

OPEC

Organization of the Petroleum Exporting Countries



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Monthly Oil Market Report

OPEC Basket average price

US \$ per barrel

Down 3.03 in November

November	24.29
October	27.32
Year-to-date	23.94

November OPEC production

million barrels per day, according to secondary sources

Algeria	0.93	Kuwait	1.88	Saudi Arabia	7.84
Indonesia	1.12	SP Libyan AJ	1.34	UAE	2.00
IR Iran	3.47	Nigeria	1.98	Venezuela	2.98
Iraq	2.37	Qatar	0.71		

Supply and demand

million barrels per day

2002

World demand	76.43
Non-OPEC supply	51.58
Difference	24.85

2003

World demand	77.09
Non-OPEC supply	52.39
Difference	24.70

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

Stocks

Moderate seasonal draw in USA in November

World economy

World GDP growth estimated at 3.4% for 2003

December 2002

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to 122nd OPEC
Conference**

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

Issued 19 December 2002

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OIL MARKET HIGHLIGHTS

- World GDP is now forecast to grow at 2.8% in 2002 and 3.4% in 2003. Within the OECD, slight downward revisions have again been made for some euro-zone countries for 2002. The developing countries' estimate is slightly down, with small downward revisions mainly in Africa and Latin America.
 - The outlook for the USA remains precarious. GDP growth in the third quarter has been revised up to 4%, but fourth-quarter GDP is still expected to be weak. The unemployment rate rose to 6%, the highest level since April and also the highest in the recent recession. On the other hand, services continued to expand at a stronger-than-expected rate in November and retail sales posted an increase of 0.4%, following a revised 0.1% rise in October, driven by home-related expenditure.
 - There are increasing signs that the Japanese recovery may be coming to an end. The index of leading indicators dropped sharply in October. Although improved from the previous report in September, the latest "Tankan" business sentiment survey points to the pessimism of large manufacturers concerning future prospects. Third-quarter GDP growth has been revised up by 0.1% to 0.8%, while second-quarter growth has been downgraded to 0.9% from 1% initially estimated.
 - Industrial production appears to be picking-up in major developing countries, such as China, Brazil and India.
 - The average price of the OPEC Reference Basket plummeted in November, wiping almost 11 per cent off its October average, or \$3.03/b. For the first time in 2002, the year-to-date average price passed the 2001 level, by \$0.35/b, to reach \$23.94/b. In the first half of December, the Basket continued its upward path, mainly due to geopolitical tensions in the Middle East and supply interruptions in the Venezuelan oil industry. It is now almost certain that the 2002 yearly average will exceed that of 2001.
 - A significant fall in crude oil prices was the main reason for product price losses in November. The magnitude of the loss for each product, however, was determined by regional factors. Demand for middle distillates in the Atlantic basin was strong, like that for fuel oil in Asian markets, thereby supporting refining margins in all three centres and paving the way for a considerable rise in refinery throughput in the USA and Europe.
 - OPEC area spot-chartering stabilized at the previous month's level of 11.89 mb/d. Meanwhile, crude oil and product tanker freight rates rose across the board, on thin modern tonnage, as regulations and safety requirements became tighter, particularly after the "Prestige" disaster near the Spanish coast.
 - OPEC's estimates for 2002 demand and the forecast for 2003 demand have undergone little change since the last *MOMR*. The continuation of colder-than-normal weather seems to be instrumental in the 1.15 mb/d demand growth in the fourth quarter of 2002.
 - OPEC crude oil production, based on secondary sources, has been estimated at 26.61 mb/d in November. The non-OPEC oil supply estimate for 2002 remains almost unchanged at 47.91 mb/d, which is 1.43 mb/d higher than the estimated 2001 figure of 46.48 mb/d. 2003 non-OPEC supply is expected to reach a level of 48.69 mb/d, an increase of 0.78 mb/d over the 2002 estimate. Net FSU exports for 2002 and 2003 forecast are estimated at 5.47 mb/d and 5.85 mb/d respectively.
 - US commercial on-land oil stocks displayed a moderate seasonal draw of 6.5 mb, at a rate of 0.23 mb/d, to 976.9 mb, during the period 1–29 November. The Strategic Petroleum Reserve continued to follow the whole year's build pattern, making the year-on-year surplus stand at about 9%. In fact, so far this year, the 45 mb increase in SPR has been more than double the draw on commercial crude oil stocks. Commercial on-land oil stocks in Eur-16 (EU plus Norway) followed the previous two months' pattern of draw-downs, declining slightly by 1.8 mb, at a rate of 0.06 mb/d, to 1,061.8 mb.
 - The weak second-quarter 2003 oil demand outlook continues to be a matter of concern regarding pressure on prices. The current supply/demand outlook has resulted in a projection for world demand in the second quarter of 2003 of 75.4 mb/d out of 77.1 mb/d for the whole year 2003, while total non-OPEC supply plus OPEC NGL is estimated at around 52.5 mb/d for the second quarter, compared with a similar level of 52.4 mb/d for 2003. Accordingly, the Conference, in its 122nd (Extraordinary) Meeting on 12 December, decided to bring OPEC-10 actual output down to the new production ceiling of 23.00 mb/d.
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Opening address
to the
122nd Extraordinary Meeting of the OPEC Conference
by
His Excellency Dr Rilwanu Lukman*

Excellencies, ladies and gentlemen,

It gives me much pleasure to welcome you to the 122nd Extraordinary Meeting of the OPEC Conference. The purpose of the Meeting is to review the situation in the international oil market and particularly the outlook for the first half of 2003. As you will recall, at the last Meeting of our Conference — in Osaka, Japan, in September — we decided that our existing production agreement would remain unchanged. This was the agreement which came into force at the beginning of this year, with an overall output ceiling of 21.7 million barrels a day for our Member Countries, excluding Iraq.

The market has been well-supplied with oil since our September Meeting and, up to very recently, there was a general softening of the price structure, of several dollars a barrel. The political tensions in Venezuela over the past week have resulted in a slight rise in prices on world markets. However, prices remain comfortably inside OPEC's price band of \$22–28/b. To complete the picture, the year-to-date price of around \$24/b is slightly above the average level for the whole of 2001. Moreover, this is the second-highest annual figure since 1985.

How has this come about? Well, there have been two significant features affecting prices since the September meeting, on top of the normal market behaviour one expects with the onset of the Northern Hemisphere winter.

The first is the uncertainty that has been created by the political tensions in Iraq and, most recently, Venezuela. The situation in the Gulf has led to talk of “war premiums” being placed on the price of oil and has seen prices fluctuate in line with the tensions. OPEC has two overriding messages, with regard to these two disturbing situations. First, we wish to reassure consumers that we will do everything we can to maintain steady, secure supplies of crude at all times, to cover any eventuality that may arise. We have sufficient spare capacity within our Organization to do this. And our second message is that we hope — and, indeed, believe — that the need for this will not arise.

It is always deeply saddening for OPEC when there are serious political problems — of whatever nature — affecting our Member Countries. This is especially the case when they involve, separately, two of our five Founder Members, to whom our Organization has owed so much over a period or more than four decades, as we have successfully sought to assert our legitimate sovereign rights to the exploitation of the hydrocarbon resources which lie within our national borders. It is our most fervent wish that quick, peaceful, amicable and enduring solutions are found to these two crises, in the best interests of the citizens of these countries and for the furtherance of world peace and harmony generally.

The second significant feature affecting prices over the past two months has been the discrepancy between production targets and production realities, which has received much coverage in the media. However, let me put the situation in its true perspective: as I have already stated, consumers have received all the crude they require and prices have remained well within our price band. The implication, therefore, is that we need to look carefully at our existing production agreement, to see whether it needs revision to reflect the current realities in the market and to accommodate the anticipated trends over the coming year. Energy trends, of course, are influenced by trends in the global economy and particularly the performance of the leading industrialised nations; in this respect, the general mood is downbeat until we are at least well into 2003.

* President of the Conference and Presidential Adviser on Petroleum and Energy, Nigeria

We also call on fellow oil producers from outside our Organization to continue to support OPEC's efforts to achieve sustainable order and stability in the international oil market. We have greatly welcomed the measures most non-OPEC producers have adopted during periods of excessive volatility or extreme price levels over the past decade, and the market has benefited enormously from this. However, the market requires more than just rainy day support if it is to thrive in the future. Cooperation — or, for those who do not wish to use that word, “harmonious endeavour” — is an ongoing process, which should exceed the bounds of time and circumstance.

It should embody the “spirit of Osaka”, as expressed at the Eighth International Energy Forum, which was held in Osaka just after our last Conference. The abiding message of the Forum was to enhance mutual understanding and cooperative dialogue among energy-producing and energy-consuming countries. We support this sentiment fully. Indeed, one of our Member Countries, Saudi Arabia, is going to provide the home for the Forum's permanent Secretariat in Riyadh. Our Member Countries have played a major role in developing producer-consumer dialogue over the past decade, culminating in the present, highly encouraging situation.

Excellencies, ladies and gentlemen,

My term as President of the OPEC Conference ends on 31 December 2002. I have found this year to be an invigorating and challenging period for our Organization, not just in the energy market, but also across a much broader spectrum, that embraces issues relating directly to the general well-being of mankind in the opening decades of the 21st century; this concerns, in particular, the perennial plight of the impoverished nations of the world. Within the space of just two months, from the end of August, there were the World Summit on Sustainable Development in Johannesburg, the Eighth International Energy Forum in Osaka and the Eighth Conference of the Parties in the climate change talks in New Delhi. At each of these three major supranational events, OPEC and its Member Countries sought to reassure the world at large that, for decades to come, the petroleum industry has the reserves, the will, the commitment and the integrity to guarantee secure supply to consumers in a manner fully compatible with the requirements of sustainable development in a cleaner, safer and healthier environment.

I believe we have achieved much success in getting this point across. The credit for this must go to the Staff Members of the very building in which we are gathered today, for the high standard of support that they have consistently provided to our Ministers and other senior officials of our Organization. I should, therefore, like to go on record of thanking each and every of them for this.

Before I conclude, I have, of course on the authority of the Conference, informed the press of the decision of Your Excellencies to raise the ceiling from 21.7 mb/d to 23 mb/d, with effect from 1 January 2003. In this connection, Their Excellencies reiterated Member Countries' assurances of the need to comply strictly with the new production level and also to ensure that price stability is maintained within the known price-band of \$22–28/b.

Finally, let me wish every success to my friend and colleague, His Excellency Abdullah bin Hamad Al Attiyah, Minister of Energy and Industry of Qatar and Head of its Delegation, who takes over as President of the OPEC Conference on 1 January 2003.

Thank you.

* * *

P.S.

After the speech was delivered, HE Dr Amer Mohammed Rasheed, Minister of Oil of Iraq, objected to the reference “... the political tensions in Iraq ...”, to which the President responded that the intention had been to address the “tensions in the Middle East”.

**122nd Extraordinary Meeting
of the OPEC Conference**

Vienna, Austria

12 December 2002

The 122nd (Extraordinary) Meeting of the Conference of the Organization of the Petroleum Exporting Countries (OPEC) convened in Vienna, Austria, on 12 December 2002, under the Chairmanship of its President, HE Dr Rilwanu Lukman, Presidential Adviser on Petroleum & Energy of Nigeria and Head of its Delegation.

The Conference voiced its support for the Government and people of Venezuela and its hope that an amicable and peaceful solution could be rapidly found to the present unfortunate civil unrest, in the interests of all concerned. In an expression of this support, Member Countries indicated their readiness, if and when necessary, to temporarily assist PDVSA in the supply of hydrocarbons to its domestic and international customers.

The Conference considered the report of the Ministerial Monitoring Sub-Committee, and thanked the Sub-Committee Members for their continuous endeavours on behalf of the Organization.

