OPEC

Organization of the Petroleum Exporting Countries

# Monthly Oil Market Report

## *October 2004*

*Feature Article:*

***Downstream refinery concerns impacting oil market***




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# Oil Market Highlights

- Following a second quarter slowdown, China and the USA appear to have achieved better growth in the third quarter. The outlook for the Euro-zone and Japan is less encouraging and some Asian economies, particularly South Korea, are suffering from a lack of demand and higher inflation. Overall the world economy is expected to achieve a slightly higher growth rate of 4.9% in 2004 as a result of gains in North America, Latin America, China and Russia.
- The outlook for economic growth in 2005 has been somewhat affected by the unusually sharp and persistent rise in oil prices during 2004. The consensus of forecasters had earlier expected the oil price to settle at an average level of about $35/b (WTI basis) for 2005. However, the strength of the market in August and September led analysts to revise their projections and an average price of $37-38/b now underlies most forecasts. The 6-8% increase in oil prices may reduce world economic activity by about 0.15% and the GDP growth forecast for 2005 has been reduced to 4.1%.
- The impact of the increase is hard to judge since Europe, though an energy efficient region, already suffers from a lack of business and consumer confidence. The Euro-zone growth forecast for 2005 has been cut to 2%. Japan has also a relatively low oil intensity but may suffer from weaker export demand as Chinese and other Asian economies slow. Japan is also expected to grow by only 2% in 2005. The US economy is expected to experience a larger reduction in the growth forecast of 0.28% but will still benefit from the stronger economic momentum from 2004. As a result, the US economy is expected to grow by 3.2% in 2005, in line with the 20-year average.
- The effect of higher energy costs on developing countries varies greatly. The growth rate of Sub-Saharan Africa is expected to fall by 0.4% which means that Africa as a whole will see lower growth. Latin America is hardly affected since many economies in the region produce oil. The growth rate of the Asia Pacific region has been reduced by 0.5% whilst Indian growth has been cut by 0.27%. The outlook for China is complex. Higher oil prices will tend to reduce Chinese growth but the main factor for 2005 may be a more restrictive monetary policy. Overall the growth rate of China in 2005 is expected to remain strong but a lower rate of 7.6%.
- The OPEC Reference Basket surged to all time highs in September after easing in late August. The Basket rose dramatically on fear of a possible supply shortfall as Hurricane Ivan threatened and then roared through the Gulf of Mexico, disrupting oil supply to as well as impacting the production of the US Gulf Coast. Despite an OPEC decision to increase its production quota by 1 mb/d or 4% to 27 mb/d effective 1 November at a time of record high actual output reaching 30.12 mb/d in September, the market remained bullish on concerns over a strike in Nigeria. Currently, market sentiment is such that participants are bidding up prices at the onset of the slightest bad news (or potentially bad news) while discounting and hardly responding to good news. The Basket closed the month at $43.39/b for a rise of nearly 14%, while the monthly average edged up to $40.36/b. The year-to-date average stood at $34.98/b compared to $28.10/b the year before. Moving into October, persistent fear of a supply shortfall maintained the Basket's rise to average $43.94/b in the first half of the month.
- The good performance of the middle of the barrel complex has supported refinery margins across the globe in September, particularly in Asia. With the level of heating oil stocks below average around the world, especially in Japan and South Korea, and limited operational possibilities to increase output, the middle distillate crack value may strengthen further and remain the driving force of the market in the next two months. The upward trend for middle distillates has tempted speculators to increase net long positions in heating oil as well.
- OPEC area spot fixtures increased by 0.76 mb/d to stand at 14.12 mb/d in September, following the high level of OPEC crude oil production, which secondary sources place at 30.12 mb/d, the highest level in the last 25 years. OPEC Member Countries outside the Middle East contributed the most to the rise in spot fixtures, adding 0.65 mb/d, due to the high demand for sweet crude oils. Freight rates for crude oil moved upward significantly in the second half of the month due to high demand in conjunction with limited tonnage availability following hurricanes in the Gulf of Mexico. The product tanker market also remained tight due to high demand, especially for distillates ahead of the winter.
- The world oil demand growth forecast for 2004 has seen a further upward revision of 0.11 mb/d to 2.6 mb/d due to this year's stronger than expected expansion in the world economy along with higher than anticipated demand in the second quarter of 2004 and more robust preliminary demand figures for both the OECD and non-OECD in July and August. In contrast, due to lower than anticipated global economic growth and the possible effect that price levels could have on demand, oil demand growth in 2005 has been revised down by 0.13 mb/d to 1.61 mb/d. Thus, total world oil demand next year is projected to average 83.41 mb/d, which implies a growth rate of 2% for the year.
- OPEC crude oil production in September, based on secondary sources, is estimated at 30.12 mb/d, 0.43 mb/d over the revised August figure. Non-OPEC oil supply estimate for 2004 was revised down to 49.95 mb/d, partly as a reflection of the impact of Hurricane Ivan on the Gulf of Mexico. Non-OPEC supply in 2005 is expected to reach 51.16 mb/d, an increase of 1.21 mb/d above the 2004 forecast. Net FSU exports for 2002 and 2003 are estimated at 5.55 mb/d and 6.48 mb/d respectively and are expected to rise to 7.26 mb/d and 7.69 mb/d in 2004 and 2005.
- As a result of increasing OPEC Production, OECD commercial oil stocks continued to show a build of 8 mb in August, adding to the recent increase of 33 mb observed in July. However at the end of September, US commercial crude oil stocks experienced a steeper than usual decline, which also affected products build, following the passage of Hurricane Ivan in the Gulf of Mexico. Since then, a recovery in imports has allowed crude oil stocks to rebuild with the week-ending 8 October showing an increase of 4.2 mb in crude oil inventories.

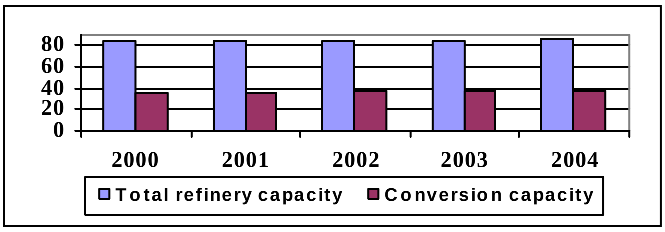
# Downstream refinery concerns impacting oil market

- Despite record high production by OPEC Member Countries and announced plans to accelerate expansion of output capacity, the current market sentiment is such that participants are bidding up prices at the onset of the slightest bad news (or potentially bad news) while discounting or hardly responding to good news. Current bullish factors include Hurricane Ivan's destructive impact on US oil instillations, labour tensions in Nigeria and the low inventory levels of middle distillates around the globe, all of which have been amplified by the influence of speculators in the futures market feeding on geopolitical tensions and concerns over the currently limited spare production capacity. Together these upward pressures have driven the US light-sweet benchmark crude WTI to over $54/b and could lead to further increases in the short term. Notwithstanding these headline-making benchmark price levels, another major but less widely-reported market characteristic is the increasing gap between light sweet and heavy sour grades.

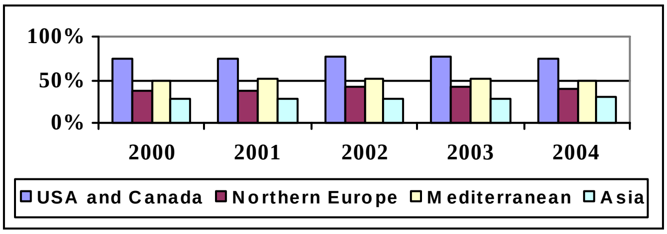
- In the US market, the gap between WTI and the heavy-crude benchmark Mars has reached as high as $13-14/b, more than double the typical spread of $5-6/b. The imbalance in demand for light sweet crudes over heavy sour crude is even more visible in the Asian market where the differential between light sweet Tapis crude versus Dubai rose to over $13/b. Apart from the widening price gap between regional sour and sweet crudes, the differential between Atlantic basin benchmark crude oils, WTI and Brent, and benchmark Dubai crude has increased substantially, reaching as high as $17.1/b for WTI and $13/b for Brent on 15 October.

- The widening differential between light sweet and heavy sour crude started earlier this year as unexpectedly strong economic growth in the USA and China not only intensified world oil demand, but also increased consumption of light petroleum products. The impact of this rise in demand has been magnified by stringent new product specifications, which came into force this year in the USA and are scheduled for Europe at the start of next year. Stricter specifications have also been adopted in some developing countries, where local refiners are even less prepared to meet the new requirements.

**Graph 1: Total world refinery and conversion capacity [mb/d]**

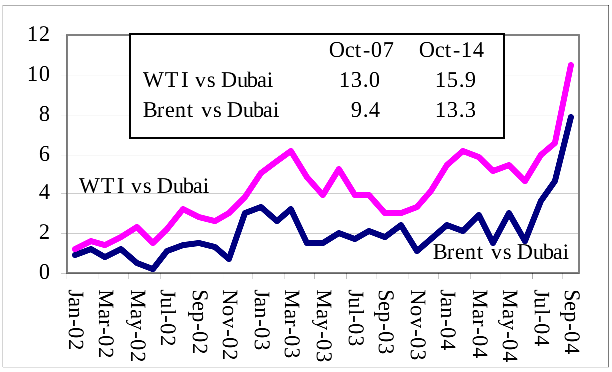



**Graph 2: Ratio of conversion to total refinery capacity by region [%]**

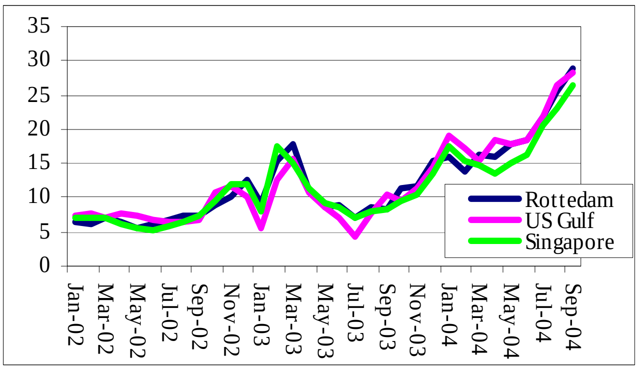



- The OPEC Secretariat has previously highlighted these problems (see *MOMR*, February 2004, as one example), pointing out that the persistent shortage of refining capacity in the USA and limited upgrading capacity in Asia will leave the market vulnerable to increased price volatility as speculators in the futures market move to take advantage of this situation. **Graph 1** shows that conversion facilities worldwide stand at about 45% of total refinery capacity, which does not provide refiners with sufficient operational flexibility to handle heavy sour crudes. **Graph 2** shows that conversion facilities at Asian refineries stand at about 30% of total capacity. Of this number, most are fluid-catalytic cracking (FCC) units, used to produce gasoline, rather than middle distillates, which are in higher demand in the winter season.

**Graph 3: Monthly crude price spread, Brent and WTI vs Dubai [$/b]**




**Graph 4: Monthly gasoil crack spread vs HSFO [$/b]**



- As the approach of winter increases seasonal demand for middle distillates, the shortage of upgrading and desulphurization capacity has intensified refiners' concerns about the security of light sweet crude oil. This concern has been further heightened by China's implementation as of the first of this month of Euro II specifications, which set a stricter 500 ppm sulphur limit for gasoline and diesel. Over the last few weeks, the so-called 'scarcity premium' for light sweet crude oil has risen sharply with the inter-crude spread between Brent and Dubai doubling in September to more than $8/b (as shown in **Graph 3**), which has accelerated in the last few days to $13/b, as mentioned above. Admittedly, the poor economics for high-sulphur fuel oil across the board has played some role in widening the differential, with the fuel oil crack spread discount against middle distillates reaching about $30/b in September 2004 (see **Graph 4**).
- In addition, given strengthening demand, most refineries are running near maximum operational capacity. In September, US refineries were operating at 92%, compared to 90% in Europe and 87% in Singapore. At such levels, despite the economic incentive, refiners are not able to use heavier crude oil as it might effect smooth operations due to conversion bottlenecks and product specifications limitations.
- For its part, OPEC has continued to exert every effort to maintain market balance by further increasing production to over 30 mb/d with an aim of strengthening the influence of fundamentals on market movements. OPEC actions so far has been successful in ensuring that there is no overall shortage of crude despite the unusually large demand growth in 2004, now estimated at 2.6 mb/d. As a result of rising OPEC production, OECD commercial oil stocks showed continuing builds, adding 8 mb in August on top of the recent 33 mb increase observed in July. OPEC's efforts to ensure ample supply have also been reflected in the price for Dubai crude, which acts as a benchmark for a major portion of OPEC production. Despite the ongoing backwardation in the Atlantic basin for light sweet crude oil, benchmark Dubai crude has recently moved into contango, with the December first month contract being sold at 65¢/b less than the second month and 90¢/b lower than the third, providing further evidence that, with the exception of light sweet crude, the market is well supplied overall.
- Moreover, OPEC Member Countries have also responded to the market's recent concern regarding the perceived tightness in spare production capacity by accelerating the implementation of production expansion plans to increase the excess supply cushion by over 2.5 mb/d by the end of 2005. While this should help to ease prices, OPEC's efforts alone are not enough. With an expected rise in world oil demand in 2005 of 1.62 mb/d, it seems that, along with the tight market for light sweet crude oil, problems in the downstream sector — particularly the shortage of refining capacity in the USA and the limited conversion and upgrading facilities in Asia — will remain major upside risks for the market, risks that require urgent attention.

# Highlights of the World Economy

**Economic growth rates 2004-2005**
%

| | World | G-7 | USA | Japan | Euro-zone |
|---|---|---|---|---|---|
| **2004** | **4.9** | **3.6** | **4.4** | **4.3** | **1.9** |
| **2005** | **4.1** | **2.6** | **3.2** | **2.0** | **2.0** |

### *Industrialised countries*

*United States of America*

**Strong third quarter, but weakness to come. US consumption may struggle to maintain momentum.**

The US economy has recovered from its mid-year weakness as all the main components of domestic demand recovered in the third quarter. The second quarter growth rate was revised up to 3.3% annualized and most forecasters now expect that third quarter growth was at least 4%. Consumer spending, auto sales, strong construction spending and healthy growth in capital outlays boosted the economy and the forecast of the 2004 growth rate has been increased to 4.4%. Despite this improvement, forward-looking indicators suggest that 2005 will be a much more difficult year. Factory orders fell in August and rising inventories confirm that production has caught up — if not exceeded — demand. The index of confidence in the service sector has fallen to its lowest level since spring 2003. Preliminary reports for consumer spending in September suggest that the year-on-year rate of increase has fallen to about 2% and the good performance of auto sales in the month relied heavily on manufacturer incentive programs. If domestic demand does weaken towards the end of the year, the net trade position may improve slightly. However, the economy will not be able to rely on trade flows to support GDP growth as the gap between exports and imports is so wide that unless US demand slows very sharply or foreign growth is unexpectedly rapid, it would take a significant fall in the US dollar to move the trade accounts towards balance. Attention has returned to the labour market, the cause of great concern earlier in the year. The September employment report was poor — showing an increase of only 96,000 in non-farm payrolls — with little progress in hours worked or average hourly earnings. Private sector job creation averaged only 65,000 over the past three months — in fact over the course of this economic recovery there has been no convincing revival in the capacity of the US economy to generate a significantly higher level of ongoing real income. Consumer spending has been strong but this reflected lower levels of savings, increasing debt and the large tax cuts. In addition to these cyclical indications of a downturn, energy prices continue to rise. The rise in energy prices at the wholesale level was largely the result of the hurricane induced loss of oil and gas output in the Gulf of Mexico and higher retail prices will reduce consumers' real incomes in the final quarter of the year. Core inflation is likely to increase to about 2% as demand remains relatively strong and monetary policy is accommodative. No change is expected in the stance of Federal Reserve policy despite the higher oil price although the speed of increase in the federal funds rate may slow once the level of 2% is reached. To some extent the Federal Reserve will be driven by the flow of data and may suspend the process of regaining neutral interest rates if the fourth quarter is weak. Nevertheless policy makers are well aware that previous rises in oil prices in the 1970s had long term impacts on inflation largely as a result of the delay in raising interest rates. The lessons of history may encourage the Federal Reserve to maintain a tight policy in 2005 despite weaker growth.

*Japan*

**Strong growth in China raises fears of 'hard landing'. Impact on Japan and Asia could be severe.**

Although domestic demand continues to expand in Japan, the slowdown in overseas economies means that the Japanese GDP forecast has been reduced slightly for 2005. Furthermore, changes in fiscal policy may be contractionary next year and the higher oil prices will have some effect. As Japan is rather resistant to higher oil prices because of a high level of energy efficiency, the greater impact will come indirectly, through a slowdown in customer economies. The trend of exports, particularly to Asia, will be vital to Japanese growth in 2005. Exports to China have been affected by the slowdown in Chinese capital spending but the annual growth rate remains not far from 20% and China will probably replace the USA as Japan's most important customer in the next few years. The situation in China remains unclear. Recent data indicates that the economy picked up speed in August and the forecast for Chinese growth in 2004 has been raised slightly. Only the state sector responded to the restrictive measures which were imposed earlier in the year. Nevertheless higher growth only increases the pressure on the Chinese authorities to tighten monetary policy later this year and heightens the risk of a 'hard landing' in 2005. As a result, the 2005 growth forecast for China has been reduced although the scale of any downturn is difficult to anticipate as the authorities have little experience in slowing the economy through monetary means. Apart from exports, the most dynamic part of the Japanese economy has been capital spending. It appears that investment is spreading to the non-manufacturing sector as a result of higher profits and lower debts. Consumer spending has benefited from improved confidence and lower savings, particularly among the elderly. The rate of growth of real incomes remains disappointing at only about 1% annually. If the Japanese government goes ahead with plans to limit the effect of previously announced tax cuts, real incomes might actually decline in the 2005 fiscal year. The slowdown in Japanese economic growth is likely to prevent much upward pressure on prices in 2005. Slack wage growth and falling unit labour costs mean that the Bank of Japan may well maintain the current stance of monetary policy until 2006 although the core rate of inflation may turn positive during 2005.

