OPEC

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Monthly Oil Market Report

April 2002

OPEC Basket average price

US $ per barrel

Up 3.75 in March

March	**22.64**
February	18.89
Year-to-date	19.83

March OPEC production

million barrels per day, according to secondary sources

Algeria	0.80	Kuwait	1.85	Saudi Arabia	7.33
Indonesia	1.14	SP Libyan AJ	1.30	UAE	1.98
IR Iran	3.38	Nigeria	1.97	Venezuela	2.58
Iraq	2.48	Qatar	0.60		

Supply and demand

million barrels per day

2001	
World demand	75.87
Non-OPEC supply*	49.73
Difference	**26.14**
2002	
World demand	76.22
Non-OPEC supply*	51.02
Difference	**25.20**

**Includes OPEC NGLs*

Stocks

Further slight draw in USA in March

World economy

World GDP growth estimate revised up to 2.6% for 2002

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Data covers period up to end-March 2002
Issued 19 April 2002

OIL MARKET HIGHLIGHTS

- The world GDP growth estimate for 2002 has been raised to 2.6% from 2.5% last month, reflecting continued expectation of a moderate world recovery. However, the uncertain political and economic background is a cause for concern.

- The early upturn in the US economy is already being reflected in improved trade data in Germany and a rise in Japanese industrial production, as well as an improved outlook in South-East Asia.

- However, there are some doubts about the sustainability of the growth in the USA, fed by recent signs of a slowdown in US retail sales, a continued drop in inventories in February and leakage from imports which could affect first-quarter GDP.

- The monthly price of OPEC's Reference Basket rose for the third consecutive month during March. It made considerable gains, adding $3.75/b, or almost 20%, with respect to the previous month; however, on a year-on-year basis, it was still 5% lower. Market perceptions and not fundamentals kept prices higher during the month. Futures markets are assessed to have a built-in speculative premium of around $5-6/b. The delicate and volatile situation in the Middle East and rising tensions between Iraq and the West are considered to have added half of this premium, while the political unrest in Venezuela has accounted for part of the other half. During April, crude prices have steadily fallen, as some of these factors have wound down. Thus, the average weekly price of the Basket has declined considerably from $25.44/b in the first week of April to $24.43/b during the second week. It weakened further to $23.57/b in the week ending 18 April.

- The sharp rally in crude oil markets translated into strong product prices in March, with the US gasoline market leading the way, as its lower refinery throughput brought about steep product stock-draws. The refinery utilization rate remained below 90% in the USA and Eur-16 countries, despite a modest recovery in profits in the USA.

- OPEC crude oil production, based on secondary sources, increased to 25.40 mb/d in March. The non-OPEC oil supply forecast for 2002 has been revised up to 47.76 mb/d, which is 1.28 mb/d more than the revised 2001 estimate of 46.48 mb/d. The net FSU export forecast for 2002 has also been revised up, to 5.13 mb/d, mainly from Russia. For Norway, crude production for the first two quarters of 2002 has been revised down to 3.08 mb/d and 2.92 mb/d. Also, Mexico's crude production for these quarters has been revised down to 3.23 mb/d and 3.16 mb/d respectively.

- The non-OPEC rig count declined sharply in March, by 165 rigs. OPEC's rig count decreased also, by three rigs. The major decline in non-OPEC occurred in North America, where rigs decreased by 185 (in Canada and the USA, rigs declined by 122 and 62 respectively).

- There has been no significant change in either the estimate for the year 2001 or the forecast for the year 2002 demand, since the last issue of the Monthly Oil Market Report.

- In March, US commercial onland oil stocks displayed a further draw of 4.8 mb, or a rate of 0.17 mb/d, to stand at 996.6 mb. In the Eur-16, total oil stocks declined also, by 5.6 mb, or a rate of 0.18 mb/d, to 1,068.0 mb, due mainly to the moderate decrease in crude oil stocks.

HIGHLIGHTS OF THE WORLD ECONOMY

Economic growth rates 2002
%

World	G-7	USA	Japan	Euro-zone
2.6	1.0	1.5	-0.9	1.3

Industrialised countries

United States of America

Despite positive sentiment, durable goods and retail sales data call for caution

The Conference Board's index of consumer confidence rose to 110.2 in March from a revised 95.0 in February. Orders for durable goods, such as cars and computers, grew for a third straight month, by 1.5% to $179.4 billion, in February, after increasing by a revised 1.3% in January. Excluding volatile defence items, orders fell 0.2% in February, after rising by a revised 1.4% in January. Excluding volatile transportation items, they fell 1.3%, after climbing by a revised 0.2% in January. The Conference Board's present situation index, measuring how consumers feel about the current state of the economy, rose to 111.5 from 96.4 in February, the biggest gain for that component in 25 years. The expectations index, measuring how consumers feel about the future, jumped to 109.3 from 94.0, the biggest increase in nearly ten years. Despite the gains in confidence, Reuters reported that the Instinet Research's Redbook Retail Sales Average, which measures sales at US discount, chain and department stores, fell 0.8% in the three weeks ending 23 March, compared with the first three weeks of February. Industrial production rose 0.7% in March, for a third consecutive monthly increase. At 138.8% of its 1992 average, output reached its highest level since August 2001, but was 2.9% below its level in March 2001. Manufacturing output climbed 0.8%; the output at utilities increased 1.6%, but production at mines declined by the same amount. For the first quarter as a whole, total industrial production grew at an annual rate of 2.5%. Capacity utilization for total industry moved up in March to 75.4%, but was still below its 1967–2001 average of 81.9%. The Conference Board's Help-Wanted Advertising Index — a key barometer of America's job market — increased four points in February. The index now stands at 51; it was 72 one year ago. In the last three months, "help-wanted advertising" increased in seven out of nine US regions. Even if there is an early turn in the labour market, hiring is likely to be minimal through the spring and perhaps the early summer. Unemployment could reach 6% this summer, before starting to come down.

Japan

Japanese industrial output rises in February, but other economic indicators still weak

While the recovery in stock prices in March, after hitting 18-year lows early in the month, helped the economy to clear the fiscal year without the financial crisis some had predicted, unemployment, consumer spending and price data still show that the economy continues to founder. However, some reprieve may come from stronger export demand, which could put a floor under manufacturing, with the help of a weak yen. The first back-to-back monthly upgrade of the economy by the Japanese government reflects this cautious optimism. Moreover, the government's leading index of economic indicators suggests the economy could start expanding in about six months. February's industrial production increased by 1.3% on the month, mainly on a surge in the production of computer parts to meet demand from a recovering US economy. The Ministry of Economy, Trade and Industry expects output to rise 1% in March and then increase by 0.2% in April, based on company surveys. While the ministry's assessment of output as "stagnant" represents an upgrade from previous assessments, it is still too early to say that production has hit bottom. In the meantime, the nationwide consumer price index fell 1.6% in February from a year earlier, marking the 30th straight monthly fall and further confirming the nation's severe deflationary situation. The rate of unemployment held at a near-record level of 5.3% in February, just below December's 5.5%. However, employment in the manufacturing sector edged up by 0.7%, the first rise in six months. On the other hand, wage-earner spending dropped by a higher-than-expected 2.9% in real terms, from a year earlier. Another negative indicator is the continued contraction in bank lending, extending a 5 1/2-year slide. For the 51st straight month, bank lending fell by 4.5% in March from a year earlier to 438 trillion yen ($3.37 trillion), depriving the economy of the money it needs to expand.

Euro-zone

Higher-than-expected German trade surplus; rise in industrial production in France; resilient euro-zone unemployment figures

On the inflation front, both the French (+0.5% month-on-month) and Spanish (+0.9% m-o-m) reports for March seem to support "euroland" inflation (harmonised index of consumer prices) at 2.5% year-on-year. German March unemployment came in better than expected, with a seasonally-adjusted drop of 8,000. The improvement is, possibly, due mainly to Easter-related factors, rather than to an economic upturn. A similar pattern was observed in Spain, where the jobless rate fell for the first time in eight months. Still, it is highly unlikely that March will represent a turning point in euroland unemployment, since it is a lagging indicator. GDP growth tends to lead the unemployment series by 1–2 quarters, indicating that the series has not reached its trough yet. Even so, the resilience of the euro-zone labour market is somewhat encouraging, with an unchanged unemployment rate from November 2001 to February 2002 at 8.2%. German trade data for February again showed a higher trade surplus than originally envisaged (3.4 bn euros in seasonally adjusted terms, from €0.5 bn in January), led by a rise in exports (possibly heralding the recovery of world demand), combined with decelerating imports (reflecting the weak demand in the country). The latter is also indicated by the latest data releases on retail sales in February, which fell for the third consecutive month, by 1.8% m-o-m. Further data releases included French industrial production in February, slightly above expectations at 0.4% m-o-m, due mainly to a rather vigorous expansion of the manufacturing sector. This should help the euroland industrial production figure head towards positive territory. The third and final release of euroland GDP in the fourth quarter of 2001 confirmed the previous –0.2% quarter-on-quarter and 0.6% y-o-y (from 0.2% q-o-q and 1.4% y-o-y in the third quarter of 2001).

Former Soviet Union

Growth slowed to annualized rate of 3% in first quarter of 2002 in Russia

According to figures released by the Finance Ministry, GDP rose by 3% y-o-y during the first quarter of 2002, versus 4.9% in the first quarter of 2001, while the federal budget surplus reached 2.8% of GDP. The average Urals export price was close to the budget break-even level of US $18.50 per barrel during the period. Inflation rose 1.1% in March, down marginally from the 1.2% recorded in February. Inflation this year has reached 5.4% to end-March, compared with a rouble dollar depreciation of 6.6%. Industrial production growth slowed down to 2.1% y-o-y in January-February, from 5.4% in the same period of 2001. February output was down 1.4% m-o-m. Part of the reason for this, since the latter half of 2001, has been the slowdown in export demand for basic materials and manufactured goods from Russia, plus a decline in domestic investment, which partly reflects concern over the global economy. Separately, the government estimates that, given favourable market conditions, the federal budget could get at least 35 bn roubles ($1.1 bn) from privatisations this year. The government is planning to sell a 5.9% stake in Lukoil in June or July this year and expects to make $600–800 million from the sale. Apart from Lukoil shares, another planned sale is a block of Slavneft shares later in the year. Russian oil production increased by 8.7% in the first quarter, reaching 7.167 million barrels a day (y-o-y). Growth in Russian oil output in the first quarter overtook growth in non-CIS oil exports through the Transneft system, which grew by 4.4% y-o-y to reach 2.605 mb/d in the first quarter. Meanwhile, the government increased oil export tariffs from $8 to $9.2 per ton, as of 1 April, reflecting the improved oil price situation.

Eastern Europe

Expectations of rapid fall in Czech crown could stimulate growth this year; pre-election fiscal easing in Hungary; and euro policy debate in Poland

In the Czech Republic, sentiment was beginning to weaken for the crown as the market began to take heed of the Central Bank's view that the recent rapid appreciation was largely a "bubble" created by short-term speculation. The Bank believes that, when the outlook for the currency reverses, this could happen "relatively quickly", and that the Bank would have the opportunity to use direct intervention to weaken the currency. This, in turn, would give an added boost to exports and could presage higher growth for the rest of the year, in spite of inflationary pressures due to the currency weakness. In Hungary, the government approved another 4.5% hike in old-age pensions (in addition to a 9.7% increase earlier this year). The measure will cost the budget some 73.8 bn forints and will be retroactive to 1 January. The government clearly intends to encourage more votes from pensioners before the crucial second round vote. However, the pre-election fiscal relaxation has been causing concern, even though the Finance Ministry says that it has enough revenue to finance it. Fiscal loosening can boost inflationary pressures and widen the current account deficit in the coming months. Poland's Finance Minister said that Poland should adopt the euro as soon as possible, following European Union accession, i.e. by 2007, prior to which he would favour a weakening of the zloty. In his view, a wide fluctuation band (of the ERM II style, +/-15%) would be appropriate in case of an expected depreciation of the zloty, whereas a narrow band would limit any expected appreciation.

