OPEC

Organization of the Petroleum Exporting Countries



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Monthly Oil Market Report

OPEC Basket average price

US \$ per barrel

Down 0.06 in October

October27.32September27.38Year-to-date23.91

October OPEC production

million barrels per day, according to secondary sources

Algeria	0.96	Kuwait	1.96	Saudi Arabia	7.83
Indonesia	1.11	SP Libyan AJ	1.36	UAE	2.03
IR Iran	3.59	Nigeria	1.99	Venezuela	3.02
Irag	2.43	Oatar	0.69		

Supply and demand

million barrels per day

2002

World demand 76.47 Non-OPEC supply 51.59 **Difference 24.88**

2003

World demand 77.17
Non-OPEC supply 52.44 **Difference 24.73**NR Non OPEC supply includes OPE

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

Stocks

Slight build in USA in October

World economy

World GDP growth estimate revised up to 2.8% for 2002

November 2002

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OIL MARKET HIGHLIGHTS

World GDP is forecast to grow by 2.8% in 2002, slightly higher than last month's figure. Within the OECD, downward revisions have been made for several euro-zone countries, while the estimate for OECD Pacific, specifically Japan, has been revised up. The developing countries' estimate is almost unchanged.

- The outlook for the USA remains doubtful. The Fed responded by lowering the target for the federal funds rate by 50 basis points to 1.25%, the lowest level in 41 years, justifying the large move by the depressed state of investment, following persistent stock market weakness and geopolitical tensions. While consumer confidence continued to drop, retail sales remained flat in October, following a revised 1.3% fall in September. A lower ISM index In October showed a further contraction in manufacturing, while the unemployment rate crept up to 5.7%.
- In Japan, third-quarter GDP growth of 0.7% was unexpectedly on the high side, although it was lower than the export-led 1.0% growth in the second quarter. While the external sector proved a drag on GDP, domestic demand picked up the slack. However, prospects remain uncertain. A slowdown in the US economy would deal a blow to exports, and deflation at home continues to exacerbate the banks' bad-loan problem. Moreover, the revival in private consumption may be short-lived. The European Commission has trimmed growth forecasts for the euro-zone for 2002 and 2003.
- The monthly average price of OPEC's Reference Basket fell by a marginal 6¢/b to \$27.32/b in October, after a period of continuous gains that had begun in July. The cumulative annual average at the end of October stood at \$23.91/b, only 2¢/b below that of 2001. In November, the Basket price dropped to around \$23.00/b, which was about \$5/b lower than the early-October level, due to plentiful supply amid an easing of tensions in the political arena, which converted the price escalation seen for many weeks into a downward movement, thereby eroding the so-called "political premium" further.
- The combination of a sharp reduction in refinery throughput and rising demand for gasoline and distillates, amid falling stocks in the Atlantic basin, alleviated product price losses, compared with their underlying crudes, in October. Thus, refinery profits improved considerably in the US and European markets.
- The OPEC area's spot-chartering slowed in October, after a sharp rise the previous month, declining by 2.20 mb/d to a monthly average of 11.89 mb/d. However, crude oil tanker freight rates rose for all tanker sizes, on tight tonnage supply and higher insurance costs. Clean product tanker freight rates maintained the previous two months' mixed trends.
- The average yearly world oil demand figures for 2002 and 2003 have changed little since the last MOMR. October data points to colder-than-normal weather in most parts of the northern hemisphere. The persistence of similar conditions in November and December would be necessary for a 1 mb/d rise in world oil demand to materialize in the fourth quarter.
- OPEC crude oil production in October, based on secondary sources, is estimated at 26.95 mb/d. The non-OPEC oil supply forecast for 2002 has been revised down to 47.91 mb/d, 1.44 mb/d higher than in 2001. 2003 non-OPEC supply is expected to reach 48.73 mb/d. The net FSU export forecasts are 5.39 mb/d and 5.71 mb/d for 2002 and 2003.
- The non-OPEC rig count declined in October by 21 to 1,580; OPEC's rig count rose by 2 to 228. The major contributor to non-OPEC's decrease was North America, which declined by 35 rigs.
- US commercial onland oil stocks reversed the previous month's trend, increasing by 1.3 mb (0.05 mb/d) to 983.4 mb in 4 October - 1 November, as crude oil stocks rebounded, regaining most of the previous month's draw. In October, commercial onland oil stocks in Eur-16 (EU plus Norway) continued to decrease, by 8.1 mb (0.26 mb/d) to 1,050.6 mb. In the third quarter of 2002, OECD commercial onland oil stocks (the USA, Eur-16 and Japan) registered a contra-seasonal draw of 63.4 mb (0.69 mb/d) to 2,219.7 mb.
- The current supply/demand outlook has resulted in a projection of world demand in the second quarter of 2003 of 75.29 mb/d, and total non-OPEC supply plus OPEC NGLs is estimated to be 52.44 mb/d. This has led to an expected difference of 22.81 mb/d. If current OPEC production is maintained, this situation would imply a huge stock build-up and could exert strong downward pressure on prices.

HIGHLIGHTS OF THE WORLD ECONOMY

Economic growth rates 2002

%

 World
 G-7
 USA
 Japan
 Euro-zone

 2.8
 1.4
 2.3
 -0.1
 0.8

Industrialised countries

United States of America

US GDP growth in fourth quarter is expected to slow from 3.1% annual rate achieved in third quarter Most indicators point to weak growth in the US economy in the fourth quarter, with moderate prospects for next year. Consumer spending has slowed recently and this trend may continue for the rest of the quarter. The relatively strong third-quarter GDP growth, estimated at 3.1% annually, was mainly boosted by a 4.2% gain in consumer spending, induced by temporary factors, such as extremely strong July auto sales. More recent data is mixed. Manufacturing activity shrank for a second straight month in October, as reported by the Institute of Supply Management's key index with a reading of 48.5, compared with 49.5 in September. Moreover, industrial production fell for the third straight month, by 0.8%, the biggest drop since September 2001, providing more evidence that manufacturing is faltering. Decreases in the production of cars and communications equipment led the slide. Manufacturing, which accounts for almost 90% of industrial production, dropped by 0.7%, after falling by 0.4% in September. At the same time, capacity utilisation fell to 75.2% in October, the lowest level in seven months, from 75.8% in September. Separately, the Labor Department reported that unemployment had crept up in Non-farm payrolls were trimmed for a second consecutive month, and the unemployment rate climbed to 5.7%. On the positive side, the Department of Commerce reported that construction spending had risen by 0.6% in September. Services also continued to expand in October. More importantly, retail sales were unchanged at \$301.7 billion in October, after falling by a revised 1.3% in September. They rose by 0.7%, excluding volatile automobile sales. Apart from cars, every other category of retail sales rose. Retail sales are important, since consumer spending accounts for two-thirds of the total economy. The data was interpreted as positive evidence that consumers continued spending, despite a further drop in consumer confidence. The Federal Reserve Board (Fed) responded to the weakness in the economy by lowering interest rates by 50 basis points to 1.25%, the lowest nominal level in 41 years. Separately, the Fed reported that consumer credit grew by \$9.9 bn, up sharply from a \$5.6 bn increase in August.

