# Organization of the Petroleum Exporting Countries

# Monthly Oil Market Report

# January 2004

# Feature Article: Is the oil market well supplied?

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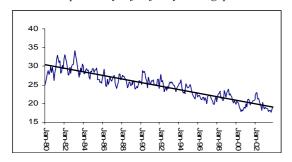
# Oil Market Highlights

- World GDP is estimated to have grown by 3.5% in 2003, a rise of 0.1% above last month's estimate. This slight increase is due to an upwards revision of fourth quarter estimates for the USA. Otherwise growth estimates for 2003 are unchanged. The latest data confirms that the economic expansion of the Euro-zone region has begun with Germany in the lead. The last quarter of 2003 saw growth of at least 2% (annualized).
- The outlook for the new year is also encouraging. This optimism is based on business surveys, improving manufacturing orders and signs that investment spending is picking up. The key question is whether this momentum can be maintained as the rising level of the euro may affect European economic activity later in the year. Thus far European exporters are benefiting from high levels of demand in Asia. A further cause for concern is the dormant European consumer as the latest data for November suggests little improvement in consumer sentiment.
- The 2004 forecasts for North America and Europe are unchanged. The forecast for Japan in 2004 has been increased by 0.2% as a result of stronger capital expenditure and export trends. The forecasts for China and Asia Pacific have been raised by 0.3% and 0.2% respectively as there is no sign of any slowdown in the growth of the Chinese economy. The higher projections for Latin America benefit from the strong US outlook. The forecast for Developing Countries as a whole is unchanged as reductions in the forecasts for Africa offset improvements in Asia and Latin America. The world economy is forecast to grow by 4.2% in 2004, in line with last month's forecast.
- The OPEC Reference Basket finished 2003 with an impressive cumulative average of \$28.10/b, the highest nominal yearly average since 1984. During the month of December the Basket added another 99¢/b to average \$29.44/b, a level not seen since the start of hostilities in the Middle East. On a weekly count the Basket started the month of December with a minor dip losing 4¢/b to average \$28.43 /b. It then made an upturn gaining 86¢/b during the second week to stand at \$29.29 /b. The Basket rose by another 90¢/b to \$30.19/b in the third week but then fell by 45¢/b to close at \$29.74 /b. The Basket rose again in the first week of January adding 58¢/b to make \$30.11/b, which was followed by another 68¢/b rise to \$30.79/b in the second week.
- Average petroleum product prices continued to exhibit mixed trends in December, with Asian product premiums exceeding those of the US Gulf and Rotterdam markets. Thus, refining margins soared to a historically high level in Singapore, while remaining moderately in positive territory in the other two centres.
- A holiday-filled December pushed OPEC area spot fixtures down by nearly 40% to a level of 10.71 mb/d, which was 4.16 mb/d below a month ago but almost to last year's level. Crude oil spot freight rates touched all-time highs, mainly due to very healthy demand for crude oil in nearly all consuming regions, particularly from China, where oil imports increased rapidly in the last months of the year. The congestion in the Bosporus Strait also bolstered crude oil freight rates as it forced a switch to oil coming from the Atlantic basin, thus increasing the voyage length. Rising demand for modern tonnage also contributed to the boom. VLCC freight rates on the Middle East eastbound and westbound long-haul routes rose a further 12% and 8% respectively in December. Product freight rates remained firm for the second consecutive month, benefiting from very high seasonal demand along all main routes during December.
- The estimate for the 2003 fourth quarter average has been raised by 0.19 mb/d to 80.13 mb/d on the basis of higher than expected apparent demand in China. Taking into consideration the higher prospects for economic growth in China, some Asian economies and the FSU, the 2004 world oil demand forecast has been revised up again by 0.05 mb/d to 79.66 mb/d. The volume growth in Developing Countries is forecast at 0.48 mb/d, with the former CPEs forecast to experience the highest growth rate at 4.16%.
- OPEC crude oil production in December, based on secondary sources, is estimated at 27.73 mb/d, a rise of 0.17 mb compared with the November figure. Non-OPEC oil supply for 2003 is estimated at 48.73 mb/d, which is 0.99 mb/d more than the 47.74 mb/d estimated for 2002. Non-OPEC supply in 2004 is expected to reach 49.87 mb/d, an increase of 1.14 mb/d over the 2003 estimate. Net FSU exports for 2002 and 2003 are estimated at 5.56 mb/d and 6.39 mb/d respectively, and expected to rise to 6.83 mb/d in 2004.
- US commercial oil stocks in December registered a massive draw of 21.9 mb or a rate of 0.68 mb/d to 931.9 mb compared to the previous month. Both crude oil and "other oil" contributed to this draw, while gasoline, distillate and residual fuel stocks showed an increase. At the same time, the Strategic Petroleum Reserve (SPR) continued its upward trend. Total stocks in EU-16 (EU plus Norway) moved slightly down by 0.52 mb or 0.02 mb/d to 1,059.2 mb, leaving them 13 mb or 1.3% higher than in the previous year. Crude oil inventories rose 0.73 mb to 440.19 mb to a comfortable level of 10.3 mb or 2.4 % above the same time last year. Japan's commercial oil stocks registered a considerable draw in November of 12.5 mb or 0.42 mb/d to 179.2 mb, mainly on the massive decrease in crude oil stocks. However, Japanese stocks remained at a comfortable level of 12.2 mb or 7.3% above the same time last year.

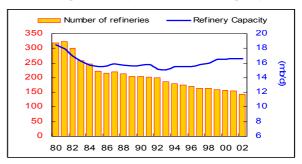
### Is the oil market well supplied?

- The estimated supply/demand balance for the fourth quarter of 2003 showed a contra-seasonal stock build of around 0.7 mb/d. This leaves the yearly balance at about 0.8mb/d compared to a balance of -0.3 mb in 2002. Other sources have reached the same conclusion, while some even expect a higher build. Theoretically, this should result in implied global stocks returning to comfortable levels. According to OECD-based sources, inventories in the main industrialised countries indicate that total US stocks, which includes the Strategic Petroleum Reserve (SPR), have experienced a build of around 22 mb at the end of 2003 compared to the previous year, while total oil stocks in EU-16 (EU plus Norway) stand at comfortable levels of around 13 mb higher than year ago. Moreover, Japanese stocks at the end of November 2003 remained around 12 mb above last year, despite a recent draw in crude oil stocks due to the large volume of imports posted last year. A clearer picture emerges when oil afloat is taken into consideration, as levels increased by 20 mb at the end of December. According to early indications, oil in transit is also expected to have seen a build, while the limited available data shows that non-OECD stocks may also have increased. Taken together, these trends show that the global inventory picture is not as tight as it has been perceived. Indeed, a consensus seems to be emerging among the various sources that despite the market's reacting as if there were an oil shortage, the global oil balance gives a strong indication that the market is well-supplied.
- Nevertheless, in US market, commercial crude oil stocks have hit their lowest level since 1975, dropping to 264 mb in the week ending 9 January 2004. This was 6 mb below the perceived 'lower minimum operating level' (LOI) set by the National Petroleum Council in 1998 to mark the minimum operating crude oil stock requirement by refiners. The LOI was originally established at 300 mb before being reduced to 270 mb.
- Since 1980, commercial crude oil stocks have fallen from a peak of 397 mb on April 1981 to 269 mb at the end of December 2003. In days of refinery throughput, commercial crude oil stocks have fallen from a high of 34.2 days in February 1983 to a low of 17.6 days in December 2003 (graph 1). Although crude oil inputs to refineries have increased by a yearly average of almost 1% since 1981, they have in terms of days of supply gradually declined due to lower inventory requirements. A number of factors can be identified as contributing to this decline.

Graph 1: Days of Refinery Throughput



Graph 2: US Refineries Number & Capacity



- The first factor has to do with a change in stock management policy. Since 1996, the oil industry has adopted a new stock policy that uses the "just-in-time" management approach. This concept comes from retail marketing, where advances in information technology allow companies to monitor inventories more closely, which enable them to get by with much lower stocks. At the same time as commercial stocks have declined, the federally-controlled SPR has seen a steady rise of almost 256 mb during the period 1980 to present. This trend will continue given the US government's decision in November 2001 to raise the SPR up to a capacity of 700 mb by 2005.
- The other factors include the consolidation, rationalization and mergers that have taken place in the oil industry. This has led to a decline in the number of refineries, while total capacities remain relatively unchanged through the expansion of existing refiners. The improvement in the operational efficiency has thereby reduced the need for storage and hence the overall cost. (graph 2). Furthermore, the increased availability of short haul supply has allowed such a shift in international oil trading to take place. Another element is the structural change in seasonal oil consumption that has reduced overall demand variation, and therefore lowered the number of days needed to be covered by stocks.
- Additionally, persistent backwardation in the market provides no financial incentive for stocking crude even when inventories have been at their lowest level. Companies have simply adapted to operating with lean inventories, although with the added risk of limited flexibility and a higher potential for disruption. Taken together, these developments pose a serious question to whether the LOI is still a valid marker for all participants in oil industry.
- The intense focus on the 270 mb floor as a LOI and the fact that US commercial crude oil stocks are hitting historical low levels has had a disproportionately bullish impact on both the market and prices. This is especially true given that even the NPC has said that the 270 mb level no longer represents the minimum. This impact has resulted in an upward pressure on the spot price of crude and has encouraged very steep backwardation, which in turn has discouraged refiners from building stocks.
- Current price levels in recent weeks are due mainly to the market's reaction to US crude oil stocks falling to the perceived "LOI" levels and to the increasingly strong influence of market players in the futures market where the non-commercials or speculators who seem to take an extremely short-term view on the market and are thus holding a large net-long position. However, it won't be long before fundamentals once again take the driver's seat. Projections indicate a significant oversupply building in the second and third quarters that cannot be ignored and needs to be acted upon in a timely fashion. Otherwise, the considerable fall in prices will be inevitable.

2.0

### Highlights of the World Economy

World

3.5

4.2

#### **Economic growth rates 2003-2004**

4.2

	70	
USA	Japan	Euro-zone
3.1	2.2	0.5

1.8

2003 2004

#### Industrialised countries

G-7

2.1

3.0

United States of America

2004 has begun strongly. Later in the year the unsolved problems of household, balance of payments and fiscal deficits may be troublesome for policymakers.

Final data for the third quarter of 2003 confirmed that the US economy grew by a remarkable 8.2% at an annual rate. Consumer spending and investment were the driving forces behind this growth although exports also grew rapidly following three quarters of decline. Data for October and November showed continued improvements in retail sales and industrial production. Overall the fourth quarter probably saw growth slow to the region of 3-4% annualized which means that for 2003 as a whole the GDP of the US grew by 3.1%. The December employment report was disappointing as non-farm payrolls rose by only 1000 and the report for manufacturing was particularly weak. Business surveys are optimistic, however, and the construction sector continues to be strong, especially private housebuilding. A further stimulus for the US economy will be the lower dollar. In the past three months the dollar has fallen by about 9% against the euro and 4.5% against the yen. It is also likely that the rather slow growth in employment and the low rate of inflation will delay any rise in US interest rates keeping financial conditions accommodative for most of 2004. Of course a very rapid decline in the dollar might lead to a change in the policy of the Federal Reserve and this remains a risk to the outlook. The outlook for fiscal policy is clearer – it will be stimulative for the first quarter of 2004 with about \$50 billion of Federal tax cuts keeping consumer spending growth well over 3%. As the year progresses it is likely that investment spending and exports will contribute more to GDP growth than in the recent past and an orderly decline in the dollar will help the transition away from dependence on consumer spending. Export growth will also depend on the willingness of Europe and Japan to maintain the momentum of their economies by supporting domestic demand. The US economy will certainly begin 2004 in excellent form as high rates of growth will co-incide with stable financial conditions and low inflation. Later in the year the required adjustments to household savings, the Federal deficit and the current account deficit may cause problems depending on how smoothly these adjustments take place. Part of the process will be a continued decline in the dollar but the necessary improvement in fiscal trends is harder to foresee – especially in an election year. It is also unlikely that households will increase their savings rates in a period of rising employment and low inflation. This suggests that the risks for the latter part of 2004 and 2005 tilt towards higher inflation, higher interest rates and more volatile financial markets as the excess slack in the US economy is absorbed.

Japan's economic growth rate is projected

Japan

to slow to 1.8% from 2% in the current fiscal year.

Japan's economic growth is projected to slow down slightly in real terms in 2004, but increase in nominal terms due to the slower pace of deflation. The cabinet office said that the real growth would slow down to 1.8% in the year to March 2005 against a projected 2% in this fiscal year. However, in nominal terms growth is expected to rise to 0.5% next year from a forecast 0.1% this fiscal year. The Japanese economy has been shrinking in nominal terms since the mid-1990s, but has shown real growth in the past several years because of the effect of deflation. The government estimated the GDP deflator would fall to -1.3% next fiscal year, compared with -1.9% this year. The environment for consumption factors such as employment, wages and consumer confidence, is recovering steadily. This recovery would support the nominal positive growth of private consumption. Furthermore, the Japanese policy-makers are doing whatever is needed to prevent a jump in the yen, which may erode the confidence of business, and affect the economic recovery. Japan's Finance Ministry last year sold a record 20.05 trillion yen to curb the yen's rise and stem the dollar's fall. It has also made it clear that it is gearing up for a bigger battle against the strength of the year this year by bolstering its intervention. Meanwhile, for the first time since 1997, the Japanese government has decided not to implement a supplementary fiscal package in the fiscal year 2003. This suggests that public works spending will fall further in the months ahead, and with the economy improving, the fiscal authorities are likely to continue the process of fiscal consolidation, in an effort to bring Japan's high deficits and debt level under control.

