

OPEC

Organization of the Petroleum Exporting Countries

Monthly Oil Market Report

November 2004

Feature Article:

Downstream challenges hinder supply efforts

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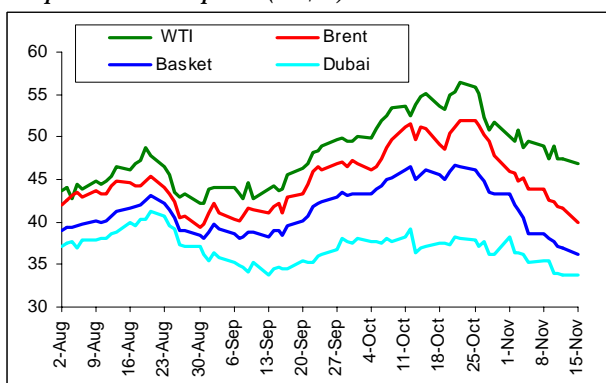
Oil Market Highlights

- The weak link in the world economy is the Euro-zone. Third quarter GDP growth was only 1.2% at an annual rate, which indicates a continued slowdown in growth since the first quarter. The outcome for Japan in the third quarter was also below expectations although most of the weakness was due to fluctuations in volatile capital expenditure. In contrast, the US data for the third quarter confirmed that the economic expansion continued at a solid pace thanks to strong exports and retail sales. There are some signs of moderating demand in China but no overall pattern of slower growth is evident. Chinese retail sales in October grew by 14% and industrial production by 15%, rates that were only slightly lower than those achieved earlier in the year. At the end of October, China raised interest rates for the first time in nine years, indicating that a 'soft landing' is not yet assured and that inflationary risks remain.
- The outlook for 2005 has been affected by the further rise in the oil price. In September the consensus of forecasters expected the oil price to settle at an average level of about \$37-38/b on a WTI basis for 2005. The strength of the market in October led analysts to revise this projection, so that an average price of \$42-43/b now underlies most forecasts. This 10% increase in the consensus oil price assumption has reduced the forecast of world GDP growth by 0.1% to 4%.
- The Euro-zone growth forecast for 2005 has been cut to 1.8% as the recent appreciation of the euro will reduce European exports. The forecast for Japan has been cut by 0.4% to 1.6% following two quarters of disappointing growth and signs of weakness in other Asian economies. The US economy is expected to experience a smaller reduction in the growth forecast of 0.1% and should still benefit from the strong economic momentum of 2004. As a result, the US economy is expected to grow by 3.1% in 2005, in line with the 20-year average. Higher oil prices will tend to reduce Chinese growth but the main factor for 2005 will be the uncertain impact of a more restrictive monetary policy. The growth rate forecast for China is unchanged at 7.6% for 2005.
- The OPEC Reference Basket in October continued to strive towards all-time highs before easing steadily late in the month. Concerns over tight winter fuel supplies amid lingering production disruption from the US Gulf Coast and a strike threat — later withdrawn — in Nigeria pushed the Basket price to record levels. The daily Basket price saw its current peak of \$46.61/b on 21 October, while the monthly average jumped about \$5 over the previous month to a record high of \$45.37/b. The yearly average to October also set a new high of \$35.76/b, up \$7.66 over the same period in 2003. By the start of November, rising OPEC production and the resultant stock build helped to dampen prices, causing the month-to-date average to drop a hefty \$4.83/b, while the year-to-date increased to \$35.95/b.
- Lower refinery runs as a result of the pre-winter maintenance schedule, particularly in the USA and Europe, have tightened the distillate market around the globe and boosted the distillate crack versus benchmark crudes in October. Lower runs have also caused an earlier than normal stock draw in the US market. However, with the completion of refinery turnarounds and a switch to maximum distillate mode as well as the relatively mild weather across the board, the fear of a winter heating oil shortage has eased, resulting in a recent downtrend in distillate product prices. But some concern remains about the ability of refiners to sustain operations at near capacity to ensure an ample supply of heating oil, and it seems that distillate products will drive the market in the next few months.
- OPEC spot fixtures experienced a robust increase of 15% or 2 mb/d in October to stand at nearly 13.6 mb/d for the first time in five years. OPEC's share of global spot chartering reached 67.5%. On a monthly average, freight rates for crude oil reached a 30-year high after having increased sharply during October thanks to surging winter crude oil demand and lack of tanker availability. Aframax witnessed a spectacular increase, while freight rates within the Mediterranean surged by 192 points to WS392. The product tanker market also remained very tight, especially on the Middle East eastbound route, where freight rates increased by 154 points to reach a monthly average of WS368 as a result of surging imports by Japan.
- The world oil demand estimate for the current year has been slightly adjusted downwards to account for the slowdown in Chinese consumption in the second half of the year as well as an expected lower apparent demand in the FSU due to the lower pace of economic activity. World oil demand growth estimates for 2005 have once again been adjusted to account for the lower rate of global economic growth, with China remaining the wild card for next year.
- OPEC crude oil production in October, based on secondary sources, is estimated at 30.23 mb/d, an increase of 0.08 mb/d over the revised September figure. Non-OPEC oil supply for 2004 is estimated at 49.91 mb/d, which is 1.32 mb/d over the 48.59 mb/d estimated for 2003. Non-OPEC supply in 2005 is expected to reach 51.12 mb/d, an increase of 1.21 mb/d over the 2004 forecast. Net FSU exports for 2002 and 2003 are estimated at 5.58 mb/d and 6.49 mb/d respectively, and expected to rise to 7.32 mb/d and 7.76 mb/d in 2004 and 2005 respectively.
- A contra-seasonal build of 1.3 mb, or 0.05 mb/d, has been observed in US commercial oil stocks during the period 1-29 October 2004. The weekly data up to 12 November further confirms this trend, particularly for crude oil. This brings the total to 963.7 mb which is 7.3 mb or less than 1% below the level registered last year. In Eur-16 (EU plus Norway), total oil stocks showed a slight seasonal draw of 0.17 mb/d to stand at 1,090.6 mb, which is about 2% higher than that registered last year. At the end of September 2004, total commercial oil stocks in Japan stood at 183.4 mb, 0.47 mb/d or about 8% above the August level, but still 10% below the year-ago figure.

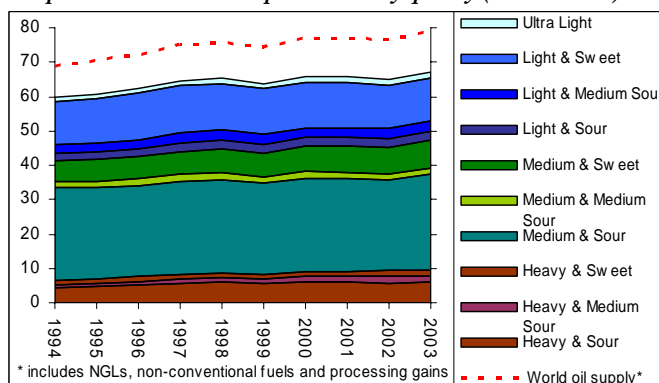
Downstream challenges hinder supply efforts

- Perceptions in the crude oil and product market have shifted over the last two weeks. This is mainly due to the recovery in output of US Gulf Coast sweet crude, the increase in North Sea production following the end of maintenance and the reemergence of refineries in the USA and Europe from autumn turnaround, especially those with conversion facilities. Sensing a change in sentiment, speculators who had staked a strong position in light sweet crudes began to liquidate their holdings, causing a substantial drop in net-long positions to only 5,236 lots on 5 November, the lowest level seen this year. Together these bearish factors knocked the light sweet benchmark crudes WTI and Brent off record peaks of \$56.42/b and \$51.91/b on 22 October, to drop as much as \$9.60/b and \$12.10/b as of 15 November, while heavy benchmark Dubai crude slipped \$4.20/b to \$33.45/b (**Graph 1**). Following these strong downward movements, the forward markets for WTI and Brent moved into contango — Dubai had been in contango since the previous month — marking a reassertion of fundamental factors on the current market.
- Despite the recent sharp plunge in sweet crude prices, the spread between light-sweet and heavy-sour remains unusually wide at as much as \$14/b. One reason for this has been the high demand growth for light products in 2004, which is estimated at close to 2 mb/d, which represents more than 75% of total incremental oil demand for the year. Another is technical constraints on the refinery side for substituting costly light-sweet crude with more readily available heavy-sour grades, as just 45% of 85.4 mb/d of total refinery capacity is equipped with conversion units. Still, given the expected supply increase from Central Asia and the coming onstream of new desulphurization units, the unusually wide sweet/sour spread should narrow somewhat in 2005.

Graph 1: Crude oil prices (US\$/b)

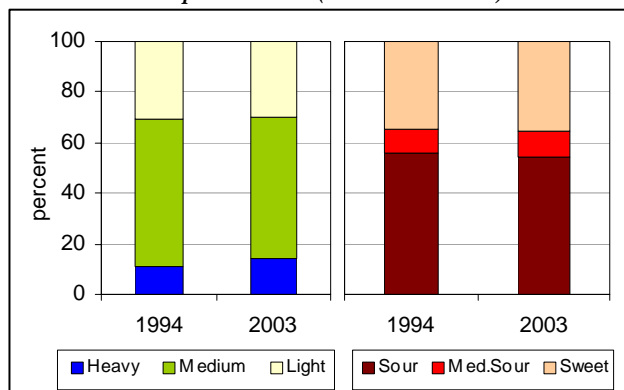


Graph 2: World crude oil production by quality (source: ENI)

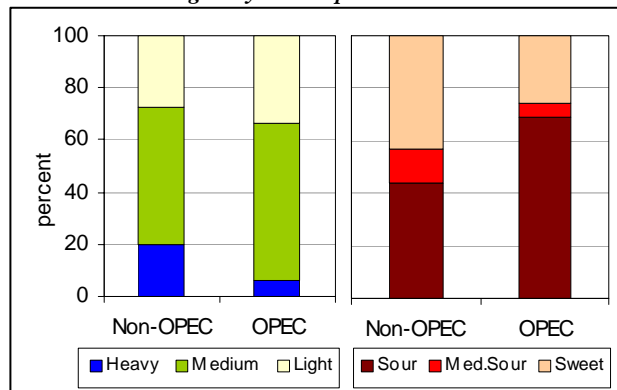


- A review of the historical trend and pattern of world crude oil production by quality shown in **Graph 2** reveals that, at around 30 mb/d, medium-sour crude represent the largest share of global output, followed by light-sweet grades at under 20 mb/d. Despite slight changes, this trend has remained stable for at least the last decade up to 2003.
- As illustrated in **Graph 3** which shows the ratio of crude oil production by grade, medium crude represented the largest share of global output at about 56%, while light and heavy grades followed with close to 30% and 14% respectively. Compared with 1994, heavy crude has increased almost 3% in the last decade, while light and medium crudes experienced a decline of just over 1.3% and 1.6% respectively. The breakdown of 2003 crude oil production by sulphur content suggests that sour crude represented the largest share of world oil output at over 54%, followed by sweet and medium-sour grades with about 36% and 10% respectively. For the period 1994-2003, medium-sour and sweet crudes saw an increase of 1.2% and 0.4% respectively, while sour declined 1.6%.
- As these figures show, the trend of the various crude grades has not changed drastically in the last decade. However, with the capacity expansion plans in the OPEC countries, which are producing mainly medium grades, and the possible decline in North Sea production, which is overwhelming light crudes, this ratio should change in favour of medium and heavy grades.

Graph 3: The ratio of world oil production based on gravity and sulphur content (2003 versus 1994)



Graph 4: The ratio of OPEC and Non-OPEC production in 2003 based on gravity and sulphur content



- It is important to note that the above data covers global crude oil production in 2003, which represents 67.2 mb/d out of total world supply of 79.2 mb/d. It does not cover other contributors to the global oil supply, such as NGLs, non-conventional fuels and processing gains. OPEC crude oil production accounts for 27.0 mb/d of this figure, while non-OPEC represents the remaining 40.2 mb/d. **Graph 4** shows the breakdown of non-OPEC and OPEC crude according to grade.
- Further pressures on light-sweet supply are expected to come in 2005, as the USA and EU have separate plans to introduce stricter new specifications for sulphur content in gasoline, with the USA adopting on average 90 PPM sulphur for gasoline and EU moving to 50 PPM for gasoline and diesel. Meanwhile, the main contributors to world oil demand growth in Asia, China and India, have also introduced euro II specification which calls for 500 PPM sulphur content for transportation fuel oil in 2004.
- It remains to be seen whether the steady fall in prices over the last three weeks confirms that the peak in prices for this year is behind us. Certainly, the extensive efforts undertaken by OPEC Member Countries have largely contributed to the recent moderating trend in prices. To achieve this end, OPEC substantially increased its production ceiling this year in three stages, most recently with a rise of 1 mb/d as of 1 November, while actual OPEC production remained strong, with output for October reported at over 30 mb/d, more than 3 mb/d above the 2003 average. This has resulted in a steady rise in OECD stock levels since the second quarter, with demand in China appearing to have moderated to more sustainable levels. At the same time, Member Countries have accelerated production capacity expansion to meet market requirements, further easing supply concerns. Together, these efforts have ensured a healthy situation on the supply side of the market, and OPEC remains ready to respond if the situation warrants.
- In the meantime, the product market — in addition to the crude market — recently shifted into contango, which may contribute to a counter-seasonal stock build. Such a build is necessary for seasonal-important heating oil stocks in the USA, which are currently at 15% or about 8 mb lower than last year's level. While this situation should be corrected once refineries return from maintenance, colder-than-normal weather conditions could add temporary price pressures as winter progresses.
- Overall, the extent to which prices will ease also largely depends on developments in the downstream sector, as the limited flexibility of refineries to process heavy crudes has placed a relatively high floor on prices. In normal circumstances, the huge differentials seen recently would encourage refiners to switch from expensive light crudes to lower-cost heavy grades. However, this has not occurred to any meaningful degree in the current market as most refiners are already running their conversion units at near full capacity. This situation underlines the urgent need for greater investment in the downstream sector to ensure sufficient conversion capacity to avoid a further mismatch in the market, which as a result would jeopardize the extensive efforts being made on the supply side. Until then, the market will remain exposed to speculative movements amplifying the fears of any potential supply shortfalls, particularly for light-sweet grades.

