two months of 2003, compared with the corresponding 2002 period, is estimated at 4.0%. In February, construction activity registered a significant 24% decline y-o-y, the worst on record. Exports, however, registered a 7.5% increase in y-o-y dollarterms in February, versus a jump at 17.5% in imports. Meanwhile, the trade deficit narrowed significantly in the first two months of 2003 versus the corresponding 2002 period. In the Czech Republic, industrial output grew at 6.4% y-o-y in January, up from 4.8% in the fourth quarter 2002. The growth in retail sales was 4.4%, down from 4.6% in December. In the first two months of 2003, the foreign trade deficit climbed to \$241 mn, more than double the amount in the corresponding 2002 period. In Hungary, the consumer price index rose as little as 0.8% m-om in February, bringing the y-o-y rate down to 4.5% from 4.7% in January. Exports dropped by 4.0% in euro-terms in January. Imports also registered a drop at 3.9% y-o-y in euro-terms. Romania's consumer price index rose 1.1% on the month in March, above February's 0.8% rise. The index rose 17.1% y-o-y in March.

Mixed trends among OPEC Member Countries' growth rates in March

Despite the odds, Asia still heading the economic expansion in developing world, while Sub-Saharan Africa grew modestly and Brazil's prospects slightly improved due to underlying reforms

Real oil prices fell by 5.7% mainly as a result of lower nominal prices. The dollar fell marginally against the modified Geneva I plus US\$ basket of currencies

#### **OPEC Member Countries**

Indonesia's GDP growth rate is expected this year at 3.5%, 0.2% lower than last month's estimate, due to weak export demand that resulted from sluggish global growth and tight domestic fiscal conditions and falling domestic confidence. Venezuelan non-oil exports are estimated to decline this year by \$1.5 bn or 40%. This is attributed to difficult financing, currency controls and increasing operating costs for exporters, due to problems faced in dispensing value-added tax rebates in a timely fashion. However, oil production appears to be recovering faster than initially expected, although there are no expectations of positive overall economic growth in 2003. In Nigeria, the increase in oil production, coupled with the rise in oil prices in early 2003, will be partially offset by the subdued non-oil sector growth in the first half of 2003, owing to domestic uncertainties. Nonetheless, private and government consumption and fixed investments will probably show modest growth this year. Thus, the GDP growth forecast for 2003 edged up slightly this month by 0.2% to settle on 2.8% from 2.6% last month. IR Iran's GDP growth forecast this month was raised slightly by 0.6% to reach 6.1% for 2003. The main driver of the expansion will be domestic demand, which has strengthened last year due to the lifting of restrictions on imports and an increase in non-oil industrial and manufacturing output.

#### Developing countries

Prospects for the ASEAN economies are mixed this year. Growth in the sub-region will average 4.5%, a reasonable rate internationally, but it is still well down on the rates of the early 1990s. However, Malaysia and Singapore, due to their high dependence on exports, will track trends in world trade. The weakening US demand in the second half of 2002 depressed growth towards the end of the year. This will hold back growth this year, when real GDP is forecast to grow by nearly 4.8% in Malaysia and 3.0% in Singapore. To some extent, the business environment in Hong Kong has been affected this month by the SARS disease, thus the growth rate has been cut by 1.1% to 1.7%, although it is expected that South Asia will average a brisk 6.2% growth this year. Real GDP growth in India in the agricultural sector will be weaker this year as a result of the effects of poor monsoon rainfall. Sub-Saharan Africa's (SSA) GDP growth is forecast at 2.9% for 2003, driven by economic reforms, firmer commodity prices and increased import demand in Europe, while domestic demand will be the main factor contributing to growth in the non-oil economies; whereas in oil economies, the weaker export prices will be offset by the increased production volume. Brazil is expected to achieve a modest 2.0% GDP growth this year, representing a 0.2% upward revision due to the positive reaction of the financial markets to the government's orthodox fiscal stance and tight monetary policies. It seems that the government will meet the conditions of the IMF agreement, which will provide access to funds to support the balance of payments.

#### Oil price, US dollar and inflation

In March, the US dollar fell against all currencies in the modified Geneva I + US \$ basket\* with the exception of the pound sterling, which lost 1.69% of its value. The yen appreciated by 0.70% to average \$118.53/\$ from \$119.36/\$ in February, while the euro rose by 0.30% versus the dollar, averaging \$1.0805 compared with \$1.0773 in February.

Geopolitical factors continued to play the dominant role in currency and financial markets with fundamentals relegated to a back seat. At the end of the first week in March, the euro climbed to four-year highs of \$1.1039 on continued worries about the military build-up in the Middle East. With weekly initial US jobless claims stubbornly high and the drop in retail sales in February, downward pressure on the dollar continued. The euro remained firmly above \$1.10 only until March 12, experiencing a sharp correction by the middle of the month as the uncertainty surrounding the military action disappeared. Both the dollar and stock markets rallied on the assumption that the military conflict would be of a short duration. The ECB's decision to lower interest rates by 25 basis points, less than the markets had expected, had little effect on the euro. Following the start of the military conflict, the dollar moved up and down in line with the oftenconflicting reports from the front. The euro ended the month at a level of \$1.0895, while the yen fell to 120.15 from 117.6 at the start of the month. The yen's drop is partly attributed to hints by the Japanese authorities of intervention to curb the unwelcome strength of the yen.

In March, the OPEC Reference Basket fell by \$1.76/b, or 5.59%, to \$29.78/b from \$31.54/b in February. In real terms (base July 1990=100), after accounting for inflation and currency fluctuations, the Basket price dropped by 5.70% to \$24.32/b from \$25.79/b, as the fall in the dollar slightly augmented the drop in nominal oil prices. The dollar dropped 0.06%, as measured by the import-weighted modified Geneva I + US dollar basket, while inflation was estimated to have eroded the value of the oil barrel by 0.05% in March.

<sup>\*</sup> The 'modified Geneva I + US\$ basket' includes the euro, the Japanese yen, the US dollar, the pound sterling and the Swiss franc, weighted according to the merchandise imports of OPEC Member Countries from the countries in the basket.



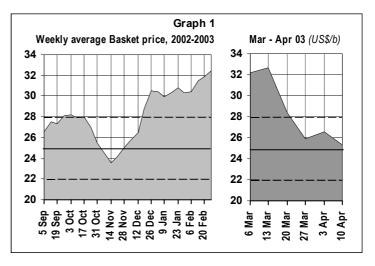
#### **CRUDE OIL PRICE MOVEMENTS**

OPEC's Reference Basket fell 5.6% or \$1.76/b to average \$29.78/b in March, nonetheless reaching another 20-year record high

Crude markets remained firm in the first half of the month, underpinned by war jitters, then corrected downwards on the perception of an anticipated swift and short war OPEC's Reference Basket of seven crudes descended from the 20-year record level reached in February of this year, losing \$1.76/b or 5.6% to average \$29.78/b, to achieve yet another 20-year record-high for March. Thus, it is not surprising that the cumulative year-to-date average for the first quarter of 2003 stood at a record level above the \$30/b mark, and almost 55% higher when compared with the previous year's first quarter.

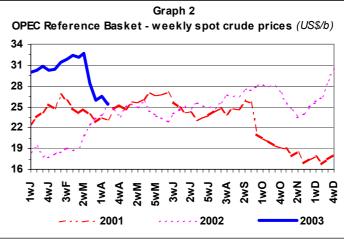
On a chronological weekly account, the Basket began the month of March with a marginal drop of less than 1%, followed by a rebound in the second week of almost 1.5%; nonetheless, the start of the war in Iraq during the third week, and the change in market perceptions, resulted in a severe downward correction, which caused the Basket to lose more than 13% of its value in just one week, followed by another 8.8% decrease during the last week of the month. However, in the week ending 10 April, the OPEC Reference Basket fell to \$25.32/b, mainly due to the diminished geopolitical/war premium, which had affected the price before the war in Iraq.

Despite the ups and downs of crude oil prices during the first half of March, crude oil prices remained stubbornly high, with the Atlantic Basin's benchmark WTI trading within a \$36-38/b range (front-month contract), while the European counterpart, Brent, moved within the \$32-34/b



band. The oil market volatility was attributed to the anticipation of a US-led war on Iraq, and the tremendous uncertainty it placed on the market. Signals that the war in Iraq was imminent became clear after the US President, George W Bush, said in a televised address that the USA would act with or without a UN resolution. Traders were only left with the uncertainty of the timing of the military campaign. But the tug-of-war in the diplomatic front between those UN Security members led by France and Germany gave the impression that the US-led attack on Iraq might be delayed, sending WTI prices lower. Meantime dangerously low US crude oil stocks and fears that the gasoline

market would have to struggle to cope with the approaching rising seasonal demand provided support prices. crude oil at its 124<sup>th</sup> **OPEC** of Meeting the Conference reiterated commitment ensure order and stability in the international market through secure oil supplies at appropriate prices balancing the need of



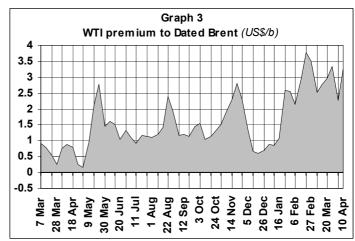
producers and consumers bringing additional assurance to the market. Later, on 20 March, following the commencement of hostilities, OPEC issued a

statement guaranteeing the supply of any shortfall that might arise. Immediately after the IEA had released its statement ensuring the adequate supply of oil, while expressing appreciation of the steps taken by producers to prevent shortfalls, it also reiterated that it stood ready to act if the need arose. In the third week of March, perceptions shifted, as stocks changed from half empty in week 2 to half full in week 3, and with it crude prices changed. The benchmark WTI's front-month contract went from \$36/b to below \$27/b; while Brent moved from \$33/b to just above \$24/b. Perceptions that the military campaign in Iraq would be swift and short magnified more fundamental issues like approaching low second-quarter demand, considerable volumes of Saudi Arabian cargoes set to reach the US market in the second half of the month, as well as plentiful sour Venezuelan crude competing for outlets on the US Gulf Coast. Towards the month end, prices took a turn on signals that the war in Iraq might take longer than was enthusiastically predicted a week before and by the closure of almost one third of Nigerian gasoline-rich crude oil production, which would be extremely difficult, if not impossible, to offset.

The market remained saturated with sour crude, while light gasoline-rich grades were scarce

#### US and European markets

An indication of what might lie ahead for the crude oil market immediate the future after the war in Iraq, and all the uncertainty it caused, may mean that it will cease to be the main market driver, only to be overcome by the fact that refiners in the USA are awash with sour crude grades. While Venezuela

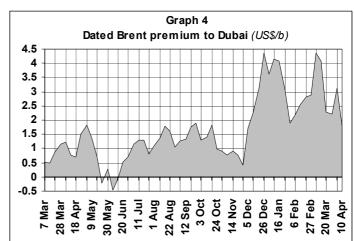


continues to restore output, after lifting the *force majeure* early in March, extra Saudi Arabian oil is already showing up in the US market. To make matters even worse is the announcement by Mexico that it has recently achieved a production record. The natural outcome, thus, is the widening of the sweet-sour differential that has reached more than \$6/b, and the steep backwardation is acting as a dam preventing crude from being bought and being accounted for as stocks, while giving the impression that supply is tight. The reality might well be that there is excess supply and refiners do not want to buy expensive oil now, but rather wait for lower future prices. Light sweet crudes remain buoyant as offers to the USA tightened after Asian buyers unexpectedly acquired several cargoes of West African crudes, combined with the partial closure of Nigerian production. The arbitrage for light sweet West African and North Sea grades stayed open, with WTI at a premium of more than \$2/b to Brent. In Europe, delays in the Black Sea due to logistical problems, high refinery margins and fears of supply disruptions over the war firmed prices, especially of Russian Urals. Delays of medium sour Russian grades to the Mediterranean have encouraged refiners to look for alternative crudes

outside the region, attracting as much as 5 mb of Venezuelan sour Mesa crude, which was displaced from the US market.

#### Far East market

Early in the month, uncertainty dominated the market with refiners and traders not appearing to have emerged in the spot market as they waited for developments on



Expectations about the war and plentiful of term supplies reduced spot activity

April 2003 MOMF



Iraq, as well as on OPEC's next move. The bearish mode was exacerbated later in the month as end users were confirmed to have received full term supplies from Saudi Arabia and Iran, combined with the end of winter demand. Towards the end of March, most grades firmed, underpinned by strong demand and supply fears especially of light sweet grades as Nigeria shut in 800,000 b/d, combined with a week-long decline of approximately 100,000 b/d of Malaysian Tapis output due to operational problems.

