OPEC

Organization of the Petroleum Exporting Countries

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Monthly Oil Market Report

January 2003

Next report to be issued on 18 February 2003

OPEC Basket average price

US $ per barrel

Up 4.10 in December

December	**28.39**
November	24.29
Year-to-date	29.92

December OPEC production

million barrels per day, according to secondary sources

Algeria	0.97	Kuwait	1.94	Saudi Arabia	7.91
Indonesia	1.10	SP Libyan AJ	1.37	UAE	2.05
IR Iran	3.54	Nigeria	2.04	Venezuela	0.84
Iraq	2.38	Qatar	0.72		

Supply and demand

million barrels per day

2002	
World demand	76.55
Non-OPEC supply	51.61
Difference	**24.94**
2003	
World demand	77.17
Non-OPEC supply	52.47
Difference	**24.70**

NB *Non-OPEC supply includes OPEC NGLs and non-conventional oils*

Stocks

Considerable draw in USA in December

World economy

World GDP growth estimated at 3.3% for 2003

Data covers period up to end-December 2002, unless otherwise stated

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OIL MARKET HIGHLIGHTS

- World GDP is forecast to grow at 3.3% in 2003, down 0.1% from last month's estimate. Within the OECD, the forecast for the USA was unchanged, while downward revisions were made for euro-zone countries, especially Germany, where the growth forecast was slashed to 0.9% from last month's 1.5%. Similarly, the estimate for OECD/Pacific, specifically Japan, was revised downwards by 0.2% to 0.6%. Developing countries' estimate was down by 0.1%, with Latin America relatively unchanged and downward revisions for Africa (0.1%) and Asia (0.2%).
- Most of the recent data for the US points to slowing growth in the last quarter and uncertainty ahead at the start of 2003. Industrial production fell in December, while unemployment remained at an eight-month high of 6%, as the economy shed over 100,000 jobs in December, mostly in manufacturing but in services as well. Consumer confidence fell in the last month of 2002 on increased uncertainty about the future, caused by the escalation of geopolitical tensions and continued high unemployment. This was reflected in retail sales figures for the holiday season, which, apart from booming car sales, were generally stagnant.
- In Japan, the near term outlook is subdued. The economy lost momentum towards the end of the year and may contract in the first quarter of 2003, while the strong yen is cause for concern, given the economy's dependence on exports. In November, industrial production fell by 2.2% on month and real household spending dropped 2.0% on the year. In the euro-zone, despite strong growth in industrial production in November, the outlook continues to be gloomy for the first part of 2003. In an attempt to respond to lacklustre growth, the ECB lowered its benchmark rate by 0.5% to 2.75% on 5 December, the first cut this year.
- The average price of the OPEC Reference Basket skyrocketed to two-year highs in December, registering a single-month gain of more than 16% or $4.10/b, to average $28.39/b. The Basket started the month with a gain of $0.72/b or 2.8%, increased by $0.74/b in the second week of the month, and then surged $2.29/b, or 8.6%, in the third week to $28.78/b. Another 6% rise during the last week of the month took the Basket above the $30/b mark to $30.52/b, one of the highest levels for the December Basket average price.
- The crude market's considerable rise was the underlying reason for increased product prices in December. An additional factor was the unusual occurrence of spot gasoline trading below prompt gasoil in all three markets. Thus, refining margins retreated, though refinery throughput rose in European and Asian centres to meet the elevated demand.
- OPEC area spot-chartering declined 1.28 mb/d to a monthly average of 10.61 mb/d in December, but remained a significant 2.79 mb/d higher than the previous year's level. Crude oil and product tanker freight rates continued to rise on strong demand and tighter prompt positions.
- The demand estimate for the fourth quarter of 2002 has been revised up on increased consumption fueled by colder weather and changes in electricity generation in Japan. World demand for 2003 was also revised up slightly to 77.17 mb/d.
- OPEC crude oil production, based on secondary sources, was estimated at 24.84 mb/d in December. Non-OPEC oil supply's estimate for 2002 is 47.94 mb/d, 1.46 mb/d higher than the estimated 2001 figure of 46.48 mb/d. In 2003, non-OPEC supply is expected to reach 48.77 mb/d, an increase of 0.83 mb/d over the year before estimate. Net FSU exports for 2002 and 2003 were estimated at 5.49 mb/d and 5.89 mb/d respectively.
- Non-OPEC rig count rose 86 in December, while OPEC's rig count declined six. Non-OPEC's major contributor was North America, which added 89 rigs, primarily on Canada's increase of 67 rigs to a 384 total, and the US rise of 22 rigs to a total of 856.
- US commercial on-land oil stocks continued to register a seasonal draw-down, falling a considerable 23.9 mb, at a rate of 0.70 mb/d, to 953.0 mb, during the period 29 November –3 January 2003. Crude oil stocks fell by a significant 8.6 mb to 278.7 mb, as the ongoing strike in Venezuela created a scarcity of crude oils, especially sour and heavy grades, pushing US crude oil stocks down heavily, particularly in the US Gulf Coast. This fall expanded the crude oil stock deficit by 3% from the 11% observed a month ago. Commercial on-land oil stocks in the Eur-16 (EU plus Norway) showed a further draw for the third consecutive month, decreasing by a modest 11.7 mb, at a rate of 0.38 mb/d, to 1,045.5 mb. The overall moderate decline of total oil stocks in the Eur-16 erased the year-on-year surplus, which was about 2% last month, reversing it to a 1% deficit. In November, Japan's commercial on-land oil stocks followed the downward pattern of the previous three months by dropping a significant 9.6 mb, at a rate of 0.32 mb/d, to 167.0 mb. Despite this draw, the year-on-year shortage was reduced by 1% to stand at about 16%.

123rd (Extraordinary) Meeting of the OPEC Conference
Vienna, Austria, 12 January 2003

Having reviewed the oil market situation, especially the demand/supply picture for the first quarter 2003, and in light of the impact of the supply shortfall on price volatility, the Conference decided to raise the OPEC-10 ceiling from 23 mb/d to 24.5 mb/d, with effect from 1 February 2003, in order to ensure adequate supplies of crude to consumers and restore balanced market conditions. In this regard, the Conference extends its support to Venezuela in its efforts to restore its market share. The adjusted ceiling will be reviewed at the next Ordinary Meeting of the Conference, which Ministers re-confirmed would take place on 11 March 2003. Member Countries affirmed their commitment to the new production level and their intention to ensure that prices remain within limits deemed acceptable to both producers and consumers.

The Conference remains determined to take whatever measures, as and when deemed necessary, to maintain oil price and market stability, and states that the market will be continuously and carefully monitored.

The Conference repeated its standing call on other oil producers and exporters to continue to co-operate with OPEC for the enduring well-being of the market and the benefit of both producers and consumers.

	Old Production Level (b/d)	**Increase (b/d)**	**New Production Level (b/d)**
Algeria	735,000	48,000	782,000
Indonesia	1,192,000	78,000	1,270,000
I.R. Iran	3,377,000	220,000	3,597,000
Kuwait	1,845,000	120,000	1,966,000
Libya	1,232,000	80,000	1,312,000
Nigeria	1,894,000	124,000	2,018,000
Qatar	596,000	39,000	635,000
Saudi Arabia	7,476,000	488,000	7,963,000
UAE	2,007,000	131,000	2,138,000
Venezuela	2,647,000	173,000	2,819,000
Total	**23,000,000**	**1,500,000**	**24,500,000**

THE US CRUDE OIL INVENTORY TRENDS

- An important factor contributing to the recent sharp rise in crude oil prices has been the decline in oil inventory levels, particularly in the USA. At the end of December, US commercial crude oil inventories totaled 278 mb, down 10.3% or 32 mb from the previous year's levels. Although stock levels closely followed the trend of the last six years' average and staying in the mid-range for most of 2002, they began to deviate downward in September. Since then a widening gap has remained exerting continuing upward pressure on prices.

- The slide in commercial crude oil stocks has also been encouraged by market fundamentals and financial concerns such as steep backwardation. US crude oil imports, for example, were down more than 300 tb/d in 2002 breaking the rising trend of recent years.

- The ongoing disruption of crude oil deliveries from Venezuela, which began in early December, further sharpened the decline in US commercial crude oil inventories. At first, offshore stock sales, spot purchases and the deferment of deliveries to the Strategic Petroleum Reserve (SPR) helped alleviate the loss of Venezuelan crude volumes. However, by late December, their impact had begun to show in weekly crude stock data as inventory levels in the first two weeks of January fell a further 5.3 mb. According to the EIA, the current crude level of 272 mb is close to the minimum operational level required by US refineries. However, the validity of this minimum operating level may be questioned as it was calculated in the 1980's and may no longer reflect current industry requirements, given the adoption of "just in time" inventory management methods.

Table 1: US weekly crude oil inventories (mb)

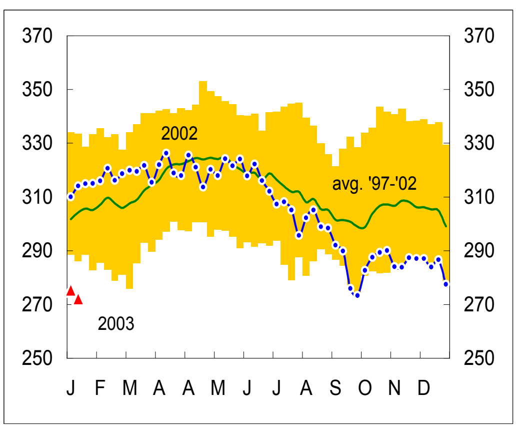
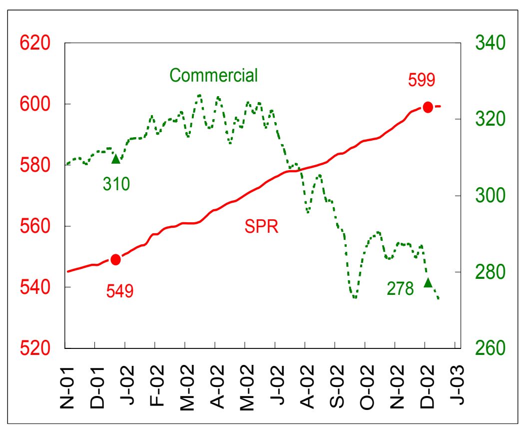


Table 2: US weekly crude oil inventories & SPR (mb)



- In contrast to the decline in US commercial inventories, the federally-controlled SPR exhibited a steady rising trend throughout 2002, registering an increase of more than 50 mb, which comfortably compensates for the 37 mb drop in US commercial crude stocks during the same period. In fact, when counted together total US crude oil stocks stood at 876.4 mb at the end of December 2002, more than 17 mb above the previous year.

- Following the US government's decision in November 2001 to bring the SPR up to its 700 mb capacity by 2005, deliveries have proceeded through royalty-in-kind transfers. Over the March-November period in 2003, the SPR is scheduled to increase its current inventory level of 600 mb by 20 mb, excluding the temporary deferrals.

HIGHLIGHTS OF THE WORLD ECONOMY

Economic growth rates 2003
%

World	G-7	USA	Japan	Euro-zone
3.3	2.0	2.7	0.6	1.5

Industrialised countries

United States of America

US economy showed further signs of weakness in the last month of 2002, as industrial production dropped and unemployment remained at an eight-month high of 6%

The US economy showed few signs of strength in December. Production and employment figures, as well as confidence indices, confirmed the slowdown in the US economy in the fourth quarter of last year. Despite optimism following a rise in the closely-watched index of manufacturing activity produced by the Institute for Supply Management (ISM), industrial production itself was reported to have fallen 0.2% in December, led by a 4.7% decline in automobile and parts production. This helped push down industry capacity utilization to 75.4% from 75.6% in November. Over the entire 2002, industrial production fell 0.6%, which follows a 3.5% drop in 2001 — the first time industrial production declined for two years in a row since 1974-1975. Retail sales in December showed a 1.2% rise to $308 billion, from a revised 0.9% increase in November, as consumers bought a record number of cars and trucks, mainly from stocks. Excluding auto sales, retail sales were stagnant. The weak sales data in the holiday period indicates that consumers were controlling spending as high unemployment and escalating geopolitical tensions reduce confidence. Evidence of consumer caution was also seen in consumer borrowing in November which dropped for the first time since January 1998, and in the Conference Board's consumer confidence index assessment, which fell to 80.3 in December from a revised 84.9 in November, as consumer's assessment of both the present situation and future prospects was lowered. The unemployment rate remained at an eight-month high of 6%, as the economy shed the largest number of jobs in ten months. Payrolls declined for the second consecutive month, dropping by 101,000 from a revised 88,000 in November, as the manufacturing industry cut 66,000 and the service-producing industry shed 42,000. The average work-week declined for the first time since July, a further sign of slowing economic activity. The weakness in the services industry was reflected in the ISM's index for non-manufacturing business activity, which slipped to 54.7 from a strong 57.4 in November. However, incomes continued to rise, as wages increased 3% in 2002. Separately, the federal budget swung from a surplus of $127.3 bn in 2001 to a deficit of $159 bn in the 2002 fiscal year.

Japan

The near term outlook subdued, as the economy lost momentum towards end of year and may contract in the first quarter of 2003

The Japanese economy lost momentum towards the end of the year and may contract in the first quarter of 2003, with the strong yen being cause for concern, given the country's export dependent economy. In November, industrial production fell by 2.2% month-on-month and real household spending dropped 2.0% year-on-year. According to the government, GDP growth in the year starting 1 April 2003 is expected to drop by a third to 0.6% from a projected pace of 0.9% this fiscal year on a slowdown in exports and consumer spending, which account for about 70% of total GDP. In December, the government also cut its export growth forecast to 2% for the year starting 1 April, from a projected 5.4% this fiscal year. This pessimistic outlook was reflected in the government's lower assessment of the economy in its latest monthly report, prompted by an unexpectedly sharp drop of 2.2% in industrial production in November, a 4.5% drop y-o-y. Moreover, overall household spending fell 2.0% in November in real terms from a year earlier. November marked the first decline in the data in six months. Spending was unchanged in October after four consecutive monthly increases. The government expects consumer spending to grow 0.4% in the fiscal year starting 1 April, down from a 0.9% gain for the current fiscal year. Japanese machinery orders, an early indicator of business investment, fell unexpectedly in November, while seasonally-adjusted core machinery orders, which exclude shipping and utility companies, fell 0.2% from October. From a year earlier, machinery orders fell 7.2%, the seventeenth drop in 18 months. Lending by Japanese banks also declined 4.4% in December from a year earlier, matching the drop in November. However, on the positive side, one notes that the index of leading indicators rose to 72.2 in November, after falling to 40 in October. Exports also posted a surprising 5.3% rise in November, following a weak third quarter.

