

# OPEC

Organization of the Petroleum Exporting Countries

## Monthly Oil Market Report

*April 2005*

*Feature Article:*

*OPEC spare capacity and crude oil prices*

<i>Oil Market Highlights</i>	<i>1</i>
<i>Feature Article</i>	<i>3</i>
<i>Highlights of the world economy</i>	<i>5</i>
<i>Crude oil price movements</i>	<i>9</i>
<i>Product markets and refinery operations</i>	<i>13</i>
<i>The oil futures market</i>	<i>17</i>
<i>The tanker market</i>	<i>19</i>
<i>World oil demand</i>	<i>21</i>
<i>World oil supply</i>	<i>26</i>
<i>Rig count</i>	<i>29</i>
<i>Stock movements</i>	<i>30</i>
<i>Balance of supply and demand</i>	<i>33</i>



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## Oil Market Highlights

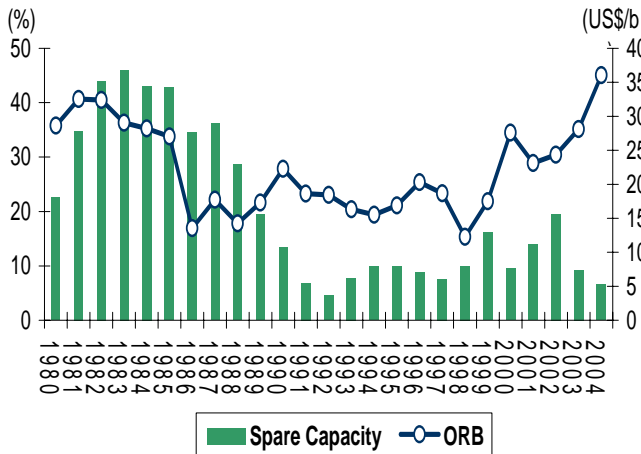
- Hopes of sustained recovery in the Euro-zone have had to be revised as latest data suggests weakness in the second quarter. Industrial production and consumer spending trends give no indication of significant growth. The outlook for Japan is mixed. Although March surveys were not encouraging, the outlook for domestic consumption and exports remains positive for 2005.
- The main growth engines of the world economy remain the USA and China. US consumer and investment spending continued to grow strongly in February and first-quarter growth was probably about 4%. Growth of consumer spending may fall back in the second quarter as a result of higher energy prices. The US Federal Reserve is increasingly sensitive to the risk of rising inflation. The authorities are likely to raise interest rates to control long-term inflation expectations and will continue to monitor the behaviour of wages and other costs. Data for China confirms a slight slow-down in the growth rates of retail sales in January and February but expansion of industrial production accelerated, rising to 16.9% year-on-year. Export growth was also strong in January and February, rising to 37%.
- The US growth forecast for 2005 stands unchanged at 3.4% and the Japanese forecast remains 1.4%, while the forecast for the Euro-zone has been reduced to 1.3% from 1.4%. The 2005 growth rate forecast for China is unchanged at 8.2%. The forecast growth rate for the world economy in 2005 also remains unchanged at 4.1%.
- The OPEC Reference Basket jumped \$7.80/b or 18% in March to set a new monthly average of \$49.07/b. The Basket started off strong aided by bullish momentum from February, with prices driven by poor arbitrage, rising world demand and a late winter cold snap in the US Northeast. After reaching a record weekly average of \$50.72/b in the third week, the Basket reversed direction in the fourth on emerging April refinery maintenance in Europe and rising crude stocks in the USA. Prices slid further in the first week of April to average \$49.15/b amid consultations for a further OPEC output hike. The latest daily Basket price for 14 April is \$47.50/b, indicating prices are continuing to moderate.
- The lingering cold weather in the North-East of the USA and North-East Asia, coupled with planned and unplanned refinery maintenance across the world and the unexpected drop of US gasoline stocks in March, switched market sentiment in favour of product developments. This situation sparked fears of a gasoline supply crunch during the US driving season and overshadowed bearish developments in the crude market, including stock-builds in the USA and resulting aggressive fund-buying as well as record-high prices both for crude and products. This new trend in the product markets is still persisting, particularly in the USA and Asia, but given the increase in arbitrage cargoes to the USA and the higher refinery utilization rates, the product markets should lose part of their earlier strength. However, due to limited effective refinery spare capacity, especially in the USA, the products market remains exposed to refinery glitches and could affect crude prices again.
- OPEC area spot chartering fell by 1.71 mb/d to 14.12 mb/d due to expected lower seasonal demand following the end of winter in the Northern Hemisphere and refinery maintenance in some regions. Sailings from the OPEC area slid by 1.1 mb/d to 23.52 mb/d, with the Middle East contributing 73% to the decline. Crude oil freight rates in the VLCC sector heading from the Middle East dropped by more than 25% as a result of low fixtures. In the Suezmax sector, the West Africa/US Gulf Coast route improved slightly due to strong demand for light sweet crude. Product freight rates increased on all the routes to more than WS300 as a result of the tight market driven by seasonal refinery maintenance in Asia, Europe and the USA.
- Total world oil demand in 2005 is projected to rise by 1.89 mb/d or 2.3 % to average 84.02 mb/d, on continued strength in global oil consumption above recent years but below 2004. The slight revision made in this month's report is mainly due to lower than normal temperatures in the Northern Hemisphere during the second half of February and the first half of March as well as indications of somewhat stronger consumption from preliminary OECD data for the first two months of 2005.
- Non-OPEC supply growth in 2005 saw a minor downward adjustment of around 70,000 b/d versus the estimate published in the March report. Non-OPEC gains are now expected to average 990,000 b/d in 2005, which represents a y-o-y increase of 2% from 2004. For the full year, non-OPEC supply is expected to average 50.7 mb/d. Total OPEC crude production, according to secondary sources, averaged 29.76 mb/d in March, which represents an increase of 300,000 b/d compared to February. For the first quarter of 2005, total production averaged 29.52 mb/d, up 1.3 mb/d from the first quarter of the previous year. OPEC output is expected to further increase in line with the decision taken at the Meeting in Isfahan to raise the production ceiling by 0.5 mb/d.
- US commercial oil stocks in March reversed the seasonal downtrend typically seen this time of year, increasing an unseasonable 4.90 mb or 0.14 mb/d to 955.9 mb. This slight build came mostly from a mix of crude oil, unfinished oils and other oil stock, while substantial draws mainly on gasoline helped to diminish the overall gains. Crude oil flows into European tanks helped total oil stocks in Eur-16 (EU plus Norway) to regain the previous month's losses, building an unseasonable 7.5 mb/d or 0.24 mb/d to stand at 1,097.8 mb. For the third consecutive month, total commercial oil stocks in Japan continued to head south in February, losing a massive 14.5 mb or 8% to stand at 170.3 mb, the lowest level in six months. With current OPEC production approaching 39 mb/d, around 2 mb/d above the required OPEC level, global oil stocks are expected to continue to build in the coming months.

- The new supply/demand balance for 2005 shows that world oil demand is now expected to average 84 mb/d, whilst non-OPEC supply + OPEC NGLs and non-conventional oils are expected to average 54.9 mb/d. This results in an average difference of 29.1 mb/d for 2005 compared to 29.0 mb/d from the previous *MOMR*. Even with the high expected demand for OPEC crude, spare capacity should be more than adequate to accommodate the projected requirement.

## OPEC spare capacity and crude oil prices

- The historical trend since the beginning of 1980 shows that the level of OPEC’s spare production capacity was mainly influenced by rising non-OPEC supply and vacillating trends in oil demand. The maximum level of excess spare capacity was registered in 1983 at close to 14 mb/d or 46%, while the lowest level was in 1992 at 1.1 mb/d or 4.5%, which was a consequence of the loss of production capacity in both Iraq and Kuwait.
- Despite the low level of spare capacity seen in 1992, the OPEC Reference Basket averaged \$18.4/b, which represented only a slight decrease from the previous year (see *Graph 1*). This price response indicated that with commercial oil stocks fluctuating around a comfortable level of 2,600 mb the market did not perceive a shortage of oil. Most likely, the reason the market did not react to the status of OPEC spare capacity was that it was considered to be a temporary phenomenon.

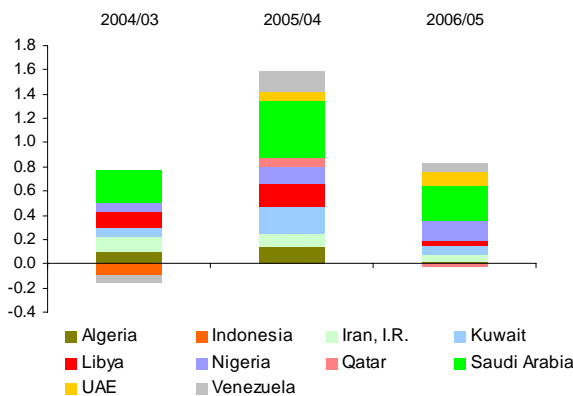
**Graph 1: ORB versus OPEC spare capacity**



- In the third quarter of the year 2004, OPEC spare capacity fell to 4.6% or 1.4 mb/d. Although this was above the level observed in 1991/1992, oil prices still jumped to a then record high of \$39.1/b with some sources pointing to limited OPEC spare capacity as a major cause of concern. Prices continued to rise in the fourth quarter 2004 even though OPEC spare capacity increased to more than 5% of production and oil stocks rose to within their five-year average.
- In contrast to the way it behaved in 1992 following the outages in Iraq and Kuwait, in 2004 the market strongly reacted to the perceived lack of spare capacity despite the fact that it actually increased. This was because the market appeared to categorize the reduced low level of excess capacity as a structural phenomenon due to ongoing geopolitical developments in the Middle East — a perception that resulted in upward pressure on prices.

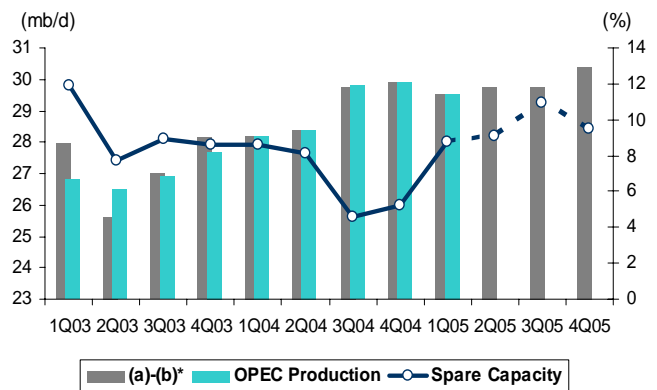
- Taking into consideration the recent trends in global oil demand and the limited capability of most non-OPEC producing countries to continue to expand current production levels at the recently observed pace, OPEC Members have been investing heavily and above trend in expanding production and capacity. During the year 2005, average OPEC production capacity is expected to rise to 32.7 mb/d as additional projects are brought onstream including a raft of projects that began at the end of 2004. This represents an increase in capacity of 1.6 mb/d over the previous year and is around 3 mb/d over current production levels\*\*. Importantly, the bulk of the new capacity is expected to be ready by the second half of 2005, and includes a range of light, medium, and heavy crudes. Major capacity increases in 2005 will take place in Kuwait (Project GC 15), Nigeria (Bonga and others), and UAE (NEAD Phase I), whilst smaller expansions will take place in Algeria, Iran and Venezuela (see *Graph 2*).

**Graph 2: OPEC-10 net capacity additions (mb/d)**



\*\* Average for the year : direct communication and secondary sources

**Graph 3: OPEC production versus spare capacity**



\*difference between world oil demand and non-OPEC supply

- In both the medium and long term, OPEC is committed to expand capacity to meet the oil demand needs of consumers. Based on public information of the projects under development, as well as ongoing and firm project announcements that have been made to date, capacity additions between 2006 and 2010 are expected to total another 3.5 to 4 mb/d. Some key projects expected in this period include Elephant (Libya); Erha, Akpo and Agbami (Nigeria); Haradh (Phase 3), Abu Hadriya/Khursahniya/Fadhili, Shaybah (Saudi Arabia); Cepu (Indonesia); Upper and Lower Zakum (UAE); and Darkhovin (Iran), a small number of which are subject to timing issues. This excludes additional projects, such as those being considered in Saudi Arabia, Project Kuwait and syncrude expansions in Iran, Nigeria, Qatar and Venezuela, all of which are at the early stages of planning. This is higher than the expected cumulative additional crude required from OPEC and shows the increased level of activity among OPEC Members would meet the expected demand in the future, and further build spare capacity.

- Looking to our quarterly forecast for world oil demand and non-OPEC supply for 2005, and the resulting required crude levels from OPEC Members Countries, spare capacity is currently estimated to average 8.8% in the first quarter, rising to 9.1% and 10.9% in the second and the third quarter respectively, given OPEC production at the current March level. As **Graph 3** indicates, OPEC spare capacity in the fourth quarter is expected to average 9.5% based on the projected demand for OPEC crude, or twice the level seen in the same period last year.

# Highlights of the World Economy

		Economic growth rates 2004-2005				
		%				
		World	G-7	USA	Japan	Euro-zone
2004		5.0	3.3	4.4	2.6	1.9
2005		4.1	2.4	3.4	1.4	1.3

## Industrialised countries

### United States of America

Rising inflation and slower consumer spending threatens ongoing expansion

Following the strong start to 2005, a number of indicators suggest that the momentum of the economy has slowed. Although the underlying strength of consumer and business spending is probably unchanged, **higher energy and materials prices together with rising interest rates and poor economic conditions overseas may lead to weakness in the second quarter and GDP growth may slip to 3-3.5% after about 4% in the first quarter.** Rising energy prices have reduced margins for companies in competitive markets which will delay capital expenditure and hiring plans. Unlike in 2004, today's higher operating rates and narrowing margins of spare capacity mean that companies in a strong market position find it easier to pass energy and other cost increases to final consumers. These companies will maintain their margins but the higher rate of inflation will eventually weaken consumer demand unless employment levels improve. Thus far in the recovery, hiring plans remain subdued and continuing jobless claims have been static for nearly two months, implying that job growth is poor. March payrolls increased by only 110,000, well below the consensus expectation. Retailers reported generally disappointing results in March as higher gasoline prices may have affected confidence. The growth of consumer credit was lower in February and there are signs that the housing market may be cooling. The likely response of the Federal Reserve to a rising inflationary threat together with a pause in growth is not yet clear. **It is probable that the Federal Reserve will place most emphasis on the dangers of a "second round" impact of higher energy prices and will continue to remove the monetary stimulus of low interest rates.** The development of labour costs is particularly important and recent data is worrisome. Although the rate of increase of average hourly earnings has been relatively stable – total wages and salaries (which include bonuses and other benefits) have been rising steadily and may indicate further cost pressures ahead. In addition, import price passthrough has affected intermediate goods prices which have continued to rise at a rate of about 7%. Taking account of these factors it seems likely that the Federal Reserve will raise its forecast for core inflation in 2005 to over 2%. **This, in turn, implies that short-term interest rates may rise to over 4% by the end of this year as the authorities push real interest rates back towards a "neutral" level of about 2%.** Whether it will prove necessary to increase rates beyond this threshold will depend on the inflation expectations of consumers and businesses. Stable or lower oil prices in the second half of the year might restore some confidence to the economy – certainly business capital spending has the potential to continue strong growth in 2005. Profit margins rose to very high levels by the end of 2004 and the corporate sector has the potential to expand investment spending by at least 10% in real terms. Companies in the energy, materials and industrial sectors will probably see further profit growth in 2005 and invest accordingly. The outlook for consumer discretionary, financial services and technology companies is less attractive. Companies with overseas exposure may also suffer as the stabilisation of the dollar has reduced the contribution of foreign profits.