Table 1 Monthly average spot quotations for OPEC's Reference Basket and selected crudes US~\$/b

			Year-to-da	ate average
	<u>Feb 03</u>	<u>Mar 03</u>	<u>2002</u>	<u>2003</u>
Reference Basket	31.54	29.78	19.83	30.55
Arabian Light	31.11	28.98	20.41	29.73
Dubai	29.94	27.76	20.05	28.57
Bonny Light	32.33	30.83	21.12	31.31
Saharan Blend	32.43	31.21	20.65	31.64
Minas	31.89	30.70	20.13	31.63
Tia Juana Light	31.21	29.04	17.05	30.13
Isthmus	31.90	29.96	19.40	30.86
Other crudes				
Brent	32.54	30.98	21.02	31.61
WTI	35.63	33.88	21.43	34.20
Differentials				
WTI/Brent	3.09	2.90	0.41	2.59
Brent/Dubai	2.60	3.22	0.97	3.04

#### PRODUCT MARKETS AND REFINERY OPERATIONS

Product price trends in March were largely shaped by developments in crude oil markets. Most product prices enjoyed rises during the first half of the month, supported mainly by crude oil price gains, colder weather lingering in the US North-East region and Asian precautionary product stock-piling. These product price gains, however, were erased in the second half of March, as crude oil prices fell sharply and were exacerbated further by milder weather. Consequently, product price losses were steeper than those of their crude oil counterparts, thereby causing refining margins to decline, but nonetheless they remained well in positive territory.

#### US Gulf market

Product price declines were led by gasoil in the US Gulf market in March. Refining margins slid, but they were still strong, and hence the refinery utilization rate rose above 91% US product prices fell across the barrel. The average prices of gasoil and high sulphur fuel oil (HSFO) plunged by 16% and 18%, respectively, in March, thereby falling below both the marker crude WTI and gasoline values, which declined by 5% for the same period in the US Gulf market. Nonetheless, by examining the four-week moving average (i.e. representing most US March refinery and product activities) published by the US Energy Information Agency, it shows that the US refinery throughput rose, though its main refined product, gasoline, was reduced, reflecting two factors. One was higher distillate cracks than those of the counterpart gasoline in the first half of the month amid colder weather, which tempted refiners to enhance the distillate slate over



**April 2003** 

gasoline. The second factor was that refiners were reluctant to boost gasoline production while they ran down their winter grade stocks, a phenomenon that usually takes place prior to the commencement of the more stringent summer gasoline specifications that contributed to draws on gasoline stocks in March. Meanwhile, following last month's decline, gasoline demand rebounded, as it rose by 2.9% and 1.7% above the previous month's and last year's levels, respectively. In contrast, distillate demand plunged by 6% throughout the month as the weather turned mild in the second half of March, but it was still 8.5% higher y-o-y. The decline in fuel oil output was nearly compensated by rising fuel oil imports due to a slight increase in incremental demand and, thus, the fuel oil price lost heavily throughout the stipulated period.

After their peaks in the preceding month, refining margins slipped in the US Gulf Coast during March, but remained strong in positive territory.

The US refinery throughput rose by 0.48 mb/d to 15.14 mb/d in March, in tandem with refinery restarts following the end of the maintenance programme. Therefore, the US refinery utilization rate also rose to barely above 91%, registering 4.5% above the corresponding level last year.

#### Rotterdam market

Average product prices fell in Rotterdam in March. Compared with a 5% decline of the underlying crude, Brent, gasoline plunged by 8%, while gasoil's fall was limited to 4%, and the HSFO price decreased by an enormous 16% over the previous month. However, an analysis of European product fundamentals shed light on these factors. In the case of the gasoline market, for instance, there were three main developments. Firstly, the unusual premium of naphtha over its final product, gasoline, which was erased in the second half of the month, theoretically paved the way for boosting gasoline output, but it seemed that dwindling refinery throughput, linked to the beginning of the seasonal maintenance, stifled gasoline production. Secondly, there was higher activity than in the previous month's arbitrage trading to the USA and Nigeria, owing to bullish NYMEX futures in the former and tight supply in the latter. And thirdly, the disproportionate selling of winter grade and the start of the stockpiling of summer grade ready for export to the USA during its driving season. The continuous shipping of Russian distillate cargoes to the US East Coast instead of their typical European destination, together with heavy diesel buying by a major during most of the month, were the main reasons for the lessening of the gasoil price fall. The hefty arrival of weather-related delayed Russian HSFO cargoes caused plentiful supply. Meanwhile, arbitrage to the Far East continued to be hindered by higher freight costs.

Average European refining margins declined sharply as the fall in the Gross Product Worth (GPW) was steeper than crude oil price losses.

Refinery throughput in the Eur-16 fell by 0.32 mb/d, in tandem with regional refinery maintenance. The equivalent refinery utilization rate was around 85%, representing a slight fraction above the previous year's level.

#### Singapore market

The average product prices for March exhibited losses in Singapore. The decline in the average gasoline value was roughly equal to the 7% decrease of its underlying crude, Dubai. Gasoil's fall was restricted to 4%, while the HSFO price plunged by 9% below the previous month's level. Accordingly, Asian product fundamentals were mixed. Gasoline was generally assisted by increased demand, as Indonesia purchased higher quantities than in the previous months, together with a decent tender from Vietnam for the second quarter. In addition, several arbitrages to the US West Coast and rising demand from the Middle East. For most of the month, both the middle and the heavy ends of the barrel were characterised by tight supply, though stemming from different origins. For instance, distillate spot availability was reduced as Middle Eastern distillate cargoes continued to move to the highly priced European markets and the start of Asia's seasonal refinery maintenance programmes after the concern of the war-related supply shortfalls had dissipated. At the same time, regional distillate demand was decent, including buying from Indonesia, Vietnam and Thailand. On the other hand, HSFO was in tight supply as higher freight rates continued to hamper foreign cargo movements from other export regions of the world, and China, the largest regional buyer, still declined to buy in response to what was perceived as still high prices. However,

**Product prices decreased** in Rotterdam in March, with particular severity to the opposite ends of the barrel. Refining margins weakened, and the refinery utilization rate in the Eur-16 fell to around 85%

Product prices fell across the barrel in Singapore in March. Refining margins remained healthy



demand for its sister product, low sulphur fuel oil, is expected to rise on the announcement of Japan's TEPCO that it will shut down all nuclear reactors by mid-April, switching to only fuel substitution for electricity generation.

Refining margins for Dubai were roughly unchanged from the previous month's levels, demonstrating healthy values.

In Japan, the refinery utilization throughput stood at 4.38 mb/d, a decline of 0.27 mb/d, reflecting receding product-related heating purpose demand as winter had drawn to a close. The corresponding utilization rate was nearly 92%, more than 5% higher than the previous year's runs.

Table 2 Refined product prices US \$/b

		<u>Jan 03</u>	<u>Feb 03</u>	<u>Mar 03</u>	Change <u>Mar/Feb</u>
US Gulf					
Regular gasoline	(unleaded)	37.08	42.61	40.63	-1.98
Gasoil	(0.2% S)	36.97	44.38	37.13	-7.25
Fuel oil	(3.0% S)	29.73	27.76	22.78	-4.98
Rotterdam					
Premium gasoline	(unleaded)	35.31	39.15	36.06	-3.09
Gasoil	(0.2% S)	35.22	41.16	39.61	-1.55
Fuel oil	(3.5% S)	25.97	25.93	21.91	-4.02
Singapore					
Premium gasoline	(unleaded)	34.34	40.14	37.51	-2.63
Gasoil	(0.5% S)	34.23	39.35	37.87	-1.48
Fuel oil	(380 cst)	26.97	29.33	26.65	-2.68

Table 3
Refinery operations in selected OECD countries

	Refinery throughput mb/d			Refinery utilization* %			
	<u>Jan 03</u>	Feb 03	<u>Mar 03</u>	<u>Jan 03</u>	Feb 03	<b>Mar 03</b>	
USA	14.80	14.66	15.14	89.1	88.2	91.1	
France	$1.70^{R}$	1.73	1.60	89.5 <sup>R</sup>	91.1	84.1	
Germany	$2.25^{R}$	$2.22^{R}$	2.18	99.5 <sup>R</sup>	97.7 <sup>R</sup>	96.1	
Italy	$1.80^{R}$	$1.77^{R}$	1.80	78.4 <sup>R</sup>	77.1 <sup>R</sup>	78.3	
UK	1.57 <sup>R</sup>	1.66	1.57	87.9 <sup>R</sup>	92.6	87.6	
Eur-16	$12.08^{R}$	$12.14^{R}$	11.82	88.0 <sup>R</sup>	88.4 <sup>R</sup>	86.1	
Japan	$4.47^{R}$	$4.65^{R}$	4.38	93.7 <sup>R</sup>	97.6 <sup>R</sup>	91.8	

<sup>\*</sup> Refinery capacities used are in barrels per calendar day.

Revised since last issue.

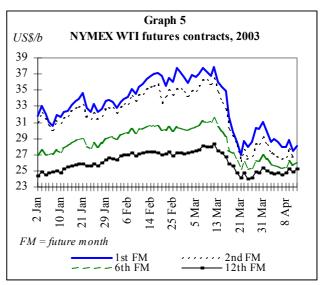
Sources: OPEC Statistics, Argus, Euroilstock Inventory Report/IEA.



#### THE OIL FUTURES MARKET

Non-commercials became increasingly bearish, while benchmark WTI prices fell by 20% As we stated in our previous MOMR, the uncommon divergence seen during February between the first-month WTI price curve and the non-commercial long/short positions was a prelude to the sharp drop in prices that was witnessed in March. Now there is evidence that the abovementioned reasoning was correct, with WTI prices showing a 20%

decline between late February and late March. Despite all the fuss that preceded the war in Iraq, non-commercials' perception of the market became increasingly bearish. According to the Commodity Futures Trading Commission's (CFTC) Commitments Traders report for the week 11 speculators March, greatly disposed of their long positions by 18,088 lots, while at the same time they increased their short positions by 8,163. Interestingly enough, divergence between the frontmonth WTI prices and the net short curve continued to widen

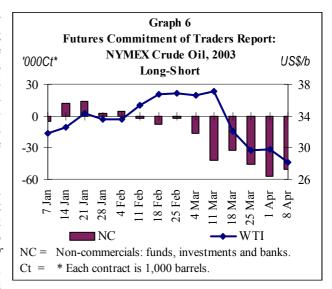


during the week. It was in the week ahead of the war when the big expected correction took place with WTI falling by almost 14 %.

The extremely difficult times immediately preceding the start of the conflict had confused speculators. This is evident by the figures in the *Commitment of Traders* report for the week of 18 March when there was a big liquidation on both long (25,119 lots) and shorts (34,744 lots) by non-commercials. Meantime, open interest declined severely by 74,791 lots to 547,236.

The week that followed saw more liquidation of long positions and the bearish mode took over speculators minds as prospects of a quick and decisive victory by the US-led forces became evident. Frontmonth WTI prices shed another \$2.50/b during the week.

Crude oil speculators on NYMEX built up their net short positions during the week ending 1 April. According to the CFTC's Commitment of Traders report for that week, non-commercials increased



their short positions by 7,587 lots while damping their net shorts by 3,928 lots. Expectations that the US-led war against Iraq would end quicker than anticipated, without significant disruption to Middle Eastern exports and news of the resumption of oil production in Nigeria, led the market down.