Having reviewed the oil market situation, including the overall demand/supply picture for the year 2003, as well as the quarterly seasonal variations, and having observed that the relative strength in current market prices is partially a reflection of the prevailing political situation, the Conference decided to bring OPEC-10 actual output down to a new production ceiling of 23 mb/d, with effect from 1 January 2003, in order to maintain the price band mechanism and to ensure that prices remain within these set limits. In this connection, the Conference reiterated its call on Member Countries to ensure strict compliance with the new production level.

With this in mind, the market will be continuously and carefully monitored and the Conference remains firm in its intention to take any measures, when deemed necessary, to maintain market stability.

The Conference repeated its standing call on other oil producers and exporters to continue to co-operate with OPEC for the continuing welfare of the market and the good of both producers and consumers.

The Conference confirmed the date of 11 March 2003 for its next (Ordinary) Meeting in Vienna, Austria.

The Conference expressed its appreciation to the Government of the Federal Republic of Austria and the authorities of the City of Vienna for their warm hospitality and the excellent arrangements made for the Meeting.

The Conference passed Resolutions that will be published on 12 January 2003, after ratification by Member Countries.

HIGHLIGHTS OF THE WORLD ECONOMY

Economic growth rates 2003

	%				
World	G-7	USA	Japan	Euro-zone	
3.4	2.1	2.7	0.8	1.8	

Industrialised countries

United States of America

US GDP growth in third quarter revised up to 4%, but fourth quarter still expected to be weak. Rate of unemployment jumped back to 6% in November, the highest rate in recent recession, indicating recovery remains jobless so far

Third-quarter GDP growth has been revised up to 4.0% from a preliminary figure of 3.1%, and labour productivity rose by a sharp 5.1% from 1.7% in the second quarter. Most recent indicators, however, confirm a marked slowdown in the fourth quarter. In particular, unemployment remains stubbornly high, as indicated by the rise in the unemployment rate to 6.0% in November from 5.7% in October, the highest level since April. Non-farm payrolls fell by 40,000, from a revised increase of 6,000 in October. The sector with the biggest drop was manufacturing, which cut 45,000 jobs. Gains were recorded in services and the government sector. The length of the working-week remained stagnant, while the average hourly wage rose by four cents to \$14.93. The steady growth in wages has been one of the factors supporting consumer spending in the recession. Weakness in the manufacturing sector has again been highlighted by the Institute of Supply Management's (ISM) November index of manufacturing business conditions, which, for the third month, remained below the 50 mark that divides expansion and contraction, with a reading of 49.2. Moreover, the ISM new orders index, a barometer of future production, fell in November to 49.9 from 50.9 in October. In contrast, stronger-than-expected growth in the services sector has been reported by the ISM's index for that sector, which came in at 57.4, compared with 53.1 in October, reflecting ten months of uninterrupted expansion. New construction rose by 0.3% in October, due to strong spending on single-family home-building. Moreover, retail sales grew by 0.4% to \$302.5 billion in November, after a revised 0.1% rise in October. Excluding volatile automobile sales, which fell by 0.1%, retail sales were up by 0.5%. November sales were driven by a 2.3% jump in furniture sales and a 1.2% rise in sales of building equipment, reflecting the boom in the housing sector over the last two years. Separately, the current account balance narrowed slightly to \$127 bn in the third quarter. Non-US citizens are reported to have purchased a near-record \$54.7 bn of US treasury securities, up from \$5.1 bn in the second quarter, while purchases of corporate and agency bonds fell to \$46.6 bn from \$104.4 bn in the second quarter.

Japan

Increasing signs of slowdown point to possible end to economic recovery in Japan

GDP in the third quarter has been revised up to 0.8% from the 0.7% initially estimated, and to 0.9% from 1% in the second quarter. However, there are increasing signs that the recovery may be ending. The index of leading indicators fell below 50 in October, for the first time in ten months, signalling a contraction. The index, which measures job offers, consumer confidence and other indicators of economic performance six months ahead, fell to 44.4% in October from 66.7% in September. The latest Bank of Japan's quarterly "Tankan" index, a closely watched gauge of confidence among large manufacturers, improved from the previous quarterly survey in September to -9 from -14, although this still showed that more companies were pessimistic than optimistic. However, the outlook for March fell to -10 for the first time in seven quarters, pointing to a marked slowdown in the fourth quarter and a possible contraction in the first quarter of 2003. Despite improved profits (up by 32%), particularly in the automobile industry, the survey showed that large manufacturers planned to cut capital spending by 10.7% in the fiscal year ending 31 March 2003. Meanwhile, seasonally adjusted household spending dropped by 2.3% in October from September, while business spending fell by 2.0% in the third quarter, the seventh straight decline. Exports have languished in recent months. Attempts to speed up a resolution to the banking sector's ¥52.4 trillion bad loans crisis is leading to more corporate bankruptcies and job losses. The Nikkei stock index has fallen by 19% this year and is heading for a third annual decline. The worsening economic prospects have prompted the government to spend ¥3 trn (\$24.5 bn) more this fiscal year on a modest supplementary budget, including job programmes, public works and other measures. However, government expenditure is limited by Japan's national debt, which is close to 140% of GDP. Weakening the yen is one of the few policy options left open to officials to boost the economy.

European Commission voices pessimism about growth prospects in euro-zone

Euro-zone

The European Commission's latest forecast indicates that the euro-zone's total GDP may even contract in the first quarter of next year by 0.2%, a marked deterioration from the predictions of 0.2–0.5% growth for the last quarter of 2002. At best, the EC sees growth of 0.2% in the first quarter. Confidence indicators also point to a deterioration in the short-term outlook. The EC's overall economic sentiment indicator for the euro area — which has been on a downward trend since May — fell further in November to 98.6, almost the same level as in November 2001. GDP registered 0.3% growth in the third quarter (0.8% year-on-year), compared with 0.3% in the second (0.6% y-o-y). Growth was driven entirely by household spending, which expanded by 0.5%, contributing 0.3 percentage points to the overall figure. Government expenditure rose by 0.3%, while inventories contracted by a similar percentage. However, investment spending stabilised, after six consecutive quarters of decline, indicating that the economy may have bottomed out, but there are no signs of vigorous growth ahead. Recent data also shows that the headline purchasing managers index for manufacturing in the region remained below the 50 break-even level in November. The rate of unemployment in the euro-zone rose to 8.4% in October, after remaining at 8.3% in the previous four months. Inflation slowed by 0.1 percentage point from October to 2.2% in November, marking the fourth straight month that inflation has remained above the 2% benchmark. In Germany, industrial output plunged by 2.1% in October, while the labour market situation continued to deteriorate in November, especially in East Germany, following four months of improvement, due, in part, to repair works after the summer floods. The seasonally adjusted unemployment rate in Germany climbed to 10.0%, from 9.9% in October.

FSU economic growth decelerating, despite acceleration in oil production and exports

Former Soviet Union

Our latest estimate of the FSU's 2002 economic growth rate stands at 4.5%, down from 6.3% in 2001. The downward trend is forecast to result in a yet-lower growth rate of 4.3% in 2003. Likewise, oil demand in 2002 is estimated at 3.83 mb/d, down from 3.93 mb/d in 2001. Oil production and exports, however, have both been growing steadily for several years and are forecast to continue their ascent through 2003. Within the FSU, Turkmenistan is set to keep its four-year record of highest growth, with an estimated 16% in 2002. Azerbaijan, however, is forecast to share the record with Turkmenistan in 2003, with 8% growth. Georgia is expected to experience the lowest GDP growth rate this year at 3.5%, and Belarus next year at 2.5%. In Russia, the economic growth rate, which has been higher than the world average in the last four years, is estimated to have decelerated to 4% in 2002, down from 5% in 2001. The forecast for 2003 is also 4%. This year, rising private consumption and fuel exports have been the main engines of growth, whereas investment has grown at just 2.5% annually during the first ten months, compared with 8.2% in the corresponding period of 2001. November inflation has been reported at 1.6% by the State Statistics Committee, bringing the 11-month aggregate rate to 13.3%. Some observers expect a year-end figure of around 14.5%.

Czech economy slows, Hungarian inflation on target and Polish money supply down

Eastern Europe

The Czech economy slowed in the third quarter, as massive flooding across the country disrupted production and reduced tourism. GDP rose by an annual 1.5% in the third quarter, down from a revised 1.9% in the second. In addition, the economy has been hurt by slowing growth in key export markets, including Germany, as well as by the strong koruna. The data could prompt calls for the Czech National Bank to ease interest rates further. Hungarian consumer prices were unchanged in November, as a sharp drop in fuel prices offset a rise in food and drink prices. Meanwhile, annual consumer price inflation slowed to 4.8% in November, from 4.9% in October. Vehicle fuel prices dropped by 4.5% on the month, reflecting several cuts in retail gasoline prices, and this resulted in an overall 1.9% drop in transport costs, although fuel prices were still 7.4% higher than a year earlier. Annual inflation now looks certain to remain within the Central Bank's target range, between 3.5% and 5.5%. According to preliminary figures from the National Bank of Poland, the country's total money supply, as measured by M3, came to 318.15 billion zlotys at the end of November, down by 1.0% from October's figure. Furthermore, net foreign assets in the banking system totalled \$32.95 bn, down by 2.8% on the month and 0.9% from the end of last year.

Moderate oil price assumptions in several OPEC Member Countries' 2003 government budgets

OPEC Member Countries

Nigeria unveiled, in November, a draft budget for 2003 based on an export crude price assumption of US \$21 per barrel, an improvement from the \$18/b used for the 2002 budget. In comparison, Algeria is assuming an oil price of \$19/b in 2003, versus \$22/b in 2002. Indonesia's working assumption is now unchanged at \$22/b. Venezuela shows a slight drop to \$17–18/b, from \$18.5/b for this year. In Saudi Arabia, the price for Saudi oil postulated in the 2002 budget has been estimated by one source at \$17/b, while about \$17.5/b appears to be implicitly assumed for 2003. Separately, the Indonesian economy may incur some damage from the current El Nino weather cycle, which has been felt most acutely in Australia so far. Indonesia, along with some other ASEAN economies, like the Philippines and Malaysia, appears to be vulnerable, since their economies are more dependent on agriculture, especially on rice production. In Indonesia, the share of agriculture in GDP is around 16%, and it employs 40% of the total labour force. In Algeria, the government's overriding economic priority remains to reduce unemployment, estimated at 27%, by stimulating investment-led economic growth.

Industrial production picks up in major developing countries

Developing countries

Industrial production is picking up in major developing countries. In China, industrial production growth accelerated in November to 14.5%, raising expectations of continued strong economic expansion in the fourth quarter of this year. After achieving 11–12% growth for most of the year, industrial output picked up speed in recent months, expanding by 13.8% in September and 14.2% in October. The fast growth was driven by the production of automobiles, electronics and telecommunications equipment. In India, industrial production posted 6.2% growth in October from a year ago, with brisk expansion in all sub-sectors. This led to higher imports (up by 34.3% from a year ago in October to \$3.8 bn), while exports grew by 9.9%. Consequently, the trade deficit widened significantly, to around \$5.5 bn in April–October. However, continued strong exports of software services and investment inflows compensated for the widening merchandise deficit. Brazil's 8.9% rise in industrial production in October was above expectations, reflecting export strength and Petrobras' ambitious investment programme. Moreover, confidence has rebounded, due to improved expectations for the future. The real's sharp depreciation may have induced some import-substitution. However, inflation remains a problem and could later lead to reduced growth, if the Central Bank raises interest rates. The general price index rose by 23.3% in November from a year ago, with the wholesale price index component up by 31.2%, while consumer prices increased by a smaller 10.8%.