*Euro-zone*

**Euro-zone growth may struggle to reach 2% in 2005**

The Euro-zone grew at an annualized rate of slightly over 2% in the first half of this year but growth is most likely to have been lower in the third quarter. Recent indicators have been negative on balance with particular weakness coming from those related to domestic demand. German data has continued to disappoint. The September indicator of business conditions in the service sector fell to the lowest level in more than a year, industrial production declined in August and the orders data showed no improvement. Even foreign orders dropped in August after a strong performance for most of 2004. As expected, domestic orders fell and this decline included both consumer and capital goods. Taken together with a weak trend in construction output, this suggests that total capital investment may have fallen in the third quarter. If there is no improvement in the fourth quarter, growth of GDP in Germany may struggle to reach the forecast rate of 1.5% for 2004 as a whole. For next year, considering the higher oil price and generally weaker state of customer economies, it seems unlikely that Germany will grow much faster. Since export growth will be lower than the 8-9% expected this year, domestic demand will have to rise by at least 2% if the GDP growth rate is to improve. The French economy enters the fourth quarter with considerable momentum. It seems probable that growth for 2004 will be in the region of 2.3%, supported by a steady rise in domestic demand. French growth in 2005 will be lower, in line with European trends, but the GDP growth rate should remain above 2%. The economy is less exposed to exports and the impact of higher oil prices should be moderate as France has one of the lowest levels of oil intensity in the Euro-zone. Expectations for economic growth in Italy in 2004 hover around 1%. The second half of the year is expected to see stronger growth in domestic demand and in 2005 Italian exporters may benefit from their trading links with oil exporting countries. Spain should achieve the highest growth rate of the larger Euro-zone economies in 2004 and 2005 but previous expectations of near 3% growth for 2005 have been reduced to 2.5%. Higher oil prices will have a significant effect on the Spanish economy, which has been driven by consumer spending and the construction sector. The overall outlook for the Euro-zone is worrisome. Economic agents within the region have not been energized by the world economic recovery that begain in mid-2003, as the only benefit so far has been a temporary boost to net exports. Surveys show a lack of confidence on the part of businesses and consumers and higher oil prices will only exacerbate this problem. External demand has provided some stimulus this year but net exports will probably have a negative effect on Euro-zone growth in 2005.

*Former Soviet Union*

**High growth in 2004, but policy challenges multiply for 2005**

The Russian economy grew by 7.4% in the second quarter of this year following growth of 7.5% in the first quarter. These rates are slightly lower than the 7.7% growth rate achieved in the first half of 2003, but with the exception of the construction sector the changes in growth rates are not significant. Construction output may have been affected by the banking problems in the summer, which restricted the availability of credit. Consumer spending was buoyant in August and retail sales rose by 12%. Real incomes have been boosted by rising wages although inflation remains a problem. In the first seven months of this year real incomes rose by 10% over the levels of 2003. The rate of consumer price increase rose to over 11% in August despite the excellent harvest. This is a reflection of the high level of demand within the Russian economy — demand which continues to be boosted by the rising external surplus. The Russian central bank supplies rubles in exchange for foreign currency and this source of liquidity will continue to grow if oil and commodity prices remain high. Fuels account for about 55% of Russian exports and metals another 18%. The trade surplus rose to $43 billion in the first seven months of 2004, a 72% increase on the same period of 2003. As expected the budget performance has been strong with the fiscal surplus rising to 3.4% of GDP in the first half and the government projects that the oil stabilization fund will reach 587 billion rubles by the end of 2004. The Russian economy is in need of structural reform but it is not clear how the political outlook will be affected by the consequences of the Beslan attack. More attention will be given to security problems but the uncertainty and increased centralization may lead to a reduction in investment and higher capital outflows. The outlook for 2005 is for lower growth. The energy sector may experience a natural slowdown as transportation bottlenecks limit the growth of oil exports. Domestic activity may be affected by lower levels of business confidence and political uncertainty. Monetary policy will face a number of challenges as the central bank tries to reduce inflation without encouraging an unwanted appreciation in the value of the ruble.

*Eastern Europe*

**High growth eases Poland's budget problems**

The rate of growth of Polish GDP slowed slightly in the second quarter following the 6.9% growth achieved in the first quarter of the year but growth of 6.1% was clearly the best performance in the region. In the third quarter growth continued to be driven by net exports and personal consumption. The manufacturing sector is in the lead, responding to the growth in world economic activity. In the first eight months of this year, Polish manufacturing output rose by 18.3%. Surprisingly, this growth in output has not generated much response in the way of capital investment. A good harvest helped stabilise the rate of inflation at 4.6% in August and the National Bank of Poland is expected to revise down its inflation forecast. The strong growth of the economy has allowed the government to reduce the estimated budget deficit for 2005. The target is very ambitious — to reduce the deficit to only 3.7% of GDP (from 5.7% in 2004). If achieved, this would bring Poland much closer to meeting EU targets and eventual adoption of the euro. Reform of public finances remains a problem for the new Czech government. Standard & Poor's lowered the rating of the Republic's long term debt to 'A' as a result of structural budget weaknesses despite the improved fiscal performance in 2004. The Finance Minister has acknowledged that more spending cuts must be made in 2006 and 2007 if the euro is to be adopted by 2010. The Hungarian economy grew at a solid 4% rate in the second quarter, continuing the good recovery of the first three months. As is typical for the region, the manufacturing sector is driving the economic recovery. Rising profits have supported investment which grew by 10% in the second quarter. Budgetary problems will top the agenda of the new government. The original target for the government deficit of 4.6% has been abandoned and the Finance Ministry now expects an outcome of up to 5.3% of GDP. In response to fiscal concerns, the National Bank of Hungary decided to hold interest rates at 11% at the September meeting.

***OPEC Member Countries***

**As long as the oil market is bullish, the positive economic outlook of OPEC Member Countries remains, despite considerable odds**

As noted in the last report, large increases in crude oil production have been the driving force of real GDP growth in OPEC Member Countries in 2004, a trend expected to continue in 2005. Oil prices are likely to remain high in 2005-06, reflecting the widely-spread belief that the oil market has undergone a structural shift that will support prices in the long as well as in the short term. Key to this view is the forecast of strong ongoing Chinese oil demand and the weakness of investments in global oil supply in recent years. Nevertheless, as global supply increases, geopolitical tensions recede and security of supply worries retreat, prices are expected to ease from the record levels witnessed in 2004. Thus, the average OPEC GDP growth rate is expected at 5.7% for the current year and should maintain a slightly lower rate of 5.5% in 2005.

***Developing Countries***

**Asia affected by higher oil prices, Brazil's trade steps up, while in Sub-Saharan Africa a declining economy fosters growth in the informal economy**

The high price of oil is taking a serious toll on Asia, simply because most of the region's economies are oil intensive. Asia consumes more oil per unit of output than Europe or even the gas-guzzling USA. Inflation is already ticking up from Mumbai to Manila, and interest rates are beginning to follow. Recent economic data from China has presented a more confused picture of economic developments. In July, year-on-year growth slowed for the fifth consecutive month, while year-on-year investment growth picked up 31.5% and industrial output growth accelerated in August over the previous month's rate. China is particularly vulnerable to high oil prices, as increased prices and higher oil import volumes are costing the country $19 billion extra in 2004, compared to likely GDP growth of $200 billon. According to Morgan Stanley, the marginal cost of oil to China is running at 10%, nearly four-times the world's average. The country's overall oil bill is running at $90 bn or 5.4% of GDP this year according to secondary sources, twice as high as the global average. China's GDP growth rate for this year is anticipated at 8.5%, lower than the previous year's 9.1% and is expected to grow at a lower pace by 7.7% in 2005. Brazil posted a large trade surplus of $3.2 bn in August, bringing the cumulative total for the previous nine months to $25.1 bn. In September, exports increased by 22.6% y-o-y in value terms, boosted by strong international commodity prices for petroleum and soybeans as well as strong external demand for automobiles and iron ore. However, the growth of imports was slightly faster, rising by 24.8% y-o-y to $5.7 billion, the highest level in 7 years. This increase was underpinned by strong consumer demand and robust investment spending by firms. In Sub-Saharan Africa, formal economic decline appears to be driving informal economic growth. However, a large informal sector brings with it some serious disadvantages, as it reduces the capacity of the state to raise tax revenues, thereby forcing governments to increase tax rates on formal enterprises to compensate for lost revenue. In addition, large informal economies are usually associated with declining levels of state spending on social services.

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

**Very quiet foreign exchange market leaves real value of Basket price unchanged**

Recent data from the USA confirmed that the economy had recovered from mid-summer weakness but the better growth outlook for the third quarter had no impact on the foreign exchange market. Exchange rates remained static, in line with the pattern of most of 2004. In September the dollar was unchanged against the euro, Swiss franc and Japanese yen, and rose by 1.5% against the pound.

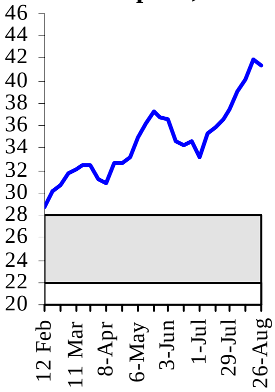
The OPEC Reference Basket stayed at high levels in September, reaching $40.36/b from $40.27/b in August. In real terms (base July 1990=100), after accounting for inflation and currency fluctuations, the Basket price was hardly changed rising to $29.42/b from $29.41/b, as the effect of inflation cancelled out the slight increase in the nominal price. The dollar was unchanged 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.*

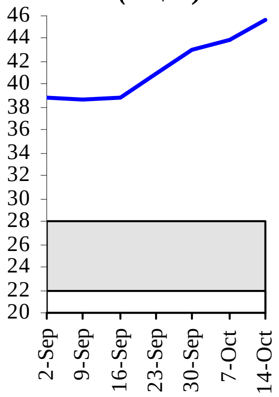
# Crude Oil Price Movement

**Despite a 1 mb/d or 4% increase in the OPEC quota ceiling to 27 mb/d, the OPEC Reference Basket still surged $5.24 to settle at $43.39/b in September**

**Weekly average Basket price, 2004**



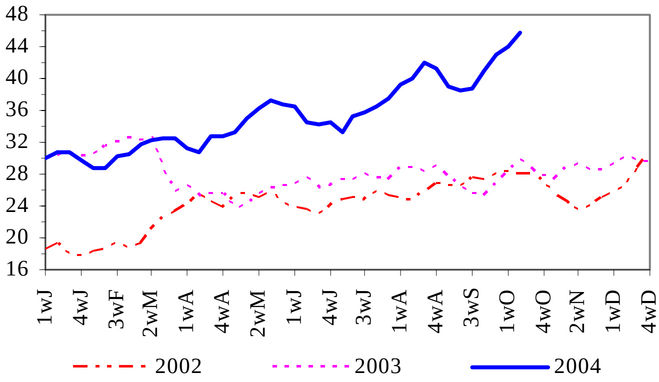
**Sep-Oct 04** ***(US$/b)***



**Hurricane Ivan interrupted 0.5 mb/d or 28% of US oil production amid low stocks and emerging demand for winter heating fuels. The sweet/sour spread swelled to record levels.**

***OPEC Reference Basket***

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

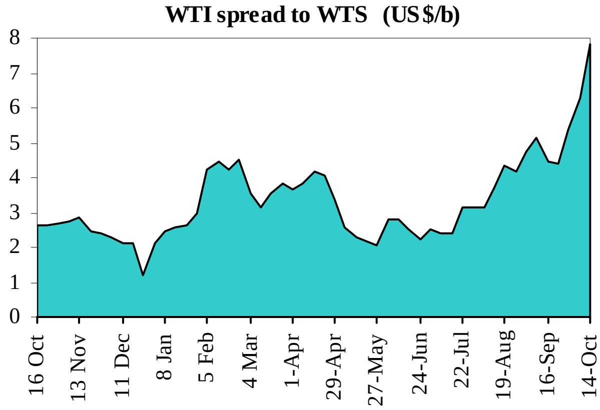



The OPEC Reference Basket started to ease towards the end of August, beginning a downtrend that extended into early September. Prices softened on the easing of supply concerns following the referendum in Venezuela, the revival in Iraqi exports from southern and northern outlets, the end of the driving season in the USA and a boost in OPEC spare capacity. This helped the Basked to shed nearly 6% in the first week of September. **In the second week, ample OPEC supply calmed rising prices helped by increased Mideast output and assurance of more OPEC production, with the Member Countries agreeing to raise the production ceiling by 1 mb/d to 27 mb/d as of 1 November.** However, the ongoing struggles at Russia's Yukos at a time of declining US oil inventories kept market bullishness intact, especially after Hurricane Ivan roared through the Gulf of Mexico disrupting both oil production and refining operations. This pushed oil prices to record highs, with the Basket rallying by nearly 11% in the last two weeks of September.

On a monthly basis, the average Basket in September inched up a marginal 0.2% or 9¢/b to $40.36/b from the previous month. The Basket jumped a hefty $5.24/b or nearly 14% to settle at a record high of $43.39/b at the end of the month. Concern over supply disruptions in Nigeria amid low US crude oil stocks kept alertness in the marketplace. The OPEC Reference Basket surged further in the first half of October to $45.48/b to average $43.94/b for the period on continued fears of a supply shortfall. Moreover, the Basket's year-to-date average was $34.98/b for a rise of $6.88 or nearly 25% over the previous year.

***US market***

**Graph 2**
**WTI spread to WTS (US$/b)**



The upward oil price movement continued as a bullish sentiment dominated the US market in September, replacing the bears of late August. While supply concern eased, causing the price to slide early in the month, worries returned with the onset of Hurricane Ivan, which pushed up the WTI price to over 4% on 9 September. As the threat seemed to dissipate, prices retreated, giving up most of the previous day's gains. However, **the hurricane gathered strength and plowed right through oil installations, closing petroleum operations and halting shipments into the US Gulf Coast, disrupting nearly 5 mb/d over the weekend of 19 September. WTI prices surged by over 12% in the final decade of the month.** WTI rallied nearly 18% or $5.70 in September to set a record high of $49.59/b and carried on to surpass $54/b in October. If supply disruptions continue to prevail and the pressure from downstream product cycles do not ease, market perception may move towards a higher price threshold.

On the supply side, **US crude oil stocks dropped a hefty 7.10 mb in the week ending 10 September followed by another substantial drawdown of 9.10 mb in the subsequent week, to show eight consecutive weekly losses**. Although demand fell as refinery operations were interrupted, prices remained high on the halt of shipment into LOOP and the loss of production from offshore the US Gulf Coast. **Hurricane Ivan suspended nearly 0.5 mb/d out of a total of 1.7 mb/d of oil production in the Gulf of Mexico**. Moreover, the refinery utilization rate in the USA dropped to a record low of some 85% adding to concerns over the seasonally important heating fuels. US crude oil inventories fell to less than 270 mb in September, just below the perceived minimum operational level.

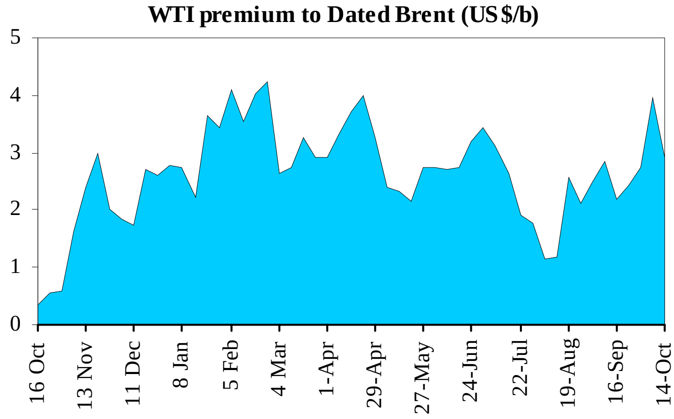
On quality differentials, the spread for Mideast heavy sour grades saw all time highs in the US market, keeping the sweet/sour spread at record levels. **WTI/WTS September average spread was at $4.86/b versus August's $3.96/b.** Concern over the lack of sufficient supply of light sweet crude in the USA as a result of Hurricane Ivan supported the spread to remain wide amid rising seasonal heating fuel demand. Because of their low sulphur content, the crudes produced off the Gulf of Mexico are exceptionally attractive to refiners, making their absence even more worrisome. The spread escalated further in October to around $10/b. Moreover, **Nymex heating oil futures surpassed gasoline in mid September**. Winter fuel remains in short supply around the globe, with end-September European distillate stocks 3.4% below last year and kerosene supplies in Japan down 20% from 2003. US heating oil inventories are already at a 6% deficit to last year.

**Dated Brent price escalated from around $40/b to hit all time highs above $47/b in September on fear of supply shortfalls especially for the light sweet crude**

***European market***

While sour grades in Europe received support from healthy refining margins, the widening spread for Mideast sour crude exerted downward pressure on the grade with **Urals trading at a $7/b discount to dated Brent**. Moreover, the prospects of emerged seasonal refinery maintenance sent the differentials for North Sea crudes lower amid a decline in demand, flipping the forward market in contango. However, the sale of overhang September cargoes supported differentials which are expected to gain momentum with the emergence of the October programme and the restart of several refineries at the end of pre-winter turnaround. Sweet crude buying was enhanced on both sides of the Atlantic, but lofty freight rates diminished the prospect of transatlantic shipments.

**Graph 3**
**WTI premium to Dated Brent (US$/b)**

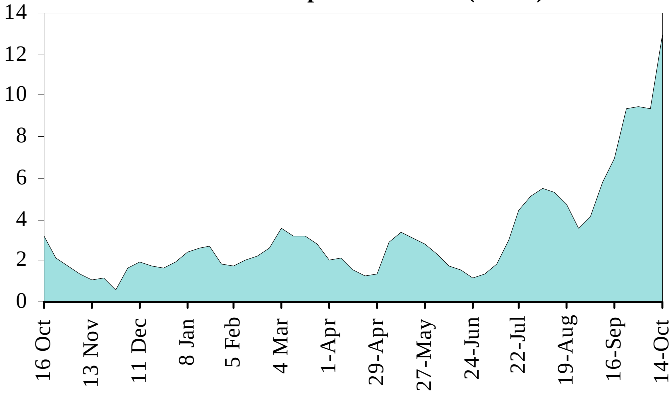



**Brent/Dubai spread widened to around $10/b amid robust demand for light sweet grades**

***Far East market***

In Asia, Mideast sour crude traded at a record low for the year with **October Oman selling at a 58¢/b discount to MOG amid the low refining margin for fuel oil**. The outlook for the kerosene-rich Abu Dhabi grade was good, while October Murban saw a high premium of 70¢/b to Abu Dhabi National Oil Company (ADNOC)'s Official Selling Price (OSP). Nevertheless, as the grade differential continued to hold a pricey $1/b premium into November loading, the market turned to the cheaper sour

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



grade. ADNOC set Murban's premium to Dubai at $4.30/b for September-loading, higher than most traders had expected. This represents a $1.30 increase against the August premium. However, the retroactive OSP for Oman crude for September was set at 50¢/b over Dubai, compared to a 45¢/b premium for August crude. Oman November loading fetched a slight discount of 3-5¢/b to MOG with deals heard taking place at a 7-8¢/b premium to MOG. **The wide Brent/Dubai spread hovered around $10/b, which prevented rival western grades from heading east given high freight rates.** Still, West African crude continued to flow eastward amid healthy refining margins for light-end products as light sweet supplies tightened on the perception that China had no alternative for West African medium and heavy sweets.