Javan

Continued growth in third quarter has not dispersed doubts about sustainability of economic recovery in Japan The government remains wary about future prospects, in particular about the growing risks from falling demand overseas. The rebounding domestic demand could also disappear in the coming months, as the unemployment situation worsens, in the wake of rising bankruptcies. Thirdquarter GDP grew at 0.7% (3% annually), the third straight quarter of expansion. Consumer spending rose by 0.8%, compensating for the external sector, which subtracted 0.1% from growth during the quarter. This moderate expansion follows a revised 1.0% on-quarter rise in the second quarter, in which the export-led boom in manufacturing helped the economy emerge from recession. As global demand subsided, export growth slowed to 0.5%, significantly lower than the 5.9% second-quarter growth and well below the 1.8% rise in imports. Japan's current-account surplus contracted 6.8% in September from a year earlier, the first decline in 12 months, following double — and even triple — digit gains for most of the year. On the other hand, consumer spending increased for the fourth straight quarter, despite continued high unemployment and a decline in wages. Machinery orders fell by 1.7% on the quarter in July-September and are forecast to drop by another 6.5% in October-December. Increasingly, deflation is becoming a major problem. The GDP deflator fell by 1.6% in July-September, worse than the 1.0% drop in the previous quarter, the 18th quarter in a row the measure has been negative. Entrenched deflation is aggravating the problem of non-performing loans crippling the banking sector. This is reflected in the corporate bankruptcy data. Although the number of corporate bankruptcy cases fell by 10.7% on the year in October, it was 12.7% higher than in September, and a string of large-scale bankruptcies sent total liabilities surging by 79.9% on the year and 136% on the month, to \\ \frac{\pma}{1.927} \text{ trillion, the second-worst postwar figure.}



Downward revisions to EU growth this year and next, on weak domestic demand and hampered investment Euro-zone

Mounting pessimism is reflected in the European Commission's recent downward revisions to GDP growth forecasts for 2002 and 2003, as stock market and other global uncertainties are perceived to be holding back investment and discouraging private consumption. The EC sees only 0.8% growth for 2002, the slowest rate in nine years, and 1.8% in 2003, down from an initial forecast of 2.9%. The sharp slowdown is also exacerbating the region's public finances. In particular, the Commission criticized Germany, as well as Portugal, both expected to run government budget deficits exceeding 3% of GDP this year and next, as well as France, getting close to the upper limit of 3%, while Italy's government debt is expected to reach 110% of GDP. Inflation is also forecast to exceed the European Central Bank's target rate of 2% next year. In the meantime, the ECB has kept interest rates on hold, but has signalled a possible cut before year-end. Consumer price inflation in the region reached 2.2% in October. Separately, the German government's Council of Economic Advisers has predicted that average real GDP growth in Germany would reach only 0.2% this year and 1.0% in 2003. This compares with the government's respective estimates of 0.5% and 1.5%, both down on previous forecasts. Industrial production in Germany fell in September by a seasonally adjusted 1.2% on the month, after rising by 1.3% in August and dropping by 0.7% in July. The fall was expected, after the recent drop in business confidence and decline in manufacturing orders. Factory orders fell by 2.5% in September. In addition, unemployment rose in October to 4.12 million, the highest level since December 1998, pushing the jobless rate up to 9.9%. Meanwhile, other euro-zone countries fared no better: third-quarter GDP in Italy and the Netherlands rose by only 0.3% and 0.1%, respectively.

Output in the five basic sectors of the Russian economy decelerated in September; January—September trade and current account surpluses fell, compared with last year

Former Soviet Union

The Russian government has approved a 14% increase in oil export duty (from \$26.2 to \$29.8 per ton, or \$4.08 per barrel), as of 1 December 2002. The year-on-year (y-o-y) growth in output in the five basic sectors of the economy decelerated in September, bringing the aggregate figure down from 3.9% in January-August to 3.7% during January-September. Although industrial output, construction, transport services and retail sales continued growing, agricultural output declined by 11.4% y-o-y in September. During January-September, while private investment grew by 5.3% y-o-y, total fixed capital investment grew by 2.5% y-o-y, compared with 7.8% in the corresponding period of 2001. This was mainly due to a drop in government investment, which is believed to have made up 21.7% of total investment in the first half of 2002, down from 23.8% in the first half of 2001. Consumer prices rose at a lower-than-expected rate of 1.1% in October, or 11.5% for the first ten months of the year. The volume of exports grew at 6.2% y-o-y in January-September, although a 6.3% decline in average prices meant almost equal export revenue of around \$77 bn in January-September 2002 and 2001. Meanwhile, the total value of imported goods rose by 12.1% y-o-y in January-September, compared with a 21.1% increase in the corresponding period of 2001. As a result, the trade surplus decreased from \$38.8 bn in January-September 2001 to \$33.8 bn in the corresponding period of 2002, bringing the current account surplus down from \$28.1 bn to \$21.1 bn.

Inflation rate rose in Hungary, but plummeted in Czech Republic and Poland

Eastern Europe

Inflation in Hungary rose by a slightly faster-than-expected 0.6% in October (4.9% on the year), on higher clothing prices and increased excise taxes on tobacco products. Meanwhile, the current account in September posted its biggest deficit since the all-time high of March 1995. The accumulated current account deficit amounted to 2.5 bn euros, or about 6.1% of GDP, compared with 3% a year ago. In the Czech Republic, inflation fell to an all-time low in October, of 0.3% on the month and 0.6% on the year, due mainly to a 7.3% month-on-month decrease in the regulated price of natural gas for households. Food prices also declined by a sharp 4.9%, while transportation registered a fall of 1.5% over year-ago prices. Furthermore, the labour market continued to deteriorate in October, with unemployment remaining on an upward trend and vacancies falling. In Poland, inflation plummeted to close to 1% year-on-year. Real interest rates have declined, but remain at a respectable 5-6%. Although the decline in inflation has been helped by some extraordinary factors, such as a prolonged decline in food prices, there is little doubt that underlying core inflation has also declined significantly, in line with the slowdown in economic activity. Real GDP growth is expected to be slightly above 1% this year, with unemployment at 17%. Signs of a pick-up in economic growth are tentative, while the Central Bank has expressed confidence that inflation, by end-2003, will be less than 3%, well within the 2–4% target range.



Efforts at economic diversification are underway in OPEC Member Countries

Rebalancing growth in emerging Asia, reducing tariffs on goods of African origin, and trade balance surplus in Brazil

Real price of OPEC Basket up by marginal 0.04% in October

OPEC Member Countries

Economic growth remains heavily dependent on the energy sector, which accounts for around one-third of total GDP in most OPEC Member Countries (MCs). However, most MCs are making a serious effort to diversify their economic base and generate more non-oil revenue. For example, Venezuela has recently entered into a 20–year agreement between the Corporation Venezuela de Guyana and the Crystallex International Corporation (CIC), for the development of its gold mines. CIC will pay a fixed royalty rate of 3% to the Venezuelan Ministry of Energy and Mines and a royalty within a range of 1–3%, that will vary according to the price of gold. It will also pay \$15m for the acquisition of national assets related to the project. In the United Arab Emirates, expansion plans are underway for the development of both the Dubai International Convention Centre and the Dubai World Trade Centre. The costs of the two projects are estimated at \$231.5m. The Socialist People's Libyan Arab Jamahirija's \$3.5 bn programme to increase its national power-generation capacity is making encouraging progress.