Mixed trends in economic policy and GDP growth among OPEC Member Countries

OPEC Member Countries

By boosting market-oriented reforms and the availability of credits to small and medium-sized businesses, the Algerian government is giving priority to the reduction of unemployment through higher rates of investment-driven GDP growth. This will necessitate moves to improve the operating environment for the private sector. Thus, the real GDP growth rate is expected to edge up slightly to 3.1% this year, from 3% last year, due to the expansion expected in domestic and foreign investment. In Indonesia, despite urban and rural spending being enhanced by large public-sector wage increases and strong demand for agricultural output, the GDP growth rate deterioration was led by a 23% (y-o-y) decline in export growth in the fourth quarter. However, export growth is forecast to pick up in the second half of the current year and to gain momentum next year. This will be the main generator of the expected GDP growth rate of 3.5% this year. Nigeria's GDP growth will slow down to 2.8% this year from 3.2% last year, due to a rapid growth in imports and limited growth in oil production. Venezuela is planning to cut spending by 7%, or $2.4 bn, from the initially budgeted levels, which will dampen growth prospects for this year. The government has also assumed higher oil prices for this year and a more modest budget shortfall. Venezuela's economic growth is expected to be 1% for the current year, compared with 2.7% in the previous year.

Outlook brighter in Asia, but trends mixed in Latin America; EU grants benefits to sub-Saharan countries

Developing countries

The GDP growth rate for Asia/Oceania is expected to reach 4.1% this year. Stronger global demand is likely to have a positive impact on emerging Asian prospects in the rest of 2002. With the expectation of an upturn, some of the liquidity that central banks in the G-7 have pumped into their economies is flowing into emerging markets, in search of higher yields. China's structural reforms will sustain real economic growth of 7% this year, after 7.3% in 2001, with an acceleration of growth in the second half of the year brought about by improved external demand. Brazil's real GDP growth rate is expected to witness a modest improvement from 1.5% in 2001 to 2.2% this year, assuming a recovery in the USA and barring "contagion" from the Argentinean crisis. Argentina's real GDP is projected to contract by 9.9% this year from 4.0% last year, based on liquidity restrictions, the collapse of the payment system, a real drop in income levels and continued uncertainty. In an attempt to boost and diversify the exports of low-income countries in the African, Caribbean and Pacific region, the EU has granted trade preferences to all sub-Saharan countries, except South Africa, under four successive agreements. Africa as a whole is expected to grow by 3.2% this year.

Dollar depreciation slightly dampens gains in nominal oil prices in March

Oil price, US dollar and inflation

The US dollar fell against almost all the currencies in the modified Geneva I + US $ basket* in March, remaining unchanged against only the pound sterling. The yen rose by 1.73% to ¥131.22/$ from ¥133.52/$ in February, while the euro appreciated by 0.66% to average $0.8758 from $0.8700.

Despite the weak Japanese economy, the yen was underpinned by year-end repatriation flows into Japan, as well as a spectacular rise in the Nikkei stock index, following the government's decision to restrict short-selling in the Japanese stock market. However, the yen's strong rebound to ¥127.6/$ in the first week of March was short-lived and it drifted downwards to around ¥133/$ by the end of the month. Plunging core machinery orders by 15.6% in January, a drop in the index of activity in all Japanese industries and another warning by credit rating agency Standard and Poor's that it may cut Japan's credit-rating later in the year, put pressure on the yen. The dollar was supported initially by bullish economic data, but this may have served the purpose of supporting the euro and the yen under the perception that the recovery in the USA would pull up the rest of the world with it. The euro reached $0.8853 mid-month; but, as usual, it could not hold on to its gains and fell towards $0.8724 by the end of the month, despite positive data, in the form of a drop in euro-zone inflation to 2.4% from 2.7% and a rise in French consumer spending to an encouraging 0.4% in February.

In March, the OPEC Reference Basket registered an increase of $3.76/b, or 19.88%, to $22.64/b from $18.89 in February. In real terms (base July 1990=100), after accounting for inflation and currency fluctuations, the Basket price rose by 19.26% to reach $21.80/b from $18.28/b, as the dollar depreciation lessened the gains in the nominal oil price. The dollar fell by 0.59%, as measured by the import-weighted modified Geneva I + US dollar basket, while inflation was estimated at –0.07% in March.

∗ *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 Basket surged by $3.75/b to $22.64/b in March

The monthly price of OPEC's Reference Basket rose for the third consecutive month during March. It made considerable gains, adding $3.75/b, or almost 20%, with respect to the previous month; however, on a year-on-year basis, it was still 5% lower. The hefty gains occurred during the whole month. It started the month by rising by $1.72/b to average $20.90/b; then it gained a further $1.56/b, to close at $22.46/b during the second week. The speed of the recovery slowed down during the third week; nonetheless, the Basket added another $0.83/b to average $23.29/b. In the fourth week, it increased by another $0.64/b and closed just below the $24/b mark.

Looking at the seven crudes that compose the Basket, we find that they all registered gains in March. Tia Juana Light and Minas led the rise ,with $4.10/b and $4.01/b; Dubai and Arabian Light followed, improving by $3.95/b and $3.86/b; and Isthmus and the Brent-related crude Bonny Light firmed, by $3.80/b and $3.46/b respectively. Finally, Saharan Blend posted the lowest gain, rising by $3.11/b.

Crude oil prices improved considerably throughout the month, boosted by an array of bullish news. However, as the month progressed, it became evident that there was a great deal of speculation built into the prices. They strengthened at the beginning of the month, boosted by good macroeconomic figures in the USA. A report released on 7 March by the US Commerce Department revised fourth-quarter GDP growth up to 1.4%, from the previous 0.2%. Meanwhile, market attention focused on the OPEC/Russia meeting in Moscow. Positive comments by OPEC's Secretary General, Dr. Alí Rodríguez Araque, about the likelihood of Russia's extension of the pledged export-cut into the second quarter, supported prices. More positive news came from a bullish API stock report, which showed a sizeable drop in gasoline inventories, as well as a decline in distillate stocks. Later in the week, markets became concerned about comments by Robert Priddle, Executive Director of the International Energy Agency, who questioned Russia's degree of compliance with its pledged export cuts. Towards the weekend, benchmark crudes reached a six-month high on intra-day trading, on concern about the results of the UN-Iraq meeting on the issue of arm inspections.

Crude prices continued to firm during the second week, supported by more positive economic figures in the USA, as well as the ongoing decline in US gasoline stocks. Concern over the escalation of the crisis in the Middle East added to the bullish sentiment, pushing the NYMEX front-month contract to a five-month high. Meanwhile, the US Department of Energy's Energy Information Administration (DOE/EIA) revised its world oil demand forecast for 2002 down by 80,000 barrels per day to 420,000 b/d. Markets reacted positively to the announcement by OPEC, at its 119th Meeting of the Conference in Vienna, that it would maintain its current output levels.

Crude markets continued to strengthen during the second part of the month, but displayed volatility, as prices were influenced by bullish as well as bearish news. Crude oil posted solid gains at the beginning of the third week, breaking through the $25/b level, mainly on technical buying, although volumes in the futures market were on the light side. Subsequently, prices retreated on profit-taking. Meanwhile, the API report for the week ending 15 March showed a rise in crude oil stocks, while distillate and gasoline inventories fell. A rebound came later in the week, when prices posted hefty gains, boosted by heavy fund-buying, amid improved perceptions about the strength of the US economic recovery.

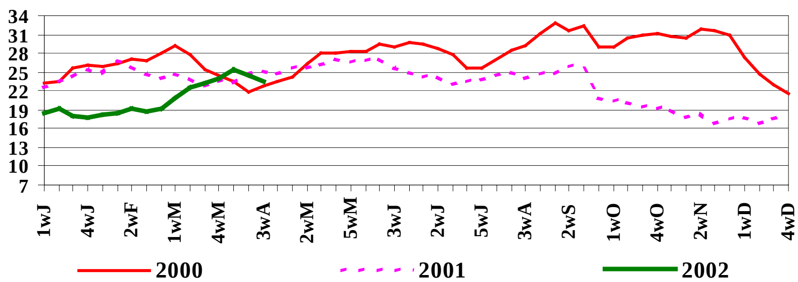
In the last week of the month, prices kept the upward momentum, with a very bullish market perception, according to the Commodity Futures Trading Commission's report, which showed that non-commercials had more than doubled their net long positions during the week ending 19 March. Further support came from the inventory statistics released by both the API and the DOE, that revealed hefty stock declines in crude oil inventories, as well as in gasoline and distillate stocks.

Signs of recovery in USA and political turmoil in Middle East underpinned prices in March

US and European markets

Early signs of an economic recovery in the USA, OPEC's decision to leave output levels unchanged until, at least, its June meeting, and fears of US-led military action against Iraq all contributed to pushing oil prices to a six-month high during March. Fuelling the price hike was persistent healthy demand for gasoline, which reduced inventories. Refinery utilization rates fell during the first half of the month, declining by 3.3% in the first week and by a further 0.9% in the second. However, refinery-run cuts then reversed their trend, on improved product demand and stronger refining margins. The second part of the month saw the refinery utilization rate recover by 1.2% and 0.1%, and it stood at 86.3% on 22 March. Nigerian and North Sea gasoline-rich grades drew healthy buying interest from the strength of gasoline demand; meanwhile, reduced availability of sour crudes like Maya, Mesa and Iraqi Basrah led to a drawdown of stocks. In Europe, early in the month, poor refining margins caused Russian crudes to seek other outlets and widened their differential to dated Brent. Later in the month, this situation reversed to some extent, due to healthy US gasoline demand.

Graph 1
OPEC Reference Basket – weekly spot crude prices
US $/b



Crude prices strengthened in Far Eastern markets in March, due to healthy naphtha demand and refining margins

Far Eastern markets

Cuts in OPEC's heavy sour regional crude supplies and several refinery outages, combined with heavy demand for gasoline and naphtha in Asia-Pacific, tightened the market and boosted spot prices of regional sour grades. Heavy naphtha demand in several Asia-Pacific countries, especially in Japan, following refinery maintenance in Saudi Arabia and the previous month's refinery accident in Kuwait, distorted regional crude oil differentials. Arbitrage opportunities, to move naphtha from both the US Gulf and the Mediterranean area to Japan, remained open.

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

			Year-to-date average	
	Feb.02	**Mar.02**	2001	**2002**
Reference Basket	18.89	**22.64**	24.36	**19.83**
Arabian Light	19.47	**23.33**	23.53	20.41
Dubai	19.02	**22.97**	23.59	20.05
Bonny Light	20.30	**23.76**	25.70	21.12
Saharan Blend	19.73	**22.84**	26.22	20.65
Minas	18.91	**22.92**	25.01	20.13
Tia Juana Light	16.05	**20.15**	22.41	17.05
Isthmus	18.74	**22.54**	24.07	19.40
Other crudes				
Brent	20.22	**23.73**	25.76	21.02
WTI	20.67	**24.35**	28.78	21.43
Differentials				
WTI/Brent	0.45	0.62	3.02	0.41
Brent/Dubai	1.20	0.76	2.17	0.97

PRODUCT MARKETS AND REFINERY OPERATIONS

The sharp rally in crude oil markets translated into strong product prices in March, with the US gasoline market leading the way, as its lower refinery throughput brought about steep product stock-draws. The refinery utilization rate remained below 90% in the USA and Eur-16 countries, despite a modest recovery in profits in the USA.