**Table 1**

**Monthly average spot quotations for OPEC's Reference Basket and selected crudes**

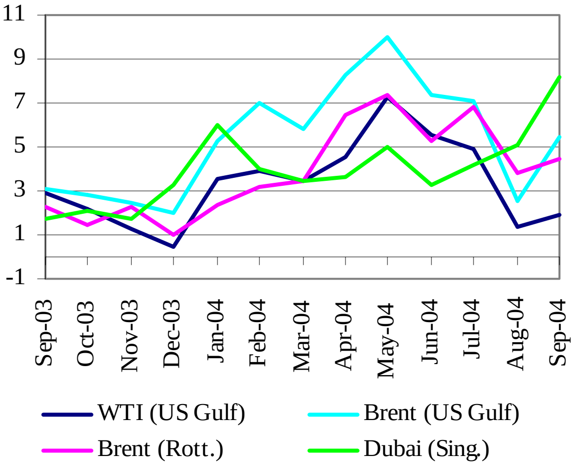
*US $/b*

| | | | ***Year-to-date average*** | |
|---|---|---|---|---|
| | Aug 04 | **Sept 04** | 2003 | **2004** |
| **Reference Basket** | 40.27 | **40.36** | 27.87 | 34.75 |
| Arabian Light | 38.93 | **36.58** | 27.36 | 33.93 |
| Dubai | 38.22 | **35.52** | 26.46 | 33.04 |
| Bonny Light | 42.55 | **43.56** | 28.57 | 36.31 |
| Saharan Blend | 42.67 | **43.92** | 28.47 | 36.38 |
| Minas | 41.79 | **44.27** | 29.17 | 35.69 |
| Tia Juana Light | 36.86 | **37.23** | 27.00 | 32.31 |
| Isthmus | 40.88 | **41.47** | 28.08 | 35.59 |
| | | | | |
| **Other crudes** | | | | |
| Brent | 42.87 | **43.43** | 28.61 | 36.35 |
| WTI | 44.77 | **45.98** | 31.09 | 39.17 |
| | | | | |
| **Differentials** | | | | |
| WTI/Brent | 1.90 | **2.55** | 2.48 | 2.82 |
| Brent/Dubai | 4.65 | **7.91** | 2.15 | 3.31 |

# *Product Markets and Refinery Operations*

The good performance of the middle of the barrel complex has supported refinery margins across the globe in September, particularly in Asia. **With the level of heating oil stocks below average around the world, especially in Japan and South Korea, and limited operational possibilities to increase output, the middle distillate crack value may strengthen further and remain the driving force of the market in the next months.** The upward trend for middle distillates has tempted speculators to increase net long positions in heating oil as well.

**Graph 5**
**Refiners' Margins**



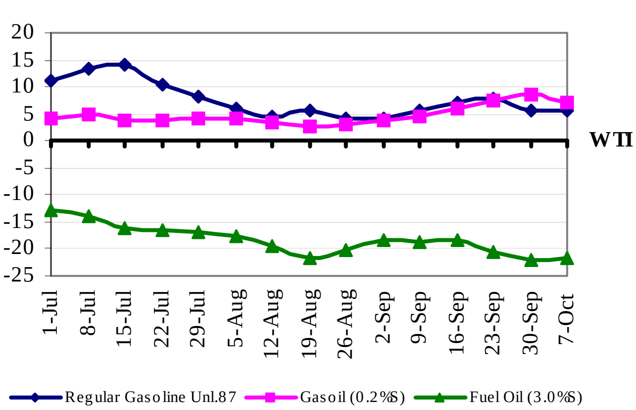

Despite bullishness for the middle of the barrel, the bottom still suffered from huge discounts against the benchmark crudes, in particular versus sweet crudes. This situation was exacerbated recently by the impact of Hurricane Ivan, which reduced US Gulf Coast crudes by about 0.5 mb/d in the last few weeks.

**Bullishness in the US product market was underpinned by hurricane-damaged US Gulf and low heating oil stocks in the run up to winter**

### *US market*

**Demand for distillate products increased 6% in the USA over the last nine months compared to the same period last year.** Combined with recent supply losses, huge inventory draws and import disruptions, this has resulted in a sharp increase in middle distillate prices as well as the crack value against the WTI benchmark. It has also fuelled the view that US refiners may have more difficulties than expected to supply enough products this winter. **Hurricane Ivan has affected the gasoline market, supporting its crack value versus crude oil. This persuaded funds to return to the market and massively increase their long positions, which provided further upward price pressure for gasoline.** The expected return of US refinery operations should lead to a build in gasoline stocks and an easing of the crack value versus WTI crude. Despite the healthy performance of the top and middle of the barrel, fuel oil values versus WTI are very poor amid a wealth of supplies. This situation is expected to persist as any improved demand, particularly for bunker fuel, would do little to narrow the sky-high gap between high sulphur fuel oil and WTI.

**Graph 6**
**US Gulf Crack Spread vs. WTI**



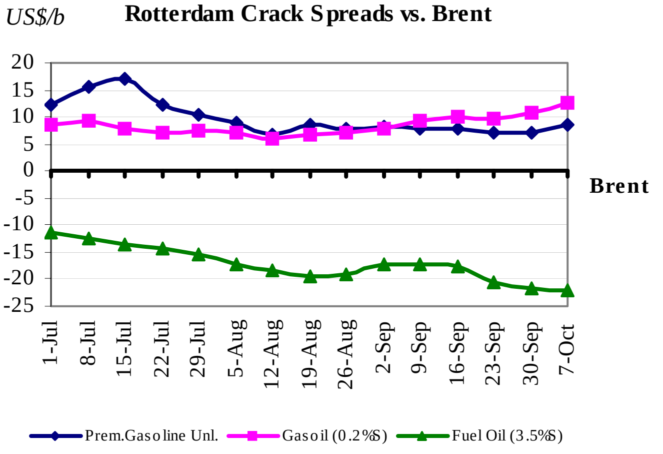

US refinery operations were severely affected by Hurricane Ivan. Despite an improvement of refinery margins over the previous month, refiners were forced to shut down about 2 mb/d of refinery capacity for a few days in the second half of September. As a result, the utilization rate was reduced to 92.2% from 97.1% in August.

**Product prices for the top and middle of the barrel followed the benchmark upward, while refinery margins in North-West Europe edged slightly higher**

### *European market*

Light and middle distillate product prices increased in tandem with the European benchmark crude price. **Refinery margins in North-West Europe saw modest improvement, while those in the Mediterranean area rose significantly due to healthy demand from Syria, Turkey and Greece; hefty maintenance of the regional refineries; and the widening gap between Urals and Brent benchmark crude oil prices.**

**Graph 7**
**Rotterdam Crack Spreads vs. Brent**




The gasoline crack spread in the Northwest European market versus Brent was relatively stable in September, while strong demand from Nigeria and eastern countries in the Mediterranean produced sufficient support for regional gasoline prices. The naphtha market in Europe also benefited from exports to Brazil.

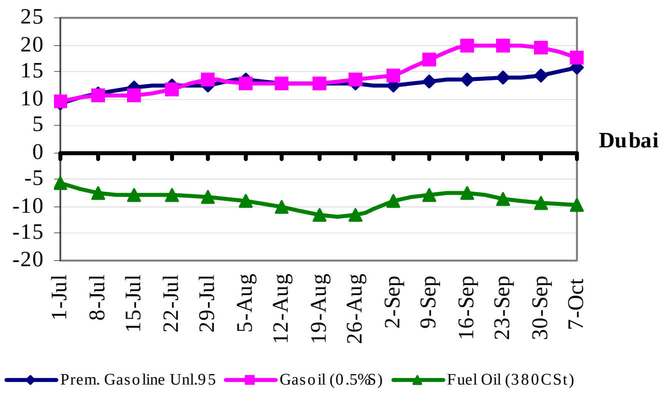
With regard to fuel oil, the bottom of the barrel saw further losses to its crack value against the corresponding benchmark crude, which resulted in continued pressure on sour crude oil in Europe. Meanwhile, due to the heavy maintenance schedule, especially in the Mediterranean area, European refinery throughput fell in September to 89.8% from 90.9% in August. But the higher distillate crack is expected to contribute to an increase in refinery utilization as soon as operationally possible.

**Extremely high distillate prices versus Dubai sharply boosted refinery margins in Asia in September**

### *Asian market*

Additional harvest season requirements for gasoil and increased concerns about Japanese kerosene inventories may further strengthen distillate prices in Asia. **Since Asian refineries are less equipped with hydro-treating and hydro-cracking units compared to their competitors in the USA and Europe, most will have to switch to lighter distillate-rich crude oil to secure distillate requirements.** This is expected to dramatically stretch the already wide sweet/sour grade differential in Asia.

**Graph 8**
**Singapore Crack Spreads vs. Dubai**




**The Asian gasoline market remains relatively strong due to diminishing exports from China and demand growth in other parts of the Pacific basin.** The crack value for naphtha products looks strong as well, because of healthy regional demand and a slide in exports from India. Fuel oil prices eased, as growing supply from Europe, the Middle East and the Caribbean outweighed fresh demand from Vietnam, Indonesia and China. The crack spread of high-sulphur fuel oil versus the Dubai benchmark crude remained below -$7/b. In Asia, encouraging refinery margins persuaded refiners to run as much as operationally possible. However, the Japanese refinery utilization rate in September dropped to 81.5% from 91.3% the month before due to the maintenance schedule.

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

| | | Jul 04 | Aug 04 | Sept 04 | Change Sept/Aug |
|---|---|---|---|---|---|
| **US Gulf (Cargoes):** | | | | | |
| Naphtha | | 46.68 | 48.42 | 51.33 | 2.91 |
| Premium gasoline | *(unleaded 93)* | 54.80 | 53.64 | 55.59 | 1.95 |
| Regular gasoline | *(unleaded 87)* | 52.10 | 49.64 | 52.25 | 2.61 |
| Jet/Kerosene | | 48.37 | 51.74 | 57.46 | 5.72 |
| Gasoil | *(0.2% S)* | 44.97 | 48.25 | 52.38 | 4.13 |
| Fuel oil | *(1.0% S)* | 30.01 | 29.30 | 29.63 | 0.33 |
| Fuel oil | *(3.0% S)* | 24.93 | 25.23 | 26.07 | 0.84 |
| **Rotterdam (Barges FoB):** | | | | | |
| Naphtha | | 48.87 | 54.96 | 54.88 | –0.08 |
| Premium gasoline | *(unleaded 95)* | 52.03 | 51.06 | 50.77 | –0.29 |
| Regular gasoline | *(unleaded)* | 52.01 | 51.06 | 50.73 | –0.33 |
| Jet/Kerosene | | 49.88 | 55.74 | 58.49 | 2.75 |
| Gasoil | *(0.2% S)* | 46.18 | 49.99 | 53.02 | 3.03 |
| Fuel oil | *(1.0% S)* | 24.28 | 23.73 | 23.40 | –0.33 |
| Fuel oil | *(3.5% S)* | 24.44 | 24.62 | 24.12 | –0.50 |
| **Mediterranean (Cargoes):** | | | | | |
| Naphtha | | 40.37 | 45.94 | 45.90 | –0.04 |
| Premium unleaded | *(0.15g/l)* | 49.40 | 48.80 | 49.87 | 1.07 |
| Premium gasoline | *(unleaded 95)* | 49.37 | 48.76 | 49.84 | 1.08 |
| Jet/Kerosene | | 48.10 | 53.52 | 56.28 | 2.76 |
| Gasoil | *(0.5% S)* | 45.88 | 49.41 | 53.12 | 3.71 |
| Fuel oil | *(1.0% S)* | 26.47 | 25.47 | 25.66 | 0.19 |
| Fuel oil | *(3.5% S)* | 23.03 | 23.59 | 22.81 | –0.78 |
| **Singapore (Cargoes):** | | | | | |
| Naphtha | | 38.60 | 44.19 | 43.95 | –0.24 |
| Premium gasoline | *(unleaded 95)* | 46.52 | 51.50 | 49.06 | –2.44 |
| Regular gasoline | *(unleaded 92)* | 45.12 | 50.62 | 48.20 | –2.42 |
| Jet/Kerosene | | 48.08 | 52.29 | 55.30 | 3.01 |
| Gasoil | *(0.5% S)* | 46.25 | 51.67 | 54.29 | 2.62 |
| Fuel oil | *(180 cst 2.0% S)* | 27.64 | 28.82 | 27.84 | –0.98 |
| Fuel oil | *(380 cst 3.5% S)* | 26.98 | 28.19 | 27.18 | –1.01 |

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

| | Refinery throughput *mb/d* | | | Refinery utilization* *%* | | |
|---|---|---|---|---|---|---|
| | **Jul 04** | **Aug 04** | **Sept 04** | **Jul 04** | **Aug 04** | **Sept 04** |
| **USA** | 16.06 | 16.34 | 15.39 | 96.1 | 97.9 | 92.2 |
| **France** | 1.77 | 1.74 | 1.76 | 90.5 | 89.3 | 90.4 |
| **Germany** | 2.33 | 2.31 R | 2.23 | 101.8 | 100.8 R | 97.3 |
| **Italy** | 1.84 R | 1.86 | 1.92 | 79.4 R | 80.4 | 83.1 |
| **UK** | 1.70 | 1.65 | 1.72 | 93.3 | 90.7 | 94.4 |
| **Eur-16** | 12.61 R | 12.48 R | 12.39 | 91.3 R | 90.4 R | 89.8 |
| **Japan** | 3.96 | 4.30 R | 3.83 | 84.1 | 91.4 R | 81.5 |

* *In barrels per calendar day.*
R *Revised since last issue.*
Sources *OPEC statistics; Argus; Euroilstock Inventory Report/IEA.*

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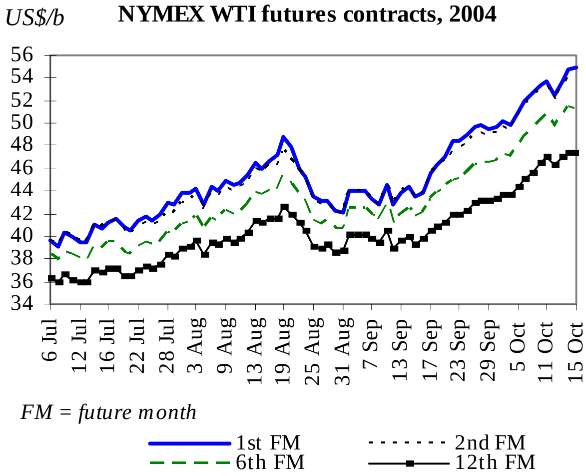
# The Oil Futures Market

**Net long positions of non-commercial funds increased from earlier in the month fueled by disruptions in the Gulf of Mexico**

Speculative funds on the Nymex reduced their net longs on 14 September from the 17 August high of 48,000 lots to 13,000, in line with the price movement of WTI. **This decline came following news that Iraq has resumed exports from its northern outlet complementing increased exports from the south.** However, further into the month, concern over the impact of Hurricane Ivan in the Gulf of Mexico, which halted oil production and imports, triggered fund buying with longs increasingly outpacing shorts. Net long positions closed on 28 September at some 33,000 lots as the WTI Nymex futures price surged to a record high of $49.90/b. Nonetheless, open interest stayed below the 700,000 level before slightly surpassing it in the early part of October at 709,000 contracts. When options are included, open interest hovered at around 1.1 million contracts.

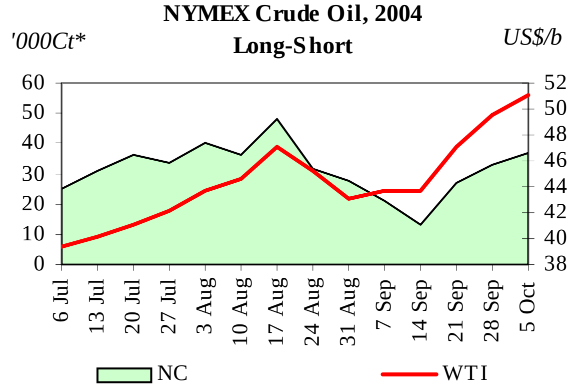
**The forward curve flattened out into a slight contango in the early part of September as supply concerns eased on OPEC's signals that it would raise official quotas in an effort to ensure sufficient supply at a time of rising demand.** As the month progressed, the curve flipped into backwardation on the lingering impact of the hurricane which hampered US Gulf Coast oil operations and led to draws on the country's oil stocks. These concerns dominated the market and attracted speculators. **Fear of possible supply disruption from Nigeria provided further support for a price rise late in September and on into October. Accordingly, the forward curve steepened further in backwardation at 80¢/b for the 1st/2nd month spread**. The August spread averaged 50¢/b with the September average at 26¢/b, while the average price for the second forward month rose at a faster rate than the prompt month.