### Japan

Volatile data clouds outlook for Japan

Following the upward revision to fourth quarter GDP growth, it had been expected that the March *Tankan* report might confirm the improving trend. Unfortunately the very volatile nature of the Japanese recovery led to a rather negative assessment. **Large manufacturers noted deterioration in business conditions and non-manufacturing companies reported that conditions were unchanged.** To some extent weaker demand for materials from Asia was a factor and data may have been affected by the Chinese New Year. A further negative aspect in the survey was the ongoing weakness in the price environment for Information Technology products. **The *Tankan* survey may have been affected by seasonal data uncertainties – indeed most domestic commentators are rather more optimistic.** The outlook for demand in Japan continues to improve with consumer spending in particular seeing higher growth in 2005. The labour market is seeing signs of strength and incomes should be boosted by better winter bonuses. Employment is on a gradual upward trend and the number of regular employees has

been rising for the first time since 1997. It is not certain whether higher income gains will lead to higher consumption but the strong rise in the expectations of the service sector since the New Year is encouraging. **A recovery in the business sector depends on the prospects for higher inflation and an increased appetite for financial leverage.** Most forecasts see the underlying rate of consumer prices returning to positive territory by the second half of this year and land prices are already showing some gains. Business investment (excluding the IT sector) is expected to increase, especially in the materials and non-manufacturing sectors, as overcapacity has gradually been reduced since 2001. Industrial production appears to have bottomed out during the first quarter and solid growth is expected in April. Thanks to the ending of the inventory correction and a recovery in exports, the index of total industrial production is expected to break through the level of 103 (2000 = 100) which has not been reached in any stage of the recovery since 2000. **There are a number of risks to this outlook – mainly relating to the external environment.** Japan is always sensitive to the cycle of world trade and interest rate developments – particularly capital goods demand in the USA and China. Recent data for China suggests no slowdown in investment activity but it seems unlikely that the current very high ratio of investment to GDP can be maintained. Nevertheless volatility in exports should not mask the long-term significance of the expected improvement in domestic demand which should underpin the gradual recovery of actual output in relation to capacity. **The absorption of excess capacity through internal recovery will be the main driver of improved business confidence, investment and employment – although progress may well be uneven.** The monetary policy meeting of the Bank of Japan in early April indicated a greater level of confidence in the recovery – indeed the meeting raised the possibility of tightening monetary policy through action on current account reserves. **Nevertheless, monetary policy should remain stable in 2005.** It seems unlikely that the monetary policy of the Bank of Japan will be tightened until year-on-year changes in the core CPI turn positive over a number of months and the growth data shows some sustained progress in overall domestic output and expenditure.

#### Second quarter may show further weakness after New Year bounce

##### *Euro-zone*

Once again hopes of a sustained recovery in Euro-zone activity were confounded by renewed weakness in industrial production and consumer spending. **The decline in the manufacturing Purchasing Managers' survey in February and March is consistent with zero growth in industrial production.** The drop brought the PMI back to its November level, which itself had been the weakest data point since 2003. New orders in Germany were weak in February, falling by 2.9% and industrial production fell by 2.2%. The near-term outlook from the European services sector suggests very slow growth – no decline but services growth is unlikely to compensate for the weakness in manufacturing. The explanation for this poor performance is to be found in the continued depressed level of consumer spending. **In the last two years Euro-zone consumer spending has stopped falling and has stabilized at low levels. There has been no change in this trend in 2005 as the underlying weakness in the Euro-zone labour market continues to depress consumer confidence.** No improvement can be seen in the hiring plans of Euro-zone companies in the past nine months which is not surprising considering the growing pressure on companies to restructure in the face of stagnant local demand. Export growth might seem to provide the only solution and rising US interest rates may help by moderating any decline in the US dollar. The negative outlook for the region was confirmed by the economic forecasts published by the EU Commission in April. The Commission expects overall GDP growth for the region to reach 1.6% in 2005 – the previous EU forecast was 2%. Reflecting this gloomy outlook the perspective of the ECB has also changed somewhat despite the nominal stress on the “upside risks to price stability”. There was no discussion of an interest rate increase at the April meeting and the statement confirmed the need to refer to current economic conditions. **This change in emphasis leaves open the possibility of lower rates in Europe later this year.**

#### Oil production growth lower in March

##### *Former Soviet Union*

Industrial production growth fell to just 3.6% year-on-year in January/February – mainly as a result of deceleration in the fuel and energy industry. Output growth in coal, oil and gas production fell to 2.3% year-on-year in this period and in March oil production growth fell to 4.3%, down from 4.7% in February. Growth in oil exports also slowed to 7.9% in March, down from 13.4% in February. **Nevertheless the oil products sector showed better progress as a result of changes in government policy to favour domestic refining.** Growth in other processing industries slowed, in line with the overall industrial trend, and this weakness reflects uncertainty concerning structural reform. As a result of the rather limited supply response of Russian industry, the robust growth of domestic consumption is increasingly satisfied by

imported consumer goods. The real effective exchange rate of the rouble continues to climb – rising by 3.2% in January and February, but the appreciation of the currency has not halted the rise of inflation in Russia which reached 13.3% in March. Certainly the 8.5% target rate will be breached. The dilemma facing the Russian Central Bank illustrates the problems of monetary authorities which try to manage both the inflation rate and the exchange rate at the same time. The only way to restrain the domestic money supply and Russian inflation would be to allow the rouble to appreciate but the Bank cannot let the currency appreciate by much more than 8% in real trade weighted terms since certain sectors of the Russian economy are already suffering from a lack of competitiveness. The fiscal situation continues to benefit from high oil prices but the operation of the oil stabilisation fund is not yet clear. There have been proposals to create a State Investment Fund although the option of tax cuts has also been considered.

#### *Eastern Europe*

One benefit of the slower rate of growth in Poland has been a moderation in the rate of inflation. The lower pressure of demand together with the strong zloty should bring inflation down to about 2.5% during the second quarter, **allowing the National Bank to reduce interest rates.** Despite the firm currency, exports have continue to grow and the current account deficit is expected to shrink towards 1% of GDP for 2005. The government's budgetary plans also imply an improvement this year but this is contingent on a rather optimistic growth forecast for 2005. Growth is unlikely to be much more than 4% in 2005. In contrast the "twin deficits" outlook for Hungary has worsened in recent months. The official March budget deficit was above the revised target and weaker economic growth will make the target yet harder to achieve. The current account deficit may fall slightly as a proportion of GDP from the 8.9% recorded in 2004 but it will remain high. As a result of rising EU transfers and strong FDI this deficit should not pose a financing problem for the economy and the currency should be able to withstand further rate cuts. Despite political problems, the outlook for the Czech economy is solid. Export growth has withstood the weakness in the Euro-zone and flows of FDI can easily finance the current account deficit. Domestic demand has been higher than anticipated thanks to rate cuts earlier in the year and inflation may increase later in the year. **The growth performance of the Czech economy was unexpectedly strong in 2004 and growth this year will not be much below 4%.**

#### *OPEC Member Countries*

Trends in real GDP growth will continue to depend heavily on developments in the energy sectors in OPEC Member Countries, with some variations in non-oil sectors and economic policies. For instance in Nigeria, real GDP grew by almost 10.7% in 2003 due to the strong expansion in oil and gas production together with robust agricultural growth. Although expectations tend to see the reasonably strong growth in the agriculture and service sectors to continue in 2005-2006 against the background of strong investment in the offshore oil sector and increasing government spending on infrastructure, growth in oil production will slow in the subsequent two-year period, given the higher production levels achieved in recent years. Overall, real GDP growth is expected to moderate to around 5.4% and 6.8% in 2004 and 2005 respectively. For this year as well, the economic expansion in Saudi Arabia will be boosted by many factors, mainly the beginning of the development of the country's upstream gas sector as well as downstream power and water supplies, rising oil output associated with the still firm prices, an expansion of FDI which will boost the non-oil private and public sectors, plus growth in domestic investment and the rise in government consumption. Although these factors will also keep consumer demand for imports firm, the GDP growth rate expectation stands at 7.8% for this year compared to 6.0% in 2004. In Venezuela, government spending will provide continued demand stimulus and drive robust growth in non-oil sectors, particularly construction, finance and manufacturing. There is also likely to be an increase in investment by private energy companies which should help to sustain oil activity, despite PDVSA's difficulties in maintaining the output level and the diversion of its investment resources into government social projects. Consequently, GDP growth is expected to exceed 5% in 2005. The fiscal stimulus will be stepped up in 2006, but a modest slow-down in overall GDP growth is nevertheless a possibility during the year as political uncertainty and rising capacity utilization make the disincentives to private investment a more serious constraint. Thus, economic growth is expected at 5.6% this year compared with 17.0% in 2004.

**Growth to slow this year but should remain well above that of Euro-zone**

**Real GDP growth trends in OPEC Members still depend on energy sector developments**



**Still strong momentum in China's economy despite efforts to cool it down. Brazil expanding steadily, while some Sub-Saharan African countries make progress in reforms.**

### *Developing Countries*

In China, most expectations still indicate a gradual slow-down in the pace of economic growth over the current and the coming year, with GDP likely to expand by 8.4% and 7.6% respectively. The investment has increased rapidly by 21% y-o-y in December, but its still considerably lower when compared with the rate of 30-40% early in 2004, indicating that the government's attempts to cool-down overinvestment and rein in overheating domestic economic activities are having an effect. China's monthly merchandise trade balance improved gradually throughout 2004, and consequently the trade surplus for the fourth quarter alone reached \$28.2 bn. Meanwhile retail sales have increased by 15% in December, compared with 13.3% in 2004 as a whole. However, export growth will fall in line with expected slower demand in the USA, Europe and Japan over the next year. This should more than offset a small increase in consumer spending. Given the strong momentum in China's economy at present, the forecast for GDP growth has risen so far this year to 8.2% from the previous 8.0%, while slower global growth will limit China's GDP growth to 7.6% in 2006. India's economic growth is driven mainly by the service sector which is continuing to expand at a rapid rate. Demand on Indian exports should remain strong on the back of robust – albeit slowing – growth in the USA, the EU and most of Asia, especially for IT service exports. India's GDP growth rate will edge-up to 6.2% in 2005-2006 on the assumption of a normal monsoon. Brazil's economic growth is expected to witness a strong upturn this year, but slightly less robust than the upturn of 2004. The main driver will be private sector demand, boosted by an expansion of credits, rising real incomes and increased investment as confidence grows and real lending rates ease. Exports will continue to grow, supported by robust external demand and firm commodity prices. In some Sub-Saharan African countries, better economic management in recent years and progress with reforms will undoubtedly help to boost real GDP growth to average 4-5% in 2005, below the growth rate of 8% needed to have a more substantial impact on reducing poverty. Strong growth, in the manufacturing sector, retail trade, infrastructure developments and investment in public utilities, is expected in 2005.

**Currencies stable in March**

### *Oil prices, the US dollar and inflation*

Currencies showed little movement in March as there were no significant changes in the economic outlook of the major economies. The dollar gave up the slight progress made against the Euro in February but continued to rise against the yen. In March the average value of the US dollar fell by 0.9% against the British pound, and by 1.2% against the euro, and 1.3% against the Swiss franc. The dollar rose by 0.4% against the yen.

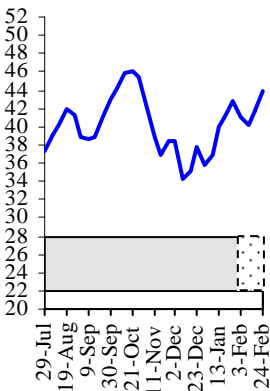
In March, the OPEC Reference Basket rose to \$49.07/b from \$41.68/b in February. In real terms (base July 1990 = 100), after accounting for inflation and currency fluctuations, the Basket price rose by 16.9% to \$33.86/b from \$28.97/b, as a very small decline in the dollar reduced the 17.75% increase in the Reference Basket price. The dollar fell by 0.7% as measured by the import-weighted modified Geneva I +US dollar basket\*.

\* 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.

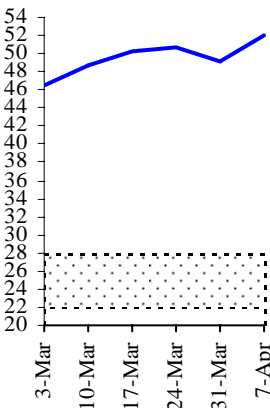
# Crude Oil Price Movements

**The OPEC Reference Basket in March surged to an all-time monthly high of \$49.07/b, a gain of almost \$8/b over the previous month**

**Weekly average Basket price, 2004-2005**



**Mar 05-Apr 05 (US\$/b)**



**Note: Price band temporarily suspended as of 31 January 2005**

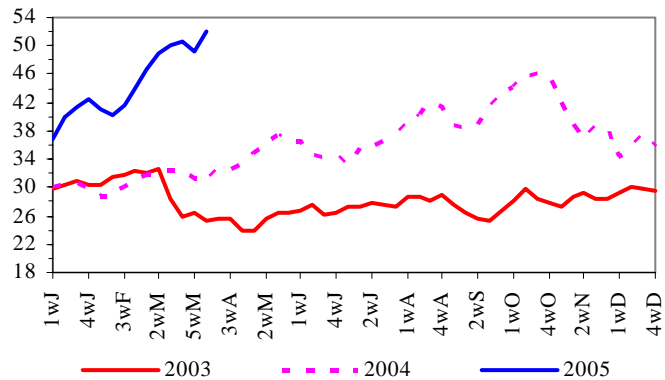
## OPEC Reference Basket

The Basket started off strong in March, continuing the upward movement seen in the last two decades of February. Deteriorating arbitrage economics for western barrels headed east enhanced the bullish sentiment in Asia while lower programmes for March loading in the Mediterranean and tight gasoil and heating oil in Europe gave a further boost to market sentiment.

Continued concern over high global demand amid downstream bottlenecks also pressured prices. As a result, the Basket's weekly average gained \$2.63 or nearly 6% to stand at \$46.58/b. **The arbitrage situation hindered Russian crude from heading east, leaving indisposed cargoes to pressure the regional market.** A continued cold snap in the Western hemisphere combined with an upward revision to EIA's demand projection spurred a revival in the futures market. The prospect that demand could outpace supply sent the Basket surging close to \$50/b to close the second week with an average of \$48.76/b for a rally of \$2.20/b or 4.7%. While continuing to suppress the regional market, freight rates supported sentiment across the Atlantic and Asia. This was furthered by **another cold snap in the US East Coast.** Market bullishness was further enhanced by the hefty fall in US product inventories of gasoline, distillates and heating oil. Accordingly, the Basket rose \$1.72 or 2.8% to settle at \$50.13/b. With US crude oil stocks at three-year record highs and OPEC discussing a further output increase of 0.5 mb/d, the market eased. However, a **tragic refinery blast in the USA** added concern over a shortfall in refined products and pushed the weekly Basket price up 59¢ or 1.2% to a **new record high of \$50.72/b.** Despite slimming demand in Europe due to April maintenance and another hefty build in the US crude oil stocks, continued concern over the hefty draw on gasoline inventories ahead of the driving season supported prices. Although the Basket saw a healthy rise in the last day of March, the final weekly average was down a hefty \$1.56 or over 3% to settle at \$49.16/b.

On a monthly basis, the Basket registered a strong surge in March, gaining \$7.40 or 17.75% over the previous month to settle at \$49.07/b. This was **due in part to the prolonged late winter cold snap in the USA and an upward revision in world oil demand at a time when additional OPEC supply was seen as not being sufficient to meet the expected surge in demand.** The March Basket stood \$17.02/b higher than the same period last year. The daily Basket price continued the previous month's upward momentum in March, rising through to the third week to a peak of \$51.76/b. **Following a downtrend in late March, the Basket turned upward again in early April, pushed higher by an investment bank report predicting that oil prices were in a "super-spike" period that could see prices reach as high as \$105/b over the next few years. Accordingly, the Basket jumped to an all-time high of \$52.93/b.** Nevertheless, this bullish momentum was short-lived and by the end of the first week in April, prices had eased on healthy crude stock-builds in the USA amid consideration of a second OPEC output increase. The Basket closed the first week in April at \$49.94/b, with a weekly average of \$49.16/b, while the month-to-date price reached \$52.05/b, an increase of \$2.98 over the March average.

**Graph 1**  
**OPEC Reference Basket - weekly spot crude prices (US\$/b)**

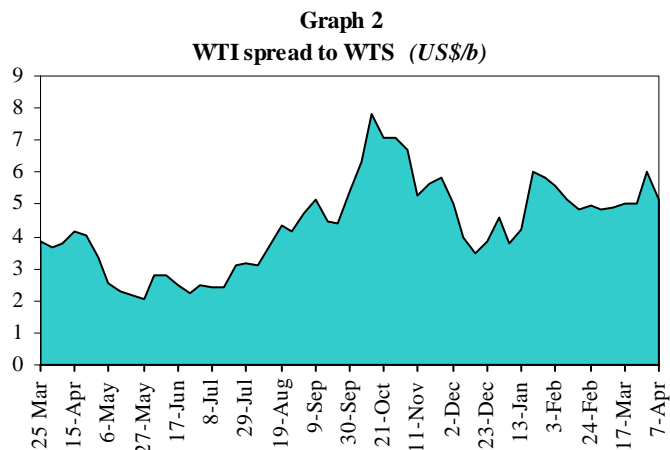


**US crude stocks rose to the highest level in three years, exerting pressure on the sweet/sour spread**

**US market**

Crude oil prices strengthened towards the second half of February with March beginning on a bullish note with concern over the restart schedule of the Chevron/Texaco's Petronius field in the Gulf of Mexico. A refinery glitch in the US Gulf Coast added to concern whether gasoline stocks would build to sufficient levels to meet summer demand while arbitrage was somewhat

closed for the flow of transatlantic barrels. Hence, WTI surged in the first week by an average of \$2.36/b while the WTI/WTS spread narrowed a slight 7¢ for a weekly average of \$4.87/b. Prices eased in the second week before planned maintenance at the Mars platform revived supply concerns. The WTI/WTS spread widened slightly to \$4.90/b on continued tight transatlantic arbitrage activities due to the narrow WTI/Brent spread. Consequently, the WTI weekly average surged \$1.85 in the second week to close at \$54.03/b. While maintenance delays on the Mars platform pressured sour differentials, the lack of light sweet rival West African crude due to **poor arbitrage with no sign of emerging westbound barrels pushed the WTI to peak at \$56.88/b for a weekly average of \$55.51/b**. Hence, the WTI/WTS spread widened to \$5/b. The impact of the OPEC decision to add 0.5 mb/d to the market at the Meeting in Isfahan followed by another possible output increase of 0.5 mb/d, was diminished by an explosion at BP's 470,000 b/d-refinery in Texas City, which turned out to be more of a tragedy than damaging to the infrastructure. However, the psychological effect placed alertness in the marketplace amid tight gasoline stocks. While the industry worried that higher **OPEC production would result in reduced spare capacity**, growing US crude stocks at 309 mb for the week closed 18 March, the highest level since July 2002, helped to ease concerns, as did the prospect that China's energy appetite could have some limits. WTI slipped, with the weekly average down \$1.11 to settle at \$54.40/b. The final days in March saw a continuation of the downtrend as refiners stayed on the sidelines amid high outright prices and further US stock-builds of 5.4 mb. The WTI/WTS spread widened \$1.05 to \$6.05/b. The WTI average price for March was \$53.91/b for a gain of \$6.22 or 13% over February.