US Gulf market

Gasoline price rocketed, and gasoil and fuel oil registered solid gains, in US Gulf in March. Refining margins were good, while utilization rate was still below 90%

After their marginal-to-modest gains during the previous month, product prices rallied higher in March. There were two driving forces: the first was the sharp rise in crude prices, in direct relation to the gasoil price, in light of ample distillate stocks; and, secondly, there was a very low refinery utilization rate (86.6%), whereby gasoline and fuel oil remained less well-supplied and hence supported their prices. The average gasoline price enjoyed a massive gain of $7.34/b, underpinned by sustainable declines in US refinery throughput, a factor which has emerged since the second half of last year, in response to poor economies, thus reducing output of their main product, gasoline. This, in part, led to continuous falls in gasoline stocks for most of March. Albeit, three other possibilities could not be ruled out: an upsurge in demand; the normal phenomenon of purging the winter grade, prior to the commencement of stricter summer gasoline specifications; and a combination of both factors. Nonetheless, regardless of the reason behind the weekly gasoline stock-draws, these weekly figures contributed considerably to a resurgence of gasoline prices, given the approaching driving season. In contrast, a massive fall of 14 mb in middle distillate stocks during March made a minor contribution to soaring gasoil prices, as year-on-year distillate inventories showed a surplus of 10%, or 18 mb. Furthermore, distillate demand was weak, in a warm winter drawing to a close; preliminary governmental distillate demand figures, on a four-week moving average, were 1.3% and 7.5% below the previous month and year respectively, clearly indicating the impact of lower refinery output on product stock levels, rather than increased demand. However, the surge in the crude market lent great support to the gasoil price, which rose by $3.89/b. The high-sulphur fuel oil price (HSFO) increased considerably, by $3.77/b, following gains in the low-sulphur (LFSO) grade, which was boosted by firm natural gas prices, generating a large utility purchase of LSFO in an already sustained fairly tightly supplied market.

Refining margins exceeded $1/b for the marker crude, i.e. WTI, registering the highest value in the past nine months. Good refining margins were largely attributed to the soaring gasoline prices, as the gasoline yield comprised about 56% of total US refinery throughput.

Despite a modest recovery in refining margins, US refinery throughput fell by 0.27 mb to 14.34 mb/d, reflecting continuous discretionary run cuts. The refinery utilization rate was 86.6%, which was the lowest US refinery throughput in March throughout the last decade.

Rotterdam market

Gasoline price spiked in March, and both middle and heavy ends of barrel gained considerably in Rotterdam. Refinery margins worsened and hence utilization rate dropped to 87.4%

Though product fundamentals remained bearish in the European market, due largely to sagging regional demand, the resurgence of crude prices pulled up all product prices in March. Gasoline and, to a lesser extent, fuel oil gained further from arbitrage trading to the US East Coast and the Asian market respectively. Intensified transatlantic gasoline cargoes were induced by two supporting factors: one was the strong US gasoline market, and the other, an easy blending of European winter grade with methyl-tertiary-butyl-ether to meet US summer specifications. Consequently, the gasoline price soared by $4.80/b. The gasoil price rose by $3.48/b, driven essentially by large crude gains, despite high end-user stocks in Germany and rising Russian distillate exports. The HSFO price increased by $2.39/b, assisted by several arbitrage opportunities to the Asian market during the first half of the month and prevailing high LSFO prices.

Refining margins fell further into negative territory, as the price of gasoil, which represents the main product of European refineries, lagged behind that of crude.

Refinery throughput in Eur-16 (Europe + Norway) fell by 0.26 mb to 11.93 mb/d during March, in tandem with the start of regional turnaround maintenance, which is expected to take more capacity in the following month. However, a refinery utilization rate of 87.4% was, surprisingly, at its highest level for two years.

All product prices surged in Singapore in March, with gasoline leading the way, although refining margins turned from poor to negative

Singapore market

While demand for the heavy end of the barrel remained weak in the continued absence of the largest regional consumer, China, trading of light products in March was hardly hit by a sharp fall in imports from Indonesia, the largest regional buyer, following hikes in local retail prices in January and a recent flood in the Jakarta region, leaving tanks at higher levels. Nonetheless, product prices improved significantly, tracking hefty crude gains. Gasoline rallied by a further $3.77/b, supported, in part, by transpacific arbitrage to the US West Coast, after an unplanned refinery outage there and strong demand from the Middle East, despite Indonesia's low monthly purchase of just about 0.5 mb, instead of 1 mb. Gasoil gained a considerable $3.07/b, though Indonesia was totally absent from the market, instead of making its usual monthly purchase of distillates of 1.2–1.8 mb. The fuel oil price surged by $2.27/b, aided by prevailing tight supply that was exacerbated by the planned maintenance of South Korean refineries, the main regional supplier.

Refining margins turned negative, as strong crude prices ousted product price rises.

In Japan, the refinery throughput stood at 4.42 mb/d in February, a rise of 0.07 mb/d from the previous month. The corresponding refinery utilization rate was 92.3%, which was 2.4% below the previous year's figure.

Table 2
Refined product prices
US $/b

		Jan.02	Feb.02	**Mar.02**	**Change Mar./Feb.**
US Gulf					
Regular gasoline	*(unleaded)*	22.63	22.65	**29.99**	+7.34
Gasoil	*(0.2%S)*	21.43	21.76	**25.65**	+3.89
Fuel oil	*(3.0%S)*	14.77	15.22	**18.99**	+3.77
Rotterdam					
Premium gasoline	*(unleaded)*	20.76	20.94 R	**25.74**	+4.80
Gasoil	*(0.2%S)*	21.76	21.81	**25.30**	+3.48
Fuel oil	*(3.5%S)*	15.24 R	15.52	**17.91**	+2.39
Singapore					
Premium gasoline	*(unleaded)*	20.95	24.11	**27.88**	+3.77
Gasoil	*(0.5%S)*	20.94	21.76	**24.83**	+3.07
Fuel oil	*(380 cst)*	16.19	17.14	**19.42**	+2.27

Table 3
Refinery operations in selected OECD countries

	Refinery throughput *mb/d*			**Refinery utilization*** *%*		
	Jan.02	Feb.02	**Mar.02**	Jan.02	Feb.02	**Mar.02**
USA	14.67	14.61	**14.34**	88.5	88.2	**86.6**
France	1.67 R	1.60	**1.60**	88.2 R	84.5	**84.4**
Germany	2.20 R	2.18	**2.17**	97.5 R	96.4	**95.9**
Italy	1.81 R	1.85 R	**1.74**	79.4 R	81.1 R	**76.4**
UK	1.69 R	1.67	**1.62**	95.0 R	93.6	**91.1**
Eur-16**	12.19 R	12.19 R	**11.93**	89.3 R	89.3 R	**87.4**
Japan	4.35	4.42	**n.a.**	91.0	**92.3**	**n.a.**

n.a. *Not available.*
* *Refinery capacities used are in barrels per calendar day.*
** *Fifteen European Union members plus Norway.*
R *Revised since last issue.*
Sources: *OPEC Statistics, Argus, Euroilstock Inventory Report/IEA.*

THE OIL FUTURES MARKET

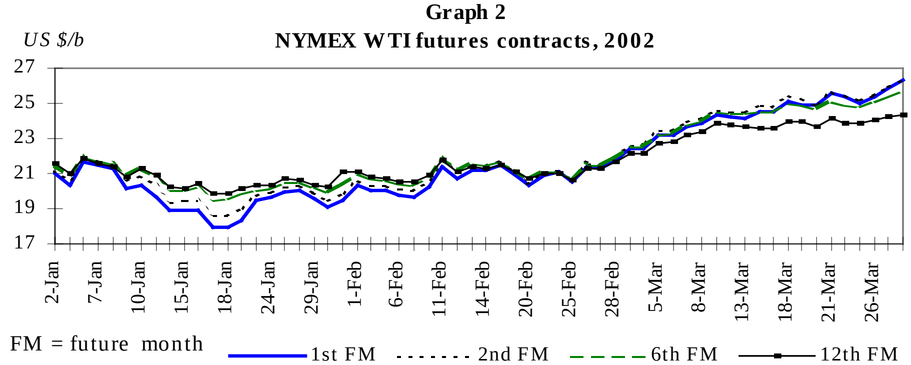
WTI's gains in March were due to signs of economic recovery, strong gasoline market and big change in fund positions

New York Mercantile Exchange WTI prices underwent a continuous rally in the first week of March, helped by stronger-than-expected US economic data and the prospect of a demand recovery. The high implied US gasoline demand data, which stood at 9.2 mb/d, came as an additional indicator of the recovery. These bullish sentiments coincided with statements from OPEC's Secretary General, Dr Alí Rodríguez Araque, that the Organization would keep its production cuts in force until 2003, thereby giving the bulls in the market a stronger position, especially in light of a possible resumption of the Middle East conflict. Gasoline added further impetus to the rally, as refinery glitches in the USA and the threat of a Venezuelan oil workers' strike lifted gasoline prices, making its spread to crude surge to $8/b, thereby exerting a pull on WTI prices and lifting them to $23.71/b.

The rally extended through the early part of the second week and was supported by a rash of refinery snags and continued tension within the national oil company, Petroleos de Venezuela. Market readings of renewed Iraqi unease about the return of UN weapon inspectors added to the supply concern. An International Energy Agency report, that pointed to a downward revision of 90,000 b/d in demand estimates for 2002, forced some selling in the market; but a US weekly inventory report cut the losses, causing a short covering rally on the back of unexpected draws on crude oil, gasoline and distillates. Some profit-taking, ahead of OPEC's Meeting of the Conference on 15 March, and more conservative draws on US inventories, as reported by the country's Department of Energy, caused prices to slip temporarily. But they moved higher to $24.56/b, as OPEC delegates made mixed statements about the situation.

Graph 2

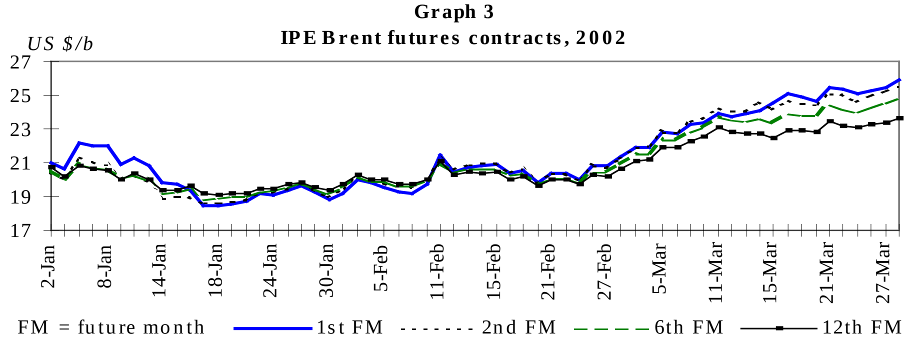
NYMEX WTI futures contracts, 2002



In the third week, although some of the price movements were attributed to technical buying and short-covering, the real sentiments were moved by gasoline. This product had witnessed a continuous draw on inventories in the previous few weeks. Any refinery snag would lead to a price rise. Rumours of a shutdown of a 30,000 b/d gasoline reformer unit in New Jersey moved prices up by $0.66/b, and WTI reached $25.61/b.

Graph 3

IPE Brent futures contracts, 2002



A large number of non-commercial (large speculators) long positions, which totalled 52,224 crude contracts, was bearish for the market in the last week of March, especially since the previous rally was overdone, and the connection between the improving US economy and improved demand did not look that close. However, later in the week, US inventory data came to the rescue, showing a huge draw on crude and continuous draws on both gasoline and distillate stocks, thereby pushing WTI to $25.87/b.