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	4.0	2.5	3.1	1.6	1.8

Industrialised countries

United States of America

Global financial imbalances, prospect of weaker dollar cloud outlook for 2005

It is now clear that the mid-year weakness in the American economy was only a pause as GDP growth in the third quarter was a solid 3.7%. The labour market data for October was particularly encouraging as nonfarm payroll employment rose by 337,000 — moreover the September gain was revised up by over 40,000. Latest data suggest that the economy's growth momentum is being supported by advances in capital spending and exports. Exports have recovered sharply following a June decline and export orders rose sharply in October. The third quarter growth rate of consumer spending was 4.6% but fourth quarter growth is unlikely to be much above 2% since the October rise in energy prices will probably depress consumer spending to some extent. The Federal Reserve saw no reason to depart from the process of gradually raising US interest rates to more normal levels and increased the Federal Funds rate to 2% on 10 November. A further hike in interest rates is likely in December since US inflation trends are causing some concern. The core rate of inflation in September rose to 0.3% month-on-month, following increases of only 0.1% in previous months, while the rate of increase of the overall consumer price index will probably exceed 3% by the end of 2004. The improvement in productivity growth is slowing and unit labour costs have started to increase following a two-year decline. **Overall it seems that 2004 will be a successful year for the American economy but 2005 may be more difficult. In the third year of a recovery it is normal to expect cyclical downturns in productivity, profits growth and capital spending but the extraordinary levels of budget and trade imbalances will impose additional strains.** Consumers expenditure will be held back by the need to rebuild savings whilst higher interest rates and lower profit growth will impact capital spending. It seems likely that the dollar will continue to weaken through 2005 and this improvement in competitiveness should help exports grow at a higher rate next year. Nevertheless the gap between exports and imports is so wide that the current account deficit will probably remain at least 5% of GDP. If the current account deficit were to stabilise at 5% of GDP, America's net foreign liabilities (currently about one quarter of GDP) would rise to well over 50% of GDP by 2010. If the dollar readjustment is gradual the impact on the domestic economy should be beneficial. **The major concern is that a sharp fall in the dollar might impact US financial markets and reduce external confidence in American financial assets.** Much of the weakness in the dollar in the period since 2002 has taken place against the euro. It now seems more likely that emerging market currencies will strengthen against the dollar and in this situation Asian central banks may be less enthusiastic purchasers of American Treasury bonds. Moreover, there is no sign of any improvement in the longterm budgetary outlook since no progress has been made in controlling entitlement spending. Financial markets currently anticipate gradually higher interest rates in 2005 but significant interest rate volatility would affect business and consumer confidence, especially considering the high levels of debt of many American households.

Japan

Appreciation of the yen will slow export growth but domestic demand remains stable. The outlook for China is a major uncertainty.

Japan's GDP rose by less than expected in the third quarter, growing by only 0.3% at an annualized rate. The major reasons for the weakness were a decline in private capital spending and a remarkable slowdown in export growth. Private and government consumption continued to grow in line with previous trends and import growth was also relatively strong. The outlook for private consumption is reasonably encouraging since real hourly wages are expected to grow in 2005 but private capital spending seems to have passed the cyclical peak. The prospects for exports are unclear and will be affected by any decline in the US dollar. **Appreciation of the yen will have a negative effect on export receipts and will reduce the yen value of profits earned overseas.** The exposure varies by industry. Automobile companies will suffer from both reduced export earnings and lower North American profits. Producers of electrical machinery should suffer less since their exports are better diversified and most of their imports are denominated in the US dollar or linked currencies. Provided that any currency appreciation is gradual, it seems likely that the Japanese authorities will tolerate a higher level of the yen but the effect will be to reduce the expected growth rate of the economy for 2005. **Japanese GDP is**

Poor third quarter data indicates that Euro-zone growth may fall in 2005

forecast to grow by only 1.6% in 2005 but this slowdown reflects the naturally high exposure of the economy to global activity and the fact that private consumption and private capital investment grew particularly rapidly in 2004. Such momentum could hardly be maintained, especially since both the US and Chinese economies are expected to slow noticeably in 2005. The outlook for China is important and recent data suggest that growth is no longer accelerating although convincing signs of a slowdown are hard to find. Chinese interest rates were raised for the first time in nine years on October 28 and import data for October indicated that internal demand has begun to moderate. **Thus far it appears that the tightening of credit and other administrative actions have had some success in achieving a gradual deceleration from the unsustainable pace of the first quarter of this year.** This means that Japan and other linked Asian economies should not have to face the possibility of aggressively restrictive policies from the Chinese authorities, although the period of very high rates of growth of exports to the Chinese market is certainly in the past.

Euro-zone

Forecasts of economic growth for the Euro-zone for 2005 have been revised down below the already disappointing growth rate expected for 2004. In 2005, growth in the Euro-zone is forecast to be only 1.8%. The growth rate of the Euro-zone began 2004 strongly at 2.8% in the first quarter but growth weakened in the second quarter, falling to 2%. **Data for the third quarter of 2004 showed a further decline, as the growth rate was only 1.2%,** well below expectations of up to 2%. Growth weakened in Germany, France and the UK, although Italy showed some stability as the Italian growth rate remained constant at 1.6%. Spain also went against the general trend and Spanish growth was the highest of the major economies, reaching 2.4% in this period. **Germany grew by only 0.4% annualized in the third quarter,** while additionally growth was revised down in the second quarter to 1.6% from 2%. The poor German performance relates mainly to a clear loss of momentum in net exports. Exports to the US, Asia and non-EU Europe actually fell in the third quarter – moreover import growth has picked up significantly this year with imports from Europe and Asia rising strongly. Net trade is particularly important to the German economy, accounting for about 6% of GDP. **It is notable that the decline in German exports in the third quarter did not reflect any overall slowdown in global growth. Rather it has been the loss in competitiveness driven by the strong euro since late 2003 which has been responsible.** This explanation is supported by an analysis of the destination of German exports which shows that declines have been greatest to the US and dollar-linked regions, notably Asia. **French growth showed the greatest setback, falling to 0.4% from 2.4% in the second quarter.** France had been the leading major Euro-zone economy during the first half of this year but a marked weakness in consumer spending halted this expansion. This data poses a dilemma for the European Central Bank. It had been expected that European interest rates might be increased at the end of this year or early in 2005 to counteract the rather persistent rate of inflation in the Euro-zone. It now seems unlikely that the Bank would attempt to force inflation lower against a background of very low growth. At the same time the Bank must consider its reaction to the stronger euro. The firmer currency will help to restrain the impact of imported inflation within the Euro-zone but will also exacerbate the developing slump in the global demand for European exports. ECB intervention is not expected unless the euro were to push through \$1.40. Policymakers will rather wait to see if the third quarter trends in currencies and growth are maintained. The most likely outcome is that euro interest rates remain at current levels until well into 2005 whilst currency intervention will be reserved as a tool of last resort. **The prospect of lower interest rates cannot be ruled out if the growth performance shows no improvement.**

Growth slows as Russia catches “Dutch Disease”

Former Soviet Union

Recent data suggests that the impressive momentum of the Russia economy slowed markedly in the third quarter, mainly as a result of slower growth in exports and agricultural production. Total output of goods and services in September was only 2.8% higher than the level of 2003. Construction activity was depressed by the banking problems earlier in the year which restricted the availability of credit. The growth in capital spending by businesses slowed and this affected the output of the engineering sector. The decline in the growth momentum was widespread across many industries — even production in the metals industry was little higher than the result for 2003. **The explanation for the slowdown in growth might be found in the lower rate of growth of exports in the second quarter of the year. Exports, in turn, have been affected by the rather depressed performance of the European economy in 2004, higher Russian inflation and the rising value of the rouble.** Inflation in Russia remained at over 11% in September and it seems unlikely that inflation will fall below the target rate of 10% before the end of this year. Although export growth has slowed recently, the level of the trade surplus

Third quarter growth remains on track for the region

remains very high. The surplus for the first eight months of 2004 exceeded the total for 2003, indeed the increase in the level of foreign exchange reserves in September alone was over \$6 billion. **The dilemma facing the Russian Central Bank illustrates the problems of monetary authorities which try to manage both the inflation rate and the exchange rate at the same time. The only way to restrain the domestic money supply and Russian inflation would be to allow the rouble to appreciate.** The Russian authorities are reluctant to let the rouble appreciate because they fear the longterm impact on the non-oil industrial sector. This is the so-called "Dutch Disease". In practice it appears that the exchange rate target — at least in trade-weighted terms — is the binding constraint and that political pressure will limit the rise in the trade-weighted value of the rouble to perhaps 8-10% in 2005. Within this constraint, the Russian authorities will attempt to keep the rate of price inflation below 9% next year although the outcome will be greatly affected by the behaviour of oil prices during the year.

Eastern Europe

Despite general signs of weakness in the Europe in the third quarter of this year, the Polish economy seems to have lost little momentum since the summer. Exports and industrial production are growing at annual rates of over 10% whilst retail sales are healthy, reflecting the slowly improving labour market. Growth in manufacturing is strongest in sectors with a large export-oriented component — the only disappointment remains the growth of fixed investment which is running at about 4-5% over the levels of 2003. Inflation is declining and the current account situation is healthy. **The main problem facing the Polish authorities has been the budgetary outlook and 2004 has seen considerable progress.** Stronger-than-expected tax revenues and transfer payments from the EU means that the overall deficit for 2004 will be about 6.5% of GDP. A further improvement is expected in 2005. The growth rate of the Czech Republic in the first half of this year was 3.8%, which exceeded expectations and pushed most forecasters to raised full year estimates in response. **The Czech National Bank lifted the mid-point of its forecast range to 4.1% whilst the Finance Ministry growth rate forecast for 2004 was increased to 3.8%.** The outlook depends mainly on the performance of Czech exports which have done very well since EU entry in May. Political conflicts between the government and the central bank have not held back the solid growth performance of the Hungarian economy and third quarter growth should be at least 3.5%. **Nevertheless the attempts of the government to influence the rate-setting policy of the National Bank of Hungary may slow the progress towards lower inflation in the medium term.** The National Bank is unimpressed by the government's fiscal proposals which imply that the budget deficit will still be around 5% of GDP in 2005. The outcome is likely to be a small reduction in Hungarian interest rates in November, with further cuts in 2005 providing that inflation falls as expected and foreign confidence in the currency remains strong.

OPEC Member Countries to see robust growth for remainder of 2004 and into 2005

OPEC Member Countries

The economy in the majority of OPEC Member Countries will grow robustly throughout the remainder of the year and into 2005, in varying degrees due to several factors. Industrial growth will be strong, underpinned by continued increases in oil production as high prices allow OPEC Members to continue output above the production ceiling. The UAE economy is expected to see firm growth during the last quarter of the year and into 2005 at an average annual rate of 6%. This expansion is supported by strong industrial growth and increases in non-oil industrial output, while domestic and foreign investments in new projects are expected to remain strong. Capital spending on real estate and infrastructure schemes will stay high. The service sector is also expected to attract substantial investment. Current demand for services is likely to pick up, led by the tourism industry. Continued rapid growth in the population, fuelled largely by increases in the size of the expatriate workforce, will also underpin robust domestic demand. Inflation is likely to stay modest, despite rapid economic growth and the continued weakening of the US dollar.

China sees continued robust growth despite the government's best efforts, Brazil is ready for fiscal consolidation, and African nations improve in competitiveness

Developing Countries

China's GDP growth rate registered 9.1% y-o-y in the third quarter of 2004, down from 9.6% in the second quarter of 2004 and 9.8% in the first quarter of 2004, according to the country's National Bureau of Statistics. Despite the lower y-o-y growth rate, it is likely that on a sequential basis growth actually picked up in the third quarter of 2004. This picture of robust growth is supported by changes in other indicators, such as investment which on a y-o-y basis has remained at around 30% since July, and by the value of ordinary trade imports in September which was the third-highest on record. However, the rate of change of credit points to a sharp downturn on the horizon. Lending grew by below 12% y-o-y in August-September, less than one

**Slight fall in US dollar
as presidential election
campaign ends**

half the rate recorded in the same period of 2003. The CPI inflation rate jumped 4% during January-September 2004 from an average of 0.7% over the same period in 2003 and rose to 5.2% y-o-y in September 2004. The main reason behind the earlier sharp increase in CPI inflation was rising food costs. However, the rate of food price inflation eased in recent months, and this trend is expected to continue as the government is striving to increase grain production. The overall rate of inflation is expected to ease from an estimated 4.3% this year to 3% in 2005 and further to 2.5% in 2006. Brazil's growth has picked up, and its trade account remains in surplus despite the welcome increase in capital good imports. The improvement of the government's debt burden and structure indicates a strong political commitment to fiscal consolidation, setting the stage for a future improvement in creditworthiness. Real GDP growth for this year is expected to hit 3.5% compared to 1% last year. According to the World Economic Forum's recent report, the latest competitiveness rankings do much to highlight Africa's weakness. Nonetheless, they are encouraging in the sense that about half of the countries on the continent are showing improvement in competitiveness, while twelve of the 15 countries have a business platform in place for stronger economic growth in future, provided that these countries can tackle existing political or macro-economic policy constraints.

Oil prices, the US dollar and inflation

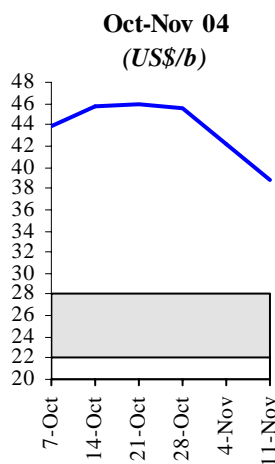
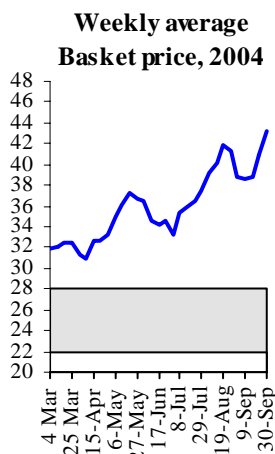
The US dollar fell in October as markets considered the likely outcome of the US presidential election on 2 November. Although the economic data continued to confirm the healthy fundamental performance of the US economy, markets were concerned by possible geopolitical implications. **Certainly the economic data from Europe did not justify any improvement in the value of the euro and statements from European authorities suggested that the appreciation of the common currency has begun to cause concern.** In October the US dollar fell by 2.2% against the euro and the Swiss franc and by 1% against the Japanese yen. The dollar was little changed versus the British pound.

In October the OPEC Reference Basket rose to a new level, reaching \$45.37/b from \$40.36/b in September. In real terms (base July 1990=100), after accounting for inflation and currency fluctuations, the Basket price rose by 10.8% to \$32.66/b from \$29.47/b, as the impact of inflation and dollar weakness was small in relation to the increase in the Reference Basket price. The dollar fell by 1.3% as measured by the import-weighted modified Geneva I +US dollar basket*.