#### THE TANKER MARKET

OPEC area spotchartering showed further increase of 1.03 mb/d in March

OPEC area spot-chartering showed a further increase on the back of higher crude oil production, particularly from OPEC Middle Eastern producers in order to meet increasing demand, especially from the USA and to compensate the losses of Venezuelan barrels. Consequently, it rose by 1.03 mb/d to 13.67 mb/d in March. This level was 0.60 mb/d, or about 5%, higher than that observed a year ago. OPEC's share of global fixtures improved by 1.53% to stand at 61.80%. Non-OPEC spot-chartering also increased slightly by 0.11 mb/d to average 8.45 mb/d in March which represented a market share of 38.20% or 1.53% less than the previous month's level. Therefore, global spot-chartering displayed an increase of 1.13 mb/d to 22.12 mb/d in March. Compared with the figure of the same period last year, it was 0.83 mb/d higher. The bulk of incremental chartering volume in the OPEC area came from the Middle East, especially from the Middle eastbound route, where it moved up by 0.67 mb/d to 4.85 mb/d as the war in Iraq, which began on 19 March, had only a slight effect on the shipping operations in the region. On the westbound route, there was a decline of 0.66 mb/d to 2.11 mb/d in the spot-chartering volume due to the fact that most of the chartering took place in February where some oil companies have chartered up to five weeks ahead of their stem date. The Middle East eastbound share of total OPEC fixtures increased by 2.44% to 35.48% m-o-m, while the Middle East westbound share fell by 6.47% to 15.43%. Together, they accounted for 50.91% of total chartering in the OPEC area, which was 3.49% below the level observed last month. Estimated sailings from the OPEC area in March showed a further rise of 1.2 mb/d to 23.76 mb/d. Out of this incremental volume, sailings from the Middle East accounted for 16.23 mb/d or an increase of 0.36 mb/d compared with the February figure. Middle East sailings stood at 68.31% of total sailings from the OPEC area, or 2.04% lower than the level registered last month. According to preliminary estimates, long-haul arrivals in the Atlantic Basin continued to move up, increasing by 0.66 mb/d to 10.80 mb/d in the US and the Caribbean and by 0.77 mb/d to an average of 7.46 mb/d in North-West Europe. Arrivals in the Euromed rose also by 1.84 mb/d to 5.81 mb/d. The exception was in Japan, where arrivals lost the previous month's gains, declining by 0.29 mb/d to 4.50 mb/d.

**VLCC** freight rates reversed last month's downward direction

The tanker market for crude oil cargoes was extremely affected by geopolitical factors rather than fundamentals in March, where the war in Iraq played the main role, followed by the interruption in Nigeria's oil production due to political unrest, while developments in Venezuela's oil output still affected freight rates, especially in the Caribbean area. During March, freight rates enjoyed very high levels, except for the Suezmax freight rates on the NW Europe/US East Coast route and Aframax freight rates on the Mediterranean/NW Europe route. VLCC freight rates reversed last month's downward direction, increasing by 28 points to WS127 on the Middle East/ Far East route and by 21 points to WS115 on the Middle East/West route. This rise came mainly on the back of the very high level of fixtures as fears of a possible interruption in oil production from Middle Eastern producers if the war in Iraq spread to neighbouring countries, forced oil companies to fix tankers weeks ahead for their stems to avoid higher costs later. At the end of the month, the 30-day availability of tonnage was 24, declining from 49 at the beginning of the month. Suezmax freight rates showed different directions as they declined by 9 points to WS179 on the NW Europe/US East Coast route due to less activity, while they gained 17 points to an average of WS185 on the West Africa/US Gulf Coast route, benefiting from high levels earlier in the month. This was especially evident in the second week, before these high levels started to erode on the back of Nigeria's oil production interruption, where around 800 mb/d were missing from the market in the last ten days of the month. Halted Iraqi exports from the Mediterranean terminal of Ceyhan affected Aframax freight rates on the Mediterranean/NW Europe route, pushing them down by 15 points to WS279, while increasing activity within the Mediterranean Basin as oil companies rushed to substitute Iraqi barrels with other regional alternatives helped to lift Aframax freight rates within the Mediterranean to WS339, which was 69 points higher than last month's average. In the Caribbean, freight rates for Aframax cargoes rose by 26 points to WS330 as Venezuelan barrels returned to the market, while the slow chartering activity pushed freight rates down extremely at the end of the month. Aframax freight rates on the Indonesia/US Gulf Coast route also showed a rise of 45 points to WS194 due to increasing demand.

Product tanker market rose on high level of activity in March The product tanker market benefited from the very high level of activity across all routes especially before the war in Iraq broke out. Tighter prompt positions helped freight rates for 30–50,000 dwt tankers on the Middle East/Far East route to stand at an average of WS260, 14 points higher than the previous month's level. From Singapore to eastern destinations, freight rates increased by 62 points to WS347. The highest rise was observed on the Caribbean/US Gulf Coast route, where rates climbed by 100 points to WS347 on the back of tight tonnage availability as Venezuelan suppliers geared up their exports of refined products to the region. In Europe, freight rates for clean tankers were above the average of WS350, where they rose by 51 points to WS355 within the Mediterranean Basin and by 81 points to WS362 from the Mediterranean to NW Europe on increased fixtures for naphtha and distillate cargoes. From NW Europe to the US East Coast, they moved up by 47 points to WS360 due to the advantage of opened arbitrage and healthy demand in the US market.

Table 4
Spot tanker chartering: sailings and arrivals

mb/d

	<u>Jan 02</u>	<u>Feb 03</u>	<u>Mar 03</u>	Change <u>Mar/Feb</u>
Chartering				
All areas	22.17	20.99	22.12	+1.13
OPEC	11.93	12.65	13.67	+1.03
Middle East/east	3.64	4.18	4.85	+0.67
Middle East/west	2.38	2.77	2.11	-0.66
Sailings				
OPEC	20.70	22.56	23.76	+1.20
Middle East	15.34	15.87	16.23	+0.36
Arrivals				
US Gulf Coast, US East Coast, Caribbean	7.53	10.14	10.80	+0.66
North-West Europe	6.53	6.69	7.46	+0.77
Euromed	4.02	3.97	5.81	+1.84
Japan	4.77	4.79	4.50	-0.29

Source: Oil Movements and Lloyd's Marine Intelligence Unit.

#### Table 5 Spot tanker freight rates Worldscale

	<u>Size</u>				Change
	1,000 DWT	<u>Jan 03</u>	<u>Feb 03</u>	<u>Mar 03</u>	Mar/Feb
Crude					
Middle East/east	200-300	131	99	127	+28
Middle East/west	200-300	103	94	115	+21
West Africa/US Gulf	100-160	171	168	185	+17
North-West Europe/US East Coast	100-160	171	188	179	<b>-9</b>
Indonesia/US West Coast	70–100	169	149	194	+45
Caribbean/US East Coast	40–70	132	304	330	+26
Mediterranean/Mediterranean	40–70	216	270	339	+69
Mediterranean/North-West Europe	70–100	203	294	279	-15
Products					
Middle East/east	30-50	271	246	260	+14
Singapore/east	25–30	271	285	347	+62
Caribbean/US Gulf Coast	25–30	230	255	355	+100
North-West Europe/US East Coast	25–30	237	313	360	+47
Mediterranean/Mediterranean	25–30	258	304	355	+51
Mediterranean/North-West Europe	25–30	268	281	362	+81

Source: Gailbraith Tanker Market Report as well as other relevant industry publications.



#### WORLD OIL DEMAND

#### Estimates for 2002

World demand for 2002

revised down slightly to 76.54 mb/d

World

First and second quarter consumption estimates have been both revised down by 0.14 mb/d, while the fourth quarter figure has been revised up by 0.10 mb/d, leading to an overall minor downward revision of 0.04 mb/d to the 2002 average oil consumption. The 2002 annual average now stands at 76.54 mb/d, against the 76.58 mb/d reported in the previous MOMR. The world demand increment, i.e. the difference between the 2001 and the 2002 averages, has likewise been reduced to 0.16 mb/d, compared with the previously estimated 0.21 mb/d. Quarterly and regional details are given in Table 6.

On a regional basis, following a smaller decline of 0.07 mb/d in 2001, demand is estimated to have decreased by 0.11 mb/d in the OECD. The former CPEs' consumption, on the other hand, is estimated to have grown considerably by 0.19 mb/d or 2.00%, higher than the 0.15 mb/d growth witnessed in 2001. In the Developing Countries, only a moderate 0.09 mb/d or 0.46% rise in consumption is estimated in 2002, following a significant 0.29 mb/d growth in 2001.

On a quarterly basis, compared with the corresponding 2001 figures, world demand declined by 0.68% or 0.52 mb/d to average 76.55 mb/d in the first quarter of 2002, mostly due to the milder-than-normal weather. The second quarter consumption is estimated to have dropped even further by 0.70% or 0.53 mb/d to 74.71 mb/d, mostly due to lacklustre economic performance during that period. However, compared with the exceptionally weak 2001 consumption, partly due to the tragic events of 11 September, demand is estimated to have risen significantly during the third and fourth quarters of 2002. The estimated growth rates are 0.44 mb/d or 0.58% and 1.24 mb/d or 1.61%, respectively. Detailed quarterly comparisons for all quarters are presented in Tables 7 and 8.

Table 6 World oil demand in 2002 mh/d

							Change 2	2002/01
	<u>2001</u>	1Q02	<u>2Q02</u>	<u>3Q02</u>	<u>4Q02</u>	<u>2002</u>	Volume	<u>%</u>
North America	23.85	23.70	23.81	24.11	24.16	23.95	0.09	0.39
Western Europe	15.27	15.17	14.65	15.19	15.36	15.09	-0.18	-1.19
OECD Pacific	8.55	9.08	7.66	8.05	9.32	8.53	-0.02	-0.28
Total OECD	47.68	47.95	46.11	47.35	48.84	47.56	-0.11	-0.24
Other Asia	7.33	7.42	7.44	7.37	7.58	7.45	0.12	1.64
Latin America	4.76	4.61	4.68	4.67	4.59	4.64	-0.12	-2.50
Middle East	4.83	4.80	4.87	5.03	4.85	4.89	0.05	1.12
Africa	2.44	2.49	2.45	2.46	2.49	2.47	0.03	1.40
Total DCs	19.36	19.31	19.43	19.52	19.52	19.45	0.09	0.46
FSU	3.93	3.78	3.32	3.65	4.26	3.75	-0.18	-4.64
Other Europe	0.72	0.77	0.73	0.73	0.73	0.74	0.02	3.12
China	4.69	4.74	5.12	5.27	5.00	5.03	0.35	7.40
Total "Other Regions"	9.34	9.29	9.17	9.65	9.99	9.53	0.19	2.00
Total world	76.37	76.55	74.71	76.52	78.34	76.54	0.16	0.21
Previous estimate	76.37	76.69	74.85	76.52	78.25	76.58	0.21	0.28
Revision	0.00	-0.14	-0.14	0.01	0.10	-0.04	-0.05	-0.06

Totals may not add due to independent rounding.



#### **OECD**

Actual data indicates that the OECD registered a substantial 0.86 mb/d decline in the first quarter 2002 consumption, making it the single contributor to the fall in world demand. The 0.18 mb/d and 0.16 mb/d rises in the demand of Developing Countries and former CPEs partly offset the decline in consumption of the OECD. Within the OECD, the highest decline rate of 3.56% was experienced by the OECD Pacific, followed by 1.99% in North America and a minor 0.31% in Western Europe.

Data on the actual consumption in the second quarter 2002 also points to a drop of 0.34 mb/d or 0.72% in the OECD consumption, due to a steep 0.31 mb/d decline in OECD Pacific's demand. This was combined with a moderate 0.13 mb/d drop in Western Europe's consumption, partly offset by a slight rise of 0.11 mb/d in the demand in North America.

The latest available data on the actual third quarter 2002 consumption points to a moderation of the downward trend seen in the first and second quarters. Total OECD consumption is estimated to have dropped by a marginal 0.13 mb/d or 0.27%. Within the OECD, the 0.18 mb/d rise in North American consumption and that of 0.01 mb/d in the OECD Pacific are estimated to have been more than offset by the 0.32 mb/d decline in Western Europe's demand.

Actual data on the OECD's fourth quarter 2002 consumption indicates an impressive gain of 0.86 mb/d. Demand picked up in North America by a robust 0.55 mb/d or 2.34% and by 0.53 mb/d or 6.03% in the OECD Pacific. On the other hand, demand continued to be weaker in Western Europe by 0.23 mb/d or 1.46%.

On a product basis, 2002 saw residual fuel oil lead the decline in consumption by 0.39 mb/d or 12.29%, mostly due to the shift to natural gas demand in North America. The weakness in aviation fuel consumption also continued with an average 2.41% decline y-o-y, as subdued air travel persisted everywhere. The leading rises in volume were attributed to gasoline and LPG consumption, with gains of 0.20 mb/d or 1.38% and 0.10 mb/d or 2.23%, respectively, mostly due to a substantial consumption growth of 2.68% or 4.72% in North America.

#### DCs

Oil demand for Developing Countries is estimated to have grown by a marginal 0.09 mb/d or 0.46% to 19.45 mb/d. Demand in Latin America continued to be significantly weaker — declining by 0.12 mb/d or 2.50% — than in the previous year due to the region's persistent economic and financial problems. Other Asia is estimated to have registered the highest volume and percentage growth of 0.12 mb/d or 1.64%, followed by the Middle East and Africa with rises of 0.05 mb/d and 0.03 mb/d, respectively.