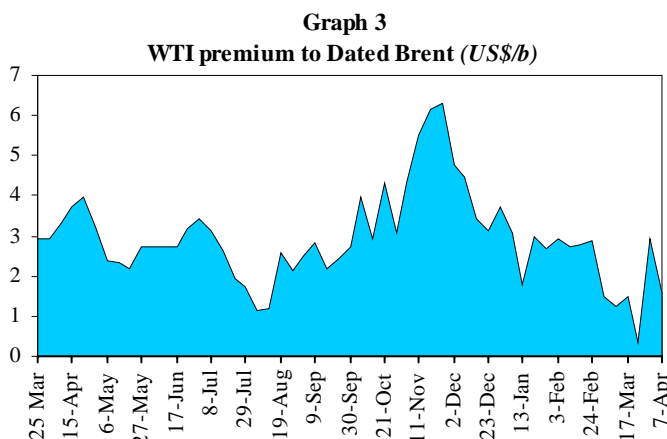


**While outright prices rose, unworkable arbitrage economics intensified pressure on price differentials in the North Sea**

**European market**

In Europe, the market emerged on a stronger note with differentials firming in both the north and the south on healthy demand. Despite the closed arbitrage, dwindled availability kept bears hibernating. However, the larger monthly programme for April weakened average refinery margins further amid a narrowing of the arbitrage window. The continued **rise in freight rates and slipping refinery**

**margins added further downward momentum to differentials in North Sea crudes at a time when absolute prices were rising**. Although Dated Brent surpassed WTI late in the month following stock-builds in the USA, weak price differentials remained through March sustaining the contango market ahead of spring refinery maintenance. Dated Brent peaked in March at an all-time high of \$55.72 to close the month at \$52.49/b for a gain of \$7.62 or 17% over February.



While prices followed suit in the Mediterranean on rising global demand, differentials declined on larger programmes and not-so-tempting refining margins. The sentiment further weakened on closed arbitrage for outbound rival Russian Urals. Nonetheless, the opening of inter-continent arbitrage depressed differential further in the Mediterranean while more northern barrels flowed south. The **Brent/Urals spread average in March stood at \$5.44/b, nearly \$1/b wider than the February average.** Moreover, the prospect of more OPEC barrels added to the burden on the sweet/sour spread in the Mediterranean at a time when Iraq's Basrah Light was flowing at a steady rate.

**Closed arbitrage opportunities supported Oman differentials, while healthy Asian's refining margins boosted Murban premiums**

#### *Far East market*

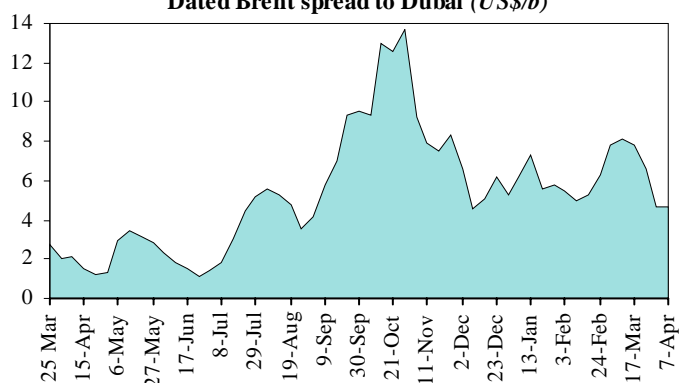
Mideast crudes performed stronger in Asia with May-loading Oman showing a premium, on bid at 10¢/b and on offer at 18¢/b to MOG, which continued to strengthen selling at a 22¢/b premium in the first week. **Closed arbitrage supported Mideast differentials on the tight flow of western crudes.** Bullish European demand for products, which limited the outflow of arbitrage

cargoes, supported the market sentiment in Asia on demand from China. Hence, the Oman premium in May escalated further to 25-28¢/b to MOG in the second week. Moreover, healthy refining margins supported Abu Dhabi distillate-rich Murban to trade in the third week at a healthy premium of \$1.15/b to ADNOC's OSP. Oman was assessed at a lower premium of 12-23¢/b in the third week, before a late snap of May barrels boosted the premium to 30¢/b to MOG. **Healthy refining margins continued to support Abu Dhabi Murban, while scheduled maintenance on some oil fields in May and June supported trade at a premium of \$1.40/b** before slipping to \$1.20/b in the final days of March.

#### *Asian market*

On the regional front in Asia, the market began the month strengthened by healthy demand for sweet grades with Malaysia's April Tapis sold at a \$1.50/b premium to the APPI quote. **This sentiment was underpinned by the lower operational rate at Japan's TEPCO** which usually requires more sweet crude for direct burning thermal plants. Hence, Indonesia April Centa and Minas were heard bought at strong premiums of \$2.05 and \$1.40 to ICP. Nevertheless, high outright regional crude prices and rising differentials made West African crude more attractive to Asian refiners. With benchmarks set at the highest level on record, Asian regional crude came under pressure. However, the procurement of local grades by Asian majors helped to boost demand for regional crudes. **Continued high prices encouraged North-East Asian refiners to opt for cheaper alternative crudes.** Although premiums lost momentum, May Tapis was on offer at around \$1.10/b, enhanced by the scheduled maintenance at the Tapis field which prevented a further tumble at month-end. Persistent demand from Japan's TEPCO supported the spread for regional sweet grades, such as Duri and Minas for May loading which were on offer at a premium of \$1.50 and \$2.00 to ICP.

**Graph 4**  
**Dated Brent spread to Dubai (US\$/b)**



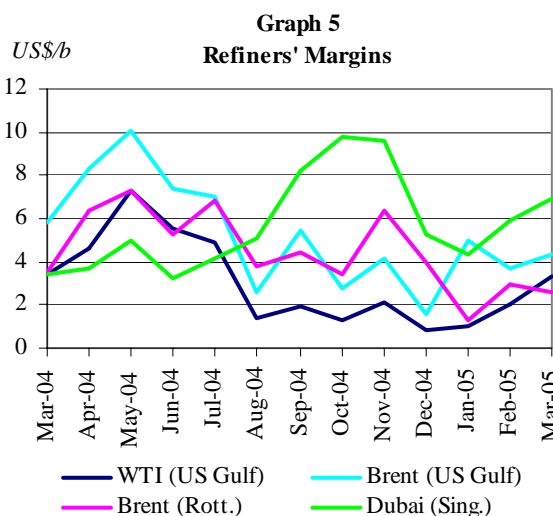
**Emerging demand from Japan's TEPCO continued to support sweet grades**

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

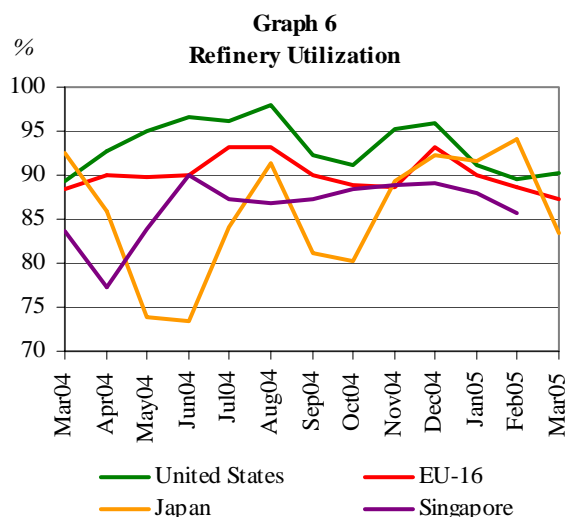
	<u>Feb 05</u>	<u>Mar 05</u>	<i>Year-to-date average</i>	
			<u>2004</u>	<u>2005</u>
<b>Reference Basket</b>				
Arabian Light	41.68	<b>49.07</b>	30.75	44.08
Dubai	39.35	<b>45.60</b>	29.50	41.27
Bonny Light	45.43	<b>53.15</b>	31.71	47.96
Saharan Blend	45.44	<b>52.59</b>	31.90	47.87
Minas	44.56	<b>54.30</b>	30.74	47.69
Tia Juana Light	36.77	<b>43.50</b>	29.17	39.04
Isthmus	40.08	<b>47.52</b>	31.93	42.57
<b>Other crudes</b>				
Brent	44.87	<b>52.60</b>	32.03	47.58
WTI	47.69	<b>54.09</b>	35.29	49.83
<b>Differentials</b>				
WTI/Brent	2.82	<b>1.49</b>	3.26	2.25
Brent/Dubai	5.52	<b>7.00</b>	2.53	6.31

## Product Markets and Refinery Operations

Lingering cold weather in the US Northeast and North-East Asia, coupled with planned and unplanned refinery maintenance across the globe and the unexpected drop of US gasoline stocks in March, switched market sentiment in favour of product developments. This situation sparked fears of a gasoline supply crunch during the US driving season and has overshadowed bearish developments in the crude market, including stock-builds in the USA and resulting in aggressive fund-buying as well as record-high prices both for crude and products.



Due to soaring prices across the barrel, the crack spread of premium products against benchmark crudes widened significantly in March, and refinery margins improved in the same month. In the USA, margins soared to \$3.28/b for WTI crude, up from \$2.02/b in February. In Singapore, refining margins rose 18%, while in North-West Europe they were not able to outpace the benchmark's performance and declined to \$2.54/b from \$2.99/b in the previous month.



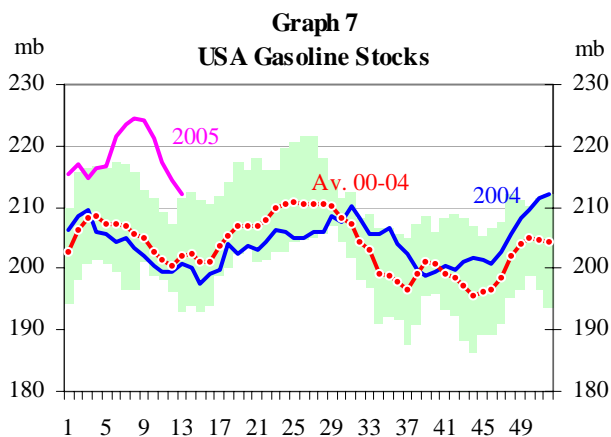
**The new trend of the product markets is still persisting, particularly in the USA and Asia, but given increased arbitrage cargoes to the USA and the higher refinery utilization rates, the product markets may lose part of their earlier strength. However, due to limited effective refinery spare capacity, especially in the USA, the product market is exposed to refinery glitches and could again affect crude prices.**

In March, the refinery utilization rate in the USA increased marginally to 90.2% from 89.5% in February. In Europe and Japan, the utilization rate dropped by 11.4% and 10.7% respectively, while in Singapore it surged 2.2% compared to the previous month.

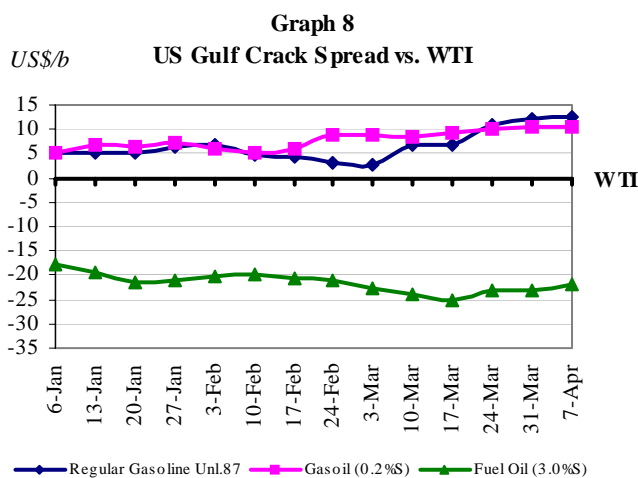
**Unexpected draw on gasoline stocks in March has strengthened the US product market**

**US market**

US gasoline stocks dropped by about 12 mn barrels over the last weeks of March as shown in Graph 7. This drop was due to higher demand, lower production and a decline in imports. On 1 April, the four-week average of US gasoline demand had risen by 1.5% compared to the same period last year, and that has hiked the gasoline crack spread versus benchmark crude WTI to exceed \$12/b recently from about \$1/b at the beginning of March. **The bullishness in the gasoline market was also fueled by refinery outages in Texas and Venezuela and more fund activities in the futures market.**



Similarly, continued strong demand for jet fuel and diesel strengthened the distillate market and its spread against WTI, further extending the upward trend. Over the last four weeks of March, distillate demand in the USA surged by 7% on average compared to the same period of last year. **However, with the start of warm weather and the approaching driving season, market players focused their attention more on developments in the gasoline market rather than in distillates.**

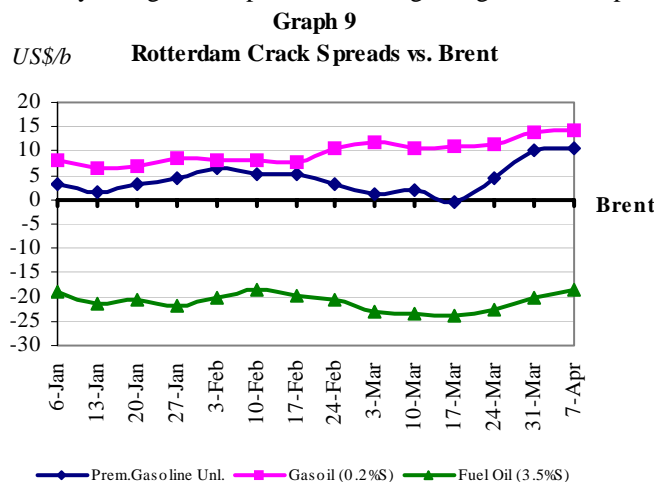


Apart from the top and middle of the barrel, the price of fuel oil in the USA also soared in line with a spike in prices in Europe and Asia and due to higher utility demand as well.

**The European product markets revived in March on refinery glitches and higher gasoline exports to the Middle East**

**European market**

Tight product supplies due to refinery turnarounds and unplanned refinery outages on both sides of the Atlantic, as well as a hike in Nymex gasoline prices, lifted European product prices, and their crack spreads against the benchmark crude surged significantly over the last few weeks of March. As Graph 8 shows, the gasoline crack spread in Rotterdam versus Brent rose from almost zero to over \$10/b on 7 April.



**In the Mediterranean area, the gasoline market was stronger due to higher exports to the Middle East**

**and North Africa.** The new circumstances of the gasoline market also supported naphtha prices, but demand from petrochemical plants is still sluggish, and the use of LPG as an alternative feedstock has dampened the naphtha market.

**In addition to the gasoline market, demand for middle distillates in Europe, especially in the Mediterranean area, was also strong.** Among the different grades of middle distillate products, the performance of jet-kerosene was excellent with prices reaching a record-high. This situation has encouraged Middle Eastern suppliers to send jet-kerosene to Europe rather than the Singapore market.

High-sulphur fuel oil prices also firmed on the back of tight bunker-spec supplies in the market and light flows from the Baltic.