Developing countries

Given the continued weakness in developed countries' export markets, domestic demand will need to play a bigger role in Asia. Foreign investment in the region will also help to boost domestic demand, offsetting weaker exports. However, prospects for members of ASEAN are moderate. Increased security concern in the region is likely to deter foreign investment and reduce tourism receipts. The Asian countries' heavy reliance on the American export market makes them vulnerable to any renewed economic weakness in the USA. China's real GDP growth is estimated to average 7.7% this year. Exports are expanding rapidly, while domestic demand growth is driven by government investment. In India, the attitude towards foreign direct investment is clearly changing, with a recent decision in June allowing 26% foreign ownership. GDP growth is expected to pick up from 5.1% this year to 5.8% in 2003. In Sub-Saharan Africa, the Community of Eastern and Southern Africa has reached a free trade agreement in October that aims to manage a reduction in tariffs on goods originating from member states, resulting in zero tariffs by 2004. Brazil has achieved a trade surplus of almost \$46 bn in the first seven months of 2002, and, with tight domestic demand and a weak real continuing to restrain import-spending for the rest of this year, it is expected that the trade surplus for all 2002 may reach \$86 bn. This, in turn, will narrow the current account deficit to less than \$17 bn, from last year's \$24 bn.

Oil price, US dollar and inflation

The US dollar stabilised against most European currencies in the modified Geneva I + US dollar basket* in October, but continued to rise versus the yen. The yen depreciated by 2.80% to \(\frac{\pma}{2}\)123.86/\(\frac{\pma}{2}\) from \(\frac{\pma}{2}\)120.48/\(\frac{\pma}{2}\) in September, while the euro rose by a marginal 0.01% against the dollar, averaging \(\frac{\pma}{2}\)0.9808 in October, almost the same level as in September.

The dollar advanced in the first half of October, rising to a four-month high of \\$125.20/\\$ and driving the euro down to \\$0.9735/\\$ on 18 October. The US currency then shed part of these gains versus the yen, falling to \\$122.45/\\$ by month-end, while the single currency managed to regain its initial early October level of \\$0.9864. The yen was pressured by the potential economic consequences of plans to confront the bad-loans problem in the banking sector, which triggered a fall in Japanese stocks to 19-year lows. On the other hand, the euro was handicapped by the ECB's unwillingness to ease interest rates, as well as the fiscal constraints imposed by the EU's Stability and Growth Pact. The dollar benefited early in the month from the positive momentum in US equity and bond markets, despite uneven economic data and continued geopolitical tension. It weathered negative data, in the form of falling US consumer sentiment and retail sales, while getting support from surging US housing starts and rising equity prices. However, other data served as a reminder that the US manufacturing sector is still contracting and employment stagnating.

In October, the OPEC Reference Basket fell by \$0.06 per barrel, or 0.22%, to \$27.32/b, from \$27.38/b in September. In real terms (base July 1990=100), after accounting for inflation and currency fluctuations, the Basket price was almost unchanged, rising by 0.04% to \$23.86/b from \$23.85/b, the small dollar appreciation compensating for the modest drop in nominal prices and for inflation. The dollar rose by 0.28%, measured by the import-weighted modified Geneva I + US dollar basket, while inflation was estimated at 0.02%.

* The 'modified Geneva I + US dollar 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.

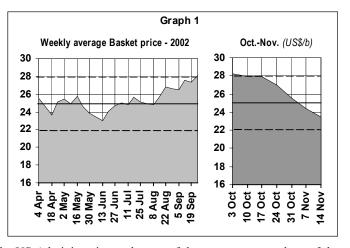


CRUDE OIL PRICE MOVEMENTS

OPEC's Reference Basket slipped by 6¢/b in October, ending three-month recovery The price of OPEC's Reference Basket of seven crudes slipped by 6¢/b in October, from \$27.38/b in September to \$27.32/b, ending a three-month recovery. Unless a major unforeseen event happens in the remainder of the year, it is most likely that the yearly average price of the Basket for 2002 will exceed that of 2001, when crude prices started to collapse at the end of September.

The average weekly price of the Basket peaked at \$28.24/b in the first week of October, but made a downturn in the second week, losing \$0.36/b to average \$27.88/b. The Basket firmed in the third week, averaging \$27.97/b; however, it went in a tail-spin when it lost \$1/b in the week ending 24 October and another \$1.45/b in the following week. The sharp fall was extended into the first week of November (latest data available at the time of publication), with the weekly average price falling by another \$1.13/b to stand at \$24.39/b. The free-fall, that had started in the second half of October, seems to have reached a bottom during the second week of November, with daily prices showing signs of recovery.

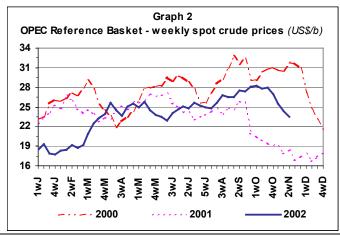
Political developments were main driver in crude oil price developments in October; so-called "war/political premium" started to be deflated in second half of month, as US stand perceived as more conciliatory In October, crude oil markets were dominated by the discussions about the USdrafted resolution at the United Nations Security Council. In other words, crude prices responded to developments in the political arena, neglecting the underlying market fundamentals. In October, undoubtedly, the efforts to bridge the



differences between the US Administration and some of the permanent members of the Security Council with veto power (France, Russia and, to some extent, China) over the final text of the resolution, resulted in a considerable swing in crude prices.

The so-called "political/war premium" was at its peak at the beginning of the month, when the NYMEX sweet crude contract exceeded \$30/b and its European counterpart hovered at around \$29/b. Market attention focused on diplomatic manoeuvering by the US Administration to gain support for a new and tougher resolution in the UN; at the same time, the US Administration was closer to getting domestic endorsement of the issue from the US Congress. Crude prices retreated in the second week, as US President George W. Bush's statement on 7 October was regarded as a postponement of a possible

military operation in the Middle East. Losses were capped, as traders' expectations ofconsiderable crude oil stock- draws in the USA, as a consequence of the two-week disruption normal oil operations in the US Gulf area, unfulfilled, and the reports from both the American Detroloum



Weather-related factors

supported crude oil

prices in first half of

October; however, US

stand on Middle East

aggressive, and reported

compliance, dragged

issue, which was

perceived as less

weaker OPEC

prices down

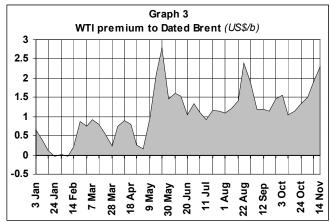
American Petroleum Institute and the US Administration's Department of Energy showed lower-than-anticipated crude oil stock draws.

Crude oil markets plunged, with NYMEX futures reaching a seven-week dip on 21 October, after the USA had reduced the intensity of its demands and in spite of the significant builds in crude oil inventories reported in the last two weeks. According to the API, crude stocks rose by 14.31 million barrels between the weeks ending 11 October and 18 October. The easing in tensions over the Iraqi issue and preliminary reports of a significant rise in OPEC production resulted in a further weakening in crude oil prices.

US and European markets

During the first part of the month, the aftermath of hurricane "Lili" and the tropical storm "Isidore", that had caused nearly 1.5 mb/d of crude oil production to be shut down, and the closure of the Louisiana offshore oil port for two weeks, sent the front-

month futures contract for West Texas Intermediate (WTI) close to the \$31/b mark. The storms sparked wave of refinery closures along the US Gulf Coast, with throughput falling by as much as 1 mb/d. The closure of the deep-water terminal prevented the unloading of foreign crude shipments, and that

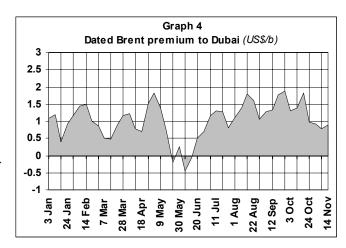


sent crude oil stocks to a 20-year low. According to the API, refinery utilization rates dropped by 6.8 percentage points to 84.70% in the first week, which was then followed by another drop, of 3.4 percentage points to 81.30%, in the second. Arbitrage opportunities arose, as the WTI premium over Brent, Forties and Oseberg (BFO) climbed early in the month; but, when the worst of the stormy weather was over, WTI fell back to the mid-\$29/b level, closing the arbitrage window. Prices began to deteriorate considerably in the latter part of the month, as markets interpreted a softening in the US Administration's stand on the Iraqi issue as a signal that a conflict in the Middle East might be delayed, if not avoided. Adding to the bearish mode were reports of OPEC's weakening level of compliance with its production agreement. In the North Sea market, positive refining margins, healthy demand by regional refiners and open transatlantic opportunities supported North Sea grade prices during the first half of the month. Margins in both the USA and Europe held up on firm US gasoline demand, but the end of the European refining maintenance season, combined with builds in US gasoline stocks, will, most likely, result in a softening of gasoline prices.