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

Crude Oil Price Movements

OPEC Reference Basket saw an all-time high of \$45.37/b in October on output outages in the US Gulf, looming strikes and concerns over winter fuel stocks



Worries over low heating fuel stocks kept the US market bullishness as WTI set a record high of \$56.42/b

OPEC Reference Basket

The OPEC Reference Basket continued to move sharply upward in October as Hurricane Ivan halted oil operations on the US Gulf Coast. Fears of a possible disruption in Nigerian supply furthered the market's bullish tone, as did concerns over heating oil stocks in the run-up to winter, which helped push the Basket up nearly 2% to \$44.08/b in the first week of the month. The upward trend continued into the second week on the lingering effects of

Hurricane Ivan and a strike in Nigeria, causing the Basket to jump to \$45.86/b for the week. **Prices rose even further in the third week to set an all-time weekly high of \$46.04/b, mainly driven by fears of a supply shortfall in winter fuels and an impending strike in Nigeria.** Prices began to ease in the last decade of the month as high energy costs were seen to be eating into demand and government intervention ended an escalating strike in Norway. Moderate builds in the US commercial crude oil stocks and the return of production in the Gulf of Mexico added further bearishness to the market, as did an interest rate increase in China, where the government is attempting to slow the economy to more sustainable levels, which would imply lower demand. Together, this host of factors caused the Basket to shed just over 1%.

The Basket's monthly average surged a hefty 12.4% or \$5.01/b to \$45.37/b in October, the highest monthly gain this year. **Concern over a shortfall in winter fuels, hurricane-related outages in the US Gulf Coast and strike threats in Nigeria were the main triggers to this price rise.**

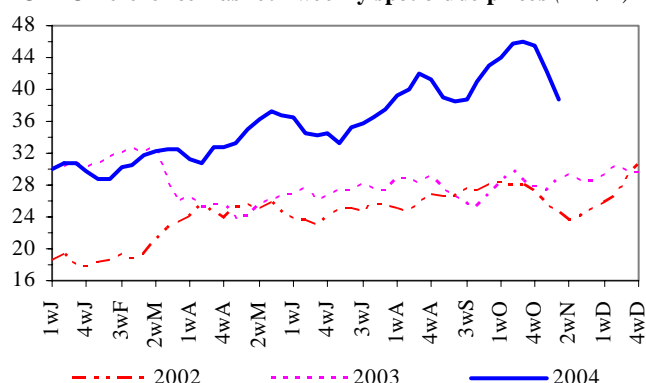
By mid-November, the Basket had eased to \$36.11/b, a level not seen since 21 July when the Basket stood at \$36.16/b. Factors behind the decline include OPEC producing at a high rate of 30 mb/d, the resultant rise in crude oil stocks, the cancellation of a planned strike in Nigeria and the return of refiners from seasonal turnaround, which should boost low product stocks. **Although the year-to-date average increased to \$35.95/b, the month-to-date average slipped to \$40.54/b, with the expectation of a continuation in the downward trend.**

US market

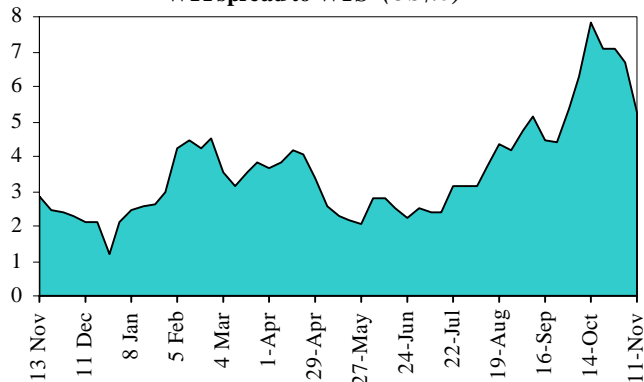
The surge in US oil prices continued throughout October. In the first week, the market saw upward pressure from an announced strike in Nigeria as well as the lingering outage in US Gulf Coast production caused by Hurricane Ivan. This caused oil prices to surge nearly \$4/b for the week. **While prices were tempted to head downward in the second week, the slow recovery**

in oil operations in the US Gulf Coast and the fear of an ongoing strike in Nigeria kept bullishness intact. Although the weekly US oil inventory report showed a crude build in the previous week, the hefty drop in heating oil inventories dominated the petroleum market, supporting a surge in WTI prices to a record high of \$55.08/b in the second week. The perception that the

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



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



recent high price was dampening growth contributed some bearishness to the marketplace, but this was more than countered by concern over low heating fuel stocks and an ongoing oil workers' strike in Norway. Consequently, **WTI surged to an all-time high of \$56.42/b in the third week of the month.** In the final week of the month, continued stock builds and a partial return of production in the Gulf of Mexico were enough to send WTI down a hefty 8%.

According to the EIA, commercial crude oil inventories in the USA have risen for several weeks and forecasters expect the agency to report a continual build in supply. Another weight on oil prices is the expectation that heating oil supplies will grow in the coming weeks as refiners complete pre-winter maintenance in time to take advantage of high prices. **The US crude oil stocks stood at nearly 290 million barrels, well above the perceived minimum operational level, amid a recovery in the refinery utilization rate to 90%.**

The tight supply of light sweet crude, as production in the USA had been disrupted by Hurricane Ivan, sent the sweet/sour (WTI/WTS) spread to a record high of \$9.11/b late in the first decade of October. However, **deep discounts from Middle Eastern producers made sour grades more attractive**, and as production returned in the US Gulf Coast, the spread began to narrow somewhat, but remained wide. High freight rates amid stronger refiner demand supported some easement on the sour grades further narrowing the spread in November to around \$5/b.

North Sea crude shot to a record high in October as Brent surpassed the \$50/b mark

European market

Prompt prices in Europe for sweet grades soared to all time highs amid demand for light-end products and concern over a possible strike-induced shortfall in supply from both Nigeria and Norway. Brent crude escalated to a record high amid fear of insufficient winter fuels.

In early October, onshore and offshore North Sea crudes diverged further as freight rates extended rapid gains amid several available prompt-loading Oseberg cargoes which put pressure on North Sea terminal differentials. **Freight rates at 30-year high prevented arbitrage opportunities from pressuring Urals.** The market remained bearish on the prospect that the persistent slide in differentials would continue amid deep discounts offered by the Middle Eastern producers to the European market. Urals crude prices continued to see price cuts as Russia's main export grade struggled to compete with cheaper Mideast sour supplies. Urals continued to slip to a discount of around \$8/b to dated Brent on lower refinery demand due to the pre-winter maintenance season.

High freight rates suspended the eastward flow of Western crude and pressured prices of Middle Eastern sour grades

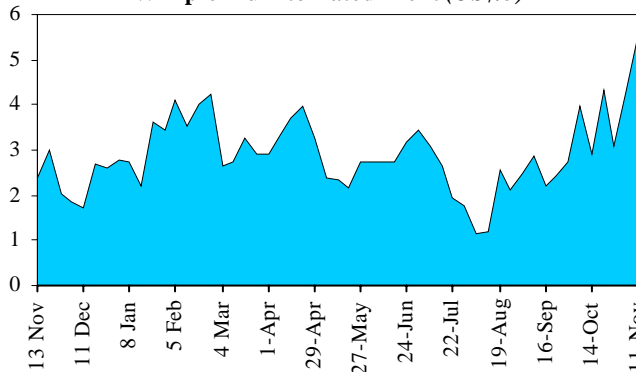
Far East market

With pricy sweet crude in the east, sophisticated Asian refiners turned to ample Middle Eastern sour crude supplies as rising freight rates made the east-bound arbitrage uneconomical.

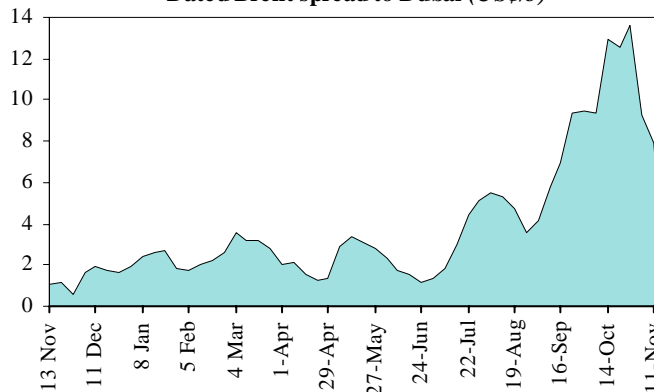
The Brent/Dubai spread widened nearly \$15/b in mid-October, before narrowing to around \$8/b in early November. December Oman continued to trade at a premium of 13¢/b early in

October, rising to 34¢/b in the first week of November. As the market digested the retroactive

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



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



September OSP, which was within industry expectation, the premium continued and December barrels traded at 34-36¢/b to MOG. **The steep differential between Middle Eastern crudes and Brent made sour grades attractive on healthy refining margins** especially from Japan. The premium for December-loading Oman peaked at 42¢/b by mid-October while Murban was set at 50¢/b to ADNOC's OSP before moving up to \$1.60/b in the last decade of October. As most December requirements were fulfilled amid extra volumes available, the premium narrowed to 15-20¢/b with the emergence of the January programme in late October, before dropping to a slight discount in early November on rising freight rates. Oman's retroactive OSP for October was hiked by \$2.45 to \$38.50/b. Oman raised its premium to Dubai by 46¢/b to 96¢, which was 10-15¢ more than the market had expected.

Given the unattractive arbitrage situation for West African crude flowing eastward, regional Asian crude continued to see increasing premiums amid healthy refining margins. Indonesia's November Cinta/Widuri crudes were heard traded at a \$1.50/b premium to ICP with Malaysia's Tapis traded at a \$1.30/b premium to APPI. However, **high outright prices started to eat into the premiums** with a December-loading Tapis cargo initially being offered at a 85¢/b premium in late October before being slashed to 50¢/b early in the following month.

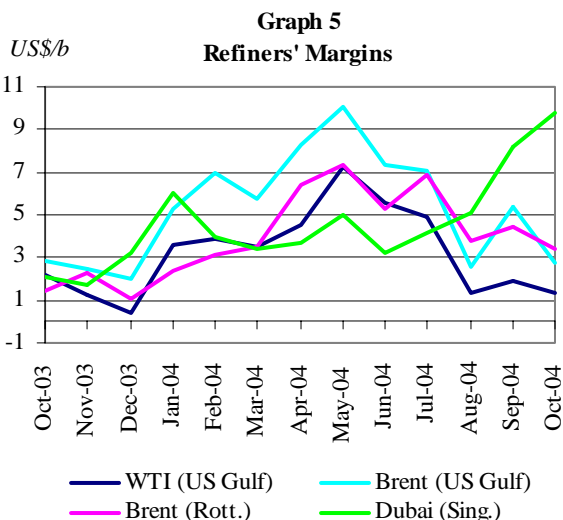
Table 1
Monthly average spot quotations for OPEC's Reference Basket
and selected crudes
US \$/b

			<i>Year-to-date average</i>	
	<u>Sept 04</u>	<u>Oct 04</u>	<u>2003</u>	<u>2004</u>
Reference Basket	40.36	45.37	27.91	35.74
Arabian Light	36.58	39.00	27.42	34.40
Dubai	35.52	37.61	26.54	33.47
Bonny Light	43.56	49.91	28.65	37.57
Saharan Blend	43.92	50.48	28.59	37.69
Minas	44.27	49.68	29.17	36.99
Tia Juana Light	37.23	43.55	26.93	33.35
Isthmus	41.47	47.40	28.08	36.69
Other crudes				
Brent	43.43	49.74	28.71	37.59
WTI	45.98	53.32	30.98	40.49
Differentials				
WTI/Brent	2.55	3.58	2.27	2.90
Brent/Dubai	7.91	12.13	2.17	4.12

Product Markets and Refinery Operations

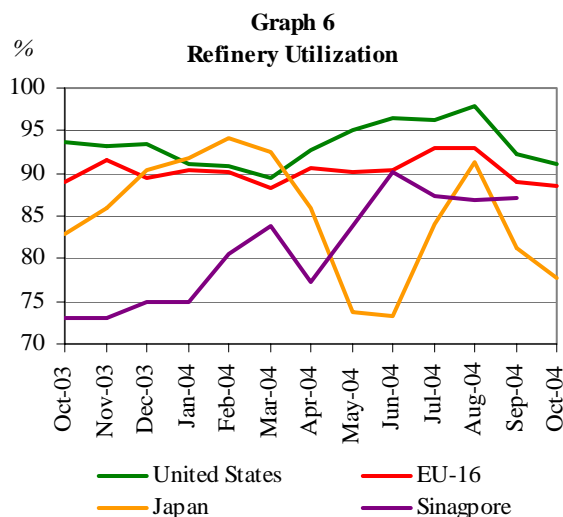
Lower refinery runs as a result of the pre-winter maintenance schedule, particularly in the USA and Europe, have tightened the distillate market around the globe and boosted the distillate crack versus benchmark crudes in October. Lower runs have also caused an earlier than normal stock-draw in the US market. However, with the completion of refinery turnarounds and a switch to maximum distillate mode as well as the relatively mild weather across the board, the fear of a winter heating oil

shortage has eased, resulting in the recent downtrend in distillate product prices. **But some concern remained about the ability of refiners to sustain operations at near capacity to ensure an ample supply of heating oil, and it seems that distillate products will drive the market in the next few months.** Meanwhile, the poor performance of the top and the bottom of the barrel, along with high freight costs and expensive Atlantic basin benchmark crudes, have overwhelmed the strength of the middle of the barrel, reducing refining margins in the USA and Europe in October from the previous month. However, refining margins in Asia were boosted by the less expensive Dubai crude oil and high prices of different products to a new record-high of over \$9/b.



The lingering effects of Hurricane Ivan and scheduled maintenance in October reduced the US refinery utilization rate to 91.2% from a high peak of 97.9% in August. However, according to the EIA, this rate showed a healthy recovery in the first week of November, jumping to 93%.

The heavy maintenance schedule in Europe caused the refinery utilization rate there to slide sharply to 88.4% from 93.1% in August.