#### *Asian market*

**Middle distillate prices in Asia increased sharply in March**

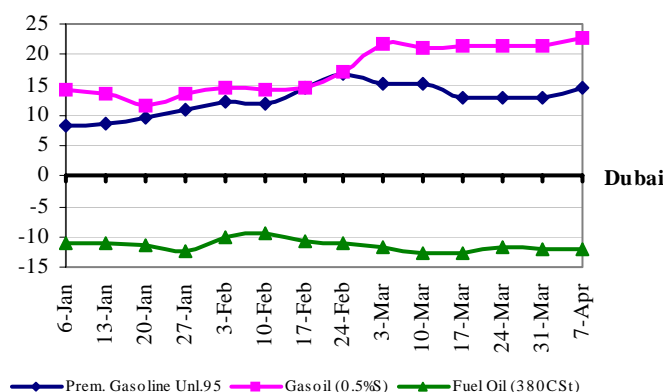
Regional robust demand, refinery shut-downs for scheduled maintenance and lower exports from the Middle East have lifted middle distillate prices significantly. This was particularly the case for jet-kerosene prices and its crack level versus the Dubai crude exceeded \$24/b. China's buy tender for 430,000 tonnes of jet fuel for the second quarter has provided more support for this product. **The firm market for middle distillates in**

**Asia strengthened regional distillate-rich crude oil prices, and the price of the Tapis benchmark crude exceeded \$61/b in early April.**

The gasoline market has also risen due to robust regional demand and production glitches. The unplanned shut-down of a gasoline unit at the Shell Dickson refinery in Malaysia supported the high octane gasoline market. **Despite the good performance of the gasoline market, the naphtha market remained lacklustre due to the maintenance schedule of petrochemical plants and higher exports from India.** Following the replacement of naphtha feedstock by LPG, Indian refiners increased their naphtha exports up to 20,000 – 25,000 tonnes per month.

The fuel oil market in Asia has done well over the last few weeks as result of tight supply due to refinery maintenance and less arbitrage cargoes from Europe, as well as higher utility demand in Japan. The fuel oil market in Asia for low density (18°CSt) is exceptionally tight now.

**Graph 10**  
**Singapore Crack Spreads vs. Dubai**





**Table 2**  
**Refined product prices**  
US\$/b

		<u>Jan 05</u>	<u>Feb 05</u>	<u>Mar 05</u>	<u>Change Mar/Feb</u>
<b>US Gulf (Cargoes):</b>					
Naphtha		50.86	48.69	59.70	11.01
Premium gasoline	(unleaded 93)	53.58	53.02	64.61	11.59
Regular gasoline	(unleaded 87)	52.58	52.11	62.64	10.53
Jet/Kerosene		56.12	56.20	65.78	9.58
Gasoil	(0.2% S)	53.34	54.67	63.81	9.14
Fuel oil	(1.0% S)	31.33	31.26	34.72	3.46
Fuel oil	(3.0% S)	26.79	27.24	30.59	3.35
<b>Rotterdam (Barges FoB):</b>					
Naphtha		51.32	54.49	62.33	7.84
Premium gasoline	(unleaded 95)	47.84	49.96	56.03	6.07
Regular gasoline	(unleaded)	47.72	49.69	55.94	6.25
Jet/Kerosene		55.05	58.05	68.81	10.76
Gasoil	(0.2% S)	51.92	54.31	64.60	10.29
Fuel oil	(1.0% S)	26.68	27.78	34.06	6.28
Fuel oil	(3.5% S)	23.54	25.48	30.09	4.61
<b>Mediterranean (Cargoes):</b>					
Naphtha		41.69	44.26	51.34	7.08
Premium unleaded	(0.15g/l)	45.80	48.33	54.20	5.87
Premium gasoline	(unleaded 95)	45.72	48.28	54.23	5.95
Jet/Kerosene		52.75	55.65	66.66	11.01
Gasoil	(0.5% S)	51.04	53.64	63.65	10.01
Fuel oil	(1.0% S)	28.69	29.59	35.31	5.72
Fuel oil	(3.5% S)	21.80	24.79	29.07	4.28
<b>Singapore (Cargoes):</b>					
Naphtha		41.34	44.61	50.74	6.13
Premium gasoline	(unleaded 95)	47.57	54.27	59.47	5.20
Regular gasoline	(unleaded 92)	46.87	53.70	58.72	5.02
Jet/Kerosene		51.10	54.54	66.33	11.79
Gasoil	(0.5% S)	51.26	55.74	67.24	11.50
Fuel oil	(180 cst 2.0% S)	28.08	30.35	34.13	3.78
Fuel oil	(380 cst 3.5% S)	26.61	29.28	33.61	4.33

**Table 3**  
**Refinery operations in selected OECD countries**

	Refinery throughput				Refinery utilization			
	<u>Jan 05</u>	<u>Feb 05</u>	<u>Mar 05</u>	<u>Mar/Feb</u>	<u>Jan 05</u>	<u>Feb 05</u>	<u>Mar 05</u>	<u>Mar/Feb</u>
<b>USA</b>	15.30	15.01	15.14	0.1	91.2	89.5	90.2	0.8
<b>France</b>	1.81 <sup>R</sup>	1.70	1.70	0.0	92.9 <sup>R</sup>	86.9	86.9	0.0
<b>Germany</b>	2.36 <sup>R</sup>	2.27 <sup>R</sup>	2.26	0.0	101.7 <sup>R</sup>	97.6 <sup>R</sup>	97.3	-0.3
<b>Italy</b>	1.83 <sup>R</sup>	1.85 <sup>R</sup>	1.81	0.0	78.6 <sup>R</sup>	79.8 <sup>R</sup>	78.1	-1.6
<b>UK</b>	1.65 <sup>R</sup>	1.62 <sup>R</sup>	1.60	0.0	90.6 <sup>R</sup>	88.5 <sup>R</sup>	87.7	-0.8
<b>Eur-16</b>	12.49 <sup>R</sup>	12.31 <sup>R</sup>	12.12	-0.2	90.0 <sup>R</sup>	88.7 <sup>R</sup>	87.3	-1.3
<b>Japan</b>	4.31	4.42 <sup>R</sup>	3.92	-0.5	91.6	94.0 <sup>R</sup>	83.3	-10.7

R Revised since last issue.

Sources OPEC statistics; Argus; Euroilstock Inventory Report/IEA.

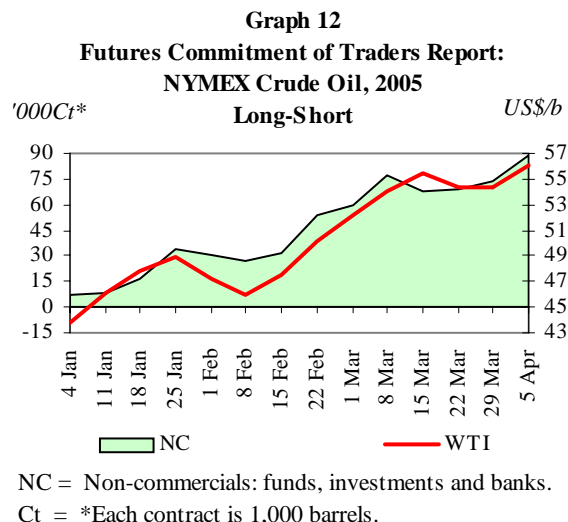
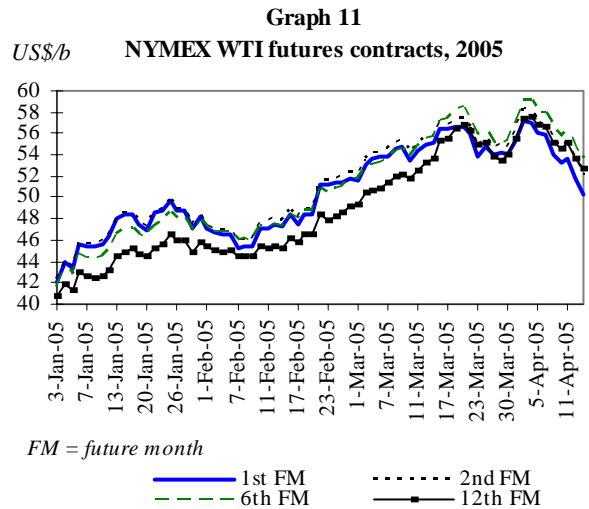
# The Oil Futures Market

**A late cold snap in the US East Coast and low product stocks sent Nymex WTI to a four-month high and boosted non-commercial fund-buying**

Nymex crude oil futures rebounded in early March to a four-month high. The bulls gained momentum on a refinery glitch in Texas which pushed gasoline futures up over 8% in the first few days in March. The WTI futures contract followed suit with the CFTC data for the week ending 1 March revealing that non-commercials increased long positions to over 130,000 lots, a level last seen in the previous October. Net long positions were up to 60,000 lots, the highest level since 1 June. The Nymex WTI prompt month contract closed the same weekly period at \$53.57/b after slipping a marginal 7¢ on the day. However, a cold snap in the US northeast stirred speculative buying interest in heating oil futures with the open interest peaking to a record high of some 775,000 contracts. The stride persisted into the second week with the CFTC report for the week ending 8 March showing that non-commercial net long positions saw another peak at nearly 77,000 lots. In the same period, Nymex WTI rose to \$54.59/b following another cold snap on the US East Coast amid a weakened US dollar, which helped to inspire fund buying in the futures market. Open interest continued to climb to an all time high, breaking the 800,000 mark to reach 816,000 contracts.

**The futures market sustained strength on an upward revision to the IEA global demand forecast** and despite OPEC's decision in Isfahan to boost output by 0.5 mb/d to 27.5 mb/d. Continued concern over the hefty drop in heating oil and gasoline inventories added momentum to the futures market as the Nymex WTI front month peaked at an all-time high of \$55.05/b on 15 March. The CFTC report for the week ending 15 March revealed that non-commercial long positions increased to a record high of 169,000 contracts, the highest since 11 May last year. However, as short positions also rose to 101,000 contracts, net longs narrowed to 68,000 lots while open interest blossomed to 842,000 lots. **The bullish sentiment was also supported by lingering cold weather in the US Northeast, which implies that refiners still have to produce heating fuel at a time when they should be switching to gasoline. The Nymex WTI peaked to a new all-time high of \$56.72/b on 18 March.** In the week ending 22 March, non-commercials reduced short positions at a faster rate than the longs, boosting net long positions to nearly 70,000 lots, while open interest peaked at an all-time high of more than 845,000 lots. Nonetheless, news that OPEC would begin discussions about whether to raise the production ceiling helped to reverse the oil price trend. Over the course of two days, the Nymex WTI front month plunged 6.5%, falling below the \$54/b barrier for the first time in two weeks.

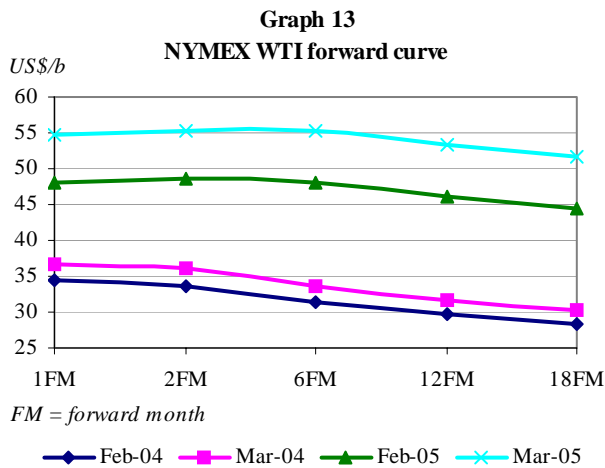
A tragic explosion at BP's Texas City refinery helped to reverse the downward momentum, as reassurances that there would be no impact on production appeared insufficient to suppress speculation that a key piece of the infrastructure may have suffered a damaging blow. This bullish trend proved short-lived as the continued build in US crude oil stocks spurred fund sell-offs on profit-taking. However, an expectation that OPEC would refrain from an immediate output increase generated some



bullishness. Non-commercials continued to reduce their shorts at a faster rate than longs leaving the net long positions at over 73,000 contracts. **Bulls got unexpected support from the infamous “super-spike” report from an investment bank which heightened concern over refined products amid refinery bottlenecks**, despite continued strong builds in crude oil inventories. The Nymex WTI prompt month closed at \$55.40/b for a gain of \$3.65 or 7% over the same time last month.

**The contango widened on continued crude oil stock-builds and deepened further into the sixth month**

The forward structure remained in contango throughout March for the fifth consecutive month. The average 1<sup>st</sup>/2<sup>nd</sup> month spread for March was at -68¢/b or 14¢ wider in contango than in February. Moreover, **the contango extended into the sixth month**, with the 1<sup>st</sup>/6<sup>th</sup> month spread widening a further 60¢ to -70¢/b in March. A continued crude oil stock-build prolonged the contango, with the spread widening towards month-end to reach over \$1/b. **The US crude oil inventory closed the last week in March at 315 mb or more than 23 mb higher than last year at this time, a level last seen in July 2002.**



## The Tanker Market

**OPEC spot fixtures decreased by 1.71 mb/d as a result of lower seasonal demand**

**OPEC area spot fixtures declined in March for the first time this year to average 14.12 mb/d** compared to 15.83 mb/d in the previous month. Despite persistent higher OPEC crude oil production, **the drop of 1.71 mb/d occurred due to expected lower seasonal demand as well as refining maintenance in different regions.** However, OPEC's share of total spot chartering moved up to 67% against 62% in February, the highest level since November 2004, and gained 3 percentage points compared to the same period of 2004. Most of the decline was attributed to Middle Eastern fixtures, especially on the Middle East/westbound long-haul route, which fell 21%, following the end of winter in the Northern Hemisphere implying lower demand for crude. Middle Eastern long-haul fixtures accounted for 53% of OPEC global chartering. Similarly, non-OPEC spot fixtures declined a further 2.6 mb/d to stand at a monthly average of 7.0 mb/d, which was 1.7 mb/d lower than last year's figure. **The combination of the drop in OPEC and non-OPEC fixtures led global spot chartering to average around 21.2 mb/d, which corresponded to a significant decline of more than 4.3 mb/d, the highest level in almost a year.** According to preliminary estimates, sailings from the OPEC area fell by 1.1 mb/d to stand at an average of 23.52 mb/d, with the Middle East, which represented 72% of OPEC's sailings, falling by around 0.8 mb/d. Preliminary data shows that, contrary to the previous month, arrivals in the USA and the Caribbean declined in March by nearly 0.5 mb/d to average 11.14 mb/d, but remained 1.5 mb/d higher than the March 2004 level. At the same time arrivals in the Euromed region declined by 0.5 mb/d to stand at an average of 4.0 mb/d, the lowest level since October 2004. However, arrivals in Japan remained unchanged at 4.4 mb/d. The only exception was NW Europe which experienced an increase of 0.3 mb/d.

**VLCC freight rates declined sharply due to low fixtures**

Spot freight rates for crude oil showed mixed patterns across the different sectors. After displaying a strong recovery in February, **freight rates for the VLCC sector slipped on a monthly basis by 25% to 28% in March due to an increase in tonnage availability and low fixtures.** Freight rates on the Middle East/eastbound long-haul route fell by 40 points to stand at a monthly average of WS105, while on the Middle East/westbound long-haul route, they declined by 29 points to WS92. This significant drop resulted from a growing increase in tonnage availability as buyers from countries with limited desulphurization capacity, particularly China and India, looked outside the Middle East for sweet crudes to meet requirements for light products with more stringent sulphur specifications. In addition, the start of refinery maintenance in some Asian countries such as Japan, China and South Korea put more pressure on freight rates by reducing demand for crude oil and therefore the number of cargoes. However, compared to last year, freight rates on both routes were almost at the same levels as in March 2004. **In the Suezmax sector, freight rates on the West Africa/US Gulf Coast route increased slightly by 6 points to WS166,** reversing a decline of 7 points in the previous month, while on the NW Europe/US East and US Gulf Coasts, rates dropped by 8 points to average WS159, which was slightly higher than the March 2004 level because of limited arbitrage due to a minor differential between WTI and BFO. The West Africa/US Gulf Coast route saw the only increase in the Suezmax sector which confirms the competition between the USA and some Asian countries for the light sweet African crudes to meet the necessary product demand. **The Aframax sector showed mixed movement with freight rates on the Indonesia/US West Coast route experiencing a strong increase of 71 points or 42%** to reach an average of WS239. At the same time, a sudden surge of activity sharply pushed up freight rates on the Caribbean/US East Coast to average WS258, which corresponded to a substantial 43 point increase after a loss of 138 points in February. In contrast, freight rates in the Mediterranean and from there to NW Europe declined for the fourth consecutive month, although losses were lower than in the previous month, as a result of a decline in activity due to refining maintenance in Europe. **It is worth noting that most of the routes in different sectors recovered quickly in the second half of March following OPEC's decision to increase production by 0.5 mb/d.**

**A tight market pushed product freight rates above WS300 on all routes**

**Product freight rates increased on all routes as a result of high demand for distillates supported by cold weather in combination with the refining maintenance in Asia, Europe and the USA.** Freight rates for vessels carrying 30,000-50,000 dwt along the Middle East/East route increased by 11 points compared to a slide of 67 points in the previous month, to stand at an average of WS303. Similarly, the Singapore/East route gained 22 points, pushing average freight rates to WS347. Compared to March 2004 figures, rates on both

routes for cargoes heading to the East were 42 points higher each. The Caribbean/US Gulf Coast route showed a significant increase of 45 points or 18% to reach an average of WS302, while the NW Europe/US East and US Gulf Coast routes gained 38 points to stand at an average of WS329. However, freight rates within the Mediterranean region and from there to NW Europe continued to climb for the second consecutive month, growing a substantial 40 points to average WS335. The increase in the Mediterranean region was quite small up 4 points to average WS313.