Healthy demand, combined with shutdown of Japan's Tepco nuclear plant, and supply concern, kept Far East markets well supported

Far East market

Market sentiment for Middle East crudes remained bullish, on the back of healthy demand from the Asia-Pacific region. Healthy buying interest was supported by strong demand from Japanese refiners, in particular ahead of the Northern hemisphere winter. Troubles at Japan's Tepco nuclear power plant also boosted demand





for fuel oil-rich heavy Asia Pacific crudes. As this market was also vulnerable to political factors, the US-UN-Iraqi tensions kept sentiment bullish for November and December cargoes, in an attempt to secure supplies in the event of a military operation in the Middle East. The high BFO premium over the regional benchmark Dubai closed the arbitrage opportunities for West African grades and provided support for Middle East grades. Heavy regional grades drew support from the shut-down of Japan's Tepco refinery, but local supply disappeared fast, forcing buyers to turn to arbitrage cargoes.

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

			Year-to-da	Year-to-date average		
	Sept.	Oct.02	<u>2001</u>	<u>2002</u>		
Reference Basket	27.38	27.32	24.13	23.91		
Arabian Light	27.10	26.95	24.00	24.10		
Dubai	26.72	26.41	23.78	23.66		
Bonny Light	28.46	27.90	25.53	24.78		
Saharan Blend	28.17	27.78	25.78	24.47		
Minas	27.58	29.69	25.23	24.56		
Tia Juana Light	26.31	25.40	21.31	22.07		
Isthmus	27.33	27.08	23.22	23.74		
Other crudes						
Brent	28.28	27.69	25.51	24.69		
WTI	29.52	29.00	27.19	25.72		
Differentials						
WTI/Brent	1.24	1.31	1.68	1.03		
Brent/Dubai	1.56	1.28	1.73	1.03		

PRODUCT MARKETS AND REFINERY OPERATIONS

The combination of a sharp reduction in refinery throughput and rising demand for gasoline and distillates, amid falling stocks in the Atlantic basin, alleviated product price losses, compared with their underlying crudes, in October. Thus, refinery profits improved considerably in the US and European markets.

US Gulf market

Gasoline price enjoyed large gains, due to renewed robust demand, in US Gulf in October. Gasoil skidded slightly lower, while fuel oil plunged. Refining margins displayed hefty profits, but US refinery utilization rate fell considerably to 86.8%

US product markets displayed divergent trends in October. The gasoline price enjoyed an unseasonable gain, when it soared by 5% above the preceding month's level. There were two driving forces. First, there was a sharp fall in US refinery throughput, caused by the lingering impact of stormy weather in the US Gulf Coast region until mid-month, and the combined effects of planned and unplanned refinery outages. And secondly, there was buoyant US gasoline demand, which rose by nearly 3% and close to 4%, compared with the levels of the previous month and the corresponding period last year respectively, as per the moving weekly averages that were published by the US Energy Information Administration (EIA). Nonetheless, strong gasoline cracks, the differential between gasoline and crude oil prices, inducing the operating US refineries to boost gasoline output at the expense of distillates, thus tightening distillate output, combined with a surge in distillate demand of 7%, compared with the September level, and of 7.6%, compared with last year's delivery, alleviated the impact of falling crude oil prices on its counterpart, gasoil, as it dropped by just 0.25% below the previous month's figure. The price of high sulphur fuel oil (HSFO) plunged by a hefty 6% over the course of the month, falling behind losses in the underlying marker crude and undermined by lower Mexican demand and scarce fuel oil cargoes to the Far East market, due to soaring freight costs, on top of sagging regional demand — although low sulphur fuel oil (LSFO) enjoyed healthy utility demand.

A combination of the rising price of the main US refined product, gasoline, and the falling underlying crude price enhanced refining margins in the US Gulf centre, hovering at their highest level for this year.

The triple effect of weather-related refinery shut-downs, planned autumn maintenance and unexpected outages reduced sharply US refinery throughput to 14.38 mb/d in October, which was 960,000 b/d below the previous month's level. Accordingly, the US refinery utilization rate moved down considerably to 86.8%, which was the lowest level for that period during the last ten years.

Rotterdam market

European product prices reversed the previous two months' gains when they fell in October, with particular severity for HSFO, which dropped in tandem with crude prices. Gasoline and gasoil prices, however, displayed moderate losses, compared with their underlying crudes, which fell by 2%, since they were both in the vicinity of 1% below the previous month's levels, although both products had different market fundamentals. Gasoline, for instance, benefited from the strong US gasoline market, causing higher activity in transatlantic arbitrage than in the previous month. Gasoil received considerable support from strong buying during most of the a month by a major, whose refineries were upgraded to meet the stringent new European transport fuel specifications. The diversion of Russian distillate exports to the USA also mitigated the decline in the gasoil price. The heavy end of the barrel, i.e. HSFO, lost much ground, almost 7%, throughout the month, hampered by a lack of regional demand, as most Western European utilities switched to burn LSFO, and an influx of Russian cargoes, despite the doubled export tariff on fuel oil, amid a slowdown in shipments to the Far East market.

Brent fell at a faster pace than the moderate decrease in its product counterparts, particularly gasoil, which comprised the European key refined product, and consequently led to a large rise in refining margins, which enjoyed their first hefty profits this year.

Refinery throughput in Eur-16 (EU \pm Norway) experienced another significant fall, of 500,000 b/d to 11.16 mb/d in October, owing to heavy refinery turnarounds, together with several refinery glitches. Thus, the equivalent utilization rate of 81.7% constituted its lowest level since October 1991.

Light and middle ends of barrel declined moderately in October in Rotterdam, while fuel oil plummeted. Refining margins enjoyed large gains, while European refinery utilization rate dropped to 81.7%



Product prices ended mixed in Singapore in October, with refining margins gaining further momentum

Singapore market

Prices at the opposite ends of the barrel, gasoline and fuel oil, fell in October, tracking the slump in the underlying marker crude, but with different magnitudes, while gasoil enjoyed another big rise in October. Gasoline decreased by 3% throughout the month, due also to fewer Indonesian monthly purchases and bearish market sentiment, on reports of an expected increase in Chinese gasoline exports during November. The export of fewer distillates from South Korea, as refiners maximised kerosene output for heating purpose ahead of the winter, strong buying by local traders, and the anticipation of buying from Japan, after the outage of several nuclear reactors that used to generate electricity, were the main reasons for a 5% increase in the gasoil price above the previous month's level. The price of HSFO dropped by a considerable 7%, compared with the previous month's level, reflecting crude oil price losses and the lack of Chinese demand at the time of the arrival of a number of fuel oil cargoes; this, consequently, caused further fuel oil stock-builds in Singapore.

Refining margins rose further, boosted by the strong gasoil price that offset the declines in gasoline and fuel oil, together with Dubai's sliding price.