Euro-zone

Despite strong growth in industrial production in November, the outlook for the euro-zone continued to be gloomy for the first part of 2003

Euro-zone data continued to point to stagnant growth, despite an unexpected rise in industrial production in November, which was seen to be a one-off event. Industrial production increased by 1% m-o-m, the strongest rise in a year-and-a-half. Within the region, strong performance by Germany — up 2.5% — resulted from robust foreign orders, as well as reconstruction efforts following the summer floods, while in France industrial production growth in November was fuelled by car production and consumer goods output. In Germany, new industrial goods orders data for November rose 1.7%, mainly showing that exports remain the driver of the economy. However, in December, business surveys predicted sluggish growth in the first quarter of this year. The purchasing managers' survey indicates that euro-zone manufacturing may have fallen for a fourth straight month in December. The index fell 1.1 points to 48.4, dipping below the 50-point threshold that separates expansion from contraction. Moreover, the new orders index, a leading indicator of future activity, fell 1.9 points to 49.1. In Germany, the Ifo business sentiment index also fell in December, for the seventh month. However, the futures expectation component of the index rose for the first time since May. Retail sales in Germany fell 6% y-o-y in real terms or 3.2% compared to October, the largest drop in a year. Unemployment climbed further to 10.1% in December and the number of unemployed reached 4.2 million, the highest level since July 1998. In the euro area, unemployment remained unchanged at 8.4% in November. Meanwhile, economic weakness is placing great strain on the EU's stability and growth pact. Germany and Portugal are set to run budget deficits this year above the 3% GDP limit and France's deficit is forecast to rise to 2.9%. Germany — whose economy grew by only 0.2% for the year, the lowest pace in a decade — already registered a 3.8% budget deficit in 2002.

Former Soviet Union

Prospects unchanged in the FSU and Russia for 2002-2003; growth in Russia accelerated in the third quarter of 2002

FSU economic growth rate estimates and forecasts for 2001, 2002 and 2003 remain at 6.3%, 4.5% and 4.3%, similar to those presented in the last *MOMR*, indicating a downward trend. These growth rates have, however, been persistently higher than the world average rates of 1.4%, 1.8% and 2.4% respectively. The 2001 and 2002 oil consumption rates of 3.93 mb/d and 3.84 mb/d also demonstrate a similar trend. Initial forecasts for 2003 oil demand, however, point to a slightly higher volume at 3.92 mb/d. Meanwhile, oil production and exports continue the upward trend set in 1997. Within the FSU, Turkmenistan and Azerbaijan are forecast to register the highest GDP growth rate at 8.0%, while Belarus is to experience the lowest growth rate by far at 2.5% in 2003. In Russia, economic growth accelerated to 4.3% in the third quarter 2002, driven by the industrial and trade sectors. Second- and first-quarter averages are estimated at 3.7% and 4.1% respectively. Our estimate for the whole 2002 GDP growth rate stands at 4.0%. The consumer price index (CPI) rose 1.6% month-on-month in November, much higher than anticipated by the government, given its yearly inflation target of 12% to 14%. The 2002 CPI is now estimated to grow at 15%, down from 21.6% in 2001. For the period January-October 2002, total exports are estimated at \$87.5 bn, indicating a 3% rise over the corresponding 2001 period. Imports grew 13% to \$48.5 bn, causing the foreign trade balance to shrink to \$39 bn.

Eastern Europe

Economic outlook in Eastern Europe remained uncertain on weak external demand

The macroeconomic outlook for Eastern Europe remained uncertain on weak external demand resulting from lacklustre EU growth, especially in their main trading partner, Germany. Additionally, as these countries accelerate progress towards EU accession in May 2004, fiscal policy will remain the key area of concern. In Poland, growth has remained well below potential with real GDP growing at just around 1% in both 2001 and 2002. The unemployment rate rose to historic highs, reflecting monetary tightening aimed at securing macroeconomic stability. However, the gradual monetary relaxation enacted over the course of 2002 has allowed for a pick up in investment and consumer spending. Weak external demand and higher inflation should limit the extent of nominal zloty appreciation this year. In the Czech Republic, fiscal reform is at the centre of a heated political debate, and the outcome remains unclear. Meanwhile, consumer prices rose 0.2% on the month in December, and inflation remains sharply below the Central Bank's target range of 3% to 5%. At present, the Central Bank is waiting to see how the economy responds to a series of interest rate reductions made in the second half of 2002. In Hungary, the fiscal deficit reached 9.4% of GDP in 2002 raising concern about the feasibility of this year's target of 4.5%, as well as that of the inflation target, especially as the National Bank of Hungary has kept its deposit rate unchanged at 8.50%, despite the forint's recent strength. The widening current account deficit is also a key source of concern, given the weak external demand outlook.

Mixed economic prospects for OPEC Member Countries in 2003

OPEC Member Countries

Algeria's plans to expand gas production over the coming months may result in a surge in exports that could offset the impact of a contraction in non-oil industrial output over the first half of this year. GDP growth rate has been adjusted upward to 4.4% in 2003, following the 2.6% expansion in 2002. With solid growth in private consumption and an 8.3% decline in import demand, Indonesia's real GDP growth is estimated to have expanded by 3.4% in 2002 from 3.3% in 2001, while it is expected to grow this year at a lower-than-expected rate of 3.6%. This is in part due to expected losses in tourism and reductions in both domestic and foreign investment, in the aftermath of the October incident in Bali. Export growth of goods and services is expected to recover in the second half of 2003. Saudi Arabia's real GDP growth is forecast at 3% this year, as the hydrocarbon sector expands and the non-oil sector strengthens. Separately, Saudi Arabia has recently cut its tariffs on a large number of products from 12% to 5%, in line with the December agreement by member countries of the Gulf Cooperation Council to bring forward implementation of the "tariff harmonization pact" from 2005 to January 2003. After shrinking an estimated 6.4% in 2002, Venezuela's real GDP growth is expected to remain lean this year at 1.3%.

Asia continued to enjoy relatively higher growth rates; African expansion is driven by economic reforms; and Brazil's prospects for growth will depend on government's economic policies

Developing countries

Asia and Oceania (excluding China and Japan) is expected to enjoy faster economic growth than other regions of the world, scoring an estimated growth rate of 4.6% for 2003. China's GDP is forecast to expand by 7.4% this year, which is within the 7-8% official target range. Despite a weak world economy in 2002, Chinese exports rose at a fast rate, promoting continued strong public investment spending and helping to push industrial production output up by 12.4% year-on-year during January-November, compared to the 9.9% posted for the whole of 2001. Given concern over the global economy and the pervasive geopolitical tension, the outlook for Asia/Pacific economies is mixed, though still brighter than in other regions. Growth is forecast at 3.7% for this year, marginally up from the 3.6% registered in 2002. Doubtlessly this increase can be attributed to economic reforms, particularly those made in the financial and corporate sectors on the heels of the financial crisis of 1997-1998, although, in some cases, the failure to resolve banking sector problems has made investment more difficult. Brazil's Congress has finalized tax increases, extending the upper income tax rate to 27.5% and the levy on corporate profits to 9% in 2003. The bill awaits official approval. The Brazilian economic performance for the years 2003-2004 will largely depend on the policies followed by the new government and the reaction of financial markets. Finally, sub-Saharan Africa's GDP growth rate is forecast at 4.2% this year, driven by economic reforms, firmer commodity prices and increased European import demand.

Real oil prices rise over 15% on the back of a strong nominal prices increase, despite further dollar depreciation against the OPEC Reference Basket

Oil price, US dollar and inflation

With the exception of the yen, the US dollar fell against all currencies in the modified Geneva I + US$ basket* in December. The yen dropped by 0.32% to ¥122.03/$ from ¥121.64/$ in November, while the euro rose by 1.79% against the dollar, averaging $1.0190 up from $1.0010 in December.

Geo-political tensions were the main concern in currency markets in December. Ahead of the 8 December deadline for Iraq's report to the UN, the dollar rose to over ¥125/$ against the Japanese currency, on the back of concerted verbal intervention by Japanese authorities, with the finance minister stating that present fundamentals justify ¥150-¥160/$ levels. The euro, meanwhile, regained parity with the dollar. The single currency got a small lift from the European Central Bank's decision to lower its benchmark rate by 0.5% to 2.75% on 5 December, the first cut this year. Although the euro's upside initially appeared to be limited by weak growth expectations in the euro-zone and superior prospects in the USA, the euro continued to appreciate as the month progressed. The dollar fell across the board against other major currencies to multi-year lows, as tensions mounted in the Middle East. The US currency was also pressured by domestic factors, including a weak employment report and the resignations of two top economic officials, the Treasury Secretary and the White House economic advisor, which were interpreted as a possible retreat from the strong dollar policy. The euro rose to almost $1.05 by the end of December, while the yen climbed to ¥118.75/$ on 31 December, almost 6 yen above its value at the start of the month.

In December, the OPEC Reference Basket soared by over $4/b or 16.84%, to $28.39/b from $24.29/b in November. In real terms (base July 1990=100), after accounting for inflation and currency fluctuations, the Basket price rose by 15.43% to $24.02/b from $20.81/b as dollar depreciation reduced gains in nominal oil prices. The dollar fell by 1.07% 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 0.14% in December.

* *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

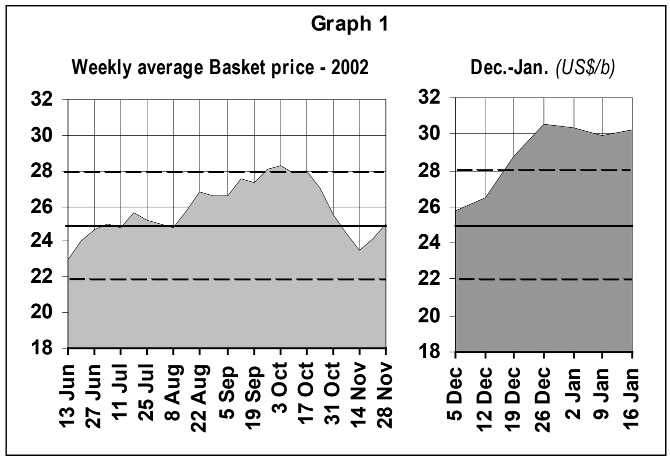
Average price of the OPEC Reference Basket surged in December, gaining $4.10/b to average $28.39/b

The average price of the OPEC Reference Basket skyrocketed to two-year highs in December, registering a single-month gain of more than 16% or $4.10/b, to average $28.39/b. On a weekly basis, the Basket recorded one rise after the other, with the size of the gains increasing towards the second half of the month as the market realized the severity of the oil workers' strike in Venezuela.

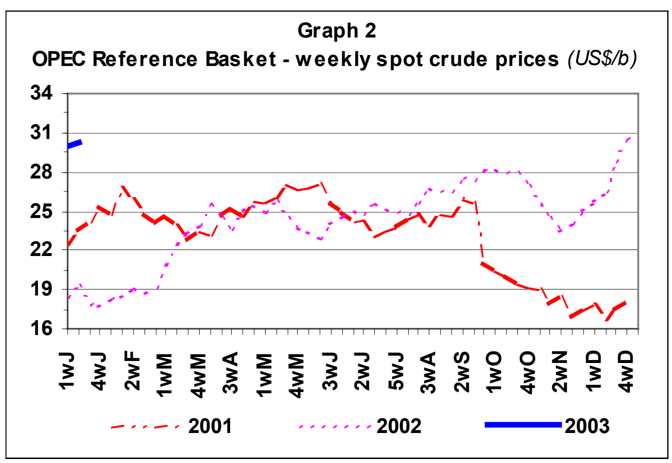
The Basket started the month with a gain of $0.72/b, or 2.8%, increased by $0.74/b in the second week of the month, and then surged $2.29/b, or 8.6%, in the third week to $28.78/b. Another 6% rise during the last week of the month took the Basket above the $30/b mark to $30.52/b, one of the highest levels for the December Basket average price.

Crude markets drew support from the potential military conflict in Iraq, the oil workers' strike in Venezuela and OPEC's move to rein in over-production

Crude oil prices surged in December, supported by the potential conflict in Iraq, the Venezuelan oil workers' strike, and the expectation that OPEC would rein in overproduction at its 12 December Meeting in Vienna. UN arms inspections in Iraq kept the oil market jittery throughout the month, while the Venezuelan strike — confounding expectations of a quick resolution to the crisis — worsened throughout December, adding increasing uncertainty to market calculations.



Crude oil production in Venezuela plunged to 200,000 b/d by mid-month, from more than 3.0 mb/d in November, while exports grinded to almost a complete halt. All refineries were shut down, including the 1 mb/d Amuay-Cardon complex. This eliminated all product exports as well and forced the country to import gasoline and diesel for domestic consumption. The USA, a major importer of Venezuelan crude and products, saw crude oil stocks fall continuously with a draw of 9 mb reported in the week ending 27 December. Crude markets reacted with a vote of confidence to the decision taken at OPEC's Meeting of the Conference on 12 December to bring OPEC-10 output down to a new production ceiling of 23 mb/d with effect from 1 January 2003, while calling for strict compliance with the new production level. The move had the effect of withdrawing around 1.5 mb/d from the market, or the difference between the new 23 mb/d ceiling and the OPEC-10 December production estimate of 24.4 to 24.5 mb/b. This pushed Brent past $27/b and West Texas Intermediate (WTI) above $28/b. Strong demand from Middle Eastern refiners raised competition for Atlantic basin crudes, which normally would have flowed to the USA. Healthy seasonal demand and fears of supply disruptions prompted the surge in Asia-Pacific buying for the month.



with Chinese imports reaching a record high of 1.8 mb/d in November, and South Korea and Taiwan absorbing significant quantities of West African crudes in December.