In Asia, while Singapore's refineries extended their steady upward operation trend, Japan's refinery utilization rate declined by 3.5% in October from the previous month, following a fire at one refinery and seasonal turnarounds. **With the return of most refineries from maintenance and the approaching peak demand season, the refinery utilization rate is expected to pick up across the globe in November.**

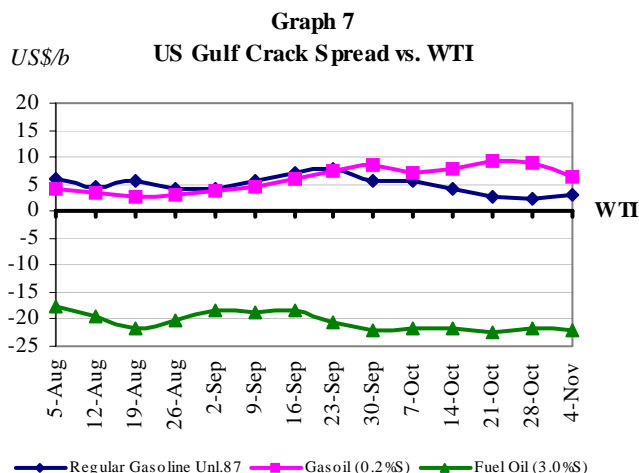
Robust demand for diesel and heating oil has underpinned the distillate crack against benchmark WTI (West Texas Intermediate) in October

US market

Over the last four weeks of October, US distillate demand increased by 11% on average compared to the same period last year. This upward demand trend, combined with lower refinery runs, has resulted in an unusual stock-draw in the last few weeks. The latest EIA figures on 5 November suggest that US distillate stocks have fallen to 115.6 mb, about 11% lower than at the same time last year.

However, the bullishness in the distillate market has eased recently as refineries emerged from maintenance and switched to maximum distillate mode, which helped the distillate crack to fall against WTI. Despite this downtrend, distillates still lead the market, and a really cold winter could renew price strength.

Demand for gasoline remained seasonally stable, but its crack spread versus benchmark WTI has decreased sharply in October, undermining refinery margins. Meanwhile, the price of low-sulphur fuel oil has recovered following increasing demand from utility plants. But the high-sulphur fuel oil market remains disappointing, despite a recovery in bunker demand.



The heavy maintenance schedule in October has tightened the European distillate market, sharply increasing its crack value against the benchmark crude Brent

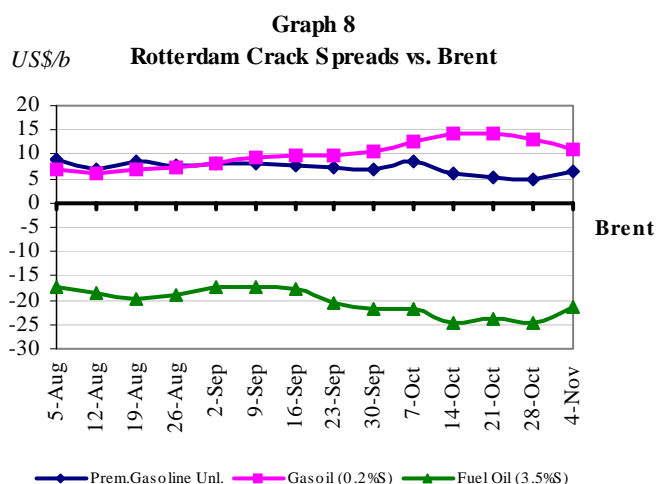
European market

As high freight rates have closed the arbitrage window from Europe to the USA and Asia, gasoline and fuel oil markets have come under increasing pressure. This helped undermine refinery margins in Europe in October from the month before. The lack of cold weather and the return of refineries from maintenance have eased distillate crack values, but lower primary and tertiary stocks, together

with colder weather, may underpin prices over the next few months. Primary distillate stocks in Europe dropped by 6.1 mb in October from the previous month, and German end-users have been slow to replenish their tanks, which currently stand at 60%, almost 9% lower than the five-year average.

The gasoline market in Europe also looks relatively bearish, as the lack of arbitrage opportunities to the USA has amplified an overhang of cargoes, and sellers of prompt cargoes have been struggling to place them. The naphtha market is also weak, and lower demand from naphtha crackers put pressure on its crack value as well.

High freight rates have also kept extra fuel oil barrels trapped in the region and sustained a growing discount against benchmark Brent.



The good performance of the different cuts of the barrel against benchmark Dubai crude has sharply boosted Asian refinery margins

Asian market

The gasoil crack spread versus Dubai reached a record-high of over \$22/b in late October. However, in the last two weeks, the bullish sentiment in the Asian product market changed with plunging crude oil futures. As a result, Asian product prices decreased across the barrel, particularly for naphtha. However, the gasoline market has seen some support from healthy demand in Australia and New Zealand, where the

summer driving season is just about to begin, and requirements from Indonesia and China are also rising. Naphtha, in contrast, has been suffering from sluggish demand and continued ample supplies from both India and the Middle East.

Meanwhile, Japanese distillate stocks recovered by about 3% in October from the previous month. Sentiment in the distillate market eased, but as refiners are maximizing kerosene at the expense of gasoil to cover expected strong winter demand, an anticipated power shortage in China is likely to raise gasoil demand and prices in the weeks to come.

In Asia, high sulphur fuel oil prices have also recovered in October, and its crack spread against Dubai crude narrowed from about -\$10/b in September to -\$5/b in late October. **The recovery in the high-sulphur fuel oil crack was attributed to fewer arbitrage cargoes from Europe and the Caribbean area to Asia and to strong bunker demand.** Despite the temporary recovery of the fuel oil spread versus its corresponding crude in October, the market for that product remains fundamentally weak.

Graph 9
Singapore Crack Spreads vs. Dubai

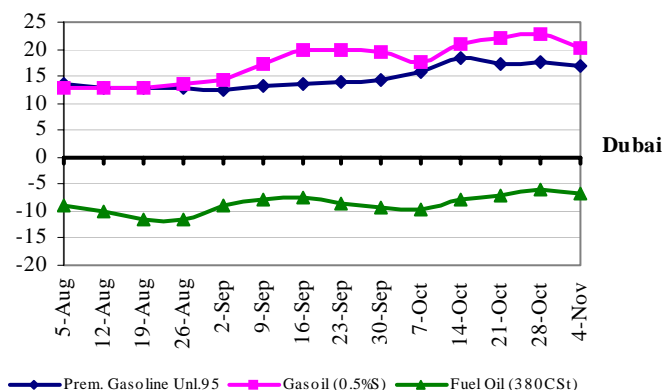


Table 2
Refined product prices
US\$/b

		<u>Aug 04</u>	<u>Sept 04</u>	<u>Oct 04</u>	<u>Change Oct/Sept</u>
US Gulf (Cargoes):					
Naphtha		48.42	51.33	56.86	5.53
Premium gasoline	(unleaded 93)	53.64	55.59	58.45	2.86
Regular gasoline	(unleaded 87)	49.64	52.25	56.89	4.64
Jet/Kerosene		51.74	57.46	64.19	6.73
Gasoil	(0.2% S)	48.25	52.38	61.54	9.16
Fuel oil	(1.0% S)	29.30	29.63	34.51	4.88
Fuel oil	(3.0% S)	25.23	26.07	31.47	5.40
Rotterdam (Barges FoB):					
Naphtha		54.96	54.88	61.21	6.33
Premium gasoline	(unleaded 95)	51.06	50.77	55.72	4.95
Regular gasoline	(unleaded)	51.06	50.73	55.81	5.08
Jet/Kerosene		55.74	58.49	65.91	7.42
Gasoil	(0.2% S)	49.99	53.02	63.06	10.04
Fuel oil	(1.0% S)	23.73	23.40	28.10	4.70
Fuel oil	(3.5% S)	24.62	24.12	25.88	1.76
Mediterranean (Cargoes):					
Naphtha		45.94	45.90	50.76	4.86
Premium unleaded	(0.15g/l)	48.80	49.87	54.39	4.52
Premium gasoline	(unleaded 95)	48.76	49.84	54.43	4.59
Jet/Kerosene		53.52	56.28	62.82	6.54
Gasoil	(0.5% S)	49.41	53.12	60.78	7.66
Fuel oil	(1.0% S)	25.47	25.66	29.03	3.37
Fuel oil	(3.5% S)	23.59	22.81	24.20	1.39
Singapore (Cargoes):					
Naphtha		44.19	43.95	48.81	4.86
Premium gasoline	(unleaded 95)	51.50	49.06	54.73	5.67
Regular gasoline	(unleaded 92)	50.62	48.20	53.68	5.48
Jet/Kerosene		52.29	55.30	61.25	5.95
Gasoil	(0.5% S)	51.67	54.29	58.40	4.11
Fuel oil	(180 cst 2.0% S)	28.82	27.84	30.96	3.12
Fuel oil	(380 cst 3.5% S)	28.19	27.18	29.95	2.77

Table 3
Refinery operations in selected OECD countries

	Refinery throughput <i>mb/d</i>				Refinery utilization* <i>%</i>			
	<u>Aug 04</u>	<u>Sept 04</u>	<u>Oct 04</u>	<u>Oct04/03</u>	<u>Aug 04</u>	<u>Sept 04</u>	<u>Oct 04</u>	<u>Oct 04/03</u>
USA	16.34	15.39	15.23	-0.35	97.9	92.2	91.2	-2.5
France	1.78 ^R	1.73 ^R	1.72	-0.14	91.0 ^R	88.6 ^R	88.1	-9.6
Germany	2.36 ^R	2.24 ^R	2.36	0.02	103.2 ^R	97.8 ^R	102.9	-0.3
Italy	1.95 ^R	1.87 ^R	1.79	-0.04	84.3 ^R	81.0 ^R	77.4	-2.1
UK	1.73 ^R	1.66 ^R	1.66	0.23	95.1 ^R	91.1 ^R	91.3	11.6
Eur-16	12.85 ^R	12.30 ^R	12.21	0.00	93.1 ^R	89.1 ^R	88.4	-0.5
Japan	4.30	3.82 ^R	3.65	-0.30	91.4	81.2 ^R	77.7	-5.2

* In barrels per calendar day.

^R Revised since last issue.

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

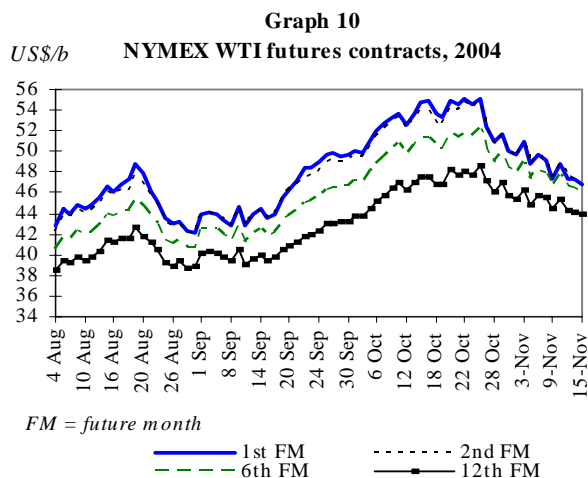
The Oil Futures Market

Non-commercial funds net long positions declined in October from early in the month on continued crude oil stock builds in the USA

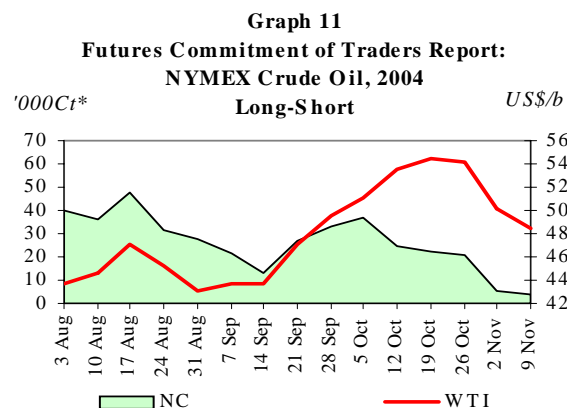
Crude oil futures continued to escalate in October on a planned strike in Nigeria. However, as the strike was called off, the WTI futures contract moved down to firm at close to \$50/b. Nevertheless, the downward trend was short-lived and concerns revived. In the week ending 5 October, non-commercial funds net long positions surged to the highest level since 17 August at around 37,000 contracts on the continued disruption of US Gulf Coast output. However, after five consecutive days of price rises, profit-taking halted the rally, sparking a downturn, which caused the prompt month futures contract to slip over 2% and net longs to be slashed by a hefty 12,000 lots to nearly 25,000 contracts in the week to 12 October. The Nymex WTI November contract slipped 3% in two days of profit-taking ending on 19 October as the market perceived a slowing in global economy growth. However, upward price pressures were revived on concern over low heating fuel stocks in the USA and the ongoing strike in Norway. As a result, **the WTI December futures contract saw a record peak of \$55.71/b on 22 October.** On a cumulative basis, the WTI front month net change was up \$2.63/b. **In the last week of October the futures contract dropped 6% on profit-taking.** Accordingly, the non-commercial net long positions slipped to 21,000 lots in the week ending 26 October, the lowest level since 14 September.

With oil prices falling from recent highs, hedge funds and others began to switch money out of energy futures and into equities, which caused a further decline in crude futures. **The perception in the marketplace is that the reduction of speculators' substantial net long positions is one of the foremost factors behind the recent price dip.** Nevertheless, open interest remained above the 700,000 level throughout the month after peaking at 735,000 on 12 October, indicating strong speculator interest.

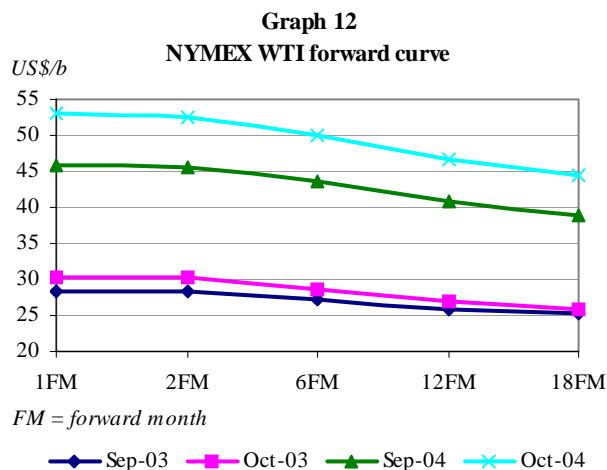
The forward curve remained in backwardation at 46¢/b for the 1st/2nd month spread almost in line with the previous month but slightly steeper than in the same period last year. Widening from the 30-40¢/b level for the 1st/2nd month, the spread peaked at nearly \$1/b in the second decade on lingering concern over low heating oil stocks in the run up to winter. However, in the last decade of the month, backwardation slid to 20¢/b on easing supply concerns and ample output from OPEC Member Countries. **The monthly average for the 1st/2nd month spread was 46¢/b com-**



Accordingly, the non-commercial net long positions slipped to 21,000 lots in the week ending 26 October, the lowest level since 14 September.



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



pared to 26¢/b in September. The forward curve remained similar to last month's backwardation and moderately steeper than in the same period of last year, despite a recent bullish stock report which revealed lower crude inventories in the USA, especially distillates which include heating oil. Nevertheless, by November, the spread had narrowed and flipped into contango.