Real oil price rose by 5.1% in November, as small dollar depreciation erodes part of gains in nominal oil price

Oil price, US dollar and inflation

The US dollar fell against all the currencies in the modified Geneva I + US dollar basket* in November. The yen appreciated by 1.79% to ¥121.64/\$ from ¥123.86/\$ in October, while the euro rose by 2.06% against the dollar, averaging \$1.0010 from \$0.9808 in October.

The dollar retreated in the first half of November, falling sharply against the euro and the yen, after the Federal Reserve Board resorted to a larger-than-expected 50 basis point drop in the federal funds rate, which now stands at 1.25%, the lowest level in 41 years. The magnitude of the easing, the first this year, raised fears that the US economy may be in worse shape than previously judged. For the first time since July, the euro moved above parity on 5 November and remained so for most of the month, weakening towards the end November to \$0.9927. The ECB left European rates unchanged in November, shifting market attention to the widening yield differential between short-term rates in the USA and Europe. Meanwhile, the Japanese authorities made repeated verbal interventions to arrest the unwelcome recent yen appreciation. The dollar bounced back in the second half of November, amid a rally in US equities and generally supportive US economic data. In contrast, EU data was mainly bearish — low GDP growth in Germany during the third quarter (0.3%) and even slower growth in France (0.2%). The yen, in turn, was pressured by the first downgrade in 11 months of the Japanese economic outlook, by the Bank of Japan.

In November, the OPEC Reference Basket fell by more than \$3/b, or 11.07%, to \$24.29/b from \$27.32/b in October. In real terms (base July 1990=100), after accounting for inflation and currency fluctuations, the Basket price fell by 12.45% to \$20.79/b from \$23.75/b, as the dollar depreciation added to the losses in nominal oil prices. The dollar fell by 1.42%, 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 0.13% in November.

* 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 OPEC Reference Basket plummeted in November, losing more than \$3/b, or 11%, with respect to October average

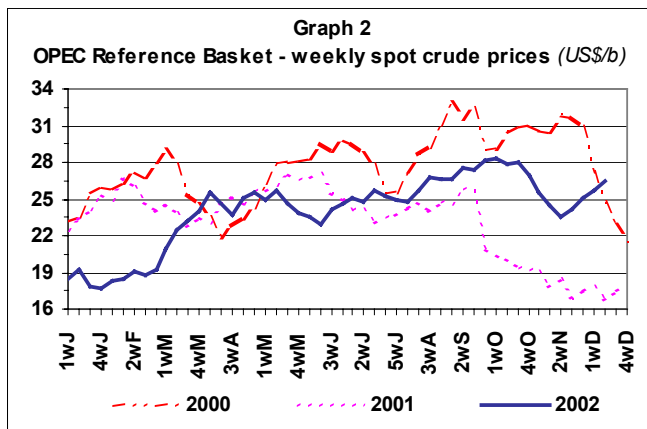
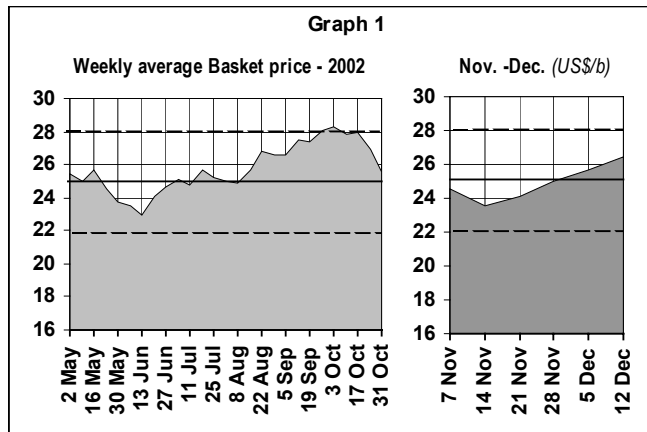
Geopolitical factors set the pace in first half of month; however, markets turned to fundamentals for second half

The average price of the OPEC Reference Basket plummeted in November, wiping almost 11 per cent off its October average, or \$3.03/b. But not all the news was bad. The sharp fall experienced during the first half of the month, which added slightly less than eight per cent, was regained during the second half. Also, on the positive side is the fact that, during November, for the first time in 2002, the year-to-date average price passed the 2001 level, by \$0.35/b, to reach \$23.94/b. It is now almost certain that the 2002 yearly average will exceed that of 2001, when crude oil prices collapsed in the fourth quarter, reaching a low of \$17.53/b in December.

On a weekly basis, the Basket started the month on a weak note, losing \$1.02/b, or four per cent. This was followed by another decline during the second week, when it fell by \$0.96/b to average \$23.54/b, a level not seen since the beginning of June. The Basket underwent a correction, gaining \$0.57/b in the third week, and then consolidated the recovery during the last week, adding \$0.92/b, or 3.8%, to close at \$25.03/b (just above the mean level of OPEC's price band). The Basket continued its upward path in the first week of December, as it rose by \$0.69/b, to average \$25.72/b. In the second week of December, it gained a further \$0.77/b, to close at \$26.48/b. This should be attributed mainly to geopolitical tensions in the Middle East and supply interruptions in the Venezuelan oil industry. Naturally, all the Basket's components suffered significant losses, with Nigeria's light-sweet Bonny Light leading the fall, while Venezuela's sour grade, Tia Juana Light, posted the smallest decline.

Crude oil markets retreated early in the month, as the UN Security Council's approval of a resolution on the Iraqi situation dissipated the imminence of a military operation in the Middle East. OPEC-10's reported weakening level of compliance, which was estimated at around 44%, with respect to the output level of October 2000, was another factor contributing to bringing prices down (OPEC-10 = OPEC – Iraq). Overwhelmingly, sour crude supplies particularly hit these markets.

Crude oil markets remained in retreating mode in the second week, as Iraq accepted unconditionally, on 13 November, to comply with the UN 1441 resolution. Atlantic basin benchmark crudes dipped by another \$1/b, while OPEC's Basket approached the lower end of the price band, as the so-called "political/war premium" partly vanished. Tight US mid-continent stock levels



and problems with the trans-Alaskan pipeline capped the fall in WTI (West Texas Intermediate), opening the arbitrage window for Brent-related grades.

As for the second part of the month, markets rebounded, driven by market fundamentals and leaving geopolitical factors on the back-burner. Crude oil prices recovered most of the ground lost in the first half of the month, on signs that OPEC would tighten up on over-production, solid Asia Pacific winter demand and colder weather in North America and Northern Asia. The belief that OPEC could rein in output, at the Meeting of its Conference planned for 12 December, supported the Middle Eastern grades, Oman and Dubai. Additionally, firm demand by South Korea and especially Japan, after the closure of several nuclear reactors at Tepco (Tokyo Electric Power Company), provided further price support. End-users in both South Korea and Japan rushed to buy distillate-rich West African grades, to meet winter demand for kerosene, in an attempt to diversify supplies from the Middle East. The Asia-Pacific region absorbed around 10 mb of West African crudes in the last week of November. With below-average temperatures, which included being well down on last year's levels, it became clear that the weather had also become an important market-driver, as distillate inventories remained relatively low.

Nation-wide crude oil inventories lower by 22 mb at end of November; crude oil stocks remained well below last five-year average in US Midwest

US and European markets

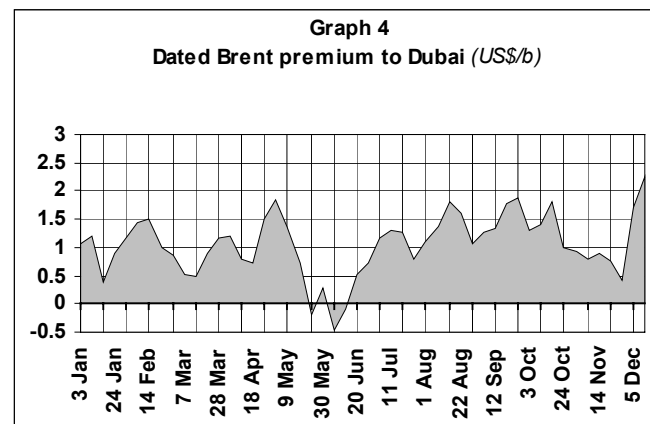
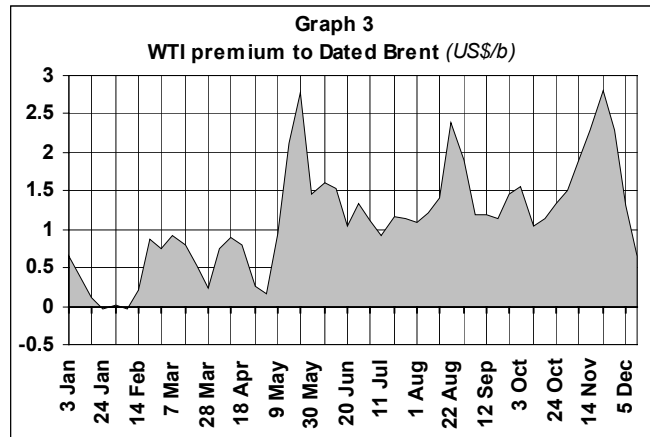
Refining margins in both the USA and Europe remained profitable during the first half of the month, as product prices did not match the losses in crude oil prices. At 287.3 mb, crude oil stocks in the USA, at the end of the month, were almost 22 mb lower on a year-to-year basis, yet, in the US Midwest, they remained 23% lower than last year. Crude oil imports, which recovered steadily after the weather-related disruptions of September and October, met with a sustained increase in refinery runs. Favourable refining margins for light sweet over sour grades gave a boost to North Sea light sweet crudes towards the end of the month, promoting healthy demand that cleared most December cargoes. Arbitrage movements of North Sea and West African crudes to the US East and US Gulf Coasts were limited by rising freight costs, after the disaster of the

tanker "Prestige"; this was in spite of the widening of the WTI/Brent differential. European refiners took advantage of the arbitrage opportunities, supported by late summer gasoline demand, with as much as 14 mb of European gasoline being shipped to the west. Since the end of May, apparent demand for gasoline has been running at much higher levels than in the previous two years; nonetheless, the spike in demand has been met by rising imports and a hike in gasoline production; likewise, colder weather has prompted a rise in demand for distillates, that has been partially met by a ramp-up in imports and production.

Closing of Brent/Dubai spread and healthy demand prompted flow of West African crudes to Far East

Far East market

The Asia-Pacific's regional benchmark crudes, Dubai and Oman, rose in November, after



markets had become aware of the fact that OPEC was serious in its attempts to rein in output, narrowing the spread with respect to Brent. The favourable Brent/Dubai differential, combined with strong regional end-user demand, induced a strong movement of eastbound West African crudes. In an attempt to diversify and hedge against the risk of a supply disruption from its natural Middle East suppliers, in the case of hostilities in that region, refiners geared their buying efforts towards the West African market, absorbing 10 mb of crude oil in the last week of November. The problems at Tepco had a sizeable effect on oil demand. Crude purchases by utilities for direct burning shot up by an impressive 160% in October, while fuel oil demand experienced an increase of 15%. All the indications suggest that the Tepco situation will get worse before it gets better.

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

	<u>Oct.02</u>	<u>Nov.02</u>	Year-to-date average	
			<u>2001</u>	<u>2002</u>
Reference Basket	27.32	24.29	23.59	23.94
Arabian Light	26.95	23.87	23.48	24.08
Dubai	26.41	23.28	23.27	23.63
Bonny Light	27.90	24.07	24.98	24.72
Saharan Blend	27.78	24.19	25.21	24.45
Minas	29.69	28.11	24.65	24.85
Tia Juana Light	25.40	22.92	20.81	22.14
Isthmus	27.08	23.63	22.67	23.73
Other crudes				
Brent	27.69	23.99	24.85	24.64
WTI	29.00	26.31	26.54	25.77
Differentials				
WTI/Brent	1.31	2.32	1.59	1.13
Brent/Dubai	1.28	0.71	1.68	1.01

PRODUCT MARKETS AND REFINERY OPERATIONS

Prices of light and heavy ends of barrel lost enormously, while gasoil outperformed underlying crude counterpart, in US Gulf in November; refining margins slid, but were still good; hence US refinery utilization rate rose to 92.0%

Product prices decreased in Rotterdam in November, led by gasoline; enhanced refining margins led to increase in refinery utilization rate in Eur-16 countries to 85.6%

A significant fall in crude oil prices was the main reason for product price losses in November. The magnitude of the loss for each product, however, was determined by regional factors. Demand for middle distillates in the Atlantic basin was strong, like that for fuel oil in Asian markets, thereby supporting refining margins in all three centres and paving the way for a considerable rise in refinery throughput in the USA and Europe.