Euro-zone recovery has begun but faces test of strong euro. Aftermath of February G7 may pose challenges for ECB

FSU's economy continued its strong performance throughout 2003, and its full-year result will exceed expectations

Strong euro and weak dollar boosts East European growth prospects

#### Euro-zone

Following the rapid increase in German industrial production in October, November produced another strong month with a rise of 1.3%, month-on-month. The leading sectors were manufacturing, particularly capital goods, and construction. The production of consumer goods fell slightly. The data for incoming orders in November was also above expectations and it is noteworthy that the acceleration mainly reflected stronger domestic demand. Foreign orders remain close to historically high levels but the high level of the euro seems to be limiting export growth. Together with strong industrial production in Spain (up 1% in both October and November) this data suggests that Euro-zone industrial production at least remained stable in November. Despite the orders data there is little concrete evidence of a recovery in consumers'expenditure. German consumer spending fell by 1.1% in November and Euro-zone consumer confidence survey data showed no improvement in December. Considering the final quarter of 2003 and the first quarter of 2004 it is very likely that Euro-zone economic activity was above trend, despite the mixed indicators. The momentum of the world economy and the fact that the European recovery is at a very early stage would be sufficient to produce such an acceleration. A more difficult question is the impact of recent euro strength on the second half of 2004 when the US and Japanese economies may slow. It is by no means certain that European domestic demand will recover sufficiently to compensate for a possible decline in exports and this is the policy dilemma facing the European Central Bank. Thus far the ECB has resisted calls for lower interest rates although the recent speed of the appreciation must be cause for concern. If Euro-zone companies expect further appreciation to \$1.35-\$1.40 this would affect investment plans, employment and reduce consumer confidence. Much will depend on the markets' reaction to the G7 summit in February. If the Japanese authorities make clear their determination to halt the rise in the yen, greater pressure will be applied to the euro and the currency might well overshoot. The ECB have the ability to intervene - both orally and in the markets – but, for the moment, will probably continue to wait and monitor the strength of the economic data.

#### Former Soviet Union

The FSU's economy continued its strong performance throughout 2003. Domestic demand became increasingly dominant as the driver of the economic growth in the second half of the year. In Russia. growth slowed in the third quarter, but the full-year result will exceed expectations. Year-on-year GDP growth slowed modestly in the third quarter of 2003 to 6.2% from 6.8% in the first quarter and 7.2% in the second one. Two major factors stood behind the slight slowdown. First of all, third-quarter developments in the agricultural sector pulled down overall growth. Value added by agriculture fell 3.5% y-o-y in the third quarter because of unfavourable weather conditions, after a 1.1% growth in the first quarter and a 1.2% drop in the second one. The other major factor in the slowdown is the higher base of comparison in the third quarter of 2002. However, the industrial output growth held steady at 6.8 throughout the first eleven months of 2003. The star performers in the industrial sector have remained the fuels, the metals and the machine-building branches. Output of crude oil, including gas condensate, amounted to 384 million tons (8.39 mb/d) in the first eleven months, up 11.0% compared with the same period of 2002. The investment boom has also caused a surge in construction activity (up 14.5% in October) and an increase in demand for construction materials. Output of construction materials was up 8.6% y-o-y on an unadjusted basis in November and 5.7% in the first eleven months. In November, consumer price inflation came in at 1.0% m-o-m, just below the 1.1% the Central Bank projected at midmonth, so the y-o-y inflation fell from 13.25 in October 2003 to only 12.5% as of the end of the same month. Russia's international reserves reached an all-time-high of \$68.2 billion, representing a \$3.3 billion increase over the end-October figure.

#### Eastern Europe

The Polish economy ended 2003 on a strong note, recording GDP growth of about 3.5% and an improving current account deficit. Estimates of industrial production suggest that output in December rose by 12-15% above year ago levels. Nevertheless the zloty was weak as a result of perennial concerns regarding fiscal policy. The new composition of the Polish Monetary Policy Council is perceived by the markets to favour lower interest rates and this change has also tended to weaken the currency. Hungary also has struggled to impose a credible fiscal policy and the release of the budget deficit for 2003 – at 5.6% of GDP – led to the dismissal of the Finance Minister. The forint weakened by 3%, falling to nearly 270, as markets lack confidence that the current account deficit is under control. The likely deficit for November will leave the 12 month

deficit-to-GDP ratio in the region of 6.5%. The third quarter growth rate of the Czech Republic exceeded expectations at 3.4% as a result of stronger household consumption and fixed investment. Inflation rose slightly in November to 1% year-on-year but the Czech koruna has stabilised at a euro exchange rate of 32-33. The government's reform package is aimed at reducing the overall deficit below 4% of GDP by 2006. The progress of the Czech Republic towards adoption of the euro is thus likely to be gradual and may not be achieved in this decade.

#### **OPEC** Member Countries

Some OPEC Member Countries enhance their economic growth via liberal reforms and diversification Some OPEC MC's are doing their best to enhance their economic expansion by applying several incentive policies. For instance' The SP Libyan AJ's government will undoubtedly continue to pursue its rehabilitation within the international community and will give the liberal economic reform top priority in its agenda for 2004. The economic expansion in Libya is expected at 2.8% in 2003, due to relatively oil output increase and the proved rise in the investment level as well. Once the rapprochement with the west develops more, Libya might attract greater foreign investor interest in its oil and gas sector and possibly even in the tourism sector over 2004. FDI will further boost the economy in 2005, as well as the lifting of economic sanctions. Similarly in Nigeria, the prospects for a liberal economic reform in 2004-2005 have increased due to the appointment of a new finance minister who has a background in the World Bank, the transfer of several respected advisers from the private sector into the government, and the emergence of the strong feeling at present that the Cabinet includes people with good expertise who are committed to economic reforms. The GDP growth rate has approached 3.5% in 2003and expected at 3.7% in 2004, it has been derived by high government spending, a booming agricultural output plus a gradual pick-up in oil production. Last but not least, Qatar's diversification policy will obviously continue to focus on the development of the huge free natural gas reserves of the North Field, as a target of a long-term strategy to remove the economy's dependence on crude oil exports only. Qatar could probably be the world's largest LNG producer when it will reach its production target of 65mT/y by 2010. This target is ambitious, besides, associated industries such as condensate and petrochemicals will also be expanded, recently After signing a substantial sales agreement between Qatar Petroleum (QP) and several big oil majors the prospects have improved.

While the GDP growth in China & India still outperforming Brazil and Sub-Saharan Africa endeavor to gain ground in growth.

#### **Developing countries**

China's GDP growth rate is expected to grow by 8.5% in 2003 and 8.3% in 2004 after having registered 8.0% in 2002. The Chinese economy was boosted by an upturn in OECD growth and the continued reallocation of manufacturing capacity from higher cost locations. However, the investment growth will probably slow down in 2004 due to the tightening of credits, and the government will begin to rein in its policy of using the public sector's infrastructure spending to boost GDP expansion. India's economy is forecast to expand by 7.5% in 2003/04 due to the ongoing rebound in the agricultural sector – which is expected to grow by 4.5% in same period, and continued industrial expansion. agriculture is a major determinant of private consumption and the sector on which around two thirds of India's population depend. Brazil's GDP growth rate for 2004 is expected to rise to 3.4% from 0.1% only in 2003. This expectation is based on further cuts in interest rates, and the return of confidence will stimulate a gradual recovery of private consumption and investment. Sluggish demand and a stable currency will push to ease inflation to some 9.2% at the end of 2003, down from the peak of 17% in May 2003. Sub-Saharan Africa's growth is expected to accelerate to 3.5% in 2003 and 4.1% in 2004 compared to 3.1% in 2002. This is the result of improved world demand and the commodity price rises feed throth into stronger domestic expenditure growth. However, domestic political developments and weather patterns will also significantly impact growth prospects. Some countries are rebounding as conflicts are over, while others are bouncing back from drought-related economic slow-downs.

#### Oil price, US dollar and inflation

The US dollar fell to a record low against other major currencies in December. On average it lost 5.11% versus the euro, 5.06% against the Swiss franc, 3.57% against the British pound and 1.32% versus the Japanese yen. The foreign exchange markets were mainly influenced by the US twin fiscal and current account deficits, fears of new terrorist attacks, the Federal Reserve policy of holding short-term interest rate, speculations on euro buying by the Asian Central Banks, and a growing perception that the US Administration will increasingly favour a soft dollar to encourage economic growth. The dollar came under

US dollar fell sharply against other major currencies in December, resulting in an erosion of the major portion of the ORB's gain in that month

more pressure against the euro on 22 December, after the USA had raised its security alert because of what officials called a "substantial increase" in the potential for terrorism during the year-end-holidays. On the same day, the dollar weakened to \$1.2429 against the euro, and its bearish momentum was extended until the end of the month. The US dollar also slipped against the pound as speculations to lift the benchmark interest rate by the Bank of England were heightened and due to continued concern that the US Administration will tolerate a weaker dollar as it tries to boost employment. However, the dollar's decline against the yen was limited by fears about an intervention by the Bank of Japan (BOJ). The BOJ sold 2.25 trillion yen in December. The figure boosts yen sales for 2003 to a record 20.1 trillion yen (\$200 billion).

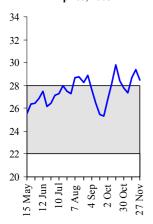
In the same month, the OPEC Reference Basket increased by \$0.99/b or 3.46% to \$29.44/b from \$28.54/b in November. In real terms (base July 1990=100), after accounting for inflation and currency fluctuations, the Basket price improved by a marginal 0.07% to \$21.56/b from \$21.55/b, as the sharp depreciation of the dollar eroded a major portion of the actual price improvement. The dollar fell 3.68% as measured by the import- weighted modified Geneva I +US dollar basket\*.

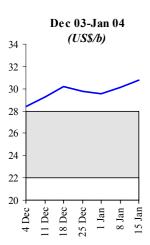
<sup>\*</sup> The 'modified Geneva I+ US\$ basket' includes the euro, the Japanese yen, the US dollar, the pound sterling and the Swiss franc, weighted according to the merchandise imports of OPEC Member Countries from the countries in the basket.

### Crude Oil Price Movements

The OPEC Reference Basket added another 99¢/b in December to average \$29.44/b

Weekly average Basket price, 2003



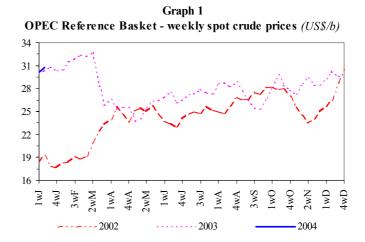


Precarious US commercial crude stocks and rampant Chinese demand underpinned crude prices. Meanwhile OPEC maintained production levels unchanged until further notice

The OPEC Reference Basket finished 2003 with an impressive cumulative average of \$28.10/b, the highest nominal yearly average since 1984. A rough calculation assuming a daily average production of 26.92 b/d results in a total revenue of approximately \$275 billion for the Organization during 2003. The 18% increase in total revenue, with respect to 2002, was due to the combined effects of a 1.59 mb/d increase in production and a rise of \$3.74/b in the Basket's average yearly price.

During the month of December the Basket added another  $99 \/e/b$  to average \$29.44/b a level not seen since the start of hostilities in the Middle East. On a weekly count the Basket started the month of December with a minor dip losing  $4 \/e/b$  to average \$28.43/b, before switching to a  $86 \/e/b$  gain in the second week to stand at \$29.29/b. The Basket added another  $90 \/e/b$  to \$30.19/b in the third week but then fell by  $45 \/e/b$  to close at \$29.74/b. The Basket made another upturn in the first week of January adding  $58 \/e/b$  to \$30.11/b, followed by a further  $68 \/e/b$  rise to \$30.79/b in the second week.

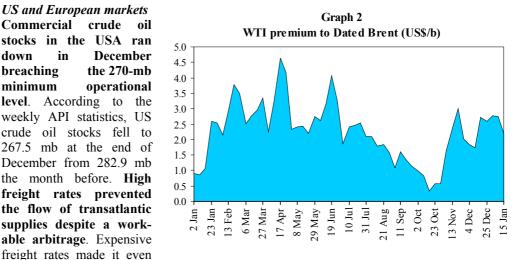
Crude prices were supported early in December by rampant demand for products in Asia, especially China, falling US commercial crude stocks and the sign of a solid economic recovery in the USA. This led the Atlantic WTI benchmarks BFO (Brent, Forcados and Oseberg) to breach the \$31/b and \$29/b marks respectively. The narrowing of the BFO-Dubai



spread resulted in an inflow of some 1.3-1.4 mb/d of West African crudes to the Asia Pacific region. Strong diesel demand in China, which has crippled exports and could ultimately make the country a net importer, supported regional crude prices and contributed to the closing of the spread to Atlantic basin crudes. The considerable draw on US crude stocks together with strong third quarter economic growth figures further underpinned crude prices early in December. Meanwhile OPEC in its 128th Extraordinary Meeting of the Conference on 4 December decided to maintain current agreed production levels until further notice, dissipating market expectations prior to the Meeting. During the second week of December, the first cool snap, together with all the factors present earlier in the month, pushed WTI futures above the \$33/b mark on 12 December with IPE Brent breaking though the \$30/b mark on the same day. Meanwhile, US commercial crude stocks continued to fall closing just above the perceived operational minimum level of 270 mb at 271.9 mb on 12 December. The cold weather also pushed up the Nymex gas futures contract, leading utilities to seek the alternative crude products, fuel oil and gasoil. Strong demand from Asia, which induced the flow of considerable volumes of West African crudes, continued to deprive the US market of one of its natural supply sources. Nonetheless, US refiners did not seem especially concerned. They argued that inventory management efficiency has improved as a result of the industry consolidation and that crude oil is readily available in the international market. Crude markets picked up in the third week of December only to ease a little towards the end of the month, yet WTI futures prices stayed well above the \$32/b mark. Crude oil inventories fell below the psychological barrier of 270 mb, while the east/west tug of war for West African crudes continued. Despite the widening of the WTI/BFO spread to around \$3/b, high freight rates discouraged transatlantic movements to the USA. Shipping rates were under pressure by continuous delays in the Bosporus Straits which tightened vessel availability.