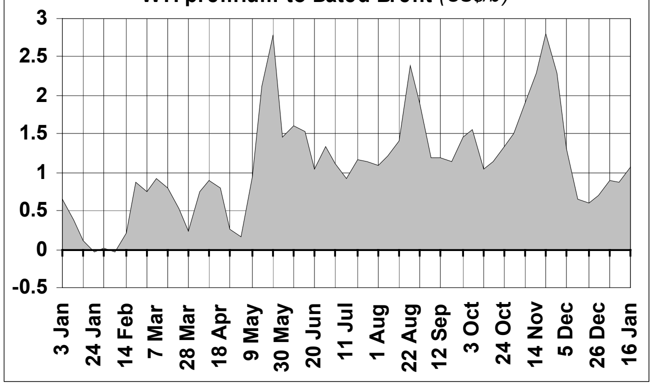
US inventories came under pressure with the fall of Venezuelan exports, while European crude prices surged on strong refiner demand

US and European markets

As the oil workers' strike dragged on throughout the month, cuts in Venezuelan crude oil supplies began to show on the US market, forcing refiners to look for alternative supplies. US Gulf Coast medium-sour Mars was in high demand as a replacement of Venezuelan Mesa, forcing the discount to WTI down to a mere $2.25/b at mid-month, its tightest level in the last three months. Given the difficulties in sending arbitrage cargoes to the USA, stronger dated Brent prices meant that US refiners who would usually run Venezuelan grades snapped up practically all crude cargoes coming into the US Gulf Coast up until the end of January 2003. Light-sweet Colombian Cuisiana provided a good alternative, causing a surge in demand that cleared all available cargoes for January and drove the usual discount to WTI to a two-digit premium. The North Sea crude market firmed up considerably during the month, as European refiners competed to find supplies and equity producers held volumes within their own refining system. Premiums of North Sea grades to the regional benchmark Brent-Forties-Oseberg (FBO) widened, as local refiners ramped up demand on the perception of tight availability, combined with the completion of maintenance turnarounds, which had hiked throughputs up to almost 100%. Urals' prices were supported by the strength in North Sea grades and their limited availability, due to weather-related loading delays in the port of Novorossiysk, which prompted European refiners, especially in the Mediterranean, to turn their attention to Iraqi crudes.

Graph 3

WTI premium to Dated Brent *(US$/b)*



Strong demand from Japan, China and India swallowed all regional supplies, prompting movements of West African crudes to the region

Far East market

High freight costs combined with the dramatic strength of dated Brent compared with Dubai, the regional Asian benchmark crude, conspired against the eastbound movement of West African crudes. However, higher prices began to encourage movement of West African cargoes once strong regional demand had cleared all January regional and Middle Eastern cargoes by the first half of the month. Demand was underpinned by fears of a US-led military action against Iraq, combined with Japan's continued reliance on oil-fired power generation to make up for the closure of several nuclear plants. Asia-Pacific buyers, especially Japan, absorbed more than 13 mb of mainly distillate-rich West African crudes during the first two weeks of December. For the second part of the month, rampant regional demand, combined with the lack of arbitrage opportunities, pushed Asia-Pacific crude prices skyward. The medium–sour benchmark crude Oman climbed to a two-year high, trading at a premium of more than $0.40/b to its official selling price.

Graph 4

Dated Brent premium to Dubai *(US$/b)*

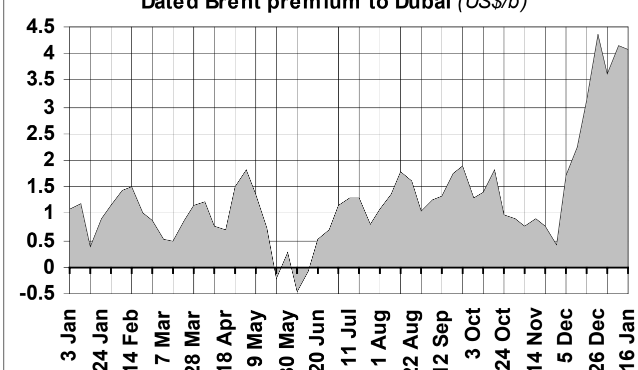


Table 1
Monthly average spot quotations for OPEC's Reference Basket and selected crudes
US $/b

	Nov.02	Dec.02	Year-to-date average 2003	Year-to-date average 2002
Reference Basket	24.29	**28.39**	29.92	**18.48**
Arabian Light	23.87	**26.56**	27.67	18.95
Dubai	23.28	**25.81**	26.87	18.63
Bonny Light	24.07	**29.27**	30.19	19.88
Saharan Blend	24.19	**29.34**	30.88	19.67
Minas	28.11	**32.80**	34.03	18.89
Tia Juana Light	22.92	**27.09**	29.52	15.64
Isthmus	23.63	**27.82**	30.31	17.72
Other crudes				
Brent	23.99	**28.83**	31.01	19.71
WTI	26.31	**29.66**	31.87	20.36
Differentials				
WTI/Brent	–2.32	–0.83	–0.86	–0.65
Brent/Dubai	0.72	3.02	4.14	1.08

PRODUCT MARKETS AND REFINERY OPERATIONS

The crude market's considerable rise was the underlying reason for increased product prices in December. An additional factor was the unusual occurrence of spot gasoline trading below prompt gasoil in all three markets. Thus, refining margins retreated, though refinery throughput rose in European and Asian centres to meet the elevated demand.

US Gulf market

Light and middle ends of the barrel were roughly in tandem with WTI crude price rises in the US Gulf market in December, hampering refinery profits and causing the US refinery utilization rate to drop to 91.2%

Both gasoline and gasoil price increases were slightly behind their underlying crude, WTI, with all average values rising near 13%. The average high sulphur fuel oil (HSFO) price enjoyed a gain of 19.5% in December. Although the US refinery throughput dropped below the previous month's level, US refiners had used feedstocks to keep upgrading units operating at full capacity and, therefore, were able to simultaneously enhance the yields of their main product, gasoline, and the seasonably most important product, heating oil. This translated into a December build of around 5 mb for both gasoline and distillate inventories. The rise in gasoline production was aimed at compensating for diminished gasoline exports from Venezuela, as well as to meet firm, sustainable demand, which approached 8.8 mb/d, up slightly from last month's figure and 2.2% above the year before. According to the preliminary moving weekly average released by the Energy Information Administration (EIA), distillate demand was marginally below last month's level but 6% higher than in the corresponding period of the previous year. The main reasons for the rebound in the HSFO price in December were renewed shipping of fuel oil cargoes to the Far East during the first half of the month, followed by heavy fuel oil exports to the Caribbean to compensate for the absence of Venezuelan exports.

As a result of slight gains by WTI over gasoline and gasoil prices, refining margins declined further in the US Gulf in December, though remaining moderately above their break-even point.

A combination of weaker refinery profits and the curtailment of Venezuelan crude exports contributed to the 0.14 mb drop in US refinery throughput to 15.11 mb in December. As a consequence, the corresponding utilization rate slipped to 91.2%, barely 0.2% above the preceding year's figure.

Rotterdam market

European product price increases were driven by sizeable gains in the December Brent market; although this worsened refining margins, the European refinery utilization rate edged up to 87.1% to meet rising US demand

Product price rises were led by a 20% surge in the marker crude, Brent, which enjoyed healthy demand as a result of increased European refinery throughput, combined with the robust export of North Sea crude to the USA to make up for losses in Venezuelan crude during December. The gasoil price continued to score the highest increase, rising by more than 14%, followed by gasoline, which was up 12% over the previous month. Both the light and the middle ends of the barrel were supported by arbitrage movements to the lucrative US markets, which continued to attract Russian distillate cargoes away from typical European destinations. The modest 8.6% increase in the HSFO price, especially when compared to the sharp rise in the crude price, can be attributed to thin trading following the ban on the use of this type of fuel by EU member country utilities, which took effect at the end of the month. However, some value was still added to HSFO prices by a drop in shipping to Far Eastern markets caused by a lack of suitable vessels and the accompanying jump in freight rates, twin consequences of the sinking of the tanker "Prestige". After considerable gains in the previous two months, refining margins plunged again into negative territory, undermined by the sharp rise in the Brent price.

Despite worsening refining economics, refinery throughput in the Eur-16 countries moved up 0.14 mb to around 11.88 mb/d, induced by incremental US demand, which supported transatlantic arbitrage trading. Likewise, the refinery utilization rate was 87.1%, which represents a 3.6% drop below the same period in the previous year.

Product prices rose in Singapore in December, but gasoline and gasoil prices increased less than crude prices, eroding refinery profits

Singapore market

Product price increases were registered on both sides of their underlying crude price, which showed gains of nearly 10% in December. Average prices for gasoline and gasoil rose nearly 9% and 8.5%, respectively, while the HSFO price was up 11% over the previous month. Gasoline was assisted by booming naphtha markets, which usually reflect healthy downstream margins. Gasoil demand suffered from lower Indonesian requirements of 0.88 mb compared with 1.2 mb for the preceding month, while its output continued to be reduced as most Asian refineries opted to boost production of kerosene, which is a widely used heating fuel in North Asia. The HSFO fundamentals tightened on a decrease in foreign cargo arrivals due to prevailing high freight costs, which in turn offset lower demand from China. Additional support came from increased demand from South Korea, caused by a shortage in LNG supply, and from Japan following the shut-down of nuclear-powered electricity generators.

As a consequence of the higher rises in incremental crude prices compared with the prices for gasoline and gasoil in December, refining margins for Dubai crude slid in Singapore, although still remained in positive territory.

In order to supply electrical utilities with fuel oil and meet demand for heating fuel, refinery throughput in Japan rose nearly 0.5 mb to reach 4.30 mb/d in November. The equivalent utilization rate was 89.9%, representing a 6.2% increase over the same month last year.

Table 2
Refined product prices
US $/b

		Oct.02	Nov.02	**Dec.02**	**Change Dec./Nov.**
US Gulf					
Regular gasoline	*(unleaded)*	34.82	29.32	**33.00**	3.68
Gasoil	*(0.2% S)*	31.90	29.65	**33.53**	3.88
Fuel oil	*(3.0% S)*	23.19	18.76	**22.41**	3.65
Rotterdam					
Premium gasoline	*(unleaded)*	32.16	27.88	**31.34**	3.46
Gasoil	*(0.2% S)*	31.23	28.52	**32.63**	4.11
Fuel oil	*(3.5% S)*	22.44	18.40	**19.99**	1.59
Singapore					
Premium gasoline	*(unleaded)*	29.62	27.80	**30.25**	2.45
Gasoil	*(0.5% S*	33.10	29.37	**31.88**	2.51
Fuel oil	*(380 cst)*	23.46	21.83	**24.24**	2.41

Table 3
Refinery operations in selected OECD countries

	Refinery throughput *mb/d*			**Refinery utilization*** *%*		
	Oct.02	Nov.02	**Dec.02**	Oct.02	Nov.02	**Dec.02**
USA	14.38	15.25	**15.11**	86.8	92.0	**91.2**
France	1.53	1.65[R]	**1.71**	80.7	87.3[R]	**90.0**
Germany	2.02	2.17[R]	**2.21**	89.6	95.9[R]	**98.0**
Italy	1.60	1.70	**1.67**	70.1	74.6[R]	**72.7**
UK	1.44	1.52	**1.63**	80.5	85.3	**91.1**
Eur-16	11.15[R]	11.74[R]	**11.88**	81.7[R]	86.0[R]	**87.1**
Japan	3.82	**4.30**	n.a.	79.7	**89.9**	**n.a.**

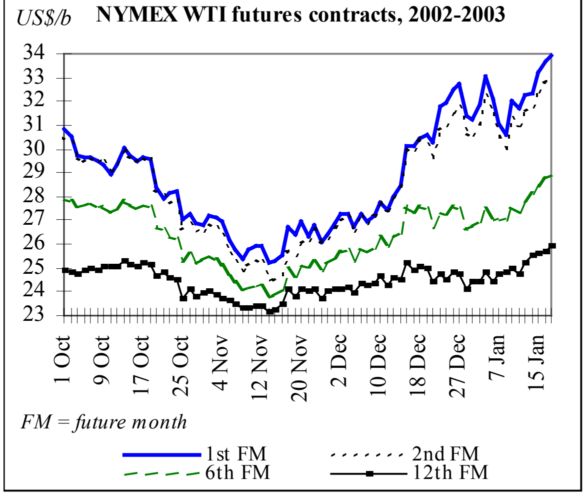
* *Refinery capacities used are in barrels per calendar day.*
R *Revised since last issue.*
n.a. *Not available.*
Sources: *OPEC Statistics, Argus, Euroilstock Inventory Report/IEA.*

THE OIL FUTURES MARKET

Speculators became more bullish in December on tensions in Iraq, the Venezuelan oil workers' strike and OPEC's move to rein in overproduction

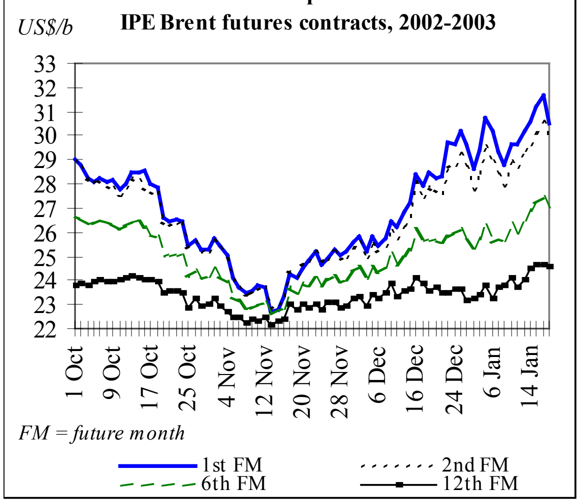
The bearish trend that prevailed throughout November, with the NYMEX front-month sweet crude contract dipping to a low $25/b, reversed its course mid-month as speculators' perception brightened slightly. Non-commercial net short positions, which, according to the Commodity Futures Trading Commission's weekly Commitment of Traders Report, stood somehow higher than 22,000 lots by the week of 19 November, moved to just 13,565 net shorts by the first week of December, and then to 5,130 net shorts by the week ending 10 December. Meanwhile, the selling of short contracts, combined with the buying of long contracts by non-commercials, pushed up the WTI front-month contract from a low $25/b to $27.43/b at the close of trading on 10 December. Many factors influenced the change in investors' sentiments in late November and early December. The most significant were the 8 December UN deadline for Iraq to submit a full declaration of its arms programmes; the oil worker's strike in Venezuela, which crippled oil production and oil exports by roughly 2.5 mb/d and left the US Gulf and East Coast markets with a deficit of 1.5 mb/d of crude and products; and the expectation that OPEC would rein in excess production by Member Countries at its Extraordinary Meeting of the Conference on 12 December.