**Graph 9**
**NYMEX WTI futures contracts, 2004**



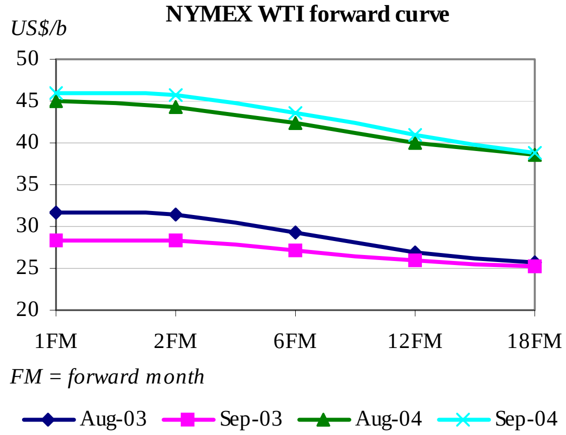

*FM = future month*

**Graph 10**
**Futures Commitment of Traders Report: NYMEX Crude Oil, 2004**
**Long-Short**




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

**Graph 11**
**NYMEX WTI forward curve**




*FM = forward month*

# *The Tanker Market*

**OPEC spot fixtures increased by 0.76 mb/d, following record crude oil production**

**OPEC area spot fixtures increased by 6% or 0.76 mb/d to stand at 14.12 mb/d in September, up 2.5 mb/d from last year's figure. This increase was due to high OPEC crude oil production, which reached 30.12 mb/d in September according to secondary sources, the highest level in the last 25 years.** Despite the increase in spot fixtures, OPEC's share of global spot chartering declined slightly by one percentage point to 62.7%, but remained higher than last year's figure of 60%. **The main contributors to OPEC spot fixtures were the regions outside the Middle East,** which increased spot fixtures by 0.65 mb/d or 11% due to the high demand for sweet crudes mainly from Africa. Middle East spot fixtures rose 0.11 mb/d or just 1% causing combined eastbound and westbound shares to fall to 54%, against nearly 57% in the previous month**.** Non-OPEC spot fixtures reached 8.39 mb/d, which corresponds to an increase of 0.72 mb/d, roughly the same level as OPEC's. **Compared to last year, Non-OPEC spot fixtures were up 0.5 mb/d in September, but at 37% their share of global spot fixtures was 3% below the year–ago level**. Global spot chartering increased by nearly 1.5 mb/d or 7% to stand at 22.5 mb/d, which was 3 mb/d more than last year's figure. According to preliminary data, sailings from the OPEC area rose 0.5 mb/d to 28.4 mb/d in September. Middle East sailings, which represented 65% of total OPEC sailings, jumped by 1 mb/d to stand at 18.43 mb/d. For arrivals, preliminary estimates show that all the regions experienced a decline, except NW Europe. **The decrease was more significant in the US Gulf Coast, US East Coast and Caribbean region which declined 1.22 mb/d, the largest drop since the start of 2003.** This fall was due to Hurricane Ivan disrupting unloading at ports and refining operations in the US Gulf Coast. The hurricane depressed US imports by 1.5 mb/d in its first week and at its peak knocked out almost 2 mb/d of refining capacity.

**Freight rates remained strong with rising activity in September**

The crude tanker market remained very tight, resulting in an increase of freight rates on all main routes, especially in the Suezmax sector**. VLCC freight rates on the Middle East/eastbound and westbound long-haul routes gained 6 and 5 points respectively to stand at monthly average levels of WS113 and WS100 in September. It is worth noting that the VLCC rates for these two routes took a significant turn during the second half of September**, after dipping in the first week. In the last week of that month, both routes reached their highest levels since mid-February to stand at WS155 and WS123 respectively. This significant increase in freight rates of between 60% and 80% in just three weeks was mainly due to high demand in the USA and Asia compounded by limited tonnage availability in the Gulf of Mexico, following powerful hurricanes in the Caribbean and the US Gulf Coast. Furthermore, strong demand in China and India for sweet crudes from Africa and the North Sea put more pressure on tanker availability by tying up tankers for long voyages. In addition, the threat of a cut in Nigerian production following the announcement of a planned national strike and rebel attacks at the end of the month contributed to the increase in VLCC freight rates. **Suezmax experienced nearly the same developments as VLCCs, but the rise was higher**. **Freight rates on the West Africa/US Gulf Coast and NW Europe/US East Coast-Gulf-Coast routes moved up 11 and 10 points to reach monthly averages of WS163 and WS169 respectively, their highest levels since February.** Both routes experienced considerable increases of 61 points and 83 points respectively in the last week. **This significant increase was mostly due to high demand for light sweet crude from Africa and NW Europe.** Aframax freight rates in the Mediterranean and from there to NW Europe were still on the rise due to increased activity from charterers and the strong demand for sweet crude oils. The drop of seven percentage points for the Indonesia/US West Coast route represents a downward correction of the high rates of the previous month.

**High demand for products ahead of winter kept tanker market tight**

For the product tanker market, the main routes gained between 16 and 17 points on average, except for the Middle East/East and Caribbean/US Gulf Coast routes, which were almost stable compared to August. **The strength in freight rates on the routes to NW Europe, the Mediterranean and the USA was due to relatively healthy activity on high demand for products, especially distillates ahead of winter in combination with seasonal refinery maintenance in these regions.** The weak trade due to hurricanes kept rates almost unchanged on the Caribbean/US Gulf Coast route.

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

| | Jul 04 | Aug 04 | Sept 04 | Change Sept/Aug |
|---|---|---|---|---|
| **Chartering** | | | | |
| All areas | 21.37 | 21.03 | 22.51 | 1.47 |
| OPEC | 13.63 | 13.36 | 14.12 | 0.76 |
| Middle East/east | 5.26 | 5.28 | 5.33 | 0.05 |
| Middle East/west | 2.21 | 2.26 | 2.32 | 0.06 |
| **Sailings** | | | | |
| OPEC | 24.44 | 27.92 | 28.40 | 0.48 |
| Middle East | 17.83 | 17.42 | 18.43 | 1.01 |
| **Arrivals** | | | | |
| US Gulf Coast, US East Coast, Caribbean | 9.87 | 11.16 | 9.93 | –1.22 |
| North West Europe | 7.12 | 6.92 | 7.29 | 0.37 |
| Euromed | 4.24 | 4.71 | 4.45 | –0.26 |
| Japan | 4.07 | 4.29 | 3.96 | –0.33 |

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

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

| | Size *1,000 DWT* | Jul 04 | Aug 04 | Sep 04 | Change Sep/Aug |
|---|---|---|---|---|---|
| ***Crude*** | | | | | |
| Middle East/east | 200–300 | 142 | 107 | 113 | 6 |
| Middle East/west | 200–300 | 113 | 95 | 100 | 5 |
| West Africa/US Gulf | 100–160 | 160 | 152 | 163 | 11 |
| North-West Europe/US East Coast | 100–160 | 163 | 159 | 169 | 10 |
| Indonesia/US West Coast | 70–100 | 166 | 192 | 185 | –7 |
| Caribbean/US East Coast | 40–70 | 189 | 194 | 197 | 3 |
| Mediterranean/Mediterranean | 40–70 | 254 | 192 | 200 | 8 |
| Mediterranean/North-West Europe | 70–100 | 166 | 143 | 151 | 8 |
| ***Products*** | | | | | |
| Middle East/east | 30–50 | 234 | 214 | 214 | 0 |
| Singapore/east | 25–30 | 291 | 257 | 273 | 16 |
| Caribbean/US Gulf Coast | 25–30 | 280 | 243 | 241 | –2 |
| North-West Europe/US East Coast | 25–30 | 254 | 219 | 235 | 16 |
| Mediterranean/Mediterranean | 25–30 | 244 | 193 | 210 | 17 |
| Mediterranean/North-West Europe | 25–30 | 271 | 238 | 255 | 17 |

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

# World Oil Demand

**Average world oil demand in 2004 estimated at 81.79 mb/d. Growth in demand was revised up 0.11 mb/d to 2.62 mb/d.**

***Revision to historical figures (2002-2003)***

World oil demand for the year 2003 was revised upward a marginal 0.11 mb/d to 79.17 mb/d. The minor adjustment was spread among all the regions with upward revisions ranging from as little as 0.01 mb/d in North America, Latin America and Africa to 0.05 mb/d in the Other Europe group and a 0.02 mb/d downward revision to FSU.

***Forecast for 2004***

*World*

**The world oil demand forecast has seen further upward revisions due to this year's stronger-than-expected expansion in the world economy (currently estimated at 4.91% versus the previous 4.79%) along with higher than anticipated demand in the second quarter of 2004 and higher preliminary demand figures for both the OECD and non-OECD in July and August.** In absolute terms, world oil demand is expected to reach 81.79 mb/d on average by the end of the year while y-o-y growth will average 2.62 mb/d or 3.31% (see Table 6).

In the first two quarters of 2004, where preliminary figures are already available, world oil demand grew by 1.8 mb/d or 2.26% in the first quarter and by an astonishing figure of almost 4 mb/d or over 5% in the second. The exceptionally high growth seen in the second quarter originates from the 1.31 mb/d rise in Chinese apparent demand combined with the strength in consumption in North America, Other Asia, the Middle East and FSU. Preliminary figures for July and August imply that oil demand picked up momentum in North America and Europe while OECD Pacific demand showed little change. The rate of growth in Chinese demand has been lowered to around 12% in the third and fourth quarters of 2004 from the 23.9% observed in the second quarter of the year. Thus, world oil demand is expected to grow by 2.54 mb/d or 3.22% to 81.45 mb/d in the third quarter of 2004 and by 2.21 mb/d or 2.73% to 83.36 mb/d in the fourth.

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

| | | | | | | | **Change 2004/03** | |
|---|---|---|---|---|---|---|---|---|
| | **2003** | **1Q04** | **2Q04** | **3Q04** | **4Q04** | **2004** | Volume | % |
| North America | 24.57 | 25.03 | 24.85 | 25.19 | 25.31 | 25.09 | 0.53 | 2.15 |
| Western Europe | 15.35 | 15.66 | 15.31 | 15.53 | 15.75 | 15.56 | 0.21 | 1.37 |
| OECD Pacific | 8.78 | 9.38 | 8.00 | 8.10 | 9.09 | 8.64 | –0.14 | –1.58 |
| **Total OECD** | **48.70** | **50.07** | **48.15** | **48.82** | **50.15** | **49.30** | **0.60** | **1.23** |
| Other Asia | 7.82 | 8.03 | 8.29 | 8.15 | 8.51 | 8.25 | 0.42 | 5.41 |
| Latin America | 4.73 | 4.65 | 4.84 | 5.00 | 4.98 | 4.87 | 0.14 | 3.00 |
| Middle East | 5.12 | 5.27 | 5.37 | 5.58 | 5.45 | 5.42 | 0.29 | 5.73 |
| Africa | 2.65 | 2.67 | 2.70 | 2.67 | 2.76 | 2.70 | 0.05 | 1.96 |
| **Total DCs** | **20.32** | **20.62** | **21.20** | **21.39** | **21.70** | **21.23** | **0.91** | **4.48** |
| FSU | 3.78 | 3.66 | 3.82 | 3.95 | 4.34 | 3.95 | 0.16 | 4.33 |
| Other Europe | 0.81 | 0.91 | 0.90 | 0.83 | 0.90 | 0.89 | 0.08 | 9.41 |
| China | 5.56 | 6.26 | 6.77 | 6.45 | 6.27 | 6.44 | 0.88 | 15.73 |
| **Total "Other Regions"** | **10.15** | **10.84** | **11.49** | **11.24** | **11.51** | **11.27** | **1.12** | **10.98** |
| **Total world** | **79.17** | **81.52** | **80.84** | **81.45** | **83.36** | **81.79** | **2.62** | **3.31** |
| Previous estimate | 79.06 | 81.55 | 80.62 | 81.07 | 83.05 | 81.58 | 2.52 | 3.18 |
| Revision | 0.11 | –0.03 | 0.21 | 0.37 | 0.31 | 0.22 | 0.11 | 0.13 |

*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 | |
|---|---|---|---|---|---|---|---|---|
| | 1Q03 | 1Q04 | Volume | % | 2Q03 | 2Q04 | Volume | % |
| North America | 24.52 | 25.03 | 0.50 | 2.06 | 24.15 | 24.85 | 0.69 | 2.86 |
| Western Europe | 15.33 | 15.66 | 0.33 | 2.15 | 15.08 | 15.31 | 0.23 | 1.51 |
| OECD Pacific | 9.76 | 9.38 | –0.38 | –3.85 | 8.19 | 8.00 | –0.20 | –2.40 |
| **Total OECD** | **49.61** | **50.07** | **0.46** | **0.92** | **47.43** | **48.15** | **0.72** | **1.52** |
| Other Asia | 7.65 | 8.03 | 0.38 | 5.01 | 7.60 | 8.29 | 0.69 | 9.03 |
| Latin America | 4.53 | 4.65 | 0.12 | 2.69 | 4.71 | 4.84 | 0.13 | 2.86 |
| Middle East | 5.03 | 5.27 | 0.25 | 4.92 | 4.93 | 5.37 | 0.44 | 8.91 |
| Africa | 2.65 | 2.67 | 0.01 | 0.53 | 2.62 | 2.70 | 0.08 | 3.20 |
| **Total DCs** | **19.85** | **20.62** | **0.77** | **3.86** | **19.86** | **21.20** | **1.34** | **6.77** |
| FSU | 4.02 | 3.66 | –0.35 | -8.79 | 3.35 | 3.82 | 0.47 | 13.94 |
| Other Europe | 0.83 | 0.91 | 0.08 | 10.06 | 0.80 | 0.90 | 0.10 | 12.09 |
| China | 5.41 | 6.26 | 0.85 | 15.66 | 5.46 | 6.77 | 1.31 | 23.89 |
| **Total "Other Regions"** | **10.26** | **10.84** | **0.58** | **5.63** | **9.62** | **11.49** | **1.87** | **19.44** |
| **Total world** | **79.72** | **81.52** | **1.80** | **2.26** | **76.90** | **80.84** | **3.93** | **5.12** |

*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 | |
|---|---|---|---|---|---|---|---|---|
| | 3Q03 | 3Q04 | Volume | % | 4Q03 | 4Q04 | Volume | % |
| North America | 24.72 | 25.19 | 0.46 | 1.88 | 24.86 | 25.31 | 0.45 | 1.81 |
| Western Europe | 15.36 | 15.53 | 0.17 | 1.14 | 15.63 | 15.75 | 0.12 | 0.74 |
| OECD Pacific | 8.03 | 8.10 | 0.08 | 0.94 | 9.15 | 9.09 | –0.06 | –0.70 |
| **Total OECD** | **48.11** | **48.82** | **0.71** | **1.48** | **49.65** | **50.15** | **0.50** | **1.01** |
| Other Asia | 7.82 | 8.15 | 0.33 | 4.21 | 8.22 | 8.51 | 0.29 | 3.59 |
| Latin America | 4.82 | 5.00 | 0.17 | 3.55 | 4.84 | 4.98 | 0.14 | 2.86 |
| Middle East | 5.33 | 5.58 | 0.25 | 4.67 | 5.21 | 5.45 | 0.24 | 4.59 |
| Africa | 2.62 | 2.67 | 0.05 | 1.86 | 2.70 | 2.76 | 0.06 | 2.24 |
| **Total DCs** | **20.59** | **21.39** | **0.80** | **3.87** | **20.96** | **21.70** | **0.73** | **3.49** |
| FSU | 3.68 | 3.95 | 0.27 | 7.43 | 4.08 | 4.34 | 0.26 | 6.38 |
| Other Europe | 0.77 | 0.83 | 0.06 | 8.28 | 0.84 | 0.90 | 0.06 | 7.28 |
| China | 5.76 | 6.45 | 0.69 | 12.03 | 5.61 | 6.27 | 0.66 | 11.73 |
| **Total "Other Regions"** | **10.21** | **11.24** | **1.03** | **10.09** | **10.53** | **11.51** | **0.98** | **9.30** |
| **Total world** | **78.90** | **81.45** | **2.54** | **3.22** | **81.14** | **83.36** | **2.21** | **2.73** |

*Totals may not add due to independent rounding.*

*OECD*

The OECD countries, which account for roughly 60% of total world oil demand, will contribute less than one-quarter of expected demand growth this year, evidencing the declining trend in energy intensity. **Total OECD demand is expected to rise by 0.6 mb/d or 1.23% to average 49.30 mb/d in 2004.** The lion's share will originate in the North American region with the USA accounting for four fifths of the estimated 0.53 mb/d increase. Despite indications of stronger than usual demand in Western Europe during the last couple of months, year-on-year demand growth is expected at around 0.2 mb/d or 1.37%. OECD Pacific consumption is projected to shrink by 0.14 mb/d or 1.58% mainly on poorer Japanese and South Korean demand.

The split of total OECD oil requirements by products for the period January-July 2004 shows that inland deliveries of LPG, gasoline and gasoil/diesel grew by 0.22 mb/d, 0.19 mb/d and 0.13 mb/d respectively, compared to the same period of last year. **In contrast, residual fuel oil requirements declined by almost 9% or 0.28 mb/d during the seven-month period. Fuel oil**

**consumption shrank in all major OECD countries but the decline was more severe in the OECD Pacific countries where demand fell by almost 15% during the first seven months of this year.** The restart of TEPCO's nuclear power plants early this year meant considerably lower fuel oil use for power generation in Japan. Nonetheless, an accident early in August could delay the restart of more than a dozen nuclear plants.

*Developing Countries*

**Oil demand in Developing Countries is projected to rise 0.91 mb/d or 4.5% to average 4.48 mb/d for the current year. Almost 50% of the growth will take place in Other Asia underpinned by the strength in demand for transportation fuel in India**. Preliminary figures for the first and second quarters of this year indicate that India's demand grew by 8% and 10% respectively. Solid rates of economic growth and increasing revenue from record high oil prices, along with heavily subsidized energy prices in the Middle East indicate that consumption of petroleum products will increase by close to 6% this year. In the other two regions, oil demand is projected to rise at a more moderate pace with Latin America showing 3% growth while Africa's oil demand will increase by less than 2%.

*Other Regions*

**More than two fifths of total world oil demand growth in 2004 will take place in the Other Regions group with almost 80% of that growth originating in China. Oil demand in this group is projected to rise 1.11 mb/d or 11% to 11.27 mb/d.** China's astonishing growth rates of 16% and 24% seen in the first and second quarters of this year are expected to moderate in the remaining two quarters. The increase in Chinese domestic consumption was met by a surge in oil and product imports which rose to 2.83 mb/d and further to 3.29 mb/d in the first two quarters. Production and trade figures show that apparent demand in FSU dropped in the first quarter by almost 9% y-o-y but rose 14% in the second quarter. The drop in FSU exports and increased production over the last two months have resulted in an upward revision of apparent demand figures for the remainder of the year. Estimates call for apparent demand to come close to 4 mb/d in 2004 with a growth rate of 4.3% or 0.16 mb/d. Oil demand in other Eastern European countries will rise 0.08 mb/d to 9.41 mb/d (see Table 6).