#### Other regions

Apparent demand in the Other Regions' group of countries is estimated to have grown at a healthy 0.19 mb/d or 2.00% rate. Within the group, the FSU registered a considerable decline in consumption of 0.18 mb/d or 4.64%. China, on the other hand, experienced the highest consumption growth rate in the world, a significant 0.35 mb/d or 7.40%. This remarkable estimated growth rate is more than twice the estimated average rise in world demand. Apparent demand in Other Europe also underwent a minor 0.02 mb/d volume rise, representing a relatively high 3.12% growth rate.

Table 7 First and second quarter world oil demand comparison for 2002 mb/d

	<b>Change 2002/01</b>				Change	2002/01		
	1Q01	1Q02	Volume	<u>%</u>	2Q01	2Q02	Volume	<u>%</u>
North America	24.19	23.70	-0.48	-1.99	23.70	23.81	0.11	0.46
Western Europe	15.21	15.17	-0.05	-0.31	14.78	14.65	-0.13	-0.90
OECD Pacific	9.42	9.08	-0.33	-3.56	7.98	7.66	-0.31	-3.91
Total OECD	48.82	47.95	-0.86	-1.77	46.45	46.11	-0.34	-0.72
Other Asia	7.31	7.42	0.11	1.54	7.31	7.44	0.12	1.70
Latin America	4.67	4.61	-0.07	-1.46	4.81	4.68	-0.13	-2.73
Middle East	4.68	4.80	0.12	2.52	4.75	4.87	0.12	2.52
Africa	2.47	2.49	0.02	0.82	2.43	2.45	0.02	0.95
Total DCs	19.13	19.31	0.18	0.95	19.29	19.43	0.14	0.70
FSU	3.95	3.78	-0.17	-4.32	3.75	3.32	-0.44	-11.62
Other Europe	0.76	0.77	0.01	-4.32	0.72	0.73	0.01	1.11
China	4.41	4.74	0.33	7.37	5.02	5.12	0.10	1.95
Total "Other Regions"	9.13	9.29	0.16	1.76	9.50	9.17	-0.33	<b>-3.47</b>
Total world	77.0							
-	7	76.55	-0.52	-0.68	75.24	74.71	-0.53	-0.70

Totals may not add due to independent rounding.

Table 8 Third and fourth quarter world oil demand comparison for 2002 mb/d

	Change 2002/01				Change	2002/01		
	3Q01	3Q02	Volume	<u>%</u>	4Q01	4Q02	Volume	<u>%</u>
North America	23.93	24.11	0.18	0.74	23.61	24.16	0.55	2.34
Western Europe	15.50	15.19	-0.32	-2.04	15.58	15.36	-0.23	-1.46
OECD Pacific	8.04	8.05	0.01	0.14	8.79	9.32	0.53	6.03
Total OECD	47.48	47.35	-0.13	-0.27	47.98	48.84	0.86	1.78
	0.00							
Other Asia	7.29	7.37	0.08	1.10	7.41	7.58	0.16	2.21
Latin America	4.80	4.67	-0.13	-2.77	4.74	4.59	-0.14	-3.00
Middle East	4.99	5.03	0.04	0.70	4.91	4.85	-0.05	-1.12
Africa	2.41	2.46	0.05	2.09	2.45	2.49	0.04	1.72
Total DCs	19.49	19.52	0.03	0.17	19.51	19.52	0.01	0.05
FSU	3.72	3.65	-0.07	-1.87	4.31	4.26	-0.06	-1.31
Other Europe	0.67	0.73	0.06	9.46	0.72	0.73	0.01	1.67
China	4.72	5.27	0.54	11.49	4.58	5.00	0.42	9.14
Total "Other Regions"	9.11	9.65	0.54	5.89	9.62	9.99	0.37	3.89
Total world	76.08	76.52	0.44	0.58	77.10	78.34	1.24	1.61

Totals may not add due to independent rounding.

#### Projections for 2003

World

World demand for 2003 adjusted downwards by 0.08 mb/d to 77.35 mb/d

The world demand forecast for the year 2003 has been slightly revised down, by 0.08 mb/d, to an average 77.35 mb/d, compared with the 77.43 mb/d reported in the previous *MOMR*. The increment has also been revised down by 0.04 mb/d to 0.81 mb/d, equivalent to 1.06%, from the previous 0.85 mb/d, equivalent to 1.11%. The outbreak of SARS is reducing travel and tourism and is feared to undermine economic growth in the affected regions. In addition, the war in Iraq has had an adverse effect on air travel. The resulting decline in aviation fuel consumption is expected to continue throughout the second quarter 2003. The rise in fuel consumption by the military due to the war in Iraq is estimated to have been offset by the loss in consumption as a result of SARS and subdued air travel. Hence, first and second quarter demand forecasts have been revised down. Regional and quarterly breakdowns of the demand forecast are given in Table 9.



Table 9								
World oil demand forecast for 2003								
mb/d								

							Change 2	2003/02
	<u>2002</u>	1Q03	2Q03	3Q03	4Q03	<u>2003</u>	Volume	<u>%</u>
North America	23.95	24.06	23.93	24.25	24.35	24.15	0.20	0.84
Western Europe	15.09	15.27	14.72	15.18	15.58	15.19	0.10	0.67
OECD Pacific	8.53	9.37	7.84	8.11	9.42	8.69	0.16	1.86
Total OECD	47.56	48.71	46.49	47.53	49.35	48.02	0.46	0.97
0.1								
Other Asia	7.45	7.51	7.56	7.43	7.61	7.53	0.08	1.03
Latin America	4.64	4.62	4.66	4.73	4.69	4.67	0.04	0.80
Middle East	4.89	4.81	4.96	5.01	4.82	4.90	0.02	0.31
Africa	2.47	2.50	2.49	2.47	2.50	2.49	0.02	0.65
Total DCs	19.45	19.44	19.68	19.63	19.61	19.59	0.15	0.75
FSU	3.75	3.84	3.54	3.67	4.17	3.81	0.05	1.42
Other Europe	0.74	0.81	0.71	0.79	0.76	0.77	0.03	4.15
China	5.03	4.82	5.20	5.45	5.15	5.16	0.12	2.45
Total "Other Regions"	9.53	9.47	9.45	9.91	10.08	9.73	0.21	2.17
Total world	76.54	77.62	75.62	77.08	79.05	77.35	0.81	1.06
Previous estimate	76.58	77.81	75.81	77.12	79.00	77.43	0.85	1.11
Revision	-0.04	-0.19	-0.19	-0.04	0.05	-0.08	-0.04	-0.05

Totals may not add due to independent rounding.

All of the three major groups of countries are forecast to register healthy demand growth during 2003. The OECD is forecast to rank first in demand volume growth with 0.46 mb/d or 0.97%. With 0.21 mb/d or 2.17% the rise in demand in the former CPEs is expected to be the second-highest in volume but the first in percentage. Developing Countries are forecast to follow with a 0.15 mb/d, or 0.75%, demand increase.

Every single quarter in 2003 is forecast to register gains y-o-y. The first and the second quarters are expected to experience the highest growth of 1.07 mb/d and 0.91 mb/d, respectively. One should bear in mind that the first and second quarter 2002 both registered exceptionally weak consumption, that the weather in the first quarter 2003 has been much colder than normal in many regions, and that the maintenance of nuclear reactors in Japan has created a higher demand for oil. The progress is going to moderate further in the third quarter when a 0.56 mb/d rise is foreseen. The fourth quarter is expected to be marked by the return of a higher growth rate of 0.71 mb/d. Further details are shown in Tables 10 and 11.

#### OECD

Preliminary OECD data for January 2003 indicates that while marine bunkers, refinery own use and backflows declined, total inland consumption grew by a healthy 1.07 mb/d or 2.40% y-o-y. This was partly due to the colder-than-normal weather in most regions of the OECD. Gasoil/diesel registered the biggest gain in volume of 0.49 mb/d or 4.04%. Naphtha led the percentage gain with 5.85% or 0.17 mb/d, due to spiking natural gas prices in the USA, which encouraged petrochemical producers to utilize more naphtha. Furthermore, healthy margins in the downstream industries, i.e. ethylene production, induced higher naphtha intake percentages in Europe and Asia. All other major products such as LPG, gasoline, kerosene and residual fuel oil experienced healthy gains.



Table 10 First and second quarter world oil demand comparison for 2003 mb/d

				Change 2	2003/02			
	1Q02	1Q03	Volume	<u>%</u>	2Q02	2Q03	Volume	<u>%</u>
North America	23.70	24.06	0.36	1.53	23.81	23.93	0.12	0.50
Western Europe	15.17	15.27	0.11	0.71	14.65	14.72	0.08	0.55
OECD Pacific	9.08	9.37	0.29	3.19	7.66	7.84	0.18	2.37
Total OECD	47.95	48.71	0.76	1.58	46.11	46.49	0.38	0.83
Other Asia	7.42	7.51	0.10	1.28	7.44	7.56	0.12	1.60
Latin America	4.61	4.62	0.01	0.23	4.68	4.66	-0.01	-0.25
Middle East	4.80	4.81	0.01	0.28	4.87	4.96	0.10	2.00
Africa	2.49	2.50	0.01	0.31	2.45	2.49	0.04	1.64
Total DCs	19.31	19.44	0.13	0.66	19.43	19.68	0.24	1.26
FSU	3.78	3.84	0.06	1.53	3.32	3.54	0.23	6.86
Other Europe	0.77	0.81	0.04	5.53	0.73	0.71	-0.01	-2.05
China	4.74	4.82	0.09	1.81	5.12	5.20	0.08	1.47
Total "Other Regions"	9.29	9.47	0.19	2.00	9.17	9.45	0.29	3.14
Total world	76.55	77.62	1.07	1.40	74.71	75.62	0.91	1.22

Totals may not add due to independent rounding.

Table 11 Third and fourth quarter world oil demand comparison for 2003 mb/d

				Change	2003/02			
	3Q02	3Q03	Volume	<u>%</u>	4Q02	<u>4Q03</u>	Volume	<u>%</u>
North America	24.11	24.25	0.14	0.58	24.16	24.35	0.18	0.76
Western Europe	15.19	15.18	-0.01	-0.07	15.36	15.58	0.22	1.46
OECD Pacific	8.05	8.11	0.06	0.72	9.32	9.42	0.11	1.16
Total OECD	47.35	47.53	0.19	0.39	48.84	49.35	0.52	1.06
Other Asia	7.37	7.43	0.06	0.80	7.58	7.61	0.03	0.43
Latin America								
	4.67	4.73	0.06	1.22	4.59	4.69	0.09	2.00
Middle East	5.03	5.01	-0.02	-0.30	4.85	4.82	-0.03	-0.68
Africa	2.46	2.47	0.01	0.39	2.49	2.50	0.01	0.28
Total DCs	19.52	19.63	0.11	0.57	19.52	19.61	0.10	0.50
FSU	3.65	3.67	0.02	0.45	4.26	4.17	-0.09	-2.04
Other Europe	0.73	0.79	0.07	9.00	0.73	0.76	0.03	3.98
China	5.27	5.45	0.18	3.41	5.00	5.15	0.15	3.01
Total "Other Regions"	9.65	9.91	0.26	2.71	9.99	10.08	0.09	0.93
Total world	76.52	77.08	0.56	0.73	78.34	79.05	0.71	0.90

Totals may not add due to independent rounding.

#### WORLD OIL SUPPLY

#### Non-OPEC

2002 non-OPEC supply figure revised up slightly to 47.99 mb/d, an estimated 1.50 mb/d increase over the 2001 figure

#### Estimate for 2002

The 2002 non-OPEC supply figure has been revised up by 0.01 mb/d to 47.99 mb/d. The fourth quarter was revised down by 0.03 mb/d to 48.51 mb/d, while minor upward revisions have been made to the other quarters of 0.02 mb/d to 47.71 mb/d, 0.03 mb/d to 48.08 mb/d and 0.02 mb/d to 47.64 mb/d respectively, compared with the last *MOMR's* figures. The yearly average increase for 2002 is estimated at 1.50 mb/d, compared with the 2001 figure.