US commercial crude inventories dropped below the operational minimum of 270 mb, while refiners were engaged in year-end inventory management for tax purposes

US and European markets Commercial crude oil stocks in the USA ran down in **December** breaching the 270-mb minimum operational level. According to the weekly API statistics, US crude oil stocks fell to 267.5 mb at the end of December from 282.9 mb the month before. High freight rates prevented the flow of transatlantic supplies despite a workable arbitrage. Expensive



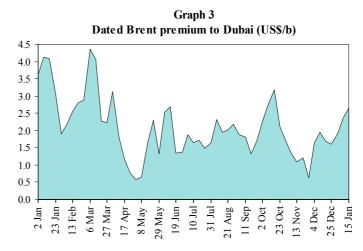
more difficult to move Latin American sour grades like Colombian Cuisiana and Ecuadorian Oriente. Strong Asian demand and a narrow arbitrage induced the flow of West African grades to the east, competing with the USA for the same barrels. Meanwhile, US buying remained lacklustre as refiners minimized inventory holding for year-end tax purposes. Crude oil imports dropped below the 9.0 mb/d level early in December but recovered thereafter implying that crude oil was readily available in the international market. The European market firmed early in December, boosted by a sharp decline in Caspian and Russian crudes as a result of the delays in the Bosporus Strait. Buoyant margins prompted European refiners to step up buying of North Sea distillate-rich grades underpinning prices of Forties and Oseberg. North Sea light sweet grades drew support later in the month, as buying interest surged ahead of the New Year clearing most availability until at least the first two weeks of January.

Strong demand and the narrow arbitrage induced the flow of **BFO** related Atlantic **Basin crudes** 

#### Far East market

Demand for West African grades to Asia Pacific remained buoyant during the first half of December, underpinned by the narrowing of the BFO/Dubai premium which fell below \$1.4/b. Regional sweet crudes were also supported by dwindling availability from Malaysia and Australia. Nevertheless, high freight rates made regional refiners turn to local

grades later in the month. Expensive transportation costs, combined with the slow-down of Chinese demand, left West African crude sellers with little alternative but to send their crude to the west. Middle East crude prices weakened following allocation of January term volumes while trading for February cargoes under pressure by the perceived expensive official selling prices. In late December and early



January, the lack of competing crudes, due to the high freight rates, supported demand for light sweet regional Australian and Malaysian grades, while Chinese demand continued to support the heavy grades.

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

			Year-to-da	te average
	Nov 03	Dec 03	<u>2002</u>	<u>2003</u>
Reference Basket	28.45	29.44	24.36	28.10
Arabian Light	28.63	29.20	24.32	27.69
Dubai	27.62	28.06	23.83	26.77
Bonny Light	28.93	29.64	25.15	28.76
Saharan Blend	28.94	29.77	24.91	28.73
Minas	30.12	32.09	25.60	29.52
Tia Juana Light	26.69	27.60	22.61	26.97
Isthmus	28.24	29.71	24.12	28.25
Other crudes				
Brent	28.68	29.82	25.03	28.81
WTI	30.94	32.15	26.13	31.09
Differentials				
WTI/Brent	2.26	2.33	1.10	2.28
Brent/Dubai	1.06	1.76	1.20	2.04

## Product Markets and Refinery Operations

Average petroleum product prices continued to exhibit mixed trends in December, with Asian product premiums exceeding those of the US Gulf and Rotterdam markets. Thus, refining margins soared to a historically high level in Singapore, while they remained moderately in positive territory in the two other centres.

US Gulf market

Spot product prices showed mixed trends in the US Gulf in December. On average, prices for gasoline and gasoil rose 4% and 5% respectively, amid an almost 4% increase in WTI's average value. The high sulphur fuel oil (HSFO) counterpart, however, shrugged off the rise in its marker crude WTI to plunge by 7% for the same period. Nonetheless, the Energy Information Agency's four-week average, representing major US refinery and product activity in December, indicated that gasoline demand declined for the second consecutive month, sliding further by 1.2% to register nearly 8.9 mb/d, although still higher than the corresponding period last year. This came in contrast to the expectation of heavy traffic during the holiday season. Furthermore, the prolonged warmer than normal temperatures from October to December, despite several short-lived cold snaps in some US regions, resulted in mild weather generally dominating most of the USA during the first half of the winter months, according to the National Oceanic and Atmospheric Administration (NOAA). Therefore, distillate demand fell by around 3% below last month's and the previous year's levels. Lastly, fuel oil demand also plummeted by 14% and 18% below the level of both the previous month and the preceding year respectively, reflecting largely lower utility consumption.

Average refining margins in the US Gulf in December fell further, but remained moderately in positive territory, as a significant rise in the WTI price was partially offset by a moderate increase in the gross product worth.

US refinery throughput crept higher, increasing by 60,000 b/d to 15.54 mb/d. The corresponding refinery utilization rate was 93.5%, representing a 2.3% increase over the previous year's runs.

#### Rotterdam market

Although the average price of the European marker crude Brent rose a considerable 4% during December, the HSFO counterpart plunged by 13%. Other product prices saw modest gains, as gasoline edged up 1% and gasoil 2%. However, an overall analysis of the European product markets showed the following developments. Firstly, narrowing gasoline price differentials between Europe and the US East Coast, coupled with persistently high freight rates, hindered transatlantic gasoline exports. However, robust demand from Nigeria and Iraq via the Eastern Mediterranean basin alleviated the gasoline surplus in Europe. Secondly, distillate supply was hindered by restricted Russian exports due to increased domestic demand. This was compounded by lower European refinery input, which implied lower output of the main product, distillates. Meanwhile, rising Russian fuel oil exports, together with mild weather and decreased efforts to send fuel oil to the Far East market, constituted the main factors for the prevailing abundant fuel oil supply in the European market.

The exceptional strength of the Brent price overwhelmed a moderate rise in light and middle product prices. This led to a sharp decline in Brent's margins, though they still roughly exhibited a value close to \$1/b.

Refinery throughput in the Eur-16 countries fell to nearly 12.30 mb/d in December, representing a drop of 120,000 b/d from the preceding month's level. The equivalent refinery utilization rate of 89.5% represented a loss of 0.5% from the corresponding period last year.

Demand for major US products fell in December, although their values followed mixed trends. Refining margins fell but remained positive in the US Gulf centre. The US refinery utilization rate edged up to 93.5%.

Arbitrage movements from and to Europe largely shaped product markets in December. Refining margins remained positive, despite a sharp drop. Refinery utilization fell to just below 90%.

The enormous rise in gasoline in December, together with a prevailing surge in the gasoil price in Singapore, led to significant strength in refining margins.

#### Singapore market

Average spot product prices in Singapore in December continued to enjoy an unusual premium over other world product markets, which implies tightened supply coinciding with steady robust demand for the light and middle ends of the barrel. The average gasoline price, for instance, made an impressive gain of nearly 10%, followed by a 5% increase in the gasoil price. The fuel oil price skidded 1%, though the marker crude, Dubai, tracked the opposite direction for an average price rise of 1.6% during the same period. The Asian product market was shaped by three main developments, the first of which was strong gasoline fundamentals. China continued to sharply reduce gasoline exports due to healthy domestic demand. The Asian gasoline supply was further exacerbated by a reduction in the quantity of naphtha available for processing into gasoline, reflecting the diversion of naphtha to the petrochemical industry where it generates higher profits. Moreover, naphtha exports from the Middle East were cut significantly, as a consequence of planned and unplanned refinery outages and strong regional demand. The second development shaping the Asian product market was Asian refiners' seasonal policies, which favour the main regional heating fuel, kerosene, and jet fuel, and, in turn, affects the gasoil supply. This, together with continuous firm gasoil demand in China, led to a prevailing surge in the Asian gasoil price. Thirdly, the prolonged absence of China's fuel oil purchases due to governmental quota restrictions left an abundant fuel oil supply in the market.

A combination of the relative weakness of Dubai compared to the other marker crudes and strong product prices supported by robust demand and curtailed supply added another boost to already healthy refining margins in Singapore in December. According to an industry survey, this resulted in average crude refining margins in December that were the best for the last seven years.

Refinery throughput in Japan rose further, increasing by 200,000 b/d to 4.3 mb/d in December. This, however, indicated a 90.1% utilization rate, a drop of almost 5% from last year.

Table 2
Refined product prices
US\$/b

		Oct 03	<u>Nov 03</u>	<u>Dec 03</u>	Change <u>Dec/Nov</u>
US Gulf					
Regular gasoline	(unleaded)	35.57	34.71	35.97	+1.26
Gasoil	(0.2% S)	33.59	34.10	35.72	+1.62
Fuel oil	(3.0% S)	24.48	24.00	22.35	-1.65
Rotterdam					
Premium gasoline	(unleaded)	33.71	33.54	33.84	+0.30
Gasoil	(0.2% S)	33.92	34.21	35.02	+0.81
Fuel oil	(3.5% S)	22.63	22.56	19.55	-3.01
Singapore					
Premium gasoline	(unleaded)	35.55	35.78	39.52	+3.74
Gasoil	(0.5% S)	33.58	35.08	36.67	+1.59
Fuel oil	(380 cst)	24.38	24.02	23.79	-0.23

Table 3
Refinery operations in selected OECD countries

	Re	finery through mb/d	put	Refinery utilization* %				
	Oct 03	<u>Nov 03</u>	Dec 03	Oct 03	Nov 03	Dec 03		
USA	15.57	15.49	15.54	93.7	93.2	93.5		
France	1.80	1.84	1.84	94.6	96.5	96.5		
Germany	2.28	$2.29^{R}$	2.21	100.7	$100.9^{R}$	97.7		
Italy	1.81	1.87	1.79	78.8	81.4	77.8		
UK	1.46	1.58 <sup>R</sup>	1.58	81.6	88.5 <sup>R</sup>	88.2		
Eur-16	12.06	12.41 <sup>R</sup>	12.29	87.8	90.4 <sup>R</sup>	89.5		
Japan	3.95	$4.10^{R}$	4.30	82.9	$86.0^{R}$	90.1		

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

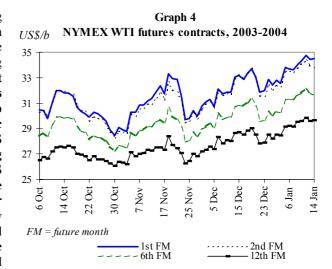
 $Sources: \qquad OPEC\ Statistics,\ Argus,\ Euroilstock\ Inventory\ Report/IEA.$ 

R Revised since last issue

### The Oil Futures Market

Low US crude stocks and cold temperatures brought the bulls out in December

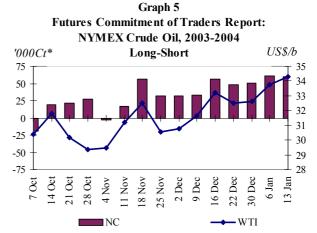
Enough factors combined to bring the bulls out in December, with speculators very active in the Nymex building up their long holdings in an attempt to profit from a rising market. The factors which combined to stir up investment funds' optimistic market perception were low US crude oil inventories, freezing winter temperatures in the US Northeast region (a prime heating oil market), weather predicting forecasts below normal winter temperatures and OPEC's decision early in the month to keep output unchanged



although hinting that a cut might be in the cards at OPEC's Meeting in Algiers on 10 February. The CFTC (Commodity and Futures Trading Commission) Commitment of Traders Report for the week ending on 2 December showed an almost unchanged net-long position with respect to the previous week, as non-commercials awaited the outcome of OPEC's 4 December Meeting following the book squaring that took place ahead of the long Thanksgiving holiday. The CFTC report for the following week showed a slight increase in net-long holding by non-commercials. Big speculators added 770 lots to their net-longs which stood at 33,221 contracts on 9 December. Open interest rose in the same week by 23,851 lots to 568,500 lots underlining the rise in interest and participation by market makers. Taking advantage of the cold winter temperatures and crude draw downs in the USA, which approached the 270-mb perceived minimum operational level, speculators decided to break the relative stability of the past three weeks and bought the market heavily.

According to the Commitment of Traders report for the week of 16 December non-commercials

boosted long positions by 26,945 lots to 116,883 contacts while short positions rose by just 3,729 lots to 60,446, resulting in a net-long position of 56,437 contracts. Speculators reduced their net-long holdings during the week 23 December by 8,495 contracts to 47,942 on profittaking, which induced a fall in WTI futures prices. Further draws on US crude stocks towards the end of the month, which fell below the 270-mb mark, together with cold winter temperatures, prompted noncommercials to increase their net-long holdings by 2,645 lots



NC = Non-commercials: funds, investments and banks. Ct = \*Each contract is 1,000 barrels.

to 50,587 in the week of 30 December.

Continued cold weather and draws on US crude oil stocks made large speculators increase their net long positions by approximately 21%, or 61,356 lots, during the first week of January. In the following week of 13 January, the CFTC report showed a small decline in the net-long positions of non-commercials. This minor decline was inspired by the continuation of cold weather in the US Northeast and low crude oil stocks.

### The Tanker Market

OPEC area spot fixtures fell 40% on fewer working days in December

After two consecutive months of increases, a holiday-filled December pushed OPEC area spot fixtures down by nearly 40% to a level of 10.71 mb/d. This was 4.16 mb/d below a month ago, but at about the same level as last year. Pre-bookings in October and November could be the reason behind the low seasonal level of chartering in December when most charterers leave for year-end holidays. Hence, OPEC's share of global spot fixtures fell by 3% to 58% compared with last month, but remained about 2% higher than a year ago. Nearly half of the fall occurred on Middle East long-haul spot fixtures where Middle East eastbound and westbound fixtures declined by 1.40 mb/d to 3.95 mb/d and by 0.68 mb/d to 1.74 mb/d respectively. Eastbound and westbound shares of total OPEC fixtures were 37% and 16% respectively, which was 1% higher for eastbound and flat for westbound from the month before and a drop of 2% and 3% from a year ago. Together they accounted for 53% of total OPEC chartering in the OPEC area, which was 1% higher than the level registered last month. Non-OPEC spot fixtures followed the same direction for similar reasons, declining by 1.75 mb/d to stand at 7.62 mb/d, a level that represents a 42% share of total global chartering and a drop of 0.86 mb/d below last year's for a share loss of 2%. As a result, global spot chartering displayed a massive fall of about 32% or 5.91 mb/d to stand at 18.33 mb/d. This was the lowest level since August 2003, but just 0.76 mb/d below the same period last year. According to preliminary estimates, sailings out of the OPEC area in December rose 1.24 mb/d to a monthly average of 25.57 mb/d. Sailings out of the Middle East moved in a contrary direction, declining by 0.49 mb/d to a monthly average of 15.66 mb/d. This was about 61% of total OPEC area sailings, or 5% below the month-ago level. Preliminary estimates of arrivals in all main areas displayed relatively small increases, except in Euro-Med, which saw a minor decline of 0.03 mb/d to 4.20 mb/d. Arrivals in US Gulf, US East Coast and the Caribbean rose by 0.11 mb/d to 10.56 mb/d, while in NW Europe they increased by 0.33 mb/d to 7.13 mb/d. In Japan, arrivals remained almost at last month's level, moving up slightly by 0.01 mb/d to 3.64 mb/d.