US Gulf market

US product prices fell across the barrel in November, albeit with different magnitudes, against the price of their underlying crude, WTI, which dropped by 8% in the same month. Gasoline, for instance, plunged by close to 16%, hampered by bearish fundamentals. Gasoline supply was enhanced, as a result of a spate of refinery restarts, after completion of the autumn turnarounds, and rising import flows, while demand, though it still surpassed slightly the level of the corresponding period in the previous year, retreated below the previous month's figure. In contrast, distillate demand was exceptionally strong, close to 4 mb/d, amid very cold weather in the North-East and Mid-West regions of the USA, representing increases of 3.7% and 6.3% above last month's and the previous year's level, respectively; it was even 4% higher than in November 2000, which had been classified as the coldest November in the last century, according to the moving weekly average preliminary data published by the US Department of Energy's Energy Information Administration (EIA). This surge in distillate demand limited the decline in the gasoil price to only 7%, thereby outperforming the fall in WTI's price. The average price of high sulphur fuel oil (HSFO) plummeted by more than 19%, tracking the significant crude price losses and exacerbated by a hefty dwindling in arbitrage movements to the Far East market, due to soaring freight rates.

After their peak gains for the year in the preceding month, refining margins slid in November in the US Gulf Coast. Yet, average WTI margins were around \$1/b, as plunging gasoline prices were moderately offset by falling crude oil prices.

Induced by the surge in distillate demand and continued firm gasoline delivery, US refinery throughput increased by a considerable 0.70 mb to 15.25 mb/d in November. Therefore, the US refinery utilization rate also rose, to 92.0%, which was 5.2% above last month's level and barely less than 1% higher than the previous year's runs.

Rotterdam market

Product prices fell further in November, reflecting the relative weakness of Brent against other marker crudes, coupled with the level of activity in arbitrage trading, in the wake of continued weak European demand. Compared with the underlying crude price, which fell by 12%, gasoil fared the best, as it dropped by more than 8%. HSFO fell the most, by 18%, while gasoline declined by 13%, although active transatlantic cargoes helped to reduce the European gasoline surplus. Prevailing movements of Russian distillate tankers to the US East Coast, instead of their typical European markets, helped mitigate the lack of German demand, in the light of adequate heating oil end-users there. HSFO was affected by abundant Russian and regional supply, following increased refinery throughput, together with scarce arbitrage bound for the Far East market, following the surge in freight costs.

A combination of considerable falls in the Brent price and a moderate decrease in distillate prices pushed refining margins further into positive territory.

Due to improved refining margins, refinery throughput in Eur-16 countries rebounded to 11.69 mb/d, which was 0.61 mb/d higher than the preceding month's figure. The corresponding refinery utilization rate, nonetheless, was 85.6%, which was 6% lower than last year's level.

Despite its decline, fuel oil price mitigated sizeable crude oil price falls in Singapore in November, thereby boosting refining margins

Singapore market

Gasoline and fuel oil prices lost around 6% in November from the previous month's levels, thereby outperforming both the marker crude Dubai and gasoil values, as they fell by 11% in the same period. Gasoline fundamentals were assisted by two subsequent Indonesian purchases during the month, totalling around 1.2 mb, together with good demand from Australia during the national summer driving season and dwindling exports from China. Gasoil was less well-supplied, as most Asian refiners favoured kerosene production for heating purposes, but its demand remained stagnant, so that gasoil price losses correlated very well with the underlying crude counterpart. Compared with the preceding month, the HSFO market parameters changed significantly during November; China, the largest regional buyer, renewed its heavy purchases, on top of other requirements from Japan and South Korea, while there was a slowdown in foreign cargo arrivals, as they were hampered by soaring freight rates, thus tightening the fuel oil market, and therefore mitigating the HSFO price declines.

The relative price strength of the light and heavy ends of the barrel, compared with Dubai's value, together with the losses for gasoil, which were almost equal to its underlying crude, provided support for refining margins, that exceeded \$1/b for Dubai, which registered its highest level so far this year.

In Japan, refinery throughput declined by 0.1 mb to 3.82 mb/d in October, which was 2.3% below the preceding month's level, but 3.3% above that of the previous year.

Table 2
Refined product prices
US \$/b

		<u>Sept.02</u>	<u>Oct. 02</u>	<u>Nov. 02</u>	<u>Change</u> <u>Nov./Oct.</u>
US Gulf					
Regular gasoline	(unleaded)	33.03	34.82	29.32	-5.49
Gasoil	(0.2%S)	31.98	31.90	29.65	-2.25
Fuel oil	(3.0%S)	24.81	23.19	18.76	-4.43
Rotterdam					
Premium gasoline	(unleaded)	32.63	32.16	27.88	-4.28
Gasoil	(0.2%S)	31.54	31.23	28.52	-2.71
Fuel oil	(3.5%S)	24.02	22.44	18.40	-4.04
Singapore					
Premium gasoline	(unleaded)	30.49	29.62	27.80	-1.83
Gasoil	(0.5%S)	31.43	33.10	29.37	-3.72
Fuel oil	(380 cst)	25.34	23.46	21.83	-1.63

Table 3
Refinery operations in selected OECD countries

	Refinery throughput			Refinery utilization*		
	mb/d			%		
	<u>Sept.02</u>	<u>Oct.02</u>	<u>Nov.02</u>	<u>Sept.02</u>	<u>Oct.02</u>	<u>Nov.02</u>
USA	15.39	14.38	15.25	92.9	86.8	92.0
France	1.65 ^R	1.53	1.57	86.8 ^R	80.7	82.8
Germany	2.18 ^R	2.02	2.19	96.8 ^R	89.6	97.0
Italy	1.79 ^R	1.60 ^R	1.70	78.2 ^R	70.1 ^R	74.5
UK	1.64 ^R	1.44 ^R	1.52	92.0 ^R	80.5	85.3
Eur-16	11.80 ^R	11.08 ^R	11.69	86.4 ^R	81.2 ^R	85.6
Japan	3.92	3.82	n.a.	82.0	79.7	n.a.

R Revised since last issue.

n.a. Not available.

* Refinery capacities used are in barrels per calendar day.

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

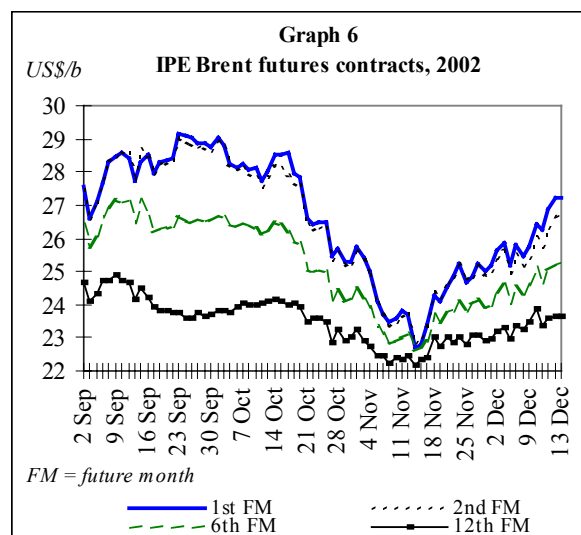
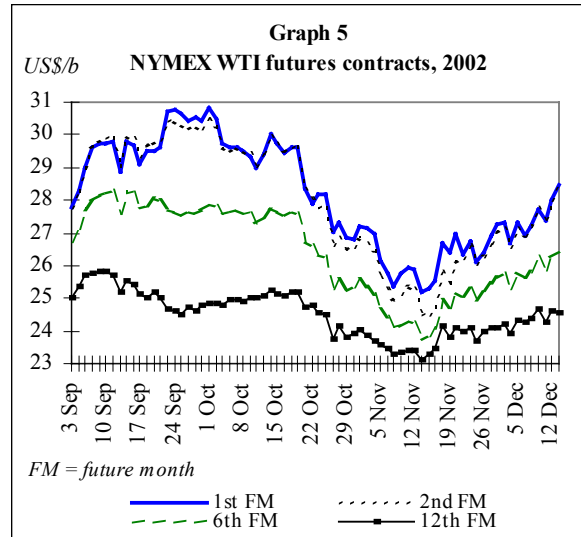
THE OIL FUTURES MARKET

Speculators became more pessimistic and more inclined to count on weak market in November

Having almost reached the \$31/b mark at the beginning of October, the front-month WTI sweet crude contract dived after that, falling to as low as \$25.16/b on 13 November; the contract then recovered around \$2/b, to finish the month at about \$27/b. A bullish market, that had reached its climax in the first week of October, turned bearish for the remainder of the month, as the risk of an imminent confrontation in the Middle East started to dissipate. Hedge funds and other large speculators continued to dispose of their long positions in November, as it became evident that several conditions and deadlines should be met, with regard to the UN resolution, before further consideration would be given to the UN adopting tougher measures.

Speculators seemed to become much less inclined to count on falling crude oil prices. Figures from the US Commodity Futures Trading Commission clearly showed this. According to the weekly Commitment of Traders Report, non-commercials, having had this year's most bearish position since 12 February in the last week of October, changed only slightly their perceptions in November. For the first week of November, they increased their long positions by 2,696, while their short positions rose by just 1,442, which resulted in a relatively small reduction in the net short positions to 18,654 lots. The ratio of long to short positions rose slightly for the second and third weeks of November, standing at 1:1.53 and 1:1.55, respectively (a more pessimistic perception of a rising market).

But this trend reversed itself towards the end of the month, when non-commercials decreased their shorts by almost 13,000 lots, while longs fell by just 4,554. The Commitment of Traders Report showed a further reduction in the number of shorts and an increase in longs for the week ending 3 December, as speculators became much less ready to count on falling crude prices. Very low levels of heating oil in the USA, combined with strong demand and low temperatures, influenced speculators' perceptions, and these were enhanced by the fact that OPEC would hold its next Meeting of the Conference on 12 December in Vienna.



THE TANKER MARKET

OPEC area spot-chartering remained at 11.89 mb/d in November

OPEC area spot-chartering in November stabilized at October's level of 11.89 mb/d, despite a production cut, as charterers were active during the first three weeks of the month, fixing ahead for December loadings. Nonetheless, compared with the same period last year, the current level of OPEC spot fixtures was more than a significant 1.07 mb/d, or about 10%, higher. Meanwhile, non-OPEC spot-chartering declined in November by 0.76 mb/d to a monthly average of 10.80 mb/d, which meant a loss of market share of 1.70 percentage points to 47.59%. Accordingly, global spot fixtures declined by a marginal 0.75 mb/d to a monthly average of 22.69 mb/d, although they registered a rise of 4.31 mb/d, compared with the same month last year. OPEC's share of global spot-chartering, therefore, improved by 1.70 percentage points to 52.41%, but this level was still 6.48 percentage points below that of the previous year. The current level of OPEC-chartering did not affect the distribution of spot-fixtures from the Middle East on the eastbound and westbound long-haul routes, since the reduction of 0.24 mb/d to 1.90 mb/d, which moved to western markets, was totally offset by an increment of the same amount to 4.22 mb/d fixed for refineries in Asia. Therefore, the Middle East eastbound share of total OPEC fixtures rose by 2.03 percentage points to 35.49%, while the westbound share fell by 1.99 percentage points to 15.98%. According to preliminary estimates, sailings from the OPEC area in November showed a slight decline, on the back of October's slowdown in the chartering level, decreasing by 0.27 mb/d to a monthly average of 23.08 mb/d. Sailings from the Middle East also edged lower, by 0.20 mb/d, to a monthly average of 15.30 mb/d, about 66% of total OPEC's sailings. Preliminary estimates of long-haul arrivals in the Atlantic basin displayed different trends in November, rising in the US Gulf Coast, the US East Coast and the Caribbean by 0.61 mb/d 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 by 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, compared with the level observed at the end of the previous month.