The Tanker Market

OPEC spot fixtures increased by 2 mb/d due to persistent high OPEC production and strong crude oil demand

OPEC area spot fixtures witnessed a robust increase of 15% or 2 mb/d to stand at around 15.6 mb/d in October. This growth in fixtures — the highest increase since last May — is due to OPEC's sustained high production, which reached a new record of 30.23 mb/d in October, and the surge in crude oil demand in preparation for the end of the refining maintenance season. With this increase, **OPEC's share of global spot chartering moved up by 5 percentage points to 67.5%, the highest level in the last five years.** The major contributor to this strong growth in OPEC area spot fixtures was the Middle East with around two thirds of the total increase, which pushed the combined eastbound and westbound share up by one percentage point to 56%. Contrary to the OPEC area, **non-OPEC spot fixtures declined by more than 8% or 0.67 mb/d** to stand at 7.5 mb/d, which was nearly 1.8 mb/d lower than in the previous year. This decline in conjunction with the increase in OPEC area spot fixtures reduced non-OPEC fixtures share to 32% from 38% in the previous month. **Global spot chartering increased by more than 1.3 mb/d or 6% to stand at 23.8 mb/d**, which is 0.8 mb/d lower than last year's figure. According to preliminary estimates, sailings from the OPEC area experienced a minor slide of 0.07 mb/d to 27.8 mb/d. Middle East sailings, which represent 65% of total OPEC sailings, witnessed a slight increase of 0.15 mb/d to stand at nearly 18 mb/d, while the rest of OPEC sailings declining by 0.22 mb to 9.8 mb/d. Arrivals in the main consuming regions saw mixed trends. **Preliminary estimates show that arrivals in the US Gulf, East and Caribbean rose 0.72 mb/d to 11.25 mb/d**, while arrivals in the Euromed moved up by 0.44 mb/d to 4.70 mb/d. Meanwhile, **arrivals in Japan fall sharply by 1.6 mb/d to around 3.8 mb/d**, the same level as last year's figures, due to the refining maintenance season. Arrivals in North West Europe also declined but by just 0.37 mb/d to around 7 mb/d.

Freight rates surged to new record highs in October

Soaring winter crude oil demand combined with a lack of tanker availability to keep freight rates climbing in October to reach their highest levels since 1973. Most routes in all sectors experienced an increase of at least 100 points. Shipping crude on long voyages, mostly to Asia from Africa and Russia because of the growing need for sweet crudes in the region, locked up availability and tightened the tanker market further. **VLCC freight rates on the Middle East/eastbound long-haul route nearly doubled compared to the September figures to stand at a monthly average of WS214.** Freight rates on the Middle East/westbound long-haul route increased by 50% to reach WS151 due to high demand and the replenishment of stocks in the USA, which had been affected by Hurricane Ivan in September. **For Suezmax, freight rates increased by over 120 points to approach WS290** on both the West Africa/US Gulf Coast route and the NW Europe route to the US East Coast and the US Gulf Coast. This represented an increase of over 170 points from last year's figures. **The surge in freight rates was more significant in the Aframax sector, which saw a spectacular increase in Worldscale rates of around 190 within the Mediterranean and from there to NW Europe to stand at WS392 and WS342 respectively.** In addition to sustained activity, delays of up to 12 days in the Bosphorus Straits due to reduced daylight and bad weather put upward pressure on freight rates. Rates along the Indonesia/US West Coast route rose 86 points to stand at WS271, reversing the fall in September. Healthy activity between the Caribbean and the US East Coast following the hurricanes pushed up freight rates on this route to WS337, an increase of 140 points compared to the September level.

The product tanker market remained very firm

The tanker market for products remained very tight in October thanks to sustained demand, especially for middle distillates, as well as limited tanker availability. On average, freight rates for medium-range tankers carrying 30,000-50,000 DWT on the Middle East/East route witnessed a considerable increase of 154 points, compared to the September figures, to stand at WS368. **This significant increase was due to healthy activity as a result of a surge of product imports by Japan to meet rising demand and refill near record-low stocks,** as refiners were operating at low rates due to a fire and maintenance shutdowns. The other routes for cargoes carrying 25,000-30,000 DWT gained between 50 and 60 points on average, except for the Mediterranean/NW Europe route, which rose 10 points to WS265. This accelerated activity to meet distillate demand and the rebuilding of inventories in the US Gulf Coast following the hurricanes reversed the downfall observed in September to stand at WS295.

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

	<u>Aug 04</u>	<u>Sept 04</u>	<u>Oct 04</u>	<u>Change Oct/Sept</u>
Chartering				
All areas	21.03	21.74	23.08	1.33
OPEC	13.36	13.58	15.58	2.01
Middle East/east	5.28	5.22	6.37	1.15
Middle East/west	2.26	2.22	2.38	0.16
Sailings				
OPEC	23.57	27.84	27.77	-0.07
Middle East	17.06	17.79	17.94	0.15
Arrivals				
US Gulf Coast, US East Coast, Caribbean	9.65	10.53	11.25	0.72
North West Europe	7.15	7.35	6.98	-0.37
Euromed	4.14	4.26	4.70	0.44
Japan	4.03	5.39	3.79	-1.60

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

Table 5
Spot tanker freight rates
Worldscale

	Size <i>1,000 DWT</i>	<u>Aug 04</u>	<u>Sept 04</u>	<u>Oct 04</u>	<u>Change Oct/Sept</u>
Crude					
Middle East/east	200-300	107	113	214	101
Middle East/west	200-300	95	100	151	51
West Africa/US Gulf	100-160	152	163	287	124
North-West Europe/US East Coast	100-160	159	169	289	120
Indonesia/US West Coast	70-100	192	185	271	86
Caribbean/US East Coast	40-70	194	197	337	140
Mediterranean/Mediterranean	40-70	192	200	392	192
Mediterranean/North-West Europe	70-100	143	151	342	191
Products					
Middle East/east	30-50	214	214	368	154
Singapore/east	25-30	257	273	333	60
Caribbean/US Gulf Coast	25-30	243	241	295	54
North-West Europe/US East Coast	25-30	219	235	288	53
Mediterranean/Mediterranean	25-30	193	210	262	52
Mediterranean/North-West Europe	25-30	238	255	265	10

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

World Oil Demand

World oil demand growth revised down by 0.12 mb/d to 2.5 mb/d, while the average is estimated at 81.74 mb/d

Revision to historical figures (2002-2003)

World oil demand data for 2003 experienced another minor upward revision of 0.07 mb/d which leaves the new yearly average at 79.24 mb/d. The adjustments were widespread among all regions with Western Europe and Other Asia revised up by 0.04 mb/d each, while the FSU revision was 0.05 mb/d. In contrast, two Developing Countries regions, namely Latin America and the Middle East, were revised down by 0.01 mb/d and 0.05 mb/d respectively.

Forecast for 2004

World

The world oil demand estimate for the current year has been slightly adjusted downwards to account for the slowdown in Chinese consumption in the second half of the year as well as expected lower apparent demand in the FSU due to the slower pace of economic activity. Other minor adjustments were made to Developing Countries estimates on the back of revisions to regional GDP figures (see Table 6). Following an adjustment of approximately -0.12 mb/d for the year, oil demand is estimated to grow by 2.5 mb/d while the yearly average is assessed at 81.74 mb/d.

The most up-to-date figures for the first two quarters of the year indicate that demand grew slightly higher than previously anticipated. Demand data from Western Europe, Other Asia and Other Europe came out stronger while the FSU and Middle Eastern figures were revised down. First quarter demand growth is estimated at 1.76 mb/d which translates into a 2.2% rise with respect to the first quarter of 2003. China and North America (mainly the USA) accounted for three quarters of the growth in demand, while Developing Countries added 0.8 mb/d, only to offset the pronounced contractions in OECD Pacific and FSU demand. The exceptionally high growth of the second quarter originates from the strength in consumption in almost all regions with the sole exception of the OECD Pacific. China, North America and Other Asia accounted for 70% of the total 3.9 mb/d estimated growth. The forecasts for the last two quarters of the year have been marginally revised downward to account for the further deceleration of the pace of apparent demand growth in China.

Table 6
World oil demand forecast for 2004
mb/d

	<u>2003</u>	<u>1Q04</u>	<u>2Q04</u>	<u>3Q04</u>	<u>4Q04</u>	<u>2004</u>	Change 2004/03	
							<u>Volume</u>	<u>%</u>
North America	24.57	25.03	24.85	25.19	25.32	25.10	0.53	2.16
Western Europe	15.39	15.71	15.33	15.56	15.82	15.60	0.21	1.38
OECD Pacific	8.78	9.38	8.00	8.10	9.08	8.64	-0.14	-1.59
Total OECD	48.74	50.12	48.17	48.85	50.23	49.34	0.60	1.23
Other Asia	7.86	8.09	8.36	8.17	8.54	8.29	0.43	5.47
Latin America	4.74	4.66	4.89	4.97	4.95	4.87	0.13	2.80
Middle East	5.07	5.24	5.30	5.53	5.40	5.36	0.30	5.88
Africa	2.65	2.67	2.70	2.68	2.77	2.70	0.06	2.18
Total DCs	20.31	20.66	21.25	21.34	21.65	21.23	0.92	4.52
FSU	3.78	3.60	3.77	3.93	4.21	3.88	0.11	2.78
Other Europe	0.86	0.95	0.92	0.95	1.01	0.96	0.10	11.57
China	5.56	6.26	6.77	6.30	6.04	6.34	0.78	14.00
Total "Other Regions"	10.19	10.81	11.45	11.18	11.26	11.18	0.98	9.64
Total world	79.24	81.58	80.87	81.37	83.14	81.74	2.50	3.16
Previous estimate	79.17	81.52	80.84	81.44	83.36	81.79	2.62	3.31
Revision	0.07	0.06	0.03	-0.07	-0.22	-0.05	-0.12	-0.16

Totals may not add due to independent rounding.

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

	Change 2004/03				Change 2004/03			
	<u>1Q03</u>	<u>1Q04</u>	<u>Volume</u>	<u>%</u>	<u>2Q03</u>	<u>2Q04</u>	<u>Volume</u>	<u>%</u>
North America	24.52	25.03	0.50	2.06	24.15	24.85	0.69	2.87
Western Europe	15.37	15.71	0.34	2.21	15.12	15.33	0.21	1.37
OECD Pacific	9.76	9.38	-0.38	-3.85	8.19	8.00	-0.20	-2.40
Total OECD	49.65	50.12	0.47	0.94	47.47	48.17	0.70	1.48
Other Asia	7.68	8.09	0.41	5.37	7.65	8.36	0.71	9.34
Latin America	4.53	4.66	0.13	2.77	4.72	4.89	0.16	3.46
Middle East	4.99	5.24	0.25	4.95	4.86	5.30	0.44	9.04
Africa	2.65	2.67	0.01	0.53	2.62	2.70	0.08	3.20
Total DCs	19.86	20.66	0.80	4.02	19.85	21.25	1.40	7.06
FSU	4.02	3.60	-0.42	-10.33	3.35	3.77	0.41	12.28
Other Europe	0.89	0.95	0.06	6.57	0.85	0.92	0.07	7.92
China	5.41	6.26	0.85	15.66	5.46	6.77	1.31	23.89
Total "Other Regions"	10.32	10.81	0.49	4.76	9.67	11.45	1.78	18.46
Total world	79.82	81.58	1.76	2.20	76.98	80.87	3.89	5.05

Totals may not add due to independent rounding.

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

	Change 2004/03				Change 2004/03			
	<u>3Q03</u>	<u>3Q04</u>	<u>Volume</u>	<u>%</u>	<u>4Q03</u>	<u>4Q04</u>	<u>Volume</u>	<u>%</u>
North America	24.72	25.19	0.47	1.89	24.86	25.32	0.45	1.83
Western Europe	15.40	15.56	0.16	1.02	15.68	15.82	0.15	0.94
OECD Pacific	8.03	8.10	0.07	0.92	9.15	9.08	-0.07	-0.72
Total OECD	48.15	48.85	0.70	1.45	49.69	50.23	0.54	1.08
Other Asia	7.86	8.17	0.30	3.83	8.24	8.54	0.29	3.58
Latin America	4.83	4.97	0.14	2.83	4.85	4.95	0.10	2.16
Middle East	5.27	5.53	0.26	4.89	5.15	5.40	0.25	4.82
Africa	2.62	2.68	0.06	2.30	2.70	2.77	0.07	2.67
Total DCs	20.58	21.34	0.76	3.67	20.93	21.65	0.72	3.44
FSU	3.68	3.93	0.25	6.92	4.05	4.21	0.16	3.98
Other Europe	0.81	0.95	0.14	17.09	0.88	1.01	0.13	14.95
China	5.76	6.30	0.54	9.33	5.61	6.04	0.43	7.70
Total "Other Regions"	10.25	11.18	0.93	9.07	10.54	11.26	0.72	6.87
Total world	78.98	81.37	2.38	3.02	81.16	83.14	1.98	2.44

Totals may not add due to independent rounding.

OECD

Total OECD demand, which remained unchanged from the last MOMR, is projected to rise 0.6 mb/d to average 49.34 mb/d, representing a year-on-year gain of 1.23%. Close to 90% of the growth will take place in the North American region where demand is expected to rise 0.53 mb/d, or 2.16%. Western Europe is expected to contribute 0.21 mb/d, while OECD Pacific demand will shrink by 0.14 mb/d or 1.59%. Preliminary data for July and August point to further growth in oil product deliveries in the USA and Canada although the rate of growth has moderated from the previous quarter. In Western Europe, demand in France and Italy contracted on average by 6.3% and 1.0% respectively during July and August, although the rise in product deliveries in the UK and Germany partially arrested the decline. Japanese demand is seen to have picked up in July and August rising an average of 0.25 mb/d in the two months following contractions of 4.9% and 4.2% in the first two quarters of the year. Power producers had to switch to burning crude and fuel oil following the string of outages and shutdowns at several Tepco and Kepco nuclear power plants.

The breakdown of total OECD oil requirements by product for the period January-August 2004 shows that inland deliveries of gasoil/diesel, LPG and gasoline grew by 0.19 mb/d, 0.18 mb/d and 0.15 mb/d with respect to the same period last year. In contrast, **residual fuel oil requirements continued to decline shrinking by almost 10% or 0.30 mb/d over the eight-month period.** Fuel oil consumption shrank in all major OECD countries but the decline was more severe in OECD Pacific, where demand fell by more than 12% followed by a drop of 9.2% in North America and 7.6% in Western Europe during the first eight months of this year.