Refinery throughput in Japan retreated by 42,000 b/d to 3.92 mb/d in September, with a refinery utilization rate at 82.0%, almost the same as the preceding year's level.

Table 2 Refined product prices US \$/b

		<u>Aug.02</u>	<u>Sept.02</u>	Oct. 02	Change Oct./Sept.
US Gulf					
Regular gasoline	(unleaded)	31.77	33.03	34.82	1.79
Gasoil	(0.2%S)	28.77	31.98	31.90	-0.08
Fuel oil	(3.0%S)	22.78	24.81	23.19	-1.62
Rotterdam					
Premium gasoline	(unleaded)	31.14	32.63	32.16	-0.47
Gasoil	(0.2%S)	28.95	31.54	31.23	-0.31
Fuel oil	(3.5%S)	21.68	24.02	22.44	-1.58
Singapore					
Premium gasoline	(unleaded)	28.17	30.49	29.62	-0.87
Gasoil	(0.5%S)	28.79	31.43	33.10	1.67
Fuel oil	(380 cst)	24.10	25.34	23.46	-1.88

Table 3
Refinery operations in selected OECD countries

	Refine	Refinery throughput mb/d			Refinery utilization* %			
	Aug.02	Sept.02	Oct.02	Aug.02	Sept.02	Oct.02		
USA	15.67	15.39	14.38	94.6	92.9	86.8		
France	1.64 ^R	1.70	1.53	86.6 ^R	89.8	80.7		
Germany	2.25^{R}	2.13^{R}	2.02	99.7 ^R	94.3 ^R	89.6		
Italy	1.68 ^R	1.75 ^R	1.67	73.6^{R}	76.7^{R}	73.2		
UK	1.63 ^R	1.56	1.47	91.6 ^R	87.3	80.5		
Eur-16	11.84 ^R	11.66 ^R	11.16	86.7 ^R	85.4 ^R	81.7		
Japan	3.97	3.92	n.a.	82.8	82.0	n.a.		

n.a. Not available. R Revised since last issue.

* Refinery capacities used are in barrels per calendar day.

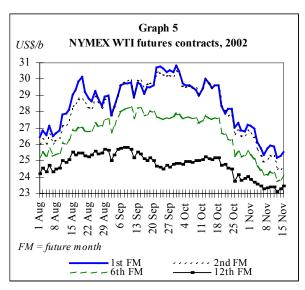
Sources: OPEC Statistics, Argus, Euroilstock Inventory Report/IEA.



THE OIL FUTURES MARKET

WTI NYMEX frontmonth contract nosedived in October With the exception of a minor recovery during the second week of the month, the WTI NYMEX front-month contract nosedived in October; registering \$30.83/b on the first day of the month, it lost \$3.61/b, to stand at \$27.22/b on 31 October. WTI prices began the month close to the \$31/b mark, underpinned by heavy draws on crude oil stocks and falling refinery throughputs, in the aftermath of hurricane "Lili" and the tropical storm "Isidore". The forward price structure was in backwardation during the first week, with the frontmonth higher than the second month, reflecting the market's perception of tightness. During the second half of the month, prices weakened consistently, with WTI's first-month prices sinking below the \$27/b mark on 29 October. The easing of tensions, preliminary reports of a notable rise in OPEC's production and significant builds in US crude oil stocks were the main factors behind the market price fall.

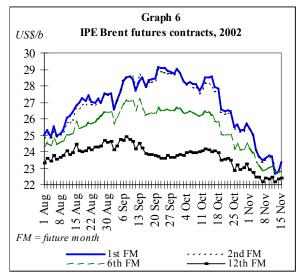
The dilution of the war premium was evident in October, as the prospects of an imminent war began to dissipate, with the cooling of US war rhetoric and the pursuance of diplomatic negotiations within the UN Security Council. Speculators in the futures markets, aware of the political developments and their implications for oil flows from the region, started to unwind their long positions as the prospects of a price According to the vanished. weekly Commitments of Traders report (Commodity Futures Trading Commission), the ratio of long versus short, that had



stood at 2.07:1 in the week of 1 October, moved to 1.37:1 by the week of 15 October, clear evidence of a less bullish mode by speculators.

But speculators' perception of the market became bearish during the third week of the month, when they sold off their long positions and, at the same time, increased their net shorts,

resulting in the reversion of the long versus short ratio to 1:1.02. By the end of the month, speculators' perceptions became clearly bearish, as they continued to dispose of their longs, while, at the same time, increasing their shorts (speculating that prices will fall in the future), with a ratio of 1:1.54. Open interest, as a measure of investor commitment, fell from 549,039 in the week of 8 October to 481,858 by the week of 29 October. With the final approval by the UN Security Council of resolution 1441 on 7 November and its unconditional acceptance by Iraq on 13 November, the prospects of



war have been reduced at the present time.

THE TANKER MARKET

OPEC area's spotchartering declined by 2.20 mb/d in October OPEC area's spot-chartering slowed down in October, after a sharp rise in the previous month, softening by 2.20 mb/d to a monthly average of 11.89 mb/d. This reduction was attributed mainly to high tanker freight rates, which undermined demand for terminal-loading cargoes. However, compared with the same period last year, the current level of OPEC's spot fixtures was 0.23 mb/d, or about 2%, higher. In contrast, non-OPEC spot-chartering partially compensated for the reduction in OPEC's spot-fixtures, rising by 0.55 mb/d to a monthly average of 11.56 mb/d and boosting its market share by a significant 5.43 percentage points to 49.29%, which almost matched OPEC's level. As a consequence, global spot fixtures decreased by a slight 1.65 mb/d to a monthly average of 23.44 mb/d, but registered a rise of 3.96 mb/d, compared with the same month last year. The OPEC area's share of global spotchartering fell in October by a significant 5.43 percentage points to 50.71%; however, this level was 9.11 percentage points below the previous year's share, due to the increase in non-OPEC spot-chartering. Spot fixtures from the Middle East on the eastbound long-haul route continued to decline, as they edged 0.94 mb/d lower to 3.98 mb/d, while spot-chartering on the westbound long-haul route improved slightly, by 0.05 mb/d to 2.14 mb/d. Therefore, the Middle East eastbound share of OPEC's total fixtures worsened further by 1.50 percentage points to 33.46%, while the share of westbound chartering recovered by 3.10 percentage points to 17.97%, on increased loading volumes to western markets. Together, they accounted for 51.43% of total chartering in the OPEC area, which was 1.59 percentage points above the previous month's level. According to preliminary estimates for September, sailings from the OPEC area continued to improve, rising by 1.69 mb/d to a monthly average of 23.67 mb/d. Sailings from the Middle East also edged higher, by 1.64 mb/d to a monthly average of 16.39 mb/d, about 69% of total OPEC sailings. Additionally, preliminary estimates for September arrivals in the US Gulf Coast, the East Coast and the Caribbean reversed the previous month's trend, rising by 0.92 mb/d to a monthly average of 8.09 mb/d. Arrivals in North-West Europe and Euromed also increased in September, by 0.82 mb/d to 5.82 mb/d and by 0.99 mb/d to 5.84 mb/d, respectively. The estimated oil-at-sea at the end of September was 440 mb, which was 3 mb below the level observed at the end of the previous month.