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

| | 2004 | 1Q05 | 2Q05 | 3Q05 | 4Q05 | 2005 | Change 2005/04 Volume | % |
|---|---|---|---|---|---|---|---|---|
| North America | 25.09 | 25.20 | 25.13 | 25.34 | 25.69 | 25.34 | 0.25 | 0.98 |
| Western Europe | 15.56 | 15.74 | 15.32 | 15.60 | 15.85 | 15.63 | 0.07 | 0.42 |
| OECD Pacific | 8.64 | 9.26 | 7.80 | 8.16 | 9.12 | 8.58 | –0.06 | –0.65 |
| **Total OECD** | **49.30** | **50.20** | **48.25** | **49.10** | **50.65** | **49.55** | **0.26** | **0.52** |
| Other Asia | 8.25 | 8.22 | 8.34 | 8.50 | 8.91 | 8.49 | 0.25 | 2.98 |
| Latin America | 4.87 | 4.75 | 4.98 | 5.13 | 5.08 | 4.99 | 0.12 | 2.44 |
| Middle East | 5.42 | 5.59 | 5.71 | 5.92 | 5.76 | 5.74 | 0.33 | 6.07 |
| Africa | 2.70 | 2.80 | 2.80 | 2.71 | 2.82 | 2.78 | 0.08 | 3.08 |
| **Total DCs** | **21.23** | **21.36** | **21.83** | **22.25** | **22.57** | **22.00** | **0.78** | **3.66** |
| FSU | 3.95 | 4.03 | 3.91 | 4.05 | 4.43 | 4.10 | 0.16 | 3.96 |
| Other Europe | 0.89 | 0.95 | 0.86 | 0.86 | 0.94 | 0.90 | 0.02 | 2.17 |
| China | 6.44 | 6.58 | 7.16 | 6.93 | 6.69 | 6.84 | 0.41 | 6.30 |
| **Total "Other Regions"** | **11.27** | **11.57** | **11.93** | **11.84** | **12.06** | **11.85** | **0.58** | **5.16** |
| **Total world** | **81.79** | **83.12** | **82.01** | **83.19** | **85.28** | **83.41** | **1.61** | **1.97** |
| Previous estimate | 81.58 | 83.32 | 81.82 | 82.88 | 85.22 | 83.32 | 1.74 | 2.13 |
| Revision | 0.22 | –0.20 | 0.19 | 0.31 | 0.06 | 0.09 | –0.13 | - 0.16 |

*Totals may not add due to independent rounding.*

### *Forecast for 2005*

**Oil demand growth forecast for 2005 reduced by 0.13 mb/d to 1.61 mb/d for an annual average estimated at 83.41 mb/d**

**Due to lower than anticipated global economic growth (currently 4.14% versus the previous 4.29%) and the possible effect that price levels could have on consumption, oil demand growth in 2005 has been revised down by 0.13 mb/d to 1.61 mb/d. Thus, total world oil demand next year is projected to average 83.41 mb/d, which implies a growth rate of 1.97% for the year. In the case of China,** which will account for one third of total world oil demand this year and more than one quarter in 2005, **significantly lower preliminary import figures for July and August point to a slowdown in that country's apparent demand for the remainder of the year, a trend**

**that might extend into 2005.** Government measures to cool the economy are now more likely to occur as Premier Hu Jintao, one of the strongest advocates of these measures, concentrates more power after the resignation of former President Jiang Zemin as the Chairman of the Central Military Commission (CMC). If such a slowdown does take place, this might significantly eat on the country's oil consumption. Furthermore, the Chinese government is pushing to bring oil-saving projects in hydroelectricity, nuclear and coal-fired generation capacity to completion ahead of schedule which could further slow oil demand growth.

Demand is projected to rise during every quarter of 2005, with the fourth quarter oil demand increment of 1.93 mb/d or 2.31 mb/d leading the gains, followed by rises of 1.74 mb/d, 1.6 mb/d and 1.18 mb/d in the third, first and second quarters respectively. On a regional basis, Developing Countries will account for almost 50% of the estimated 1.61 mb/d total for world oil demand growth, followed by the Other Regions group with just over a third, and then OECD countries with 16%.

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

| | | | **Change 2005/04** | | | | **Change 2005/04** | |
|---|---|---|---|---|---|---|---|---|
| | **1Q04** | **1Q05** | Volume | % | **2Q04** | **2Q05** | Volume | % |
| North America | 25.03 | 25.20 | 0.18 | 0.71 | 24.85 | 25.13 | 0.28 | 1.13 |
| Western Europe | 15.66 | 15.74 | 0.08 | 0.51 | 15.31 | 15.32 | 0.01 | 0.09 |
| OECD Pacific | 9.38 | 9.26 | –0.12 | –1.30 | 8.00 | 7.80 | –0.19 | –2.39 |
| **Total OECD** | **50.07** | **50.20** | **0.14** | **0.27** | **48.15** | **48.25** | **0.10** | **0.22** |
| Other Asia | 8.03 | 8.22 | 0.19 | 2.34 | 8.29 | 8.34 | 0.05 | 0.57 |
| Latin America | 4.65 | 4.75 | 0.11 | 2.28 | 4.84 | 4.98 | 0.14 | 2.86 |
| Middle East | 5.27 | 5.59 | 0.32 | 6.03 | 5.37 | 5.71 | 0.35 | 6.49 |
| Africa | 2.67 | 2.80 | 0.13 | 4.79 | 2.70 | 2.80 | 0.10 | 3.70 |
| **Total DCs** | **20.62** | **21.36** | **0.74** | **3.59** | **21.20** | **21.83** | **0.63** | **2.99** |
| FSU | 3.66 | 4.03 | 0.37 | 9.97 | 3.82 | 3.91 | 0.09 | 2.34 |
| Other Europe | 0.91 | 0.95 | 0.04 | 4.20 | 0.90 | 0.86 | –0.04 | –4.14 |
| China | 6.26 | 6.58 | 0.33 | 5.19 | 6.77 | 7.16 | 0.39 | 5.75 |
| **Total "Other Regions"** | **10.84** | **11.57** | **0.73** | **6.73** | **11.49** | **11.93** | **0.44** | **3.84** |
| **Total world** | **81.52** | **83.12** | **1.60** | **1.97** | **80.84** | **82.01** | **1.18** | **1.46** |

*Totals may not add due to independent rounding.*

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

| | | | **Change 2005/04** | | | | **Change 2005/04** | |
|---|---|---|---|---|---|---|---|---|
| | **3Q04** | **3Q05** | Volume | % | **4Q04** | **4Q05** | Volume | % |
| North America | 25.19 | 25.34 | 0.15 | 0.61 | 25.31 | 25.69 | 0.37 | 1.48 |
| Western Europe | 15.53 | 15.60 | 0.07 | 0.44 | 15.75 | 15.85 | 0.10 | 0.65 |
| OECD Pacific | 8.10 | 8.16 | 0.06 | 0.68 | 9.09 | 9.12 | 0.03 | 0.31 |
| **Total OECD** | **48.82** | **49.10** | **0.28** | **0.57** | **50.15** | **50.65** | **0.50** | **1.01** |
| Other Asia | 8.15 | 8.50 | 0.35 | 4.28 | 8.51 | 8.91 | 0.40 | 4.65 |
| Latin America | 5.00 | 5.13 | 0.13 | 2.59 | 4.98 | 5.08 | 0.10 | 2.03 |
| Middle East | 5.58 | 5.92 | 0.34 | 6.11 | 5.45 | 5.76 | 0.31 | 5.68 |
| Africa | 2.67 | 2.71 | 0.04 | 1.59 | 2.76 | 2.82 | 0.06 | 2.31 |
| **Total DCs** | **21.39** | **22.25** | **0.86** | **4.03** | **21.70** | **22.57** | **0.87** | **4.01** |
| FSU | 3.95 | 4.05 | 0.09 | 2.33 | 4.34 | 4.43 | 0.08 | 1.89 |
| Other Europe | 0.83 | 0.86 | 0.03 | 3.99 | 0.90 | 0.94 | 0.04 | 4.72 |
| China | 6.45 | 6.93 | 0.48 | 7.40 | 6.27 | 6.69 | 0.43 | 6.82 |
| **Total "Other Regions"** | **11.24** | **11.84** | **0.60** | **5.37** | **11.51** | **12.06** | **0.55** | **4.80** |
| **Total world** | **81.45** | **83.19** | **1.74** | **2.14** | **83.36** | **85.28** | **1.93** | **2.31** |

*Totals may not add due to independent rounding.*

# World Oil Supply

**Non-OPEC supply for 2004 was revised lower to 49.95 mb/d in September, an increase of 1.37 mb/d over the downwardly revised 2003 figure**

## *Non-OPEC*

### *Forecast for 2004*

The 2004 non-OPEC supply has been revised down to 49.95 mb/d. The quarterly figures stand at 49.61 mb/d, 49.71 mb/d, 49.66 mb/d and 50.81 mb/d respectively. The downward revisions were mainly due to the impact of Hurricane Ivan on production in the Gulf of Mexico and underperformance in the North Sea. The yearly average increase stands at 1.37 mb/d, compared with the downwardly revised 2003 figure.

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

| | 2003 | 1Q04 | 2Q04 | 3Q04 | 4Q04 | 2004 | Change 04//03 |
|---|---|---|---|---|---|---|---|
| North America | 14.59 | 14.80 | 14.72 | 14.36 | 14.95 | 14.71 | 0.12 |
| Western Europe | 6.39 | 6.38 | 6.24 | 5.96 | 6.13 | 6.17 | –0.21 |
| OECD Pacific | 0.65 | 0.59 | 0.56 | 0.59 | 0.50 | 0.56 | –0.09 |
| **Total OECD** | **21.63** | **21.77** | **21.53** | **20.91** | **21.58** | **21.44** | **–0.18** |
| Other Asia | 2.36 | 2.47 | 2.50 | 2.60 | 2.53 | 2.53 | 0.17 |
| Latin America | 3.91 | 3.89 | 3.91 | 3.99 | 4.00 | 3.95 | 0.04 |
| Middle East | 2.00 | 1.94 | 1.89 | 1.87 | 1.90 | 1.90 | –0.10 |
| Africa | 3.05 | 3.31 | 3.37 | 3.48 | 3.69 | 3.46 | 0.42 |
| **Total DCs** | **11.32** | **11.62** | **11.67** | **11.94** | **12.13** | **11.84** | **0.53** |
| FSU | 10.27 | 10.78 | 11.07 | 11.32 | 11.63 | 11.20 | 0.94 |
| Other Europe | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.00 |
| China | 3.41 | 3.43 | 3.47 | 3.51 | 3.43 | 3.46 | 0.05 |
| **Total "Other regions"** | **13.85** | **14.38** | **14.71** | **15.00** | **15.23** | **14.83** | **0.99** |
| **Total non-OPEC production** | **46.79** | **47.76** | **47.90** | **47.85** | **48.94** | **48.12** | **1.33** |
| Processing gains | 1.80 | 1.85 | 1.81 | 1.81 | 1.87 | 1.83 | 0.04 |
| **Total non-OPEC supply** | **48.58** | **49.61** | **49.71** | **49.66** | **50.81** | **49.95** | **1.37** |
| Previous estimate | 48.62 | 49.68 | 49.80 | 49.90 | 50.90 | 50.07 | 1.45 |
| **Revision** | **–0.04** | **–0.07** | **–0.09** | **–0.24** | **–0.09** | **–0.12** | **–0.09** |

*Totals may not add due to independent rounding.*

**Non-OPEC supply for 2005 forecast at 51.16 mb/d, an increase of 1.21 mb/d above 2004**

### *Forecast for 2005*

Non-OPEC supply for 2005 is forecast to rise 1.21 mb/d. **North America is expected to witness a rise of 0.16 mb/d mainly from a 0.08 mb/d increase in Canada, which was partially offset by the 0.09 mb/d decline expected in both OECD Pacific and Western Europe, where the UK is forecast to decline by 0.08 mb/d. Total OECD is expected to increase to 21.48 mb/d. Total Developing Countries are expected to rise 0.57 mb/d, mainly contributed by Latin America where Brazil gained 0.12 mb/d and Trinidad added 0.05 mb/d, along with Africa where Angola, Sudan and Chad increased 0.19 mb/d, 0.06 mb/d and 0.04 mb/d respectively. The FSU is expected to be the major contributor to the rise, mainly on Russia's 0.47 mb/d and 0.06 mb/d increases from Kazakhstan and Azerbaijan.** Quarterly figures are redistributed at 50.85 mb/d, 50.91 mb/d, 50.87 mb/d and 52.02 mb/d respectively. The yearly average is forecast at 51.16 mb/d.

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

| | 2004 | 1Q05 | 2Q05 | 3Q05 | 4Q05 | 2005 | Change 05/04 |
|---|---|---|---|---|---|---|---|
| North America | 14.71 | 14.96 | 14.88 | 14.52 | 15.11 | 14.87 | 0.16 |
| Western Europe | 6.17 | 6.28 | 6.15 | 5.87 | 6.04 | 6.08 | –0.09 |
| OECD Pacific | 0.56 | 0.55 | 0.53 | 0.56 | 0.48 | 0.53 | –0.03 |
| **Total OECD** | **21.44** | **21.80** | **21.57** | **20.95** | **21.63** | **21.48** | **0.04** |
| Other Asia | 2.53 | 2.47 | 2.50 | 2.60 | 2.53 | 2.53 | 0.00 |
| Latin America | 3.95 | 4.13 | 4.15 | 4.23 | 4.25 | 4.19 | 0.24 |
| Middle East | 1.90 | 1.92 | 1.91 | 1.89 | 1.89 | 1.90 | 0.00 |
| Africa | 3.46 | 3.71 | 3.69 | 3.77 | 4.00 | 3.79 | 0.33 |
| **Total DCs** | **11.84** | **12.24** | **12.23** | **12.50** | **12.67** | **12.41** | **0.57** |
| FSU | 11.20 | 11.35 | 11.65 | 11.92 | 12.24 | 11.79 | 0.59 |
| Other Europe | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.00 |
| China | 3.46 | 3.44 | 3.49 | 3.52 | 3.45 | 3.47 | 0.02 |
| **Total "Other regions"** | **14.83** | **14.96** | **15.30** | **15.61** | **15.86** | **15.44** | **0.61** |
| **Total non-OPEC production** | **48.12** | **49.00** | **49.10** | **49.06** | **50.16** | **49.33** | **1.21** |
| Processing gains | 1.83 | 1.85 | 1.81 | 1.81 | 1.87 | 1.83 | 0.00 |
| **Total non-OPEC supply** | **49.95** | **50.85** | **50.91** | **50.87** | **52.02** | **51.16** | **1.21** |
| Previous estimate | 50.07 | 50.89 | 50.98 | 51.08 | 52.09 | 51.27 | 1.19 |
| **Revision** | **–0.12** | **–0.04** | **–0.07** | **–0.22** | **–0.07** | **–0.10** | **0.02** |

*Totals may not add due to independent rounding.*

**2005 net FSU oil export forecast at 7.69 mb/d, 0.43 mb/d over 2004**

FSU net oil exports for 2005 are expected at 7.69 mb/d, an increase of 0.43 mb/d over the 2004 figure of 7.26 mb/d. Some minor revisions were also made to 2002 and 2003 figures in both directions.

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

| | 1Q | 2Q | 3Q | 4Q | Year |
|---|---|---|---|---|---|
| **2001** | 4.30 | 4.71 | 4.89 | 4.47 | **4.60** |
| **2002** | 5.14 | 5.84 | 5.85 | 5.49 | **5.58** |
| **2003** | 5.87 | 6.75 | 6.72 | 6.58 | **6.48** |
| **2004** (forecast) | 7.12 | 7.25 | 7.37 | 7.29 | **7.26** |
| **2005** (forecast) | 7.32 | 7.74 | 7.88 | 7.82 | **7.69** |

**OPEC NGL for 2005 forecast at 4.14 mb/d, 0.19 mb/d over 2004**

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

The OPEC NGL+NCO figure for 2005 remained unchanged at 4.14 mb/d, an increase of 0.19 mb/d over the 2004 figure. Figures for 2001–2003 stayed the same at 3.58 mb/d, 3.62 mb/d and 3.71 mb/d respectively, compared with the figures in the last *MOMR*.

**OPEC NGL production — 2000–2004**
*mb/d*

| 2001 | 2002 | 2003 | 1Q04 | 2Q04 | 3Q04 | 4Q04 | 2004 | Change 04/03 | 2005 | Change 05/04 |
|---|---|---|---|---|---|---|---|---|---|---|
| **3.58** | **3.62** | **3.71** | 3.88 | 3.89 | 3.97 | 4.04 | **3.95** | 0.24 | **4.14** | 0.19 |

**Available secondary sources put OPEC's September production at 30.12 mb/d**

### *OPEC crude oil production*

Available secondary sources indicate that OPEC output for **September was 30.12 mb/d, up 0.43 mb/d over the revised August figure.** Table 15 shows OPEC production as reported by selected secondary sources.

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

| | 2002 | 2003 | 2Q04 | Aug04* | **Sept04*** | 3Q04* | Sept- Aug |
|---|---|---|---|---|---|---|---|
| Algeria | 864 | 1,134 | 1,199 | 1,259 | **1,253** | 1,253 | –7 |
| Indonesia | 1,120 | 1,027 | 969 | 958 | **951** | 956 | –7 |
| IR Iran | 3,416 | 3,757 | 3,903 | 3,947 | **3,945** | 3,941 | –2 |
| Iraq | 2,000 | 1,323 | 2,009 | 1,828 | **2,199** | 1,985 | 372 |
| Kuwait | 1,885 | 2,173 | 2,292 | 2,393 | **2,409** | 2,391 | 16 |
| SP Libyan AJ | 1,314 | 1,422 | 1,499 | 1,583 | **1,579** | 1,570 | –4 |
| Nigeria | 1,969 | 2,131 | 2,349 | 2,425 | **2,404** | 2,412 | –21 |
| Qatar | 648 | 746 | 772 | 803 | **814** | 807 | 11 |
| Saudi Arabia | 7,535 | 8,709 | 8,637 | 9,424 | **9,496** | 9,412 | 72 |
| UAE | 1,988 | 2,243 | 2,243 | 2,464 | **2,468** | 2,452 | 3 |
| Venezuela | 2,586 | 2,291 | 2,547 | 2,606 | **2,605** | 2,601 | –2 |
| **Total OPEC** | **25,323** | **26,955** | **28,419** | **29,689** | **30,121** | **29,780** | **432** |

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

# Rig Count

**Non-OPEC rig count down by 69 in September**

### *Non-OPEC*

Rig activity was lower in September compared with the August figures. North America declined by 73 rigs mainly in Canada, while Western Europe lost 2 rigs to drop to 58. Rig activity in Developing Countries increased, mainly in Africa, adding 3 rigs to stand at 388.