VLCC freight rates enjoyed further increments in December on very healthy demand

In December, crude oil spot freight rates touched all-time highs, mostly on the back of very healthy demand for crude oil in nearly all consuming regions, but particularly in China, where oil imports increased rapidly in the last months of the year. The congestion in the Bosporus Strait bolstered crude oil freight rates as it led to a replacement of oil mostly from the Atlantic basin, which increased the voyage length. Rising demand for modern tonnage also contributed to the rate boom. VLCC freight rates on the Middle East eastbound and westbound long-haul routes rose further by 12% and 8% respectively in December to stand at a monthly average of WS 153 and WS 129, or an increase of 18 and 10 points respectively. Tight tonnage availability especially at the beginning of the month, where 30-day VLCC availability in the Middle East was hovering at around 40 vessels, encouraged ship-owners to seek higher rates. A slight rise in 30-day VLCC availability by the end of the month also moved rates upwards. Suezmax was the sector that benefitted the most from the bottleneck in the Bosporus Strait where delays kept many tankers away from the market for a longer than expected period. This situation helped Suezmax freight rates to gain considerably more than 50% on some routes. Freight rates along the West Africa/US Gulf Coast route rose by about 21%, increasing by 31 points to stand at a monthly average of WS 180. On the NW Europe/US East-Gulf Coast route, rates improved by 38% as healthy US demand and price differentials attracted North Sea grades by making such high transportation costs worthwhile. Very high activity in the Caribbean pushed Aframax freight rates up by 18% along the Caribbean/US Gulf route, lifting them by 40 points to WS 258. Within the Mediterranean and from there to NW Europe, rates improved by about 3% and 16% respectively to stand at WS 273 and WS 235, an increase of 7 and 32 points. The already high and still rising level of Aframax freight rates on the Mediterranean/NW Europe route resulted from higher Baltic exports as so many exporters avoided the congestion in the Bosporus. Along the Indonesia/US West Coast route, rates also showed some improvement, increasing by 19 points to WS 171.

Clean freight rates remained firm on all main routes in December

Product freight rates remained firm for the second consecutive month, benefiting from very high seasonal demand along all main routes during December. Freight rates for clean medium-range vessels on the Middle East/Far East route rose by 20 points or about 13% to stand at WS 176 on relatively strong activity. From Singapore to the East, rates enjoyed a nearly similarly increase of 25 points or 12% to stand at a monthly average of WS 241. This rise was mainly due to high fixtures at the beginning of the month, which slowed as the month wore on depressing rates down slightly by a few points. Healthy demand mainly for gasoline helped vessel owners within the Atlantic basin to gain 29 points or about 12% to WS 268 along the NW Europe/US East-Gulf

Coast route. In the Caribbean, rates managed to get an increase of 33 points to WS 327 due to pre-Christmas fixtures. Within the Mediterranean basin and from there to NW Europe, freight rates gained 44 and 35 points to stand at WS 258 and WS 308 respectively. Strong demand and tight tonnage availability were the main reasons behind such buoyant levels.

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

				Change
	Oct 03	<b>Nov 03</b>	<b>Dec 03</b>	Dec/Nov
Chartering				
All areas	23.89	24.24	18.33	-5.91
OPEC	14.61	14.87	10.71	-4.16
Middle East/east	5.44	5.35	3.95	-1.40
Middle East/west	2.35	2.42	1.74	-0.68
Sailings				
OPEC	22.98	24.32	25.57	1.24
Middle East	16.00	16.14	15.66	-0.49
Arrivals				
US Gulf Coast, US East Coast, Caribbean	10.75	10.45	10.56	0.11
North West Europe	7.66	6.81	7.13	0.33
Euromed	4.05	4.23	4.20	-0.03
Japan	3.49	3.63	3.64	0.01

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

Table 5 Spot tanker freight rates Worldscale

	<b>Size</b> 1,000 DWT	Oct 03	<u>Nov 03</u>	Dec 03	Change Dec/Nov
Crude					
Middle East/east	200-300	63	135	153	18
Middle East/west	200-300	54	119	129	10
West Africa/US Gulf	100-160	111	149	180	31
North-West Europe/US East Coast	100-160	119	141	194	53
Indonesia/US West Coast	70–100	139	152	171	19
Caribbean/US East Coast	40–70	162	218	258	40
Mediterranean/Mediterranean	40–70	160	266	273	7
Mediterranean/North-West Europe	70–100	174	203	235	32
Products					
Middle East/east	30-50	154	156	176	20
Singapore/east	25-30	184	216	241	25
Caribbean/US Gulf Coast	25–30	240	294	327	33
North-West Europe/US East Coast	25-30	201	239	268	29
Mediterranean/Mediterranean	25-30	197	214	258	44
Mediterranean/North-West Europe	25–30	172	273	308	35

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

### World Oil Demand

#### Estimates for 2003

World

World demand for 2003 revised up a slight 0.05 mb/d to 78.41 mb/d, a rise of 1.42 mb/d over 2002 Our 2003 demand estimates for the first, second and third quarters. which incorporate actual consumption data for the OECD up to the end of the third quarter, remain basically unchanged from the last *MOMR*. Further evidence, however, points to higher than expected fourth quarter consumption in China and the FSU of 0.20 mb/d and 0.05 mb/d respectively, partly offset by a 0.10 mb/d reduction in the estimated demand for the OECD Pacific. As a result, **the fourth quarter average has been substantially revised up by 0.19 mb/d, and the forecast average world oil demand volume for 2003 has been raised by 0.05 mb/d to 78.41 mb/d versus the 78.36 mb/d presented in the last** *MOMR***. The yearly increment — the difference between the 2002 and the 2003 averages — has likewise been adjusted upward by 0.04 mb/d to read 1.42 mb/d. Quarterly and regional details are given in Table 7.** 

On a regional basis, demand in 2003 is estimated to have risen by 0.72 mb/d or 1.52% in the OECD following a minor fall of 0.07 mb/d in 2002. Developing countries are forecast to see only a moderate 0.10 mb/d or 0.53% rise in consumption in 2003, following a much higher 0.18 mb/d growth in 2002. Apparent demand in the former CPEs is estimated to have grown considerably by 0.59 mb/d or 6.23%, close to triple the 2002 volume and growth rate of 0.21 mb/d and 2.21% respectively.

Table 6
World oil demand in 2003

							Change 2003/02	
	<u>2002</u>	<u>1Q03</u>	<u>2Q03</u>	<u>3Q03</u>	<u>4Q03</u>	<b>2003</b>	<u>Volume</u>	<u>%</u>
North America	24.16	24.56	24.16	24.80	24.70	24.56	0.39	1.63
Western Europe	15.08	15.20	14.99	15.28	15.44	15.23	0.15	1.00
OECD Pacific	8.50	9.61	8.04	7.88	9.18	8.67	0.18	2.11
Total OECD	47.73	49.37	47.19	47.96	49.32	48.46	0.72	1.52
Other Asia	7.47	7.54	7.58	7.53	7.78	7.61	0.13	1.80
Latin America	4.75	4.54	4.69	4.78	4.68	4.67	-0.08	-1.62
Middle East	4.95	4.89	4.76	5.15	5.08	4.97	0.02	0.48
Africa	2.53	2.55	2.54	2.53	2.57	2.55	0.02	0.87
Total DCs	19.70	19.52	19.57	19.99	20.11	19.80	0.10	0.53
FSU	3.78	4.01	3.35	3.70	4.46	3.88	0.10	2.64
Other Europe	0.74	0.77	0.73	0.70	0.76	0.74	0.00	-0.09
China	5.03	5.41	5.46	5.76	5.48	5.53	0.50	9.85
Total "Other Regions"	9.56	10.20	9.54	10.16	10.70	10.15	0.59	6.23
Total world	76.99	79.08	76.30	78.12	80.13	78.41	1.42	1.85
Previous estimate	76.97	79.08	76.30	78.11	79.95	78.36	1.39	1.80
Revision	0.01	0.00	0.00	0.01	0.19	0.05	0.04	0.05

Totals may not add due to independent rounding.

Since the first three quarterly averages have undergone very minor changes, our comments on the quarterly averages remain very similar to those presented in the last *MOMR*. Compared with the exceptionally weak first quarter 2002, world demand is estimated to have grown significantly by 2.97% or 2.28 mb/d to average 79.08 mb/d in the first quarter of 2003. This is the net effect of much colder than normal weather in most parts of the northern hemisphere, fuel substitution in Japan as a result of nuclear power reactors maintenance, stockpiling ahead of the anticipated Iraq war, and record high natural gas prices in the USA. Second quarter 2003 consumption is estimated to have risen by 1.44% or 1.08 mb/d compared to the exceptionally weak second quarter of 2002, thanks to robust economic growth in China and due to the continuation of fuel substitution in Japan.

Third quarter consumption is assumed to have grown similarly by 1.02 mb/d or 1.32%. But fourth quarter consumption is expected to have undergone much higher growth of 1.32 mb/d or 1.68%. Detailed quarterly comparisons for all quarters are presented in Tables 8 and 9.

Table 7
First and second quarter world oil demand comparison for 2003

	Change 2003/02							2003/02
	1Q02	1Q03	Volume	<u>%</u>	<u>2Q02</u>	<b>2Q03</b>	Volume	<u>%</u>
North America	23.93	24.56	0.63	2.64	24.02	24.16	0.13	0.56
Western Europe	15.15	15.20	0.05	0.33	14.63	14.99	0.36	2.48
OECD Pacific	9.06	9.61	0.55	6.04	7.64	8.04	0.41	5.33
Total OECD	48.14	49.37	1.23	2.55	46.28	47.19	0.90	1.95
Other Asia	7.29	7.54	0.25	3.40	7.50	7.58	0.08	1.06
Latin America	4.70	4.54	-0.16	-3.50	4.78	4.69	-0.09	-1.95
Middle East	4.83	4.89	0.05	1.11	4.91	4.76	-0.15	-3.08
Africa	2.56	2.55	0.00	-0.09	2.50	2.54	0.05	1.83
Total DCs	19.38	19.52	0.13	0.69	19.69	19.57	-0.12	-0.61
FSU	3.77	4.01	0.24	6.43	3.39	3.35	-0.04	-1.31
Other Europe	0.77	0.77	0.00	0.09	0.73	0.73	0.00	0.60
China	4.74	5.41	0.67	14.23	5.12	5.46	0.34	6.65
Total "Other Regions"	9.28	10.20	0.92	9.89	9.24	9.54	0.30	3.25
Total world	76.80	79.08	2.28	2.97	75.22	76.30	1.08	1.44

Totals may not add due to independent rounding.

Table 8 Third and fourth quarter world oil demand comparison for 2003 mb/d

	Change 2003/02					Change 2004/03		
	3Q02	3Q03	<u>Volume</u>	<u>%</u>	4Q02	4Q03	Volume	<u>%</u>
North America	24.34	24.80	0.46	1.89	24.35	24.70	0.35	1.45
Western Europe	15.18	15.28	0.10	0.65	15.35	15.44	0.09	0.59
OECD Pacific	8.03	7.88	-0.15	-1.87	9.26	9.18	-0.08	-0.81
Total OECD	47.55	47.96	0.41	0.86	48.95	49.32	0.37	0.75
	0.00							
Other Asia	7.47	7.53	0.07	0.90	7.64	7.78	0.15	1.92
Latin America	4.81	4.78	-0.03	-0.72	4.69	4.68	-0.02	-0.35
Middle East	5.10	5.15	0.05	0.92	4.93	5.08	0.15	2.94
Africa	2.49	2.53	0.04	1.48	2.57	2.57	0.01	0.27
Total DCs	19.88	19.99	0.12	0.58	19.83	20.11	0.28	1.42
FSU	3.67	3.70	0.03	0.78	4.28	4.46	0.17	4.08
Other Europe	0.73	0.70	-0.03	-4.05	0.74	0.76	0.02	2.99
China	5.27	5.76	0.49	9.36	5.00	5.48	0.48	9.54
Total "Other Regions"	9.67	10.16	0.49	5.09	10.02	10.70	0.67	6.72
Total world	77.10	78.12	1.02	1.32	78.81	80.13	1.32	1.68

Totals may not add due to independent rounding.

#### **OECL**

As indicated in the previous *MOMR*, **OECD consumption assumed at 48.46 mb/d constitutes 62% of total world demand in 2003**. Out of an estimated 1.42 mb/d world oil consumption increment in 2003, about 0.72 mb/d or nearly 51% is expected to initiate in the OECD. Within the group, **North America ranks first in estimated demand growth with 0.39 mb/d, close to 54% of the group demand increment.** OECD Pacific ranks second with 0.18 mb/d, equivalent to 25%, and Western Europe ranks third with 0.15 mb/d, nearly 21%.

Actual consumption data suggests that OECD January-October oil requirements were 0.85 mb/d higher compared to the corresponding 2002 period. During this period, similar to the January-September period reported in the last *MOMR*, gasoil/diesel was the leading volume and percentage product gainer with a 0.41 mb/d or 3.46% rise in consumption due to fuel switching in the USA and across Europe. The second volume and percentage product gainer was naphtha which experienced 0.10 mb/d or 3.41% growth thanks to healthy margins in the petrochemical sector. Direct use also experienced exceptionally high growth of 115% due to nuclear reactor maintenance in Japan.

#### DCS

In developing countries, oil demand is estimated to have grown by 0.10 mb/d or 0.53% to 19.80 mb/d. Consumption in Latin America is estimated to have contracted by 0.08 mb/d or 1.62% to average 4.67 mb/d, indicating a relative improvement over the last year when demand weakened by 0.12 mb/d due to persistent economic and financial problems. Other Asia is estimated to have registered the highest volume and percentage growth of 0.13 mb/d or 1.80%, followed by Africa and the Middle East with 0.02 mb/d or 0.87% and 0.02 mb/d or 0.48% respectively.