Crude oil freight rates surged across the board in October

Crude oil tanker freight rates enjoyed a sharp upturn in October for all tanker sizes trading along the major routes. In the Middle East, the very large crude carrier (VLCC) market continued its upward trend on tight prompt October tonnage availability, which resulted from noticeable delays in vessel arrivals, combined with the increased tonnage volume used as floating storage, amid concern over a possible supply disruption. Furthermore, the VLCC Limburg explosion off the Yemen coast at the beginning of the month raised insurance costs and sent freight rates straight up, for certain positions, from the mid-WS40s to WS100 by the third week of the month, although the rates softened slightly during the fourth week. Thus, the monthly average spot freight rates for VLCC voyages from the Middle East on the eastbound and the westbound long-haul routes surged by a remarkable 37 points to WS75 and by 24 points to WS60, respectively, the highest levels since September 2001, according to our data. The Suezmax market on the routes across the Atlantic experienced an upward trend on sustained fixture volumes and lack of immediate tonnage positions, amid limited VLCC availability on the back of the booming Middle East VLCC market. Therefore, freight rates for one million barrel crude oil cargoes from West Africa and North-West Europe to US destinations gained 21 points each to WS91 and WS88, respectively. Meanwhile, generally tighter supply of Aframax vessels, as well as increased Aframax fixtures in the Mediterranean, as Suezmax tonnage dried up for certain positions, left Suezmax charterers no option but to split the cargoes into two Aframax vessels. Freight rates on the route across the Mediterranean and from the Mediterranean to North-West Europe rose by 14 points to WS126 and by 27 points to WS117, respectively. Additionally, in the Caribbean, freight rates for Aframax cargoes to US destinations surged by 31 points to WS135, on a very tight market. Freight rates for 70-100,000 dwt tankers on the route from Indonesia to the US West Coast increased by 12 points to WS104.

Clean tanker freight rates remained mixed in October

The product tanker market continued to maintain the previous two months' mixed trends in October. Lower cargo demand in the Asian market and plenty of tonnage availability for October loading dates pushed the clean tanker freight rates lower on the routes from the Middle East and Singapore to the Far East, by 17 points to WS167 and by 36 points to

WS182, respectively. In the Mediterranean market, freight rates almost stabilized, as they moved up by one point to WS153 on the route across the Mediterranean and by seven points to WS179 on the route from the Mediterranean to North-West Europe. The improvement in transatlantic activity by the second half of the month helped freight rates gain 12 points to reach WS160 for gasoline cargoes from North-West Europe to the US East Coast. Along the route from the Caribbean to the US Gulf Coast, freight rates partially recovered, rising by five points to WS152.

	<u>Aug.02</u>	Sept.02	Oct.02	Change Oct./Sept.
Chartering				
All areas	19.84	25.09	23.44	-1.65
OPEC	9.86	14.09	11.89	-2.20
Middle East/east	3.98	4.92	3.98	-0.94
Middle East/west	0.81	2.09	2.14	+0.05
Sailings				
OPEC	21.98	23.67	n.a.	_
Middle East	14.75	16.39	n.a.	_
Arrivals				
US Gulf Coast, US East Coast, Caribbean	7.17	8.09	n.a.	_
North-West Europe	5.00	5.82	n.a.	_
Euromed	4.85	5.84	n.a.	_

n.a. not available.

Source: "Oil Movements" by Roy Mason.

Table 5 Spot tanker freight rates Worldscale

<u>Size</u> 1,000 DWT	Aug.02	<u>Sept.02</u>	Oct.02	Change Oct./Sept.
200-300	34	38	75	+37
200-300	33	36	60	+24
100-160	68	70	91	+21
100-160	69	67	88	+21
70-100	97	94	106	+12
40-70	123	104	135	+31
40-70	123	112	126	+14
70–100	87	90 ^R	117	+27
30-50	182	184	167	-17
25-30	214	218	182	-36
25-30	162	147	152	+5
25-30	160	148	160	+12
25-30	160	152	153	+1
25–30	172	172	179	+7
	200–300 200–300 100–160 100–160 70–100 40–70 70–100 30–50 25–30 25–30 25–30	200–300 34 200–300 33 100–160 68 100–160 69 70–100 97 40–70 123 40–70 123 70–100 87 30–50 182 25–30 214 25–30 160 25–30 160	7,000 DWT Aug.02 Sept.02 200-300 34 38 200-300 33 36 100-160 68 70 100-160 69 67 70-100 97 94 40-70 123 104 40-70 123 112 70-100 87 90 ^R 30-50 182 184 25-30 214 218 25-30 162 147 25-30 160 148 25-30 160 152	7,000 DWT Aug.02 Sept.02 Oct.02 200-300 34 38 75 200-300 33 36 60 100-160 68 70 91 100-160 69 67 88 70-100 97 94 106 40-70 123 104 135 40-70 123 112 126 70-100 87 90 ^R 117 30-50 182 184 167 25-30 214 218 182 25-30 162 147 152 25-30 160 148 160 25-30 160 152 153

R revised.

Source: Galbraith Tanker Market Report.



WORLD OIL DEMAND

World oil demand estimate for 2001 unchanged at 76.32 mb/d

Historical data

No changes have been made to the historical data since the previous *MOMR*. Average world oil demand for 2001 is assessed at 76.32 mb/d, growing by 0.35 mb/d, or 0.46%. In the FSU, demand rose by a remarkable 0.17 mb/d, or 4.53%. While developing countries also experienced healthy demand growth, of 0.27 mb/d, or 1.39%, the OECD witnessed a minor decline of 0.07 mb/d, or 0.14%. On a quarterly basis for 2001, world demand enjoyed healthy growth of 1.05 mb/d, or 1.38%, and 0.93 mb/d, or 1.25%, in the first and second quarters, respectively. The third and fourth quarters, however, saw declines of 0.10 mb/d, or 0.14%, and 0.45 mb/d, or 0.58%, respectively, due to the worldwide economic slowdown, the effects of which were accelerated by the tragic events of 11 September. The resulting quarterly averages were 77.10 mb/d, 75.20 mb/d, 76.02 mb/d and 76.97 mb/d respectively.

Projections for 2002

World oil demand for 2002 revised up by 0.01 mb/d to 76.47 mb/d

World

For the current year, the projected volume of world oil demand has been revised up slightly to an average of 76.47 mb/d, compared with the previously projected 76.46 mb/d. This has been mainly due to a minor upward revision to the third-quarter data, which has been partly offset by a minor downward revision to the second-quarter figures. The world demand increment for 2002 is now estimated at 0.15 mb/d, or 0.20%, which is marginally higher than the 0.14 mb/d, or 0.18%, presented in the last *MOMR*. Quarterly and regional details are given in Table 6.

On a regional basis, demand is projected to decrease by 0.14 mb/d in the OECD. This decline is totally offset by an expected moderate rise of 0.14 mb/d in developing countries. The "other regions" (former CPEs) are expected to witness consumption growth of 0.15 mb/d.

On a quarterly basis, compared with the year-earlier figure, world demand declined by 0.55%, or 0.42 mb/d, to average 76.67 mb/d in January–March. Second-quarter consumption is estimated to have dropped by a further 0.70%, or 0.53 mb/d, to 74.67 mb/d. For the remainder of the year, demand is projected to rise at a significantly accelerating pace during the third and fourth quarters. The anticipated growth rates are 0.45 mb/d, or 0.59%, and 1.09 mb/d, or 1.41%, respectively. Detailed quarterly comparisons for all quarters are presented in Tables 7 and 8.