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

| | 2002 | 2003 | Change 03/02 | Aug04 | Sept04 | Change Sept/Aug |
|---|---|---|---|---|---|---|
| North America | 1,162 | 1,496 | 333 | 1,699 | 1,626 | –73 |
| Western Europe | 85 | 78 | –7 | 60 | 58 | –2 |
| OECD Pacific | 17 | 18 | 1 | 26 | 29 | 3 |
| **OECD** | **1,264** | **1,592** | **328** | **1,785** | **1,713** | **–72** |
| Other Asia | 111 | 117 | 7 | 129 | 129 | 0 |
| Latin America | 106 | 116 | 10 | 131 | 128 | –3 |
| Middle East | 62 | 70 | 7 | 71 | 70 | –1 |
| Africa | 43 | 48 | 5 | 54 | 61 | 7 |
| **DCs** | **322** | **350** | **28** | **385** | **388** | **3** |
| FSU | na | na | na | na | na | na |
| Other Europe | 2 | 2 | 0 | 2 | 2 | 0 |
| China | na | na | na | na | na | na |
| **Other regions** | na | na | na | na | na | na |
| **Total non-OPEC** | **1,588** | **1,944** | **356** | **2,172** | **2,103** | **–69** |

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

**OPEC rig count up by 5 in September**

### *OPEC*

OPEC's rig count was 262 in September, a rise of 5 rigs compared with the August figure. The gain in rig activity was mainly contributed by Kuwait and Indonesia.

**Table 17**
**OPEC rig count**

| | 2002 | 2003 | Change 03/02 | Aug04 | Sept04 | Change Sept/Aug |
|---|---|---|---|---|---|---|
| Algeria | 20 | 20 | 0 | 20 | **20** | 0 |
| Indonesia | 46 | 45 | –1 | 54 | **56** | 2 |
| IR Iran | 34 | 35 | 1 | 42 | **43** | 1 |
| Iraq | na | na | na | na | **na** | na |
| Kuwait | 6 | 5 | –1 | 10 | **15** | 5 |
| SP Libyan AJ | 10 | 10 | 0 | 9 | **9** | 0 |
| Nigeria | 12 | 10 | –2 | 9 | **9** | 0 |
| Qatar | 13 | 8 | –5 | 13 | **10** | –3 |
| Saudi Arabia | 32 | 32 | 0 | 32 | **31** | –1 |
| UAE | 16 | 16 | 0 | 16 | **16** | 0 |
| Venezuela | 42 | 37 | –6 | 52 | **53** | 1 |
| **Total OPEC** | **231** | **217** | **–14** | **257** | **262** | **5** |

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

# Stock Movements

**US commercial oil stocks displayed a steeper draw of 16.1 mb in September, mainly on lower imports and a decline in production**

**USA**

**US commercial oil stocks showed a steeper draw for the second consecutive month in the third quarter of 2004, falling 16.1 mb to stand at 962.4 mb during the period 3 September- 1 October 2004. Most of the draw occurred on crude oil stocks which dropped by 11.7 mb, while product inventories observed much lower declines. Total commercial oil stocks are 11.2 mb or about 1% below the level registered a year ago.**

Crude oil stocks have continued to head south since July, reflecting a sustainable decline in US crude oil output due to persistent problems in Alaska and in the Gulf of Mexico. Hurricane Ivan made things worse in September, pushing crude oil production below 5 mb/d, a level not seen since 1954. Declining imports due to delayed arrivals of shipments because of Hurricane Ivan, which averaged 9.60 mb/d in September compared with 10.29 mb/d in the previous month, were partly responsible for the draw on crude oil stocks. At the end of September, crude oil stocks stood at 274.0 mb which is 12.7 mb or 4.4% below last year's level, and the lowest level since January 2004. The damage caused by Hurricane Ivan to oil production facilities in Gulf of Mexico, where about 0.50 mb/d remains shut in, will not help US crude oil stocks to recover anytime soon as it is expected to take a few months before output fully recovers. Gasoline inventories followed the same pattern as crude oil stocks, showing a steady draw since July despite the decline in implied demand. Gasoline stocks lost 4.7 mb to stand at 199.4 mb which is 0.90 mb or 0.50% less than that witnessed last year. Lower gasoline production due to the fall in refinery runs because of hurricanes as well as lower imports were the main reason behind this draw on gasoline stocks. Higher implied demand and lower production justified the draw of 3.2 mb to 123.4 mb on distillate fuel stocks which registered a y-o-y deficit of 7.9 mb or 6%. The only exception was jet fuel which registered a build of 1.6 mb to stand at 41.0 mb on weaker implied demand, resulting in a y-o-y surplus of 0.90 mb or about 2%.

During the same period, the SPR did not reverse its long uptrend although the US administration decided after Hurricane Ivan hit the US Gulf Coast to release some SPR crude under a loan programme. The SPR rose by 1.2 mb to stand at 670.2 mb which is a y-o-y surplus of 45.8 mb or about 7%. This trend is expected to change as of next month and oil companies which have signed contracts start to lift their loan cargoes.

During the week ending 8 October, total US commercial oil stocks displayed a minor draw of 0.8 mb to 961.6 mb compared with the previous week, while they were 11.3 mb or about 1% lower than the level registered at the same time of last year. The most noticeable draw was on distillates which fell by 2.5 mb to 120.9 mb compared with last week. This decline was larger than the market expected and could be attributed to strong implied demand which rose by 4.25% over the previous week as a sign that consumers started to fill their tanks ahead of the winter season. Other main product stocks moved in different directions, where gasoline registered a build of 1.2 mb to 200.6 mb which is 3.5 mb higher than the level observed a year ago. This increase came on the back of higher imports which rose 0.12 mb/d to 1.03 mb/d, as well as on stagnant implied demand which remained unchanged compared with the previous week. Crude oil stocks showed a considerable build of 4.20 mb to 278.2 mb, narrowing the y-o-y deficit to 10.3 mb or 3.5%. Higher oil production, especially from Alaska, and weaker implied demand contributed to this build. Lower refinery runs which declined by about 2% also justified this build as some refineries have not returned to operation yet after the forced shutdown caused by the Hurricane Ivan.

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

| | 30 Jul 04 | 3 Sep 04 | 1 Oct 04 | Change Sep/Aug 04 | 1 Oct 03 | 8 Oct 04** |
|---|---|---|---|---|---|---|
| **Crude oil (excl. SPR)** | 298.6 | 285.7 | **274.0** | –11.7 | 286.7 | 278.2 |
| Gasoline | 210.1 | 204.1 | 199.4 | –4.7 | 198.5 | 200.6 |
| Distillate fuel | 121.2 | 126.6 | 123.4 | –3.2 | 131.3 | 120.9 |
| Residual fuel oil | 32.9 | 34.7 | 33.5 | –1.2 | 31.6 | 32.9 |
| Jet fuel | 39.4 | 39.4 | 41.0 | 1.6 | 40.1 | 41.3 |
| **Total** | **978.4** | **978.5** | **962.4** | **–16.1** | **973.6** | **961.6** |
| SPR | 664.5 | 669.0 | 670.2 | 1.2 | 624.4 | 669.2 |

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

### *Western Europe*

**In September, EUR-16 oil stocks lost previous month's gain**

**At the end of September 2004, total oil stocks in the EU-16 (Europe plus Norway) lost the previous month's gain, falling by 4.0 mb to 1,082.6 mb. This level makes the y-o-y deficit 2.7 mb or just 0.3%. Product inventories contributed solely to this draw, while crude oil stocks rose slightly.**

After four month of draws, crude oil stocks in EU-16 changed the trend, showing a build of 2.1 mb to 462.5 mb, keeping the y-o-y surplus at 6.4 mb or more than 1%. Higher arrivals especially from the Middle East and Russia as well as increasing oil production from North Sea fields ended the summer maintenance shutdowns. All main product stocks showed draws except fuel oil which continued to rise, adding 1.4 mb to stand at 112.6 mb. The bulk of the draws on products occurred on middle distillates where 6.2 mb were lost, pushing them to 348.0 mb or 12.4 below last year's level. Strong demand especially from German household consumers helped to reduce distillates. Lower supplies also contributed to this draw. Gasoline stocks showed a marginal draw of 0.8 mb to 135.3 mb, registering a y-o-y shortage of 1.2 mb or about 1%.

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

| | Jul 04 | Aug 04 | Sep 04 | Change Sep/Aug 04 | Sep 03 |
|---|---|---|---|---|---|
| **Crude oil** | 462.8 | 460.4 | **462.5** | 2.1 | 456.2 |
| Mogas | 136.8 | 136.1 | 135.3 | –0.8 | 136.5 |
| Naphtha | 23.8 | 24.6 | 24.2 | –0.4 | 23.0 |
| Middle distillates | 344.3 | 354.2 | 348.0 | –6.2 | 360.4 |
| Fuel oils | 110.8 | 111.2 | 112.6 | 1.4 | 109.2 |
| **Total products** | 615.6 | 626.2 | 620.1 | –6.1 | 629.2 |
| **Overall total** | **1,078.4** | **1,086.6** | **1,082.6** | **–4.0** | **1,085.3** |

** At end of month, with region consisting of the Eur–16.*
*Source: Argus, Euroilstock*

### *Japan*

**Japanese inventories decreased 0.32 mb/d in August, mainly crude oil**

**At the end of August, Japanese commercial oil stocks reversed the upward trend observed last month, decreasing by 9.8 mb at a rate of 0.32 mb/d to 169.2 mb. This was mainly due to crude oil stocks, which decreased 16.0 mb to 102.7 mb, while total major products abated the draw with a build of 6.2 mb to 66.5 mb. Total commercial oil stocks remained at 32.2 mb or 16.0 mb below last year's level.** The strong draw on crude oil stocks came on the back of increasing crude throughputs which moved up by 8.6% from the July level or 10.1% from a year earlier, to represent a rate of 90.2% of refinery capacity. The decline of 8.4% in crude imports also contributed to the strong draw on oil stocks. However, crude imports were still 1.6% above a year ago at this time. On the product side, concerns were raised about a kerosene shortage when demand peaks in winter as stocks were

25.3% lower than a year earlier and supplies were also expected to be tight overseas, including the USA and Europe. Kerosene stock levels for the month of August were the lowest since 1972. The level is improving on a monthly basis as kerosene stocks showed a build of 27.5% in August compared to the previous month. But it will be a big problem in winter if inventories continue to increase at moderate levels. Gasoline stocks dropped a slight 2.6% to 11.5 mb due to the 6.4% rise in wholesale gasoline sales from the July level of 5.2% from a year earlier. It was the highest level for any month on record as good weather encouraged more drivers to flood the road during the summer holiday.

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

| | Jun 04 | Jul 04 | Aug 04 | Change Aug/Jul04 | Aug 03 |
|---|---|---|---|---|---|
| **Crude oil** | 112.0 | 118.7 | 102.7 | –16.0 | 122.3 |
| Gasoline | 12.4 | 11.8 | 11.5 | –0.3 | 13.9 |
| Middle distillates | 26.8 | 30.4 | 35.8 | 5.4 | 43.9 |
| Residual fuel oil | 17.7 | 18.1 | 19.2 | 1.1 | 21.3 |
| **Total products** | 57.0 | 60.3 | 66.5 | 6.2 | 79.1 |
| **Overall total**** | **168.9** | **179.0** | **169.2** | **–9.8** | **201.4** |

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

# Balance of Supply and Demand

**2004 supply/demand difference revised up to 27.90 mb/d**

The summarized supply/demand balance table for 2004 shows a significant downward revision to total non-OPEC supply of 0.12 mb/d now at 53.90 mb/d and a significant upward revision to world oil demand of 0.22 mb/d to 81.79 mb/d, resulting in an estimated annual difference of around 27.90 mb/d. The quarterly distribution now stands at 28.03 mb/d, 27.23 mb/d, 27.81 mb/d and 28.51 mb/d respectively. The balance for the first quarter 2004 was revised downward by 0.04 mb/d to stand at 0.16 mb/d, the second quarter revised significantly lower by 0.31 mb/d to 1.19 mb/d, and **according to initial calculations**, **the balance for the third quarter stands at 1.97 mb/d.**

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

| | **2003** | 1Q04 | 2Q04 | 3Q04 | 4Q04 | **2004** |
|---|---|---|---|---|---|---|
| (a) World oil demand | 79.17 | 81.52 | 80.84 | 81.45 | 83.36 | 81.79 |
| (b) Non-OPEC supply(1) | 52.29 | 53.49 | 53.61 | 53.63 | 54.85 | 53.90 |
| **Difference (a – b)** | **26.88** | **28.03** | **27.23** | **27.81** | **28.51** | **27.90** |
| OPEC crude oil production(2) | 26.95 | 28.19 | 28.42 | 29.78 | | |
| **Balance** | **0.08** | **0.16** | **1.19** | **1.97** | | |

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

**2005 supply/demand difference expected at 28.11 mb/d**

The summarized supply/demand balance table for 2005 shows world oil demand expected at 83.41 mb/d while total non-OPEC supply should reach 55.30 mb/d. This has resulted in an annual difference of around 28.11 mb/d, with a quarterly distribution of 28.19 mb/d, 27.00 mb/d, 28.16 mb/d and 29.08 mb/d respectively.

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

| | **2004** | 1Q05 | 2Q05 | 3Q05 | 4Q05 | **2005** |
|---|---|---|---|---|---|---|
| (a) World oil demand | 81.79 | 83.12 | 82.01 | 83.19 | 85.28 | 83.41 |
| (b) Non-OPEC supply(1) | 53.90 | 54.94 | 55.02 | 55.03 | 56.21 | 55.30 |
| **Difference (a – b)** | **27.90** | **28.19** | **27.00** | **28.16** | **29.08** | **28.11** |
| OPEC crude oil production(2) | | | | | | |
| **Balance** | | | | | | |

*(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 | 1Q04 | 2Q04 | 3Q04 | 4Q04 | 2004 | 1Q05 | 2Q05 | 3Q05 | 4Q05 | 2005 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| World demand | | | | | | | | | | | | | | |
| OECD | 47.9 | 47.9 | 48.0 | 48.7 | 50.1 | 48.2 | 48.8 | 50.1 | 49.3 | 50.2 | 48.3 | 49.1 | 50.7 | 49.6 |
| North America | 24.1 | 24.0 | 24.1 | 24.6 | 25.0 | 24.8 | 25.2 | 25.3 | 25.1 | 25.2 | 25.1 | 25.3 | 25.7 | 25.3 |
| Western Europe | 15.1 | 15.3 | 15.2 | 15.4 | 15.7 | 15.3 | 15.5 | 15.7 | 15.6 | 15.7 | 15.3 | 15.6 | 15.8 | 15.6 |
| Pacific | 8.7 | 8.7 | 8.6 | 8.8 | 9.4 | 8.0 | 8.1 | 9.1 | 8.6 | 9.3 | 7.8 | 8.2 | 9.1 | 8.6 |
| DCs | 19.2 | 19.5 | 20.0 | 20.3 | 20.6 | 21.2 | 21.4 | 21.7 | 21.2 | 21.4 | 21.8 | 22.2 | 22.6 | 22.0 |
| FSU | 3.8 | 3.9 | 3.7 | 3.8 | 3.7 | 3.8 | 4.0 | 4.3 | 3.9 | 4.0 | 3.9 | 4.0 | 4.4 | 4.1 |
| Other Europe | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 | 0.8 | 0.9 | 0.9 | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 |
| China | 4.7 | 4.7 | 5.0 | 5.6 | 6.3 | 6.8 | 6.5 | 6.3 | 6.4 | 6.6 | 7.2 | 6.9 | 6.7 | 6.8 |
| (a) Total world demand | 76.3 | 76.9 | 77.6 | 79.2 | 81.5 | 80.8 | 81.4 | 83.4 | 81.8 | 83.1 | 82.0 | 83.2 | 85.3 | 83.4 |
| Non-OPEC supply | | | | | | | | | | | | | | |
| OECD | 21.9 | 21.8 | 21.9 | 21.6 | 21.8 | 21.5 | 20.9 | 21.6 | 21.4 | 21.8 | 21.6 | 20.9 | 21.6 | 21.5 |
| North America | 14.2 | 14.3 | 14.5 | 14.6 | 14.8 | 14.7 | 14.4 | 14.9 | 14.7 | 15.0 | 14.9 | 14.5 | 15.1 | 14.9 |
| Western Europe | 6.8 | 6.7 | 6.6 | 6.4 | 6.4 | 6.2 | 6.0 | 6.1 | 6.2 | 6.3 | 6.1 | 5.9 | 6.0 | 6.1 |
| Pacific | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 | 0.6 | 0.5 | 0.5 |
| DCs | 10.7 | 10.9 | 11.2 | 11.3 | 11.6 | 11.7 | 11.9 | 12.1 | 11.8 | 12.2 | 12.2 | 12.5 | 12.7 | 12.4 |
| FSU | 7.9 | 8.5 | 9.3 | 10.3 | 10.8 | 11.1 | 11.3 | 11.6 | 11.2 | 11.4 | 11.7 | 11.9 | 12.2 | 11.8 |
| Other Europe | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| China | 3.2 | 3.3 | 3.4 | 3.4 | 3.4 | 3.5 | 3.5 | 3.4 | 3.5 | 3.4 | 3.5 | 3.5 | 3.4 | 3.5 |
| Processing gains | 1.7 | 1.7 | 1.7 | 1.8 | 1.9 | 1.8 | 1.8 | 1.9 | 1.8 | 1.9 | 1.8 | 1.8 | 1.9 | 1.8 |
| Total non-OPEC supply | 45.6 | 46.4 | 47.7 | 48.6 | 49.6 | 49.7 | 49.7 | 50.8 | 49.9 | 50.9 | 50.9 | 50.9 | 52.0 | 51.2 |
| OPEC NGLs + non-conventional oils | 3.3 | 3.6 | 3.6 | 3.7 | 3.9 | 3.9 | 4.0 | 4.0 | 3.9 | 4.1 | 4.1 | 4.2 | 4.2 | 4.1 |
| (b) Total non-OPEC supply and OPEC NGLs | 48.9 | 50.0 | 51.4 | 52.3 | 53.5 | 53.6 | 53.6 | 54.8 | 53.9 | 54.9 | 55.0 | 55.0 | 56.2 | 55.3 |
| OPEC crude oil production (secondary sources) | 28.0 | 27.2 | 25.3 | 27.0 | 28.2 | 28.4 | 29.8 | | | | | | | |
| Total supply | 76.9 | 77.2 | 76.7 | 79.2 | 81.7 | 82.0 | 83.4 | | | | | | | |
| Balance (stock change and miscellaneous) | 0.5 | 0.3 | -0.9 | 0.1 | 0.2 | 1.2 | 2.0 | | | | | | | |
| Closing stock level (outside FCPEs) *mb* | | | | | | | | | | | | | | |
| OECD onland commercial | 2530 | 2628 | 2475 | 2522 | 2467 | 2552 | | | | | | | | |
| OECD SPR | 1269 | 1284 | 1343 | 1406 | 1418 | 1424 | | | | | | | | |
| OECD total | 3799 | 3912 | 3818 | 3928 | 3885 | 3975 | | | | | | | | |
| Oil-on-water | 877 | 831 | 816 | 885 | 906 | 905 | | | | | | | | |
| Days of forward consumption in OECD | | | | | | | | | | | | | | |
| Commercial onland stocks | 53 | 55 | 51 | 51 | 51 | 52 | | | | | | | | |
| SPR | 26 | 27 | 28 | 29 | 29 | 29 | | | | | | | | |
| Total | 79 | 82 | 78 | 80 | 81 | 81 | | | | | | | | |
| Memo items | | | | | | | | | | | | | | |
| FSU net exports | 4.1 | 4.6 | 5.6 | 6.5 | 7.1 | 7.2 | 7.4 | 7.3 | 7.3 | 7.3 | 7.7 | 7.9 | 7.8 | 7.7 |
| (a) - (b) | 27.4 | 26.9 | 26.2 | 26.9 | 28.0 | 27.2 | 27.8 | 28.5 | 27.9 | 28.2 | 27.0 | 28.2 | 29.1 | 28.1 |