#### Other Regions

Although apparent demand in the former CPEs in 2003 is now forecast at 10.15 mb/d, or marginally higher than the level mentioned in the last *MOMR*, their share of world oil consumption remains unchanged at 13%. Due to the upward revision in China's consumption prospects, the demand growth estimate now stands at 0.50 mb/d or 9.85%, equivalent to 35% of the total world demand increment, and more than double the country's consumption growth in 2002. Within the group, the apparent 5.53 mb/d demand in **China is forecast to register the highest volume and percentage growth**. The FSU, with an average of 3.88 mb/d, is expected to experience the second highest demand rise of 0.10 mb/d or 2.64%, while apparent demand in Other Europe is expected to see only a negligible change.

#### Forecast for 2004

Based on slightly higher prospects for economic growth, our 2004 average world oil demand forecast has been revised up by 0.05 mb/d to 79.66 mb/d, compared with the 79.61 mb/d presented in the last *MOMR*. However, anticipated oil demand growth in 2004 has been raised by only 0.01 mb/d to 1.25 mb/d to reflect the simultaneous upward revision in the 2003 average oil demand forecast for 2003. The fourth quarter forecast has been raised by 0.12 mb/d, partly to reflect the upward revision in the corresponding 2003 period and also to account for higher consumption prospects in China and the FSU.

On a regional basis, oil demand is forecast to register solid growth in all of the three major groups of countries. Demand in the OECD is now expected to grow at the lowest rate, 0.74% or 0.36 mb/d, due to lower consumption prospects in the OECD Pacific. Demand growth in the developing countries is forecast to rank first with a 0.48 mb/d or 2.40% growth, equivalent to 38% of the total world demand increment. The former CPEs come in second in volume and share of world demand growth, but scored the highest percentage growth of 4.16% at 0.42 mb/d equivalent to 34% of the world increment.

Every single quarter of 2004 is forecast to experience oil demand growth. The first quarter is expected to account for the lowest growth rate of 0.93 mb/d or 1.18%, while the second and the third quarters are forecast to enjoy much higher rises of 1.36 mb/d and 1.30 mb/d respectively. The fourth quarter should see the highest growth with 1.42 mb/d or 1.77%.

World demand for 2004 revised up a slight 0.05 mb/d to 79.66 mb/d, an increase of 1.25 mb/d over 2002

Table 9
World oil demand forecast for 2004

mb/d

							Change 2004/03	
	<b>2003</b>	<u>1Q04</u>	2Q04	3Q04	<u>4Q04</u>	<b>2004</b>	Volume	<u>%</u>
North America	24.56	24.76	24.40	25.12	25.14	24.86	0.30	1.22
Western Europe	15.23	15.26	15.11	15.40	15.58	15.34	0.11	0.74
OECD Pacific	8.67	9.56	8.02	7.85	9.06	8.62	-0.06	-0.64
Total OECD	48.46	49.58	47.53	48.37	49.78	48.81	0.36	0.74
Other Asia	7.61	7.70	7.86	7.79	8.04	7.85	0.24	3.16
Latin America	4.67	4.62	4.76	4.86	4.75	4.75	0.08	1.66
Middle East	4.97	4.97	4.88	5.26	5.20	5.08	0.11	2.20
Africa	2.55	2.61	2.61	2.55	2.62	2.60	0.05	1.87
Total DCs	19.80	19.90	20.12	20.46	20.62	20.28	0.48	2.40
FSU	3.88	4.06	3.48	3.84	4.61	4.00	0.12	3.10
Other Europe	0.74	0.79	0.79	0.71	0.77	0.76	0.02	3.06
China	5.53	5.68	5.74	6.04	5.77	5.81	0.28	5.06
Total "Other Regions"	10.15	10.53	10.01	10.59	11.15	10.57	0.42	4.16
Total world	78.41	80.01	77.66	79.41	81.55	79.66	1.25	1.60
Previous estimate	78.36	79.98	77.63	79.38	81.43	79.61	1.25	1.59
Revision	0.05	0.03	0.03	0.04	0.12	0.05	0.01	0.01

Totals may not add due to independent rounding

Table 10 First and second quarter world oil demand comparison for 2004 mb/d

	Change 2004/03						Change 2004/03	
	1Q03	<u>1Q04</u>	Volume	<u>%</u>	<b>2Q03</b>	<b>2Q04</b>	Volume	<u>%</u>
North America	24.56	24.76	0.19	0.79	24.16	24.40	0.25	1.02
Western Europe	15.20	15.26	0.06	0.41	14.99	15.11	0.12	0.80
OECD Pacific	9.61	9.56	-0.04	-0.47	8.04	8.02	-0.02	-0.30
Total OECD	49.37	49.58	0.21	0.43	47.19	47.53	0.34	0.73
Other Asia	7.54	7.70	0.16	2.15	7.58	7.86	0.28	3.75
Latin America	4.54	4.62	0.08	1.77	4.69	4.76	0.07	1.57
Middle East	4.89	4.97	0.09	1.74	4.76	4.88	0.12	2.52
Africa	2.55	2.61	0.06	2.16	2.54	2.61	0.07	2.80
Total DCs	19.52	19.90	0.38	1.96	19.57	20.12	0.55	2.81
FSU	4.01	4.06	0.05	1.18	3.35	3.48	0.14	4.16
Other Europe	0.77	0.79	0.02	2.76	0.73	0.79	0.05	7.24
China	5.41	5.68	0.27	4.99	5.46	5.74	0.28	5.09
Total "Other Regions"	10.20	10.53	0.34	3.32	9.54	10.01	0.47	4.93
Total world	79.08	80.01	0.93	1.18	76.30	77.66	1.36	1.79

Totals may not add due to independent rounding.

Table 11 Third and fourth quarter world oil demand comparison for 2004 mb/d

				Change 2004/03				
	3Q03	3Q04	Volume	<u>%</u>	4Q03	<u>4Q04</u>	Volume	<u>%</u>
North America	24.80	25.12	0.32	1.28	24.70	25.14	0.44	1.78
Western Europe	15.28	15.40	0.12	0.79	15.44	15.58	0.15	0.94
OECD Pacific	7.88	7.85	-0.03	-0.36	9.18	9.06	-0.12	-1.35
Total OECD	47.96	48.37	0.41	0.86	49.32	49.78	0.46	0.93
Other Asia	7.53	7.79	0.26	3.42	7.78	8.04	0.26	3.30
Latin America	4.78	4.86	0.08	1.69	4.68	4.75	0.07	1.60
Middle East	5.15	5.26	0.11	2.06	5.08	5.20	0.13	2.49
Africa	2.53	2.55	0.02	0.76	2.57	2.62	0.05	1.76
Total DCs	19.99	20.46	0.46	2.32	20.11	20.62	0.50	2.50
FSU	3.70	3.84	0.14	3.85	4.46	4.61	0.15	3.38
Other Europe	0.70	0.71	0.01	1.06	0.76	0.77	0.01	1.21
China	5.76	6.04	0.28	4.78	5.48	5.77	0.29	5.38
Total "Other Regions"	10.16	10.59	0.43	4.19	10.70	11.15	0.45	4.25
Total world	78.12	79.41	1.30	1.66	80.13	81.55	1.42	1.77

Totals may not add due to independent rounding.

## World Oil Supply

Non-OPEC

#### Estimate for 2003

Non-OPEC supply for 2003 revised up to 48.73 mb/d in December, an increase of 0.99 mb/d over the downwardly revised figure for 2002 The non-OPEC supply figure for 2003 was revised up to 48.73 mb/d, with the fourth quarter revised up a significant 0.39 mb/d. This increase was mainly contributed by three new fields which were partially put on stream and the full recovery from the maintenance in the Norwegian sector of the North Sea. Russia and Kazakhstan also contributed to the rise which was partially offset by some significant delays in Chad and Angola. The other quarters saw only minor revisions. The quarterly distribution now stands at 48.62 mb/d, 47.98 mb/d, 48.68 mb/d and 49.61 mb/d respectively. The yearly average increase stands at 0.99 mb/d, compared with the downwardly revised 2002 figure.

Table 12 Non-OPEC oil supply in 2003 mb/d

North America Western Europe	2002 14.48 6.63	1 <u>Q03</u> 14.76 6.73	2Q03 14.55 6.19	3Q03 14.79 6.10	4Q03 14.76 6.62	2003 14.71 6.41	Change <u>03/02</u> 0.24 -0.22
OECD Pacific	0.76	0.67	0.65	0.68	0.62	0.66	-0.10
Total OECD	21.86	22.16	21.38	21.57	22.00	21.78	-0.09
Other Asia	2.27	2.37	2.35	2.36	2.38	2.37	0.10
Latin America	3.87	3.86	3.78	3.91	3.92	3.87	0.00
Middle East	2.06	2.05	2.02	1.99	1.98	2.01	-0.05
Africa	3.03	2.92	2.97	3.09	3.22	3.05	0.03
Total DCs	11.23	11.19	11.12	11.35	11.51	11.30	0.07
FSU	9.34	9.88	10.09	10.42	10.68	10.27	0.93
Other Europe	0.18	0.17	0.17	0.17	0.17	0.17	0.00
China	3.39	3.40	3.44	3.38	3.43	3.41	0.02
Total "Other regions"	12.91	13.46	13.71	13.97	14.28	13.86	0.95
Total non-OPEC production	46.01	46.82	46.21	46.89	47.79	46.93	0.93
Processing gains	1.73	1.81	1.77	1.79	1.82	1.80	0.06
Total non-OPEC supply	47.74	48.62	47.98	48.68	49.61	48.73	0.99
Previous estimate	47.75	48.62	47.96	48.65	49.22	48.62	0.86
Revision	-0.02	0.00	0.02	0.03	0.39	0.11	0.13

Totals may not add due to independent rounding.

Non-OPEC supply for 2004 forecast at 49.75 mb/d, an increase of 1.14 mb/d above 2003

#### Forecast for 2004

Non-OPEC supply for 2004 is forecast to rise 1.14 mb/d. Russia is expected to be the main contributor with around 0.49 mb/d, followed by Chad with 0.20 mb/d, Angola with 0.11 mb/d and Kazakhstan with 0.07 mb/d. Colombia is also expected to contribute to the rise with 0.06 mb/d, while Mauritania may add some 0.05 mb/d and Oman is going to lose roughly the same amount. The quarterly distribution now stands at 49.70 mb/d, 49.11 mb/d, 49.84 mb/d and 50.79 mb/d respectively. The yearly average is forecast at 49.87 mb/d.

Table 13 Non-OPEC oil supply in 2004

		mb	o/d				
							Change
	<u>2003</u>	<u>1Q04</u>	<u>2Q04</u>	<u>3Q04</u>	<u>4Q04</u>	<u>2004</u>	<u>04/03</u>
North America	14.71	14.84	14.64	14.88	14.85	14.80	0.09
Western Europe	6.41	6.74	6.20	6.11	6.63	6.42	0.01
OECD Pacific	0.66	0.67	0.65	0.68	0.62	0.66	0.00
Total OECD	21.78	22.26	21.48	21.67	22.10	21.88	0.10
Other Asia	2.37	2.41	2.39	2.39	2.42	2.40	0.04
Latin America	3.87	3.95	3.88	4.01	4.03	3.97	0.10
Middle East	2.01	1.92	1.91	1.91	1.90	1.91	-0.10
Africa	3.05	3.37	3.43	3.54	3.66	3.50	0.45
Total DCs	11.30	11.66	11.62	11.85	12.01	11.78	0.49
FSU	10.27	10.42	10.64	10.99	11.27	10.83	0.56
Other Europe	0.17	0.17	0.17	0.17	0.17	0.17	0.00
China	3.41	3.38	3.42	3.36	3.41	3.39	-0.02
Total "Other regions"	13.86	13.97	14.24	14.52	14.85	14.40	0.54
Total non-OPEC production	46.93	47.89	47.33	48.04	48.96	48.06	1.13
Processing gains	1.80	1.82	1.77	1.80	1.83	1.81	0.01
Total non-OPEC supply	48.73	49.70	49.11	49.84	50.79	49.87	1.14
Previous estimate	48.62	49.76	49.14	49.85	50.24	49.75	1.13
Revision	0.11	-0.06	-0.04	-0.01	0.55	0.11	0.00

Totals may not add due to independent rounding.

Net FSU oil exports forecast at 6.83 mb/d for 2004, the 2003 figure was estimated at 6.39 mb/d The FSU's net oil exports for 2004 are expected to be 6.83 mb/d. The 2003 figure was revised up by 0.05 mb/d to 6.39 mb/d, while figures for 2000-2002 remain almost unchanged from the last *MOMR*.

Table 14 FSU net oil exports									
		mb/a	!						
	<u>1Q</u>	<u>2Q</u>	<u>3Q</u>	<u>4Q</u>	<b>Year</b>				
2000	3.97	4.13	4.47	4.01	4.14				
2001	4.30	4.71	4.89	4.47	4.59				
2002	5.14	5.76	5.85	5.49	5.56				
<b>2003</b> (estimate)	5.87	6.75	6.72	6.23	6.39				
2004 (forecast)	6.36	7.16	7.15	6.66	6.83				

#### OPEC natural gas liquids

OPEC NGL for 2004 forecast at 3.81 mb/d, an increase of 0.23 mb/d over 2003 The OPEC NGL figure for 2004 is forecast at 3.81 mb/d, an increase of 0.23 mb/d over the 2003 figure of 3.58 mb/d. Figures for 2000–2002 remain unchanged at 3.34 mb/d, 3.58 mb/d and 3.62 mb/d respectively, compared with the figures in the last *MOMR*.

OPEC NGL production — $2000$ – $2004$ mb/d										
<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>1Q03</u>	<u>2Q03</u>	<u>3Q03</u>	<u>4Q03</u>	<u>2003</u>	Change <u>03/02</u>	<u>2004</u>	Change <u>04/03</u>
3.34	3.58	3.62	3.44	3.59	3.64	3.64	3.58	-0.04	3.81	0.23

Available secondary sources put OPEC's December production at 27.73 mb/d

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

Available secondary sources indicate that OPEC output for December was 27.73 mb/d, an increase of 0.17 mb/d from the revised November figure of 27.56 mb/d. Table 15 shows OPEC production as reported by selected secondary sources. OPEC fourth quarter production averaged 27.62 mb/d and the 2003 yearly average stood at 26.92 mb/d.