Crude oil freight rates continued to rise in November

Spot freight rates for crude oil tankers along the major trading routes remained strong in November and rallied further, on a couple of additional supporting factors. First, on concern over a possible supply disruption, charterers intensified their fixture activities, not only for November loading dates, but also for the next month's cargoes, as nominated. Secondly, modern tonnage was in short supply, on the back of tighter regulations and safety requirements, especially after the "Prestige" disaster near the Spanish coast on 13 November. As a result, the monthly average freight rates edged higher from every loading area. In the Middle East, the main market for VLCC tankers, freight rates for VLCC voyages on the eastbound and westbound long-haul routes increased steadily throughout the month, registering additional monthly increments of 11 points to WS86 and four points to WS64, respectively. Suezmax freight rates, on the routes across the Atlantic, continued their rising trend, assisted by extra shipments chartered to US destinations, as the benchmark crude price differential of WTI/Brent widened throughout most of the month, thereby opening the arbitrage window for transatlantic cargo movements. Hence, freight rates for one million barrels of crude oil voyages from West Africa and the Rotterdam area to US destinations rose by a further 22 points to WS113 and by 24 points to WS112, respectively. Aframax freight rates for tankers operating on short-haul routes remained firm on sustained enquiries, with continuing emphasis on modern tonnage, particularly after the "Prestige" incident. The rates along the Caribbean/US East Coast route surged by a considerable 36 points to WS171, as tonnage availability became scarcer. Furthermore, strong demand from the Mediterranean and Black Sea lent support to freight rates, which rose by 27 points to WS153 on the route within the Mediterranean and by 18 points to WS135 for voyages from the Mediterranean to North-West Europe. Meanwhile, freight rates for 70-100,000 dwt tankers, on the route from Indonesia to the US West Coast, experienced the highest increase, surging by 41 points to WS147.

Clean tanker freight rates improved on all trading routes in November

Clean tanker freight rates firmed across the major trading routes in November. The rates for 30-50,000 dwt tankers trading from the Middle East to the Far East showed signs of recovery, due to increased imports of winter fuels by the Asian market; therefore, they rose by a significant 21 points to WS188. Additionally, there was more chartering activity in Singapore, drying-up the regional prompt positions and causing the rates to improve by a

remarkable 39 points to WS221 for the shorter trips from Singapore to Japan. The Caribbean market continued its upward trend, and freight rates for shipments to the US Gulf Coast edged 16 points higher to WS168. In the Mediterranean market, as charterers increasingly insisted on modern tonnage, freight rates for jet kerosene and gasoil, as well as naphtha, cargoes rose by 21 points to WS174 on the route across the Mediterranean, while they moved by a moderate five points higher along the Mediterranean/North-West Europe route. Transatlantic trade remained healthy, and freight rates from North-West Europe to US destinations gained another 21 points to register a monthly average of WS181.

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

	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Change Nov./Oct.</u>
Chartering				
All areas	25.09	23.44	22.69	-0.75
OPEC	14.09	11.89	11.89	0.00
Middle East/east	4.92	3.98	4.22	+0.24
Middle East/west	2.09	2.14	1.90	-0.24
Sailings				
OPEC	22.50	23.35	23.08	-0.27
Middle East	14.80	15.50	15.30	-0.20
Arrivals				
US Gulf Coast, US East Coast, Caribbean	9.10	8.89	9.50	+0.61
North-West Europe	5.60	5.99	5.55	-0.44
Euromed	5.10	4.58	4.80	+0.22

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

Table 5
Spot tanker freight rates
Worldscale

	<u>Size</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Change Nov./Oct.</u>
	<i>1,000 DWT</i>				
Crude					
Middle East/east	200-300	38	75	86	+11
Middle East/west	200-300	36	60	64	+4
West Africa/US Gulf	100-160	70	91	113	+22
North-West Europe/US East Coast	100-160	67	88	112	+24
Indonesia/US West Coast	70-100	94	106	147	+41
Caribbean/US East Coast	40-70	104	135	171	+36
Mediterranean/Mediterranean	40-70	112	126	153	+27
Mediterranean/North-West Europe	70-100	90	117	135	+18
Products					
Middle East/east	30-50	184	167	188	+21
Singapore/east	25-30	218	182	221	+39
Caribbean/US Gulf Coast	25-30	147	152	168	+16
North-West Europe/US East Coast	25-30	148	160	181	+21
Mediterranean/Mediterranean	25-30	152	153	174	+21
Mediterranean/North-West Europe	25-30	172	179	184	+5

Source: Galbraith Tanker Market Report.

WORLD OIL DEMAND

World demand estimate for 2001 unchanged at 76.32 mb/d

World demand for 2002 revised down by 0.04 mb/d to 76.43 mb/d

Historical data

No change has been made to the historical data since the last *MOMR*, with world oil demand for 2001 assessed at 76.32 mb/d.

Projections for 2002

World

For the present year, the projected volume of world oil demand has been revised down slightly to an average of 76.43 mb/d, compared with the previously projected 76.47 mb/d; this is due to downward revisions to the second- and third-quarter data, although these have been partly offset by an upward revision to the fourth-quarter estimate. The 2002 world demand increment is now estimated at 0.11 mb/d, or 0.14%, marginally lower than the 0.15 mb/d, or 0.20%, presented in the last *MOMR*. Quarterly and regional details are given in Table 6.

On a regional basis, demand is projected to decrease by 0.15 mb/d in the OECD, following a less significant decline of 0.07 mb/d in 2001. This is in contrast with a significant 0.23 mb/d, or 2.42%, expected rise in consumption in the "other regions", which is well above the 0.15 mb/d growth in 2001. In developing countries, following much higher growth of 0.27 mb/d in 2001, only a moderate 0.03 mb/d, or 0.18%, rise in consumption is envisaged in 2002.

On a quarterly basis, compared with the year-earlier figure, world demand declined by 0.42 mb/d, or 0.55%, to average 76.67 mb/d in January–March. Second-quarter consumption is estimated to have dropped by a further 0.58 mb/d, or 0.78%, to 74.61 mb/d. However, demand is projected to rise at a significantly accelerating pace during the third and fourth quarters. The anticipated growth rates are 0.27 mb/d, or 0.35%, and 1.15 mb/d, or 1.50%, respectively. Detailed quarterly comparisons for all quarters are presented in Tables 7 and 8.

Table 6
World oil demand in 2002
mb/d

	<u>2001</u>	<u>1Q02</u>	<u>2Q02</u>	<u>3Q02</u>	<u>4Q02</u>	<u>2002</u>	Change 2002/01	
							<u>Volume</u>	<u>%</u>
North America	23.85	23.70	23.79	24.16	24.02	23.92	0.06	0.27
Western Europe	15.27	15.17	14.64	15.18	15.77	15.19	-0.08	-0.52
OECD Pacific	8.55	9.08	7.66	8.07	8.85	8.42	-0.14	-1.59
Total OECD	47.68	47.95	46.09	47.41	48.65	47.53	-0.15	-0.32
Other Asia	7.30	7.40	7.36	7.26	7.57	7.40	0.10	1.31
Latin America	4.73	4.55	4.62	4.68	4.63	4.62	-0.11	-2.40
Middle East	4.83	4.87	4.77	4.87	4.96	4.87	0.03	0.68
Africa	2.44	2.49	2.45	2.44	2.45	2.46	0.02	0.79
Total DCs	19.31	19.30	19.20	19.24	19.61	19.34	0.03	0.18
FSU	3.93	3.92	3.49	3.65	4.27	3.83	-0.10	-2.56
Other Europe	0.72	0.77	0.73	0.73	0.74	0.74	0.02	3.30
China	4.69	4.74	5.10	5.26	4.85	4.99	0.30	6.47
Total "other regions"	9.34	9.43	9.32	9.64	9.86	9.56	0.23	2.42
Total world	76.32	76.67	74.61	76.29	78.13	76.43	0.11	0.14
Previous estimate	76.32	76.67	74.67	76.47	78.06	76.47	0.15	0.20
Revision	0.00	0.00	-0.05	-0.18	0.06	-0.04	-0.04	-0.06

Totals may not add, due to independent rounding.

OECD

Based on estimates for the first quarter, the OECD was solely responsible for the fall in world consumption, with a substantial 0.87 mb/d decline, which was partly offset by 0.15 mb/d and 0.30 mb/d rises in demand in developing countries and “other regions”. 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% in Western Europe.

Data on consumption in the second quarter also points to a drop, of 0.36 mb/d, or 0.77%, in the OECD, 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 was partly offset by a slight rise in demand, of 0.09 mb/d, in North America.

Preliminary data for the third quarter points to the continuation of the downward trend seen in the first and second quarters. Total OECD consumption is estimated to have dropped moderately, by 0.07 mb/d, or 0.14%. Within the OECD, a 0.23 mb/d rise in North American consumption has been more than offset by a larger decline in Western Europe. OECD Pacific consumption rose moderately, by 0.03 mb/d.

Data on OECD consumption during January-September indicates a 0.45 mb/d, or 0.95%, decline, compared with the corresponding period in 2001. All three regions within the OECD shared the experience, with the biggest fall occurring in the OECD Pacific — 0.21 mb/d, or 2.42%. Western Europe and North America followed, with 0.17 mb/d, or 1.14%, and 0.07 mb/d, or 0.31%, respectively. Except for naphtha and gasoline, all petroleum products, and even refinery own-use, witnessed consumption declines in the OECD Pacific.

On a product basis, during the period January-September, residual fuel oil had the biggest fall, in terms of both volume (0.44 mb/d) and percentage (13.82%), mostly due to the shift-back to natural gas consumption, as the price of the latter moderated. Aviation fuel consumption also continued to see significant weakness (-6.22%), compared with the same period last year, as subdued air travel persisted. LPG and gasoline consumption, however, enjoyed positive growth, mostly due to substantial rises, of 6.19% and 2.75% respectively, in consumption in North America, helped by relatively low natural gas prices and robust growth in automobile use.

DCs

Demand in developing countries is expected to grow by a marginal 0.03 mb/d, or 0.18%, to 19.34 mb/d. The demand outlook in Latin America continues to be significantly weaker — declining by 0.11 mb/d or 2.40% — than in the previous year, due to the persistent economic and financial problems. “Other Asia” is expected to enjoy the highest volume growth, of 0.10 mb/d, 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 rise by a remarkable 0.23 mb/d, or 2.42%, almost entirely due to a promising demand outlook for China. In the FSU, all four quarters are anticipated to demonstrate declines in consumption, compared with the corresponding periods in 2001; the overall yearly average is expected to drop by 0.10 mb/d, or 2.56%. In contrast, Chinese demand is anticipated to undergo healthy growth in every quarter of the current year, leading to an average annual growth rate of 0.30 mb/d, or 6.47%. This remarkable estimated growth rate is nearly three times the expected average world demand growth.