THE TANKER MARKET

OPEC area spot-chartering rose by 1.55 mb/d in March

OPEC area spot-chartering increased by 1.55 mb/d to a monthly average of 13.07 mb/d in March, assisted by an increase in fixture volumes to westbound destinations, amid uncertainty over a supply disruption. However, compared with the same period last year, the current level of OPEC fixtures remained at a deficit of 2.06 mb/d, due to production restraint. Meanwhile, non-OPEC spot-chartering continued to maintain the high level of 11.26 mb/d observed the previous month, being only 0.14 mb/d lower and not far short of the OPEC level. As a consequence, global spot fixtures improved by a further 1.41 mb/d to 24.33 mb/d, but remained 1.51 mb/d below the level in the corresponding month of 2001. The OPEC area's share of global spot-chartering regained some of the previous month's losses, rising by 3.45 percentage points to 53.72%, although this level was 4.84 percentage points below the previous year's share. Most of the increment in OPEC chartering during March was attributed to a significant rise in spot fixtures from the Middle East on the westbound long-haul route, by 1.15 mb/d to 2.59 mb/d, while, on the eastbound route, they increased marginally by just 0.50 mb/d to 4.17 mb/d. Therefore, the share of Middle East westbound of OPEC total fixtures improved by a considerable 7.30 percentage points to 19.84%, while the share of eastbound rose by just 0.06 percentage points to 31.89%. Together, they accounted for 51.73% of total chartering in the OPEC area, which was 7.36 percentage points above the previous month's level. According to preliminary estimates, sailings from the OPEC area declined by 1.56 mb/d to a monthly average of 22.29 mb/d. Sailings from the Middle East also decreased, by 0.50 mb/d to a monthly average of 16.04 mb/d, and that was about 72% of total OPEC sailings. Arrivals in the US Gulf Coast, the East Coast and the Caribbean declined in March by 0.72 mb/d to a monthly average of 6.87 mb/d, while arrivals in North-West Europe and Euromed moved lower by 0.56 mb/d to 6.15 mb/d and 0.68 mb/d to 4.79 mb/d respectively. The estimated oil-at-sea on 24 March was 461 mb, which was 12 mb above the level observed at the end of the previous month.

VLCC freight rates reached bottom range in March

Despite the prevailing active market in terms of fixture volumes, which was aggravated in the second half of March by charterers' concern over supply disruption, prompting them to move more oil on water, VLCC spot freight rates in the Middle East reached the bottom range, due to excessive tonnage availability. The monthly average freight rates for VLCC cargoes on the Middle East eastbound and westbound long-haul routes plunged by 16 points to WS35 and six points to WS33 respectively, the lowest levels in the past two years; this was amid lower import volumes into the Asian market, due to the forthcoming refinery turnaround season and improved enquiries in the west. The steady active market for Suezmax tankers on the routes across the Atlantic, that had been witnessed the previous month, continued, with a significant improvement in fixture levels. Nevertheless, Suezmax tanker owners were unable to push freight rates high enough, as charterers started to combine cargoes in cheap VLCC tankers operating on the same routes, to put pressure on Suezmax rates. Therefore, freight rates on the routes from West Africa and North-West Europe to the US Gulf and East Coasts fluctuated in both directions during the course of the month, averaging gains of only five points to WS68 and seven points to WS73 respectively. Aframax freight rates for tankers operating on the short-haul routes weakened in March, except for the route across the Mediterranean, where the rates stabilized at the previous month's level of WS121, with only a one point deficit. However, the monthly average freight rates along the Caribbean/US East Coast route witnessed the biggest drop of all types of crude tanker, plummeting by 24 points to WS126, while, on the Mediterranean/North-West Europe route, they declined by seven points to WS94. Freight rates for 70–100,000 dwt tankers on the route from Indonesia to the US West Coast declined by a further 13 points to WS90.

Clean tanker freight rates weakened in general in March

The clean product tanker markets, in general, showed a softer trend, except for voyages heading to the Far East. Freight rates on the Middle East/Far East route improved by three points to WS176, while, on the Singapore/Far East route, they rose by a significant 20 points to WS196, helped by a surge in fixtures, especially in the last week of the month. However, on the routes across the Mediterranean and to North-West Europe, freight rates weakened by eight points to WS158 and 14 points to WS154 respectively. Similarly, freight rates from North-West Europe and the Caribbean to the US destinations declined by four points to WS164 and 13 points to WS149 respectively.

WORLD OIL DEMAND

World demand forecast for 2001 revised down marginally to 75.87 mb/d

Estimate for 2001

World

A rather significant modification has been applied to the fourth-quarter figures since the last *MOMR*, mostly due to downward adjustments to the most up-to-date data relating to all regions. However, minor upward revisions to the first-, second- and third-quarter estimates in total have mostly offset the revision to the fourth-quarter figures. Year-2001 consumption is, therefore, estimated to average 75.87 mb/d, very close to the 75.88 mb/d reported in the previous *MOMR* and nearly 0.05 mb/d higher than that of 2000. On a regional basis, demand is estimated to have decreased by 0.140 mb/d in the OECD. However, it is likely to have risen by 0.139 mb/d in the former CPEs ("Other regions"), due to a significant increase in FSU consumption, which has been partly offset by declines in China's and Other Europe's apparent consumption. Demand in the developing countries is also expected to have risen moderately, by 0.051 mb/d. Table 4 provides more details.

On a quarterly basis, compared with the year-earlier figure, world demand grew by 0.98%, or 0.744 mb/d, to average 76.66 mb/d in the first quarter. It is estimated to have grown by 0.91%, or 0.675 mb/d, to average 74.73 mb/d in the second. The third and fourth quarters, however, are expected to have experienced negative growth. The reasons are decelerating economic growth in the third and fourth quarters and declining aviation fuel consumption in the fourth. Third-quarter demand is now estimated at 75.69 mb/d, about 0.487 mb/d, or 0.64%, less than that of the third quarter of 2000. Likewise, fourth-quarter demand is expected to be 76.39 mb/d, nearly 0.709 mb/d, or 0.92%, less than that in 2000.

Table 4
World oil demand in 2001
mb/d

	2000	1Q01	2Q01	3Q01	4Q01	**2001**	**Change 2001/00** Volume	*%*
North America	24.10	24.26	23.76	23.96	23.64	23.90	–0.19	*–0.80*
Western Europe	15.09	15.20	14.77	15.49	15.45	15.23	0.13	*0.89*
OECD Pacific	8.65	9.44	8.00	8.06	8.79	8.57	–0.08	*–0.95*
Total OECD	**47.84**	**48.90**	**46.54**	**47.50**	**47.88**	**47.70**	**–0.14**	***–0.29***
Other Asia	7.34	7.28	7.37	7.44	7.41	7.38	0.04	*0.48*
Latin America	4.72	4.58	4.67	4.66	4.53	4.61	–0.11	*–2.34*
Middle East	4.37	4.42	4.37	4.63	4.50	4.48	0.11	*2.53*
Africa	2.36	2.40	2.35	2.36	2.39	2.37	0.02	*0.67*
Total DCs	**18.79**	**18.68**	**18.75**	**19.09**	**18.84**	**18.84**	**0.05**	***0.27***
FSU	3.76	3.95	3.75	3.78	4.40	3.97	0.20	*5.44*
Other Europe	0.74	0.77	0.73	0.68	0.73	0.73	–0.02	*–2.37*
China	4.68	4.35	4.96	4.65	4.55	4.63	–0.05	*–1.02*
Total "Other regions"	**9.18**	**9.08**	**9.44**	**9.10**	**9.67**	**9.32**	**0.14**	***1.52***
Total world	**75.82**	**76.66**	**74.73**	**75.69**	**76.39**	**75.87**	**0.05**	***0.07***
Previous estimate	75.80	76.63	74.70	75.67	76.52	75.88	0.08	*0.10*
Revision	0.01	0.03	0.03	0.02	–0.13	–0.01	–0.03	*–0.03*

Totals may not add, due to independent rounding.

OECD

Having grown by as little as 0.3% in 2000, OECD product deliveries posted a decline of 0.140 mb/d, or 0.29%, to average 47.70 mb/d in 2001. This drop would be the sum of a 0.193 mb/d decline, a 0.135 mb/d rise and a 0.082 mb/d decline in North America, Western Europe and OECD Pacific respectively. The considerable declines in the third and, especially, the fourth quarters are behind the yearly drop in 2001 demand in the OECD. In addition to the weakening GDP growth rate prospects in the OECD Pacific, the estimated lower aviation fuel consumption, especially in the USA, has been responsible for the overall reduced demand in the region.

Total OECD oil requirements in the fourth quarter of 2001 demonstrated a significant decline of 0.778 mb/d, or 1.60%, compared with the same period in 2000. This was the net result of drops of 0.790 mb/d, or 3.23%, in North American and of 0.020 mb/d, or 0.23%, in OECD Pacific requirements, which were partly offset by a rise of 0.032 mb/d, or 0.21%, in those of OECD Europe.

DCs

Oil demand in developing countries is now expected to experience a minor rise of 0.051 mb/d, or 0.27%, to average 18.84 mb/d for the year. The estimated growth rate in consumption has been revised up slightly for the Asian group of countries, from the previous 0.46% to 0.48%. The fundamental factor behind the lack of growth in demand is that Asian regional GDP is projected to grow at a lower-than-anticipated rate. These economies are highly export-dependent and are extremely reliant upon the health of their trading partners. The demand growth rates for Middle East and Africa have not changed. However, the demand growth rate for Latin America has been revised down.

Other regions

In the former CPEs, apparent demand is estimated to grow by 0.139 mb/d, or 1.52%, to average 9.32 mb/d for 2001; this is lower than the previous projection of 9.34 mb/d. Trade and production data for the first quarter have been revised, showing that apparent FSU demand rose by 7.01%, or 0.259 mb/d, compared with the year-earlier figure. The most recent assessments point towards growth of 2.92%, or 0.107 mb/d, in the second quarter. For the third quarter, a significant increase of 7.11%, or 0.251 mb/d, is expected in apparent consumption, coupled with another considerable rise of 4.83%, or 0.202 mb/d, in the fourth. Net exports during the first and second quarters were 0.335 mb/d, or 8.45%, and 0.581 mb/d, or 14.08%, higher than in the corresponding quarters of 2000. The third and fourth quarters could have registered substantial gains, 0.364 mb/d, or 8.15%, and 0.372 mb/d, or 9.28%, respectively. The FSU's net oil exports in 2001 would, therefore, display an overall yearly average substantial rise of 0.414 mb/d, equivalent to 9.98%. The motives behind consistently rising exports seem to be relatively favourable oil prices and the need for more revenue, in order to service international loans. A considerable drop in Chinese apparent consumption is shown in indigenous production and trade data for the first three months of the year. Apparent demand declined by 0.355 mb/d, or 7.53%, during the first quarter, according to the latest figures. Even though the decrease seems huge, one has to bear in mind that this comparison is made with the first quarter of 2000, when demand surged by record figures. Apparent demand in the second quarter, however, demonstrated a significant rise of 0.594 mb/d, or 13.59%. This was in line with the considerable recovery in total imports, which registered an impressive 44.46% rise in the second quarter. Third-quarter consumption posted a 0.243 mb/d, or 4.96%, decline, followed by a similar fall of 0.186 mb/d, or 3.94%, in the fourth quarter.

Forecast for 2002

World demand forecast for 2002 revised down marginally to 76.22 mb/d

Although all quarterly averages have been adjusted, the 2002 world demand forecast has undergone little change, at 76.22 mb/d, compared with the previous month's forecast of 76.23 mb/d. The average yearly increment has remained basically the same and now stands at 0.357 mb/d, or 0.47%, compared with the 0.346 mb/d, equivalent to 0.46%, mentioned in the previous *MOMR*.