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

	<u>2002</u>	<u>3Q03</u>	Nov .03	<u>Dec 03</u>	<u>4Q03</u>	2003	Dec-Nov
Algeria	864	1,160	1,178	1,201	1,184	1,136	24
Indonesia	1,120	1,011	1,002	994	1,002	1,028	-8
IR Iran	3,428	3,766	3,807	3,838	3,825	3,752	31
Iraq	2,000	1,046	1,910	1,945	1,836	1,309	36
Kuwait	1,885	2,130	2,173	2,169	2,179	2,167	-5
SP Libyan AJ	1,314	1,425	1,445	1,443	1,444	1,421	-2
Nigeria	1,969	2,179	2,255	2,271	2,260	2,127	16
Qatar	648	740	739	749	745	744	10
Saudi Arabia	7,535	8,533	8,332	8,376	8,401	8,706	45
UAE	1,988	2,261	2,171	2,230	2,201	2,240	59
Venezuela	2,586	2,562	2,550	2,520	2,544	2,288	-30
Total OPEC	25,335	26,815	27,560	27,735	27,621	26,919	175

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

### Rig Count

Non-OPEC rig count up 27 in December

#### Non-OPEC

Rig activity rose in December. North America gained 7 rigs, compared with the November figure. Canada and USA rig activities increased by 5 rigs to 417 and 2 to 1,114 rigs respectively, while Mexico remained unchanged at 107 rigs. Western Europe's rig activity increased by 6 rigs to 78, solely contributed by the UK which was up by 8 rigs to 21 and partially offset by a decline in the rest of the group. Africa, Other Asia and Middle East witnessed an increase of 6, 5 and 4 rigs to 56, 118 and 69 rigs respectively.

Table 16 Non-OPEC rig count in 2002–2003

			Change			Chang <u>e</u>
	<u>2002</u>	<u>2003</u>	03/02	Nov 03	<b>Dec 03</b>	Dec /Nov
North America	1,162	1,496	333	1,631	1,638	7
Western Europe	85	78	-7	72	78	6
OECD Pacific	17	18	1	17	19	2
OECD	1,264	1,592	328	1,720	1,735	15
Other Asia	111	117	7	113	118	5
Latin America	106	116	10	115	112	-3
Middle East	62	70	7	65	69	4
Africa	43	48	5	50	56	6
DCs	322	350	28	343	355	12
FSU	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other Europe	2	2	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	1,588	1,944	356	2,065	2,092	27

Totals may not add due to independent rounding.

n.a. not available

Source: Baker Hughes International.

#### **OPEC**

OPEC rig count up 4 in December

OPEC's rig count was 229 in December, an increase of 4 rigs when compared with the November figure. IR Iran was the major contributor to the rise adding 3 rigs to 39.

Table 17
OPEC rig count

	<u>2002</u>	<u>2003</u>	Change <u>03/02</u>	<u>Nov 03</u>	Dec 03	Change <u>Dec/ Nov</u>
Algeria	20	20	0	19	20	1
Indonesia	46	45	-1	41	42	1
IR Iran	34	35	1	36	39	3
Iraq	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Kuwait	6	5	-1	8	8	0
SP Libyan AJ	10	10	0	9	11	2
Nigeria	12	10	-2	7	9	2
Qatar	13	8	-5	9	8	-1
Saudi Arabia	32	32	0	32	31	-1
UAE	16	16	0	17	16	-1
Venezuela	42	37	-6	47	45	-2
Total OPEC	231	217	-14	225	229	4

Totals may not add due to independent rounding.

n.a. not available

Source: Baker Hughes International.

### Stock Movements

US stocks saw considerable draw of 0.68 mb/d at the end of December, mainly due to the decline in commercial crude oil inventories

#### USA

Commercial oil stocks registered a massive draw of 21.9 mb or a rate of 0.68 mb/d to 931.9 mb at the end of December 2003 compared to the previous month. Both crude oil and "other oils" contributed to this draw, while gasoline, distillate and residual fuel stocks showed an increase. At the same time, the Strategic Petroleum Reserve (SPR) continued its upward trend. Crude oil stocks hits their lowest level since 1975, dropping to 269.0 mb, which was 8.5 mb or 3.1% below this time last year and 1.0 mb below the minimum operational inventory level. Stocks have also fallen to historic lows in terms of days of refinery throughput, dropping to around 17.6 days compared to the previous low of 17.7 days seen in August 2003. Crude oil imports averaged 9.46 mb/d, a loss of 0.16 mb/d from the previous month, but 0.72 mb/d above a year ago. Crude oil inputs stayed more or less unchanged at 15.32 mb/d, an increase of 0.42 mb/d from last year's figure. Neither of the previous two factors explains the large draw on crude oil stocks. However, the Strategic Petroleum Reserve (SPR) registered a build of 4.8 mb to 638.2 mb, widening the year-on-year supply to 39 mb. Gasoline stocks jumped by 9.2 mb to 206.3 mb, narrowing the year-on-year deficit to 2.9 mb, a build which occurred despite the decline in apparent demand typically seen at this time of year. Distillate inventories also rose 4.4 mb to 135.5 mb, an increase of 2.1 mb above the same time last year. The combination of the rise in output with the increase in imports was the reason behind the build.

During the week ending 9 January, total commercial oil stocks registered a slight draw of 3.6 mb to 928.3 mb, leaving them at 9.2 mb or 1% below last year at the same time. Commercial crude oil stocks showed a surprising further draw of 5 mb to 264.0 pushing them 12.4 or 4.5% below a year earlier. The fall in crude oil imports of 0.55 mb/d to 9.21 mb/d was the main reason behind this draw, which was in contradiction to expectations that refineries would build their crude oil stocks after having drawn them at the end of the year for tax and accounting purposes. On the product side, distillate stocks registered an contra-seasonal build of 2.8 mb to 138.3 mb, putting them at a comfortable y-o-y level of 9.9 mb or 7.7%. Heating oil stocks rose 1 mb to nearly 57 mb, some 5.7 mb more than the year-ago level. This assumes that tertiary inventory had been sufficiently filled earlier to cope with the upcoming winter. Gasoline stocks continued their seasonal build, increasing by 2.1 y-o-y to over 40 mb.

Table 18
US onland commercial petroleum stocks'
mb

	31 Oct 03	28 Nov 03	2 Jan 04	Dec/Nov	2 Jan 03	9 Jan 04**
Crude oil (excl. SPR)	291.9	284.3	269.0	-15.30	277.5	264.0
Gasoline	191.3	197.1	206.3	9.20	209.2	208.4
Distillate fuel	132.7	131.1	135.5	4.40	133.4	138.3
Residual fuel oil	33.6	35.3	38.8	3.50	31.3	39.2
Jet fuel	39.8	37.8	38.1	0.30	39.3	40.0
Unfinished oils	84.6	84.0	76.1	-7.90	75.9	75.1
Other oils	192.6	184.3	168.1	-16.20	180.9	163.3
Total	966.5	953.8	931.9	-21.90	947.4	928.3
SPR	630.0	633.4	638.2	4.80	599.1	639.3

\* At end of month, unless otherwise stated

\*\* Latest available data at time of report's release

Source: US Department of Energy's Energy Information Administration

#### Western Europe

EU-16 saw marginal 0.02 mb/d draw at the end of December

Total stocks in the EU-16 (EU plus Norway) moved slightly down by 0.52 mb or 0.02 mb/d to 1,059.2 mb, an increase of 13 mb or 1.3% above the previous year. Crude oil inventories rose 0.73 mb to 440.19 mb, reaching a comfortable level of 10.3 mb or 2.4% above the same time last year. This increase came as refinery crude runs dropped by 0.12 mb/d after reaching a high rate of 12.4 mb/d last month. However, refinery margins are still 0.14 mb/d above a year

27

ago. This corresponds to a utilization rate of 93.8%, or a loss of 0.9% from the previous month, but a y-o-y rise of 1.5%. On the product side, middle distillates fell seasonally by 1.95 mb to 345.8 mb, but remained more than 7 mb above last year. The decline in distillate stocks, which include heating oil, diesel and jet fuel, came amid strong demand, lower refinery output and a steady flow of Russian imports, which remained close to an 18-month low. Gasoline stocks continued their seasonal build for the fourth successive month, rising by 1.3 mb to 139.7 mb, an increase of roughly 1 mb or 0.5% above last year's level. Lack of demand and restrained exports to the USA due to high freight costs were behind the build in gasoline inventories. Fuel oil stocks dropped just 0.58 mb to 110.7 mb, which was 5.3 mb or 4.6% below December last year. This draw mainly reflects the decline in refinery output.

Table 19 Western Europe's oil stocks\* mb

				Change	
	Oct 03	Nov 03	<u>Dec 03</u>	Dec/Nov	<u>Dec 02</u>
Crude oil	443.3	439.5	440.2	0.7	440.2
Mogas	136.0	138.4	139.7	1.3	139.7
Naphtha	22.0	22.9	22.9	0.0	11.5
Middle distillates	346.5	347.7	345.8	-1.9	338.6
Fuel oils	110.3	111.3	110.7	-0.6	116.0
Total products	614.8	620.2	619.0	-1.3	605.8
Overall total	1,058.1	1,059.7	1,059.2	-0.5	1,046.0

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

#### Japan

Japan's commercial oil stocks registered a considerable draw in November of 12.5 mb or 0.42 mb/d to 179.2 mb, mainly on the massive decrease in crude oil stocks. However, Japanese stocks remained at a comfortable level of 12.2 mb or 7.3% above the same time last year. Crude oil stocks also showed a huge draw of 14.7 mb, dropping to 97.2 mb, their lowest level since February 2002, and are now around 2 mb below year ago levels. This draw came as Japan's crude oil imports marked the steepest y-o-y decline since March 2003. Indeed, crude oil imports fell 3.6% compared to the previous month, but 13.4% compared to last year at the same time. This year's milder winter is one factor behind the decline, as well as the large volume of imports posted last year as demand rose with the shut-down of Tokyo Electric Power Co Inc's (TEPCO) nuclear reactors. Forced to close all of its 17 nuclear plants in 2002, TEPCO now has five of the reactors back in operation. Middle distillate stocks continued their upward trend increasing by 2.1 mb to 48.0 mb, widening the y-o-y surplus to 10.5 mb or 28%. Japanese kerosene inventories — the main component of middle distillate stocks — have remained at high levels for several months, and are now at 40% above last year at the same time.

Table 20 Japan's commercial oil stocks\*

		1110				
				Change		
	<u>Sept 03</u>	Oct 03	Nov 03	Nov/Oct	<u>Nov 02</u>	
Crude oil	122.6	111.9	97.2	-14.7	99.2	
Gasoline	12.9	12.9	13.3	0.4	12.9	
Middle distillates	47.9	45.9	48.0	2.1	37.5	
Residual fuel oil	20.3	21.0	20.7	-0.3	17.5	
Total products	81.1	79.8	82.0	2.2	67.8	
Overall total**	203.7	191.7	179.2	-12.5	167.0	

<sup>\*</sup> At end of month

Massive seasonal draw of 0.42 mb/d in Japan at the end of November, due to the decline in crude oil stocks

<sup>\*\*</sup> Includes crude oil and main products only Source: MITI, Japan

## Balance of Supply and Demand

2003 supply/demand difference revised down to 26.10 mb/d in December The summarized supply/demand balance table for 2003 shows an upward revision to total non-OPEC supply of 0.11 mb/d to 52.31 mb/d and to world oil demand of 0.05 mb/d to 78.41 mb/d, resulting in an estimated annual difference of around 26.10 mb/d. This represents a minor decline of 0.06 mb/d from the last *MOMR* figure, with a quarterly distribution of 27.02 mb/d, 24.74 mb/d, 25.79 mb/d and 26.87 mb/d respectively. Minor revisions were made to the balance of the first three quarters, while the fourth quarter has been introduced for the first time in this *MOMR* and is estimated at 0.75 mb/d. The quarterly balance figures now stand at -0.25 mb/d, 1.73 mb/d, 1.03 mb/d and 0.75 mb/d respectively. The balance for 2003 now averaged 0.82 mb/d.

Table 21 Summarized supply/demand balance for 2003 *mb/d* 

	<u>2002</u>	1Q03	2Q03	3Q03	<u>4Q03</u>	<u>2003</u>
(a) World oil demand	76.99	79.08	76.30	78.12	80.13	78.41
(b) Non-OPEC supply <sup>(1)</sup>	51.35	52.06	51.56	52.33	53.26	52.31
Difference $(a - b)$	25.63	27.02	24.74	25.79	26.87	26.10
OPEC crude oil production <sup>(2)</sup>	25.34	26.76	26.47	26.81	27.62	26.92
Balance	-0.30	-0.25	1.73	1.03	0.75	0.82

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

Totals may not add due to independent rounding.

2004 supply/demand difference expected at 25.99 mb/d

The summarized supply/demand balance table for 2004 shows world oil demand expected at 81.55 mb/d and total non-OPEC supply expected at 53.67 mb/d. This has resulted in a difference of around 25.99 mb/d, with a quarterly distribution of 26.69 mb/d, 24.72 mb/d, 25.68 mb/d and 26.86 mb/d respectively.

Table 22 Summarized supply/demand balance for 2004 mb/d

	<u>2003</u>	1Q04	<u>2Q04</u>	<u>3Q04</u>	<u>4Q04</u>	<u>2004</u>
(a) World oil demand	78.41	80.01	77.66	79.41	81.55	79.66
(b) Non-OPEC supply <sup>(1)</sup>	52.31	53.31	52.94	53.74	54.69	53.67
Difference (a – b)	26.10	26.69	24.72	25.68	26.86	25.99
OPEC crude oil production <sup>(2)</sup>	26.92					
Balance	0.82					

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

Totals may not add due to independent rounding.