**Table 4**  
**Tanker chartering, sailings and arrivals**  
*mb/d*

	<u>Jan 05</u>	<u>Feb 05</u>	<u>Mar 05</u>	<u>Change</u> <u>Mar/Feb</u>
<b>Spot Chartering</b>				
All areas	24.35	25.50	21.18	-4.32
OPEC	15.53	15.83	14.12	-1.71
Middle East/east	6.27	6.50	5.73	-0.77
Middle East/west	2.15	2.25	1.77	-0.48
<b>Sailings</b>				
OPEC	24.30	24.62	23.52	-1.10
Middle East	17.30	17.67	16.88	-0.79
<b>Arrivals</b>				
US Gulf Coast, US East Coast, Caribbean	9.31	11.61	11.14	-0.47
North West Europe	8.19	7.39	7.70	0.31
Euromed	4.43	4.57	4.05	-0.52
Japan	4.37	4.42	4.41	-0.01

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

**Table 5**  
**Spot tanker freight rates**  
*Worldscale*

	<b>Size</b> <i>1,000 DWT</i>	<u>Jan 05</u>	<u>Feb 05</u>	<u>Mar 05</u>	<u>Change</u> <u>Mar/Feb</u>
<b>Crude</b>					
Middle East/east	200-300	71	145	105	-40
Middle East/west	200-300	70	121	92	-29
West Africa/US Gulf Coast	100-160	167	160	166	6
NW Europe/USEC - USGC	100-160	155	167	159	-8
Indonesia/US West Coast	70-100	159	168	239	71
Caribbean/US East Coast	40-70	353	215	258	43
Mediterranean/Mediterranean	40-70	259	228	221	-7
Mediterranean/North-West Europe	70-100	209	195	191	-4
<b>Products</b>					
Middle East/east	30-50	359	292	303	11
Singapore/east	25-30	359	325	347	22
Caribbean/US Gulf Coast	25-30	333	257	302	45
NW Europe/USEC - USGC	25-30	345	291	329	38
Mediterranean/Mediterranean	25-30	297	309	313	4
Mediterranean/North-West Europe	25-30	290	295	335	40

Source: Galbraith's Tanker Market Report as well as other relevant industry publications.

# World Oil Demand

**World oil demand growth for 2004 was slightly revised down to 2.61 mb/d. The yearly average now stands at 82.13m mb/d.**

## Forecast for 2004

### World

As further revisions to the demand data for 2004 have been incorporated, based on the latest information, global as well as regional figures have seen only marginal revisions. With minor increases and decreases netting out, the figure for total world oil demand growth of 2.61 mb/d for 2004 is slightly lower than the assessment presented in the last *MOMR* (see Table 6). Likewise, changes to the quarterly distribution were minor with the first and third quarters revised up by 0.02 mb/d while the fourth quarter was up 0.01 mb/d, while the second quarter remained unchanged. On a regional basis, OECD as well as Total Other Regions aggregate demand was unchanged at 49.54 mb/d and 11.24 mb/d respectively, while total Developing Countries consumption was marginally revised up by 0.03 mb/d to 21.36 mb/d. All in all total world demand is estimated to have grown by 3.28% to a yearly average of 82.13 mb/d.

**Table 6**  
World oil demand forecast for 2004  
*mb/d*

	<u>2003</u>	<u>1Q04</u>	<u>2Q04</u>	<u>3Q04</u>	<u>4Q04</u>	<u>2004</u>	<b>Change 2004/03</b>	
							<u>Volume</u>	<u>%</u>
North America	24.58	25.03	24.85	25.23	25.64	25.19	0.61	2.48
Western Europe	15.50	15.76	15.33	15.68	16.13	15.72	0.22	1.42
OECD Pacific	8.77	9.38	8.00	8.25	8.87	8.62	-0.15	-1.71
<b>Total OECD</b>	<b>48.86</b>	<b>50.17</b>	<b>48.17</b>	<b>49.17</b>	<b>50.63</b>	<b>49.54</b>	<b>0.68</b>	<b>1.39</b>
Other Asia	8.05	8.28	8.53	8.29	8.72	8.45	0.40	5.03
Latin America	4.73	4.67	4.91	5.01	4.96	4.89	0.16	3.28
Middle East	5.10	5.26	5.31	5.47	5.32	5.34	0.24	4.74
Africa	2.62	2.63	2.67	2.65	2.74	2.67	0.06	2.13
<b>Total DCs</b>	<b>20.50</b>	<b>20.84</b>	<b>21.42</b>	<b>21.42</b>	<b>21.74</b>	<b>21.36</b>	<b>0.86</b>	<b>4.18</b>
FSU	3.78	3.61	3.78	3.98	4.07	3.86	0.09	2.27
Other Europe	0.83	0.91	0.86	0.82	0.84	0.86	0.03	3.09
China	5.56	6.23	6.77	6.37	6.71	6.52	0.96	17.21
<b>Total "Other Regions"</b>	<b>10.17</b>	<b>10.75</b>	<b>11.40</b>	<b>11.16</b>	<b>11.62</b>	<b>11.24</b>	<b>1.07</b>	<b>10.51</b>
<b>Total world</b>	<b>79.52</b>	<b>81.75</b>	<b>81.00</b>	<b>81.75</b>	<b>84.00</b>	<b>82.13</b>	<b>2.61</b>	<b>3.28</b>
Previous estimate	79.50	81.73	80.99	81.73	83.99	82.12	2.62	3.29
Revision	0.03	0.02	0.00	0.02	0.01	0.01	-0.01	-0.02

*Totals may not add due to independent rounding.*

**Table 7**  
**First and second quarter world oil demand comparison for 2004**  
*mb/d*

	Change 2004/03				Change 2004/03			
	<u>1Q03</u>	<u>1Q04</u>	<u>Volume</u>	<u>%</u>	<u>2Q03</u>	<u>2Q04</u>	<u>Volume</u>	<u>%</u>
North America	24.52	25.03	0.50	2.06	24.15	24.85	0.70	2.89
Western Europe	15.50	15.76	0.26	1.68	15.24	15.33	0.08	0.56
OECD Pacific	9.75	9.38	-0.37	-3.79	8.18	8.00	-0.18	-2.17
<b>Total OECD</b>	<b>49.77</b>	<b>50.17</b>	<b>0.39</b>	<b>0.79</b>	<b>47.57</b>	<b>48.17</b>	<b>0.60</b>	<b>1.27</b>
Other Asia	7.87	8.28	0.41	5.21	7.79	8.53	0.74	9.44
Latin America	4.53	4.67	0.14	3.05	4.72	4.91	0.19	4.08
Middle East	5.02	5.26	0.24	4.73	4.91	5.31	0.41	8.26
Africa	2.62	2.63	0.01	0.55	2.60	2.67	0.07	2.61
<b>Total DCs</b>	<b>20.04</b>	<b>20.84</b>	<b>0.80</b>	<b>3.99</b>	<b>20.02</b>	<b>21.42</b>	<b>1.40</b>	<b>7.00</b>
FSU	4.02	3.61	-0.41	-10.09	3.35	3.78	0.43	12.68
Other Europe	0.89	0.91	0.02	2.32	0.83	0.86	0.03	3.10
China	5.41	6.23	0.82	15.11	5.46	6.77	1.31	23.89
<b>Total "Other Regions"</b>	<b>10.31</b>	<b>10.75</b>	<b>0.43</b>	<b>4.20</b>	<b>9.65</b>	<b>11.40</b>	<b>1.76</b>	<b>18.20</b>
<b>Total world</b>	<b>80.13</b>	<b>81.75</b>	<b>1.63</b>	<b>2.03</b>	<b>77.24</b>	<b>81.00</b>	<b>3.76</b>	<b>4.87</b>

*Totals may not add due to independent rounding.*

**Table 8**  
**Third and fourth quarter world oil demand comparison for 2004**  
*mb/d*

	Change 2004/03				Change 2004/03			
	<u>3Q03</u>	<u>3Q04</u>	<u>Volume</u>	<u>%</u>	<u>4Q03</u>	<u>4Q04</u>	<u>Volume</u>	<u>%</u>
North America	24.76	25.23	0.47	1.91	24.87	25.64	0.77	3.08
Western Europe	15.50	15.68	0.18	1.15	15.77	16.13	0.35	2.24
OECD Pacific	8.03	8.25	0.23	2.82	9.15	8.87	-0.28	-3.10
<b>Total OECD</b>	<b>48.29</b>	<b>49.17</b>	<b>0.88</b>	<b>1.81</b>	<b>49.80</b>	<b>50.63</b>	<b>0.84</b>	<b>1.68</b>
Other Asia	8.07	8.29	0.22	2.69	8.46	8.72	0.26	3.07
Latin America	4.83	5.01	0.18	3.66	4.85	4.96	0.11	2.33
Middle East	5.29	5.47	0.17	3.29	5.17	5.32	0.15	2.95
Africa	2.59	2.65	0.06	2.50	2.66	2.74	0.08	2.83
<b>Total DCs</b>	<b>20.79</b>	<b>21.42</b>	<b>0.63</b>	<b>3.05</b>	<b>21.14</b>	<b>21.74</b>	<b>0.60</b>	<b>2.84</b>
FSU	3.68	3.98	0.30	8.18	4.05	4.07	0.01	0.35
Other Europe	0.77	0.82	0.04	5.61	0.83	0.84	0.01	1.54
China	5.76	6.37	0.60	10.50	5.61	6.71	1.10	19.65
<b>Total "Other Regions"</b>	<b>10.21</b>	<b>11.16</b>	<b>0.95</b>	<b>9.29</b>	<b>10.49</b>	<b>11.62</b>	<b>1.13</b>	<b>10.76</b>
<b>Total world</b>	<b>79.29</b>	<b>81.75</b>	<b>2.46</b>	<b>3.10</b>	<b>81.43</b>	<b>84.00</b>	<b>2.57</b>	<b>3.15</b>

*Totals may not add due to independent rounding.*

#### **Forecast for 2005**

**World oil demand in 2005 is forecast to average 84.02 mb/d, with growth of 1.89 mb/d or 2.3%**

**Total world oil demand for the present year is projected to rise by 1.89 mb/d or 2.3% to average 84.02 mb/d, on continued strength and global oil consumption above recent years but below 2004.** World oil demand has been revised up slightly, mainly due to lower than normal temperatures in the Northern Hemisphere during the second half of February and the first half of March as well as on indications of somewhat stronger consumption from preliminary data from the OECD for the first two months of 2005, despite a minor downward revision to the forecast of total world economic activity, which now stands at 4.12%. As mentioned above, preliminary data for OECD countries for the period January-February, as well as figures on apparent demand from the FSU and China for January and direct communication data for the first quarter from OPEC Member Countries suggest that demand rose by 2.8% y-o-y during the first quarter to average 84.03 mb/d. This apparent significant growth rate could in part be the result of the moderate

1.63% rise observed during the first quarter of 2004. It is important to note that, although projections for world oil demand growth for this year are considerably lower than actual growth during 2004, the substantially higher first quarter y-o-y growth of 2.8% this year should be carefully noted. Following the exceptionally high growth of 4.87% seen during the second quarter of 2004, world oil demand growth is projected to decelerate to 2.07% or 1.67 mb/d to average 82.62 mb/d for the second quarter of 2005. Demand is estimated to gain momentum during the last two quarters of the year on the back of strong consumption in transportation and heating oil fuels. Third-quarter world oil demand is estimated to grow by 2.2% or 1.8 mb/d to 83.55 mb/d, while demand in the last quarter is estimated to reach 85.83 mb/d, or just a notch below the unprecedented 86 mb/d mark.

#### *OECD*

**Total OECD consumption is estimated to grow by 0.8% or 0.39 mb/d during the present year to average 49.92 mb/d.** On a regional basis, North America will account for a big proportion of the increase (0.35 mb/d) and the USA will contribute more than 80% of that growth. Preliminary supply figures for the period January-March 2005 released by the EIA indicate that finished motor gasoline deliveries rose by 0.7% to 8.92 mb/d versus the same period last year. Distillate deliveries remained almost flat during the first three months of 2005, while kerosene and fuel oil rose by 3.7% and 9.8%, respectively. The estimated 0.6% y-o-y increase in Western Europe's demand, which translates into 0.1 mb/d, will be partially offset by the projected drop of 0.06 mb/d in OECD Pacific demand. The split of total OECD oil requirements by products for January 2005 shows that inland consumption grew by 0.3% or 0.15 mb/d versus January 2004 to 46.08 mb/d. Consumption of fuel oil and naphtha rose by 4.5% and 4.4% in January while LPG and gas oil/diesel demand fell by 3.4% and 0.8%, respectively. In North America, inland consumption rose by 0.35 mb/d or 1.54% on demand for fuel oil (0.21 mb/d) and gasoline (0.15 mb/d). In contrast, inland consumption in Western Europe fell by 0.17 mb/d or 1.25% on a sizable drop in gasoline, fuel oil and LPG consumption. Strong naphtha demand was not sufficient to counteract the fall in LPG, gasoil/diesel and fuel oil consumption in OECD Pacific countries.

#### *Developing Countries*

**Developing countries oil consumption — based on lower but still healthy economic growth figures compared to the previous year — is estimated to rise by 3.8% or 0.81 mb/d to average 22.17 mb/d.** The estimated growth in demand in this group of countries will make up for more than 40% of total world oil demand for the present year. Demand growth for products from the Asian countries within this group was revised upwards from the last *MOMR* – increased by 0.05 mb/d to 0.29 mb/d based on the healthy 5.3% projected rise in GDP for 2005 and indications of strength in consumption during February and March. **It is important to mention that, in response to the new market reality of high oil prices, several Asian countries have started to introduce measures to curb demand growth especially in the transportation sector. The Indian and Chinese governments recently increased the price of gasoline and China is likely to raise diesel prices once the harvest season is over. In the same line, Indonesia and Thailand lowered subsidies on transportation fuel and Malaysia is expected to follow suit.** Record high oil prices and record revenues for many Middle Eastern producing countries, supporting solid GDP growth rate of 7.55% point to another solid rise in oil demand in that region. Oil consumption is forecast to increase by 0.30 mb/d or 5.61% to a yearly average of 5.64 mb/d. In Latin America and Africa demand is expected to rise by 0.14 mb/d and 0.08 mb/d based on healthy projections of economic expansion.

#### *Other Regions*

**Oil demand in this group is estimated to rise by more than 6% y-o-y or 0.7 mb/d to reach an average of 11.93 mb/d for 2005.** China's yearly average demand is projected to reach 7.12 mb/d which represents a y-o-y rise of 9.2% or 0.6 mb/d. Very preliminary data and estimates of production and trade figures indicate that apparent consumption in China grew by 7% to 6.67 mb/d during the first quarter of 2005. Despite this significant growth it is only half of the 15% rise in apparent demand for the first quarter of 2004. Preliminary trade data, subject to further revisions, showing healthy import levels of crude and products is the main reason behind such growth. China's net imports of crude and products seem to have dropped in January following healthy buying and stocking during the last quarter of 2004 but rebounded substantially in February following the end of the Chinese New Year. Preliminary indications for March point to another month of healthy buying. In the FSU, very preliminary production and trade statistics show that apparent demand rose by more than 5% to 3.81 mb/d during the first quarter of 2005.



However, this preliminary figure is likely to be revised downward in the recent future. As for the whole year, FSU apparent demand is projected to rise by 2.27% or 0.09 mb/d to 3.86 mb/d. Oil consumption in the group of Central European countries is projected to increase by 3% or 0.03 mb/d to reach a yearly average of 0.86 mb/d.