Table 12 Non-OPEC oil supply in 2002 mb/d

		mo/c	a				
							Change
	<u>2001</u>	1Q02	<u>2Q02</u>	3Q02	<u>4Q02</u>	<u>2002</u>	02/01
North America	14.36	14.62	14.65	14.43	14.60	14.58	0.22
Western Europe	6.70	6.73	6.76	6.26	6.84	6.65	-0.05
OECD Pacific	0.77	0.76	0.77	0.79	0.72	0.76	-0.01
Total OECD	21.82	22.11	22.17	21.48	22.16	21.98	0.16
Other Asia	2.28	2.36	2.36	2.37	2.40	2.37	0.09
Latin America	3.75	3.93	3.94	3.91	3.80	3.89	0.14
Middle East	2.13	2.11	2.09	2.05	2.09	2.08	-0.05
Africa	2.80	3.04	3.08	3.01	2.99	3.03	0.23
Total DCs	10.97	11.44	11.47	11.34	11.27	11.38	0.41
FSU	8.53	8.92	9.15	9.50	9.75	9.33	0.80
Other Europe	0.18	0.18	0.18	0.17	0.17	0.18	-0.01
China	3.30	3.35	3.39	3.43	3.40	3.39	0.10
Total "Other regions"	12.01	12.45	12.72	13.10	13.32	12.90	0.89
Total non-OPEC production	44.79	45.99	46.36	45.92	46.75	46.26	1.46
Processing gains	1.69	1.72	1.72	1.72	1.76	1.73	0.04
Total non-OPEC supply	46.48	47.71	48.08	47.64	48.51	47.99	1.50
Previous estimate	46.48	47.69	48.05	47.62	48.54	47.98	1.50
Revision	0.00	0.02	0.03	0.02	-0.03	0.01	0.01

Totals may not add due to independent rounding.

MOMR\_

98

2003 non-OPEC supply forecast at 49.04 mb/d, 1.05 mb/d above the 2002 figure

#### Forecast for 2003

OPEC forecasts a rise in non-OPEC supply of 1.05 mb/d in 2003. The major contributors to the forecast rise in output are the FSU and North America. The 2003 quarterly distribution forecast has been revised down significantly by 0.12 mb/d, 0.10 mb/d, 0.10 mb/d and 0.15 mb/d to 49.00 mb/d, 49.09 mb/d, 48.77 mb/d and 49.31 mb/d respectively, compared with figures last published in the *MOMR*, resulting in a yearly average of around 49.04 mb/d.

Table 13 Non-OPEC oil supply in 2003

m	ıt	)/	d	

		1110701					
							Change
	<u>2002</u>	1Q03	<u>2Q03</u>	3Q03	4Q03	<u>2003</u>	03/02
North America	14.58	14.85	14.83	14.62	14.74	14.76	0.18
Western Europe	6.65	6.81	6.72	6.41	6.77	6.68	0.03
OECD Pacific	0.76	0.73	0.73	0.75	0.69	0.72	-0.03
Total OECD	21.98	22.38	22.29	21.78	22.20	22.16	0.18
Other Asia	2.37	2.41	2.41	2.42	2.45	2.42	0.05
Latin America	3.89	3.91	3.91	3.89	3.78	3.87	-0.02
Middle East	2.08	2.05	2.03	2.00	2.03	2.03	-0.05
Africa	3.03	3.02	3.07	3.01	2.99	3.02	-0.01
Total DCs	11.38	11.39	11.43	11.31	11.25	11.34	-0.03
FSU	9.33	9.88	9.98	10.24	10.42	10.13	0.80
Other Europe	0.18	0.17	0.17	0.17	0.17	0.17	0.00
China	3.39	3.37	3.42	3.45	3.42	3.42	0.02
Total "Other regions"	12.90	13.42	13.57	13.87	14.01	13.72	0.82
Total non-OPEC production	46.26	47.19	47.28	46.96	47.46	47.22	0.97
Processing gains	1.73	1.81	1.81	1.81	1.85	1.82	0.09
Total non-OPEC supply	47.99	49.00	49.09	48.77	49.31	49.04	1.05
Previous estimate	47.98	49.11	49.19	48.87	49.46	49.16	1.18
Revision	0.01	-0.12	-0.10	-0.10	-0.15	-0.12	-0.13

Totals may not add due to independent rounding.

2003 net FSU oil export forecast at 6.22 mb/d, 2002 estimated at 5.50 mb/d. The FSU net oil export forecast for 2003 was revised up by 0.04 mb/d to 6.22 mb/d, while the 2002 figure remained unchanged at 5.50 mb/d. Figures for 1999-2001 remain unchanged compared with the last MOMR.

Table 14
FSU net oil exports

		rse net on e	apor is						
	mb/d								
	<u>1Q</u>	<u>2Q</u>	<u>3Q</u>	<u>4Q</u>	<u>Year</u>				
1999	3.12	3.62	3.52	3.49	3.44				
2000	3.97	4.13	4.47	4.01	4.14				
2001	4.30	4.71	4.89	4.47	4.59				
<b>2002</b> (estimate)	5.00	5.66	5.84	5.47	5.50				
2003 (forecast)	5.87	6.23	6.55	6.21	6.22				
2003 (forecast)	5.87	6.23	6.55	6.21	6.22				

#### OPEC natural gas liquids

2003 OPEC NGL forecast at 3.62 mb/d

OPEC NGL data remain almost unchanged at 3.16 mb/d, 3.34 mb/d, 3.58 mb/d, 3.64 mb/d and 3.62 mb/d, respectively, compared with last *MOMR*'s figures.

#### OPEC NGL production — 1998–2003

mb/d

<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>1Q02</u>	<u>2Q02</u>	<u>3Q02</u>	<u>4Q02</u>	2002	Change <u>02/01</u>		Change <u>03/02</u>
3.16	3.34	3.58	3.64	3.64	3.67	3.61	3.64	0.06	3.62	-0.02

Available secondary sources put OPEC's March production at 27.49 mb/d

#### **OPEC** crude oil production

Available secondary sources indicate that, in March, OPEC output was 27.49 mb/d, which was 0.34 mb/d higher than the revised February figure of 27.15 mb/d. Table 15 shows OPEC production, as reported by selected secondary sources.

Table 15 OPEC crude oil production, based on secondary sources  $1{,}000\ b/d$ 

							Mar 03
	<u>2001</u>	<u>4Q02</u>	<u>2002</u> *	Feb 03*	<u>Mar 03</u> *	1Q03*	Feb 03
Algeria	820	952	864	1,066	1,088	1,059	22
Indonesia	1,214	1,102	1,120	1,075	1,040	1,067	-35
IR Iran	3,665	3,535	3,420	3,679	3,706	3,674	27
Iraq	2,381	2,394	2,006	2,498	1,430	2,128	-1,068
Kuwait	2,025	1,925	1,887	2,047	2,278	2,108	231
SP Libyan AJ	1,361	1,349	1,314	1,388	1,410	1,392	23
Nigeria	2,097	2,010	1,965	2,199	1,900	2,078	-299
Qatar	683	704	648	748	753	741	4
Saudi Arabia	7,939	7,904	7,537	8,813	9,293	8,852	480
UAE	2,163	2,021	1,988	2,159	2,284	2,187	125
Venezuela	2,862	2,231	2,591	1,475	2,305	1,458	830
<b>Total OPEC</b>	27,211	26,125	25,340	27,147	27,487	26,745	339

Totals may not add due to independent rounding.

#### **RIG COUNT**

# Non-OPEC rig count down by 74 in March

#### Non-OPEC

Rig activity declined in March. North America saw a decrease of 74 rigs, compared with the February figure. In Canada, the rig count declined by 105 rigs to 449. The USA witnessed an increase of 34 rigs to 941, while Mexico's rig activity declined by 3 to 79 rigs. Western Europe's rig activity decreased by 4 rigs to 74. Latin America rig activity rose by 6 rigs to 118, mainly contributed by Argentina. Angola's rig activity increased also by 5 rigs.

Table 16 Non-OPEC rig count in 2002-2003

			Change			Change
	<u>2001</u>	<u>2002</u>	02/01	Feb 03	<b>Mar 03</b>	Mar/Feb
North America	1,552	1,162	-390	1,543	1,469	-74
Western Europe	95	85	-10	78	74	-4
OECD Pacific	20	17	-3	21	17	-4
OECD	1,667	1,264	-403	1,642	1,560	-82
Other Asia	95	111	16	118	117	-1
Latin America	141	106	-35	112	118	6
Middle East	50	62	12	72	72	0
Africa	36	43	7	46	49	3
DCs	321	322	1	348	356	8
FSU	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other Europe	3	2	-1	2	2	0
China	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other regions	n.a.	n.a.	n.a.	2	2	0
Total non-OPEC	1,991	1,588	-403	1,992	1,918	<b>-74</b>

Totals may not add due to independent rounding. Source: Baker Hughes International.

<sup>\*</sup> Not all sources available.

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# OPEC rig count almost flat in March

#### **OPEC**

OPEC's rig count stood at 208 in March, almost unchanged compared with the February figure. Venezuela restored some of its rig activity, as the rig count there increased by 8 rigs to 29, compared with last month's figures. This rise was totally offset by the declines in Algeria and IR Iran of 5 and 4 rigs to 17 and 32, respectively.

# Table 17 OPEC rig count

			Change			Change
	<u>2001</u>	<u>2002</u>	02/01	<b>Feb 03</b>	<b>Mar 03</b>	Mar/Feb
Algeria	20	20	0	22	17	-5
Indonesia	41	46	6	50	50	0
IR Iran	30	34	4	36	32	-4
Iraq	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Kuwait	9	6	-3	4	1	-3
SP Libyan AJ	5	10	5	9	10	1
Nigeria	12	12	0	11	12	1
Qatar	9	13	4	8	8	0
Saudi Arabia	30	32	2	32	33	1
UAE	15	16	0	16	16	0
Venezuela	67	42	-25	21	29	8
<b>Total OPEC</b>	238	231	<b>-7</b>	209	208	-1

Totals may not add due to independent rounding. Source: Baker Hughes International.

#### STOCK MOVEMENTS

# Further slight draw of 2.7 mb in USA in March

USA

US commercial onland oil stocks displayed a further draw when they moved down by 2.7 mb, or at a rate of 0.09 mb/d, to 892.3 mb during the period 28 February-28 March 2003. This draw left the y-o-y deficit at about 10% compared to 12% reported in the March MOMR. Crude oil stocks registered a considerable build of 7.1 mb to 280.7 mb, however, they switched into an upward direction only in the last two weeks of the month as crude oil imports jumped to an average record, mainly from Venezuela and Saudi Arabia. Indeed, crude oil imports rose to 10.4 mb/d, 1.7 mb/d higher than the level registered last month. This increase in crude oil imports offset the rise of 0.9 mb/d to 15.1 mb/d in refinery runs and enabled the yearly deficit of crude oil stocks to lessen to about 14%, from 16%, as reported in the previous MOMR. Gasoline stocks showed a draw of 5.4 mb to 200.7 mb, as an improvement in apparent demand and stagnant output was witnessed. However, the closing week of March registered a build, due to a rise in production, as refineries usually build gasoline stocks at this time of the year in preparation for the peak seasonal demand. Gasoline stocks were around 5% below last year's figure. Distillate stocks reversed their huge loss in March over February as they rose by 1.4 mb to 97.9 mb. The increase in output, combined with the decrease in apparent demand, was behind this build.

During the week ending 4 April 2003, total oil stocks in the USA showed a further draw of 7.6 mb to 884.7 mb, 12% below the level reported in the same month last year. With the decline in crude oil imports and an increase in refinery input, US commercial crude oil stocks fell by 3.6 mb to 277.1 mb. Distillate fuel inventories also decreased by 1.8 mb to 96.1 mb due to surprisingly cold weather in the US Northeast that boosted heating oil demand. Gasoline stocks, however, rose by 1.5 mb to 202.2 mb as refineries boosted gasoline stocks at the start of the up-coming summer driving season, as well as reflecting the recovery of exports from Venezuela. Amid this build, the y-o-y deficit narrowed to about 5.4%.

During the same period, the Strategic Petroleum Reserve (SPR) remained unchanged at the previous month's level of 599.2 mb.





Table 18 US onland commercial petroleum stocks\*

mb

				Change		
	31 Jan 03	28 Feb 03	28 Mar 03	Mar/Feb	29 Mar 02	4 Apr 03**
Crude oil (excl. SPR)	274.3	273.6	280.7	7.1	325.1	277.1
Gasoline	209.6	206.1	200.7	-5.4	211.5	202.2
Distillate fuel	112.1	96.5	97.9	1.4	119.7	96.1
Residual fuel oil	31.1	31.4	30.1	-1.3	34.6	32.0
Jet fuel	40.9	39.4	35.8	-3.6	41.0	36.4
Unfinished oils	79.2	83.1	84.9	1.8	93.6	86.3
Other oils	171.4	165.0	162.2	-2.8	171.1	154.6
Total	918.6	895.0	892.3	-2.7	996.6	884.7
SPR	599.2	599.2	599.2	0.0	560.9	599.2

<sup>\*</sup> At end of month, unless otherwise stated.