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

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

Table 23 World oil demand/supply balance mb/d

	1999	2000	2001	2002	1003	2003	3Q03	4003	2003	1004	2Q04	3004	4004	2004
World demand														
OECD	47.7	47.8	47.8	47.7	49.4	47.2	48.0	49.3	48.5	49.6	47.5	48.4	49.8	48.8
North America	23.8	24.1	24.0	24.2	24.6	24.2	24.8	24.7	24.6	24.8	24.4	25.1	25.1	24.9
Western Europe	15.2	15.1	15.3	15.1	15.2	15.0	15.3	15.4	15.2	15.3	15.1	15.4	15.6	15.3
Pacific	8.7	9.8	8.5	8.5	9.6	8.0	7.9	9.5	8.7	9.6	8.0	7.9	9.1	9.8
DCs	18.9	19.2	19.5	19.7	19.5	19.6	20.0	20.1	19.8	19.9	20.1	20.5	20.6	20.3
FSU	4.0	3.8	3.9	3.8	4.0	3.3	3.7	4.5	3.9	4.1	3.5	3.8	4.6	4.0
Other Europe	0.8	0.7	0.7	0.7	8.0	7.0	0.7	8.0	0.7	8.0	8.0	0.7	8.0	8.0
China	4.2	4.7	4.7	5.0	5.4	5.5	5.8	5.5	5.5	2.7	2.7	0.9	5.8	5.8
(a) Total world demand	75.5	76.2	76.7	77.0	79.1	76.3	78.1	80.1	78.4	0.08	77.7	79.4	81.6	79.7
Non-OPEC supply														
OECD	21.3	21.9	21.8	21.9	22.2	21.4	21.6	22.0	21.8	22.3	21.5	21.7	22.1	21.9
North America	14.0	14.2	14.3	14.5	14.8	14.6	14.8	14.8	14.7	14.8	14.6	14.9	14.9	14.8
Western Europe	9.9	8.9	6.7	9.9	6.7	6.2	6.1	9.9	6.4	6.7	6.2	6.1	9.9	6.4
Pacific	0.7	8.0	8.0	0.8	0.7	9.0	2.0	9.0	0.7	7.0	9.0	0.7	9.0	0.7
DCs	10.7	10.9	10.9	11.2	11.2	11.1	11.4	11.5	11.3	11.7	11.6	11.9	12.0	11.8
FSU	7.5	7.9	8.5	9.3	6.6	10.1	10.4	10.7	10.3	10.4	10.6	11.0	11.3	10.8
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	0.2
China	3.2	3.2	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Processing gains	1.6	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Total non-OPEC supply	44.5	45.7	46.4	47.7	48.6	48.0	48.7	49.6	48.7	49.7	49.1	49.8	8.09	49.9
OPEC NGLs + non-conventional oils	3.2	3.3	3.6	3.6	3.4	3.6	3.6	3.6	3.6	3.6	3.8	3.9	3.9	3.8
(b) Total non-OPEC supply and OPEC NGLs	47.7	49.1	20.0	51.4	52.1	51.6	52.3	53.3	52.3	53.3	52.9	53.7	54.7	53.7
OPEC crude oil production (secondary sources)	26.5	28.0	27.2	25.3	26.8	26.5	26.8	27.6	26.9					
Total supply	74.2	77.1	77.2	76.7	78.8	78.0	79.1	80.9	79.2					
Balance (stock change and miscellaneous)	-1.4	6.0	0.5	-0.3	-0.3	1.7	1.0	0.7	8.0					
Closing stock level (outside FCPEs) mb														
OECD onland commercial	2446	2530	2621	2465	2407	2525	2569							
OECD SPR	1284	1268	1285	1343	1357	1361	1379							
OECD total	3730	3798	3906	3807	3764	3886	3948							
Other onland	266	1016	1045	1018	1007	1039	1056							
Oil-on-water	808	876	831	815	857	988	873							
Total stock	5535	2690	5782	5641	5629	5811	2877							
Days of forward consumption in OECD														
Commercial onland stocks	51	23	22	51	51	23	25							
SPR	27	27	27	28	53	28	78							
Total	78	79	82	79	80	81	80							
Memo items														
FSU net exports	3.4	4.1	4.6	9.6	5.9	2.9	6.7	6.2	6.4	6.4	7.2	7.1	6.7	8.9
(a) - (b)	27.9	27.1	26.7	25.6	27.0	24.7	25.8	26.9	26.1	26.7	24.7	25.7	26.9	26.0

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

	1999	2000	2001	2002	1003	2003	3003	4003	2003	1004	2Q04	3004	4004	2004
World demand														
OECD	٠		٠	٠	•	٠	٠	-0.1	•	0.1	-0.1	-0.1	-0.3	0.1
North America	٠	•	•	•	•	•	•	'	•	٠	•	•	•	'
Western Europe	•	٠	•	•	٠	٠	٠	•	•	٠	•	•	•	•
Pacific	•	٠	•	•	٠	•	•	-0.1	•	-0.1	-0.1	-0.1	-0.3	0.1
DCs	•	٠	•	•	٠	•	•	'	•	٠	•	•	0.1	'
FSU	٠	٠	٠	•	٠	٠	٠	٠	•	٠	٠	٠	0.1	•
Other Europe	•	•	٠		•	•	٠	•	•	٠	٠	٠	٠	•
China	٠	•	•	•	•	•	•	0.2	•	0.1	0.1	0.1	0.3	0.1
(a) Total world demand	•	٠	•	•	٠	•	•	0.2	•	٠	•	•	0.1	'
Non-OPEC supply														
OECD	•	•	•	•	٠	•	•	0.1	•	٠	•	•	0.1	'
North America	•	•	•	٠	•	٠	٠	0.1	٠	٠	•	•	0.1	•
Western Europe	٠	٠	'	•	٠	٠	٠	0.1	,	٠	•	•	0.1	'
Pacific	•	٠	•	•	•	٠	٠	-0.1	•	٠	٠	٠	-0.1	•
DCs	٠	٠	٠	٠	٠	٠	٠	•	٠	٠	٠	0.1	0.2	0.1
FSU	٠	•	1	•	•	٠	٠	0.3	0.1	•	•	•	0.3	•
Other Europe	٠	٠	٠	•	٠	٠	٠	•	•	٠	٠	٠	٠	•
China	٠		٠	٠	•	٠	٠	٠	•	٠	٠	٠	٠	•
Processing gains	٠	٠	٠		•	٠	٠	•	•	٠	٠	٠	٠	•
Total non-OPEC supply	•	٠	•	٠	•	٠	٠	0.4	0.1	-0.1	•	•	9.0	0.1
OPEC NGLs + non-conventionals	•	٠	•	٠	•	٠	٠	•	•	٠	•	•	•	•
(b) Total non-OPEC supply and OPEC NGLs	•		-		•			0.4	0.1	-0.1	-	•	9.0	0.1
OPEC crude oil production (secondary sources)	•	-	-	-	-	-	-							
Total supply	•	•	•	•	•	•	•							
Balance (stock change and miscellaneous)	•	٠	•		٠	٠	•							
Closing stock level (outside FCPEs) mb														
OECD onland commercial	٠	٠	٠	٠	2.1	9.0	-1.9							
OECD SPR	٠	٠	2.0	•	٠	٠	٠							
OECD total	•		2.0		2.1	9.0	-1.5							
Other onland	•	•	•		9.0	٠	٠							
Oil on water	•	٠	•	•	•	٠	٠							
Total stock	•	٠	2.5	٠	2.7	0.7	٠							
Days of forward consumption in OECD														
Commercial onland stocks			•	•	•	٠	٠							
SPR	•		•		•	٠	٠							
Total	-	-	-	-	-	-	-							
Memo items														
FSU net exports	•	•	•	•	•	•	•	0.2	•	•	•	•	0.2	•
(a) - (b)	•	'	•	•	•	'	'	-0.2	-0.1	0.1	0.1	,	-0.4	-0.1

<sup>T</sup> This compares Table 23 in this issue of the MOMR with Table 23 in the December 2003 issue. This table shows only where changes have occurred.

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

	1997	1998	1999	2000	2001	2002	1Q01	2Q01	3Q01	4Q01	1Q02	2Q02	3Q02	4Q02	1Q03	2Q03	3Q03
Closing stock level mb																	
OECD onland commercial	2,615	2,698	2,446	2,530	2,621	2,465	2,525	2,597	2,661	2,621	2,598	2,648	2,567	2,465	2,407	2,525	2,569
North America	1,211	1,283	1,127	1,146	1,263	1,172	1,159	1,231	1,269	1,263	1,235	1,262	1,216	1,172	1,098	1,178	1,201
Western Europe	912	963	881	930	915	883	918	606	918	915	927	939	912	883	968	895	606
OECD Pacific	492	453	437	454	443	410	447	457	473	443	435	447	440	410	413	453	460
OECD SPR	1,254	1,302	1,284	1,268	1,285	1,343	1,269	1,267	1,267	1,285	1,303	1,314	1,319	1,343	1,357	1,361	1,379
North America	563	571	292	543	552	601	544	545	547	552	563	578	289	601	601	611	929
Western Europe	329	362	346	354	353	352	351	347	345	353	353	348	344	352	363	358	360
OECD Pacific	362	369	370	370	380	389	374	374	375	380	386	388	386	389	393	393	393
OECD total	3,869	4,000	3,730	3,798	3,906	3,807	3,794	3,864	3,928	3,906	3,901	3,962	3,886	3,807	3,764	3,886	3,948
Other onland	1,035	1,070	266	1,016	1,045	1,018	1,015	1,033	1,050	1,045	1,043	1,060	1,039	1,018	1007	1039	1056
Oil-on-water	812	829	808	876	831	815	903	829	870	831	762	908	804	815	857	988	873
Total stock	5,715	5,929	5,535	5,690	5,782	5,641	5,712	5,726	5,848	5,782	5,740	5,828	5,729	5,641	5,629	5,811	5,877
Days of forward consumption in OECD																	
OECD onland commercial	26	22	51	53	22	51	25	22	22	54	26	99	25	20	51	23	52
North America	52	54	47	48	52	48	49	51	53	53	51	52	20	48	45	47	49
Western Europe	09	63	28	19	19	28	62	29	29	09	63	62	69	28	09	29	69
OECD Pacific	28	52	51	53	52	47	99	22	54	49	22	99	47	43	51	22	20
OECD SPR	27	27	27	27	27	28	27	27	56	27	78	28	27	27	59	78	28
North America	24	24	24	23	23	24	23	23	23	23	23	24	24	24	25	52	25
Western Europe	21	24	23	23	23	23	24	22	22	23	24	23	22	23	24	23	23
OECD Pacific	43	42	43	43	45	45	47	47	43	42	51	48	42	41	49	20	42
OECD total	83	84	78	79	85	79	28	8	85	8	84	83	79	11	80	28	8
Days of global forward consumption	88	68	83	8	98	83	98	82	98	98	87	98	83	82	84	98	82