**Table 9**  
**World oil demand forecast for 2005**  
*mb/d*

	<u>2004</u>	<u>1Q05</u>	<u>2Q05</u>	<u>3Q05</u>	<u>4Q05</u>	<u>2005</u>	Change 2005/04	
							Volume	%
North America	25.19	25.47	25.14	25.53	26.02	25.54	0.35	1.41
Western Europe	15.72	15.97	15.38	15.75	16.19	15.82	0.10	0.63
OECD Pacific	8.62	9.52	7.86	8.14	8.73	8.56	-0.06	-0.74
<b>Total OECD</b>	<b>49.54</b>	<b>50.97</b>	<b>48.37</b>	<b>49.42</b>	<b>50.94</b>	<b>49.92</b>	<b>0.39</b>	<b>0.79</b>
Other Asia	8.45	8.56	8.84	8.57	9.00	8.74	0.29	3.43
Latin America	4.89	4.81	5.06	5.15	5.10	5.03	0.14	2.91
Middle East	5.34	5.55	5.62	5.78	5.61	5.64	0.30	5.61
Africa	2.67	2.74	2.75	2.71	2.82	2.76	0.08	3.08
<b>Total DCs</b>	<b>21.36</b>	<b>21.66</b>	<b>22.28</b>	<b>22.22</b>	<b>22.52</b>	<b>22.17</b>	<b>0.81</b>	<b>3.81</b>
FSU	3.86	3.81	3.83	4.04	4.11	3.95	0.09	2.27
Other Europe	0.86	0.93	0.80	0.83	0.87	0.86	0.00	0.36
China	6.52	6.67	7.38	7.04	7.38	7.12	0.60	9.22
<b>Total "Other Regions"</b>	<b>11.24</b>	<b>11.41</b>	<b>12.02</b>	<b>11.91</b>	<b>12.37</b>	<b>11.93</b>	<b>0.69</b>	<b>6.16</b>
<b>Total world</b>	<b>82.13</b>	<b>84.03</b>	<b>82.67</b>	<b>83.55</b>	<b>85.83</b>	<b>84.02</b>	<b>1.89</b>	<b>2.31</b>
Previous estimate	82.12	84.05	82.66	83.41	85.77	83.98	1.86	2.27
Revision	0.01	-0.02	0.01	0.14	0.06	0.05	0.03	0.04

Totals may not add due to independent rounding.

**Table 10**  
**First and second quarter world oil demand comparison for 2005**  
*mb/d*

	<u>1Q04</u>	<u>1Q05</u>	Change 2005/04		<u>2Q04</u>	<u>2Q05</u>	Change 2005/04	
			Volume	%			Volume	%
North America	25.03	25.47	0.45	1.79	24.85	25.14	0.29	1.16
Western Europe	15.76	15.97	0.22	1.36	15.33	15.38	0.05	0.35
OECD Pacific	9.38	9.52	0.14	1.46	8.00	7.86	-0.14	-1.76
<b>Total OECD</b>	<b>50.17</b>	<b>50.97</b>	<b>0.80</b>	<b>1.59</b>	<b>48.17</b>	<b>48.37</b>	<b>0.20</b>	<b>0.42</b>
Other Asia	8.28	8.56	0.28	3.38	8.53	8.84	0.32	3.73
Latin America	4.67	4.81	0.14	2.99	4.91	5.06	0.15	3.07
Middle East	5.26	5.55	0.29	5.44	5.31	5.62	0.31	5.89
Africa	2.63	2.74	0.11	4.12	2.67	2.75	0.08	2.94
<b>Total DCs</b>	<b>20.84</b>	<b>21.66</b>	<b>0.81</b>	<b>3.90</b>	<b>21.42</b>	<b>22.28</b>	<b>0.86</b>	<b>4.01</b>
FSU	3.61	3.81	0.20	5.54	3.78	3.83	0.05	1.39
Other Europe	0.91	0.93	0.02	2.70	0.86	0.80	-0.05	-6.33
China	6.23	6.67	0.44	7.07	6.77	7.38	0.62	9.09
<b>Total "Other Regions"</b>	<b>10.75</b>	<b>11.41</b>	<b>0.66</b>	<b>6.19</b>	<b>11.40</b>	<b>12.02</b>	<b>0.61</b>	<b>5.38</b>
<b>Total world</b>	<b>81.75</b>	<b>84.03</b>	<b>2.28</b>	<b>2.79</b>	<b>81.00</b>	<b>82.67</b>	<b>1.67</b>	<b>2.07</b>

Totals may not add due to independent rounding.

**Table 11**  
**Third and fourth quarter world oil demand comparison for 2005**  
*mb/d*

	<u>3Q04</u>	<u>3Q05</u>	<b>Change 2005/04</b>		<u>4Q04</u>	<u>4Q05</u>	<b>Change 2005/04</b>	
			<u>Volume</u>	<u>%</u>			<u>Volume</u>	<u>%</u>
North America	25.23	25.53	0.30	1.19	25.64	26.02	0.38	1.48
Western Europe	15.68	15.75	0.07	0.43	16.13	16.19	0.06	0.38
OECD Pacific	8.25	8.14	-0.11	-1.34	8.87	8.73	-0.14	-1.55
<b>Total OECD</b>	<b>49.17</b>	<b>49.42</b>	<b>0.26</b>	<b>0.52</b>	<b>50.63</b>	<b>50.94</b>	<b>0.31</b>	<b>0.60</b>
Other Asia	8.29	8.57	0.28	3.43	8.72	9.00	0.28	3.17
Latin America	5.01	5.15	0.14	2.83	4.96	5.10	0.14	2.77
Middle East	5.47	5.78	0.32	5.77	5.32	5.61	0.28	5.33
Africa	2.65	2.71	0.06	2.30	2.74	2.82	0.08	3.00
<b>Total DCs</b>	<b>21.42</b>	<b>22.22</b>	<b>0.80</b>	<b>3.75</b>	<b>21.74</b>	<b>22.52</b>	<b>0.78</b>	<b>3.59</b>
FSU	3.98	4.04	0.06	1.39	4.07	4.11	0.05	1.11
Other Europe	0.82	0.83	0.02	1.98	0.84	0.87	0.03	3.03
China	6.37	7.04	0.67	10.54	6.71	7.38	0.67	10.04
<b>Total "Other Regions"</b>	<b>11.16</b>	<b>11.91</b>	<b>0.74</b>	<b>6.65</b>	<b>11.62</b>	<b>12.37</b>	<b>0.74</b>	<b>6.40</b>
<b>Total world</b>	<b>81.75</b>	<b>83.55</b>	<b>1.80</b>	<b>2.20</b>	<b>84.00</b>	<b>85.83</b>	<b>1.83</b>	<b>2.18</b>

*Totals may not add due to independent rounding.*

# World Oil Supply

**Non-OPEC supply in 2004 increased 1.1 mb/d over 2003**

## Non-OPEC

### Estimate for 2004

The total non-OPEC supply estimate for 2004 remains unchanged. Non-OPEC supply averaged 49.74 mb/d for the year, which represents an increase of 1.1 mb/d from 2003, or 2.2% y-o-y. The quarterly distribution for non-OPEC supply was 49.67 mb/d, 49.76 mb/d, 49.51 mb/d and 50 mb/d for the first, second, third and fourth quarters, respectively.

**Table 12**  
**Non-OPEC oil supply in 2004**  
*mb/d*

	<u>2003</u>	<u>1Q04</u>	<u>2Q04</u>	<u>3Q04</u>	<u>4Q04</u>	<u>2004</u>	<u>Change</u> <u>04/03</u>
North America	14.60	14.79	14.69	14.38	14.41	14.57	-0.03
Western Europe	6.39	6.42	6.29	5.74	6.03	6.12	-0.27
OECD Pacific	0.65	0.59	0.57	0.59	0.53	0.57	-0.08
<b>Total OECD</b>	<b>21.64</b>	<b>21.79</b>	<b>21.55</b>	<b>20.72</b>	<b>20.97</b>	<b>21.26</b>	<b>-0.39</b>
Other Asia	2.36	2.49	2.51	2.61	2.70	2.58	0.22
Latin America	3.94	3.93	3.95	4.00	3.97	3.96	0.02
Middle East	2.00	1.94	1.89	1.87	1.84	1.89	-0.11
Africa	3.05	3.30	3.36	3.48	3.57	3.43	0.38
<b>Total DCs</b>	<b>11.34</b>	<b>11.66</b>	<b>11.72</b>	<b>11.96</b>	<b>12.08</b>	<b>11.86</b>	<b>0.51</b>
FSU	10.27	10.78	11.06	11.32	11.44	11.15	0.89
Other Europe	0.17	0.16	0.16	0.16	0.15	0.16	-0.01
China	3.41	3.43	3.47	3.54	3.51	3.49	0.08
<b>Total "Other regions"</b>	<b>13.84</b>	<b>14.37</b>	<b>14.69</b>	<b>15.02</b>	<b>15.10</b>	<b>14.79</b>	<b>0.95</b>
<b>Total non-OPEC production</b>	<b>46.83</b>	<b>47.82</b>	<b>47.95</b>	<b>47.70</b>	<b>48.15</b>	<b>47.91</b>	<b>1.08</b>
Processing gains	1.80	1.85	1.81	1.81	1.85	1.83	0.03
<b>Total non-OPEC supply</b>	<b>48.63</b>	<b>49.67</b>	<b>49.76</b>	<b>49.51</b>	<b>50.00</b>	<b>49.74</b>	<b>1.11</b>
Previous estimate	48.63	49.67	49.76	49.51	50.00	49.74	1.11
<b>Revision</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Totals may not add due to independent rounding.

### Forecast for 2005

**Non-OPEC supply is expected to average 50.7 mb/d in 2005, which represents an increase of just under 1 mb/d over 2003**

Non-OPEC supply growth in 2005 has been revised down by approximately 70,000 b/d versus the estimate published in the March report. Non-OPEC gains are now expected to average 990,000 b/d in 2005, which represents a y-o-y increase of 2% from 2004. For the full year, non-OPEC supply is expected to average 50.7 mb/d, with a quarterly distribution of 50.45 mb/d, 50.79 mb/d, 50.53 mb/d and 51.15 mb/d for the first, second, third and fourth quarter respectively.

On a quarterly basis, the first quarter of 2005 has been revised down by 50,000 b/d, the second quarter revised up by 40,000 b/d, and the third and fourth quarters revised down by 150,000 b/d and 110,000 b/d, respectively. The major revisions come from lower-than-expected growth in Russia, Kazakhstan, and the UK. Preliminary data for Russian output in the first quarter of 2005 indicates that production was roughly 80,000 b/d below expectations. In 2005, Russian production is now expected to grow by an average of 360,000 b/d versus 450,000 b/d in our previous assessment. Full year average production growth in Kazakhstan has been assessed at 100,000 b/d versus a previous 150,000 b/d. The forecast for the UK has also been revised down a modest 40,000 b/d and is now expected to decline by 130,000 b/d in 2005.

However, the outlook for other selected non-OPEC countries remains strong, particularly in the second half of the year. This report sees an improved outlook versus last month's report

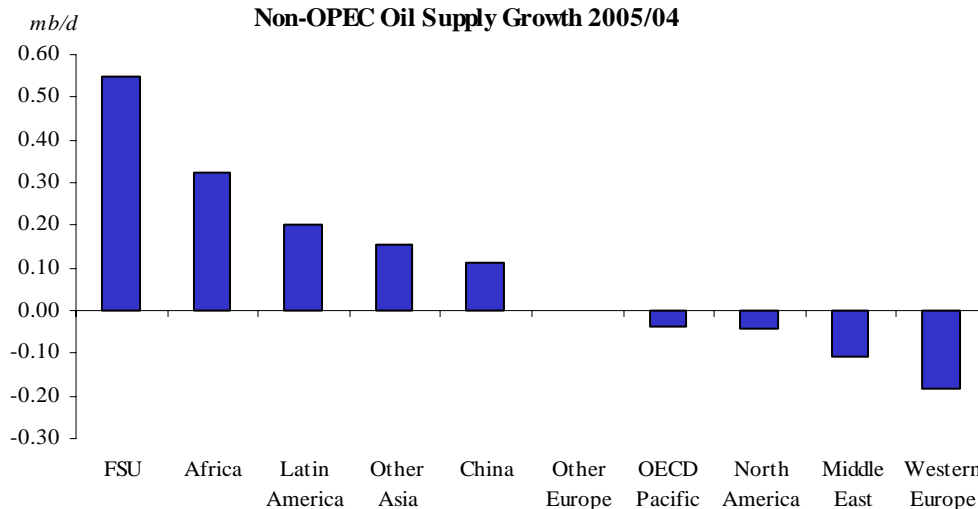
particularly in Brazil, Angola, Sudan and Azerbaijan, as the start up and ramping up of projects remains on track, and in some cases ahead of schedule. Sequentially, first quarter 2005 non-OPEC production is expected to grow 450,000 b/d versus the fourth quarter of 2004; for the second quarter, production is expected to grow 350,000 b/d versus the first; and then dropping in the third quarter due to the maintenance season. However, in the fourth quarter non-OPEC production is expected to reach 51.1 mb/d. This represents an increase of approximately 600,000 b/d versus the previous quarter and 1.1 mb/d versus the fourth quarter of last year.

**Table 13**  
**Non-OPEC oil supply in 2005**  
*mb/d*

	<u>2004</u>	<u>1Q05</u>	<u>2Q05</u>	<u>3Q05</u>	<u>4Q05</u>	<u>2005</u>	<u>Change</u> <u>05/04</u>
North America	14.57	14.62	14.64	14.48	14.36	14.52	-0.04
Western Europe	6.12	6.00	6.08	5.68	5.98	5.93	-0.18
OECD Pacific	0.57	0.55	0.53	0.55	0.51	0.53	-0.04
<b>Total OECD</b>	<b>21.26</b>	<b>21.16</b>	<b>21.25</b>	<b>20.71</b>	<b>20.84</b>	<b>20.99</b>	<b>-0.26</b>
Other Asia	2.58	2.71	2.71	2.73	2.77	2.73	0.15
Latin America	3.96	4.10	4.15	4.16	4.25	4.16	0.20
Middle East	1.89	1.82	1.79	1.77	1.74	1.78	-0.11
Africa	3.43	3.63	3.68	3.76	3.94	3.75	0.32
<b>Total DCs</b>	<b>11.86</b>	<b>12.25</b>	<b>12.34</b>	<b>12.43</b>	<b>12.70</b>	<b>12.43</b>	<b>0.57</b>
FSU	11.15	11.40	11.61	11.80	11.98	11.70	0.55
Other Europe	0.16	0.16	0.16	0.16	0.16	0.16	0.00
China	3.49	3.60	3.60	3.60	3.60	3.60	0.11
<b>Total "Other regions"</b>	<b>14.79</b>	<b>15.15</b>	<b>15.37</b>	<b>15.55</b>	<b>15.74</b>	<b>15.45</b>	<b>0.66</b>
<b>Total non-OPEC production</b>	<b>47.91</b>	<b>48.57</b>	<b>48.95</b>	<b>48.69</b>	<b>49.27</b>	<b>48.87</b>	<b>0.97</b>
Processing gains	1.83	1.88	1.84	1.84	1.88	1.86	0.03
<b>Total non-OPEC supply</b>	<b>49.74</b>	<b>50.45</b>	<b>50.79</b>	<b>50.53</b>	<b>51.15</b>	<b>50.73</b>	<b>0.99</b>
Previous estimate	49.74	50.5	50.75	50.68	51.26	50.8	1.06
<b>Revision</b>	<b>0.00</b>	<b>-0.05</b>	<b>0.04</b>	<b>-0.15</b>	<b>-0.11</b>	<b>-0.07</b>	<b>-0.07</b>

*Totals may not add due to independent rounding*

**Graph 14**  
**Non-OPEC Oil Supply Growth 2005/04**



**FSU net oil export**

**Net FSU oil export for 2005 forecast at 7.82 mb/d, an increase of 0.53 mb/d over 2004**

FSU net oil export for 2005 is expected to average 7.75 mb/d, an increase of 460,000 b/d over the previous year. This represents a downward revision of 70,000 b/d from last month, largely due to the previously indicated lower expectations for Russia's oil production growth. However, exports from Azerbaijan are expected to increase significantly, particularly in the second half of the year, underpinned by volume growth in Phase I of the ACG project.

**Table 14**  
**FSU net oil exports**  
*mb/d*

	<u>1Q</u>	<u>2Q</u>	<u>3Q</u>	<u>4Q</u>	<u>Year</u>
<b>2001</b>	4.30	4.71	4.89	4.47	<b>4.59</b>
<b>2002</b>	5.14	5.84	5.85	5.49	<b>5.58</b>
<b>2003</b>	5.87	6.75	6.72	6.61	<b>6.49</b>
<b>2004 (estimate)</b>	7.17	7.28	7.34	7.37	<b>7.29</b>
<b>2005 (forecast)</b>	7.48	7.78	7.76	7.87	<b>7.75</b>

**OPEC NGL for 2005  
forecast at 4.19 mb/d,  
0.24 mb/d above 2004**

***OPEC natural gas liquids and non-conventional oils***

The 2005 forecast for OPEC NGLs + non-conventional oils remains unchanged at 4.19 mb/d, which represents an increase of 0.24 mb/d over 2004. The quarterly distribution is projected at 4.11 mb/d, 4.17 mb/d, 4.21 mb/d and 4.26 mb/d for the first, second, third and fourth quarter, respectively.