Graph 5
NYMEX WTI futures contracts, 2002-2003



Speculators' perception turned bullish in late December on the continuing Venezuelan oil workers' strike, coupled with the ever-present threat of military conflict in the Middle East, and significant draws on US crude oil stocks. Non-commercial institutions, convinced that prices would rise in the near future, significantly increased their long positions, at the same time as disposing of some of their short positions. According to the Commitment of Traders Report, long positions for net non-commercials stood above 12,000 contracts in the week of 17 December, rising further to almost 28,000 lots by 23 December, before falling to 17,794 on 31 December. The NYMEX WTI price surged by more than $3/b, ending just a few cents short of the $33/b mark at the close of trading on 27 December when it stood at $32.72/b, and rising to an intra-day high of $33.65/b on 30 December. For the week of 7 January 2003, investors increased their short positions considerably, while longs rose slightly. The long/short position stood at 5,033 net shorts, suggesting a more bearish market sentiment.

Graph 6
IPE Brent futures contracts, 2002-2003



THE TANKER MARKET

OPEC area spot-chartering declined 1.28 mb/d in December

OPEC area spot-chartering declined 1.28 mb/d to a monthly average of 10.61 mb/d in December, affected mainly by Venezuela's oil supply disruption caused by the ongoing oil workers' strike. However, the current level of OPEC spot fixtures remained significantly higher compared with the same period last year, up by 2.79 mb/d or about 36%. Non-OPEC spot-chartering also declined in December because of bad weather conditions in most loading areas, dropping noticeably by 2.32 mb/d to a monthly average of 8.48 mb/d, which resulted in a loss of market share of 3.18 percentage points, down to 44.41%. As a consequence, global spot fixtures saw a considerable decrease of 3.60 mb/d to a monthly average of 19.09 mb/d, although remained 4.74 mb/d higher than the same month last year. OPEC area's share of global spot-chartering rose a further 3.18 percentage points to 55.59%, which represents an improvement of 1.07 percentage points over the previous year's share. Most of the reduction in OPEC chartering for December can be attributed to a decline in spot fixtures from the Middle East on the westbound long-haul route, which moved down by 0.52 mb/d to 1.38 mb/d. On the eastbound route, fixtures from the Middle East maintained the previous month's level of 4.18 mb/d, with a slight slip of 0.04 mb/d, as chartering activities remained steady during the month on seasonal demand and concern about possible supply interruption. Accordingly, OPEC's Middle Eastern westbound share of total OPEC fixtures declined 2.94 percentage points to 12.96%, while the share of eastbound chartering improved by 3.93 percentage points to 39.42%. Together, they accounted for 52.38% of total chartering in the OPEC area, which was 0.99 percentage points above the previous month's level. According to preliminary estimates, sailings from the OPEC area in November showed a slight 0.27 mb/d decline to a monthly average of 23.08 mb/d. Sailings from the Middle East also edged 0.20 mb/d lower to a monthly average of 15.30 mb/d, about 66% of total OPEC sailings. Preliminary estimates of long-haul arrivals in the Atlantic basin for November show a rise of 0.61 mb/d in the US Gulf Coast, East Coast and the Caribbean, to a monthly average of 9.50 mb/d. In Euromed, arrivals also increased by 0.22 mb/d to 4.80 mb/d, while in North-West Europe they declined 0.44 mb/d to 5.55 mb/d. A preliminary estimate of the volume of oil-at-sea at the end of November was 451 mb, registering a moderate decline of 8 mb over the level at the end of the previous month.

Crude oil freight rates rose further in December

Spot freight rates for crude oil tankers sustained their rising trend in December, amid bullish fundamentals in most loading areas. On the supply side, the availability of modern tonnage became noticeably tighter during the month, as charterers preferred to hire only modern double-hull tankers after the single-hull "Prestige" sank off the cost of Spain laden with 77,000 mt of fuel oil. The demand for tankers remained strong in many regions, assisted by an abnormally cold weather and fear that tensions in the Middle East could lead to a supply shortage. Furthermore, the disruption of Venezuelan exports increased demand in other regions to replace the lost barrels. In the Middle East, the VLCC market was particularly active during the month with extra volumes of fixtures concluded ahead of the Christmas holidays. Consequently, the monthly average freight rates for VLCC voyages on eastbound and westbound long-haul routes rose 29 points to WS115 and 28 points to WS92, respectively. Meanwhile, in the Atlantic market, strong US demand for North Sea and West Africa crude continued to support transatlantic Suezmax freight rates, coupled with tight VLCC availability due to robust demand in the Middle East. This caused freight rates for the 1 mb vessels from West Africa and Rotterdam to US destinations to improve by 19 points each, to hit WS132 and WS131 respectively. Aframax freight rates for tankers operating on short-haul routes remained firm with the exception of tankers trading on the Caribbean/US East Coast route. These were strongly affected by the strike in Venezuela, which saw rates plunge by 40 points to WS131. In contrast, shipping delays in the Black Sea and Turkey's Bosporus Strait generated extra demand in the Mediterranean. Aframax freight rates surged by 55 points for trips to North-West Europe and by 28 points for voyages on the route within the Mediterranean. Freight rates for 70–100,000 dwt tankers on the route from Indonesia to the US West Coast registered an increase of 18 points to WS165.

Clean tanker freight rates rallied across the board in December

Clean tanker freight rates remained firm in December, supported by across the board seasonal demand. The rates for 30–50,000 dwt tankers on the Middle East/Far East route gained another 45 points to stand at WS233, while soaring by 68 points on the short trip from Singapore to Japan, on tighter prompt positions. In the Caribbean, the rates continued to rise, although slowly, improving by 37 points to WS205. The Mediterranean market witnessed the highest increase in freight rates, surging by a remarkable 84 points to WS258 on the route across the Mediterranean and by 86 points to WS270 along the Mediterranean/North-West Europe route. The tight supply situation in the US market opened up transatlantic cargo movements from Europe, with freight rates from North-West Europe to the US East Coast rising a further 45 points to WS226.

Table 4
Spot tanker chartering — sailings and arrivals
mb/d

	Oct.02	Nov.02	**Dec.02**	**Change Dec./Nov.**
Chartering				
All areas	23.44	22.69	**19.09**	–3.60
OPEC	11.89	11.89	**10.61**	–1.28
Middle East/east	3.98	4.22	**4.18**	–0.04
Middle East/west	2.14	1.90	**1.38**	–0.52
Sailings				
OPEC	23.35	23.08	**n.a.**	–
Middle East	15.50	15.30	**n.a.**	–
Arrivals				
US Gulf Coast, US East Coast, Caribbean	8.89	9.50	**n.a.**	–
North-West Europe	5.99	5.55	**n.a.**	–
Euromed	4.58	4.80	**n.a.**	–

Source: "Oil Movements" by Roy Mason and Argus Fundamentals.

Table 5
Spot tanker freight rates
Worldscale

	Size *1,000 DWT*	Oct.02	Nov.02	**Dec.02**	**Change Dec./Nov.**
Crude					
Middle East/east	200–300	75	86	**115**	+29
Middle East/west	200–300	60	64	**92**	+28
West Africa/US Gulf	100–160	91	113	**132**	+19
North-West Europe/US East Coast	100–160	88	112	**131**	+19
Indonesia/US West Coast	70–100	106	147	**165**	+18
Caribbean/US East Coast	40–70	135	171	**131**	–40
Mediterranean/Mediterranean	40–70	126	153	**181**	+28
Mediterranean/North-West Europe	70–100	117	135	**190**	+55
Products					
Middle East/east	30–50	167	188	**233**	+45
Singapore/east	25–30	182	221	**289**	+68
Caribbean/US Gulf Coast	25–30	152	168	**205**	+37
North-West Europe/US East Coast	25–30	160	181	**226**	+45
Mediterranean/Mediterranean	25–30	153	174	**258**	+84
Mediterranean/North-West Europe	25–30	179	184	**270**	+86

Source: Galbraith Tanker Market Report.

WORLD OIL DEMAND

World demand estimate for 2001 revised up slightly to 76.35 mb/d

Historical data

Following a minor upward revision to the historical data, average 2001 world oil demand is assessed at 76.35 mb/d, compared with the 76.32 mb/d reported in the previous *MOMR*. The rise in world oil consumption during 2001 is now estimated at 0.37 mb/d, or 0.50%. Regionally, demand in the FSU grew at the highest rate, on an increase of 0.17 mb/d or 4.53%. Developing countries also saw robust demand growth of 0.29 mb/d or 1.53%, while the OECD witnessed a minor decline of 0.07 mb/d or 0.14%. In the first and second quarters of 2001, world demand enjoyed healthy growth of 1.03 mb/d or 1.36% and 0.94 mb/d or 1.26% respectively. In contrast, the third and fourth quarters experienced declines of 0.02 mb/d or 0.03% and 0.43 mb/d or 0.55% respectively, due to the worldwide economic slowdown accelerated by the tragic events of 11 September. The resulting quarterly averages were 77.08 mb/d, 75.21 mb/d, 76.10 mb/d and 77.00 mb/d respectively.

World demand for 2002 revised up slightly to 76.55 mb/d

Projections for 2002

World

For 2002, the estimated volume of world oil demand has been revised up 0.12 mb/d to an average of 76.55 mb/d, due to a rise in actual consumption in the second half of the year. Colder weather and a shift away from nuclear power generation in Japan are among the major contributing factors. As a result, third- and fourth-quarter estimates have been revised up. The 2002 world demand increase is now estimated at 0.20 mb/d or 0.27%, higher than the 0.11 mb/d or 0.14% presented in the last *MOMR*. Quarterly and regional details are given in Table 6.

Regionally, demand is projected to decrease 0.11 mb/d in the OECD, after a less significant decline of 0.07 mb/d in 2001. This is in contrast to a significant expected rise of 0.24 mb/d or 2.60% in the consumption of the former CPEs, much higher than the 0.15 mb/d growth recorded in that region in 2001. Developing countries, following a significant 0.27 mb/d growth in 2001, should experience only a moderate 0.07 mb/d or 0.35% rise in consumption in 2002.

On a quarterly basis, compared with the previous year, world demand declined by 0.50% or 0.39 mb/d to average 76.70 mb/d in January–March. Second-quarter consumption is estimated to have dropped a further 0.70% or 0.52 mb/d to 74.69 mb/d. However, demand is estimated to have risen at a significantly accelerating pace during the third and the fourth quarters. The estimated growth rates are 0.29 mb/d or 0.39% and 1.41 mb/d or 1.83% respectively. Detailed quarterly comparisons for all quarters are presented in Tables 7 and 8.

Table 6
World oil demand in 2002
mb/d

							Change 2002/01	
	2001	1Q02	2Q02	3Q02	4Q02	**2002**	Volume	%
North America	23.85	23.70	23.79	24.14	24.02	23.91	0.06	0.24
Western Europe	15.27	15.17	14.64	15.19	15.63	15.16	–0.11	–0.75
OECD Pacific	8.55	9.08	7.66	8.07	9.19	8.50	–0.05	–0.60
Total OECD	**47.68**	**47.95**	**46.09**	**47.40**	**48.84**	**47.57**	**–0.11**	**–0.22**
Other Asia	7.33	7.42	7.44	7.37	7.59	7.45	0.13	1.75
Latin America	4.73	4.55	4.62	4.68	4.65	4.63	–0.11	–2.26
Middle East	4.83	4.87	4.77	4.87	4.94	4.86	0.03	0.56
Africa	2.44	2.49	2.45	2.44	2.45	2.46	0.02	0.80
Total DCs	**19.33**	**19.32**	**19.27**	**19.36**	**19.63**	**19.40**	**0.07**	**0.35**
FSU	3.93	3.92	3.49	3.65	4.28	3.84	–0.10	–2.54
Other Europe	0.72	0.77	0.73	0.73	0.74	0.74	0.02	3.34
China	4.69	4.74	5.10	5.26	4.91	5.00	0.32	6.80
Total "other regions"	**9.34**	**9.43**	**9.32**	**9.64**	**9.93**	**9.58**	**0.24**	**2.60**
Total world	**76.35**	**76.70**	**74.69**	**76.40**	**78.40**	**76.55**	**0.20**	**0.27**
Previous estimate	76.32	76.67	74.61	76.29	78.13	76.43	0.11	0.14
Revision	0.03	0.02	0.07	0.11	0.28	0.12	0.10	0.13

Totals may not add due to independent rounding.

OECD
Estimates of actual first-quarter consumption indicate that the OECD bears sole responsibility for the fall in world consumption, with a substantial 0.87 mb/d decline, partly offset by the 0.18 mb/d and 0.30 mb/d rise in Developing Country and former CPE demand. Within the OECD, the highest drop rate of 3.56% was experienced by the OECD Pacific, followed by 2.02% in North America, and a minor 0.30% decrease in Western Europe.