The estimated 2002 growth level is significantly higher than that of 2001. However, this assessment would be subject to further adjustment as more information becomes available on major factors, such as the economic growth outlook, the trend in air travel and aviation fuel consumption, and prices. On a regional basis, the highest average yearly volume growth is forecast at 0.175 mb/d, or 0.93%, for the developing countries, followed by 0.116 mb/d, or 1.24%, for the former CPEs and 0.066 mb/d, or 0.14%, for the OECD. Details of the regional and quarterly breakdowns of demand forecasts are given in Table 5.

Comparisons between the first- and second-quarter figures of 2001 and 2002 are presented in Table 6. The figures indicate that there will be a gradual mild recovery in the first and then the second quarter. The recovery is expected to continue at a higher and increasing pace in the third and fourth quarters, when world demand is forecast to rise by 0.227 mb/d, or 0.30%, and 1.002 mb/d, or 1.31%, respectively. Details are presented in Table 7.

Table 5
World oil demand forecast for 2002
mb/d

	2001	1Q02	2Q02	3Q02	4Q02	2002	Change 2002/01 Volume	Change 2002/01 %
North America	23.90	24.09	23.97	23.99	23.93	24.00	0.09	*0.39*
Western Europe	15.23	15.20	14.59	15.32	15.65	15.19	–0.04	*–0.24*
OECD Pacific	8.57	9.45	7.89	7.98	9.01	8.58	0.01	*0.13*
Total OECD	**47.70**	**48.74**	**46.45**	**47.29**	**48.59**	**47.77**	**0.07**	***0.14***
Other Asia	7.38	7.39	7.40	7.43	7.60	7.46	0.08	*1.09*
Latin America	4.61	4.53	4.68	4.67	4.56	4.61	0.00	*0.00*
Middle East	4.48	4.49	4.46	4.73	4.59	4.57	0.09	*1.96*
Africa	2.37	2.41	2.34	2.37	2.40	2.38	0.01	*0.30*
Total DCs	**18.84**	**18.82**	**18.89**	**19.20**	**19.16**	**19.02**	**0.18**	***0.93***
FSU	3.97	3.86	3.71	4.15	4.38	4.03	0.06	*1.48*
Other Europe	0.73	0.79	0.76	0.66	0.72	0.73	0.01	*1.01*
China	4.63	4.53	5.02	4.61	4.55	4.68	0.05	*1.08*
Total "Other regions"	**9.32**	**9.19**	**9.50**	**9.43**	**9.65**	**9.44**	**0.12**	***1.24***
Total world	**75.87**	**76.75**	**74.83**	**75.92**	**77.40**	**76.22**	**0.36**	***0.47***
Previous estimate	75.88	76.71	74.79	75.88	77.51	76.23	0.35	*0.46*
Revision	–0.01	0.04	0.04	0.03	–0.12	0.00	0.01	*0.01*

Totals may not add, due to independent rounding.

Table 6
First- and second-quarter world oil demand comparison for 2002
mb/d

	1Q01	1Q02	Change 2002/01 Volume	Change 2002/01 %	2Q01	2Q02	Change 2002/01 Volume	Change 2002/01 %
North America	24.26	24.09	–0.17	*–0.69*	23.76	23.97	0.20	*0.85*
Western Europe	15.20	15.20	–0.01	*–0.03*	14.77	14.59	–0.18	*–1.23*
OECD Pacific	9.44	9.45	0.01	*0.10*	8.00	7.89	–0.11	*–1.34*
Total OECD	**48.90**	**48.74**	**–0.16**	***–0.33***	**46.54**	**46.45**	**–0.09**	***–0.18***
Other Asia	7.28	7.39	0.11	*1.46*	7.37	7.40	0.04	*0.49*
Latin America	4.58	4.53	–0.04	*–0.94*	4.67	4.68	0.01	*0.18*
Middle East	4.42	4.49	0.07	*1.62*	4.37	4.46	0.09	*2.11*
Africa	2.40	2.41	0.01	*0.30*	2.35	2.34	0.00	*–0.09*
Total DCs	**18.68**	**18.82**	**0.14**	***0.76***	**18.75**	**18.89**	**0.13**	***0.72***
FSU	3.95	3.86	–0.09	*–2.21*	3.75	3.71	–0.04	*–1.07*
Other Europe	0.77	0.79	0.02	*2.40*	0.73	0.76	0.03	*4.75*
China	4.35	4.53	0.18	*4.11*	4.96	5.02	0.06	*1.17*
Total "Other regions"	**9.08**	**9.19**	**0.11**	***1.21***	**9.44**	**9.50**	**0.05**	***0.56***
Total world	**76.66**	**76.75**	**0.09**	***0.12***	**74.73**	**74.83**	**0.10**	***0.14***

Totals may not add, due to independent rounding.

Table 7
Third- and fourth-quarter world oil demand comparison for 2002
mb/d

	3Q01	3Q02	Change 2001/00 Volume	%	4Q01	4Q02	Change 2002/01 Volume	%
North America	23.96	23.99	0.04	*0.16*	23.64	23.93	0.29	*1.23*
Western Europe	15.49	15.32	–0.17	*–1.09*	15.45	15.65	0.20	*1.33*
OECD Pacific	8.06	7.98	–0.08	*–0.98*	8.79	9.01	0.22	*2.49*
Total OECD	**47.50**	**47.29**	**–0.21**	***–0.44***	**47.88**	**48.59**	**0.71**	***1.49***
Other Asia	7.44	7.43	–0.01	*–0.16*	7.41	7.60	0.19	*2.57*
Latin America	4.66	4.67	0.01	*0.22*	4.53	4.56	0.02	*0.53*
Middle East	4.63	4.73	0.10	*2.06*	4.50	4.59	0.09	*2.04*
Africa	2.36	2.37	0.01	*0.54*	2.39	2.40	0.01	*0.45*
Total DCs	**19.09**	**19.20**	**0.11**	***0.56***	**18.84**	**19.16**	**0.32**	***1.68***
FSU	3.78	4.15	0.37	*9.85*	4.40	4.38	–0.01	*–0.33*
Other Europe	0.68	0.66	–0.01	*–1.82*	0.73	0.72	–0.01	*–1.52*
China	4.65	4.61	–0.03	*–0.65*	4.55	4.55	0.00	*–0.07*
Total "Other regions"	**9.10**	**9.43**	**0.33**	***3.62***	**9.67**	**9.65**	**–0.03**	***–0.30***
Total world	**75.69**	**75.92**	**0.23**	***0.30***	**76.39**	**77.40**	**1.00**	***1.31***

Totals may not add, due to independent rounding.

WORLD OIL SUPPLY

Non-OPEC

2001 non-OPEC supply figure revised down to 46.48 mb/d; 2000 figure also down, to 45.73 mb/d

Figures for 2001

All the "total non-OPEC supply" figures for 2001 have been revised down since the last *MOMR*. The yearly figure is down by 0.06 mb/d to 46.48 mb/d, and the quarterly figures by 0.05 mb/d to 46.17 mb/d, 0.08 mb/d to 45.95 mb/d, 0.10 mb/d to 46.52 mb/d and 0.02 mb/d to 47.28 mb/d respectively. The yearly average increase is estimated at 0.75 mb/d, compared with the 2000 figure, which has also been revised down.

Table 8
Non-OPEC oil supply in 2001
mb/d

	2000	1Q01	2Q01	3Q01	4Q01	2001	Change 01/00
North America	14.25	14.21	14.28	14.47	14.65	14.41	0.16
Western Europe	6.74	6.77	6.53	6.59	6.92	6.70	–0.03
OECD Pacific	0.83	0.80	0.76	0.77	0.74	0.77	–0.07
Total OECD	**21.82**	**21.79**	**21.58**	**21.82**	**22.31**	**21.88**	**0.06**
Other Asia	2.23	2.27	2.20	2.28	2.31	2.27	0.04
Latin America	3.74	3.77	3.65	3.82	3.78	3.76	0.01
Middle East	2.13	2.14	2.16	2.12	2.10	2.13	0.00
Africa	2.84	2.79	2.73	2.72	2.79	2.76	–0.09
Total DCs	**10.95**	**10.97**	**10.74**	**10.94**	**10.99**	**10.91**	**–0.04**
FSU	7.91	8.25	8.46	8.61	8.78	8.53	0.62
Other Europe	0.18	0.18	0.18	0.18	0.18	0.18	0.00
China	3.23	3.29	3.31	3.28	3.33	3.31	0.08
Total "Other regions"	**11.32**	**11.73**	**11.95**	**12.07**	**12.29**	**12.01**	**0.69**
Total non-OPEC production	**44.08**	**44.48**	**44.26**	**44.83**	**45.59**	**44.79**	**0.71**
Processing gains	1.65	1.69	1.69	1.69	1.69	1.69	0.04
Total non-OPEC supply	**45.73**	**46.17**	**45.95**	**46.52**	**47.28**	**46.48**	**0.75**
Previous estimate	45.78	46.23	46.03	46.62	47.30	46.55	0.77
Revision	**–0.05**	**–0.05**	**–0.08**	**–0.10**	**–0.02**	**–0.06**	**–0.02**

Totals may not add, due to independent rounding.

2002 non-OPEC supply forecast revised up by 0.12 mb/d to 47.76 mb/d

Expectations for 2002

Our 2002 non-OPEC supply forecast has been revised up by 0.12 mb/d since the last *MOMR* and is expected to witness an increase of around 1.28 mb/d, compared with the estimated figure for 2001. The expected 2002 quarterly distribution is estimated at 47.74 mb/d, 47.27 mb/d, 47.69 mb/d and 48.35 mb/d respectively, resulting in a yearly average of 47.76 mb/d.

Table 9
Non-OPEC oil supply in 2002
mb/d

	2001	1Q02	2Q02	3Q02	4Q02	**2002**	**Change 02/01**
North America	14.41	14.78	14.59	14.61	14.65	14.66	0.25
Western Europe	6.70	6.72	6.49	6.54	6.88	6.66	–0.05
OECD Pacific	0.77	0.76	0.72	0.72	0.70	0.73	–0.04
Total OECD	**21.88**	**22.26**	**21.80**	**21.87**	**22.23**	**22.04**	**0.16**
Other Asia	2.27	2.32	2.26	2.34	2.37	2.32	0.05
Latin America	3.76	3.91	3.79	3.96	3.93	3.90	0.14
Middle East	2.13	2.11	2.13	2.09	2.07	2.10	–0.03
Africa	2.76	2.98	2.92	2.90	2.99	2.95	0.19
Total DCs	**10.91**	**11.32**	**11.09**	**11.29**	**11.36**	**11.27**	**0.36**
FSU	8.53	8.86	9.08	9.24	9.43	9.16	0.63
Other Europe	0.18	0.17	0.17	0.17	0.17	0.17	–0.01
China	3.31	3.40	3.41	3.39	3.44	3.41	0.10
Total "Other regions"	**12.01**	**12.43**	**12.67**	**12.80**	**13.04**	**12.74**	**0.73**
Total non-OPEC production	**44.79**	**46.02**	**45.55**	**45.97**	**46.63**	**46.04**	**1.25**
Processing gains	1.69	1.72	1.72	1.72	1.72	1.72	0.03
Total non-OPEC supply	**46.48**	**47.74**	**47.27**	**47.69**	**48.35**	**47.76**	**1.28**
Previous estimate	46.55	47.61	47.17	47.61	48.18	47.64	1.09
Revision	**–0.06**	**0.13**	**0.10**	**0.08**	**0.17**	**0.12**	**0.19**

Totals may not add, due to independent rounding.

FSU net oil export figures revised up for both 2001 and 2002

The FSU's net oil export estimate for 2001 has been revised up by around 0.01 mb/d to 4.56 mb/d, compared with the last *MOMR*. Our forecast for 2002 has also been revised up, by 0.06 mb/d to 5.13 mb/d.