Table 6 World oil demand in 2002 mb/d

							Change 2002/01	
	<u>2001</u>	1Q02	2Q02	3Q02	4Q02	<u>2002</u>	Volume	<u>%</u>
North America	23.85	23.70	23.79	24.13	24.01	23.91	0.06	0.23
Western Europe	15.27	15.17	14.65	15.31	15.78	15.23	-0.04	-0.29
OECD Pacific	8.55	9.08	7.66	8.02	8.86	8.40	-0.15	-1.73
Total OECD	47.68	47.95	46.10	47.46	48.65	47.54	-0.14	-0.29
Other Asia	7.30	7.40	7.36	7.23	7.59	7.39	0.09	1.27
Latin America	4.73	4.55	4.66	4.86	4.66	4.68	-0.05	-1.05
Middle East	4.83	4.87	4.77	5.06	4.95	4.91	0.08	1.62
Africa	2.44	2.49	2.45	2.41	2.46	2.45	0.01	0.59
Total DCs	19.31	19.30	19.24	19.56	19.66	19.44	0.14	0.71
FSU	3.93	3.92	3.49	3.85	4.25	3.88	-0.06	-1.46
Other Europe	0.72	0.77	0.73	0.68	0.73	0.73	0.01	1.30
China	4.69	4.74	5.10	4.93	4.77	4.89	0.20	4.26
Total "other regions"	9.34	9.43	9.32	9.45	9.76	9.49	0.15	1.62
Total world	76.32	76.67	74.67	76.47	78.06	76.47	0.15	0.20
Previous estimate	76.32	76.67	74.68	76.41	78.06	76.46	0.14	0.18
Revision	0.00	0.00	-0.01	0.07	0.00	0.01	0.01	0.02



Based on estimates for the first quarter, the OECD was solely responsible for the fall in world oil consumption, with a substantial 0.87 mb/d decline, which was partly offset by rises of 0.15 mb/d and 0.30 mb/d in demand in the developing countries and former CPEs. Within the OECD, the highest drop, of 3.56%, was experienced by the OECD Pacific, followed by 2.02% in North America and a minor 0.30% in Western Europe.

Data for the second quarter points to a drop of 0.35 mb/d, or 0.74%, in OECD consumption, due to a steep decline of 0.31 mb/d in the OECD Pacific, combined with a moderate 0.13 mb/d drop in Western Europe, which was partly offset by a slight rise of 0.10 mb/d in North America.

OECD consumption data for January-August indicates a 0.54 mb/d, or 1.14%, decline, compared with the corresponding period in 2001. All three regions within the OECD shared the experience with the OECD Pacific, which led with a significant fall of 0.25 mb/d, or 2.90%. North America and Western Europe, followed, with 0.17 mb/d, or 0.71%, and 0.13 mb/d, or 0.83%, respectively. Except for residual fuel oil, all petroleum products, and even refinery own-use, witnessed consumption declines in the OECD Pacific.

On a product basis, during the period January-August 2002, residual fuel oil led the decline, in both volume (0.45 mb/d) and percentage (13.90%), mostly due to a shift back to natural gas consumption, as the price of the latter moderated. Aviation fuel consumption also continued to see significant weakness (-7.00%), compared with the similar period last year, as subdued air travel persisted. LPG and gasoline consumption, however, enjoyed positive growth, mostly due to substantial rises, of 7.00% and 2.82% respectively, in consumption in North America, assisted by relatively low natural gas prices and robust growth in automobile-use.

Oil demand in developing countries is expected to grow by 0.14 mb/d, or 0.71%, to 19.44 mb/d. The outlook in Latin America continues to be weaker than last year, due to persistent economic and financial problems. "Other Asia" is anticipated to enjoy the highest volume growth of 0.09 mb/d, followed by the Middle East and Africa, with 0.08 mb/d and 0.01 mb/d respectively.

Other regions

Apparent demand in the "other regions" is expected to rise by 0.15 mb/d, due almost entirely to a promising demand outlook for China. In the FSU, except for third-quarter demand, which is estimated to show growth of 0.13 mb/d, demand in the other three quarters is anticipated to demonstrate declines, in comparison with the consumption patterns in 2001. The overall yearly average is expected to drop by 0.06 mb/d, or 1.46%. In contrast, Chinese demand is anticipated to undergo healthy growth in every quarter of the current year, leading to an average annual growth rate of 0.20 mb/d, or 4.26%.

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

Change 2002/01					Change	2002/01		
	<u>1Q01</u>	1Q02	Volume	<u>%</u>	2Q01	2Q02	Volume	<u>%</u>
North America	24.19	23.70	-0.49	-2.02	23.70	23.79	0.10	0.41
Western Europe	15.21	15.17	-0.05	-0.30	14.78	14.65	-0.13	-0.89
OECD Pacific	9.42	9.08	-0.33	-3.56	7.98	7.66	-0.31	-3.91
Total OECD	48.82	47.95	-0.87	-1.78	46.45	46.10	-0.35	-0.74
Other Asia	7.32	7.40	0.08	1.03	7.30	7.36	0.06	0.85
Latin America	4.68	4.55	-0.13	-2.85	4.78	4.66	-0.11	-2.40
Middle East	4.68	4.87	0.18	3.92	4.75	4.77	0.02	0.42
Africa	2.47	2.49	0.02	0.82	2.43	2.45	0.02	0.95
Total DCs	19.16	19.30	0.15	0.76	19.25	19.24	-0.01	-0.05
FSU	3.95	3.92	-0.03	-0.80	3.75	3.49	-0.26	-6.96
Other Europe	0.76	0.77	0.01	0.79	0.72	0.73	0.01	1.11
China	4.41	4.74	0.33	7.37	5.02	5.10	0.08	1.59
Total "other								
regions"	9.13	9.43	0.30	3.28	9.50	9.32	-0.17	-1.83
Total world	77.10	76.67	-0.42	-0.55	75.20	74.67	-0.53	-0.70

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

	Change 2002/01						Change 2002/01	
	3Q01	3Q02	Volume	<u>%</u>	4Q01	4Q02	Volume	<u>%</u>
North America	23.93	24.13	0.20	0.84	23.61	24.01	0.40	1.70
Western Europe	15.50	15.31	-0.19	-1.26	15.58	15.78	0.19	1.25
OECD Pacific	8.04	8.02	-0.02	-0.31	8.79	8.86	0.07	0.83
Total OECD	47.48	47.46	-0.02	-0.04	47.98	48.65	0.67	1.39
Other Asia	7.21	7.23	0.02	0.31	7.38	7.59	0.21	2.85
Latin America	4.83	4.86	0.03	0.62	4.64	4.66	0.02	0.38
Middle East	4.99	5.06	0.07	1.38	4.91	4.95	0.04	0.88
Africa	2.41	2.41	0.01	0.30	2.45	2.46	0.01	0.30
Total DCs	19.43	19.56	0.13	0.66	19.38	19.66	0.28	1.44
FSU	3.72	3.85	0.13	3.36	4.31	4.25	-0.06	-1.50
Other Europe	0.67	0.68	0.01	1.42	0.72	0.73	0.01	1.93
China	4.72	4.93	0.20	4.29	4.58	4.77	0.19	4.19
Total "other regions"	9.11	9.45	0.34	3.70	9.62	9.76	0.14	1.46
Total world	76.02	76.47	0.45	0.59	76.97	78.06	1.09	1.41

Totals may not add, due to independent rounding.

Forecast for 2003

World oil demand for

2003 revised down by

0.05 mb/d to 77.17 mb/d

To reflect a somewhat slower-than-expected economic recovery pace and a slightly lowerthan-anticipated GDP growth rate, our demand forecast for 2003 has been adjusted down to 77.17 mb/d, versus the 77.22 mb/d reported in the previous MOMR. The increment has also been revised down slightly to 0.70 mb/d, equivalent to 0.92%, from the previous 0.76 mb/d, equivalent to 1.00%. Further adjustments are expected, as more information becomes available on major factors, such as the economic growth outlook, prices and the weather. Regional and quarterly breakdowns of the demand forecast are given in Table 9.