Data on actual consumption in the second quarter also points to a drop of 0.36 mb/d or 0.77% in OECD consumption, due to a steep decline in OECD/Pacific demand of 0.31 mb/d, combined with a moderate 0.14 mb/d drop in Western Europe, which were partly offset by a slight rise of 0.09 mb/d in North America.

The latest available data on actual third-quarter consumption points to a moderation of the downward trend seen in the first and second quarters. Total OECD consumption is estimated to have dropped marginally by 0.08 mb/d or 0.16%. Within the OECD, the 0.21 mb/d increase in North American consumption and the 0.03 mb/d rise in OECD/Pacific consumption were more than offset by the estimated 0.31 mb/d decline in demand in Western Europe.

Actual data on OECD consumption during January-October 2002 indicates a 0.37 mb/d or 0.77% decline compared with the corresponding period in 2001. All three regions within the OECD shared this decline, with OECD Pacific being the leading percentage loser after a fall of 0.14 mb/d or 1.60%. Western Europe and North America followed with decreases of 0.15 mb/d or 0.97% and 0.09 mb/d or 0.36% respectively.

On a product basis, during the period January-October 2002, residual fuel oil continued to lead the decline in volume and percentage, scoring 0.44 mb/d and 13.68% respectively, mostly due to a shift to natural gas consumption. The weakness in aviation fuel consumption also continued, but at a moderated rate of -4.85%, up from the January-September average of -6.22%, as subdued air travel persisted. The leading gainers were LPG and gasoline consumption, up 0.11 mb/d or 2.42% and 0.21 mb/d or 1.46% respectively, mostly due to a substantial consumption growth in North America of 5.27% and 2.66% respectively.

DCs
Oil demand for developing countries is estimated to have grown marginally by 0.07 mb/d or 0.35% to 19.40 mb/d. Compared with the previous year, the demand outlook in Latin America continues to be significantly weaker, declining by 0.11 mb/d or 2.26%, due to persistent economic and financial problems. Other Asia is anticipated to enjoy the highest volume and percentage growth at 0.13 mb/d or 1.75%, followed by the Middle East and Africa with 0.03 mb/d and 0.02 mb/d respectively.

Other regions
Apparent demand in the “other regions” group of countries is expected to grow significantly by 0.24 mb/d or 2.60%, almost entirely on the promising demand outlook for China. In the FSU, all four quarters are anticipated to demonstrate declines in consumption, compared with those of 2001. The overall yearly average is expected to drop 0.10 mb/d or 2.54%. In contrast, Chinese demand in 2002 is anticipated to undergo healthy growth in every quarter, leading to an average annual growth rate of 0.32 mb/d or 6.80%. This remarkable estimated growth rate is more than one-and-a-half times the expected average rise in world demand.

Table 7
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	24.19	23.70	–0.49	–2.02	23.70	23.79	0.09	0.38
Western Europe	15.21	15.17	–0.05	–0.30	14.78	14.64	–0.14	–0.92
OECD Pacific	9.42	9.08	–0.33	–3.56	7.98	7.66	–0.31	–3.91
Total OECD	**48.82**	**47.95**	**–0.87**	**–1.78**	**46.45**	**46.09**	**–0.36**	**–0.77**
Other Asia	7.31	7.42	0.11	1.57	7.31	7.44	0.12	1.70
Latin America	4.68	4.55	–0.13	–2.88	4.78	4.62	–0.16	–3.35
Middle East	4.68	4.87	0.18	3.92	4.75	4.77	0.02	0.42
Africa	2.47	2.49	0.02	0.82	2.43	2.45	0.02	0.95
Total DCs	**19.14**	**19.32**	**0.18**	**0.96**	**19.26**	**19.27**	**0.01**	**0.04**
FSU	3.95	3.92	–0.03	–0.80	3.75	3.49	–0.26	–6.96
Other Europe	0.76	0.77	0.01	0.79	0.72	0.73	0.01	1.11
China	4.41	4.74	0.33	7.37	5.02	5.10	0.08	1.59
Total "other regions"	**9.13**	**9.43**	**0.30**	**3.28**	**9.50**	**9.32**	**–0.17**	**–1.83**
Total world	**77.08**	**76.70**	**–0.39**	**–0.50**	**75.21**	**74.69**	**–0.52**	**–0.70**

Totals may not add due to independent rounding.

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

	3Q01	3Q02	Change 2002/01 Volume	Change 2002/01 %	4Q01	4Q02	Change 2002/01 Volume	Change 2002/01 %
North America	23.93	24.14	0.21	0.87	23.61	24.02	0.41	1.74
Western Europe	15.50	15.19	–0.31	–2.03	15.58	15.63	0.04	0.27
OECD Pacific	8.04	8.07	0.03	0.36	8.79	9.19	0.40	4.60
Total OECD	**47.48**	**47.40**	**–0.08**	**–0.16**	**47.98**	**48.84**	**0.86**	**1.79**
Other Asia	7.29	7.37	0.08	1.10	7.40	7.59	0.19	2.60
Latin America	4.83	4.68	–0.14	–2.97	4.64	4.65	0.01	0.21
Middle East	4.99	4.87	–0.13	–2.54	4.91	4.94	0.03	0.71
Africa	2.41	2.44	0.04	1.47	2.45	2.45	0.00	–0.02
Total DCs	**19.51**	**19.36**	**–0.15**	**–0.79**	**19.40**	**19.63**	**0.24**	**1.22**
FSU	3.72	3.65	–0.07	–1.91	4.31	4.28	–0.04	–0.83
Other Europe	0.67	0.73	0.06	9.46	0.72	0.74	0.02	2.52
China	4.72	5.26	0.54	11.33	4.58	4.91	0.33	7.25
Total "other regions"	**9.11**	**9.64**	**0.53**	**5.78**	**9.62**	**9.93**	**0.31**	**3.27**
Total world	**76.10**	**76.40**	**0.29**	**0.39**	**77.00**	**78.40**	**1.41**	**1.83**

Totals may not add due to independent rounding.

Forecast for 2003

World demand for 2003 revised up slightly to 77.17 mb/d

In spite of a downward revision to the average world GDP growth rate, the demand forecast for 2003 has been adjusted slightly upwards to 77.17 mb/d from the 77.09 mb/d reported in the previous *MOMR*. This reflects an expectation of slightly colder first-quarter weather and the continuation of some structural changes in power generation. However, the expected increase has been revised down slightly to 0.62 mb/d or 0.81% from the previous 0.66 mb/d or 0.86%, resulting from an upward revision to the 2002 demand estimate. Further adjustments are expected as more information becomes available on major factors such as prices, the weather and the economic growth outlook. Regional and quarterly breakdowns of demand forecast are given in Table 9.

The three major regional groups are all forecast to experience stronger demand, although with differing volume growth. The OECD is expected to see the highest demand volume growth, forecast at 0.36 mb/d. Ranking the second in volume but first in percentage is expected to be the former CPEs with a rise of 0.21 mb/d or 2.18%. Developing countries are expected to experience only a limited demand rise of 0.05 mb/d.

Table 9
World oil demand forecast for 2003
mb/d

	2002	1Q03	2Q03	3Q03	4Q03	2003	Change 2003/02 Volume	Change 2003/02 %
North America	23.91	23.99	23.98	24.14	24.28	24.10	0.19	0.78
Western Europe	15.16	15.30	14.74	15.12	15.68	15.21	0.05	0.36
OECD Pacific	8.50	9.30	7.77	8.04	9.37	8.62	0.12	1.40
Total OECD	**47.57**	**48.58**	**46.50**	**47.31**	**49.34**	**47.93**	**0.36**	**0.76**
Other Asia	7.45	7.53	7.57	7.44	7.64	7.55	0.09	1.22
Latin America	4.63	4.52	4.57	4.70	4.70	4.62	0.00	–0.04
Middle East	4.86	4.80	4.79	4.77	4.83	4.80	–0.06	–1.26
Africa	2.46	2.50	2.50	2.46	2.47	2.48	0.02	0.92
Total DCs	**19.40**	**19.36**	**19.42**	**19.38**	**19.64**	**19.45**	**0.05**	**0.26**
FSU	3.84	4.01	3.75	3.70	4.22	3.92	0.08	2.15
Other Europe	0.74	0.79	0.73	0.75	0.75	0.76	0.01	2.00
China	5.00	4.86	5.22	5.38	5.00	5.12	0.11	2.22
Total "other regions"	**9.58**	**9.66**	**9.69**	**9.83**	**9.97**	**9.79**	**0.21**	**2.18**
Total world	**76.55**	**77.60**	**75.61**	**76.51**	**78.95**	**77.17**	**0.62**	**0.81**
Previous estimate	76.43	77.46	75.40	76.61	78.89	77.09	0.66	0.86
Revision	0.12	0.15	0.21	–0.10	0.07	0.08	–0.04	–0.05

Totals may not add due to independent rounding.

All quarters are forecast to register gains in consumption over the corresponding 2002 periods. The first and the second quarters are expected to register the highest growth, at 0.91 mb/d and 0.92 mb/d respectively, which will slow considerably in the third quarter, to a much lower 0.11 mb/d rise, before returning to a higher rate of 0.55 mb/d in the fourth quarter. Further details are shown in Tables 10 and 11.

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

	1Q02	1Q03	Change 2003/02 Volume	Change 2003/02 %	2Q02	2Q03	Change 2003/02 Volume	Change 2003/02 %
North America	23.70	23.99	0.29	1.23	23.79	23.98	0.20	0.83
Western Europe	15.17	15.30	0.13	0.85	14.64	14.74	0.10	0.68
OECD Pacific	9.08	9.30	0.22	2.37	7.66	7.77	0.11	1.39
Total OECD	**47.95**	**48.58**	**0.64**	**1.33**	**46.09**	**46.50**	**0.40**	**0.87**
Other Asia	7.42	7.53	0.11	1.48	7.44	7.57	0.13	1.80
Latin America	4.55	4.52	–0.03	–0.62	4.62	4.57	–0.05	–1.10
Middle East	4.87	4.80	–0.06	–1.30	4.77	4.79	0.02	0.43
Africa	2.49	2.50	0.01	0.58	2.45	2.50	0.05	1.91
Total DCs	**19.32**	**19.36**	**0.03**	**0.17**	**19.27**	**19.42**	**0.15**	**0.78**
FSU	3.92	4.01	0.09	2.24	3.49	3.75	0.26	7.35
Other Europe	0.77	0.79	0.02	3.12	0.73	0.73	0.00	0.04
China	4.74	4.86	0.13	2.66	5.10	5.22	0.11	2.22
Total "other regions"	**9.43**	**9.66**	**0.24**	**2.52**	**9.32**	**9.69**	**0.37**	**3.97**
Total world	**76.70**	**77.60**	**0.91**	**1.18**	**74.69**	**75.61**	**0.92**	**1.24**

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				Change 2003/02	
	3Q02	3Q03	Volume	%	4Q02	4Q03	Volume	%
North America	24.14	24.14	0.00	0.00	24.02	24.28	0.26	1.08
Western Europe	15.19	15.12	–0.07	–0.43	15.63	15.68	0.06	0.37
OECD Pacific	8.07	8.04	–0.03	–0.34	9.19	9.37	0.18	1.99
Total OECD	**47.40**	**47.31**	**-0.09**	**–0.20**	**48.84**	**49.34**	**0.50**	**1.03**
Other Asia	7.37	7.44	0.07	1.01	7.59	7.64	0.05	0.63
Latin America	4.68	4.70	0.02	0.39	4.65	4.70	0.05	1.13
Middle East	4.87	4.77	–0.09	–1.88	4.94	4.83	–0.11	–2.22
Africa	2.44	2.46	0.02	0.67	2.45	2.47	0.01	0.56
Total DCs	**19.36**	**19.38**	**0.02**	**0.09**	**19.63**	**19.64**	**0.00**	**0.02**
FSU	3.65	3.70	0.05	1.25	4.28	4.22	–0.06	–1.35
Other Europe	0.73	0.75	0.02	2.85	0.74	0.75	0.01	1.94
China	5.26	5.38	0.12	2.24	4.91	5.00	0.09	1.80
Total "other regions"	**9.64**	**9.83**	**0.18**	**1.91**	**9.93**	**9.97**	**0.05**	**0.46**
Total world	**76.40**	**76.51**	**0.11**	**0.14**	**78.40**	**78.95**	**0.55**	**0.70**

Totals may not add due to independent rounding.

WORLD OIL SUPPLY

Non-OPEC

Non-OPEC supply figure for 2002 revised up to 47.94 mb/d — 1.46 mb/d above 2001

Forecast for 2002

The non-OPEC supply figure for 2002 has been revised up by 0.03 mb/d to 47.94 mb/d. The first quarter remained unchanged at 47.68 mb/d, compared with the last *MOMR's* figures. Minor revisions have been made to the second and the third quarters, which are up 0.01 mb/d to 48.03 mb/d and down 0.01 mb/d to 47.58 mb/d respectively, while the fourth quarter is expected to show a significant rise of 0.13 mb/d to 48.47 mb/d. The yearly average increase has been revised up to 1.46 mb/d, compared with the 2001 estimate of 1.43 mb/d.