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

	<u>1Q01</u>	<u>1Q02</u>	Change 2002/01		<u>2Q01</u>	<u>2Q02</u>	Change 2002/01	
			<u>Volume</u>	<u>%</u>			<u>Volume</u>	<u>%</u>
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	7.32	7.40	0.08	1.03	7.30	7.36	0.06	0.85
Latin America	4.68	4.55	-0.13	-2.85	4.78	4.62	-0.16	-3.31
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	19.16	19.30	0.15	0.76	19.25	19.20	-0.05	-0.27
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	77.10	76.67	-0.42	-0.55	75.20	74.61	-0.58	-0.78

Totals may not add, due to independent rounding.

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

	<u>3Q01</u>	<u>3Q02</u>	Change 2002/01		<u>4Q01</u>	<u>4Q02</u>	Change 2002/01	
			<u>Volume</u>	<u>%</u>			<u>Volume</u>	<u>%</u>
North America	23.93	24.16	0.23	0.95	23.61	24.02	0.41	1.74
Western Europe	15.50	15.18	-0.32	-2.07	15.58	15.77	0.19	1.20
OECD Pacific	8.04	8.07	0.03	0.35	8.79	8.85	0.07	0.76
Total OECD	47.48	47.41	-0.07	-0.14	47.98	48.65	0.67	1.39
Other Asia	7.21	7.26	0.05	0.69	7.38	7.57	0.19	2.62
Latin America	4.83	4.68	-0.15	-3.12	4.64	4.63	-0.01	-0.27
Middle East	4.99	4.87	-0.13	-2.54	4.91	4.96	0.06	1.19
Africa	2.41	2.44	0.04	1.47	2.45	2.45	0.00	-0.06
Total DCs	19.43	19.24	-0.19	-0.99	19.38	19.61	0.24	1.23
FSU	3.72	3.65	-0.07	-1.91	4.31	4.27	-0.04	-0.91
Other Europe	0.67	0.73	0.06	9.46	0.72	0.74	0.02	2.37
China	4.72	5.26	0.54	11.33	4.58	4.85	0.27	5.93
Total "other regions"	9.11	9.64	0.53	5.78	9.62	9.86	0.25	2.59
Total world	76.02	76.29	0.27	0.35	76.97	78.13	1.15	1.50

Totals may not add, due to independent rounding.

Forecast for 2003

**World demand for 2003
revised down by
0.08 mb/d to 77.09 mb/d**

To reflect a somewhat slower pace of expected economic recovery and a slightly lower rate of anticipated GDP growth, our demand forecast for the year 2003 has been adjusted down to 77.09 mb/d, versus 77.17 mb/d reported in the previous *MOMR*. The increment has also been revised down slightly to 0.66 mb/d, equivalent to 0.86%, from the previous 0.70 mb/d, equivalent to 0.92%. Further adjustments are expected, as more information becomes available on major factors, such as the economic growth outlook, prices and the weather. The forecasts for regional and quarterly breakdowns of demand are given in Table 9.

All three major consuming groups are forecast to experience stronger demand, with similar growth in volume: 0.21 mb/d for the OECD, 0.22 mb/d for the DCs and 0.23 mb/d for the "other regions".

Table 9
World oil demand forecast for 2003
mb/d

	<u>2002</u>	<u>1Q03</u>	<u>2Q03</u>	<u>3Q03</u>	<u>4Q03</u>	<u>2003</u>	Change 2003/02	
							Volume	%
North America	23.92	23.87	23.86	24.16	24.28	24.04	0.13	0.53
Western Europe	15.19	15.26	14.71	15.12	15.83	15.23	0.04	0.26
OECD Pacific	8.42	9.16	7.59	8.05	9.04	8.46	0.04	0.52
Total OECD	47.53	48.29	46.16	47.33	49.16	47.74	0.21	0.44
Other Asia	7.40	7.51	7.50	7.33	7.62	7.49	0.09	1.23
Latin America	4.62	4.52	4.57	4.69	4.68	4.62	0.00	-0.04
Middle East	4.87	4.97	4.96	4.95	5.03	4.98	0.11	2.28
Africa	2.46	2.50	2.50	2.46	2.47	2.48	0.02	1.00
Total DCs	19.34	19.51	19.52	19.43	19.79	19.56	0.22	1.16
FSU	3.83	4.00	3.74	3.70	4.21	3.91	0.08	2.10
Other Europe	0.74	0.76	0.73	0.75	0.75	0.75	0.01	0.83
China	4.99	4.89	5.24	5.40	4.97	5.13	0.14	2.79
Total "other regions"	9.56	9.65	9.72	9.85	9.94	9.79	0.23	2.36
Total world	76.43	77.46	75.40	76.61	78.89	77.09	0.66	0.86
Previous estimate	76.47	77.55	75.29	76.83	79.01	77.17	0.70	0.92
Revision	-0.04	-0.09	0.10	-0.22	-0.13	-0.08	-0.04	-0.05

Totals may not add, due to independent rounding.

All four quarters are forecast to register gains in consumption over the corresponding periods of 2002. The first and the second quarters will witness the highest growth, of 0.78 mb/d each. This progress will moderate in the third quarter, when a lower 0.32 mb/d rise is foreseen. The fourth quarter is expected to be marked by the return of a higher growth rate of 0.76 mb/d. Further details are shown in Tables 10 and 11.

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

	<u>1Q02</u>	<u>1Q03</u>	Change 2003/02		<u>2Q02</u>	<u>2Q03</u>	Change 2003/02	
			Volume	%			Volume	%
North America	23.70	23.87	0.17	0.72	23.79	23.86	0.08	0.32
Western Europe	15.17	15.26	0.09	0.62	14.64	14.71	0.06	0.44
OECD Pacific	9.08	9.16	0.08	0.90	7.66	7.59	-0.08	-1.00
Total OECD	47.95	48.29	0.35	0.72	46.09	46.16	0.06	0.14
Other Asia	7.40	7.51	0.11	1.49	7.36	7.50	0.13	1.82
Latin America	4.55	4.52	-0.03	-0.63	4.62	4.57	-0.05	-1.10
Middle East	4.87	4.97	0.11	2.24	4.77	4.96	0.19	4.04
Africa	2.49	2.50	0.02	0.65	2.45	2.50	0.05	1.98
Total DCs	19.30	19.51	0.21	1.07	19.20	19.52	0.32	1.69
FSU	3.92	4.00	0.09	2.19	3.49	3.74	0.25	7.29
Other Europe	0.77	0.76	-0.01	-1.34	0.73	0.73	0.00	0.00
China	4.74	4.89	0.15	3.25	5.10	5.24	0.14	2.76
Total "other regions"	9.43	9.65	0.23	2.43	9.32	9.72	0.40	4.24
Total world	76.67	77.46	0.78	1.02	74.61	75.40	0.78	1.05

Totals may not add, due to independent rounding.

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

	<u>3Q02</u>	<u>3Q03</u>	<u>Change 2003/02</u>		<u>4Q02</u>	<u>4Q03</u>	<u>Change 2003/02</u>	
			<u>Volume</u>	<u>%</u>			<u>Volume</u>	<u>%</u>
North America	24.16	24.16	0.00	0.00	24.02	24.28	0.26	1.08
Western Europe	15.18	15.12	-0.06	-0.40	15.77	15.83	0.06	0.40
OECD Pacific	8.07	8.05	-0.02	-0.26	8.85	9.04	0.19	2.15
Total OECD	47.41	47.33	-0.08	-0.17	48.65	49.16	0.51	1.05
Other Asia	7.26	7.33	0.07	1.02	7.57	7.62	0.05	0.63
Latin America	4.68	4.69	0.02	0.38	4.63	4.68	0.05	1.14
Middle East	4.87	4.95	0.08	1.66	4.96	5.03	0.06	1.26
Africa	2.44	2.46	0.02	0.74	2.45	2.47	0.02	0.63
Total DCs	19.24	19.43	0.19	0.99	19.61	19.79	0.18	0.91
FSU	3.65	3.70	0.04	1.19	4.27	4.21	-0.06	-1.40
Other Europe	0.73	0.75	0.02	2.81	0.74	0.75	0.01	1.90
China	5.26	5.40	0.15	2.76	4.85	4.97	0.12	2.40
Total "other regions"	9.64	9.85	0.21	2.17	9.86	9.94	0.07	0.71
Total world	76.29	76.61	0.32	0.42	78.13	78.89	0.76	0.97

Totals may not add, due to independent rounding.

WORLD OIL SUPPLY

Non-OPEC

Forecast for 2002

2002 non-OPEC supply figure revised down to 47.91 mb/d — 1.43 mb/d above 2001

The 2002 non-OPEC supply figure has been revised down by 0.01 mb/d to 47.91 mb/d, since the last *MOMR*. The third and fourth quarters see reductions of 0.03 mb/d to 47.59 mb/d and 0.02 mb/d to 48.33 mb/d respectively, while the second quarter estimate rises by 0.03 mb/d to 48.02 mb/d; the first quarter remains unchanged at 47.68 mb/d. The yearly average increase over 2001 is estimated at 1.43 mb/d.

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

	<u>2001</u>	<u>1Q02</u>	<u>2Q02</u>	<u>3Q02</u>	<u>4Q02</u>	<u>Change</u>	
						<u>2002</u>	<u>02/01</u>
North America	14.36	14.62	14.67	14.46	14.52	14.56	0.21
Western Europe	6.70	6.73	6.75	6.25	6.74	6.62	-0.08
OECD Pacific	0.77	0.76	0.77	0.78	0.76	0.76	0.00
Total OECD	21.82	22.10	22.18	21.49	22.02	21.95	0.13
Other Asia	2.28	2.36	2.36	2.36	2.37	2.36	0.09
Latin America	3.75	3.92	3.93	3.90	3.90	3.91	0.16
Middle East	2.13	2.09	2.06	2.01	2.01	2.04	-0.09
Africa	2.80	3.04	3.06	3.01	3.03	3.04	0.23
Total DCs	10.96	11.41	11.40	11.29	11.31	11.35	0.39
FSU	8.53	8.92	9.15	9.49	9.65	9.31	0.78
Other Europe	0.18	0.18	0.18	0.17	0.17	0.18	0.00
China	3.30	3.35	3.39	3.42	3.42	3.40	0.10
Total "Other regions"	12.00	12.45	12.72	13.09	13.24	12.88	0.88
Total non-OPEC production	44.79	45.96	46.30	45.87	46.57	46.18	1.39
Processing gains	1.69	1.72	1.72	1.72	1.76	1.73	0.04
Total non-OPEC supply	46.48	47.68	48.02	47.59	48.33	47.91	1.43
Previous estimate	46.48	47.68	48.00	47.62	48.36	47.91	1.44
Revision	0.00	0.00	0.03	-0.03	-0.02	-0.01	-0.01

Totals may not add, due to independent rounding.

2003 non-OPEC supply forecast is 48.69 mb/d — 0.78 mb/d above 2002

Expectations for 2003

Non-OPEC supply is expected to rise by another 0.78 mb/d in 2003. The expected major contributors to the increase are the FSU and North America. The 2003 quarterly distribution is estimated at 48.43 mb/d, 48.79 mb/d, 48.38 mb/d and 49.13 mb/d respectively, resulting in a yearly average of 48.69 mb/d.