*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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| World demand | | | | | | | | | | | | | | |
| OECD | - | - | - | - | - | - | 0.1 | 0.1 | - | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 |
| North America | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Western Europe | - | - | - | - | - | - | - | - | - | -0.1 | - | -0.1 | -0.1 | -0.1 |
| Pacific | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| DCs | - | - | - | - | - | - | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 |
| FSU | - | - | - | - | - | - | - | - | - | - | 0.2 | 0.2 | - | 0.1 |
| Other Europe | - | - | - | - | - | - | 0.1 | 0.1 | - | - | - | 0.1 | 0.1 | - |
| China | - | - | - | - | -0.1 | 0.1 | 0.1 | 0.1 | - | -0.2 | -0.1 | -0.1 | -0.1 | -0.1 |
| (a) Total world demand | - | - | - | 0.1 | - | 0.2 | 0.4 | 0.3 | 0.2 | -0.2 | 0.2 | 0.3 | 0.1 | 0.1 |
| Non-OPEC supply | | | | | | | | | | | | | | |
| OECD | - | - | - | - | - | - | -0.3 | - | -0.1 | - | - | -0.3 | - | -0.1 |
| North America | - | - | - | - | - | - | -0.2 | - | - | - | - | -0.2 | - | - |
| Western Europe | - | - | - | - | - | - | -0.1 | - | - | - | - | -0.1 | - | - |
| Pacific | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| DCs | - | - | - | - | -0.1 | -0.1 | - | -0.1 | -0.1 | -0.1 | -0.1 | - | -0.1 | -0.1 |
| FSU | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Other Europe | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| China | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Processing gains | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total non-OPEC supply | - | - | - | - | -0.1 | -0.1 | -0.2 | -0.1 | -0.1 | - | -0.1 | -0.2 | -0.1 | -0.1 |
| OPEC NGLs + non-conventionals | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| (b) Total non-OPEC supply and OPEC NGLs | - | - | - | - | -0.1 | -0.1 | -0.2 | -0.1 | -0.1 | - | -0.1 | -0.2 | -0.1 | -0.1 |
| OPEC crude oil production (secondary sources) | - | - | - | - | - | - | | | | | | | | |
| Total supply | - | - | - | - | -0.1 | -0.1 | | | | | | | | |
| Balance (stock change and miscellaneous) | - | - | -0.1 | -0.1 | - | -0.3 | | | | | | | | |
| Closing stock level (outside FCPEs) *mb* | | | | | | | | | | | | | | |
| OECD onland commercial | - | - | - | - | -1 | -10 | | | | | | | | |
| OECD SPR | - | - | - | - | - | - | | | | | | | | |
| OECD total | - | - | - | - | -1 | -10 | | | | | | | | |
| Oil on water | - | - | - | - | - | - | | | | | | | | |
| Days of forward consumption in OECD | | | | | | | | | | | | | | |
| Commercial onland stocks | - | - | - | - | - | - | | | | | | | | |
| SPR | - | - | - | - | - | - | | | | | | | | |
| Total | - | - | - | - | - | - | | | | | | | | |
| Memo items | | | | | | | | | | | | | | |
| FSU net exports | - | - | - | - | - | - | - | - | - | - | -0.2 | -0.1 | - | -0.1 |
| (a) - (b) | - | - | 0.1 | 0.1 | - | 0.3 | 0.6 | 0.4 | 0.3 | -0.2 | 0.3 | 0.5 | 0.1 | 0.2 |

† *This compares Table 23 in this issue of the MOMR with Table 23 in the September 2004 issue.*

*This table shows only where changes have occurred.*

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

| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 1Q01 | 2Q01 | 3Q01 | 4Q01 | 1Q02 | 2Q02 | 3Q02 | 4Q02 | 1Q03 | 2Q03 | 3Q03 | 4Q03 | 1Q04 | 2Q04 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Closing stock level *mb* | | | | | | | | | | | | | | | | | | | | |
| OECD onland commercial | 2,615 | 2,698 | 2,445 | 2,530 | 2,628 | 2,475 | 2,524 | 2,597 | 2,660 | 2,628 | 2,604 | 2,650 | 2,575 | 2,475 | 2,424 | 2,546 | 2,598 | 2,522 | 2,467 | 2,552 |
| 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 | 1,214 | 1,166 | 1,145 | 1,206 |
| Western Europe | 912 | 963 | 881 | 930 | 923 | 891 | 918 | 909 | 918 | 923 | 932 | 942 | 917 | 891 | 908 | 907 | 924 | 921 | 921 | 926 |
| OECD Pacific | 492 | 453 | 437 | 454 | 443 | 410 | 447 | 457 | 473 | 443 | 435 | 447 | 440 | 410 | 413 | 453 | 460 | 435 | 401 | 419 |
| OECD SPR | 1,254 | 1,302 | 1,285 | 1,269 | 1,284 | 1,343 | 1,270 | 1,268 | 1,265 | 1,284 | 1,302 | 1,314 | 1,319 | 1,343 | 1,357 | 1,361 | 1,379 | 1,406 | 1,418 | 1,424 |
| North America | 563 | 571 | 567 | 543 | 552 | 601 | 544 | 545 | 547 | 552 | 563 | 578 | 589 | 601 | 601 | 611 | 626 | 640 | 654 | 664 |
| Western Europe | 329 | 362 | 347 | 355 | 352 | 353 | 352 | 348 | 343 | 352 | 352 | 348 | 345 | 353 | 363 | 358 | 360 | 369 | 366 | 362 |
| OECD Pacific | 362 | 369 | 370 | 370 | 380 | 389 | 374 | 374 | 375 | 380 | 386 | 388 | 386 | 389 | 393 | 393 | 393 | 396 | 398 | 398 |
| OECD total | 3,869 | 4,000 | 3,729 | 3,799 | 3,912 | 3,818 | 3,794 | 3,864 | 3,925 | 3,912 | 3,906 | 3,964 | 3,895 | 3,818 | 3,781 | 3,906 | 3,977 | 3,928 | 3,885 | 3,975 |
| Oil-on-water | 812 | 859 | 808 | 877 | 831 | 816 | 903 | 829 | 870 | 831 | 798 | 805 | 802 | 816 | 857 | 887 | 873 | 885 | 906 | 905 |
| Days of forward consumption in OECD | | | | | | | | | | | | | | | | | | | | |
| OECD onland commercial | 56 | 56 | 51 | 53 | 55 | 51 | 54 | 54 | 55 | 54 | 56 | 55 | 52 | 50 | 51 | 53 | 52 | 50 | 51 | 52 |
| North America | 52 | 54 | 47 | 48 | 52 | 48 | 49 | 51 | 53 | 53 | 52 | 52 | 50 | 48 | 46 | 48 | 49 | 47 | 46 | 48 |
| Western Europe | 60 | 63 | 58 | 61 | 61 | 58 | 62 | 59 | 59 | 60 | 63 | 61 | 59 | 58 | 60 | 59 | 59 | 59 | 60 | 60 |
| OECD Pacific | 58 | 52 | 50 | 52 | 51 | 47 | 55 | 56 | 53 | 48 | 56 | 55 | 47 | 42 | 50 | 56 | 50 | 46 | 50 | 52 |
| OECD SPR | 27 | 27 | 27 | 26 | 27 | 28 | 27 | 27 | 26 | 27 | 28 | 28 | 27 | 27 | 29 | 28 | 28 | 28 | 29 | 29 |
| North America | 24 | 24 | 24 | 23 | 23 | 24 | 23 | 23 | 23 | 23 | 24 | 24 | 24 | 25 | 25 | 25 | 25 | 26 | 26 | 26 |
| Western Europe | 21 | 24 | 23 | 23 | 23 | 23 | 24 | 22 | 22 | 23 | 24 | 23 | 22 | 23 | 24 | 23 | 23 | 24 | 24 | 23 |
| OECD Pacific | 43 | 42 | 42 | 43 | 44 | 44 | 46 | 46 | 42 | 41 | 50 | 47 | 41 | 40 | 48 | 49 | 43 | 42 | 50 | 49 |
| OECD total | 83 | 84 | 78 | 79 | 82 | 78 | 81 | 81 | 81 | 81 | 84 | 83 | 79 | 77 | 80 | 81 | 80 | 78 | 81 | 81 |

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

| | 2000 | 2001 | 2002 | Change 02/01 | 2003 | Change 03/02 | 1Q04 | 2Q04 | 3Q04 | 4Q04 | 2004 | Change 04/03 | 1Q05 | 2Q05 | 3Q05 | 4Q05 | 2005 | Change 05/04 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| USA | 8.11 | 8.05 | 8.04 | -0.01 | 7.82 | -0.22 | 7.85 | 7.73 | 7.45 | 7.65 | 7.67 | -0.15 | 7.90 | 7.78 | 7.50 | 7.70 | 7.72 | 0.05 |
| Canada | 2.68 | 2.73 | 2.84 | 0.12 | 2.97 | 0.12 | 3.12 | 3.11 | 3.08 | 3.36 | 3.17 | 0.20 | 3.20 | 3.18 | 3.16 | 3.45 | 3.25 | 0.08 |
| Mexico | 3.45 | 3.57 | 3.59 | 0.03 | 3.80 | 0.20 | 3.83 | 3.89 | 3.83 | 3.93 | 3.87 | 0.07 | 3.86 | 3.92 | 3.86 | 3.96 | 3.90 | 0.03 |
| North America | 14.25 | 14.34 | 14.48 | 0.13 | 14.59 | 0.11 | 14.80 | 14.72 | 14.36 | 14.95 | 14.71 | 0.12 | 14.96 | 14.88 | 14.52 | 15.11 | 14.87 | 0.16 |
| Norway | 3.32 | 3.42 | 3.33 | -0.09 | 3.26 | -0.07 | 3.34 | 3.24 | 3.09 | 3.30 | 3.24 | -0.02 | 3.33 | 3.23 | 3.08 | 3.29 | 3.23 | -0.01 |
| UK | 2.69 | 2.54 | 2.52 | -0.01 | 2.33 | -0.20 | 2.20 | 2.14 | 2.02 | 1.97 | 2.08 | -0.24 | 2.12 | 2.05 | 1.95 | 1.89 | 2.00 | -0.08 |
| Denmark | 0.36 | 0.35 | 0.37 | 0.02 | 0.37 | 0.00 | 0.37 | 0.40 | 0.38 | 0.36 | 0.38 | 0.01 | 0.37 | 0.40 | 0.38 | 0.36 | 0.38 | 0.00 |
| Other Western Europe | 0.40 | 0.38 | 0.42 | 0.04 | 0.43 | 0.01 | 0.47 | 0.46 | 0.46 | 0.49 | 0.47 | 0.04 | 0.47 | 0.46 | 0.46 | 0.49 | 0.47 | 0.00 |
| Western Europe | 6.77 | 6.68 | 6.64 | -0.04 | 6.39 | -0.26 | 6.38 | 6.24 | 5.96 | 6.13 | 6.17 | -0.21 | 6.28 | 6.15 | 5.87 | 6.04 | 6.08 | -0.09 |
| Australia | 0.77 | 0.71 | 0.70 | 0.00 | 0.60 | -0.10 | 0.53 | 0.51 | 0.54 | 0.46 | 0.51 | -0.09 | 0.50 | 0.48 | 0.51 | 0.44 | 0.48 | -0.03 |
| Other Pacific | 0.07 | 0.07 | 0.06 | -0.01 | 0.06 | -0.01 | 0.05 | 0.05 | 0.05 | 0.04 | 0.05 | -0.01 | 0.05 | 0.05 | 0.05 | 0.04 | 0.05 | 0.00 |
| OECD Pacific | 0.85 | 0.78 | 0.77 | -0.01 | 0.65 | -0.11 | 0.59 | 0.56 | 0.59 | 0.50 | 0.56 | -0.09 | 0.55 | 0.53 | 0.56 | 0.48 | 0.53 | -0.03 |
| Total OECD | 21.87 | 21.81 | 21.89 | 0.08 | 21.63 | -0.26 | 21.77 | 21.53 | 20.91 | 21.58 | 21.44 | -0.18 | 21.80 | 21.57 | 20.95 | 21.63 | 21.48 | 0.04 |
| Brunei | 0.19 | 0.20 | 0.20 | 0.01 | 0.21 | 0.01 | 0.21 | 0.21 | 0.21 | 0.22 | 0.21 | 0.00 | 0.21 | 0.21 | 0.21 | 0.22 | 0.21 | 0.00 |
| India | 0.74 | 0.73 | 0.75 | 0.01 | 0.74 | 0.00 | 0.76 | 0.78 | 0.78 | 0.77 | 0.77 | 0.03 | 0.74 | 0.75 | 0.76 | 0.75 | 0.75 | -0.02 |
| Malaysia | 0.69 | 0.68 | 0.71 | 0.03 | 0.75 | 0.04 | 0.79 | 0.77 | 0.83 | 0.83 | 0.80 | 0.05 | 0.81 | 0.79 | 0.85 | 0.85 | 0.82 | 0.02 |
| Vietnam | 0.31 | 0.34 | 0.34 | 0.00 | 0.35 | 0.01 | 0.39 | 0.40 | 0.41 | 0.40 | 0.40 | 0.05 | 0.38 | 0.39 | 0.40 | 0.39 | 0.39 | -0.01 |
| Asia others | 0.25 | 0.25 | 0.26 | 0.01 | 0.30 | 0.04 | 0.32 | 0.35 | 0.38 | 0.30 | 0.34 | 0.04 | 0.33 | 0.36 | 0.39 | 0.31 | 0.35 | 0.01 |
| Other Asia | 2.18 | 2.20 | 2.27 | 0.07 | 2.36 | 0.09 | 2.47 | 2.50 | 2.60 | 2.53 | 2.53 | 0.17 | 2.47 | 2.50 | 2.60 | 2.53 | 2.53 | 0.00 |
| Argentina | 0.80 | 0.82 | 0.80 | -0.02 | 0.78 | -0.01 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | -0.05 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.00 |
| Brazil | 1.31 | 1.53 | 1.72 | 0.19 | 1.77 | 0.06 | 1.75 | 1.74 | 1.81 | 1.72 | 1.75 | -0.02 | 1.87 | 1.86 | 1.93 | 1.84 | 1.87 | 0.12 |
| Colombia | 0.70 | 0.61 | 0.58 | -0.03 | 0.55 | -0.03 | 0.52 | 0.54 | 0.54 | 0.50 | 0.52 | -0.03 | 0.54 | 0.56 | 0.56 | 0.52 | 0.54 | 0.02 |
| Ecuador | 0.40 | 0.41 | 0.40 | -0.01 | 0.42 | 0.02 | 0.51 | 0.53 | 0.53 | 0.65 | 0.55 | 0.13 | 0.54 | 0.55 | 0.56 | 0.68 | 0.58 | 0.03 |
| Trinidad & Tobago | 0.14 | 0.13 | 0.15 | 0.02 | 0.16 | 0.01 | 0.16 | 0.16 | 0.15 | 0.18 | 0.16 | 0.00 | 0.21 | 0.20 | 0.20 | 0.23 | 0.21 | 0.05 |
| L. America others | 0.22 | 0.23 | 0.22 | -0.01 | 0.22 | 0.00 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.00 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.02 |
| Latin America | 3.57 | 3.73 | 3.87 | 0.14 | 3.91 | 0.04 | 3.89 | 3.91 | 3.99 | 4.00 | 3.95 | 0.04 | 4.13 | 4.15 | 4.23 | 4.25 | 4.19 | 0.24 |
| Bahrain | 0.19 | 0.19 | 0.19 | 0.00 | 0.20 | 0.00 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.00 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.00 |
| Oman | 0.96 | 0.96 | 0.90 | -0.06 | 0.82 | -0.08 | 0.79 | 0.77 | 0.75 | 0.79 | 0.78 | -0.05 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.00 |
| Syria | 0.52 | 0.52 | 0.51 | -0.01 | 0.54 | 0.03 | 0.52 | 0.51 | 0.50 | 0.50 | 0.51 | -0.03 | 0.52 | 0.51 | 0.50 | 0.50 | 0.51 | 0.00 |
| Yemen | 0.45 | 0.47 | 0.46 | -0.01 | 0.44 | -0.02 | 0.43 | 0.42 | 0.42 | 0.41 | 0.42 | -0.02 | 0.43 | 0.42 | 0.42 | 0.41 | 0.42 | 0.00 |
| Middle East | 2.12 | 2.14 | 2.06 | -0.07 | 2.00 | -0.06 | 1.94 | 1.89 | 1.87 | 1.90 | 1.90 | -0.10 | 1.92 | 1.91 | 1.89 | 1.89 | 1.90 | 0.00 |
| Angola | 0.75 | 0.74 | 0.89 | 0.15 | 0.87 | -0.02 | 0.94 | 0.93 | 0.98 | 1.03 | 0.97 | 0.10 | 1.13 | 1.11 | 1.17 | 1.23 | 1.16 | 0.19 |
| Chad | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.10 | 0.18 | 0.23 | 0.23 | 0.19 | 0.16 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.04 |
| Congo | 0.27 | 0.27 | 0.25 | -0.01 | 0.24 | -0.01 | 0.24 | 0.22 | 0.22 | 0.24 | 0.23 | -0.01 | 0.24 | 0.22 | 0.22 | 0.24 | 0.23 | 0.00 |
| Egypt | 0.80 | 0.76 | 0.75 | -0.01 | 0.75 | 0.00 | 0.73 | 0.71 | 0.71 | 0.71 | 0.71 | -0.04 | 0.74 | 0.72 | 0.72 | 0.72 | 0.72 | 0.01 |
| Equatorial Guinea | 0.11 | 0.14 | 0.20 | 0.06 | 0.24 | 0.04 | 0.34 | 0.34 | 0.34 | 0.44 | 0.36 | 0.12 | 0.37 | 0.37 | 0.37 | 0.48 | 0.39 | 0.03 |
| Gabon | 0.34 | 0.31 | 0.30 | -0.01 | 0.25 | -0.05 | 0.25 | 0.24 | 0.24 | 0.25 | 0.24 | -0.01 | 0.25 | 0.24 | 0.24 | 0.25 | 0.24 | 0.00 |
| South Africa | 0.18 | 0.18 | 0.19 | 0.01 | 0.20 | 0.01 | 0.23 | 0.23 | 0.23 | 0.28 | 0.24 | 0.04 | 0.23 | 0.23 | 0.23 | 0.28 | 0.24 | 0.00 |
| Sudan | 0.18 | 0.21 | 0.24 | 0.03 | 0.27 | 0.03 | 0.29 | 0.31 | 0.34 | 0.32 | 0.31 | 0.05 | 0.34 | 0.37 | 0.40 | 0.38 | 0.37 | 0.06 |
| Africa other | 0.22 | 0.20 | 0.20 | 0.00 | 0.20 | 0.00 | 0.19 | 0.21 | 0.21 | 0.20 | 0.20 | 0.01 | 0.19 | 0.21 | 0.21 | 0.20 | 0.20 | 0.00 |
| Africa | 2.84 | 2.80 | 3.03 | 0.23 | 3.05 | 0.02 | 3.31 | 3.37 | 3.48 | 3.69 | 3.46 | 0.42 | 3.71 | 3.69 | 3.77 | 4.00 | 3.79 | 0.33 |
| Total DCs | 10.71 | 10.86 | 11.23 | 0.37 | 11.32 | 0.09 | 11.62 | 11.67 | 11.94 | 12.13 | 11.84 | 0.53 | 12.24 | 12.23 | 12.50 | 12.67 | 12.41 | 0.57 |
| FSU | 7.91 | 8.53 | 9.33 | 0.79 | 10.27 | 0.94 | 10.78 | 11.07 | 11.32 | 11.63 | 11.20 | 0.94 | 11.35 | 11.65 | 11.92 | 12.24 | 11.79 | 0.59 |
| Russia | 6.49 | 6.99 | 7.62 | 0.63 | 8.46 | 0.84 | 8.89 | 9.12 | 9.35 | 9.65 | 9.25 | 0.79 | 9.35 | 9.58 | 9.82 | 10.14 | 9.72 | 0.47 |
| Kazakhstan | 0.71 | 0.80 | 0.94 | 0.14 | 1.03 | 0.09 | 1.12 | 1.15 | 1.20 | 1.21 | 1.17 | 0.14 | 1.17 | 1.21 | 1.27 | 1.27 | 1.23 | 0.06 |
| Azerbaijan | 0.27 | 0.30 | 0.31 | 0.01 | 0.31 | 0.00 | 0.31 | 0.31 | 0.31 | 0.29 | 0.30 | -0.01 | 0.37 | 0.37 | 0.37 | 0.35 | 0.36 | 0.06 |
| FSU Others | 0.44 | 0.45 | 0.45 | 0.00 | 0.47 | 0.02 | 0.47 | 0.49 | 0.46 | 0.49 | 0.48 | 0.01 | 0.47 | 0.49 | 0.46 | 0.49 | 0.48 | 0.00 |
| Other Europe | 0.18 | 0.18 | 0.18 | -0.01 | 0.17 | 0.00 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.00 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.00 |
| China | 3.23 | 3.30 | 3.39 | 0.10 | 3.41 | 0.01 | 3.43 | 3.47 | 3.51 | 3.43 | 3.46 | 0.05 | 3.44 | 3.49 | 3.52 | 3.45 | 3.47 | 0.02 |
| Non-OPEC production | 43.90 | 44.68 | 46.01 | 1.33 | 46.79 | 0.78 | 47.76 | 47.90 | 47.85 | 48.94 | 48.12 | 1.33 | 49.00 | 49.10 | 49.06 | 50.16 | 49.33 | 1.21 |
| Processing gains | 1.65 | 1.69 | 1.73 | 0.04 | 1.80 | 0.06 | 1.85 | 1.81 | 1.81 | 1.87 | 1.83 | 0.04 | 1.85 | 1.81 | 1.81 | 1.87 | 1.83 | 0.00 |
| Non-OPEC supply | 45.55 | 46.37 | 47.74 | 1.37 | 48.58 | 0.84 | 49.61 | 49.71 | 49.66 | 50.81 | 49.95 | 1.37 | 50.85 | 50.91 | 50.87 | 52.02 | 51.16 | 1.21 |
| OPEC NGL | 3.18 | 3.40 | 3.42 | 0.01 | 3.57 | 0.16 | 3.65 | 3.66 | 3.71 | 3.78 | 3.70 | 0.13 | 3.78 | 3.80 | 3.82 | 3.84 | 3.81 | 0.11 |
| Non-conventional oils | 0.17 | 0.18 | 0.20 | 0.02 | 0.14 | -0.06 | 0.23 | 0.23 | 0.26 | 0.26 | 0.25 | 0.11 | 0.31 | 0.31 | 0.34 | 0.34 | 0.33 | 0.08 |
| OPEC NGLs + non-conventional oils | 3.34 | 3.58 | 3.62 | 0.03 | 3.71 | 0.09 | 3.88 | 3.89 | 3.97 | 4.04 | 3.95 | 0.24 | 4.09 | 4.11 | 4.16 | 4.18 | 4.14 | 0.19 |
| Total Non-OPEC and OPEC NGLs | 48.90 | 49.95 | 51.36 | 1.40 | 52.29 | 0.93 | 53.49 | 53.61 | 53.63 | 54.85 | 53.90 | 1.61 | 54.94 | 55.02 | 55.03 | 56.21 | 55.30 | 1.40 |