Developing Countries

Estimates for regional oil demand growth in Developing Countries have stayed relatively unchanged from last month with an aggregated growth of 0.92 mb/d or 4.5% to average 21.23 mb/d for the year. Almost 90% of the growth will concentrate in "Other Asia" and the Middle East, with Latin America and Africa accounting for the remaining 20%. The income effect arising from record high oil prices, solid rates of economic growth — revised upwards to almost 5% for the year — and the heavily subsidized energy prices in the Middle East point to a growth in petroleum product consumption of close to 6% for the year. Very preliminary figures for July and August indicate that India's consumption has slowed from the rapid pace seen in the first half of the year. Nevertheless, there is evidence of healthier consumption in Indonesia, Taiwan, Thailand and Singapore.

Other Regions

Considerable revisions were made to apparent demand in Other Regions to account for the slowdown in the pace of Chinese consumption following government measures introduced in April this year to cool down the runaway economy. Apparent demand growth estimates for the year were adjusted to reflect more moderate rate of growth in the third and fourth quarters of 9.3% and 7.7% respectively compared to 15.6% and 23.9% in the first two quarters. The Chinese government introduced a number of administrative measures during the second quarter in an attempt to engineer a soft landing of the economy. The flows of bank loans to overheated sectors of the economy such as construction, steel and cement have been targeted by the government. Judging by the 9.1% growth in economic activity in the third quarter, it seems that these measures are yet to have the desired effect. Lately the Chinese government has made use of monetary policy by **raising interest rates by 27 percentage points** in a new attempt to slow down the economy. Preliminary apparent demand figures for July for China, derived from production and trade data, shows demand at 6.33 mb/d, down from 6.8 mb/d in the second quarter of 2004, but higher than the 6.26 mb/d seen in the first quarter of the year. Apparent consumption estimates in the FSU were also revised down to account for the lower GDP figures.

Table 9
World oil demand forecast for 2005
mb/d

	<u>2004</u>	<u>1Q05</u>	<u>2Q05</u>	<u>3Q05</u>	<u>4Q05</u>	<u>2005</u>	Change 2005/04	
							<u>Volume</u>	<u>%</u>
North America	25.10	25.19	25.11	25.33	25.68	25.33	0.23	0.92
Western Europe	15.60	15.77	15.33	15.61	15.91	15.65	0.05	0.32
OECD Pacific	8.64	9.22	7.76	8.11	9.07	8.54	-0.10	-1.16
Total OECD	49.34	50.17	48.20	49.05	50.65	49.52	0.18	0.37
Other Asia	8.29	8.23	8.41	8.47	8.84	8.49	0.20	2.42
Latin America	4.87	4.77	5.03	5.10	5.06	4.99	0.12	2.57
Middle East	5.36	5.57	5.66	5.89	5.73	5.71	0.35	6.51
Africa	2.70	2.78	2.79	2.71	2.82	2.77	0.07	2.62
Total DCs	21.23	21.36	21.89	22.17	22.45	21.97	0.75	3.51
FSU	3.88	3.96	3.85	4.02	4.29	4.03	0.15	3.93
Other Europe	0.96	0.97	0.86	0.96	1.03	0.96	0.00	0.29
China	6.34	6.58	7.16	6.78	6.47	6.75	0.41	6.39
Total "Other Regions"	11.18	11.52	11.87	11.76	11.80	11.74	0.56	5.02
Total world	81.74	83.05	81.96	82.98	84.90	83.23	1.49	1.82
Previous estimate	81.79	83.12	82.01	83.19	85.29	83.41	1.61	1.97
Revision	-0.05	-0.07	-0.05	-0.20	-0.39	-0.18	-0.13	-0.16

Totals may not add due to independent rounding.

Oil demand revised down by 0.18 mb/d to 83.33 mb/d, with growth estimated at 1.49 mb/d

Forecast for 2005

World oil demand growth estimates for next year have once again been adjusted to account for the lower rate of global economic growth. The latest estimate of global GDP growth has been lowered by 0.11% to 4.03% from the previous 4.14%. On a regional basis, rates of economic growth have been reduced across the board. The OECD Pacific GDP growth rate for next year is now estimated at 2.06%, down 0.38% from last month, while OECD Europe economies are estimated to grow by 2.31%, down 0.12% from the October estimate. Non-OECD Asia — an engine of oil demand growth — as well as Eastern Europe, Africa and the FSU have seen GDP growth rates revised down 0.21%, 0.31%, 0.05% and 0.01%, respectively. **China remains the wild card for oil demand growth next year.** It is too early to assess the effectiveness of the recent rise in interest rates on administrative measures implemented by the central government early this year to slow down the economy. It is questionable how effective the central government's economic policy might be especially when it is at odds with that of local governments. While the central government seeks to cool down the economy, regional governments are more interested in creating jobs and increase investment. **Our forecast for next year assumes a more moderate GDP growth rate for China of 7.6% versus the 9.1% estimated for this year. Chinese demand is therefore expected to rise by 0.41 mb/d which translates into slightly more than one quarter of total world demand growth in 2005.** As for total world oil demand, it is now forecast at 1.49 mb/d which translates into a year-on-year change of 1.82%.

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

			Change 2005/04				Change 2005/04	
	<u>1Q04</u>	<u>1Q05</u>	<u>Volume</u>	<u>%</u>	<u>2Q04</u>	<u>2Q05</u>	<u>Volume</u>	<u>%</u>
North America	25.03	25.19	0.16	0.64	24.85	25.11	0.26	1.06
Western Europe	15.71	15.77	0.06	0.41	15.33	15.33	0.00	-0.01
OECD Pacific	9.38	9.22	-0.17	-1.76	8.00	7.76	-0.23	-2.93
Total OECD	50.12	50.17	0.06	0.12	48.17	48.20	0.03	0.06
Other Asia	8.09	8.23	0.14	1.73	8.36	8.41	0.05	0.59
Latin America	4.66	4.77	0.11	2.41	4.89	5.03	0.14	2.96
Middle East	5.24	5.57	0.33	6.35	5.30	5.66	0.36	6.85
Africa	2.67	2.78	0.12	4.33	2.70	2.79	0.09	3.24
Total DCs	20.66	21.36	0.70	3.39	21.25	21.89	0.64	3.03
FSU	3.60	3.96	0.36	10.04	3.77	3.85	0.09	2.27
Other Europe	0.95	0.97	0.02	2.31	0.92	0.86	-0.05	-5.85
China	6.26	6.58	0.33	5.19	6.77	7.16	0.39	5.75
Total "Other Regions"	10.81	11.52	0.71	6.56	11.45	11.87	0.42	3.68
Total world	81.58	83.05	1.47	1.80	80.87	81.96	1.09	1.35

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	
	<u>3Q04</u>	<u>3Q05</u>	<u>Volume</u>	<u>%</u>	<u>4Q04</u>	<u>4Q05</u>	<u>Volume</u>	<u>%</u>
North America	25.19	25.33	0.14	0.55	25.32	25.68	0.36	1.41
Western Europe	15.56	15.61	0.05	0.33	15.82	15.91	0.09	0.55
OECD Pacific	8.10	8.11	0.01	0.15	9.08	9.07	-0.01	-0.16
Total OECD	48.85	49.05	0.20	0.41	50.23	50.65	0.43	0.85
Other Asia	8.17	8.47	0.30	3.68	8.54	8.84	0.31	3.61
Latin America	4.97	5.10	0.14	2.73	4.95	5.06	0.11	2.16
Middle East	5.53	5.89	0.37	6.62	5.40	5.73	0.33	6.20
Africa	2.68	2.71	0.03	1.13	2.77	2.82	0.05	1.86
Total DCs	21.34	22.17	0.83	3.90	21.65	22.45	0.80	3.70
FSU	3.93	4.02	0.09	2.25	4.21	4.29	0.08	1.85
Other Europe	0.95	0.96	0.02	1.76	1.01	1.03	0.03	2.58
China	6.30	6.78	0.48	7.59	6.04	6.47	0.43	7.08
Total "Other Regions"	11.18	11.76	0.58	5.21	11.26	11.80	0.53	4.72
Total world	81.37	82.98	1.62	1.99	83.14	84.90	1.76	2.12

Totals may not add due to independent rounding.

World Oil Supply

Non-OPEC supply for 2004 revised down to 49.91 mb/d in October, an increase of 1.32 mb/d over the 2003 figure

Non-OPEC

Forecast for 2004

Non-OPEC supply for 2004 has been revised down to 49.91 mb/d, with a quarterly distribution of 49.63 mb/d, 49.72 mb/d, 49.49 mb/d and 50.79 mb/d respectively. The downward revisions were mainly due to the continuing impact of Hurricane Ivan on Gulf of Mexico production and the underperformance of the Norwegian sector of the North Sea. The yearly average increase stands at 1.32 mb/d compared with the 2003 figure.

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

	<u>2003</u>	<u>1Q04</u>	<u>2Q04</u>	<u>3Q04</u>	<u>4Q04</u>	<u>2004</u>	Change 04/03
North America	14.59	14.80	14.72	14.36	14.95	14.71	0.12
Western Europe	6.39	6.39	6.25	5.82	6.09	6.14	-0.25
OECD Pacific	0.65	0.59	0.56	0.59	0.56	0.57	-0.08
Total OECD	21.63	21.78	21.54	20.77	21.60	21.42	-0.21
Other Asia	2.36	2.47	2.51	2.60	2.58	2.54	0.18
Latin America	3.91	3.89	3.91	3.97	3.96	3.93	0.03
Middle East	2.00	1.94	1.89	1.87	1.88	1.90	-0.10
Africa	3.05	3.31	3.35	3.46	3.66	3.45	0.40
Total DCs	11.32	11.62	11.67	11.90	12.09	11.82	0.51
FSU	10.27	10.78	11.06	11.33	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	3.52	3.43	3.46	0.05
Total "Other regions"	13.85	14.38	14.70	15.01	15.23	14.83	0.99
Total non-OPEC production	46.79	47.78	47.91	47.68	48.93	48.07	1.28
Processing gains	1.80	1.85	1.81	1.81	1.87	1.83	0.04
Total non-OPEC supply	48.59	49.63	49.72	49.49	50.79	49.91	1.32
Previous estimate	48.58	49.61	49.71	49.66	50.81	49.95	1.37
Revision	0.01	0.01	0.01	-0.17	-0.01	-0.04	-0.05

Totals may not add due to independent rounding.

Non-OPEC supply for 2005 forecast at 51.12 mb/d, an increase of 1.21 mb/d over 2004

Forecast for 2005

Non-OPEC supply for 2005 is forecast to increase 1.21 mb/d. North America should witness a rise of 0.16 mb/d mainly from 0.08 mb/d growth in Canada, partially offset by the expected 0.09 mb/d decline in both OECD Pacific and Western Europe where the UK is forecast to dip 0.08 mb/d. Total OECD supply is expected to increase to 21.46 mb/d. Total DC supply is forecast to rise 0.57 mb/d, mainly contributed by Latin America, with Brazil adding 0.12 mb/d and Trinidad 0.05 mb/d, as well as Africa where Angola, Sudan and Chad should see increases of 0.19 mb/d, 0.06 mb/d and 0.04 mb/d respectively. FSU is expected to be the major contributor to the rise, mainly from Russia's 0.47 mb/d, while Kazakhstan and Azerbaijan are expected to add 0.06 mb/d each. Quarterly figures are redistributed at 50.86 mb/d, 50.91 mb/d, 50.69 mb/d and 52.02 mb/d respectively. The yearly average is forecast at 51.12 mb/d.

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

	<u>2004</u>	<u>1Q05</u>	<u>2Q05</u>	<u>3Q05</u>	<u>4Q05</u>	<u>2005</u>	<u>Change</u> <u>05/04</u>
North America	14.71	14.96	14.88	14.51	15.11	14.87	0.16
Western Europe	6.14	6.30	6.16	5.73	6.01	6.05	-0.09
OECD Pacific	0.57	0.56	0.53	0.56	0.53	0.54	-0.03
Total OECD	21.42	21.81	21.58	20.80	21.65	21.46	0.04
Other Asia	2.54	2.47	2.51	2.60	2.58	2.54	0.00
Latin America	3.93	4.13	4.15	4.21	4.21	4.17	0.24
Middle East	1.90	1.92	1.90	1.89	1.88	1.90	0.00
Africa	3.45	3.71	3.67	3.75	3.97	3.78	0.33
Total DCs	11.82	12.24	12.23	12.45	12.65	12.39	0.57
FSU	11.20	11.35	11.65	11.93	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	3.53	3.45	3.48	0.02
Total "Other regions"	14.83	14.96	15.30	15.63	15.86	15.44	0.61
Total non-OPEC production	48.07	49.01	49.10	48.88	50.16	49.29	1.21
Processing gains	1.83	1.85	1.81	1.81	1.87	1.83	0.00
Total non-OPEC supply	49.91	50.86	50.91	50.69	52.02	51.12	1.21
Previous estimate	49.95	50.85	50.91	50.87	52.02	51.16	1.21
Revision	-0.04	0.01	0.00	-0.18	0.00	-0.04	0.00

Totals may not add due to independent rounding

Net FSU oil export for 2005 forecast at 7.76 mb/d, 0.44 mb/d over 2004

The FSU net oil export for 2005 is expected at 7.76 mb/d, an increase of 0.44 mb/d over the 2004 figure of 7.32 mb/d. Some minor upward revisions were also made to the 2003 figure.

Table 14

FSU net oil exports

	<u>1Q</u>	<u>2Q</u>	<u>3Q</u>	<u>4Q</u>	<u>Year</u>
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	6.61	6.49
2004 (forecast)	7.18	7.30	7.39	7.42	7.32
2005 (forecast)	7.39	7.79	7.90	7.95	7.76

OPEC natural gas liquids and non-conventional oils

The 2005 forecast for OPEC NGL+NCO remains unchanged at 4.14 mb/d, an increase of 0.19 mb/d over the 2004 figure. Figures for 2001–2003 were also unchanged 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

								<u>Change</u> <u>04/03</u>	<u>Change</u> <u>05/04</u>
<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>1Q04</u>	<u>2Q04</u>	<u>3Q04</u>	<u>4Q04</u>	<u>2004</u>		
3.58	3.62	3.71	3.88	3.89	3.97	4.04	3.95	0.24	4.14
									0.19

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

Available secondary sources put OPEC's October production at 30.23 mb/d

OPEC crude oil production

Available secondary sources indicate that **OPEC's output for October was 30.23 mb/d, 0.08 mb/d over the revised September 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

	<u>2002</u>	<u>2003</u>	<u>2Q04</u>	<u>Sept04*</u>	<u>3Q04*</u>	<u>Oct04*</u>	<u>Oct- Sept</u>
Algeria	864	1,134	1,199	1,264	1,256	1,273	9
Indonesia	1,120	1,027	969	959	958	956	-3
IR Iran	3,416	3,757	3,903	3,954	3,944	3,945	-9
Iraq	2,000	1,323	2,009	2,249	2,014	2,224	-26
Kuwait	1,885	2,173	2,292	2,426	2,397	2,443	17
SP Libyan AJ	1,314	1,422	1,499	1,585	1,575	1,600	15
Nigeria	1,969	2,131	2,342	2,362	2,383	2,349	-14
Qatar	648	746	772	800	798	800	0
Saudi Arabia	7,535	8,709	8,637	9,454	9,404	9,508	54
UAE	1,988	2,243	2,243	2,492	2,460	2,518	25
Venezuela	2,586	2,291	2,547	2,606	2,603	2,615	9
Total OPEC	25,323	26,955	28,412	30,151	29,792	30,228	78

Totals may not add due to independent rounding.