Source: US Department of Energy's Energy Information Administration.

## EUR-16 oil stocks Total

continued upward trend, as they rose by 4.2 mb in March

#### Western Europe

Total oil stocks in the Eur-16 (EU plus Norway) continued the upward trend seen last month as they rose by 4.2 mb, or at a rate of 0.14 mb/d, to 1,057.8 mb. This build still left total stocks 19.3% lower than last year's figure and at their lowest end-March level since 1996. This build in total oil stocks was mainly due to the increase in, by almost the same amount, crude oil stocks, while the rises in gasoline and naphtha stocks were offset by the draw on middle distillate and fuel oil inventories. Crude oil stocks registered a build of 4.3 mb to 443.3 mb on the back of increasing volumes of imports from the Middle East which started to reach the refineries in the Mediterranean, combined with lower crude runs which decreased by 0.32 mb/d. This build raised the crude oil stocks by 4.3 mb or 1% compared to last year's figures. Gasoline stocks increased slightly by 0.3 mb to 149.8 mb when compared to the substantial build observed in the last four months. This small build was due to lower demand and a continued flow of exports to the USA putting the y-o-y deficit at about 6%. Middle distillates continued to fall to a level not seen since November 2001 as they dropped by 0.6 mb to 329.4 mb, widening the y-o-y deficit to 14.7 mb as Russian cargoes moved to the USA instead of Europe due to the cold weather in the USA. Fuel oil stocks fell slightly by 0.6 mb to 112.5 mb and remained 1.9 mb higher than last year's figure. The bad weather observed in February, which interrupted the exports from Russia, combined with healthy demand, were behind this decrease in fuel oil stocks.

Table 19
Western Europe's oil stocks\*

mb

				Change	
	<u>Jan 03</u>	<u>Feb 03</u>	Mar 03	Mar/Feb	Mar 02
Crude oil	436.4	439.0	443.3	4.3	439.0
Mogas	143.1	149.5	149.8	0.3	159.3
Naphtha	22.0	22.0	22.9	0.9	24.2
Middle distillates	336.6	330.0	329.4	-0.6	344.1
Fuel oils	111.1	113.1	112.5	-0.6	110.6
<b>Total products</b>	612.8	614.6	614.5	-0.1	638.1
Overall total	1,049.1	1,053.6	1,057.8	4.2	1,077.0

<sup>\*</sup> At end of month, with region consisting of the Eur-16. Source: Argus Euroilstock.

#### Japan

Oil stocks registered slight draw of 1.3 mb in Japan in February Commercial onland oil stocks in Japan continued to decline further by 1.3 mb, or at a rate of 0.05 mb/d, to 164.2 mb in February 2003, almost the same y-o-y deficit. Distillate stocks led this draw, decreasing by 4.8 mb on the back of strong kerosene demand used as heating fuel and lower output. While gasoline stocks and fuel oil registered marginal builds of 0.5 mb to 13.8 mb and 0.1 mb to 18.6 mb, respectively. Crude oil stocks showed a moderate build of 2.8 mb to 105.4 mb, widening the y-o-y surplus to about 8.7%. This build was caused mainly by the rise in crude oil imports from the Middle East, despite the increase in refinery crude runs.

<sup>\*\*</sup> Latest available data at time of report's release.

Table 20 Japan's commercial oil stocks\*

mb

				Change	
	<u>Dec 02</u>	<u>Jan 03</u>	Feb 03	Feb/Jan	Feb 02
Crude oil	102.9	102.6	105.4	2.8	97.0
Gasoline	12.3	13.3	13.8	0.5	15.3
Middle distillates	32.7	31.3	26.5	-4.8	34.3
Residual fuel oil	17.7	18.4	18.6	0.1	19.0
Total products	62.7	63.0	58.8	-4.2	68.5
Overall total**	165.7	165.6	164.2	-1.3	165.5

#### BALANCE OF SUPPLY AND DEMAND

2002 supply/demand difference revised down to 24.91 mb/d

The summarized supply/demand balance table for 2002 shows a downward revision to the estimated world oil demand of 0.04 mb/d to 76.54 mb/d, and total non-OPEC supply was revised up by 0.01 mb/d to 51.63 mb/d, resulting in an estimated annual difference of around 24.91 mb/d, down by 0.05 mb/d compared with the last figure in the *MOMR*, with a quarterly distribution of 25.20 mb/d, 22.99 mb/d, 25.21 mb/d and 26.22 mb/d, respectively. The balance for the first and the second quarters was revised up significantly by 0.16 mb/d and 0.17 mb/d to -0.06 mb/d and 1.63 mb/d respectively, and the third quarter was revised up slightly by 0.01 mb/d to 0.26 mb/d, while a significant 0.13 mb/d downward revision has been made to the fourth quarter, now estimated at -0.09 mb/d. The average 2002 yearly balance is estimated at 0.43 mb/d, up by 0.05 mb/d compared with the last *MOMR* figure.

Table 21 Summarized supply/demand balance for 2002 mb/d

	<u>2001</u>	1Q02	2Q02	3Q02	4Q02	<b>2002</b>
(a) World oil demand	76.37	76.55	74.71	76.52	78.34	76.54
(b) Non-OPEC supply <sup>(1)</sup>	50.07	51.35	51.72	51.31	52.13	51.63
Difference (a – b)	26.31	25.20	22.99	25.21	26.22	24.91
OPEC crude oil production <sup>(2)</sup>	27.21	25.14	24.61	25.47	26.13	25.34
Balance	0.90	-0.06	1.63	0.26	-0.09	0.43

<sup>(1)</sup> Including OPEC NGLs+non-conventional oils.

Totals may not add due to independent rounding.

2003 supply/demand difference expected at 24.69 mb/d

The summarized supply/demand balance table for 2003 shows a downward revision to both the world oil demand forecast of 0.08 mb/d to 77.35 mb/d and total non-OPEC supply of 0.11 mb/d to 52.66 mb/d, resulting in an expected difference of around 24.69 mb/d, with a quarterly distribution of 25.20 mb/d, 22.99 mb/d, 24.56 mb/d and 25.99 mb/d, respectively. The balance for the first quarter 2003, which is introduced for the first time, is estimated at 1.54 mb/d.

Table 22 Summarized supply/demand balance for 2003 mb/d

	<u>2002</u>	<u>1Q03</u>	<u>2Q03</u>	3Q03	<u>4Q03</u>	<u>2003</u>
(a) World oil demand	76.54	77.62	75.62	77.08	79.05	77.35
(b) Non-OPEC supply <sup>(1)</sup>	51.63	52.42	52.63	52.52	53.06	52.66
Difference (a − b)	24.91	25.20	22.99	24.56	25.99	24.69
OPEC crude oil production <sup>(2)</sup>	25.34	26.75				
Balance	0.43	1.54				

<sup>(1)</sup> Including OPEC NGLs+non-conventional oils.

Totals may not add due to independent rounding.

<sup>(2)</sup> Selected secondary sources.

<sup>(2)</sup> Selected secondary sources.

Table 23 World oil demand/supply balance

mb/d

	1999	2000	2001	1002	2Q02	3Q02	4Q02	2002	1003	2003	3003	4003	2003
World demand						- (							
OECD	47.7	47.7	47.7	48.0	46.1	47.3	48.8	47.6	48.7	46.5	47.5	49.4	48.0
North America	23.8	24.0	23.9	23.7	23.8	24.1	24.2	23.9	24.1	23.9	24.2	24.3	24.1
Western Europe	15.2	15.1	15.3	15.2	14.6	15.2	15.4	15.1	15.3	14.7	15.2	15.6	15.2
Pacific	8.7	8.6	8.6	9.1	7.7	8.1	9.3	8.5	9.4	7.8	8.1	9.4	8.7
DCs	18.7	19.0	19.4	19.3	19.4	19.5	19.5	19.4	19.4	19.7	19.6	19.6	19.6
FSU	4.0	3.8	3.9	3.8	3.3	3.7	4.3	3.8	3.8	3.5	3.7	4.2	3.8
Other Europe	0.8	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8
China	4.2	4.7	4.7	4.7	5.1	5.3	5.0	5.0	4.8	5.2	5.4	5.2	5.2
(a) Total world demand	75.4	76.0	76.4	76.6	74.7	76.5	78.3	76.5	77.6	75.6	77.1	79.1	77.3
Non-OPEC supply													
OECD	21.3	21.8	21.8	22.1	22.2	21.5	22.2	22.0	22.4	22.3	21.8	22.2	22.2
North America	14.1	14.2	14.4	14.6	14.7	14.4	14.6	14.6	14.9	14.8	14.6	14.7	14.8
Western Europe	6.6	6.7	6.7	6.7	6.8	6.3	6.8	6.6	6.8	6.7	6.4	6.8	6.7
Pacific	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.7	0.7	0.8	0.7	0.7
DCs	10.8	11.0	11.0	11.4	11.5	11.3	11.3	11.4	11.4	11.4	11.3	11.2	11.3
FSU	7.5	7.9	8.5	8.9	9.2	9.5	9.7	9.3	9.9	10.0	10.2	10.4	10.1
Other Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
China	3.2	3.2	3.3	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.5	3.4	3.4
Processing gains	1.6	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.8	1.8	1.8	1.8	1.8
Total non-OPEC supply	44.6	45.7	46.5	47.7	48.1	47.6	48.5	48.0	49.0	49.1	48.8	49.3	49.0
OPEC NGLs + non-conventionals	3.2	3.3	3.6	3.6	3.6	3.7	3.6	3.6	3.4	3.5	3.7	3.7	3.6
(b) Total non-OPEC supply and OPEC NGLs	47.7	49.1	50.1	51.4	51.7	51.3	52.1	51.6	52.4	52.6	52.5	53.1	52.7
OPEC crude oil production (secondary sources)	26.5	27.9	27.2	25.1	24.6	25.5	26.1	25.3	26.7				
Total supply	74.2	77.0	77.3	76.5	76.3	76.8	78.3	77.0	79.2				
Balance (stock change and miscellaneous)	-1.1	1.1	0.9	-0.1	1.6	0.3	-0.1	0.4	1.5				
Closing stock level (outside FCPEs) mb													
OECD onland commercial	2446	2530	2622	2599	2643	2564	2467	2467					
OECD SPR	1228	1210	1222	1237	1247	1250	1272	1272					
OECD total	3674	3740	3843	3836	3890	3814	3739	3739					
Other onland	983	1000	1028	1026	1040	1020	1000	1000					
Oil-on-water	808	876	829	808	817	820	825	825					
Total stock	5465	5617	5700	5669	5747	5654	5564	5564					
Days of forward consumption in OECD													
Commercial onland stocks	51	53	55	56	56	53	51	51					
SPR	26	25	26	27	26	26	26	26					
Total	77	78	81	83	82	78	77	78					
Memo items													
FSU net exports	3.4	4.1	4.6	5.1	5.8	5.8	5.5	5.6	6.0	6.4	6.6	6.3	6.3
(a) - (b)	27.7	26.9	26.3	25.2	23.0	25.2	26.2	24.9	25.2	23.0	24.6	26.0	24.7

Note: Totals may not add up due to independent rounding.