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

	<u>2002</u>	<u>1Q03</u>	<u>2Q03</u>	<u>3Q03</u>	<u>4Q03</u>	<u>2003</u>	Change 03/02
North America	14.56	14.72	14.77	14.56	14.62	14.66	0.10
Western Europe	6.62	6.76	6.78	6.28	6.77	6.65	0.03
OECD Pacific	0.76	0.76	0.77	0.78	0.76	0.76	0.00
Total OECD	21.95	22.23	22.31	21.62	22.15	22.08	0.13
Other Asia	2.36	2.40	2.40	2.40	2.41	2.40	0.04
Latin America	3.91	3.98	3.99	3.97	3.96	3.97	0.06
Middle East	2.04	2.07	2.04	1.99	1.99	2.02	-0.02
Africa	3.04	3.12	3.14	3.09	3.11	3.12	0.08
Total DCs	11.35	11.57	11.56	11.45	11.48	11.51	0.16
FSU	9.31	9.36	9.61	9.96	10.13	9.77	0.46
Other Europe	0.18	0.18	0.18	0.17	0.17	0.18	0.00
China	3.40	3.35	3.39	3.42	3.42	3.40	0.00
Total "Other regions"	12.88	12.89	13.18	13.56	13.72	13.34	0.46
Total non-OPEC production	46.18	46.68	47.04	46.63	47.34	46.93	0.75
Processing gains	1.73	1.75	1.75	1.75	1.79	1.76	0.03
Total non-OPEC supply	47.91	48.43	48.79	48.38	49.13	48.69	0.78
Previous estimate	47.91	48.48	48.81	48.45	49.19	48.73	0.82
Revision	-0.01	-0.04	-0.02	-0.07	-0.06	-0.05	-0.04

Totals may not add, due to independent rounding.

FSU net oil export forecasts revised up for 2002 and 2003

Upward revisions have been made to the forecasts for the FSU's net oil exports in 2002 and 2003, and these are now 5.47 mb/d and 5.85 mb/d, respectively.

Table 14
FSU net oil exports
mb/d

	<u>1Q</u>	<u>2Q</u>	<u>3Q</u>	<u>4Q</u>	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	5.38	5.47
2003 (forecast)	5.36	5.86	6.27	5.91	5.85

OPEC NGL figures unchanged

OPEC natural gas liquids

The OPEC NGL figures for 1999–2003 remain unchanged at 3.16 mb/d, 3.34 mb/d, 3.58 mb/d, 3.67 mb/d and 3.70 mb/d, respectively, compared with the last *MOMR*.

OPEC NGL production — 1998–2002
mb/d

<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>1Q02</u>	<u>2Q02</u>	<u>3Q02</u>	<u>4Q02</u>	<u>2002</u>	Change 02/01	<u>2003</u>	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 November production at 26.61 mb/d

OPEC crude oil production

Available secondary sources indicate that, in November, OPEC output was 26.61 mb/d, which was 0.27 mb/d lower than the revised October figure of 26.88 mb/d. Table 15 shows OPEC production, as reported by selected secondary sources.

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

	<u>2000</u>	<u>2001</u>	<u>2Q02</u>	<u>3Q02*</u>	<u>Oct.02*</u>	<u>Nov.02*</u>	<u>Nov.-Oct.</u>
Algeria	807	820	829	882	944	934	-10
Indonesia	1,278	1,214	1,128	1,115	1,111	1,118	6
IR Iran	3,671	3,665	3,360	3,431	3,552	3,471	-81
Iraq	2,551	2,382	1,508	1,742	2,431	2,367	-64
Kuwait	2,095	2,026	1,874	1,910	1,940	1,884	-56
SP Libyan AJ	1,405	1,361	1,309	1,332	1,353	1,339	-14
Nigeria	2,031	2,097	1,932	1,959	1,975	1,978	4
Qatar	698	683	632	655	702	706	4
Saudi Arabia	8,267	7,940	7,384	7,610	7,855	7,835	-20
UAE	2,251	2,163	1,967	1,994	2,024	2,001	-23
Venezuela	2,897	2,862	2,686	2,857	2,995	2,978	-17
Total OPEC	27,952	27,213	24,609	25,487	26,879	26,609	-271

Totals may not add, due to independent rounding.

* Not all sources available.

RIG COUNT

Non-OPEC rig count up by 53 in November

Non-OPEC

Non-OPEC rig activity was higher in November. North America, the major contributor, saw an increase of 55 rigs, compared with the October figure. In Canada, the rig count rose by 61 to 281. The USA witnessed a decline of 18 to 834 rigs, while Mexico's activity rose by 12 to 80. Western Europe's activity witnessed an increase of five to 85 rigs, mainly in Norway.

Table 16
Non-OPEC rig count in 2002

	<u>2000</u>	<u>2001</u>	<u>Change</u> <u>02/01</u>	<u>Oct.02</u>	<u>Nov.02</u>	<u>Change</u> <u>Nov.-Oct.</u>
North America	1,305	1,552	247	1,140	1,195	55
Western Europe	125	95	-30	80	85	5
OECD Pacific	17	20	3	17	20	3
OECD	1,447	1,667	220	1,237	1,300	63
Other Asia	83	95	12	120	116	-4
Latin America	120	141	20	106	107	1
Middle East	45	50	5	68	68	0
Africa	34	36	2	47	40	-7
DCs	282	321	40	341	331	-10
FSU	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other Europe	3	3	0	2	2	0
China	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other regions	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total non-OPEC	1,732	1,991	260	1,580	1,633	53

Totals may not add, due to independent rounding.

Source: Baker Hughes International.

OPEC rig count up by four in November
OPEC

OPEC's rig count rose by four to 232 in November, compared with the October figure. Most of the changes were contributed by Venezuela, where the rig count increased by five to 43.

Table 17
OPEC rig count

	<u>2000</u>	<u>2001</u>	<u>Change</u> <u>02/01</u>	<u>Oct.02</u>	<u>Nov.02</u>	<u>Change</u> <u>Nov.-Oct.</u>
Algeria	15	20	5	19	21	2
Indonesia	32	41	9	46	43	-3
IR Iran	27	30	3	34	35	1
Iraq	0	0	0	n.a.	n.a.	n.a.
Kuwait	12	9	-3	7	8	1
SP Libyan AJ	7	5	-2	9	10	1
Nigeria	8	12	4	16	13	-3
Qatar	6	9	3	11	12	1
Saudi Arabia	25	30	5	32	32	0
UAE	13	15	3	16	15	-1
Venezuela	63	67	5	38	43	5
Total OPEC	206	238	32	228	232	4

Totals may not add, due to independent rounding.

Source: Baker Hughes International.

STOCK MOVEMENTS

Moderate seasonal draw of 0.23 mb/d in USA in November
USA

US commercial on-land oil stocks displayed a moderate seasonal draw of 6.5 mb, at a rate of 0.23 mb/d, to 976.9 mb, during the period 1–29 November. Most of the draw occurred with “other oils”, which fell by 7.8 mb to 205.6 mb, followed by crude oil, down by 3.2 mb to 287.3 mb. The decline in crude was attributed partly to the interruption of the oil flow from Alaska, due to the earthquake at the beginning of November. This draw widened the crude stock deficit to about 8%, from the 7% registered last month. Distillates added to the overall draw, declining by 2.1 mb to 119.8 mb, on the back of improved apparent demand, due to a cold spell. Distillates’ year-on-year shortage extended to about 13%, from just 5% observed last month. Gasoline diminished the overall draw, increasing by 7.9 mb to 200.0 mb, on the back of higher imports and weak apparent demand. The overall moderate decrease in total oil stocks lifted their year-on-year deficit by 1% to about 6%.

During the same period, the Strategic Petroleum Reserve (SPR) continued to follow the whole year’s build pattern, displaying a further increase of 5.5 mb to 594.6 mb and making the year-on-year surplus stand at about 9%, from the 8% reported last month.

During the week ending 6 December, total oil stocks in the USA rose for the third consecutive week, by 4.6 mb to 981.5 mb. This weekly stock-build resulted mainly from a 3.5 mb rise to 123.3 mb in distillates, on higher output and despite improved demand, due to a cold spell. Gasoline added to this build, lifted by 3.2 mb to 203.2 mb, due to weak apparent demand, coupled with increasing imports. Crude oil followed the previous three weeks’ rising pattern and was up by 1.4 mb to 288.7 mb. This rise could be attributed to lower imports.

Table 18
US onland commercial petroleum stocks*
mb

	4 Oct.02	1 Nov.02	29 Nov.02	Change Nov./Oct.	29 Nov.01	6 Dec.02**
Crude oil (excl. SPR)	270.5	290.5	287.3	-3.2	312.3	288.7
Gasoline	205.3	192.1	200.0	7.9	212.0	203.2
Distillate fuel	127.4	121.9	119.8	-2.1	138.3	123.3
Residual fuel oil	33.6	33.8	33.8	0.0	39.1	33.8
Jet fuel	40.6	42.5	41.2	-1.3	40.1	42.3
Unfinished oils	83.5	89.1	89.2	0.1	91.3	85.8
Other oils	221.3	213.4	205.6	-7.8	206.7	204.4
Total	982.1	983.4	976.9	-6.5	1,039.9	981.5
SPR	586.2	589.1	594.6	5.5	547.2	597.1

* 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.

**Slight seasonal draw of
0.06 mb/d in Eur-16 in
November**

Western Europe

Commercial on-land oil stocks in Eur-16 (EU plus Norway) followed the previous two months' pattern of draw-downs, declining slightly by 1.8 mb, at a rate of 0.06 mb/d, to 1,061.8 mb. A moderate 5.7 mb draw on crude oil was nearly erased by an increase of 3.9 mb in total major products. Despite the draw on crude oil, its year-on-year surplus widened from 1% to 4%. Higher refinery runs, after the end of the shut-down season, were behind the fall in crude stocks. Fuel oil was mostly responsible for the build in major product inventories, contributing 2.4 mb, on a combination of increasing fuel oil production, as a result of higher refinery runs, together with a flow of Russian cargoes into the European market, as well as closed arbitrage, especially to Asia, due to expensive freight rates, on the back of the EU's efforts to restrict the use of single-hulled tankers. Other major products displayed little change in either direction, turning the total major product inventories' year-on-year deficit to a surplus of about 1%. This surplus was attributed mainly to distillates, the year-on-year excess of which stood at more than 6%, while other major products fell into a deficit of 5% for gasoline and about 2% for fuel oil. The overall minor decline in total oil stocks in Eur-16 was about 2% above the year-ago level.

Table 19
Western Europe commercial oil stocks*
mb

	Sept.02	Oct.02	Nov.02	Change Nov./Oct.	Nov.01
Crude oil	443.0	454.4	448.7	-5.7	431.4
Mogas	138.8	134.5	134.7	0.3	142.0
Naphtha	21.1	21.1	22.0	0.9	26.7
Middle distillates	346.2	344.7	345.1	0.4	324.9
Fuel oils	109.5	108.9	111.3	2.4	114.0
Total products	615.6	609.2	613.1	3.9	607.5
Overall total	1,058.6	1,063.5	1,061.8	-1.8	1,038.9

* At end of month, and region consists of the Eur-16.

Source: Argus Euroilstock.

Japan

**Minor seasonal draw of
0.08 mb/d in Japan in
October**

In October, commercial on-land oil stocks experienced a draw for the second consecutive month, declining by a marginal 2.4 mb, at a rate of 0.08 mb/d, to 176.6 mb; this widened the year-on-year deficit by 7% to about 17%. All oil stocks contributed to this draw, with crude oil registering the highest figure, decreasing by 1.6 mb to 104.8 mb, on improved refinery runs. This draw on crude oil expanded its year-on-year deficit to about 19%, from just 10% recorded last month. Major product inventories showed small draws, ranging from 0.1 mb on middle distillates to 0.7 mb on residual fuel oil.

Table 20
Japan's commercial oil stocks*
mb

	<u>Jun.02</u>	<u>Sept.02</u>	<u>Oct.02</u>	<u>Change</u> <u>Oct./Sept.</u>	<u>Oct.01</u>
Crude oil	118.3	106.4	104.8	-1.6	129.3
Gasoline	14.2	13.1	12.8	-0.3	13.6
Middle distillates	30.2	41.9	41.8	-0.1	48.3
Residual fuel oil	20.1	17.7	17.4	-0.3	20.5
Total products	64.4	72.6	71.9	-0.7	82.4
Overall total **	182.7	179.0	176.6	-2.4	211.7

* At end of month.