** Not all sources available.*

Rig Count

Non-OPEC rig count up 91 in September

Non-OPEC

Non-OPEC rig activity was higher in October compared with the September figure. North America gained 94 rigs mainly in Canada, while Western Europe added 7 rigs to total 65. Rig activity in DCs declined 3 rigs to 385, mainly in Africa.

Table 16
Non-OPEC rig count in 2002–2004

	<u>2002</u>	<u>2003</u>	<u>Change</u> <u>03/02</u>	<u>Sept04</u>	<u>Oct04</u>	<u>Change</u> <u>Oct/Sept</u>
North America	1,162	1,496	333	1,626	1,722	96
Western Europe	85	78	–7	58	65	7
OECD Pacific	17	18	1	29	20	–9
OECD	1,264	1,592	328	1,713	1,807	94
Other Asia	111	117	7	129	129	0
Latin America	106	116	10	128	132	4
Middle East	62	70	7	70	69	–1
Africa	43	48	5	61	55	–6
DCs	322	350	28	388	385	–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	2,103	2,194	91

Totals may not add due to independent rounding.

na not available

Source: Baker Hughes International.

OPEC rig count down 16 in October

OPEC

OPEC's rig count was 246 in October, a decline of 16 compared with the September figure. The loss in rig activity was mainly contributed by Indonesia.

Table 17
OPEC rig count

	<u>2002</u>	<u>2003</u>	<u>Change</u> <u>03/02</u>	<u>Sept04</u>	<u>Oct04</u>	<u>Change</u> <u>Oct/Sept</u>
Algeria	20	20	0	20	19	–1
Indonesia	46	45	–1	56	46	–10
IR Iran	34	35	1	43	43	0
Iraq	na	na	na	na	na	na
Kuwait	6	5	–1	15	14	–1
SP Libyan AJ	10	10	0	9	10	1
Nigeria	12	10	–2	9	7	–2
Qatar	13	8	–5	10	8	–2
Saudi Arabia	32	32	0	31	31	0
UAE	16	16	0	16	14	–2
Venezuela	42	37	–6	53	54	1
Total OPEC	231	217	–14	262	246	–16

Totals may not add due to independent rounding.

na not available

Source: Baker Hughes International.

Stock Movements

US commercial oil stocks showed slight contra-seasonal build of 1.3 mb in October

USA

US commercial oil stocks reversed the downward trend, showing a slight contra-seasonal build of 1.3 mb to 963.7 mb in the first month of the fourth quarter, at a time when oil stocks typically see draws due to high demand, especially for heating fuels. During the period 1-29 October 2004, all stocks witnessed some increases except for distillate fuel and jet fuel, as the former experienced a significant draw while the latter fell marginally.

The resumption of import flows interrupted by the Hurricane Ivan averaged 10.29 mb/d during the period 1-29 October compared with the previous month's average of 9.60 mb/d. This, together with the ongoing improvement in Gulf of Mexico production, helped crude oil stocks to regain all the previous month's losses, lifting them to 289.7 mb for a build of 15.7 mb, which was about 6% higher than in the previous period but still about 2% below the year-ago level. This upward trend is expected to continue at least in November when the lost Gulf of Mexico barrels will gradually return to the market and import flows remaining at very high levels to meet healthy demand especially for light and sweet grades. Gasoline inventories rose 2.3 mb to stand at 201.7 mb which was 8.8 mb or about 5% above the same period last year. This stock build came on the back of slower implied demand which averaged 9.08 mb/d during the current period compared with 9.21 mb/d in the previous one. Increasing gasoline production added to this build as the average output hit 8.63 mb/d for an increase of 0.18 mb/d over the previous period.

Distillates were the exception to the upward stock trend. Even with increased production, which on average rose from 3.66 mb/d to 3.74 mb/d, distillate stocks fell considerably to 115.7 mb, a draw of 7.7 mb or about 7% below the previous month and 12% lower than a year earlier. The main reason behind this draw is the improvement in implied demand which on average rose from 4.12 mb/d to 4.21 mb/d in the current period.

During the same time, the SPR showed a stock draw as expected in the previous *MOMR* to stand at 669.7 mb, but not a significant one as only 0.5 mb were released under a loan programme.

Table 18
US onland commercial petroleum stocks*
mb

	3 Sep 04	1 Oct 04	29 Oct 04	Change Oct/Sep 04	29 Oct 03	5 Nov 04**
Crude oil (excl. SPR)	285.7	274.0	289.7	15.7	293.9	291.5
Gasoline	204.1	199.4	201.7	2.3	192.9	201.3
Distillate fuel	126.6	123.4	115.7	-7.7	132.0	115.6
Residual fuel oil	34.7	33.5	35.6	2.1	33.6	36.8
Jet fuel	39.4	41.0	40.2	-0.8	40.2	39.8
Total	978.5	962.4	963.7	1.3	971.0	966.7
SPR	669.0	670.2	669.7	-0.5	630.2	670.3

* At end of month, unless otherwise stated.

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

Source: US Department of Energy's Energy Information Administration

Western Europe

Draws on middle distillate and crude oil inventories pushed EUR-16 stocks down moderately in October

After an upward revision of the September figures, total oil stocks in Eur-16 (EU plus Norway) registered a draw of 5.2 mb to 1,090.6 mb in October which was 18.9 mb or about 2% higher than a year ago. The main contributor to this decline was middle distillate stocks and to a lesser degree crude oil stocks.

After a significant build in September, crude oil stocks lost part of their gain, declining by 2.5 mb to 465.5 mb which was 2 mb above last year's level. Increasing freight rates discouraged refiners from importing expensive materials even with the slide in oil prices. On

the product side, the stock draw was deeper especially on middle distillates which dropped by 6.1 mb to stand at 347.9 mb, still 6.4 mb higher than last year's level. Strong demand, particularly from German consumers who are rushing to fill their tanks ahead of winter, as well as slower refinery runs, which averaged 12.21 mb/d or 0.09 mb/d below last month's average, were the reasons behind the draw on distillate stocks. Gasoline stocks also moved down on the back of lower production as higher naphtha prices determined reforming margins. Gasoline stocks fell by 1.5 mb to stand at 133.5 mb, leaving a y-o-y deficit of 2 mb. Fuel oil and naphtha were the exceptional products, as both witnessed increases, with fuel oil rising 0.5 mb to 115.1 mb and naphtha gaining 4.4 mb to 28.6 mb respectively. Steady import flows and lower demand were behind the builds in both products.

Table 19
Western Europe's oil stocks*
mb

	<u>Aug 04</u>	<u>Sep 04</u>	<u>Oct 04</u>	<u>Change</u> <u>Oct/Sep 04</u>	<u>Oct 03</u>
Crude oil	460.4	468.0	465.5	-2.5	463.5
Mogas	136.1	135.1	133.5	-1.5	135.6
Naphtha	24.6	24.2	28.6	4.4	22.9
Middle distillates	354.2	354.0	347.9	-6.1	341.5
Fuel oils	111.2	114.5	115.1	0.5	108.2
Total products	626.2	627.8	625.0	-2.8	608.2
Overall total	1,086.6	1,095.8	1,090.6	-5.2	1,071.7

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

Source: Argus, Euroilstock

Japan

Massive build up in crude oil and middle distillate stocks in September in Japan

At the end of September, total commercial oil stocks in Japan stood at 183.4 mb, up 14.2 mb or about 8% from the level registered in August. Crude stocks were about 20.40 mb or 10% below last year's level. Almost 70% of the build occurred on crude oil stocks while product inventories, especially middle distillates, contributed the remaining 30%.

Lower refinery runs, which fell by about 14%, and higher crude oil imports, which rose by about 5% in September from the previous month, were the main reason behind the surge in crude oil stocks which moved up 9.8 mb or about 8% higher than the month of August, lifting them to 112.5 mb which was 10.10 mb or about 8% below last year's figure. Middle distillates registered a significant build, adding 4.0 mb or about 10% to stand at 39.8 mb. This stock build could be attributed to lower implied demand due to high prices, while decreasing production prevented distillate stocks from accumulating extra barrels. On the back of stagnant gasoline implied demand, gasoline stocks showed a moderate increase of 1.3 mb to 12.8 mb, erasing almost the entire y-o-y deficit which stood at just 0.10 mb. Fuel oil stocks were the only product whose inventories showed a drawdown, declining by 0.90 mb to 18.3 mb, which widened the y-o-y deficit to 2 mb.

Table 20
Japan's commercial oil stocks*
mb

	<u>Jul 04</u>	<u>Aug 04</u>	<u>Sep 04</u>	<u>Change</u> <u>Sep/Aug</u>	<u>Sep 03</u>
Crude oil	118.7	102.7	112.5	9.8	122.6
Gasoline	11.8	11.5	12.8	1.3	12.9
Middle distillates	30.4	35.8	39.8	4.0	48.0
Residual fuel oil	18.1	19.2	18.3	-0.9	20.3
Total products	60.3	66.5	70.9	4.4	81.2
Overall total**	179.0	169.2	183.4	14.2	203.8

* At end of month.

** Includes crude oil and main products only.

Source: MITI, Japan

Balance of Supply and Demand

2004 supply/demand difference revised down to 27.89 mb/d

The summarized supply/demand balance table for 2004 shows minor downward revisions to total non-OPEC supply of 0.04 mb/d to now stand at 53.85 mb/d, while world oil demand has been lowered 0.05 mb/d to 81.74 mb/d, resulting in an estimated annual difference of around 27.89 mb/d. The quarterly distribution stands at 28.08 mb/d, 27.26 mb/d, 27.90 mb/d and 28.31 mb/d respectively. The quarterly balance was revised downward by 0.05 mb/d, 0.04 mb/d and 0.08 mb/d respectively, to now stand at 0.11 mb/d, 1.16 mb/d and 1.89 mb/d.

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

	<u>2003</u>	<u>1Q04</u>	<u>2Q04</u>	<u>3Q04</u>	<u>4Q04</u>	<u>2004</u>
(a) World oil demand	79.24	81.58	80.87	81.37	83.14	81.74
(b) Non-OPEC supply ⁽¹⁾	52.30	53.50	53.61	53.46	54.83	53.86
Difference (a – b)	26.94	28.08	27.26	27.90	28.31	27.89
OPEC crude oil production ⁽²⁾	26.95	28.19	28.41	29.79		
Balance	0.01	0.11	1.16	1.89		

(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 27.97 mb/d

The summarized supply/demand balance table for 2005 shows world oil demand expected at 83.23 mb/d and total non-OPEC supply expected at 55.26 mb/d. This has resulted in an annual difference of around 27.97 mb/d, with a quarterly distribution of 28.10 mb/d, 26.95 mb/d, 28.13 mb/d and 28.70 mb/d respectively.

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

	<u>2004</u>	<u>1Q05</u>	<u>2Q05</u>	<u>3Q05</u>	<u>4Q05</u>	<u>2005</u>
(a) World oil demand	81.74	83.05	81.96	82.98	84.90	83.23
(b) Non-OPEC supply ⁽¹⁾	53.86	54.95	55.02	54.85	56.21	55.26
Difference (a – b)	27.89	28.10	26.95	28.13	28.70	27.97
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	2005	3Q05	4Q05	2005
World demand														
OECD	47.9	47.9	48.0	48.7	50.1	48.2	48.8	50.2	49.3	50.2	48.2	49.1	50.7	49.5
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	15.6	15.8	15.6	15.8	15.3	15.6	15.9	15.7
Pacific	8.7	8.7	8.6	8.8	9.4	8.0	8.1	9.1	8.6	9.2	7.8	8.1	9.1	8.5
DCs	19.3	19.6	20.1	20.3	20.7	21.2	21.3	21.7	21.2	21.4	21.9	22.2	22.5	22.0
FSU	3.8	3.9	3.7	3.8	3.6	3.8	3.9	4.2	3.9	4.0	3.9	4.0	4.3	4.0
Other Europe	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0	0.9	1.0	1.0	1.0
China	4.7	4.7	5.0	5.6	6.3	6.8	6.3	6.0	6.3	6.6	7.2	6.8	6.5	6.7
(a) Total world demand	76.4	77.0	77.7	79.2	81.6	80.9	81.4	83.1	81.7	83.0	82.0	83.0	84.9	83.2
Non-OPEC supply														
OECD	21.9	21.8	21.9	21.6	21.8	21.5	20.8	21.6	21.4	21.8	21.6	20.8	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	5.8	6.1	6.1	6.3	6.2	5.7	6.0	6.0
Pacific	0.8	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5
DCs	10.9	10.9	11.2	11.3	11.6	11.7	11.9	12.1	11.8	12.2	12.2	12.4	12.6	12.4
FSU	7.9	8.5	9.3	10.3	10.8	11.1	11.3	11.6	11.2	11.4	11.6	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	45.7	46.4	47.7	48.6	49.6	49.7	49.5	50.8	49.9	50.9	50.9	50.7	52.0	51.1
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
OPEC NGLs	49.0	50.0	51.4	52.3	53.5	53.6	53.5	54.8	53.9	54.9	55.0	54.9	56.2	55.3
(b) Total non-OPEC supply and OPEC NGLs	28.0	27.2	25.3	27.0	28.2	28.4	29.8	83.3						
OPEC crude oil production (secondary sources)	77.0	77.2	76.7	79.3	81.7	82.0	83.3							
Total supply	0.6	0.2	-1.0	0.0	0.1	1.2	1.9							
Balance (stock change and miscellaneous)														
Closing stock level (outside FCPEs) mb														
OECD onland commercial	2530	2628	2476	2522	2467	2546	2597							
OECD SPR	1269	1284	1343	1406	1418	1424	1431							
OECD total	3799	3912	3819	3928	3885	3970	4028							
Oil-on-water	877	831	816	885	906	906	n.a.							
Days of forward consumption in OECD														
Commercial onland stocks	53	55	51	51	51	52	52							
SPR	26	27	28	28	29	29	28							
Total	79	82	78	80	81	81	80							
Memo items														
FSU net exports	4.1	4.6	5.6	6.5	7.2	7.3	7.4	7.4	7.3	7.4	7.8	7.9	8.0	7.8
(a) - (b)	27.4	27.1	26.3	26.9	28.1	27.3	27.9	28.3	27.9	28.1	26.9	28.1	28.7	28.0

Note: Totals may not add up due to independent rounding.
n.a. = Not available.