 $\label{eq:table 24} Table~24$  World oil demand/supply balance: changes from last month's table  $\dot{\tau}$ 

mb/d

	1999	2000	2001	1Q02	2Q02	3Q02	4Q02	2002	1Q03	2Q03	3Q03	4Q03	2003
World demand													
OECD	-	-	_	_	_	_	0.1	_	-	_	-	0.1	-
North America	-	-	_	_	_	_	-	_	-	-	-	-	-
Western Europe	-	-	_	_	_	_	0.1	_	-	_	-	0.1	_
Pacific	-	-	_	_	_	_	_	_	-	_	-	-	-
DCs	-	-	_	_	_	_	_	_	-	_	-	-	-
FSU	-	-	_	-0.1	-0.2	_	_	-0.1	-0.1	-0.2	-	-	-0.1
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	_	_	_	_	_	_	-	_	-	-	-
(a) Total world demand	-	-	_	-0.1	-0.1	_	0.1	_	-0.2	-0.2	-	-	-0.1
Non-OPEC supply													
OECD	-	-	_	_	_	_	_	_	-0.1	-0.1	-0.1	-0.2	-0.1
North America	-	_	-	-	-	-	-	_	-	_	_	-0.1	-
Western Europe	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1
Pacific	-	-	_	_	_	_	-	_	-	-	-	-	-
DCs	-	-	_	_	_	_	_	_	-0.1	-0.1	-0.1	-0.1	-0.1
FSU	-	-	_	_	_	_	_	_	0.1	0.1	0.1	0.1	0.1
Other Europe	-	-	_	_	_	_	_	_	-	_	-	-	-
China	-	-	_	_	_	_	_	_	-	_	-	-	_
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	_	_	_	_	_	_	-0.1	-0.1	-0.1	-0.2	-0.1
OPEC NGLs + non-conventionals	-	-	_	_	_	_	_	_	-	_	-	-	_
(b) Total non-OPEC supply and OPEC NGLs	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.2	-0.1
OPEC crude oil production (secondary sources)	-	-	-	-	-	-	-	-	-				
Total supply	-	-	-	-	-	-	-	-	-				
Balance (stock change and miscellaneous)	-	-	-	0.2	0.2	-	-0.1	-	-				
Closing stock level (outside FCPEs) mb													
OECD onland commercial	-	-	-	-0.6	-0.6	-0.7	-17.3	-17.3					
OECD SPR	-	-	-	-	-	-	-	-					
OECD total	-	-	-	-0.6	-0.7	-0.8	-17.8	-17.8					
Other onland	-	-	-	-	-	-	-4.8	-4.8					
Oil on water	-	-	-	-	-	-	-7.7	-7.7					
Total stock	-	-	-0.6	-0.7	-0.8	-0.8	-30.2	-30.2					
Days of forward consumption in OECD													
Commercial onland stocks	-	-	-	-	-	-	-	-					
SPR	-	-	-	-	-	-	-	-					
Total	-	-	-	-	-	-	-	-					
Memo items													
FSU net exports	-	-	-	0.1	0.2	-	-	0.1	0.2	0.2	0.1	0.1	0.1
(a) - (b)	-	-	-	-0.2	-0.2	-	0.1	-	-0.1	-0.1	0.1	0.2	-

 $<sup>^\</sup>dagger$  This compares Table 23 in this issue of the MOMR with Table 23 in the March 2003 issue. This table shows only where changes have occurred.

Table 25
World oil stocks (excluding former CPEs) at end of period

	1997	1998	1999	2000	2001	2002	1Q01	2Q01	3Q01	4Q01	1Q02	2Q02	3Q02	4Q02
Closing stock level mb														
OECD onland commercial	2,615	2,697	2,446	2,530	2,622	2,467	2,525	2,597	2,660	2,622	2,599	2,643	2,564	2,467
North America	1,211	1,283	1,127	1,146	1,263	1,175	1,159	1,231	1,269	1,263	1,235	1,257	1,216	1,175
Western Europe	912	962	881	930	914	882	918	909	918	914	928	940	913	882
OECD Pacific	492	453	437	454	444	410	447	457	473	444	435	447	435	410
OECD SPR	1,207	1,249	1,228	1,210	1,222	1,272	1,210	1,207	1,205	1,222	1,237	1,247	1,250	1,272
North America	563	571	567	543	552	601	544	545	547	552	563	578	589	601
Western Europe	329	362	346	354	353	353	351	347	345	353	353	348	344	353
OECD Pacific	315	315	315	313	316	318	314	314	313	316	321	321	317	318
OECD total	3,822	3,946	3,674	3,740	3,843	3,739	3,734	3,804	3,865	3,843	3,836	3,890	3,814	3,739
Other onland	1,022	1,055	983	1,000	1,028	1,000	999	1,017	1,034	1,028	1,026	1,040	1,020	1,000
Oil-on-water	812	859	808	876	829	825	899	823	860	829	808	817	820	825
Total stock	5,656	5,860	5,465	5,617	5,700	5,564	5,632	5,643	5,759	5,700	5,669	5,747	5,654	5,564
D (f ) OFCD														
Days of forward consumption in OECD														
OECD onland commercial	56	57	51	53	55	51	54	55	55	55	56	56	53	51
North America	52	54	47	48	53	49	49	51	54	53	52	52	50	49
Western Europe	60	63	58	61	61	58	62	59	59	60	63	62	59	58
OECD Pacific	58	52	51	53	52	47	56	57	54	49	57	55	47	44
OECD SPR	26	26	26	25	26	26	26	25	25	25	27	26	26	26
North America	24	24	24	23	23	25	23	23	23	23	24	24	24	25
Western Europe	21	24	23	23	23	23	24	22	22	23	24	23	22	23
OECD Pacific	37	36	37	37	37	37	39	39	36	35	42	40	34	34
OECD total	82	83	77	<b>78</b>	81	78	80	80	81	80	83	82	<b>78</b>	77
Days of global forward consumption	87	88	82	84	85	82	86	84	85	85	86	86	83	82

Table 26
Non-OPEC supply and OPEC natural gas liquids

mb/d

				Change						Change						Change
	1999	2000	2001	01/00	1Q02	2Q02	3Q02	4Q02	2002	02/01	1Q03	2Q03	3Q03	4Q03	2003	03/02
USA	8.11	8.11	8.05	-0.06	8.17	8.24	7.99	8.06	8.11	0.06	8.12	8.19	7.94	8.01	8.06	-0.05
Canada	2.60	2.69	2.74	0.05	2.84	2.84	2.86	2.94	2.87	0.13	2.97	2.92	2.94	2.97	2.95	0.08
Mexico	3.35	3.45	3.57	0.11	3.61	3.57	3.58	3.60	3.59	0.03	3.76	3.73	3.74	3.76	3.75	0.15
North America	14.05	14.25	14.36	0.11	14.62	14.65	14.43	14.60	14.58	0.22	14.85	14.83	14.62	14.74	14.76	0.18
Norway	3.06	3.32	3.42	0.09	3.32	3.38	3.22	3.44	3.34	-0.08	3.40	3.35	3.38	3.37	3.37	0.03
UK	2.84	2.64	2.53	-0.11	2.60	2.56	2.28	2.59	2.51	-0.03	2.59	2.55	2.27	2.58	2.50	-0.01
Denmark	0.30	0.36	0.35	-0.02	0.38	0.37	0.34	0.38	0.37	0.02	0.40	0.38	0.35	0.39	0.38	0.01
Other Western Europe	0.43	0.41	0.40	-0.01	0.42	0.44	0.42	0.43	0.43	0.03	0.42	0.44	0.42	0.43	0.43	0.00
Western Europe	6.63	6.74	6.70	-0.04	6.73	6.76	6.26	6.84	6.65	-0.05	6.81	6.72	6.41	6.77	6.68	0.03
Australia	0.59	0.77	0.71	-0.06	0.71	0.71	0.73	0.67	0.70	0.00	0.67	0.67	0.69	0.63	0.67	-0.04
Other Pacific	0.07	0.06	0.06	0.00	0.05	0.06	0.05	0.05	0.05	-0.01	0.05	0.06	0.06	0.05	0.06	0.00
OECD Pacific	0.66	0.83	0.77	-0.07	0.76	0.77	0.79	0.72	0.76	-0.01	0.73	0.73	0.75	0.69	0.72	-0.03
Total OECD*	21.34	21.82	21.82	0.00	22.11	22.17	21.48	22.16	21.98	0.16	22.38	22.29	21.78	22.20	22.16	0.18
Brunei	0.18	0.19	0.20	0.00	0.21	0.20	0.20	0.20	0.20	0.01	0.20	0.19	0.19	0.19	0.19	-0.01
India	0.75	0.74	0.73	-0.01	0.74	0.74	0.75	0.75	0.75	0.01	0.75	0.75	0.76	0.76	0.76	0.01
Malaysia	0.70	0.68	0.69	0.00	0.73	0.75	0.75	0.75	0.75	0.06	0.76	0.78	0.78	0.78	0.77	0.03
Papua New Guinea	0.09	0.07	0.06	-0.01	0.05	0.05	0.05	0.05	0.05	-0.01	0.05	0.05	0.05	0.05	0.05	0.00
Vietnam	0.26	0.31	0.35	0.04	0.34	0.33	0.32	0.35	0.34	-0.01	0.34	0.33	0.32	0.34	0.33	0.00
Asia others	0.20	0.24	0.26	0.02	0.28	0.29	0.29	0.30	0.29	0.03	0.31	0.31	0.32	0.32	0.31	0.02
Other Asia	2.18	2.23	2.28	0.05	2.36	2.36	2.37	2.40	2.37	0.09	2.41	2.41	2.42	2.45	2.42	0.05
Argentina	0.84	0.79	0.80	0.01	0.80	0.80	0.79	0.78	0.79	-0.01	0.79	0.79	0.78	0.77	0.78	-0.01
Brazil	1.36	1.49	1.57	0.08	1.75	1.80	1.77	1.67	1.75	0.18	1.76	1.81	1.78	1.68	1.76	0.01
Colombia	0.82	0.70	0.61	-0.08	0.61	0.59	0.57	0.57	0.59	-0.03	0.57	0.54	0.53	0.53	0.54	-0.04
Ecuador	0.38	0.40	0.41	0.01	0.40	0.39	0.41	0.39	0.40	-0.01	0.39	0.39	0.40	0.39	0.39	0.00
Peru	0.11	0.10	0.10	-0.01	0.10	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.00
Trinidad & Tobago	0.14	0.14	0.13	-0.01	0.14	0.14	0.15	0.16	0.15	0.02	0.17	0.16	0.18	0.19	0.17	0.03
L. America others	0.11	0.12	0.13	0.01	0.13	0.12	0.12	0.12	0.12	-0.01	0.17	0.12	0.12	0.12	0.12	0.00
Latin America	3.76	3.74	3.75	0.01	3.93	3.94	3.91	3.80	3.89	0.14	3.91	3.91	3.89	3.78	3.87	-0.02
Bahrain	0.19	0.19	0.19	0.00	0.19	0.19	0.19	0.19	0.19	0.00	0.19	0.19	0.19	0.19	0.19	0.00
Oman	0.91	0.95	0.95	0.00	0.94	0.92	0.87	0.89	0.90	-0.04	0.86	0.84	0.80	0.82	0.83	-0.07
Syria	0.55	0.54	0.53	-0.01	0.53	0.53	0.54	0.55	0.54	0.01	0.54	0.54	0.55	0.56	0.55	0.01
Yemen	0.42	0.45	0.33	0.01	0.45	0.35	0.45	0.46	0.45	-0.01	0.46	0.46	0.46	0.46	0.46	0.01
Middle East	2.06	2.13	2.13	0.01	2.11	2.09	2.05	2.09	2.08	-0.01 - <b>0.05</b>	2.05	2.03	2.00	2.03	2.03	-0.05
Angola	0.76	0.75	0.74	-0.01	0.92	0.92	0.89	0.85	0.89	0.15	0.87	0.87	0.84	0.81	0.85	-0.05
Cameroon	0.10	0.10	0.08	-0.01	0.08	0.08	0.07	0.07	0.07	-0.01	0.08	0.08	0.07	0.07	0.07	0.00
	0.10	0.10	0.08	0.00	0.03	0.08	0.07	0.07	0.26	-0.01	0.03	0.08	0.07	0.22	0.07	-0.02
Congo	0.83	0.27	0.27	-0.04	0.27	0.26	0.23	0.23	0.26	-0.01	0.24	0.24	0.23	0.22	0.23	0.02
Egypt Gabon	0.36	0.34	0.70	-0.04	0.73	0.76	0.74	0.73	0.73	-0.01	0.70	0.77	0.73	0.78	0.76	-0.01
South Africa	0.36	0.34	0.31	0.00	0.31	0.31	0.30	0.30	0.30	0.00	0.30	0.30	0.29	0.28	0.29	0.00
	0.17	0.19	0.19	0.00	0.19		0.19	0.19	0.19	0.00	0.19	0.19		0.19	0.19	0.00
Africa other						0.56							0.64			
Africa Total DCs	2.78 10.78	2.85 10.95	2.80 10.97	-0.05 0.01	3.04 11.44	3.08 11.47	3.01 11.34	2.99 11.27	3.03 11.38	0.23 0.41	3.02 11.39	3.07 11.43	3.01 11.31	2.99 11.25	3.02 11.34	-0.01 -0.03
FSU	7.47	7.91	8.53	0.62	8.92	9.15	9.50	9.75	9.33	0.41	9.88	9.98	10.24	10.42	10.13	0.80
Other Europe	0.18	0.18	0.18	0.02	0.18	0.18	9.50 0.17	0.17	9.33 0.18	-0.01	9.88 0.17	9.98 0.17	0.17	0.17	0.17	0.00
China	3.21	3.23	3.30	0.07	3.35	3.39	3.43	3.40	3.39	0.10	3.37	3.42	3.45	3.42	3.42	0.00
Non-OPEC production	42.98	44.10	44.79	0.70	45.99	46.36	45.92	46.75	46.26	1.46	47.19	47.28	46.96	47.46	47.22	0.02
Processing gains	1.58	1.65	1.69	0.04	1.72	1.72	1.72	1.76	1.73	0.04	1.81	1.81	1.81	1.85	1.82	0.09
Non-OPEC supply	44.56	45.75	46.48	0.74	47.71	48.08	47.64	48.51	47.99	1.50	49.00	49.09	48.77	49.31	49.04	1.05
OPEC NGLs + non-conventionals	3.16	3.34	3.58	0.24	3.64	3.64	3.67	3.61	3.64	0.06	3.42	3.55	3.75	3.75	3.62	-0.02

Note: Totals may not add up due to independent rounding.