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

## Table 27
## Non-OPEC Rig Count

| | 2000 | 2001 | Change 01/00 | 1Q02 | 2Q02 | 3Q02 | 4Q02 | 2002 | Change 02/01 | 1Q03 | 2Q03 | 3Q03 | 4Q03 | 2003 | Change 03/02 | 1Q04 | 2Q04 | Aug04 | Sep04 | 3Q04 | Change Sep04- Aug04 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| USA | 916 | 1,156 | 240 | 818 | 806 | 853 | 847 | 831 | -325 | 901 | 1,028 | 1,088 | 1,109 | 1,032 | 201 | 1,119 | 1,164 | 1,234 | 1240 | 1229 | 6 |
| Canada | 344 | 342 | -2 | 383 | 147 | 250 | 283 | 266 | -76 | 494 | 203 | 383 | 408 | 372 | 106 | 528 | 202 | 353 | 273 | 326 | -80 |
| Mexico | 44 | 54 | 10 | 63 | 61 | 62 | 76 | 65 | 11 | 82 | 84 | 96 | 107 | 92 | 27 | 107 | 113 | 112 | 113 | 111 | 1 |
| North America | 1,305 | 1,552 | 247 | 1,264 | 1,014 | 1,165 | 1,206 | 1,162 | -390 | 1,476 | 1,315 | 1,567 | 1,624 | 1,496 | 334 | 1,754 | 1,479 | 1,699 | 1626 | 1665 | -73 |
| Norway | 22 | 23 | 1 | 20 | 20 | 17 | 19 | 19 | -4 | 18 | 19 | 20 | 18 | 19 | 0 | 19 | 18 | 13 | 13 | 14 | 0 |
| UK | 18 | 24 | 6 | 28 | 30 | 24 | 23 | 26 | 2 | 19 | 21 | 22 | 16 | 20 | -6 | 15 | 19 | 15 | 15 | 14 | 0 |
| Denmark | 3 | 4 | 1 | 5 | 4 | 3 | 5 | 4 | 0 | 3 | 5 | 3 | 4 | 4 | 0 | 4 | 4 | 3 | 1 | 3 | -2 |
| Other Western Europe | 82 | 44 | -38 | 39 | 38 | 33 | 34 | 36 | -8 | 36 | 34 | 38 | 37 | 36 | 0 | 31 | 30 | 29 | 29 | 27 | 0 |
| Western Europe | 125 | 95 | -30 | 92 | 91 | 76 | 81 | 85 | -10 | 77 | 78 | 83 | 75 | 78 | -7 | 69 | 70 | 60 | 58 | 57 | -2 |
| Australia | 10 | 10 | 0 | 9 | 9 | 9 | 9 | 9 | -1 | 10 | 10 | 11 | 13 | 11 | 2 | 12 | 13 | 16 | 20 | 18 | 4 |
| Other Pacific | 7 | 9 | 2 | 8 | 7 | 7 | 10 | 8 | -1 | 8 | 7 | 8 | 6 | 7 | -1 | 7 | 8 | 10 | 9 | 9 | -1 |
| OECD Pacific | 17 | 20 | 3 | 17 | 16 | 16 | 19 | 17 | -3 | 18 | 17 | 18 | 19 | 18 | 1 | 19 | 22 | 26 | 29 | 26 | 3 |
| Total OECD* | 1,447 | 1,667 | 220 | 1,373 | 1,121 | 1,257 | 1,306 | 1,264 | -403 | 1,571 | 1,411 | 1,669 | 1,719 | 1,592 | 328 | 1,842 | 1,570 | 1,785 | 1713 | 1749 | -72 |
| Brunei | 2 | 3 | 1 | 2 | 3 | 3 | 3 | 3 | 0 | 3 | 4 | 4 | 2 | 3 | 0 | 2 | 3 | 3 | 2 | 3 | -1 |
| India | 49 | 50 | 1 | 52 | 54 | 55 | 57 | 55 | 5 | 59 | 60 | 61 | 62 | 60 | 5 | 64 | 68 | 71 | 73 | 71 | 2 |
| Malaysia | 7 | 11 | 4 | 12 | 13 | 15 | 14 | 14 | 3 | 14 | 13 | 16 | 15 | 14 | 0 | 15 | 15 | 14 | 13 | 13 | -1 |
| Papua New Guinea | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 2 | 2 | 1 | 2 | 1 | 3 | 2 | 0 | 0 | 0 | 0 |
| Vietnam | 8 | 8 | 0 | 8 | 8 | 9 | 10 | 9 | 1 | 9 | 9 | 10 | 8 | 9 | 0 | 8 | 9 | 10 | 9 | 8 | -1 |
| Asia others | 16 | 22 | 6 | 26 | 29 | 33 | 32 | 30 | 8 | 31 | 28 | 26 | 30 | 29 | -1 | 27 | 31 | 31 | 32 | 31 | 1 |
| Other Asia | 83 | 95 | 12 | 100 | 109 | 116 | 117 | 111 | 16 | 117 | 115 | 119 | 118 | 117 | 6 | 119 | 128 | 129 | 129 | 127 | 0 |
| Argentina | 57 | 71 | 14 | 49 | 45 | 49 | 54 | 49 | -22 | 59 | 66 | 59 | 57 | 60 | 11 | 64 | 73 | 73 | 71 | 73 | -2 |
| Brazil | 23 | 28 | 5 | 27 | 27 | 27 | 26 | 27 | -1 | 27 | 27 | 27 | 25 | 26 | -1 | 24 | 26 | 26 | 26 | 26 | 0 |
| Colombia | 14 | 15 | 1 | 13 | 13 | 10 | 9 | 11 | -4 | 10 | 9 | 11 | 12 | 11 | 0 | 8 | 9 | 9 | 9 | 9 | 0 |
| Ecuador | 7 | 10 | 3 | 10 | 9 | 8 | 8 | 9 | -1 | 9 | 11 | 8 | 8 | 9 | 0 | 7 | 9 | 12 | 12 | 12 | 0 |
| Peru | 4 | 4 | 0 | 2 | 2 | 2 | 1 | 2 | -2 | 2 | 2 | 3 | 3 | 3 | 1 | 2 | 2 | 3 | 3 | 3 | 0 |
| Trinidad & Tobago | 4 | 5 | 1 | 5 | 4 | 4 | 4 | 4 | -1 | 3 | 3 | 3 | 3 | 3 | -1 | 3 | 4 | 4 | 4 | 4 | 0 |
| L. America others | 12 | 7 | -5 | 4 | 4 | 4 | 5 | 5 | -2 | 3 | 4 | 4 | 5 | 4 | -1 | 6 | 6 | 4 | 3 | 3 | -1 |
| Latin America | 120 | 141 | 21 | 110 | 103 | 104 | 107 | 106 | -35 | 113 | 121 | 114 | 114 | 116 | 10 | 114 | 127 | 131 | 128 | 129 | -3 |
| Bahrain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oman | 24 | 25 | 1 | 27 | 29 | 30 | 32 | 29 | 4 | 33 | 34 | 36 | 36 | 35 | 6 | 36 | 35 | 34 | 33 | 34 | -1 |
| Syria | 14 | 19 | 5 | 20 | 21 | 23 | 24 | 22 | 3 | 23 | 23 | 26 | 23 | 24 | 2 | 24 | 24 | 24 | 23 | 23 | -1 |
| Yemen | 6 | 6 | 0 | 8 | 9 | 9 | 11 | 9 | 3 | 11 | 10 | 9 | 7 | 9 | 0 | 7 | 8 | 10 | 10 | 9 | 0 |
| Middle East | 45 | 50 | 5 | 57 | 60 | 64 | 69 | 62 | 12 | 70 | 68 | 72 | 68 | 70 | 8 | 69 | 68 | 71 | 70 | 69 | -1 |
| Angola | 6 | 5 | -1 | 5 | 6 | 6 | 5 | 5 | 0 | 3 | 4 | 3 | 6 | 4 | -1 | 4 | 3 | 2 | 3 | 3 | 1 |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Congo | 3 | 1 | -2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 2 | 2 | 2 | 3 | 3 | 1 |
| Egypt | 18 | 22 | 4 | 22 | 23 | 22 | 23 | 23 | 1 | 26 | 26 | 27 | 26 | 26 | 3 | 27 | 28 | 27 | 33 | 29 | 6 |
| Gabon | 2 | 2 | 0 | 1 | 2 | 2 | 2 | 2 | 0 | 3 | 4 | 1 | 3 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 0 |
| South Africa | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Africa other | 5 | 4 | -1 | 11 | 12 | 12 | 12 | 12 | 8 | 12 | 14 | 12 | 14 | 13 | 1 | 15 | 18 | 21 | 20 | 20 | -1 |
| Africa | 34 | 36 | 2 | 41 | 45 | 44 | 43 | 43 | 7 | 45 | 50 | 44 | 51 | 48 | 5 | 48 | 53 | 54 | 61 | 56 | 7 |
| Total DCs | 282 | 322 | 40 | 307 | 317 | 328 | 336 | 322 | 0 | 346 | 354 | 350 | 350 | 350 | 28 | 350 | 376 | 385 | 388 | 381 | 3 |
| FSU | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Europe | 3 | 3 | 0 | 2 | 2 | 2 | 2 | 2 | -1 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 2 | 2 | 0 |
| China | 0 | 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 | 260 | 1,682 | 1,440 | 1,587 | 1,644 | 1,588 | -404 | 1,919 | 1,767 | 2,021 | 2,071 | 1,944 | 356 | 2,194 | 1,949 | 2,172 | 2,103 | 2,132 | -69 |

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

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Data is provided by Data Services Department.

# Data Summary                October 2004

## OPEC Basket average price
*US$ per barrel*

⬆ *up 0.09 in September*

| | |
|---|---|
| **September 2004** | **40.36** |
| August 2004 | 40.27 |
| Year-to-date | 34.75 |

## September OPEC production
*in million barrels per day, according to secondary sources*

| | | | | | |
|---|---|---|---|---|---|
| Algeria | 1.25 | Kuwait | 2.41 | Saudi Arabia | 9.50 |
| Indonesia | 0.95 | SP Libyan AJ | 1.58 | UAE | 2.47 |
| IR Iran | 3.95 | Nigeria | 2.40 | Venezuela | 2.60 |
| Iraq | 2.20 | Qatar | 0.81 | **TOTAL** | **30.12** |

## Supply and demand
*in million barrels per day*

| **2004** | | **2005** | |
|---|---|---|---|
| World demand | 81.79 | World demand | 83.41 |
| Non-OPEC supply | 53.89 | Non-OPEC supply | 55.30 |
| **Difference** | **27.90** | **Difference** | **28.11** |

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

## Stocks

***US commercial oil stocks displayed a steeper than usual decline of 16.1 mb in September***

## World economy

***World GDP growth revised up to 4.9% for 2004 and revised down to 4.1% for 2005***

*Issued 18 October 2004*
*Data covers period up to end of September 2004 unless otherwise stated*
***Next report to be issued on 18 November 2004***