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

					Change						Change						Change
	1999	2000	2001	2002	02/01	1003	2003	3Q03	4Q03	2003	03/02	1004	2Q04	3004	4Q04	2004	04/03
USA	8.11	8.11	8.05	8.04	-0.01	8.07	7.81	7.80	7.80	7.87	-0.17	8.09	7.83	7.82	7.82	7.89	0.02
Canada	2.59	2.68	2.73	2.84	0.12	2.94	2.99	3.15	3.12	3.05	0.21	3.01	3.06	3.22	3.19	3.12	0.07
Mexico	3.35	3.45	3.57	3.59	0.03	3.75	3.75	3.84	3.84	3.79	0.20	3.75	3.75	3.84	3.84	3.79	0.00
North America	14.04	14.25	14.34	14.48	0.13	14.76	14.55	14.79	14.76	14.71	0.24	14.84	14.64	14.88	14.85	14.80	0.09
Norway	3.06	3.32	3.42	3.33	-0.09	3.40	3.16	3.12	3.40	3.27	-0.06	3.40	3.16	3.12	3.40	3.27	0.00
¥	2.84	2.70	2.53	2.50	-0.03	2.52	2.23	2.18	2.38	2.33	-0.17	2.50	2.21	2.16	2.36	2.31	-0.02
Denmark	0.30	0.36	0.35	0.37	0.02	0.38	0.36	0.36	0.39	0.37	0.00	0.39	0.37	0.37	0.40	0.38	0.01
Other Western Europe	0.43	0.41	0.40	0.43	0.03	0.44	0.43	0.44	0.45	4 :	0.01	0.46	0.45	0.46	0.48	0.46	0.02
Western Europe	6.63	6.80	6.70	6.63	-0.07	6.73	6.19	6.10	6.62	6.41	-0.22	6.74	6.20	6.11	6.63	6.42	0.0
Australia	0.03	2.0	- 0	0.70	0.00	0.02	0.00	0.03	0.0	0.0	ò ò	0.02	0.00	0.03	0.30	0.0	8 8
Other Pacific	0.07	90.00	0.00	0.03	0.0-	0.03	0.05	0.02	0.05	0.02	0.0	0.02	0.00	0.05	0.02	0.05	0.00
OECD Pacific	0.66	0.83	 	9 6	-0.0	0.67	0.65	0.68 1	0.62	9 6	9 9 9	0.67	0.65	0.68	0.62	0.66	0.00
	2 .33	6.00	<u>.</u> 6	90.12	0.03	25.10	6.130	, c	00.22	07:10	-0.03	0.00	2.40	70.0	25.10	6.50	9 6
Biunel	0.10	0.19	0.20	0.20	0.0	0.20	12.0	0.21	12.0	0.21	0.0	0.20	12.0	0.21	12.0	12.0	8 6
Malayeia	0.0	1 09 0	0.0	2.5	0.0	0.70	27.0	0.72	00	2 2	0.00	2.0	27.0	0.0	0.70	α	8 6
Violen	0.0	0.03	0.00	5 5	50.0	. o	98.0	33 0	2.0	3,0	0.00	9.0	98.0	0.79	5 5	0.70	20.0
Asia others	0.20	0.25	0.04	5.0	0.00	0.33	96.0	800	60.0	30.00	0.00	0.33	0.31	0.33	3 5	0.32	800
Other Asia	2.13	2.18	2.20	2.27	0.07	2.37	2.35	2.36	2.38	2.37	0.10	2.41	2.39	2.39	2.42	2.40	0.04
Argentina	0.84	08.0	0.82	080	-0.02	0.78	0.78	0.78	0.77	0.78	2000	0.78	0.78	0.78	0.78	0.78	000
Brazil	1.36	1.49	1.56	1.72	0.16	1.76	1.72	1.77	1.77	1.76	0.04	1.76	1.72	1.77	1.77	1.76	0.00
Colombia	0.82	0.70	0.61	0.58	-0.03	0.56	0.55	0.55	0.54	0.55	-0.03	0.63	0.61	0.61	09:0	0.61	90:0
Ecuador	0.38	0.40	0.41	0.40	-0.01	0.39	0.35	0.42	0.45	0.40	0.00	0.38	0.34	0.41	44.0	0.39	-0.01
Trinidad & Tobago	0.14	0.14	0.13	0.15	0.02	0.15	0.17	0.17	0.17	0.17	0.01	0.19	0.21	0.21	0.21	0.21	0.04
L. America others	0.22	0.22	0.23	0.22	-0.01	0.22	0.22	0.22	0.22	0.22	0.00	0.23	0.23	0.23	0.23	0.23	0.01
Latin America	3.76	3.75	3.76	3.87	0.11	3.86	3.78	3.91	3.92	3.87	0.00	3.95	3.88	4.01	4.03	3.97	0.10
Bahrain	0.19	0.19	0.19	0.19	0.00	0.19	0.19	0.19	0.19	0.19	-0.01	0.19	0.19	0.19	0.19	0.19	00.00
Oman	0.91	0.95	0.95	06.0	-0.05	0.85	0.83	0.81	0.80	0.82	-0.08	0.77	0.77	0.77	0.77	0.77	-0.05
Syria	0.55	0.52	0.52	0.51	-0.01	0.55	0.54	0.53	0.52	0.54	0.03	0.52	0.51	0.50	0.50	0.51	-0.03
Yemen	0.42	0.45	0.47	0.46	-0.01	0.46	0.46	0.47	0.47	0.46	0.00	0.44	0.4	0.44	0.44	0.44	-0.02
Middle East	2.06	2.12	2.12	5.06	-0.0	2.05	2.02	1.99	1.98	2.01	-0.02	1.92	<u>6</u> .	1.91	1.90	1.91	-0.10
Angola	0.76	0.75	0.74	0.89	0.15	0.83	0.89	0.90	0.92	0.89	-0.04	0.94	1.00	1.01	1.03	1.00	0.11
Crad	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.02	20.0	0.22	0.22	0.23	0.23	0.23	0.20
Congo	0.27	0.27	0.27	0.70	0.0-	0.24	4.0	0.24	9.24	0.24	0.0	0.24	0.24	0.24	92.0	0.24	0.00
Equatorial Control	60.0	- 0	0.14	0.20	50.0	0.20	0.19	0.23	0.30	0.24	0.04	0.24	0.23	0.30	0.30	0.23	8 6
Gabon	0.36	95.0	2.5		5 5	0.75	0.75	0.74	0.05	0.75	55. c-	0.75	0.75	0.25	0.25	0.75	8 6
South Africa	0.17	0.18	0.18	0.19	0.01	0.19	0.19	0.20	0.23	0.20	0.01	0.21	0.21	0.22	0.25	0.22	0.02
Sudan	90.0	0.18	0.21	0.24	0.03	0.25	0.25	0.28	0.28	0.27	0.03	0.27	0.27	0.30	0.30	0.29	0.02
Africa other	0.23	0.22	0.20	0.20	0.00	0.19	0.20	0.20	0.20	0.20	0.00	0.24	0.25	0.25	0.25	0.25	0.05
Africa	2.78	2.84	2.80	3.03	0.23	2.92	2.97	3.09	3.22	3.05	0.03	3.37	3.43	3.54	3.66	3.50	0.45
Total DCs	10.73	10.89	10.88	11.23	0.35	11.19	11.12	11.35	11.51	11.30	0.07	11.66	11.62	11.85	12.01	11.78	0.49
FSU	7.47	7.91	8.53	9.34	0.82	9.88	10.09	10.42	10.68	10.27	0.93	10.42	10.64	10.99	11.27	10.83	0.56
Kozokheten	0.14	0.49	66.0 0 C	5 6	0.00	9.10	10.5	0 0	0.00	4.0	0.00	0.07 0.07	0.79	9.13	9.51	0.30	64.0
Azerbajan	0.28	0.27	0.30	0.32	0.02	0.32	0.31	0.32	0.33	0.32	00.0	0.32	0.31	0.32	0.33	0.32	000
FSU Others	0.44	9 0	0.44	0.45	0.01	0.45	0.46	0.46	0.46	0.46	0.01	0.45	0.46	0.46	0.46	0.46	00.0
Other Europe	0.18	0.18	0.18	0.18	-0.0	0.17	0.17	0.17	0.17	0.17	0.00	0.17	0.17	0.17	0.17	0.17	0.00
China	3.21	3.23	3.30	3.39	0.10	3.40	3.44	3.38	3.43	3.41	0.02	3.38	3.42	3.36	3.41	3.39	-0.02
Non-OPEC production	42.92	44.09	44.70	46.01	1.31	46.82	46.21	46.89	47.79	46.93	0.93	47.89	47.33	48.04	48.96	48.06	1.13
Processing gains	1.58	1.65	1.69	1.73	0.04	1.81	1.77	1.79	1.82	1.80	90.0	1.82	1.77	1.80	1.83	1.81	0.01
Non-OPEC supply	44.50	45.74	46.39	47.74	1.35	48.62	47.98	48.68	49.61	48.73	66.0	49.70	49.11	49.84	50.79	49.87	1.14
OPEC NGL	3.02	3.18	3.40	3.42	0.01	3.34	3.43	3.49	3.49	8. 4.	0.03	3.34	3.43	3.49	3.49	3.44	0.00
Non-conventional oils	0.15	0.17	0.18	0.20	0.02	0.10	0.15	0.15	0.15	0.14	90.0	0.27	0.40	0.40	0.40	0.37	0.23
OPEC NGLs + non-conventional oils	3.16	3.34	3.58	3.62	0.03	3.44	3.59	3.64	3.64	3.58	0.04	3.61	3.84	3.89	3.89	3.81	0.23
Total Non-OPEC and OPEC NGLS	47.00	49.03	49.97	51.33	06.1	2Z.U0	0.1.0	52.33	53.20	15.25	0.90	23.31	52.34	53.74	24.03	23.07	1.37

Note: Totals may not add up due to independent rounding.
\* Former East Germany is included in the OECD.

Table 27 Non-OPEC Rig Count

	2000	100	2001	3001	4001	2001	Change	000	2002	3003	4002	0	Change 02/01	1003	2003	3003	Nov03	Declia	4003	2003	Change
100	070					CLT.	866	100	1000	1000	100		1000	3	200			200		2004	1000
USA	916	1,141	1,239	1,231	1,004	1,156	740	818	800	853	84/	831	-325	901	1,028	1,088	1,112	1,114	1,109	1,032	700
Canada	344	515	252	320	278	342	-5	383	147	250	283	566	9/-	4 4 4	203	% %	412	417	408	372	106
Mexico	44	20	48	29	85	24	9	83	61	62	9/	99	=	8	\$	96	107	107	107	8	27
North America	1,305	1.706	1.539	1,607	1.344	1,552	247	1.264	1.014	1.165	1,206	1,162	-390	1.476	1.315	1,567	1.631	1,638	1,624	1,496	333
Norway	. 22	24	. 22	22	22	23	_	50	50	17	19	19	4-	<u>@</u>	19	50	8	17	<u>~</u>	19	0
, Y	18	18	25	78	56	24	9	28	30	24	23	26	2	19	7	22	13	21	16	8	-7
Denmark	က	4	2	4	2	4	_	2	4	က	2	4	0	က	2	က	4	4	4	4	<u>-</u>
Other Western Europe	82	43	44	45	47	44	89	33	38	33	34	38	ထု	98	怒	38	37	36	37	38	0
Western Europe	125	88	92	96	5	92	၉-	95	9	9/	20	82	<del>-</del>	<b>L</b>	8/	83	72	78	75	8/	-7
Australia	10	=======================================	=	10	10	10	0	6	6	<b>о</b>	တ	ത	-5	9	10	#	12	13	13	Ξ	2
Other Pacific	7	1	6	8	9	6	2	80	7	7	10	∞	<u>-</u>	œ	7	œ	2	9	9	7	<u>-</u>
OECD Pacific	17	20	70	9	20	20	က	17	16	16	19	1	ņ	8	11	8	17	19	19	8	-
Total OECD*	1,447	1,815	1,655	1,721	1,464	1,667	220	1,373	1,121	1,257	1,306	1,264	403	1,571	1,411	1,669	1,720	1,735	1,719	1,592	328
Brunei	5	က	က	5	5	က	_	5	m	m	က	က	0	m	4	4	5	5	7	m	0
India	49	51	48	20	20	20	_	52	24	22	22	22	2	29	9	61	61	62	62	09	9
Malaysia	7	10	=	13	12	=	4	12	13	15	14	4	2	4	13	16	14	14	15	4	_
Papua New Guinea	0	0	_	2	_	_	_	_	_	_	_	_	0	_	7	2	0	_	_	7	_
Vietnam	∞	6	80	8	8	8	0	80	∞	တ	10	တ	0	ത	6	10	7	6	∞	တ	0
Asia others	16	22	23	24	8	22	2	56	53	33	32	8	œ	33	88	56	53	30	30	23	7
Other Asia	83	96	92	86	6	92	12	100	109	116	117	1	16	117	115	119	113	118	118	117	7
Argentina	22	69	74	11	22	71	4	49	45	49	24	49	-22	23	99	29	26	09	22	09	=
Brazil	23	28	30	83	56	78	2	27	27	27	56	27	-5	27	27	27	25	24	25	56	0
Colombia	14	15	16	4	16	15	_	13	13	10	တ	Ξ	4	9	6	#	13	7	12	=	7
Ecuador	7	6	10	9	Ħ	19	က	10	<u></u>	œ	∞	တ	<u>-</u>	ത	Ę	œ	80	7	∞	တ	0
Peru	4	4	4	က	က	4	0	2	7	7	<del>-</del>	7	-5	2	7	က	က	2	က	က	_
Trinidad & Tobago	4	9	2	4	2	2	_	2	4	4	4	4	-	က	က	က	4	က	က	က	7
L. America others	12	6	∞	9	9	7	4	4	4	4	2	2	ကု	က	4	4	9	2	2	4	<u>-</u>
Latin America	120	141	147	<del>1</del>	130	141	70	110	103	104	107	106	-32	113	121	114	115	112	114	116	9
Bahrain		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oman	24	24	24	52	56	22	_	27	59	30	32	23	2	33	¥	36	35	37	36	32	2
Syria	14	19	19	20	19	19	2	70	21	23	24	72	က	23	23	56	22	24	23	74	7
Yemen	9	9	9	2	9	9	0	∞	6	6	Ξ	တ	က	Ξ	9	တ	7	7	7	တ	0
Middle East	42	49	49	6	25	20	S	22	9	9	69	62	12	2	89	75	65	69	89	2	7
Angola	9	9	2	4	9	2	0	2	9	9	S)	2	0	က	4	က	9	7	9	4	<u>-</u>
Cameroon		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congo	က	_	2	_	_	_	Υ-	<del>-</del>	_	_	<del>-</del>	_	0	0	-	<del>-</del>	0	4	2	_	0
Egypt	18	21	22	23	23	22	4	22	23	22	23	23	<del>-</del>	98	<b>2</b> 8	27	27	27	56	26	4
Gabon	2	7	4	_	_	7	0	<del>-</del>	7	7	2	7	0	က	4	<del>-</del>	7	က	က	က	_
South Africa	_	2	_	0	-	_	0	_	_	_	0	_	0	0	-	0	-	_	_	0	0
Africa other	2	4	2	2	က	4	0	=	12	12	12	12	7	12	4	12	14	14	14	13	2
Africa	34	36	4	怒	32	36	7	4	42	4	43	43	7	45	20	4	20	26	51	84	5
Total DCs	282	322	330	325	307	321	4	307	317	328	336	322	-	346	354	320	343	355	320	320	78
FSU																					
Other Europe	က	ო	ო	ო	4	ဗ	0	7	7	7	7	7	-	7	7	7	7	7	7	7	0
China																					
Non-OPEC Rig count	1,732	2,140	1,988	2,049	1,774	1,991	260	1,682	1,440	1,587	1,644	1,588	-403	1,919	1,767	2,021	2,065	2,092	2,071	1,944	356

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

#### Main Contributors to Monthly Oil Market Report

WORLD ECONOMY Mr. M. Behzad

e-mail: mbehzad@opec.org

Mr. S. Keramati

e-mail: skeramati@opec.org

Mr. G. Skipper

e-mail: gskipper@opec.org

CRUDE OIL PRICES Mr. O. Salas

e-mail: osalas@opec.org

Mr. F. Al Nassar

e-mail: fal-nassar@opec.org

**PRODUCTS AND REFINERY** 

**OPERATIONS** 

Mr. H. Eldarsi

e-mail: heldarsi@opec.org

THE TANKER MARKET Mr. J. Bahelil

e-mail: jbahelil@opec.org

WORLD OIL DEMAND Dr. M.R. Jazayeri

e-mail: sjazayeri@opec.org

WORLD OIL SUPPLY Mr. Z. Mohammad

e-mail: zmohammad@opec.org

STOCK MOVEMENTS Dr. A. Yahyai

e-mail: ayahyai@opec.org

COORDINATORS Mr. M. Alipour-Jeddi

Head, Petroleum Market Analysis Dept.

e-mail: majeddi@opec.org

Dr. A. Yahyai

e-mail: ayahyai@opec.org

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# OPEC Basket average price

US\$ per barrel

**h** up 0.99 in December December 2003 *29.44* 

> November 2003 28.45 *Year-to-date* 28.10

## December OPEC production

in million barrels per day, according to secondary sources

Algeria	1.20	Kuwait	2.17	Saudi Arabia	8.38
Indonesia	0.99	SP Libyan AJ	1.44	$U\!AE$	2.23
IR Iran	3.84	Nigeria	2.27	Venezuela	2.52
$Iraq\square$	1.95	Qatar	0.75	TOTAL	27.74

## Supply and demand

in million barrels per day

2003		2004	
World demand	78.41	World demand	79.66
Non-OPEC supply	52.31	Non-OPEC supply	53.67
Difference	26.10	Difference	25.99

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

### Stocks

Commercial oil stocks registered a massive draw of 0.68 mb/d in USA in December

### World economy

World GDP growth revised up to 3.5% for 2003 but remained unchanged at 4.2% for 2004