<sup>\*</sup> Former East Germany is included in the OECD.

Table 27
Non-OPEC Rig Count

USA         2000         1 (01)         2001         3 (01)         4 (01)         2001         1 (10)         2002         2002         2002         2002         2002         Peb03         Mar/03         1 (04)         Mar/03-Feb03           USA         916         1141         1239         1231         1004         1156         818         806         853         268         325         907         941         901         34           Canada         344         515         252         320         278         342         383         147         250         283         266         -76         554         449         494         -105           Mexico         44         50         48         56         62         54         63         61         62         76         65         11         82         79         82         -3           North America         1305         1706         1539         1607         134         1552         1264         101         116         20         -30         1543         1469         1476         48         156         4         52         4         28         30         24         23
Canada         344         515         252         320         278         342         383         147         250         283         266         -76         554         449         494         -105           Mexico         44         50         48         56         62         54         63         61         62         76         65         11         82         79         82         -3           North America         1305         1706         1539         1607         1344         1552         1264         1014         1165         1206         1162         -390         1543         1469         1476         -74           Norway         22         24         222         222         22         22         22         22         22         22         22         22         22         22         22         24         23         26         2         18         19         19         19         4         19         16         18         -3           UK         118         18         25         28         26         24         28         30         24         23         26         2         18
Mexico         44         50         48         56         62         54         63         61         62         76         65         11         82         79         82         -3           North America         1305         1706         1539         1607         1344         1552         1264         1014         1165         1206         1162         -390         1543         1469         1476         -74           Norway         22         24         22         22         22         22         23         20         17         19         19         -4         19         16         18         -3           UK         18         18         25         28         26         24         28         30         24         23         26         2         18         19         19         1           Denmark         3         4         42         47         44         39         38         33         34         36         -8         37         36         36         -1           Western Europe         125         89         95         96         100         95         92         91         76<
North America         1305         1706         1539         1607         1344         1552         1264         1014         1165         1206         1162         -390         1543         1469         1476         -74           Norway         22         24         22         22         22         23         20         20         17         19         19         -4         19         16         18         -3           UK         18         18         25         28         26         24         28         30         24         23         26         2         18         19         19         19         16         18         -3           UK         18         18         18         25         28         26         24         28         30         24         23         26         2         18         19         19         19         19         19         19         19         19         19         19         18         37         36         36         -1           Western Europe         125         89         95         96         100         95         92         91         76         81
Norway 22 24 22 22 22 23 20 20 17 19 19 19 -4 19 16 18 -3 UK 18 18 25 28 26 24 28 30 24 23 26 2 18 19 19 1 Denmark 3 4 5 4 5 4 5 4 5 4 3 5 4 0 4 6 4 0 4 3 3 3 -1 Other Western Europe 82 43 44 42 47 44 39 38 33 34 36 -8 37 36 36 36 -1  Western Europe 125 89 95 96 100 95 92 91 76 81 85 -10 78 74 77 -4 Australia 10 11 11 10 10 10 10 9 9 9 9 9 9 9 -2 11 10 10 10 -1 Other Pacific 7 10 9 8 10 9 8 10 9 8 7 7 7 10 8 -1 10 7 8 3 -3  OECD Pacific 17 20 20 18 20 17 16 16 16 19 17 -3 21 17 18 -4  Total OECD* 1447 1815 1655 1721 1464 1667 1373 1121 1257 1306 1264 -403 1642 1560 1571 -82  Brunei 2 3 3 3 2 2 3 3 2 3 2 3 3 3 3 3 3 3 3
UK         18         18         25         28         26         24         28         30         24         23         26         2         18         19         19         1           Denmark         3         4         5         4         5         4         5         4         3         5         4         0         4         3         3         -1           Other Western Europe         82         43         44         42         47         44         39         38         33         34         36         -8         37         36         36         -1           Western Europe         125         89         95         96         100         95         92         91         76         81         85         -10         78         74         77         -4           Australia         10         11         11         10         10         9         8         7         7         10         8         -1         0         9         9         9         9         9         9         -2         11         10         10         11         1         1         1         1
Denmark   3
Other Western Europe         82         43         44         42         47         44         39         38         33         34         36         -8         37         36         36         -1           Western Europe         125         89         95         96         100         95         92         91         76         81         85         -10         78         74         77         -4           Australia         10         11         11         10         10         10         9         9         9         9         9         -2         11         10         10         -1           Other Pacific         7         10         9         8         10         9         8         7         7         10         8         -1         10         7         8         -3           OECD Pacific         17         20         20         18         20         20         17         16         16         19         17         -3         21         17         18         -4           Total OECD*         1447         1815         1655         1721         1464         1667         1373 <th< td=""></th<>
Western Europe         125         89         95         96         100         95         92         91         76         81         85         -10         78         74         77         -4           Australia         10         11         11         10         10         10         9         9         9         9         9         -2         11         10         10         -1           Other Pacific         7         10         9         8         10         9         8         7         7         10         8         -1         10         7         8         -3           OECD Pacific         17         20         20         18         20         20         17         16         16         19         17         -3         21         17         18         -4           Total OECD*         1447         1815         1655         1721         1464         1667         1373         1121         1257         1306         1264         -403         1642         1560         1571         -82           Brunei         2         3         3         2         2         3         2         3 </td
Australia         10         11         11         10         10         10         9         9         9         9         9         -2         11         10         10         -1           Other Pacific         7         10         9         8         10         9         8         7         7         10         8         -1         10         7         8         -3           OECD Pacific         17         20         20         18         20         20         17         16         16         19         17         -3         21         17         18         -4           Total OECD*         1447         1815         1655         1721         1464         1667         1373         1121         1257         1306         1264         -403         1642         1560         1571         -82           Brunei         2         3         3         2         2         3         2         3         3         3         3         0         3         3         3         0           India         49         51         48         50         50         50         52         54         55 </td
Other Pacific         7         10         9         8         10         9         8         7         7         10         8         -1         10         7         8         -3           OECD Pacific         17         20         20         18         20         20         17         16         16         19         17         -3         21         17         18         -4           Total OECD*         1447         1815         1655         1721         1464         1667         1373         1121         1257         1306         1264         -403         1642         1560         1571         -82           Brunei         2         3         3         2         2         2         3         3         3         3         0         3         3         3         0           India         49         51         48         50         50         50         52         54         55         57         55         5         59         59         59         0           Malaysia         7         10         11         13         12         11         1         1         1         1
OECD Pacific         17         20         20         18         20         20         17         16         16         19         17         -3         21         17         18         -4           Total OECD*         1447         1815         1655         1721         1464         1667         1373         1121         1257         1306         1264         -403         1642         1560         1571         -82           Brunei         2         3         3         2         2         3         2         3         3         3         0         3         3         3         0           India         49         51         48         50         50         50         52         54         55         57         55         5         59         59         59         0           Malaysia         7         10         11         13         12         11         12         13         15         14         14         2         13         15         14         2           Papua New Guinea         0         0         1         2         1         1         1         1         1
Total OECD*         1447         1815         1655         1721         1464         1667         1373         1121         1257         1306         1264         -403         1642         1560         1571         -82           Brunei         2         3         3         2         2         3         2         3         3         3         3         0         3         3         3         0           India         49         51         48         50         50         50         52         54         55         57         55         5         59         59         59         0           Malaysia         7         10         11         13         12         11         12         13         15         14         14         2         13         15         14         2           Papua New Guinea         0         0         1         2         1         1         1         1         1         1         0         2         1         1         -1           Vietnam         8         9         8         8         8         8         8         9         0         9         9
Brunei         2         3         3         2         2         3         2         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         0         3         3         3         3         0         3         3         3         0         5         5         5         59         59         59         0           Malaysia         7         10         11         13         12         11         12         13         15         14         14         2         13         15         14         2           Papua New Guinea         0         0         1         2         1         1         1         1         1         1         0         2         1         1         -1           Vietnam         8         9         8         8         8         8         8         9         10
India         49         51         48         50         50         50         52         54         55         57         55         5         59         59         59         0           Malaysia         7         10         11         13         12         11         12         13         15         14         2         13         15         14         2           Papua New Guinea         0         0         1         2         1         1         1         1         1         0         2         1         1         -1           Vietnam         8         9         8         8         8         8         8         9         10         9         0         9         9         9         0           Asia others         16         22         23         24         18         22         26         29         33         32         30         8         32         30         31         -2           Other Asia         83         96         95         98         90         95         100         109         116         117         111         16         118         117
Malaysia         7         10         11         13         12         11         12         13         15         14         14         2         13         15         14         2           Papua New Guinea         0         0         1         2         1         1         1         1         1         1         0         2         1         1         -1           Vietnam         8         9         8         8         8         8         8         9         10         9         0         9         9         9         0           Asia others         16         22         23         24         18         22         26         29         33         32         30         8         32         30         31         -2           Other Asia         83         96         95         98         90         95         100         109         116         117         111         16         118         117         117         -1
Papua New Guinea       0       0       1       2       1       1       1       1       1       1       1       0       2       1       1       -1         Vietnam       8       9       8       8       8       8       8       9       10       9       0       9       9       9       9       0         Asia others       16       22       23       24       18       22       26       29       33       32       30       8       32       30       31       -2         Other Asia       83       96       95       98       90       95       100       109       116       117       111       16       118       117       117       -1
Vietnam         8         9         8         8         8         8         8         9         10         9         0         9         9         9         0           Asia others         16         22         23         24         18         22         26         29         33         32         30         8         32         30         31         -2           Other Asia         83         96         95         98         90         95         100         109         116         117         111         16         118         117         117         -1
Asia others 16 22 23 24 18 22 26 29 33 32 30 8 32 30 31 -2  Other Asia 83 96 95 98 90 95 100 109 116 117 111 16 118 117 117 -1
Other Asia 83 96 95 98 90 95 100 109 116 117 111 16 118 117 117 -1
Argentina 5/ 69 /4 // 64 /1 49 45 49 54 49 -22 58 63 59 5
· ·
Colombia 14 15 16 14 16 15 13 13 10 9 11 -4 10 11 10 1  Ecuador 7 9 10 10 11 10 10 9 8 8 9 -1 9 10 9 1
***************************************
Latin America         120         141         147         144         130         141         110         103         104         107         106         -35         112         118         113         6           Bahrain         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td< td=""></td<>
Middle East 45 49 49 49 51 50 57 60 64 69 62 12 72 72 70 0  Angola 6 6 5 4 6 5 5 6 6 5 5 0 1 6 3 5
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C C C C C C C C C C C C C C C C C C C
26) [7]
Gabon 2 2 4 1 1 2 1 2 2 2 2 0 3 4 3 1
South Africa 1 2 1 0 1 1 1 1 0 1 0 0 0 0 0 0 1 1 1 1
Africa other 5 4 5 5 3 4 11 12 12 12 12 7 15 12 12 -3
Africa 34 36 40 34 35 36 41 45 44 43 43 7 46 49 45 3
Total DCs 282 322 330 325 307 321 307 317 328 336 322 1 348 356 346 8 FSU
Other Europe 3 3 3 3 4 3 2 2 2 2 2 -1 2 2 2 0
China Non-OPEC Rig count 1,732 2,140 1,988 2,049 1,774 1,991 1,682 1,440 1,587 1,644 1,588 -403 1,992 1,918 1,919 -74

Note: Totals may not add up due to independent rounding.

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