**OPEC NGL production — 2001-2005**  
*mb/d*

<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>1Q04</u>	<u>2Q04</u>	<u>3Q04</u>	<u>4Q04</u>	<u>2004</u>	<u>Change</u> <u>04/03</u>	<u>2005</u>	<u>Change</u> <u>05/04</u>
<b>3.40</b>	<b>3.42</b>	<b>3.57</b>	3.65	3.66	3.71	3.78	<b>3.70</b>	0.13	<b>3.93</b>	0.23

**March output rose by  
300,000 b/d versus  
February**

***OPEC crude oil production***

Total OPEC crude production averaged 29.76 mb/d in March, according to secondary sources, which represents an increase of 300,000 b/d compared to February. In the middle of March, OPEC agreed at the Meeting in Isfahan to modify its production agreement from 27 mb/d to 27.5 mb/d. For the first quarter of 2005, total production averaged 29.52 mb/d, up 1.3 mb/d from the first quarter of last year.

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

	<u>2003</u>	<u>2004</u>	<u>4Q04</u>	<u>Jan 05</u>	<u>Feb 05</u>	<u>Mar 05</u>	<u>Mar/Feb</u>
Algeria	1,134	1,229	1,289	1,305	1,317	1,333	16
Indonesia	1,027	969	961	955	948	947	-1
IR Iran	3,757	3,920	3,947	3,927	3,907	3,906	-1
Iraq	1,322	2,015	1,960	1,813	1,846	1,813	-34
Kuwait	2,172	2,344	2,448	2,406	2,443	2,481	39
SP Libyan AJ	1,422	1,537	1,608	1,608	1,613	1,617	5
Nigeria	2,131	2,351	2,344	2,291	2,324	2,365	41
Qatar	743	781	798	781	793	796	4
Saudi Arabia	8,709	8,982	9,450	9,143	9,191	9,346	155
UAE	2,243	2,360	2,486	2,388	2,381	2,440	59
Venezuela	2,305	2,580	2,615	2,698	2,700	2,717	17
OPEC-10	<b>25,644</b>	<b>27,052</b>	<b>27,947</b>	<b>27,502</b>	<b>27,614</b>	<b>27,948</b>	<b>334</b>
Total OPEC	<b>26,965</b>	<b>29,068</b>	<b>29,907</b>	<b>29,315</b>	<b>29,461</b>	<b>29,761</b>	<b>300</b>

*Totals may not add due to independent rounding.*

# Rig Count

**Non-OPEC rig count reached historic highs in the first quarter of 2005**

## Non-OPEC

Non-OPEC rig count dropped by 129 in March compared to the previous month. North America lost 149 rigs, due to losses in Canada and Mexico, which were partly offset by new rigs in the USA. Western Europe gained 17 rigs over the previous month, whilst OECD Pacific added just 1 rig. Overall, non-OPEC rig activity in the first quarter of 2005 was 2,390, which represents an increase of 196 from the first quarter of 2004 and a historical record high. In 2005, non-OPEC rig activity is expected to remain strong, largely fueled by North America's gas drilling.

**Table 16**  
Non-OPEC rig count in 2002–2004

	<u>2003</u>	<u>2004</u>	<u>Change</u> <u>04/03</u>	<u>Feb05</u>	<u>Mar05</u>	<u>Change</u> <u>Mar/Feb</u>
North America	1,496	1,669	173	1,988	1,839	-149
Western Europe	78	65	-13	49	66	17
OECD Pacific	18	22	4	24	25	1
<b>OECD</b>	<b>1,592</b>	<b>1,755</b>	<b>163</b>	<b>2,061</b>	<b>1,930</b>	<b>-131</b>
Other Asia	117	126	9	135	131	-4
Latin America	116	126	10	134	135	1
Middle East	70	70	0	65	69	4
Africa	48	54	6	58	59	1
<b>DCs</b>	<b>350</b>	<b>376</b>	<b>26</b>	<b>392</b>	<b>394</b>	<b>2</b>
FSU	na	na	na	na	na	na
Other Europe	2	2	0	3	3	0
China	na	na	na	na	na	na
<b>Other regions</b>	na	na	na	na	na	na
<b>Total non-OPEC</b>	<b>1,944</b>	<b>2,132</b>	<b>188</b>	<b>2,456</b>	<b>2,327</b>	<b>-129</b>

Totals may not add due to independent rounding.

na not available

Source: Baker Hughes International.

## OPEC

**OPEC rig count unchanged in March**

OPEC's rig count was 274 in March, unchanged from February. Rig count averaged 271 in the first quarter of 2005, up 34 rigs from the first quarter of 2004 and 8 rigs from the fourth quarter of 2004.

**Table 17**  
OPEC rig count

	<u>2003</u>	<u>2004</u>	<u>Change</u> <u>04/03</u>	<u>Feb 05</u>	<u>Mar 05</u>	<u>Change</u> <u>Mar/Feb</u>
Algeria	20	19	-1	20	20	0
Indonesia	45	49	4	58	51	-7
IR Iran	35	41	6	43	43	0
Iraq	na	na	na	na	na	na
Kuwait	5	10	5	12	14	2
SP Libyan AJ	10	10	0	10	9	-1
Nigeria	10	8	-2	9	10	1
Qatar	8	9	1	9	11	2
Saudi Arabia	32	32	0	33	34	1
UAE	16	16	0	16	16	0
Venezuela	37	55	18	64	66	2
<b>Total OPEC</b>	<b>218</b>	<b>249</b>	<b>31</b>	<b>274</b>	<b>274</b>	<b>0</b>

Totals may not add due to independent rounding.

na not available

Source: Baker Hughes International.

## Stock Movements

**US commercial oil stocks saw an unseasonable rise of 0.14 mb/d in March**

### USA

**In the period 25 February-1 April, US commercial oil stocks reversed the downtrend typical for this time of year, increasing an unseasonable 4.90 mb or 0.14 mb/d to 955.9 mb. This slight build came mostly from a mix of crude oil, unfinished oils and other oil stock, while substantial draws mainly on gasoline helped to diminish the overall gains.**

Crude inventories continued to build, reaching a level not seen since June 2002. Oil stocks stood at 317.1 mb on 1 April, representing an increase of 17.7 mb or 0.51 mb/d since 25 February. This increase could be justified mostly by higher domestic oil production which rose from 5.49 mb/d to 5.50 mb/d and lower refinery input which fell by 0.15 mb/d to 15.06 mb/d. Higher crude oil imports which hovered around 10 mb/d were part of this build, and figures were higher at the beginning of the period than at the end. Compared with last year and the five-year average, crude oil stocks are 8% and 6% higher respectively. In terms of days of forward cover, crude oil stocks stood 1.3 days above last year but declined a slight 0.3 days below the five-year average.

The draw on gasoline stocks of 12.2 mb or about 5% was mainly due to robust implied demand which rose from 8.88 mb/d to 9.10 mb/d or about 3% higher than in the previous period. Declining gasoline imports added to this draw, slipping 0.08 mb/d to 0.90 mb/d. The draw on gasoline stocks would have been higher if gasoline production had not picked up by 0.13 mb/d to 8.62 mb/d. At this level, gasoline inventories stood more than 6% above last year's figure and 5% higher than the five-year average. Forward cover slipped from 25.3 days to 23.3 days, still one day above last year's level.

Even approaching the end of seasonal demand, distillate stocks continued to head downward, falling a further 5.9 mb or 5% to stand at 104.1 mb. Much of the draw occurred on heating oil inventories as cold weather especially in US Northeast forced consumers to turn up their heating despite higher prices. This was supported by implied demand figures which showed an increase of 0.07 mb/d to 4.23 mb/d. Higher distillate production helped to slow the draw-down as output rose 0.40 mb/d to 4.13 mb/d. The year-on-year and average five-year deficit remained at the previous month's levels of 1% and 2% respectively, a trend which is expected to improve further as consumption is projected to fall seasonally in the coming months.

The Strategic Petroleum Reserve (SPR) continued to build steadily towards its maximum capacity of 700 mb, gaining a further 6.0 mb to stand at 687.5 mb during the period 25 February-1 April 2005.

US commercial oil stocks in the week ending 8 April 2005 showed a further increase, building 5.8 mb to 961.7 mb compared with the previous weekly period. Most of the increment came from crude oil stocks which rose by 3.6 mb to 320.7 mb on the back of lower implied crude oil demand which dropped from 15.06 mb/d to 14.77 mb/d, pushing refinery runs down from 93.71% to 91.03%. Gasoline inventories added to the build, rising a modest 0.80 mb to 213.1 mb on a 0.08 mb/d increase in output to 8.70 mb/d and higher imports which reached 1.0 mb/d, a rise of 0.10 mb/d. Middle distillates declined slightly by 0.12 mb to stand at 104.00 mb due to lower imports and output.

**Table 18**  
**US onland commercial petroleum stocks\***  
*mb*

	Change					
	28 Jan 05	25 Feb 05	1 Apr 05	Mar/Feb	1 Apr 04	8 Apr 05**
<b>Crude oil (excl. SPR)</b>	295.3	299.4	<b>317.1</b>	17.7	293.7	320.7
Gasoline	216.3	224.5	212.3	-12.2	201.3	213.1
Distillate fuel	118.6	110.0	104.1	-5.9	104.0	104.0
Residual fuel oil	40.1	38.2	39.2	1.0	39.0	39.0
Jet fuel	43.1	43.0	38.8	-4.2	35.6	39.2
<b>Total</b>	<b>957.7</b>	<b>951.0</b>	<b>955.9</b>	<b>4.9</b>	<b>914.1</b>	<b>961.7</b>
SPR	678.6	681.5	687.5	6.0	652.1	688.8

\* 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

**Eur-16 oil stocks saw a contra-seasonal rise of 0.24 mb/d in March**

### *Western Europe*

Crude oil flows into European tanks helped total oil stocks in Eur-16 (EU plus Norway) to regain the previous month's losses, building an unseasonable 7.5 mb/d or 0.24 mb/d to stand at 1,097.8 mb. Distillates contributed significantly to this build as refiners pushed production up in an attempt to benefit from high gasoil prices. Moderate draws on gasoline and fuel oil stocks capped the overall build. The y-o-y surplus widened to 12.7 mb from the 7.3 mb registered last month.

Crude oil inventories in Eur-16 showed a further build on increasing imports especially from Middle East countries and lower exports to Asia due to closing arbitrage. Lowering refinery runs due to seasonal maintenance also contributed to this build, rising by 3.1 mb or about 1% to stand at 468.2 mb or 10.60 mb below the year-ago level.

Eur-16 gasoline stocks followed the US draw pattern, falling by 2.3 mb to 140.6 mb on the back of decreased output due to low refinery runs which dipped by 0.18 mb/d. Cleaning up tanks from winter gasoline was another factor behind the draws as refiners started to prepare for summer gasoline specifications. Despite the draw, the y-o-y deficit narrowed to 1.2 mb from 8.3 mb last month.

Middle distillate inventories regained the previous month's losses, building a considerable 10.1 mb or about 3% on higher output as refiners raised middle distillate production to its maximum in order to benefit from soaring prices. However, refiners were forced to store much of it as end-users were reluctant to buy at very high prices, preferring to wait for prices to ease. Flows of Russian and US materials added to the build, with the y-o-y surplus extending to about 10%, an increase of about 7% from last month's level.

**Table 19**  
**Western Europe's oil stocks\***  
*mb*

	<u>Jan 05</u>	<u>Feb 05</u>	<u>Mar 05</u>	Change <u>Mar/Feb</u>	<u>Mar 04</u>
<b>Crude oil</b>	455.1	465.2	<b>468.2</b>	3.1	478.8
Mogas	136.2	142.9	140.6	-2.3	141.8
Naphtha	25.5	24.6	25.5	0.9	24.2
Middle distillates	354.0	347.3	357.4	10.1	325.9
Fuel oils	111.7	110.3	106.1	-4.2	114.3
<b>Total products</b>	627.4	625.2	629.6	4.4	606.2
<b>Overall total</b>	<b>1,082.5</b>	<b>1,090.3</b>	<b>1,097.8</b>	<b>7.5</b>	<b>1,085.1</b>

\* At end of month, with region consisting of the Eur-16

Source: Argus, Euroilstock

### *Japan*

**Japanese oil stocks continued to register massive draws in February**

For the third consecutive month, total commercial oil stocks in Japan continued to head south in February, losing a massive 14.5 mb or 8% to stand at 170.3 mb, the lowest level in six months. Middle distillate and crude oil inventories contributed mostly to the draw. The only product which showed an increase was gasoline but this minor build did little to counter the massive draw. Compared with last year's figure, total commercial stocks in Japan were slightly higher by 0.60 mb.

Increasing refinery utilization in February, which rose 2.2% to 93.8%, and lower imports pressed crude oil stocks down, which lost 6.9 mb to register 109.3 mb but stood 1 mb higher than a year ago. Crude oil stocks had not been this low since last August when they dipped to the lowest level for the year.

Middle distillate stocks also showed a very strong draw, falling by 7.3 mb or about 21%. This level is the lowest in eight months when middle distillates reached 26.8 mb in June 2004. The previous month's surplus turned to a minor deficit of 0.7 mb or about 3%. Seasonal winter demand especially for kerosene was one of the main reasons behind this draw as cold winter hit northern Japan.



Lower implied demand and rising gasoline production due to increasing refinery throughput helped gasoline stocks to build, increasing modestly by 0.8 mb to 15.6 mb which was 1.50 mb higher than the level observed a year ago.

**Table 20**  
**Japan's commercial oil stocks\***  
*mb*

	<u>Dec 04</u>	<u>Jan 05</u>	<u>Feb 05</u>	Change	
				<u>Feb/Jan</u>	<u>Feb 04</u>
<b>Crude oil</b>	117.5	116.2	<b>109.3</b>	-6.9	108.3
Gasoline	12.9	14.8	15.6	0.8	14.1
Middle distillates	40.0	34.4	27.1	-7.3	27.8
Residual fuel oil	19.5	19.4	18.3	-1.1	19.5
<b>Total products</b>	72.4	68.6	61.0	-7.6	61.4
<b>Overall total**</b>	<b>189.9</b>	<b>184.8</b>	<b>170.3</b>	<b>-14.5</b>	<b>169.7</b>

\* At end of month

\*\* Includes crude oil and main products only

Source: MITI, Japan

## Balance of Supply and Demand

**2004 supply/demand difference remains nearly unchanged**

The summarized supply/demand balance for 2004 remains nearly unchanged from last month. World oil demand averaged 82.1 mb/d, whilst non-OPEC supply + OPEC NGLs and non-conventional oils averaged 53.7 mb/d. This resulted in an average annual difference of 28.4 mb/d for 2004, versus 27.2 mb/d in 2003.

**Table 21**  
Summarized supply/demand balance for 2004  
mb/d

	<u>2003</u>	<u>1Q04</u>	<u>2Q04</u>	<u>3Q04</u>	<u>4Q04</u>	<u>2004</u>
(a) World oil demand	79.52	81.75	81.00	81.75	84.00	82.13
(b) Non-OPEC supply <sup>(1)</sup>	52.34	53.55	53.66	53.49	54.04	53.68
<b>Difference (a – b)</b>	27.19	28.20	27.34	28.26	29.96	28.45
OPEC crude oil production <sup>(2)</sup>	26.97	28.19	28.40	29.76	29.91	29.07
<b>Balance</b>	0.22	-0.01	1.06	1.49	-0.06	0.62

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

(2) Selected secondary sources.

Totals may not add due to independent rounding.

**Quarterly supply/demand balance indicates OPEC spare capacity more than adequate to meet expected requirements**

The new supply/demand balance for 2005 shows that world oil demand is now expected to average 84 mb/d, whilst non-OPEC supply + OPEC NGLs and non-conventional oils are expected to average 54.9 mb/d. This results in an average difference of 29.1 mb/d for 2005. The quarterly distribution is expected to be 29.5 mb/d in the first quarter of 2005, 27.7 mb/d in the second, 28.8 mb/d in the third and 30.4 mb/d in the fourth.

Based on the quarterly supply/demand balance for 2005, the resulting required OPEC crude production levels and the projected production capacity, spare capacity is estimate to average 8.8% in the first quarter of 2005 and to rise to 9.1% in the second with OPEC producing at current levels. In the third and fourth quarters, OPEC's spare capacity is expected to average 10.9% and 9.5%, respectively. Therefore, even with the high expected demand for OPEC crude in the fourth quarter, estimated at 30.4 mb/d, spare capacity should be more than adequate to accommodate the projected requirements and will even reach twice the level seen in the same period last year.

**Table 22**  
Summarized supply/demand balance for 2005  
mb/d

	<u>2004</u>	<u>1Q05</u>	<u>2Q05</u>	<u>3Q05</u>	<u>4Q05</u>	<u>2005</u>
(a) World oil demand	82.13	84.03	82.67	83.55	85.83	84.02
(b) Non-OPEC supply <sup>(1)</sup>	53.68	54.56	54.96	54.74	55.41	54.92
<b>Difference (a – b)</b>	28.45	29.48	27.71	28.81	30.42	29.11
OPEC crude oil production <sup>(2)</sup>	29.07	29.51				
<b>Balance</b>	0.62	0.04				

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

(2) Selected secondary sources.

Totals may not add due to independent rounding.