Table 10
FSU net oil exports
mb/d

	1Q	2Q	3Q	4Q	**Year**
1998	2.77	3.02	3.18	3.20	**3.04**
1999	3.12	3.62	3.52	3.49	**3.44**
2000	3.97	4.13	4.47	4.01	**4.14**
2001 (estimate)	4.30	4.71	4.83	4.38	**4.56**
2002 (forecast)	5.00	5.37	5.10	5.05	**5.13**

OPEC natural gas liquids

No revisions to OPEC NGL data

The OPEC NGL figures for 1998–2002 remain unchanged from the last *MOMR*, at 3.01 mb/d, 3.07 mb/d, 3.23 mb/d, 3.24 mb/d and 3.26 mb/d respectively.

OPEC NGL production — 1998–2002
mb/d

1998	**1999**	**2000**	1Q01	2Q01	3Q01	4Q01	**2001**	**Change 01/00**	**2002**	**Change 02/01**
3.01	**3.07**	**3.23**	3.24	3.24	3.24	3.24	**3.24**	0.02	**3.26**	0.02

Available secondary sources put OPEC's March production at 25.40 mb/d

OPEC crude oil production

Available secondary sources indicate that, in March, OPEC output was 25.40 mb/d, which was 0.40 mb/d higher than the revised February level of 24.99 mb/d. Table 11 shows OPEC production, as reported by selected secondary sources.

Table 11
OPEC crude oil production, based on secondary sources
1,000 b/d

	2000	4Q01	2001	Feb.02*	**Mar.02***	1Q02	Mar.–Feb.
Algeria	808	810	820	775	**799**	786	24
Indonesia	1,278	1,175	1,214	1,145	**1,140**	1,143	–5
IR Iran	3,671	3,481	3,665	3,324	**3,383**	3,358	59
Iraq	2,552	2,559	2,383	2,447	**2,481**	2,396	34
Kuwait	2,101	1,949	2,032	1,826	**1,845**	1,843	20
SP Libyan AJ	1,405	1,308	1,361	1,268	**1,295**	1,275	27
Nigeria	2,031	2,113	2,097	1,947	**1,970**	1,970	23
Qatar	698	634	683	589	**602**	596	13
Saudi Arabia	8,273	7,571	7,945	7,159	**7,331**	7,246	172
UAE	2,251	2,034	2,163	1,957	**1,975**	1,972	19
Venezuela	2,897	2,703	2,831	2,559	**2,576**	2,571	16
Total OPEC	**27,965**	**26,336**	**27,194**	**24,994**	**25,396**	**25,157**	**403**

Totals may not add, due to independent rounding.
** Not all sources available.*

RIG COUNT

Non-OPEC rig count down by 165 in March

Non-OPEC

Rig activity slowed down in March, compared with February. North America was the major contributor, witnessing a drop in the rig count of 185. The major regional decrease occurred in Canada, by 122 to 311. The other significant decline in North America was observed in the USA, by 62 to 763.

Table 12
Non-OPEC rig count in 2001

	2000	**2001**	**2001–00**	**Feb.02**	**Mar.02**	**Mar.–Feb.**
North America	1,305	1,552	247	1,323	**1,138**	–185
Western Europe	125	95	–30	82	**90**	8
OECD Pacific	17	20	3	17	**14**	–3
OECD	1,447	1,667	220	1,422	**1,242**	–180
Other Asia	83	95	12	98	**102**	4
Latin America	120	141	20	106	**110**	4
Middle East	45	50	5	55	**58**	3
Africa	34	36	2	40	**44**	4
DCs	282	321	40	299	**314**	15
FSU	n.a.	n.a.	n.a.	n.a.	**n.a.**	n.a.
Other Europe	3	3	0	2	**2**	0
China	n.a.	n.a.	n.a.	n.a.	**n.a.**	n.a.
Other regions	n.a.	n.a.	n.a.	n.a.	**n.a.**	n.a.
Total non-OPEC	**1,732**	**1,991**	**260**	**1,723**	**1,558**	**–165**

Totals may not add, due to independent rounding.
n.a. not available.
Source: Baker Hughes International.

OPEC rig count down by three in March

OPEC

OPEC's rig count declined by three to 243 in March, compared with February. The major declines occurred in Venezuela and Indonesia, by five and three rigs respectively.

Table 13
OPEC rig count

	2000	2001	2001–00	Feb.02	Mar.02	Mar.–Feb.
Algeria	15	20	5	19	**23**	4
Indonesia	32	41	9	50	**47**	–3
IR Iran	27	30	3	34	**34**	0
Iraq	0	0	0	n.a.	**n.a.**	n.a.
Kuwait	12	9	–3	5	**6**	1
SP Libyan AJ	7	5	–2	10	**10**	0
Nigeria	8	12	4	11	**11**	0
Qatar	6	9	3	15	**15**	0
Saudi Arabia	25	30	5	31	**33**	2
UAE	13	15	3	17	**15**	–2
Venezuela	63	67	5	54	**49**	–5
Total OPEC	**206**	**238**	**32**	**246**	**243**	**–3**

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

STOCK MOVEMENTS

Further slight draw of 0.17 mb/d in USA in March

USA

US commercial onland oil stocks displayed a further draw, when they moved down by a slight 4.8 mb, or a rate of 0.17 mb/d, to 996.6 mb during 1–29 March. The draw was largely confined to a decrease of 11.1 mb to 119.7 mb in distillates, as apparent distillate demand rose by about 10%, due to late winter heating oil requirements. Fuel oil and gasoline also contributed to the draw, when they moved down by 3.2 mb to 34.6 mb and by 1.2 mb to 211.5 mb respectively, on lower fuel oil imports and relatively healthy demand, especially for bunker fuel. Meanwhile, a sharp drop in gasoline output, together with declining imports, was behind a draw on this product's stocks. However, a continued build in crude stocks, which rose by a further 4.6 mb to 325.1 mb, due mainly to a considerable downturn in crude imports, especially during the week ending 22 March, reduced the total draw. The overall level of stocks was 62.0 mb above last year's figure.

Table 14
US onland commercial petroleum stocks*
mb

	28 Dec.01	01 Mar.02	29 Mar.02	Change Mar./Feb.	29 Mar.01	5 Apr.02**
Crude oil (excl. SPR)	309.9	320.5	**325.1**	**4.6**	302.1	**326.25**
Gasoline	207.9	212.7	211.5	–1.2	194.8	208.88
Distillate fuel	137.6	130.8	119.7	–11.1	106.1	122.50
Residual fuel oil	40.9	37.8	34.6	–3.2	39.0	35.28
Jet fuel	40.7	40.5	41.0	0.5	39.9	40.85
Unfinished oils	90.6	90.1	93.6	3.5	101.1	91.55
Other oils	181.5	168.9	171.1	2.2	151.4	n.a.
Total	1,009.2	1,001.4	**996.6**	**–4.8**	934.6	**825.31**
SPR	549.0	559.7	560.9	1.2	542.2	n.a.

** At end of month, unless otherwise stated.* *Source: US/DOE-EIA*

***Data from API.*

During the same period, the US Strategic Petroleum Reserve (SPR) rose slightly, by 1.2 mb to 560.9 mb.

Seasonal marginal stock-draw of 0.18 mb/d in Eur-16 in March

Western Europe

Commercial onland oil stocks in Eur-16 lost part of the previous month's unseasonable build in March, when they declined by 5.6 mb, or a rate of 0.18 mb/d, to 1,068.0 mb. This seasonal draw resulted mainly from a moderate decrease in crude oil stocks, of 7.4 mb to 432.7 mb, due to lower imports. Fuel oil stocks were almost the only inventories to show a build, of 1.8 mb to 112.1 mb, on weak bunker demand, as well as closed arbitrage to Asia. Other major product stocks remained nearly unchanged, with only marginal movements in both directions. Total oil stocks remained slightly higher than the year-ago level.

Table 15
Western Europe commercial oil stocks*
mb

	Sep.01	Dec.01	Feb.02	**Mar.02**	**Change Mar./Feb.**	Mar.01
Crude oil	436.6	436.0	440.1	**432.7**	**–7.4**	415.7
Mogas	144.6	151.8	159.6	159.2	–0.3	154.6
Naphtha	26.0	26.4	24.2	24.2	0.0	23.0
Middle distillates	323.4	331.2	339.5	339.8	0.3	337.6
Fuel oils	121.0	119.1	110.2	112.1	1.8	126.2
Total products	615.0	628.5	633.4	635.2	1.8	641.4
Overall total	1,051.6	1,064.5	1,073.6	**1,068.0**	**–5.6**	1,057.1

** At end of month, and region consists of Eur-16. Source: Argus Euroilstock.*

Persistent draw of 0.18 mb/d in Japan in February

Japan

In February, commercial onland oil stocks were drawn down for the fourth consecutive month, as they decreased by 5.1 mb, or a rate of 0.18 mb/d, to 165.5 mb. Crude oil and distillates contributed nearly equally to this draw, falling by 3.3 mb to 97.0 mb and by 2.9 mb to 34.3 mb respectively. The draw on crude oil was due to an increase in refinery throughput of about 2% in February, while rising demand was behind the draw on distillates. Gasoline abated this draw, rising by a slight 1.2 mb, due to higher gasoline output and weak demand. Total oil stocks were 11.4 mb below the year-ago level.

Table 16
Japan's commercial oil stocks*
mb

	Sep.01	Dec.01	Jan.02	**Feb.02**	**Change Feb./Jan.**	Feb.01
Crude oil	118.0	113.4	100.3	**97.0**	**–3.3**	110.2
Gasoline	13.8	12.3	14.1	15.3	1.2	14.6
Middle distillates	45.7	37.8	37.2	34.3	–2.9	32.0
Residual fuel oil	19.9	18.5	19.0	19.0	0.0	20.1
Total products	79.5	68.6	70.2	68.5	–1.7	66.7
Overall total **	197.5	182.0	170.6	**165.5**	**–5.1**	176.9

** At end of month. ** Includes crude oil and main products only. Source: MITI, Japan.*

BALANCE OF SUPPLY AND DEMAND

2001 supply/demand difference estimated at 26.1 mb/d

Both world demand and non-OPEC supply estimates have been revised down by less than 0.1 mb/d since the last *MOMR*, to 75.9 mb/d and 49.7 mb/d respectively. These revisions have resulted in a yearly average difference of 26.1 mb/d, up by less than 0.1 mb/d, compared with the last *MOMR*, with quarterly distributions of 27.2 mb/d, 25.5 mb/d, 25.9 mb/d and 25.9 mb/d respectively. The balances for the first three quarters have been revised down by less than 0.1 mb/d to 0.9 mb/d, 1.6 mb/d and 1.3 mb/d, respectively, while that of the fourth quarter has been revised up by more than 0.1 mb/d to 0.5 mb/d. The 2001 annual average balance is estimated at 1.1 mb/d. The 2000 balance remains unchanged at 1.1 mb/d.

Table 17
Summarized supply/demand balance for 2001
mb/d

	2000	1Q01	2Q01	3Q01	4Q01	**2001**
(a) World oil demand	75.8	76.7	74.7	75.7	76.4	75.9
(b) Non-OPEC supply(1)	49.0	49.4	49.2	49.8	50.5	49.7
Difference (a – b)	**26.9**	**27.2**	**25.5**	**25.9**	**25.9**	**26.1**
OPEC crude oil production(2)	28.0	28.1	27.1	27.3	26.3	27.2
Balance	**1.1**	**0.9**	**1.6**	**1.3**	**0.5**	**1.1**

(1) Including OPEC NGLs.
(2) Selected secondary sources.
Totals may not add, due to independent rounding.