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

	2001	1Q02	2Q02	3Q02	4Q02	2002	Change 02/01
North America	14.36	14.62	14.67	14.45	14.67	14.60	0.24
Western Europe	6.70	6.73	6.76	6.24	6.66	6.60	–0.10
OECD Pacific	0.77	0.76	0.77	0.78	0.75	0.76	0.00
Total OECD	**21.82**	**22.10**	**22.19**	**21.47**	**22.08**	**21.96**	**0.14**
Other Asia	2.28	2.36	2.36	2.36	2.37	2.36	0.08
Latin America	3.75	3.92	3.93	3.90	3.86	3.90	0.15
Middle East	2.13	2.09	2.06	2.02	2.00	2.04	–0.09
Africa	2.80	3.04	3.06	3.01	3.06	3.04	0.24
Total DCs	**10.96**	**11.41**	**11.40**	**11.29**	**11.29**	**11.34**	**0.38**
FSU	8.53	8.92	9.15	9.49	9.72	9.33	0.80
Other Europe	0.18	0.18	0.18	0.17	0.17	0.18	0.00
China	3.30	3.35	3.39	3.43	3.44	3.40	0.11
Total "Other regions"	**12.00**	**12.45**	**12.72**	**13.10**	**13.33**	**12.90**	**0.90**
Total non-OPEC production	**44.79**	**45.96**	**46.31**	**45.86**	**46.71**	**46.21**	**1.42**
Processing gains	1.69	1.72	1.72	1.72	1.76	1.73	0.04
Total non-OPEC supply	**46.48**	**47.68**	**48.03**	**47.58**	**48.47**	**47.94**	**1.46**
Previous estimate	46.48	47.68	48.02	47.59	48.33	47.91	1.43
Revision	**0.00**	**0.00**	**0.01**	**–0.01**	**0.13**	**0.03**	**0.03**

Totals may not add due to independent rounding.

Non-OPEC supply for 2003 expected at 48.77 mb/d — 0.83 mb/d above 2002

Expectations for 2003

Non-OPEC supply is expected to rise by 0.83 mb/d in 2003, with North America and the FSU being the expected major contributors. The 2003 quarterly distribution is estimated at 48.48 mb/d, 48.85 mb/d, 48.42 mb/d and 49.32 mb/d respectively, resulting in a yearly average of 48.77 mb/d.

Table 13
Non-OPEC oil supply in 2003
mb/d

	2002	1Q03	2Q03	3Q03	4Q03	2003	Change 03/02
North America	14.60	14.73	14.79	14.57	14.79	14.72	0.12
Western Europe	6.60	6.76	6.79	6.27	6.69	6.63	0.03
OECD Pacific	0.76	0.76	0.77	0.78	0.75	0.76	0.00
Total OECD	**21.96**	**22.25**	**22.34**	**21.62**	**22.24**	**22.11**	**0.15**
Other Asia	2.36	2.40	2.40	2.40	2.41	2.40	0.04
Latin America	3.90	3.98	3.99	3.96	3.92	3.96	0.06
Middle East	2.04	2.08	2.05	2.01	1.99	2.03	–0.01
Africa	3.04	3.12	3.14	3.09	3.14	3.12	0.08
Total DCs	**11.34**	**11.58**	**11.57**	**11.46**	**11.46**	**11.51**	**0.17**
FSU	9.33	9.38	9.63	9.98	10.22	9.81	0.48
Other Europe	0.18	0.18	0.18	0.17	0.17	0.18	0.00
China	3.40	3.35	3.39	3.43	3.44	3.40	0.00
Total "Other regions"	**12.90**	**12.91**	**13.19**	**13.59**	**13.83**	**13.38**	**0.48**
Total non-OPEC production	**46.21**	**46.73**	**47.10**	**46.67**	**47.53**	**47.01**	**0.80**
Processing gains	1.73	1.75	1.75	1.75	1.79	1.76	0.03
Total non-OPEC supply	**47.94**	**48.48**	**48.85**	**48.42**	**49.32**	**48.77**	**0.83**
Previous estimate	47.91	48.43	48.79	48.38	49.13	48.69	0.78
Revision	**0.03**	**0.05**	**0.05**	**0.04**	**0.19**	**0.08**	**0.05**

Totals may not add due to independent rounding.

FSU net oil exports for 2003 expected at 5.89 mb/d — 5.49 mb/d estimated for 2002

The FSU net oil export forecasts for 2002 and 2003 has been revised up by 0.02 mb/d and 0.04 mb/d to 5.49 mb/d and 5.89 mb/d respectively.

Table 14
FSU net oil exports
mb/d

	1Q	2Q	3Q	4Q	Year
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**
2002 (forecast)	5.00	5.66	5.84	5.45	**5.49**
2003 (forecast)	5.37	5.88	6.28	6.00	**5.89**

OPEC natural gas liquids

OPEC NGL for 2003 forecast at 3.70 mb/d

OPEC NGL data for the years 1999-2002 remains unchanged at 3.16 mb/d, 3.34 mb/d, 3.58 mb/d and 3.67 mb/d respectively. The expected 2003 figure also remains unchanged at 3.70 mb/d.

OPEC NGL production — 1998–2002
mb/d

1999	2000	2001	1Q02	2Q02	3Q02	4Q02	2002	Change 02/01	2003	Change 03/02
3.16	**3.34**	**3.58**	3.64	3.64	3.67	3.74	**3.67**	0.09	**3.70**	0.03

Available secondary sources put OPEC's December production at 24.84 mb/d

OPEC crude oil production

Available secondary sources indicate that OPEC's output in December was 24.84 mb/d or 1.83 mb/d lower than the revised November figure of 26.67 mb/d. OPEC production estimates by these sources are shown in Table 15.

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

	2001	3Q02	Nov.02*	Dec.02*	4Q02*	2002*	Dec.-Nov.
Algeria	820	880	938	**966**	947	863	28
Indonesia	1,214	1,114	1,111	**1,098**	1,106	1,121	–14
IR Iran	3,665	3,434	3,486	**3,542**	3,521	3,417	55
Iraq	2,381	1,742	2,385	**2,378**	2,398	2,007	–7
Kuwait	2,025	1,909	1,894	**1,943**	1,918	1,887	49
SP Libyan AJ	1,361	1,326	1,346	**1,366**	1,352	1,316	19
Nigeria	2,097	1,957	1,992	**2,039**	2,004	1,964	48
Qatar	683	654	699	**716**	705	649	16
Saudi Arabia	7,939	7,613	7,865	**7,906**	7,870	7,528	40
UAE	2,163	1,994	2,014	**2,046**	2,029	1,990	32
Venezuela	2,862	2,847	2,935	**843**	2,230	2,591	–2,093
Total OPEC	**27,211**	**25,469**	**26,665**	**24,840**	**26,079**	**25,331**	**–1,825**

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

RIG COUNT

Non-OPEC rig count up 86 in December; 2002 count 403 less than in 2001

Non-OPEC

Rig activity was higher in December. North America, the major contributor, saw an increase of 89 rigs, compared with the November figure. In Canada, the rig count rose by 67 rigs to 348. The USA saw a rise of 22 rigs to 856, while Mexico's rig activity was unchanged at 80. Western Europe's rig activity witnessed a decline of seven rigs to 78, mainly on an eight-rig loss by Norway. Rig count for 2002 declined sharply by 403 rigs, compared with 2001, which had also seen a drop in rigs, down 260 rigs from the year before. The main culprit for non-OPEC's decline in rig count in 2002 was North America, which lost 390 rigs, 325 in the USA alone.

Table 16
Non-OPEC rig count in 2002

	2001	2002	Change 02/01	Nov.02	Dec.02	Change Dec./Nov.
North America	1,552	1,162	–390	1,195	**1,284**	89
Western Europe	95	85	–10	85	**78**	–7
OECD Pacific	20	17	–3	20	**20**	0
OECD	**1,667**	**1,264**	**–403**	**1,300**	**1,382**	**82**
Other Asia	95	111	16	116	**115**	-1
Latin America	141	106	–35	107	**109**	2
Middle East	50	62	12	68	**70**	2
Africa	36	43	7	40	**41**	1
DCs	**321**	**322**	**1**	**331**	**335**	**4**
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.**	**n.a.**	**n.a.**	**n.a.**
Total non-OPEC	**1,991**	**1,588**	**–403**	**1,633**	**1,719**	**86**

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

OPEC rig count down six in December; 2002 activity down seven

OPEC

OPEC's rig count fell six rigs to 226 in December, compared with the November figure. Venezuela contributed the most to this loss, as the rig count there declined by 13 rigs to 30, compared with last month's figures. OPEC's rig activity for 2002 was down seven rigs to 231, compared with 238 the year before. Here too, Venezuela led the decline in 2002 with a loss of 25 rigs.

Table 17
OPEC rig count

	2001	2002	Change 02/01	Nov.02	Dec.02	Change Dec./Nov.
Algeria	20	20	0	21	**22**	1
Indonesia	41	46	6	43	**53**	10
IR Iran	30	34	4	35	**34**	–1
Iraq	n.a.	n.a.	n.a.	n.a.	**n.a.**	n.a.
Kuwait	9	6	-3	8	**7**	–1
SP Libyan AJ	5	10	5	10	**10**	0
Nigeria	12	12	0	13	**12**	–1
Qatar	9	13	4	12	**9**	–3
Saudi Arabia	30	32	2	32	**33**	1
UAE	15	16	0	15	**16**	1
Venezuela	67	42	–25	43	**30**	–13
Total OPEC	**238**	**231**	**–7**	**232**	**226**	**–6**

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

STOCK MOVEMENTS

Considerable stock-draw of 0.70 mb/d in USA for December

USA

US commercial on-land oil stocks continued to register a seasonal draw-down, falling a considerable 23.9 mb, at a rate of 0.70 mb/d, to 953.0 mb, during the period 29 November – 3 January 2003. Non-major oil stocks, such as "other oils" and unfinished oil stocks, as well as crude oil stocks, contributed to this draw. Crude oil stocks fell by a significant 8.6 mb to 278.7 mb, as the ongoing strike in Venezuela created a scarcity of crude oils, especially sour and heavy grades, pushing US crude oil stocks down heavily, particularly in the US Gulf Coast. This fall extended the crude oil stock deficit by 3% from the 11% observed a month ago. On the product side, both gasoline and distillate stocks diminished the draw, increasing by 9.8 mb to 209.8 mb and by 9.9 mb to 129.7 mb, respectively. These builds were mainly due to weak apparent demand, as well as increased imports. Compared with the previous month's report, the build in gasoline stocks reduced the year-on-year deficit almost to parity with last year's level, while the shortage of distillates narrowed to about 10% from 13%. The overall draw on total oil stocks increased its year-on-year deficit by 2% to about 8%.

During the week ending 10 January 2003, total US oil stocks moved down by a slight 1.7 mb to 951.3 mb, compared with the previous week's level, widening the year-on-year deficit to about 9%. Most of the draw occurred on crude oil stocks, which fell a further 6.4 mb to 272.3 mb, increasing the year-on-year shortage to about 15%. This left crude oil stocks at close to their lowest level in the last two decades and marginally above the minimum level of 270 mb required as an operational base for refineries to avoid cutting runs. Venezuela's ongoing export interruption continued to depress US oil stocks, particularly crude oil inventories. Gasoline and distillates provided relief to the total core of US oil stocks by registering significant builds, especially in gasoline, which rose 5.8 mb on the back of increased output combined with higher imports from both Europe and Asia.

During the same period, the Strategic Petroleum Reserve (SPR) displayed a further build of 4.5 mb to 599.1 mb, despite the US Department of Energy decision to allow a delay in oil deliveries to the SPR for December and January to compensate for halted Venezuelan cargoes.

Table 18
US onland commercial petroleum stocks*
mb

	4 Oct.02	29 Nov.02	3 Jan.02	Change Dec./Nov.	3 Jan.01	10 Jan.03**
Crude oil (excl. SPR)	270.5	287.3	**278.7**	**–8.6**	312.5	**272.3**
Gasoline	205.3	200.0	209.8	9.8	210.6	215.6
Distillate fuel	127.4	119.8	129.7	9.9	144.1	132.3
Residual fuel oil	33.6	33.8	30.7	–3.1	41.1	31.3
Jet fuel	40.6	41.2	40.6	–0.6	41.9	39.8
Unfinished oils	83.5	89.2	76.3	–12.9	87.9	76.5
Other oils	221.3	205.6	187.1	–18.5	198.0	183.4
Total	982.1	976.9	**953.0**	**–23.9**	1,036.2	**951.3**
SPR	586.2	594.6	599.1	4.5	550.5	599.3

* *At end of month, unless otherwise stated.*
** *Latest available data, at time of report's release.*
Source: US Department of Energy's Energy Information Administration.

Western Europe

Further moderate draw of 0.38 mb/d in Eur-16 in December

Commercial on-land oil stocks in the Eur-16 (EU plus Norway) showed a further draw for the third consecutive month, decreasing by a moderate 11.7 mb, at a rate of 0.38 mb/d, to 1,045.5 mb. Distillate and crude oil stocks led the draw, falling by 5.7 mb and 5.1 mb respectively. The draw on distillate stocks came on the back of higher exports to the US market, while the draw on crude oil stocks resulted from increasing throughputs and lower imports, as North Sea and Russian crude oil cargoes headed to the US market to replace Venezuelan barrels. As a direct result of this stock-draw, the year-on-year surpluses of distillate and crude oil stocks were mostly erased, returning stocks to last year's levels. Gasoline stocks reversed their traditional draw pattern to rise 1.6 mb, as high freight rates prevented Europe's gasoline cargoes from being moved to the US market. Despite this build, gasoline's year-on-year deficit widened to about 12% from just 5% last month. The overall moderate decline of total oil stocks in the Eur-16 cancelled the year-on-year surplus, which was about 2% last month, reversing it to a 1% deficit.