**Table 23**  
**World oil demand/supply balance**  
mb/d

	2000	2001	2002	2003	2004	3Q04	4Q04	2005	3Q05	4Q05	2005	
<b>World demand</b>												
OECD	48.0	48.0	48.1	48.9	48.2	49.2	50.6	49.4	49.4	50.9	49.9	49.9
North America	24.1	24.0	24.1	24.6	24.9	25.2	25.6	25.1	25.5	26.0	25.5	25.5
Western Europe	15.2	15.3	15.3	15.5	15.3	15.7	16.1	15.4	15.7	16.2	15.8	15.8
Pacific	8.7	8.7	8.6	8.8	8.0	8.3	8.9	7.9	8.1	8.7	8.6	8.6
DCs	19.3	19.7	20.2	20.5	21.4	21.4	21.7	22.3	22.2	22.5	22.2	22.2
FSU	3.8	3.9	3.7	3.8	3.8	4.0	4.1	3.8	4.0	4.1	3.9	3.9
Other Europe	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.9	0.9	0.9
China	4.7	4.7	5.0	5.6	6.8	6.4	6.7	7.4	7.0	7.4	7.1	7.1
<b>(a) Total world demand</b>	<b>76.5</b>	<b>77.2</b>	<b>77.9</b>	<b>79.5</b>	<b>81.0</b>	<b>81.7</b>	<b>84.0</b>	<b>82.1</b>	<b>83.6</b>	<b>85.8</b>	<b>84.0</b>	<b>84.0</b>
<b>Non-OPEC supply</b>												
OECD	21.9	21.8	21.9	21.6	21.5	20.7	21.0	21.3	20.7	20.8	21.0	21.0
North America	14.2	14.3	14.5	14.6	14.7	14.4	14.4	14.6	14.5	14.4	14.5	14.5
Western Europe	6.8	6.7	6.6	6.4	6.3	5.7	6.0	6.1	5.7	6.0	5.9	5.9
Pacific	0.8	0.8	0.8	0.7	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5
DCs	10.9	10.9	11.2	11.3	11.7	12.0	12.1	11.9	12.3	12.4	12.4	12.4
FSU	7.9	8.5	9.3	10.3	10.8	11.3	11.4	11.2	11.4	12.0	11.7	11.7
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
China	3.2	3.3	3.4	3.4	3.5	3.5	3.5	3.5	3.6	3.6	3.6	3.6
Processing gains	1.7	1.7	1.7	1.8	1.8	1.8	1.9	1.8	1.8	1.9	1.9	1.9
Total non-OPEC supply	45.7	46.4	47.7	48.6	49.7	49.5	50.0	49.7	50.4	51.2	50.7	50.7
OPEC NGLs + non-conventional oils	3.3	3.6	3.6	3.7	3.9	4.0	4.0	3.9	4.1	4.2	4.2	4.2
<b>(b) Total non-OPEC supply and OPEC NGLs</b>	<b>49.0</b>	<b>50.0</b>	<b>51.4</b>	<b>52.3</b>	<b>53.6</b>	<b>53.5</b>	<b>54.0</b>	<b>53.7</b>	<b>54.6</b>	<b>55.4</b>	<b>54.9</b>	<b>54.9</b>
OPEC crude oil production (secondary sources)	28.0	27.2	25.4	27.0	28.2	29.8	29.9	29.1	29.5			
<b>Total supply</b>	<b>77.0</b>	<b>77.2</b>	<b>76.7</b>	<b>79.3</b>	<b>82.1</b>	<b>83.2</b>	<b>83.9</b>	<b>82.8</b>	<b>84.1</b>			
Balance (stock change and miscellaneous)	0.6	0.0	-1.1	-0.2	1.1	1.5	-0.1	0.6	0.0			
<b>Closing stock level (outside FCPFs) mb</b>												
OECD onland commercial	2534	2632	2478	2525	2468	2589	2569	2569	2569			
OECD SPR	1270	1285	1345	1407	1421	1432	1444	1444	1444			
OECD total	3804	3918	3822	3932	3888	4021	4013	4013	4013			
Oil-on-water	877	830	814	885	909	895	908	908	908			
<b>Days of forward consumption in OECD</b>												
Commercial onland stocks	53	55	51	51	52	51	50	51	51			
SPR	26	27	28	28	29	28	28	29	29			
Total	79	82	78	79	81	79	79	80	80			
<b>Memo items</b>												
FSU net exports	4.1	4.6	5.6	6.5	7.2	7.3	7.4	7.3	7.6	7.8	7.8	7.8
<b>(a) - (b)</b>	<b>27.4</b>	<b>27.2</b>	<b>26.5</b>	<b>27.2</b>	<b>28.2</b>	<b>28.3</b>	<b>30.0</b>	<b>28.4</b>	<b>29.5</b>	<b>30.4</b>	<b>29.1</b>	<b>29.1</b>

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

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

	2000	2001	2002	2003	1Q04	2Q04	3Q04	4Q04	2004	1Q05	2Q05	3Q05	4Q05	2005
<b>World demand</b>														
OECD	-	-	-	-	-	-	-	-	-	0.4	-0.1	-0.1	-0.1	-
North America	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Western Europe	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-0.1	0.1	0.1	0.1	-
FSU	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-0.2	-	0.1	-	-
<b>(a) Total world demand</b>	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	-
<b>Non-OPEC supply</b>														
OECD	-	-	-	-	-	-	-	-	-	-0.2	-	0.1	-	-
North America	-	-	-	-	-	-	-	-	-	-0.1	-	0.2	-	-
Western Europe	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	0.1	0.1	-	0.1	0.1
FSU	-	-	-	-	-	-	-	-	-	-	-0.1	-0.2	-0.1	-0.1
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total non-OPEC supply</b>	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1
<b>OPEC NGLs + non-conventionals</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>(b) Total non-OPEC supply and OPEC NGLs</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>OPEC crude oil production (secondary sources)</b>	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1
<b>Total supply</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Balance (stock change and miscellaneous)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Closing stock level (outside FCPes) mb</b>														
OECD onland commercial	-	-	-2	-	-	-	-	-7	-7	-	-	-	-	-
OECD SPR	-	-	-	-	-	-	-	1	1	-	-	-	-	-
OECD total	-	-	-2	-	-	-	-	-6	-6	-	-	-	-	-
Oil on water	-	-	-	-	-	-	1	-26	-26	-	-	-	-	-
<b>Days of forward consumption in OECD</b>														
Commercial onland stocks	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPR	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-1	-1	-	-	-	-	-
<b>Memo items</b>														
FSU net exports	-	-	-	-	-	-	-	-	-	0.1	-0.1	-0.2	-0.1	-0.1
<b>(a) - (b)</b>	-	-	-	-	-	-	-	-	-	-	-	0.3	0.2	0.1

† This compares Table 23 in this issue of the MOMR with Table 23 in the March 2005 issue.

This table shows only where changes have occurred.

Table 25  
OECD oil stocks and oil on water at the end of period

	1997	1998	1999	2000	2001	2002	2001	2001	3001	4001	1002	2002	3002	4002	1003	2003	3003	4003	1004	2004	3004	4004	
<b>Closing stock level mb</b>																							
OECD onland commercial	2,619	2,702	2,449	2,534	2,632	2,478	2,529	2,602	2,664	2,632	2,609	2,654	2,579	2,478	2,427	2,550	2,600	2,525	2,468	2,546	2,589	2,569	
North America	1,211	1,283	1,127	1,146	1,262	1,174	1,159	1,231	1,269	1,262	1,237	1,262	1,219	1,174	1,103	1,186	1,216	1,167	1,145	1,197	1,216	1,212	
Western Europe	916	967	885	934	923	896	923	914	922	927	936	945	920	896	913	912	925	924	922	929	943	927	
OECD Pacific	492	453	437	454	443	408	447	457	473	443	435	447	440	408	411	452	459	435	400	420	430	430	
OECD SPR	1,255	1,304	1,286	1,270	1,285	1,345	1,271	1,269	1,266	1,285	1,304	1,316	1,321	1,345	1,359	1,362	1,380	1,407	1,421	1,426	1,432	1,444	
North America	563	571	567	543	552	601	544	545	547	552	563	578	589	601	601	611	626	640	654	664	672	678	
Western Europe	330	364	348	357	353	354	353	349	344	353	354	349	346	354	365	359	361	371	369	364	364	371	
OECD Pacific	362	369	370	370	380	389	374	374	375	380	386	388	386	389	393	393	393	396	398	398	396	396	
<b>OECD total</b>	<b>3,874</b>	<b>4,006</b>	<b>3,735</b>	<b>3,804</b>	<b>3,918</b>	<b>3,822</b>	<b>3,800</b>	<b>3,870</b>	<b>3,930</b>	<b>3,918</b>	<b>3,912</b>	<b>3,969</b>	<b>3,899</b>	<b>3,822</b>	<b>3,786</b>	<b>3,912</b>	<b>3,980</b>	<b>3,932</b>	<b>3,888</b>	<b>3,972</b>	<b>4,021</b>	<b>4,013</b>	
Oil-on-water	812	859	808	877	830	814	903	828	870	830	796	804	801	814	860	887	869	885	909	898	895	908	
<b>Days of forward consumption in OECD</b>																							
OECD onland commercial	56	56	51	53	55	51	54	54	55	54	56	55	52	50	51	53	52	50	51	52	51	51	
North America	52	54	47	48	52	48	49	51	53	53	52	52	50	48	46	48	49	47	46	47	47	48	
Western Europe	60	63	58	61	61	58	62	59	59	60	63	61	59	58	60	59	59	59	60	59	58	58	
OECD Pacific	58	52	50	52	51	46	55	56	53	48	56	55	47	42	50	56	50	46	50	51	48	46	
OECD SPR	27	27	27	26	27	28	27	27	26	27	28	27	27	27	29	28	28	28	29	29	28	29	
North America	24	24	24	23	23	24	23	23	23	23	24	24	24	24	25	25	25	26	26	26	26	27	
Western Europe	21	24	23	23	23	23	24	22	22	23	24	23	22	23	24	23	23	24	24	23	23	23	
OECD Pacific	43	42	42	43	44	44	46	46	42	41	50	47	41	40	48	49	43	42	50	48	45	43	
<b>OECD total</b>	<b>83</b>	<b>84</b>	<b>78</b>	<b>79</b>	<b>82</b>	<b>78</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>84</b>	<b>83</b>	<b>79</b>	<b>77</b>	<b>80</b>	<b>81</b>	<b>80</b>	<b>78</b>	<b>81</b>	<b>81</b>	<b>79</b>	<b>79</b>	



**Table 27  
Non-OPEC Rig Count**

	2000	2001	2002	02/01	1003	2003	3Q03	4Q03	2003	03/02	1Q04	2Q04	3Q04	4Q04	2004	04/03	Feb05	Mar05	1Q05	Change Mar05-Feb05
USA	916	1,156	831	-325	901	1,028	1,088	1,109	1,032	201	1,119	1,164	1,229	1,249	1,190	158	1,276	1,306	1,279	30
Canada	344	342	266	-76	494	203	383	408	372	106	528	202	326	420	369	-3	593	420	521	-173
Mexico	44	54	65	11	82	84	96	107	92	27	107	113	111	108	110	18	119	113	114	-6
North America	1,305	1,552	1,162	-390	1,476	1,315	1,567	1,624	1,496	334	1,754	1,479	1,665	1,777	1,669	173	1,988	1,839	1,914	-149
Norway	22	23	19	-4	18	19	20	18	19	0	19	18	14	16	17	-2	12	18	15	6
UK	18	24	26	2	19	21	22	16	20	-6	15	19	14	15	16	-4	14	23	16	9
Denmark	3	4	4	0	3	5	3	4	4	0	4	4	3	4	4	0	0	2	2	2
Other Western Europe	82	44	36	-8	36	34	38	37	36	0	31	30	27	27	29	-7	23	23	23	0
Western Europe	125	95	85	-10	77	78	83	75	78	-7	69	70	57	62	65	-13	49	66	56	17
Australia	10	10	9	-1	10	10	11	13	11	2	12	13	18	14	14	3	16	18	17	2
Other Pacific	7	9	8	-1	8	7	8	6	7	-1	7	8	9	6	8	1	8	7	7	-1
OECD Pacific	17	20	17	-3	18	17	18	19	18	1	19	22	26	20	22	4	24	25	24	1
Total OECD	1,447	1,667	1,264	-403	1,571	1,411	1,669	1,719	1,592	328	1,842	1,570	1,749	1,859	1,755	163	2,061	1,930	1,993	-131
Brunei	2	3	3	0	3	4	4	2	3	0	2	3	3	2	3	0	2	0	1	-2
India	49	50	55	5	59	60	61	62	60	5	64	68	71	76	70	10	75	74	76	-1
Malaysia	7	11	14	3	14	13	16	15	14	0	15	15	13	13	14	0	13	13	12	0
Papua New Guinea	0	1	1	0	1	2	2	1	2	1	3	2	0	1	2	0	1	1	1	0
Vietnam	8	8	9	1	9	9	10	8	9	0	8	9	8	7	8	-1	9	9	8	0
Asia others	16	22	30	8	31	28	26	30	29	-1	27	31	31	31	30	1	35	34	35	-1
Other Asia	83	95	111	16	117	115	119	118	117	6	119	128	127	130	126	9	135	131	133	-4
Argentina	57	71	49	-22	59	66	59	57	60	11	64	73	73	74	71	11	74	75	74	1
Brazil	23	28	27	-1	27	27	27	25	26	-1	24	26	26	26	26	0	26	26	26	0
Colombia	14	15	11	-4	10	9	11	12	11	0	8	9	9	11	9	-2	13	12	13	-1
Ecuador	7	10	9	-1	9	11	8	8	9	0	7	9	12	12	10	1	10	12	10	2
Peru	4	4	2	-2	2	2	3	3	3	1	2	2	3	3	2	-1	4	4	3	0
Trinidad & Tobago	4	5	4	-1	3	3	3	3	3	-1	3	4	4	4	4	1	3	3	3	0
L. America others	12	7	5	-2	3	4	4	5	4	-1	6	6	3	4	5	1	4	3	3	-1
Latin America	120	141	106	-35	113	121	114	114	116	10	114	127	129	134	126	10	134	135	133	1
Bahrain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oman	24	25	29	4	33	34	36	36	35	6	36	35	34	36	35	0	32	35	34	3
Syria	14	19	22	3	23	23	26	23	24	2	24	24	23	23	24	0	22	21	21	-1
Yemen	6	6	9	3	11	10	9	7	9	0	7	8	9	11	9	0	8	10	10	2
Middle East	45	50	62	12	70	68	72	68	70	8	69	68	69	73	70	0	65	69	69	4
Angola	6	5	5	0	3	4	3	6	4	-1	4	3	3	3	3	-1	4	3	3	-1
Cameroon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congo	3	1	1	0	0	1	1	2	1	0	2	2	3	2	2	1	4	1	3	-3
Egypt	18	22	23	1	26	26	27	26	26	3	27	28	29	28	28	2	26	29	28	3
Gabon	2	2	2	0	3	4	1	3	3	1	2	2	2	2	2	-1	2	2	2	0
South Africa	1	1	1	0	0	1	0	1	0	-1	0	0	0	0	0	0	0	0	0	0
Africa other	5	4	12	8	12	14	12	14	13	1	15	18	20	22	19	6	22	24	23	2
Africa	34	36	43	7	45	50	44	51	48	5	48	53	56	57	54	6	58	59	58	1
Total DCs	282	322	322	0	346	354	350	350	350	28	350	376	381	394	376	26	392	394	393	2
FSU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Europe	3	3	2	-1	2	2	2	2	2	0	2	2	2	2	2	0	3	3	3	0
China	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-OPEC Rig count	1,732	1,992	1,588	-404	1,919	1,767	2,021	2,071	1,944	356	2,194	1,949	2,132	2,255	2,132	188	2,456	2,327	2,390	-129

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

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## OPEC Basket average price

US\$ per barrel

▲ up 7.39 in March

<b>March 2005</b>	<b>49.07</b>
February 2005	41.68
Year-to-date	44.08

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## March OPEC production

in million barrels per day, according to secondary sources

Algeria	1.33	Kuwait	2.48	Saudi Arabia	9.35
Indonesia	0.95	SP Libyan AJ	1.62	UAE	2.44
IR Iran	3.90	Nigeria	2.36	Venezuela	2.72
Iraq	1.81	Qatar	0.80	<b>TOTAL</b>	<b>29.76</b>

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## Supply and demand

in million barrels per day

<b>2004</b>		<b>2005</b>	
World demand	82.13	World demand	84.02
Non-OPEC supply	53.68	Non-OPEC supply	54.91
<b>Difference</b>	<b>28.45</b>	<b>Difference</b>	<b>29.11</b>

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

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## Stocks

**US commercial oil stocks displayed contra-seasonal build of 4.9 mb in March**

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## World economy

**World GDP growth was unchanged at 5.0% for 2004 and 4.1% for 2005**