2002 supply/demand difference revised down to 25.2 mb/d

The summarized expected supply/demand balance table for 2002 shows no change to the world demand forecast of 76.2 mb/d, while total non-OPEC supply has been revised up by more than 0.1 mb/d to 51.0 mb/d. This has resulted in an expected annual difference of around 25.2 mb/d, down by more than 0.1 mb/d, compared with the last *MOMR*, with a quarterly distribution of 25.7 mb/d, 24.3 mb/d, 25.0 mb/d and 25.8 mb/d respectively. The balance for the first quarter is estimated for the first time, at –0.6 mb/d.

Table 18
Summarized supply/demand balance for 2002
mb/d

	2001	1Q02	2Q02	3Q02	4Q02	**2002**
(a) World oil demand	75.9	76.7	74.8	75.9	77.4	76.2
(b) Non-OPEC supply(1)	49.7	51.0	50.5	51.0	51.6	51.0
Difference (a – b)	**26.1**	**25.7**	**24.3**	**25.0**	**25.8**	**25.2**
OPEC crude oil production(2)	27.2	25.2				
Balance	**1.1**	**–0.6**				

(1) Including OPEC NGLs.
(2) Selected secondary sources.
Totals may not add, due to independent rounding.

Table 19
World oil demand/supply balance

mb/d

	1998	**1999**	**2000**	1Q01	2Q01	3Q01	4Q01	**2001**	1Q02	2Q02	3Q02	4Q02	**2002**
World demand													
OECD	46.8	47.7	47.8	48.9	46.5	47.5	47.9	47.7	48.7	46.4	47.3	48.6	47.8
North America	23.1	23.8	24.1	24.3	23.8	24.0	23.6	23.9	24.1	24.0	24.0	23.9	24.0
Western Europe	15.3	15.2	15.1	15.2	14.8	15.5	15.4	15.2	15.2	14.6	15.3	15.6	15.2
Pacific	8.4	8.7	8.7	9.4	8.0	8.1	8.8	8.6	9.4	7.9	8.0	9.0	8.6
DCs	18.2	18.6	18.8	18.7	18.8	19.1	18.8	18.8	18.8	18.9	19.2	19.2	19.0
FSU	4.3	4.0	3.8	4.0	3.8	3.8	4.4	4.0	3.9	3.7	4.1	4.4	4.0
Other Europe	0.8	0.8	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7
China	3.8	4.2	4.7	4.4	5.0	4.6	4.5	4.6	4.5	5.0	4.6	4.5	4.7
(a) Total world demand	73.8	75.2	75.8	76.7	74.7	75.7	76.4	75.9	76.7	74.8	75.9	77.4	76.2
Non-OPEC supply													
OECD	21.8	21.3	21.8	21.8	21.6	21.8	22.3	21.9	22.3	21.8	21.9	22.2	22.0
North America	14.5	14.1	14.2	14.2	14.3	14.5	14.7	14.4	14.8	14.6	14.6	14.7	14.7
Western Europe	6.6	6.6	6.7	6.8	6.5	6.6	6.9	6.7	6.7	6.5	6.5	6.9	6.7
Pacific	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.7	0.7	0.7	0.7
DCs	10.5	10.8	10.9	11.0	10.7	10.9	11.0	10.9	11.3	11.1	11.3	11.4	11.3
FSU	7.3	7.5	7.9	8.3	8.5	8.6	8.8	8.5	8.9	9.1	9.2	9.4	9.2
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	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4	3.4
Processing gains	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Total non-OPEC supply	44.5	44.6	45.7	46.2	46.0	46.5	47.3	46.5	47.7	47.3	47.7	48.3	47.8
OPEC NGLs	3.0	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3
(b) Total non-OPEC supply and OPEC NGLs	47.5	47.6	49.0	49.4	49.2	49.8	50.5	49.7	51.0	50.5	51.0	51.6	51.0
OPEC crude oil production (secondary sources)	27.8	26.5	28.0	28.1	27.1	27.3	26.3	27.2	25.2				
Total supply	75.3	74.2	76.9	77.5	76.3	77.0	76.9	76.9	76.2				
Balance (stock change and miscellaneous)	1.5	-1.1	1.1	0.9	1.6	1.3	0.5	1.1	-0.6				
Closing stock level (outside FCPEs) mb													
OECD onland commercial	2698	2446	2525	2518	2592	2656	2624						
OECD SPR	1249	1228	1210	1210	1207	1205	1222						
OECD total	3947	3675	3735	3728	3799	3861	3846						
Other onland	1056	983	999	997	1016	1032	1029						
Oil-on-water	859	808	876	913	833	868	845						
Total stock	5861	5466	5610	5638	5648	5761	5720						
Days of forward consumption in OECD													
Commercial onland stocks	57	51	53	54	55	55	54						
SPR	26	26	25	26	25	25	25						
Total	83	77	78	80	80	81	79						
Memo items													
FSU net exports	3.0	3.4	4.1	4.3	4.7	4.8	4.4	4.6	5.0	5.4	5.1	5.0	5.1
(a) - (b)	26.3	27.6	26.9	27.2	25.5	25.9	25.9	26.1	25.7	24.3	25.0	25.8	25.2

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

Table 20
World oil demand/supply balance: changes from last month's table †
mb/d

	1998	**1999**	**2000**	1Q01	2Q01	3Q01	4Q01	**2001**	1Q02	2Q02	3Q02	4Q02	**2002**
World demand													
OECD	-	-	-	-	-	-	-0.1	-	0.1	0.1	-	-0.1	-
North America	-	-	-	-	-	-	-	-	-	-	-	-	-
Western Europe	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) Total world demand	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-
Non-OPEC supply													
OECD	-	-	-	-	-	-	-	-	-	-	-	-	-
North America	-	-	-	-	-	-	-	-	-	-	-	-	-
Western Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-	-	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	0.1	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	-0.1	-0.1	-	-0.1	0.1	0.1	0.1	0.2	0.1
OPEC NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	-	-	-	-	-0.1	-0.1	-	-0.1	0.1	0.1	0.1	0.2	0.1
OPEC crude oil production (secondary sources)	-	-	-	-	-	-	-	-	-				
Total supply	-	-	-	-	-	-0.1	-	-	-				
Balance (stock change and miscellaneous)	-	-	-	-	-0.1	-0.1	0.1	-	-				
Closing stock level (outside FCPEs) *mb*													
OECD onland commercial	-	-	-2	-2	-4	1	7						
OECD SPR	-	-	-	-	-1	-1	-1						
OECD total	-	-	-2	-3	-5	-	6						
Other onland	-	-	-	-1	-1	-	2						
Oil on water	-	-	-	-	-	2	-						
Total stock	-	-	-2	-3	-6	2	-						
Days of forward consumption in OECD													
Commercial onland stocks	-	-	-	-	-	-	-						
SPR	-	-	-	-	-	-	-						
Total	-	-	-	-	-	-	-						
Memo items													
FSU net exports	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1
(a) - (b)	-	-	0.1	0.1	0.1	0.1	-0.1	-	-0.1	-0.1	-	-0.3	-0.1

† *This compares Table 20 in this issue of the MOMR with Table 19 in the March 2002 issue.*
This table shows only where changes have occurred.

Table 21
World oil stocks (excluding former CPEs) at end of period

	1996	1997	1998	1999	2000	1Q00	2Q00	3Q00	4Q00	1Q01	2Q01	3Q01	4Q01
Closing stock level *mb*													
OECD onland commercial	2,515	2,616	2,698	2,446	2,525	2,415	2,507	2,540	2,525	2,518	2,592	2,656	2,624
North America	1,138	1,211	1,283	1,127	1,145	1,108	1,165	1,180	1,145	1,155	1,228	1,265	1,266
Western Europe	899	912	962	881	925	898	897	908	925	917	907	917	914
OECD Pacific	477	493	454	438	454	409	445	452	454	447	457	473	444
OECD SPR	1,199	1,207	1,249	1,228	1,210	1,234	1,232	1,237	1,210	1,210	1,207	1,205	1,222
North America	566	563	571	567	543	569	569	572	543	544	545	547	552
Western Europe	330	329	362	346	354	349	349	353	354	351	347	345	353
OECD Pacific	303	315	315	315	313	315	315	312	313	314	314	313	316
OECD total	**3,714**	**3,823**	**3,947**	**3,675**	**3,735**	**3,649**	**3,739**	**3,777**	**3,735**	**3,728**	**3,799**	**3,861**	**3,846**
Other onland	993	1,022	1,056	983	999	976	1,000	1,010	999	997	1,016	1,032	1,029
Oil-on-water	798	812	859	808	876	840	865	849	876	913	833	868	845
Total stock	**5,505**	**5,658**	**5,861**	**5,466**	**5,610**	**5,464**	**5,604**	**5,635**	**5,610**	**5,638**	**5,648**	**5,761**	**5,720**
Days of forward consumption in OECD													
OECD onland commercial	54	56	57	51	53	52	52	52	52	54	55	55	54
North America	50	52	54	47	48	46	48	48	47	49	51	54	53
Western Europe	60	60	63	58	61	61	59	59	61	62	59	59	60
OECD Pacific	53	59	52	51	53	51	53	51	48	56	57	54	47
OECD SPR	26	26	26	26	25	27	26	25	25	26	25	25	25
North America	25	24	24	24	23	24	23	23	22	23	23	23	23
Western Europe	22	22	24	23	23	24	23	23	23	24	22	22	23
OECD Pacific	34	37	36	36	37	39	38	35	33	39	39	36	33
OECD total	**80**	**82**	**83**	**77**	**78**	**78**	**78**	**78**	**76**	**80**	**80**	**81**	**79**
Days of global forward consumption	**85**	**87**	**88**	**82**	**84**	**84**	**84**	**84**	**83**	**86**	**85**	**86**	**86**