Table 19
Western Europe commercial oil stocks*
mb

	Sept.02	Nov.02	Dec.02	Change Dec./Nov.	Dec.01
Crude oil	443.0	445.7	**440.6**	**–5.1**	437.4
Mogas	138.8	134.3	135.9	1.6	153.6
Naphtha	21.1	22.0	21.1	–0.9	24.3
Middle distillates	346.2	344.0	338.3	–5.7	337.6
Fuel oils	109.5	111.2	109.6	–1.6	107.9
Total products	615.6	611.4	**604.9**	**–6.6**	623.4
Overall total	1,058.6	1,057.1	**1,045.5**	**–11.7**	1,060.8

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

Japan

Significant draw-down of 0.32 mb/d in Japan in November

In November, Japan's commercial on-land oil stocks followed the downward pattern of the previous three months by dropping a significant 9.6 mb, at a rate of 0.32 mb/d, to 167.0 mb. Despite this draw, the year-on-year shortage was reduced by 1% to stand at about 16%. Crude oil and distillates contributed a large portion of to this draw, falling by 5.7 mb and 4.3 mb, respectively. Contrary to expectation, the draw on crude oil stocks did not widen the year-on-year deficit, but instead, narrowed it by 3% to about 16%. Increased refinery runs were the main reason behind this draw, rising by about 8% over the previous month's level, despite a 9% increase in imports for the same period. While healthy demand was behind the draw on distillates, other major product stocks registered minor builds, especially gasoline and residual fuel oil.

Table 20
Japan's commercial oil stocks*
mb

	Sept.02	Oct.02	Nov.02	Change Nov./Oct.	Nov.01
Crude oil	106.4	104.8	**99.1**	**–5.7**	117.5
Gasoline	13.1	12.8	12.9	0.1	14.1
Middle distillates	41.9	41.8	37.5	–4.3	46.2
Residual fuel oil	17.7	17.4	17.5	0.1	19.9
Total products	72.6	71.9	**67.8**	**–4.1**	80.3
Overall total **	179.0	176.6	**167.0**	**–9.6**	197.8

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

BALANCE OF SUPPLY AND DEMAND

2002 supply/demand difference revised up to 24.94 mb/d

The summarized supply/demand balance table for 2002 shows upward revisions of 0.12 mb/d to 76.55 mb/d to the world oil demand forecast and 0.03 mb/d to 51.61 mb/d to the total non-OPEC supply, resulting in an expected annual difference of around 24.94 mb/d, an increase of 0.09 mb/d over the last *MOMR*'s figure. This leaves a quarterly distribution of 25.38 mb/d, 23.02 mb/d, 25.14 mb/d and 26.20 mb/d respectively, requiring the balance to be revised downward by 0.02 to –0.23 mb/d, 0.07 mb/d to 1.59 and 0.14 mb/d to 0.32 mb/d respectively. The balance for the fourth quarter 2002, which is introduced here for the first time, was estimated at –0.10 mb/d. The average annual balance for 2002 is estimated at 0.40 mb/d, while a minor downward revision of 0.03 mb/d has been made to the 2001 balance, which is now estimated at 0.92 mb/d.

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

	2001	1Q02	2Q02	3Q02	4Q02	**2002**
(a) World oil demand	76.35	76.70	74.69	76.40	78.40	76.55
(b) Non-OPEC supply(1)	50.06	51.32	51.67	51.25	52.21	51.61
Difference (a – b)	**26.29**	**25.38**	**23.02**	**25.14**	**26.20**	**24.94**
OPEC crude oil production(2)	27.21	25.15	24.61	25.47	26.09	25.33
Balance	**0.92**	**–0.23**	**1.59**	**0.32**	**–0.10**	**0.40**

(1) Including OPEC NGLs + non-conventional oils.
(2) Selected secondary sources.
Totals may not add due to independent rounding.

2003 supply/demand difference expected at 24.70 mb/d

The summarized supply/demand balance table for 2003 shows upward revisions of 0.08 mb/d to 77.17 mb/d to the world oil demand forecast and 0.08 mb/d to 52.47 mb/d to the total non-OPEC supply. This is expected to result in a difference of around 24.70 mb/d, with a quarterly distribution of 25.45 mb/d, 23.09 mb/d, 24.39 mb/d and 25.86 mb/d respectively.

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

	2002	1Q03	2Q03	3Q03	4Q03	**2003**
(a) World oil demand	76.55	77.60	75.61	76.51	78.95	77.17
(b) Non-OPEC supply(1)	51.61	52.15	52.52	52.12	53.09	52.47
Difference (a – b)	**24.94**	**25.45**	**23.09**	**24.39**	**25.86**	**24.70**

(1) Including OPEC NGLs + non-conventional oils.
Totals may not add due to independent rounding.

Table 23
World oil demand/supply balance
mb/d

	1999	**2000**	**2001**	1Q02	2Q02	3Q02	4Q02	2002	**1Q03**	**2Q03**	**3Q03**	**4Q03**	**2003**
World demand													
OECD	47.7	47.7	47.7	47.9	46.1	47.4	48.8	47.6	48.6	46.5	47.3	49.3	47.9
North America	23.8	24.0	23.9	23.7	23.8	24.1	24.0	23.9	24.0	24.0	24.1	24.3	24.1
Western Europe	15.2	15.1	15.3	15.2	14.6	15.2	15.6	15.2	15.3	14.7	15.1	15.7	15.2
Pacific	8.7	8.6	8.6	9.1	7.7	8.1	9.2	8.5	9.3	7.8	8.0	9.4	8.6
DCs	18.7	19.0	19.3	19.3	19.3	19.4	19.6	19.4	19.4	19.4	19.4	19.6	19.4
FSU	4.0	3.8	3.9	3.9	3.5	3.7	4.3	3.8	4.0	3.7	3.7	4.2	3.9
Other Europe	0.8	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.8	0.8
China	4.2	4.7	4.7	4.7	5.1	5.3	4.9	5.0	4.9	5.2	5.4	5.0	5.1
(a) Total world demand	75.4	76.0	76.3	76.7	74.7	76.4	78.4	76.6	77.6	75.6	76.5	79.0	77.2
Non-OPEC supply													
OECD	21.3	21.8	21.8	22.1	22.2	21.5	22.1	22.0	22.3	22.3	21.6	22.2	22.1
North America	14.1	14.2	14.4	14.6	14.7	14.5	14.7	14.6	14.7	14.8	14.6	14.8	14.7
Western Europe	6.6	6.7	6.7	6.7	6.8	6.2	6.7	6.6	6.8	6.8	6.3	6.7	6.6
Pacific	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
DCs	10.8	11.0	11.0	11.4	11.4	11.3	11.3	11.3	11.6	11.6	11.5	11.5	11.5
FSU	7.5	7.9	8.5	8.9	9.2	9.5	9.7	9.3	9.4	9.6	10.0	10.2	9.8
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	3.3	3.4	3.4	3.4	3.4
Processing gains	1.6	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.7	1.8	1.8
Total non-OPEC supply	44.6	45.7	46.5	47.7	48.0	47.6	48.5	47.9	48.5	48.8	48.4	49.3	48.8
OPEC NGLs + non-conventionals	3.2	3.3	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.7	3.7	3.8	3.7
(b) Total non-OPEC supply and OPEC NGLs	47.7	49.1	50.1	51.3	51.7	51.3	52.2	51.6	52.2	52.5	52.1	53.1	52.5
OPEC crude oil production (secondary sources)	26.5	27.9	27.2	25.2	24.6	25.5	26.1	25.3					
Total supply	74.2	77.0	77.3	76.5	76.3	76.7	78.3	76.9					
Balance (stock change and miscellaneous)	-1.1	1.1	0.9	-0.2	1.6	0.3	-0.1	0.4					
Closing stock level (outside FCPEs) mb													
OECD onland commercial	2446	2530	2622	2599	2644	2568							
OECD SPR	1228	1210	1222	1237	1247	1250							
OECD total	3674	3740	3844	3837	3891	3818							
Other onland	983	1000	1028	1026	1041	1021							
Oil-on-water	808	876	829	808	817	817							
Total stock	5465	5617	5701	5670	5748	5657							
Days of forward consumption in OECD													
Commercial onland stocks	51	53	55	56	56	53							
SPR	26	25	26	27	26	26							
Total	77	78	81	83	82	78							
Memo items													
FSU net exports	3.4	4.1	4.6	5.0	5.7	5.8	5.4	5.5	5.4	5.9	6.3	6.0	5.9
(a) - (b)	27.7	26.9	26.3	25.4	23.0	25.1	26.2	24.9	25.5	23.1	24.4	25.9	24.7

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

Table 24
World oil demand/supply balance: changes from last month's table †
mb/d

	1999	2000	2001	1Q02	2Q02	3Q02	4Q02	2002	1Q03	2Q03	3Q03	4Q03	2003
World demand													
OECD	-	-	-	-	-	-	0.2	-	0.3	0.3	-	0.2	0.2
North America	-	-	-	-	-	-	-	-	0.1	0.1	-	-	-
Western Europe	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-
Pacific	-	-	-	-	-	-	0.3	0.1	0.1	0.2	-	0.3	0.2
DCs	-	-	-	-	0.1	0.1	-	0.1	-0.2	-0.1	-	-0.2	-0.1
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	0.1	-	-	-	-	-	-
(a) Total world demand	-	-	-	-	0.1	0.1	0.3	0.1	0.1	0.2	-0.1	0.1	0.1
Non-OPEC supply													
OECD	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-
North America	-	-	-	-	-	-	0.1	-	-	-	-	0.2	0.1
Western Europe	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	-	-	0.1	-	-	-	-	0.2	0.1
OPEC NGLs + non-conventionals	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	-	-	-	-	-	-	0.1	-	-	-	-	0.2	0.1
OPEC crude oil production (secondary sources)	-	-	-	-	-	-	-	-					
Total supply	-	-	-	-	-	-	-	-					
Balance (stock change and miscellaneous)	-	-	-	-	-0.1	-0.1	-	-					
Closing stock level (outside FCPEs) *mb*													
OECD onland commercial	-	-	-	-	-	-3.7	-	-					
OECD SPR	-	-	-	-	-	-1.2	-	-					
OECD total	-	-	-	-	-	-4.9	-	-					
Other onland	-	-	-	-	-	-1.3	-	-					
Oil on water	-	-	-13.9	-13.7	-13.9	-78.6	-	-					
Total stock	-	-	-13.9	-13.7	-13.9	-84.8	-	-					
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	0.2	-0.1	-0.1	-

† *This compares Table 23 in this issue of the MOMR with Table 23 in the December 2002 issue.*
This table shows only where changes have occurred.

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

	1996	1997	1998	1999	2000	2001	1Q00	2Q00	3Q00	4Q00	1Q01	2Q01	3Q01	4Q01	1Q02	2Q02	3Q02
Closing stock level *mb*																	
OECD onland commercial	2,514	2,615	2,697	2,446	2,530	2,622	2,419	2,510	2,542	2,530	2,525	2,597	2,661	2,622	2,599	2,644	2,568
North America	1,138	1,211	1,283	1,127	1,146	1,263	1,108	1,165	1,180	1,146	1,159	1,231	1,269	1,263	1,235	1,257	1,218
Western Europe	899	912	962	881	930	915	902	900	910	930	918	909	918	915	929	940	912
OECD Pacific	476	492	453	437	454	444	409	445	452	454	447	457	473	444	435	447	439
OECD SPR	1,199	1,207	1,249	1,228	1,210	1,222	1,234	1,232	1,237	1,210	1,210	1,207	1,205	1,222	1,237	1,247	1,250
North America	566	563	571	567	543	552	569	569	572	543	544	545	547	552	563	578	589
Western Europe	330	329	362	346	354	353	349	349	353	354	351	347	345	353	353	348	344
OECD Pacific	303	315	315	315	313	316	315	315	312	313	314	314	313	316	321	321	317
OECD total	**3,713**	**3,822**	**3,946**	**3,674**	**3,740**	**3,844**	**3,653**	**3,742**	**3,778**	**3,740**	**3,734**	**3,804**	**3,866**	**3,844**	**3,837**	**3,891**	**3,818**
Other onland	993	1,022	1,055	983	1,000	1,028	977	1,001	1,010	1,000	999	1,017	1,034	1,028	1,026	1,041	1,021
Oil-on-water	798	812	859	808	876	829	840	866	849	876	899	823	860	829	808	817	817
Total stock	**5,503**	**5,656**	**5,860**	**5,465**	**5,617**	**5,701**	**5,470**	**5,609**	**5,638**	**5,617**	**5,632**	**5,644**	**5,759**	**5,701**	**5,670**	**5,748**	**5,657**
Days of forward consumption in OECD																	
OECD onland commercial	54	56	57	51	53	55	52	52	52	52	54	55	55	55	56	56	53
North America	50	52	54	47	48	53	47	48	48	47	49	51	54	53	52	52	51
Western Europe	60	60	63	58	61	60	62	59	59	61	62	59	59	60	63	62	58
OECD Pacific	53	58	52	51	53	52	51	53	51	48	56	57	54	49	57	55	48
OECD SPR	26	26	26	26	25	26	27	26	25	25	26	25	25	25	27	26	26
North America	25	24	24	24	23	23	24	23	23	22	23	23	23	23	24	24	25
Western Europe	22	21	24	23	23	23	24	23	23	23	24	22	22	23	24	23	22
OECD Pacific	34	37	36	37	37	37	39	38	36	33	39	39	36	35	42	40	34
OECD total	**80**	**82**	**83**	**77**	**78**	**81**	**79**	**78**	**78**	**77**	**80**	**80**	**81**	**80**	**83**	**82**	**78**
Days of global forward consumption	**85**	**87**	**88**	**82**	**84**	**85**	**84**	**84**	**83**	**83**	**86**	**84**	**85**	**85**	**87**	**86**	**83**