** Includes crude oil and main products only.

Source: MITI, Japan.

BALANCE OF SUPPLY AND DEMAND

**2002 supply/demand
difference revised down
to 24.85 mb/d**

The summarized supply/demand balance table for 2002 shows minor downward revisions of 0.04 mb/d to 76.43 mb/d for world oil demand and of 0.01 mb/d to 51.58 mb/d for total non-OPEC supply, resulting in an expected annual difference of around 24.85 mb/d, down by 0.04 mb/d, compared with the last *MOMR*. This leaves a quarterly distribution of 25.36 mb/d, 22.95 mb/d, 25.02 mb/d and 26.05 mb/d respectively. Upward revisions of 0.04 mb/d to -0.21 mb/d, of 0.13 mb/d to 1.66 mb/d and of 0.18 mb/d to 0.46 mb/d, respectively, have been made to the balance for the first three quarters. A minor upward revision of 0.03 mb/d has been made to the 2001 balance, which is now estimated at 0.95 mb/d.

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

	<u>2001</u>	<u>1Q02</u>	<u>2Q02</u>	<u>3Q02</u>	<u>4Q02</u>	<u>2002</u>
(a) World oil demand	76.32	76.67	74.61	76.29	78.13	76.43
(b) Non-OPEC supply ⁽¹⁾	50.06	51.32	51.66	51.27	52.07	51.58
Difference (a - b)	26.26	25.36	22.95	25.02	26.05	24.85
OPEC crude oil production ⁽²⁾	27.21	25.15	24.61	25.49		
Balance	0.95	-0.21	1.66	0.46		

(1) Including OPEC NGLs + non-conventional oils.

(2) Selected secondary sources.

Totals may not add, due to independent rounding.

**2003 supply/demand
difference revised down
to 24.70 mb/d**

The summarized supply/demand balance table for 2003 shows downward revisions of 0.08 mb/d to 77.09 mb/d to the world oil demand forecast and of 0.05 mb/d to 52.39 mb/d to total non-OPEC supply, resulting in an expected difference of around 24.70 mb/d; this is 0.04 mb/d down on last month's estimate. It leaves a quarterly distribution of 25.35 mb/d, 22.93 mb/d, 24.52 mb/d and 25.98 mb/d respectively.

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

	<u>2002</u>	<u>1Q03</u>	<u>2Q03</u>	<u>3Q03</u>	<u>4Q03</u>	<u>2003</u>
(a) World oil demand	76.43	77.46	75.40	76.61	78.89	77.09
(b) Non-OPEC supply ⁽¹⁾	51.58	52.10	52.46	52.09	52.91	52.39
Difference (a - b)	24.85	25.35	22.93	24.52	25.98	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	48.6	47.5	48.3	46.2	47.3	49.2	47.7
North America	23.8	24.0	23.9	23.7	23.8	24.2	24.0	23.9	23.9	23.9	24.2	24.3	24.0
Western Europe	15.2	15.1	15.3	15.2	14.6	15.2	15.8	15.2	15.3	14.7	15.1	15.8	15.2
Pacific	8.7	8.6	8.6	9.1	7.7	8.1	8.9	8.4	9.2	7.6	8.1	9.0	8.5
DCs	18.7	19.0	19.3	19.3	19.2	19.2	19.6	19.3	19.5	19.5	19.4	19.8	19.6
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	0.7
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	74.6	76.3	78.1	76.4	77.5	75.4	76.6	78.9	77.1
Non-OPEC supply													
OECD	21.3	21.8	21.8	22.1	22.2	21.5	22.0	21.9	22.2	22.3	21.6	22.1	22.1
North America	14.1	14.2	14.4	14.6	14.7	14.5	14.5	14.6	14.7	14.8	14.6	14.6	14.7
Western Europe	6.6	6.7	6.7	6.7	6.8	6.3	6.7	6.6	6.8	6.8	6.3	6.8	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	11.4	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	10.1	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	48.3	47.9	48.4	48.8	48.4	49.1	48.7
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	52.1	51.6	52.1	52.5	52.1	52.9	52.4
OPEC crude oil production (secondary sources)	26.5	28.0	27.2	25.2	24.6	25.5							
Total supply	74.2	77.0	77.3	76.5	76.3	76.8							
Balance (stock change and miscellaneous)	-1.1	1.1	1.0	-0.2	1.7	0.5							
Closing stock level (outside FCPEs) mb													
OECD onland commercial	2446	2530	2622	2599	2644	2572							
OECD SPR	1228	1210	1222	1237	1247	1251							
OECD total	3674	3740	3844	3837	3891	3823							
Other onland	983	1000	1028	1026	1041	1022							
Oil-on-water	808	876	843	821	831	896							
Total stock	5465	5617	5715	5684	5762	5742							
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	79							
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	5.9	5.9
(a) - (b)	27.7	26.9	26.3	25.4	22.9	25.0	26.1	24.8	25.4	22.9	24.5	26.0	24.7

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	-	-	-	-	-	-	-	-	-	-	-	-0.1	-
North America	-	-	-	-	-	-	-	-	-	-	-	-	-
Western Europe	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-0.3	-	-0.1	-	-	-0.3	-0.1	-0.1
FSU	-	-	-	-	-	-0.2	-	-	-	-	-0.2	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	0.3	0.1	0.1	-	-	0.3	-	0.1
(a) Total world demand	-	-	-	-	-	-0.2	0.1	-	-0.1	0.1	-0.2	-0.1	-0.1
Non-OPEC supply													
OECD	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1
North America	-	-	-	-	-	-	0.1	-	-0.1	-	-0.1	-	-
Western Europe	-	-	-	-	-	-	-0.2	-	-	-	-	-0.2	-0.1
Pacific	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-
DCs	-	-	-	-	-	-	-0.2	-0.1	-	-	-	-0.2	-0.1
FSU	-	-	-	-	-	-	0.2	-	0.1	0.1	0.1	0.2	0.1
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-
OPEC NGLs + non-conventionals	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-
OPEC crude oil production (secondary sources)	-	-	-	-	-	-	-	-	-	-	-	-	-
Total supply	-	-	-	-	0.1	-	-	-	-	-	-	-	-
Balance (stock change and miscellaneous)	-	-	-	-	0.1	0.2	-	-	-	-	-	-	-
Closing stock level (outside FCPEs) mb													
OECD onland commercial	-	-	-	-	-1.2	-	-	-	-	-	-	-	-
OECD SPR	-	-	-	-	-	-	-	-	-	-	-	-	-
OECD total	-	-	-	-	-1.2	-	-	-	-	-	-	-	-
Other onland	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil on water	-	-	-	-14.1	-	-	-	-	-	-	-	-	-
Total stock	-	-	-	-14.1	-	-	-	-	-	-	-	-	-
Days of forward consumption in OECD													
Commercial onland stocks	-	-	-	-	-	-	-	-	-	-	-	-	-
SPR	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-
Memo items													
FSU net exports	-	-	-	-	-	0.2	0.1	0.1	0.1	-	0.3	0.2	0.1
(a) - (b)	-	-	-	-	-0.1	-0.2	0.1	-	-	0.1	-0.2	-0.1	-

† This compares Table 23 in this issue of the MOMR with Table 24 in the November 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 <i>mb</i>																	
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	2,572
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	1,217
Western Europe	899	912	962	881	930	915	902	900	910	930	918	909	918	915	929	940	916
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	1,251
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	345
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	3,823
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	1,022
Oil-on-water	798	812	859	808	876	843	840	866	849	876	914	836	874	843	821	831	896
Total stock	5,503	5,656	5,860	5,465	5,617	5,715	5,470	5,609	5,638	5,617	5,647	5,658	5,774	5,715	5,684	5,762	5,742
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	53	51	53	51	48	56	57	54	49	57	55	50
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	38	39	38	36	33	39	39	36	35	42	40	36
OECD total	80	82	83	77	78	81	79	78	78	77	80	80	81	80	83	82	79
Days of global forward consumption	85	87	88	82	84	85	84	84	83	83	86	85	86	85	87	86	84

Table 27
Non-OPEC Rig Count

	1999	2000	1Q01	2Q01	3Q01	4Q01	2001	Change 01/00	1Q02	2Q02	3Q02	Oct02	Nov02	Change Nov-Oct
USA	608	916	1,141	1,239	1,231	1,004	1,156	240	818	806	853	852	834	-18
Canada	246	344	515	252	320	278	342	-2	383	147	250	220	281	61
Mexico	43	44	50	48	56	62	54	10	63	61	62	68	80	12
North America	897	1,305	1,706	1,539	1,607	1,344	1,552	247	1,264	1,014	1,165	1,140	1,195	55
Norway	17	22	24	22	22	22	23	1	20	20	17	19	23	4
UK	18	18	18	25	28	26	24	6	28	30	24	23	24	1
Denmark	2	3	4	5	4	5	4	1	5	4	3	6	5	-1
Other Western Europe	77	82	43	44	42	47	44	-38	39	38	33	32	33	1
Western Europe	114	125	89	95	96	100	95	-30	92	91	76	80	85	5
Australia	10	10	11	11	10	10	10	0	9	9	9	7	9	2
Other Pacific	6	7	10	9	8	10	9	2	8	7	7	10	11	1
OECD Pacific	16	17	20	20	18	20	20	3	17	16	16	17	20	3
Total OECD*	1,027	1,447	1,815	1,655	1,721	1,464	1,667	220	1,373	1,121	1,257	1,237	1,300	63
Brunei	3	2	3	3	2	2	3	1	2	3	3	3	4	1
India	46	49	51	48	50	50	50	1	52	54	55	56	57	1
Malaysia	6	7	10	11	13	12	11	4	12	13	15	15	13	-2
Papua New Guinea	1	0	0	1	2	1	1	1	1	1	1	1	2	1
Vietnam	9	8	9	8	8	8	8	0	8	8	9	10	10	0
Asia others	16	16	22	23	24	18	22	5	26	29	33	35	30	-5
Other Asia	81	83	96	95	98	90	95	12	100	109	116	120	116	-4
Argentina	35	57	69	74	77	64	71	14	49	45	49	51	54	3
Brazil	19	23	28	30	29	26	28	5	27	27	27	25	27	2
Colombia	12	14	15	16	14	16	15	1	13	13	10	9	8	-1
Ecuador	3	7	9	10	10	11	10	3	10	9	8	9	8	-1
Peru	2	4	4	4	3	3	4	0	2	2	2	2	1	-1
Trinidad & Tobago	3	4	6	5	4	5	5	1	5	4	4	5	4	-1
L. America others	13	12	9	8	6	6	7	-4	4	4	4	5	5	0
Latin America	86	120	141	147	144	130	141	20	110	103	104	106	107	1
Bahrain			0	0	0	0	0	0	0	0	0	0	0	0
Oman	19	24	24	24	25	26	25	1	27	29	30	31	32	1
Syria	13	14	19	19	20	19	19	5	20	21	23	24	23	-1
Yemen	4	6	6	6	5	6	6	0	8	9	9	11	10	-1
Middle East	36	45	49	49	49	51	50	5	57	60	64	68	68	0
Angola	5	6	6	5	4	6	5	0	5	6	6	7	5	-2
Cameroon			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	0
Egypt	17	18	21	22	22	23	22	4	22	23	22	24	21	-3
Gabon	2	2	2	4	1	1	2	0	1	2	2	2	2	0
South Africa	1	1	2	1	0	1	1	0	1	1	1	0	0	0
Africa other	4	5	4	5	5	3	4	0	11	12	12	13	11	-2
Africa	30	34	36	40	34	35	36	2	41	45	44	47	40	-7
Total DCs	232	282	322	330	325	307	321	40	307	317	328	341	331	-10
FSU														
Other Europe	4	3	3	3	3	4	3	0	2	2	2	2	2	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	1,580	1,633	53

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

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