Table 22
Non-OPEC supply and OPEC natural gas liquids
mb/d

	1998	1999	2000	1Q01	2Q01	3Q01	4Q01	2001	Change 01/00	1Q02	2Q02	3Q02	4Q02	2002	Change 02/01
USA	8.39	8.11	8.11	7.87	8.10	8.17	8.24	8.10	-0.01	8.22	8.21	8.10	8.02	8.14	0.04
Canada	2.61	2.60	2.69	2.78	2.68	2.67	2.84	2.74	0.06	2.90	2.79	2.78	2.96	2.86	0.11
Mexico	3.51	3.35	3.45	3.56	3.50	3.63	3.57	3.57	0.11	3.66	3.59	3.72	3.67	3.66	0.10
North America	**14.51**	**14.05**	**14.25**	**14.21**	**14.28**	**14.47**	**14.65**	**14.41**	**0.16**	**14.78**	**14.59**	**14.61**	**14.65**	**14.66**	**0.25**
Norway	3.08	3.06	3.32	3.47	3.35	3.39	3.50	3.43	0.11	3.32	3.20	3.24	3.34	3.28	-0.15
UK	2.77	2.84	2.64	2.53	2.48	2.48	2.65	2.53	-0.10	2.62	2.57	2.57	2.75	2.63	0.09
Denmark	0.24	0.30	0.36	0.37	0.31	0.33	0.38	0.35	-0.02	0.38	0.32	0.35	0.40	0.36	0.02
Other Western Europe	0.48	0.43	0.41	0.40	0.40	0.38	0.39	0.39	-0.02	0.40	0.39	0.38	0.39	0.39	0.00
Western Europe	**6.56**	**6.63**	**6.74**	**6.77**	**6.53**	**6.59**	**6.92**	**6.70**	**-0.03**	**6.72**	**6.49**	**6.54**	**6.88**	**6.66**	**-0.05**
Australia	0.61	0.59	0.77	0.74	0.70	0.71	0.68	0.71	-0.06	0.71	0.67	0.68	0.65	0.68	-0.03
Other Pacific	0.08	0.07	0.06	0.06	0.06	0.06	0.05	0.06	0.00	0.05	0.05	0.05	0.05	0.05	-0.01
OECD Pacific	**0.69**	**0.66**	**0.83**	**0.80**	**0.76**	**0.77**	**0.74**	**0.77**	**-0.07**	**0.76**	**0.72**	**0.72**	**0.70**	**0.73**	**-0.04**
Total OECD*	**21.75**	**21.34**	**21.82**	**21.79**	**21.58**	**21.82**	**22.31**	**21.88**	**0.06**	**22.26**	**21.80**	**21.87**	**22.23**	**22.04**	**0.16**
Brunei	0.16	0.18	0.19	0.20	0.18	0.19	0.21	0.19	0.00	0.21	0.19	0.21	0.22	0.21	0.01
India	0.75	0.75	0.74	0.74	0.71	0.73	0.75	0.73	-0.01	0.74	0.71	0.73	0.75	0.73	0.00
Malaysia	0.72	0.70	0.68	0.68	0.67	0.70	0.70	0.69	0.00	0.71	0.70	0.73	0.73	0.72	0.03
Papua New Guinea	0.08	0.09	0.07	0.06	0.06	0.05	0.05	0.06	-0.01	0.05	0.05	0.05	0.05	0.05	-0.01
Vietnam	0.23	0.26	0.31	0.35	0.34	0.36	0.36	0.35	0.04	0.35	0.35	0.37	0.37	0.36	0.01
Asia others	0.20	0.20	0.24	0.24	0.25	0.25	0.25	0.25	0.01	0.25	0.25	0.26	0.26	0.26	0.01
Other Asia	**2.14**	**2.18**	**2.23**	**2.27**	**2.20**	**2.28**	**2.31**	**2.27**	**0.04**	**2.32**	**2.26**	**2.34**	**2.37**	**2.32**	**0.05**
Argentina	0.88	0.84	0.79	0.80	0.80	0.80	0.80	0.80	0.00	0.79	0.80	0.80	0.80	0.80	0.00
Brazil	1.23	1.36	1.49	1.57	1.50	1.59	1.62	1.57	0.08	1.73	1.65	1.75	1.78	1.73	0.16
Colombia	0.75	0.82	0.70	0.64	0.57	0.65	0.59	0.61	-0.08	0.62	0.56	0.64	0.58	0.60	-0.01
Ecuador	0.38	0.38	0.40	0.42	0.42	0.40	0.41	0.41	0.02	0.41	0.41	0.40	0.40	0.40	-0.01
Peru	0.12	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.09	0.10	0.09	0.09	0.09	-0.01
Trinidad & Tobago	0.13	0.14	0.14	0.13	0.13	0.13	0.14	0.13	-0.01	0.13	0.14	0.14	0.15	0.14	0.01
L. America others	0.11	0.11	0.12	0.13	0.13	0.13	0.13	0.13	0.01	0.13	0.13	0.14	0.14	0.14	0.01
Latin America	**3.62**	**3.76**	**3.74**	**3.77**	**3.65**	**3.82**	**3.78**	**3.76**	**0.01**	**3.91**	**3.79**	**3.96**	**3.93**	**3.90**	**0.14**
Bahrain	0.20	0.19	0.19	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	0.90	0.91	0.95	0.95	0.97	0.94	0.94	0.95	0.00	0.95	0.97	0.95	0.94	0.95	0.00
Syria	0.56	0.55	0.54	0.54	0.53	0.52	0.52	0.53	-0.01	0.51	0.50	0.49	0.49	0.50	-0.03
Yemen	0.39	0.42	0.45	0.47	0.47	0.47	0.46	0.47	0.01	0.46	0.46	0.46	0.45	0.46	-0.01
Middle East	**2.05**	**2.06**	**2.13**	**2.14**	**2.16**	**2.12**	**2.10**	**2.13**	**0.00**	**2.11**	**2.13**	**2.09**	**2.07**	**2.10**	**-0.03**
Angola	0.73	0.76	0.74	0.72	0.69	0.69	0.74	0.71	-0.04	0.89	0.85	0.84	0.91	0.87	0.16
Cameroon	0.10	0.10	0.10	0.08	0.08	0.08	0.08	0.08	-0.02	0.08	0.08	0.08	0.08	0.08	0.00
Congo	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.00	0.27	0.27	0.27	0.27	0.27	0.00
Egypt	0.86	0.83	0.80	0.78	0.74	0.75	0.76	0.76	-0.04	0.75	0.72	0.72	0.74	0.73	-0.03
Gabon	0.38	0.36	0.34	0.31	0.31	0.31	0.31	0.31	-0.03	0.31	0.31	0.31	0.32	0.31	0.00
South Africa	0.16	0.17	0.19	0.20	0.19	0.19	0.18	0.19	0.00	0.19	0.19	0.18	0.18	0.18	0.00
Africa other	0.22	0.28	0.41	0.44	0.45	0.44	0.45	0.44	0.04	0.50	0.51	0.50	0.51	0.51	0.06
Africa	**2.72**	**2.78**	**2.84**	**2.79**	**2.73**	**2.72**	**2.79**	**2.76**	**-0.09**	**2.98**	**2.92**	**2.90**	**2.99**	**2.95**	**0.19**
Total DCs	**10.54**	**10.78**	**10.95**	**10.97**	**10.74**	**10.94**	**10.99**	**10.91**	**-0.04**	**11.32**	**11.09**	**11.29**	**11.36**	**11.27**	**0.36**
FSU	**7.29**	**7.47**	**7.91**	**8.25**	**8.46**	**8.61**	**8.78**	**8.53**	**0.62**	**8.86**	**9.08**	**9.24**	**9.43**	**9.16**	**0.63**
Other Europe	**0.19**	**0.18**	**0.18**	**0.18**	**0.18**	**0.18**	**0.18**	**0.18**	**0.00**	**0.17**	**0.17**	**0.17**	**0.17**	**0.17**	**-0.01**
China	**3.15**	**3.21**	**3.23**	**3.29**	**3.31**	**3.28**	**3.33**	**3.31**	**0.08**	**3.40**	**3.41**	**3.39**	**3.44**	**3.41**	**0.10**
Non-OPEC production	**42.93**	**42.99**	**44.08**	**44.48**	**44.26**	**44.83**	**45.59**	**44.79**	**0.71**	**46.02**	**45.55**	**45.97**	**46.63**	**46.04**	**1.25**
Processing gains	1.55	1.58	1.65	1.69	1.69	1.69	1.69	1.69	0.04	1.72	1.72	1.72	1.72	1.72	0.03
Non-OPEC supply	**44.48**	**44.56**	**45.73**	**46.17**	**45.95**	**46.52**	**47.28**	**46.48**	**0.75**	**47.74**	**47.27**	**47.69**	**48.35**	**47.76**	**1.28**
OPEC NGLs	**3.01**	**3.07**	**3.23**	**3.24**	**3.24**	**3.24**	**3.24**	**3.24**	**0.02**	**3.26**	**3.26**	**3.26**	**3.26**	**3.26**	**0.02**

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

** Former East Germany is included in the OECD.*

Table 23
Non-OPEC Rig Count
mb/d

	1998	1999	2,000	1Q01	2Q01	3Q01	4Q01	2,001	Change 01/00	Jan02	Feb02	Mar02	1Q02	Change Mar/Feb
USA	829	608	916	1,141	1,239	1,231	1,004	1,156	240	867	825	763	818	-62
Canada	260	246	344	515	252	320	278	342	-2	405	433	311	383	-122
Mexico	55	43	44	50	48	56	62	54	10	60	65	64	63	-1
North America	**1,144**	**897**	**1,305**	**1,706**	**1,539**	**1,607**	**1,344**	**1,552**	**247**	**1,332**	**1,323**	**1,138**	**1,264**	**-185**
Norway	17	17	22	24	22	22	22	23	1	23	16	21	20	5
UK	28	18	18	18	25	28	26	24	6	35	23	26	28	3
Denmark	3	2	3	4	5	4	5	4	1	7	4	5	5	1
Other Western Europe	93	77	82	43	44	42	47	44	-38	39	39	38	39	-1
Western Europe	**141**	**114**	**125**	**89**	**95**	**96**	**100**	**95**	**-30**	**104**	**82**	**90**	**92**	**8**
Australia	15	10	10	11	11	10	10	10	0	9	9	9	9	0
Other Pacific	6	6	7	10	9	8	10	9	2	10	8	5	8	-3
OECD Pacific	**21**	**16**	**17**	**20**	**20**	**18**	**20**	**20**	**3**	**19**	**17**	**14**	**17**	**-3**
Total OECD*	**1,306**	**1,027**	**1,447**	**1,815**	**1,655**	**1,721**	**1,464**	**1,667**	**220**	**1,455**	**1,422**	**1,242**	**1,373**	**-180**
Brunei	2	3	2	3	3	2	2	3	1	2	2	2	2	0
India	52	46	49	51	48	50	50	50	1	51	51	53	52	2
Malaysia	8	6	7	10	11	13	12	11	4	14	10	12	12	2
Papua New Guinea	2	1	0	0	1	2	1	1	1	1	1	0	1	-1
Vietnam	7	9	8	9	8	8	8	8	0	7	8	8	8	0
Asia others	20	16	16	22	23	24	18	22	5	26	26	27	26	1
Other Asia	**91**	**81**	**83**	**96**	**95**	**98**	**90**	**95**	**12**	**101**	**98**	**102**	**100**	**4**
Argentina	44	35	57	69	74	77	64	71	14	55	47	44	49	-3
Brazil	20	19	23	28	30	29	26	28	5	27	27	27	27	0
Colombia	12	12	14	15	16	14	16	15	1	13	12	14	13	2
Ecuador	5	3	7	9	10	10	11	10	3	12	9	10	10	1
Peru	5	2	4	4	4	3	3	4	0	1	2	2	2	0
Trinidad & Tobago	6	3	4	6	5	4	5	5	1	5	3	6	5	3
L. America others	13	13	12	9	8	6	6	7	-4	5	6	7	6	1
Latin America	**106**	**86**	**120**	**141**	**147**	**144**	**130**	**141**	**20**	**118**	**106**	**110**	**111**	**4**
Bahrain				0	0	0	0	0	0	0	0	0	0	0
Oman	24	19	24	24	24	25	26	25	1	26	27	27	27	0
Syria	14	13	14	19	19	20	19	19	5	20	21	20	20	-1
Yemen	4	4	6	6	6	5	6	6	0	7	6	10	8	4
Middle East	**42**	**36**	**45**	**49**	**49**	**49**	**51**	**50**	**5**	**57**	**55**	**58**	**57**	**3**
Angola	6	5	6	6	5	4	6	5	0	4	4	6	5	2
Cameroon				0	0	0	0	0	0	0	0	0	0	0
Congo	6	3	3	1	2	1	1	1	-1	1	1	0	1	-1
Egypt	22	17	18	21	22	22	23	22	4	24	20	23	22	3
Gabon	6	2	2	2	4	1	1	2	0	1	1	1	1	0
South Africa	1	1	1	2	1	0	1	1	0	1	1	1	1	0
Africa other	8	4	5	4	5	5	3	4	0	7	13	13	11	0
Africa	**48**	**30**	**34**	**36**	**40**	**34**	**35**	**36**	**2**	**38**	**40**	**44**	**41**	**4**
Total DCs	**287**	**232**	**282**	**322**	**330**	**325**	**307**	**321**	**40**	**314**	**299**	**314**	**309**	**15**
FSU														
Other Europe	**5**	**4**	**3**	**3**	**3**	**3**	**4**	**3**	**0**	**2**	**2**	**2**	**2**	**0**
China														
Non-OPEC Rig count	**1,597**	**1,263**	**1,732**	**2,140**	**1,988**	**2,049**	**1,774**	**1,991**	**260**	**1,771**	**1,723**	**1,558**	**1,684**	**-165**

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