Table 26
Non-OPEC supply and OPEC natural gas liquids
mb/d

	1999	2000	2001	Change 01/00	1Q02	2Q02	3Q02	4Q02	2002	Change 02/01	1Q03	2Q03	3Q03	4Q03	2003	Change 03/02
USA	8.11	8.11	8.05	-0.06	8.17	8.24	7.99	8.03	8.11	0.05	8.17	8.24	7.99	8.03	8.11	0.00
Canada	2.60	2.69	2.74	0.05	2.84	2.85	2.88	2.99	2.89	0.15	2.86	2.87	2.90	3.01	2.91	0.02
Mexico	3.35	3.45	3.57	0.11	3.61	3.57	3.58	3.65	3.60	0.04	3.71	3.67	3.68	3.75	3.70	0.10
North America	**14.05**	**14.25**	**14.36**	**0.11**	**14.62**	**14.67**	**14.45**	**14.67**	**14.60**	**0.24**	**14.73**	**14.79**	**14.57**	**14.79**	**14.72**	**0.12**
Norway	3.06	3.32	3.42	0.09	3.32	3.38	3.22	3.44	3.34	-0.08	3.34	3.40	3.24	3.46	3.36	0.02
UK	2.84	2.64	2.53	-0.11	2.60	2.56	2.28	2.48	2.48	-0.05	2.61	2.57	2.29	2.48	2.49	0.01
Denmark	0.30	0.36	0.35	-0.02	0.38	0.37	0.33	0.34	0.36	0.01	0.38	0.37	0.33	0.34	0.36	0.00
Other Western Europe	0.43	0.41	0.40	-0.01	0.42	0.44	0.42	0.42	0.42	0.02	0.42	0.44	0.42	0.42	0.42	0.00
Western Europe	**6.63**	**6.74**	**6.70**	**-0.04**	**6.73**	**6.76**	**6.24**	**6.66**	**6.60**	**-0.10**	**6.76**	**6.79**	**6.27**	**6.69**	**6.63**	**0.03**
Australia	0.59	0.77	0.71	-0.06	0.71	0.71	0.72	0.70	0.71	0.00	0.71	0.71	0.72	0.70	0.71	0.00
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	0.05	0.05	0.05	0.00
OECD Pacific	**0.66**	**0.83**	**0.77**	**-0.07**	**0.76**	**0.77**	**0.78**	**0.75**	**0.76**	**0.00**	**0.76**	**0.77**	**0.78**	**0.75**	**0.76**	**0.00**
Total OECD*	**21.34**	**21.82**	**21.82**	**0.00**	**22.10**	**22.19**	**21.47**	**22.08**	**21.96**	**0.14**	**22.25**	**22.34**	**21.62**	**22.24**	**22.11**	**0.15**
Brunei	0.18	0.19	0.20	0.00	0.21	0.20	0.20	0.20	0.20	0.01	0.21	0.20	0.20	0.20	0.20	0.00
India	0.75	0.74	0.73	-0.01	0.74	0.74	0.75	0.75	0.75	0.01	0.76	0.76	0.77	0.77	0.77	0.02
Malaysia	0.70	0.68	0.69	0.00	0.73	0.75	0.75	0.75	0.75	0.06	0.74	0.76	0.76	0.76	0.76	0.01
Papua New Guinea	0.09	0.07	0.06	-0.01	0.05	0.05	0.05	0.05	0.05	-0.01	0.06	0.06	0.06	0.06	0.06	0.01
Vietnam	0.26	0.31	0.35	0.04	0.34	0.33	0.32	0.33	0.33	-0.02	0.34	0.33	0.32	0.33	0.33	0.00
Asia others	0.20	0.24	0.26	0.02	0.28	0.28	0.28	0.29	0.28	0.03	0.28	0.28	0.28	0.29	0.28	0.00
Other Asia	**2.18**	**2.23**	**2.28**	**0.05**	**2.36**	**2.36**	**2.36**	**2.37**	**2.36**	**0.08**	**2.40**	**2.40**	**2.40**	**2.41**	**2.40**	**0.04**
Argentina	0.84	0.79	0.80	0.01	0.80	0.79	0.79	0.78	0.79	-0.01	0.79	0.78	0.78	0.77	0.78	-0.01
Brazil	1.36	1.49	1.57	0.08	1.75	1.80	1.77	1.75	1.77	0.20	1.78	1.83	1.80	1.78	1.80	0.03
Colombia	0.82	0.70	0.61	-0.08	0.61	0.59	0.57	0.55	0.58	-0.03	0.61	0.59	0.57	0.55	0.58	0.00
Ecuador	0.38	0.40	0.41	0.01	0.40	0.39	0.40	0.40	0.40	-0.01	0.41	0.40	0.41	0.41	0.41	0.01
Peru	0.11	0.10	0.10	-0.01	0.10	0.10	0.10	0.10	0.10	0.00	0.12	0.12	0.12	0.12	0.12	0.02
Trinidad & Tobago	0.14	0.14	0.13	-0.01	0.14	0.14	0.15	0.15	0.15	0.01	0.15	0.15	0.16	0.16	0.16	0.01
L. America others	0.11	0.12	0.13	0.01	0.13	0.12	0.12	0.12	0.12	-0.01	0.13	0.12	0.12	0.12	0.12	0.00
Latin America	**3.76**	**3.74**	**3.75**	**0.01**	**3.92**	**3.93**	**3.90**	**3.86**	**3.90**	**0.15**	**3.98**	**3.99**	**3.96**	**3.92**	**3.96**	**0.06**
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	0.86	0.90	-0.05	0.92	0.91	0.86	0.85	0.89	-0.01
Syria	0.55	0.54	0.53	-0.01	0.51	0.50	0.50	0.50	0.50	-0.03	0.51	0.50	0.50	0.50	0.50	0.00
Yemen	0.42	0.45	0.47	0.01	0.45	0.45	0.45	0.45	0.45	-0.02	0.45	0.45	0.45	0.45	0.45	0.00
Middle East	**2.06**	**2.13**	**2.13**	**0.00**	**2.09**	**2.06**	**2.02**	**2.00**	**2.04**	**-0.09**	**2.08**	**2.05**	**2.01**	**1.99**	**2.03**	**-0.01**
Angola	0.76	0.75	0.74	-0.01	0.92	0.92	0.90	0.92	0.92	0.18	0.94	0.94	0.92	0.94	0.94	0.02
Cameroon	0.10	0.10	0.08	-0.02	0.08	0.08	0.08	0.08	0.08	0.00	0.09	0.09	0.08	0.08	0.09	0.01
Congo	0.27	0.27	0.27	0.00	0.27	0.26	0.25	0.24	0.25	-0.01	0.27	0.26	0.25	0.24	0.25	0.00
Egypt	0.83	0.80	0.76	-0.04	0.75	0.76	0.74	0.75	0.75	-0.01	0.76	0.77	0.75	0.76	0.76	0.01
Gabon	0.36	0.34	0.31	-0.03	0.31	0.31	0.30	0.30	0.31	-0.01	0.32	0.32	0.31	0.31	0.32	0.01
South Africa	0.17	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
Africa other	0.28	0.41	0.46	0.05	0.52	0.54	0.55	0.58	0.55	0.09	0.55	0.57	0.58	0.61	0.58	0.03
Africa	**2.78**	**2.85**	**2.80**	**-0.05**	**3.04**	**3.06**	**3.01**	**3.06**	**3.04**	**0.24**	**3.12**	**3.14**	**3.09**	**3.14**	**3.12**	**0.08**
Total DCs	**10.78**	**10.95**	**10.96**	**0.01**	**11.41**	**11.40**	**11.29**	**11.29**	**11.34**	**0.38**	**11.58**	**11.57**	**11.46**	**11.46**	**11.51**	**0.17**
FSU	**7.47**	**7.91**	**8.53**	**0.62**	**8.92**	**9.15**	**9.49**	**9.72**	**9.33**	**0.80**	**9.38**	**9.63**	**9.98**	**10.22**	**9.81**	**0.48**
Other Europe	**0.18**	**0.18**	**0.18**	**0.00**	**0.18**	**0.18**	**0.17**	**0.17**	**0.18**	**0.00**	**0.18**	**0.18**	**0.17**	**0.17**	**0.18**	**0.00**
China	**3.21**	**3.23**	**3.30**	**0.07**	**3.35**	**3.39**	**3.43**	**3.44**	**3.40**	**0.11**	**3.35**	**3.39**	**3.43**	**3.44**	**3.40**	**0.00**
Non-OPEC production	**42.99**	**44.09**	**44.79**	**0.69**	**45.96**	**46.31**	**45.86**	**46.71**	**46.21**	**1.42**	**46.73**	**47.10**	**46.67**	**47.53**	**47.01**	**0.80**
Processing gains	1.58	1.65	1.69	0.04	1.72	1.72	1.72	1.76	1.73	0.04	1.75	1.75	1.75	1.79	1.76	0.03
Non-OPEC supply	**44.56**	**45.74**	**46.48**	**0.73**	**47.68**	**48.03**	**47.58**	**48.47**	**47.94**	**1.46**	**48.48**	**48.85**	**48.42**	**49.32**	**48.77**	**0.83**
OPEC NGLs + non-conventionals	**3.16**	**3.34**	**3.58**	**0.24**	**3.64**	**3.64**	**3.67**	**3.74**	**3.67**	**0.09**	**3.67**	**3.67**	**3.70**	**3.77**	**3.70**	**0.03**

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

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

Table 27
Non-OPEC Rig Count

	1999	**2000**	1Q01	2Q01	3Q01	4Q01	**2001**	**Change 01/00**	1Q02	2Q02	3Q02	Dec02	**4Q02**	**2002**	**Change 02/01**	**Change Dec.-Nov.**
USA	608	916	1,141	1,239	1,231	1,004	1,156	240	818	806	853	856	847	831	-325	22
Canada	246	344	515	252	320	278	342	-2	383	147	250	348	283	266	-76	67
Mexico	43	44	50	48	56	62	54	10	63	61	62	80	76	65	11	0
North America	**897**	**1,305**	**1,706**	**1,539**	**1,607**	**1,344**	**1,552**	**247**	**1,264**	**1,014**	**1,165**	**1,284**	**1,206**	**1,162**	**-390**	**89**
Norway	17	22	24	22	22	22	23	1	20	20	17	15	19	19	-4	-8
UK	18	18	18	25	28	26	24	6	28	30	24	23	23	26	2	-1
Denmark	2	3	4	5	4	5	4	1	5	4	3	4	5	4	0	-1
Other Western Europe	77	82	43	44	42	47	44	-38	39	38	33	36	34	36	-8	3
Western Europe	**114**	**125**	**89**	**95**	**96**	**100**	**95**	**-30**	**92**	**91**	**76**	**78**	**81**	**85**	-10	**-7**
Australia	10	10	11	11	10	10	10	0	9	9	9	10	9	9	-2	1
Other Pacific	6	7	10	9	8	10	9	2	8	7	7	10	10	8	-1	-1
OECD Pacific	**16**	**17**	**20**	**20**	**18**	**20**	**20**	**3**	**17**	**16**	**16**	**20**	**19**	**17**	-3	**0**
Total OECD*	**1,027**	**1,447**	**1,815**	**1,655**	**1,721**	**1,464**	**1,667**	**220**	**1,373**	**1,121**	**1,257**	**1,382**	**1,306**	**1,264**	**-403**	**82**
Brunei	3	2	3	3	2	2	3	1	2	3	3	3	3	3	0	-1
India	46	49	51	48	50	50	50	1	52	54	55	58	57	55	5	1
Malaysia	6	7	10	11	13	12	11	4	12	13	15	15	14	14	2	2
Papua New Guinea	1	0	0	1	2	1	1	1	1	1	1	0	1	1	0	-2
Vietnam	9	8	9	8	8	8	8	0	8	8	9	9	10	9	0	-1
Asia others	16	16	22	23	24	18	22	5	26	29	33	30	32	30	8	0
Other Asia	**81**	**83**	**96**	**95**	**98**	**90**	**95**	**12**	**100**	**109**	**116**	**115**	**117**	**111**	**16**	**-1**
Argentina	35	57	69	74	77	64	71	14	49	45	49	56	54	49	-22	2
Brazil	19	23	28	30	29	26	28	5	27	27	27	26	26	27	-2	-1
Colombia	12	14	15	16	14	16	15	1	13	13	10	10	9	11	-4	2
Ecuador	3	7	9	10	10	11	10	3	10	9	8	8	8	9	-1	0
Peru	2	4	4	4	3	3	4	0	2	2	2	1	1	2	-2	0
Trinidad & Tobago	3	4	6	5	4	5	5	1	5	4	4	2	4	4	-1	-2
L. America others	13	12	9	8	6	6	7	-4	4	4	4	6	5	5	-3	1
Latin America	**86**	**120**	**141**	**147**	**144**	**130**	**141**	**20**	**110**	**103**	**104**	**109**	**107**	**106**	**-35**	**2**
Bahrain			0	0	0	0	0	0	0	0	0		0	0	0	0
Oman	19	24	24	24	25	26	25	1	27	29	30	32	32	29	5	0
Syria	13	14	19	19	20	19	19	5	20	21	23	24	24	22	3	1
Yemen	4	6	6	6	5	6	6	0	8	9	9	11	11	9	3	1
Middle East	**36**	**45**	**49**	**49**	**49**	**51**	**50**	**5**	**57**	**60**	**64**	**70**	**69**	**62**	**12**	**2**
Angola	5	6	6	5	4	6	5	0	5	6	6	2	5	5	0	-3
Cameroon			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congo	3	3	1	2	1	1	1	-1	1	1	1	1	1	1	0	0
Egypt	17	18	21	22	22	23	22	4	22	23	22	24	23	23	1	3
Gabon	2	2	2	4	1	1	2	0	1	2	2	2	2	2	0	0
South Africa	1	1	2	1	0	1	1	0	1	1	1	0	0	1	0	0
Africa other	4	5	4	5	5	3	4	0	11	12	12	12	12	12	7	1
Africa	**30**	**34**	**36**	**40**	**34**	**35**	**36**	**2**	**41**	**45**	**44**	**41**	**43**	**43**	**7**	**1**
Total DCs	**232**	**282**	**322**	**330**	**325**	**307**	**321**	**40**	**307**	**317**	**328**	**335**	**336**	**322**	**1**	**4**
FSU																
Other Europe	**4**	**3**	**3**	**3**	**3**	**4**	**3**	**0**	**2**	**2**	**2**	**2**	**2**	**2**	**-1**	**0**
China																
Non-OPEC Rig count	**1,263**	**1,732**	**2,140**	**1,988**	**2,049**	**1,774**	**1,991**	**260**	**1,682**	**1,440**	**1,587**	**1,719**	**1,644**	**1,588**	**-403**	**86**

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

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