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

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

† This compares Table 23 in this issue of the MOMR with Table 23 in the October 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	1001	2001	3001	4001	1002	2002	3002	4002	1003	2003	3003	4003	1004	2004	3004
Closing stock level mb																					
OECD onland commercial	2,615	2,698	2,445	2,530	2,628	2,476	2,524	2,597	2,660	2,628	2,604	2,650	2,575	2,476	2,425	2,546	2,596	2,522	2,467	2,546	2,597
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	1,200	1,229
Western Europe	912	963	881	930	923	892	918	909	918	923	932	942	917	892	909	908	922	921	921	926	932
OECD Pacific	492	453	437	454	443	410	447	457	473	443	435	447	440	410	413	453	460	435	401	419	437
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	1,431
North America	563	571	567	543	552	601	544	545	547	552	563	578	589	601	601	611	626	640	654	664	672
Western Europe	329	362	347	355	352	353	352	348	343	352	352	348	345	353	363	358	360	369	366	362	363
OECD Pacific	362	369	370	370	380	389	374	374	375	380	386	388	386	389	393	393	393	396	398	398	396
OECD total	3,869	4,000	3,729	3,799	3,912	3,819	3,794	3,864	3,925	3,912	3,906	3,964	3,895	3,819	3,782	3,907	3,975	3,928	3,885	3,970	4,028
Oil-on-water	812	859	808	877	831	816	903	829	870	831	798	805	802	816	857	887	873	885	906	906	n.a.

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	52
North America	52	54	47	48	52	48	49	51	53	53	52	52	50	48	46	48	49	47	46	48	49
Western Europe	60	63	58	61	61	58	62	59	59	60	63	61	59	58	60	59	59	59	60	60	59
OECD Pacific	58	52	50	52	51	47	55	56	53	48	56	55	47	42	50	56	50	46	50	52	48
OECD SPR	27	27	27	26	27	28	27	27	26	27	28	28	27	27	29	28	28	28	29	29	28
North America	24	24	24	23	23	24	23	23	23	23	24	24	24	25	25	25	25	26	26	26	27
Western Europe	21	24	23	23	23	23	24	22	22	23	24	23	22	23	24	23	23	24	24	23	23
OECD Pacific	43	42	42	43	44	44	46	46	42	41	50	47	41	40	48	49	43	42	50	49	44
OECD total	83	84	78	79	82	78	81	81	81	81	84	83	79	77	80	81	80	78	81	81	80

n.a. = Not available.

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

	2000	2001	2002	Change 02/01	2003	Change 03/02	2004	2004	3004	4004	2004	Change 04/03	2005	3005	4005	2005	Change 05/04
USA	8.11	8.05	8.04	-0.01	7.82	-0.22	7.85	7.73	7.48	7.65	7.68	-0.15	7.90	7.53	7.70	7.73	0.05
Canada	2.68	2.73	2.84	0.12	2.97	0.12	3.12	3.11	3.04	3.36	3.16	0.19	3.20	3.19	3.12	3.45	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	3.90	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	15.11	14.87	0.16
Norway	3.32	3.42	3.33	-0.09	3.26	-0.07	3.35	3.25	2.97	3.27	3.21	-0.05	3.34	3.24	3.26	3.20	-0.01
UK	2.69	2.54	2.52	-0.01	2.33	-0.20	2.20	2.14	2.01	1.97	2.08	-0.25	2.12	2.05	1.94	2.00	-0.08
Denmark	0.36	0.35	0.37	0.02	0.37	0.00	0.37	0.40	0.39	0.36	0.38	0.01	0.37	0.40	0.39	0.38	0.00
Other Western Europe	0.40	0.38	0.42	0.04	0.43	0.01	0.47	0.46	0.45	0.49	0.47	0.04	0.47	0.46	0.49	0.47	0.00
Western Europe	6.77	6.68	6.64	-0.04	6.39	-0.25	6.39	6.25	5.82	6.09	6.14	-0.25	6.30	6.16	5.73	6.05	-0.09
Australia	0.77	0.71	0.70	0.00	0.60	-0.10	0.53	0.51	0.54	0.52	0.53	-0.07	0.50	0.49	0.51	0.50	-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	0.04	0.05	0.00
OPEC Pacific	0.85	0.78	0.77	-0.01	0.65	-0.11	0.59	0.56	0.59	0.56	0.57	-0.08	0.56	0.53	0.53	0.54	-0.03
Total OPEC	21.87	21.81	21.89	0.08	21.63	-0.25	21.78	21.54	20.77	21.60	21.42	-0.21	21.81	21.58	20.80	21.46	0.04
Brunel	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	0.22	0.21	0.00
India	0.74	0.73	0.75	0.01	0.74	0.00	0.76	0.77	0.78	0.77	0.77	0.03	0.74	0.75	0.76	0.75	-0.02
Malaysia	0.69	0.68	0.71	0.03	0.75	0.04	0.79	0.78	0.83	0.83	0.81	0.06	0.81	0.80	0.85	0.83	0.02
Vietnam	0.31	0.34	0.34	0.00	0.35	0.01	0.39	0.40	0.40	0.40	0.40	0.05	0.38	0.39	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	0.35	0.35	0.05	0.33	0.36	0.36	0.36	0.01
Other Asia	2.18	2.20	2.27	0.07	2.36	0.09	2.47	2.51	2.60	2.58	2.54	0.18	2.47	2.51	2.60	2.54	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	0.00
Brazil	1.45	1.53	1.72	0.19	1.77	0.06	1.75	1.74	1.80	1.72	1.75	-0.02	1.87	1.86	1.84	1.87	0.12
Colombia	0.70	0.61	0.58	-0.03	0.55	-0.03	0.52	0.54	0.53	0.50	0.52	-0.03	0.54	0.55	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	0.61	0.54	0.12	0.54	0.55	0.64	0.57	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	0.21	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	0.02
Latin America	3.71	3.73	3.87	0.14	3.91	0.04	3.89	3.91	3.97	3.96	3.93	0.03	4.13	4.15	4.21	4.17	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	0.00
Oman	0.96	0.96	0.90	-0.06	0.82	-0.08	0.79	0.77	0.76	0.77	0.77	-0.05	0.77	0.77	0.77	0.77	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	0.51	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	0.41	0.42	0.00
Middle East	2.12	2.14	2.06	-0.07	2.00	-0.06	1.94	1.89	1.87	1.88	1.90	-0.10	1.92	1.90	1.88	1.90	0.00
Angola	0.75	0.74	0.89	0.15	0.87	-0.02	0.94	0.93	0.99	1.03	0.97	0.10	1.13	1.11	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	0.04
Congo	0.27	0.27	0.25	-0.01	0.24	-0.01	0.24	0.24	0.22	0.23	0.23	-0.01	0.24	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	0.01
Equatorial Guinea	0.11	0.14	0.20	0.06	0.24	0.04	0.34	0.34	0.34	0.41	0.36	0.12	0.37	0.37	0.44	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	0.25	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	0.28	0.24	0.00
Sudan	0.18	0.21	0.24	0.03	0.27	0.03	0.29	0.30	0.31	0.32	0.30	0.04	0.34	0.35	0.38	0.36	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	0.20	0.20	0.00
Africa	2.84	2.80	3.03	0.23	3.05	0.02	3.31	3.35	3.46	3.66	3.45	0.40	3.71	3.67	3.75	3.78	0.33
Total DCs	10.86	10.86	11.23	0.37	11.32	0.09	11.62	11.67	11.90	12.09	11.82	0.51	12.24	12.23	12.45	12.39	0.57
FSU	7.91	8.53	9.33	0.79	10.27	0.94	10.78	11.06	11.33	11.63	11.20	0.94	11.35	11.65	11.93	11.79	0.59
Russia	6.49	6.99	7.62	0.63	8.46	0.84	8.89	9.12	9.37	9.65	9.26	0.80	9.35	9.58	9.84	9.73	0.47
Kazakhstan	0.71	0.80	0.94	0.15	1.03	0.09	1.12	1.15	1.19	1.21	1.16	0.13	1.17	1.21	1.25	1.22	0.06
Azerbaijan	0.27	0.30	0.31	0.00	0.31	0.00	0.31	0.31	0.31	0.29	0.30	-0.01	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	0.47	0.49	0.48	0.01	0.47	0.49	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	0.00
China	3.23	3.30	3.39	0.10	3.41	0.01	3.43	3.47	3.52	3.43	3.46	0.05	3.44	3.49	3.45	3.48	0.02
Non-OPEC production	44.05	44.68	46.01	1.33	46.79	0.78	47.78	47.91	47.68	48.93	48.07	1.28	49.01	48.88	50.16	49.29	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	1.87	1.83	0.00
Non-OPEC supply	45.70	46.37	47.74	1.37	48.59	0.85	49.63	49.72	49.49	50.79	49.91	1.32	50.86	50.91	52.02	51.12	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	3.84	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	0.33	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	4.14	0.19
Total Non-OPEC and OPEC NGLs	49.04	49.95	51.36	1.40	52.30	0.94	53.50	53.61	53.46	54.83	53.86	1.56	54.95	55.02	56.21	55.26	1.40

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

Table 27
Non-OPEC Rig Count

	2000	2001	01/00	Change	1002	2002	3002	4002	2002	02/01	1003	2003	3003	4003	2003	Change	03/02	1004	2004	Sep04	3004	Oct04	Change	Oct04- Sep04
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	1,240	1,229	1,240		0	
Canada	344	342	-2		383	147	250	283	266	-76	494	203	383	408	372	106	528	202	273	326	372		99	
Mexico	44	54	10		63	61	62	76	65	11	82	84	96	107	92	27	107	113	113	111	110		-3	
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	1,626	1,665	1,722		96	
Norway	22	23	1		20	20	17	19	19	-4	18	19	20	18	19	0	19	18	13	14	16		3	
UK	18	24	6		28	30	24	23	26	2	19	21	22	16	20	-6	15	19	15	14	15		0	
Denmark	3	4	1		5	4	3	5	4	0	3	5	3	4	4	0	4	4	1	3	4		3	
Other Western Europe	82	44	-38		39	38	33	34	36	-8	36	34	38	37	36	0	31	30	29	27	30		1	
Western Europe	125	95	-30		92	91	76	81	85	-10	77	78	83	75	78	-7	69	70	58	57	65		7	
Australia	10	10	0		9	9	9	9	9	-1	10	10	11	13	11	2	12	13	20	18	13		-7	
Other Pacific	7	9	2		8	7	7	10	8	-1	8	7	8	6	7	-1	7	8	9	9	7		-2	
OECD Pacific	17	20	3		17	16	16	19	17	-3	18	17	18	19	18	1	19	22	29	26	20		-9	
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	1,713	1,749	1,807		94	
Brunei	2	3	1		2	3	3	3	3	0	3	4	4	2	3	0	2	3	2	3	2		0	
India	49	50	1		52	54	55	57	55	5	59	60	61	62	60	5	64	68	73	71	75		2	
Malaysia	7	11	4		12	13	15	14	14	3	14	13	16	15	14	0	15	15	13	13	14		1	
Papua New Guinea	0	1	1		1	1	1	1	1	0	1	2	2	1	2	1	3	2	0	0	1		1	
Vietnam	8	8	0		8	8	9	10	9	1	9	9	10	8	9	0	8	9	9	8	8		-1	
Asia others	16	22	6		26	29	33	32	30	8	31	28	26	30	29	-1	27	31	32	31	29		-3	
Other Asia	83	95	12		100	109	116	117	111	16	117	115	119	118	117	6	119	128	129	127	129		0	
Argentina	57	71	14		49	45	49	54	49	-22	59	66	59	57	60	11	64	73	71	73	72		1	
Brazil	23	28	5		27	27	27	26	27	-1	27	27	27	25	26	-1	24	26	26	26	27		1	
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	5		1	
L. America others	12	7	-5		4	4	4	5	5	-2	3	4	4	5	4	-1	6	6	3	3	4		1	
Latin America	120	141	21		110	103	104	107	106	-35	113	121	114	114	116	10	114	127	128	129	132		4	
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	33	34	35		2	
Syria	14	19	5		20	21	23	24	22	3	23	23	26	23	24	2	24	24	23	23	22		-1	
Yemen	6	6	0		8	9	9	11	9	3	11	10	9	7	9	0	7	8	10	9	10		0	
Middle East	45	50	5		57	60	64	69	62	12	70	68	72	68	70	8	69	68	70	69	69		-1	
Angola	6	5	-1		5	6	6	5	5	0	3	4	3	6	4	-1	4	3	3	3	4		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	3	3	2		-1	
Egypt	18	22	4		22	23	22	23	23	1	26	26	27	26	26	3	27	28	33	29	26		-7	
Gabon	2	2	0		1	2	2	2	2	0	3	4	1	3	3	1	2	2	2	2	1		-1	
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	20	20	22		2	
Africa	34	36	2		41	45	44	43	43	7	45	50	44	51	48	5	48	53	61	56	55		-6	
Total DCS	282	322	40		307	317	328	336	322	0	346	354	350	350	350	28	350	376	388	381	385		-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	2,103	2,132	2,194		91	

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

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OPEC Basket average price

US\$ per barrel

↑ up 5.01 in October

October 2004	45.37
September 2004	40.36
Year-to-date	35.74

October OPEC production

in million barrels per day, according to secondary sources

Algeria	1.27	Kuwait	2.44	Saudi Arabia	9.51
Indonesia	0.96	SP Libyan AJ	1.60	UAE	2.51
IR Iran	3.95	Nigeria	2.35	Venezuela	2.62
Iraq	2.22	Qatar	0.80	TOTAL	30.23

Supply and demand

in million barrels per day

2004

World demand	81.74
Non-OPEC supply	53.85
Difference	27.89

2005

World demand	83.23
Non-OPEC supply	55.26
Difference	27.97

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

Stocks

US commercial oil stocks displayed a build of 1.3 mb in October

World economy

World GDP growth remains unchanged at 4.9% for 2004 and revised down to 4.0% for 2005