All three major consuming groups are forecast to experience stronger demand, with similar growth in volume. Demand in both the OECD and developing countries is forecast to grow by 0.23 mb/d. The remaining 0.24 mb/d of the 0.70 mb/d world growth will be registered by the other regions.

Table 9 World oil demand forecast for 2003 mb/d

							Change	2003/02
	2002	1Q03	2Q03	3Q03	4Q03	2003	Volume	<u>%</u>
North America	23.91	23.87	23.84	24.12	24.32	24.04	0.13	0.55
Western Europe	15.23	15.27	14.70	15.25	15.86	15.27	0.04	0.29
OECD Pacific	8.40	9.17	7.60	8.00	9.09	8.46	0.06	0.69
Total OECD	47.54	48.31	46.15	47.37	49.26	47.77	0.23	0.49
Other Asia	7.39	7.53	7.47	7.32	7.66	7.49	0.10	1.33
Latin America	4.68	4.52	4.62	4.88	4.72	4.69	0.00	0.08
Middle East	4.91	4.99	4.92	5.15	5.03	5.02	0.11	2.20
Africa	2.45	2.50	2.49	2.43	2.48	2.47	0.02	0.87
Total DCs	19.44	19.54	19.50	19.77	19.88	19.67	0.23	1.19
FSU	3.88	4.02	3.69	3.91	4.19	3.95	0.08	1.98
Other Europe	0.73	0.76	0.73	0.70	0.75	0.73	0.01	1.03
China	4.89	4.92	5.22	5.09	4.93	5.04	0.15	3.14
Total "other regions"	9.49	9.70	9.65	9.69	9.87	9.73	0.24	2.51
Total world	76.47	77.55	75.29	76.83	79.01	77.17	0.70	0.92
Previous estimate	76.46	77.76	75.22	76.82	79.07	77.22	0.76	1.00
Revision	0.01	-0.21	0.08	0.01	-0.06	-0.05	-0.06	-0.08



All four quarters are forecast to register gains in consumption over the corresponding periods of 2002. A remarkable 0.95 mb/d level of growth is expected to mark the fourth quarter, as the highest rise of 2002. The first quarter will follow, with a significant 0.87 mb/d gain. Second- and third-quarter demand are expected to see growth of 0.62 mb/d and 0.36 mb/d respectively. Further details are shown in Tables 10 and 11.

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

Change 2003/02								2003/02
	1Q02	1Q03	Volume	<u>%</u>	2002	2003	Volume	<u>%</u>
North America	23.70	23.87	0.18	0.74	23.79	23.84	0.05	0.21
Western Europe	15.17	15.27	0.10	0.68	14.65	14.70	0.05	0.35
OECD Pacific	9.08	9.17	0.09	0.94	7.66	7.60	-0.06	-0.76
Total OECD	47.95	48.31	0.36	0.76	46.10	46.15	0.04	0.09
Other Asia	7.40	7.53	0.13	1.74	7.36	7.47	0.11	1.52
Latin America	4.55	4.52	-0.03	-0.66	4.66	4.62	-0.04	-0.80
Middle East	4.87	4.99	0.12	2.48	4.77	4.92	0.15	3.11
Africa	2.49	2.50	0.02	0.65	2.45	2.49	0.04	1.43
Total DCs	19.30	19.54	0.24	1.22	19.24	19.50	0.26	1.34
FSU	3.92	4.02	0.11	2.69	3.49	3.69	0.20	5.84
Other Europe	0.77	0.76	-0.01	-1.32	0.73	0.73	0.00	0.11
China	4.74	4.92	0.18	3.78	5.10	5.22	0.12	2.36
Total "other								
regions"	9.43	9.70	0.27	2.91	9.32	9.65	0.32	3.48
Total world	76.67	77.55	0.87	1.14	74.67	75.29	0.62	0.84

Totals may not add, due to independent rounding.

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

	Change 2003/02						Change	2003/02
	3Q02	3Q03	Volume	<u>%</u>	4Q02	4Q03	Volume	<u>%</u>
North America	24.13	24.12	-0.01	-0.03	24.01	24.32	0.30	1.27
Western Europe	15.31	15.25	-0.06	-0.37	15.78	15.86	0.08	0.50
OECD Pacific	8.02	8.00	-0.02	-0.27	8.86	9.09	0.23	2.55
Total OECD	47.46	47.37	-0.09	-0.18	48.65	49.26	0.61	1.25
Other Asia	7.23	7.32	0.09	1.19	7.59	7.66	0.07	0.91
Latin America	4.86	4.88	0.09	0.38	4.66	4.72	0.07	1.36
Middle East								
	5.06	5.15	0.09	1.68	4.95	5.03	0.08	1.61
Africa	2.41	2.43	0.02	0.70	2.46	2.48	0.02	0.71
Total DCs	19.56	19.77	0.21	1.06	19.66	19.88	0.23	1.17
FSU	3.85	3.91	0.06	1.50	4.25	4.19	-0.06	-1.35
Other Europe	0.68	0.70	0.02	3.15	0.73	0.75	0.02	2.39
China	4.93	5.09	0.16	3.26	4.77	4.93	0.15	3.24
Total "other regions"	9.45	9.69	0.24	2.54	9.76	9.87	0.11	1.18
Total world	76.47	76.83	0.36	0.47	78.06	79.01	0.95	1.22

WORLD OIL SUPPLY

Non-OPEC

2002 non-OPEC supply figure revised down to 47.91 mb/d in October expected increase of 1.44 mb/d over 2001

Forecast for 2002

The 2002 non-OPEC supply figure has been revised down by 0.04 mb/d to 47.91 mb/d since the last *MOMR*. The third-quarter figure has been revised down considerably, by 0.18 mb/d to 47.62 mb/d, while the fourth quarter has witnessed a minor downward adjustment of 0.03 mb/d to 48.36 mb/d. The second quarter has been revised up by 0.03 mb/d to 48.00 mb/d, and the first quarter remains almost unchanged at 47.68 mb/d. The yearly average increase is estimated at 1.44 mb/d, compared with the 2001 figure.

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

							Change
	<u>2001</u>	1Q02	2Q02	3Q02	4Q02	<u>2002</u>	02/01
North America	14.36	14.61	14.64	14.44	14.46	14.54	0.18
Western Europe	6.70	6.73	6.75	6.30	6.90	6.67	-0.03
OECD Pacific	0.77	0.76	0.77	0.78	0.70	0.75	-0.02
Total OECD	21.82	22.10	22.16	21.51	22.06	21.96	0.14
Other Asia	2.28	2.36	2.36	2.37	2.44	2.38	0.10
Latin America	3.75	3.92	3.93	3.90	3.95	3.92	0.17
Middle East	2.13	2.09	2.06	2.03	2.05	2.05	-0.08
Africa	2.80	3.04	3.06	3.02	3.12	3.06	0.26
Total DCs	10.96	11.41	11.40	11.31	11.55	11.42	0.45
FSU	8.53	8.92	9.15	9.48	9.49	9.26	0.74
Other Europe	0.18	0.18	0.18	0.17	0.17	0.18	0.00
China	3.30	3.35	3.39	3.42	3.36	3.38	0.08
Total "Other regions"	12.00	12.45	12.72	13.08	13.02	12.82	0.82
Total non-OPEC production	44.79	45.96	46.28	45.90	46.64	46.19	1.41
Processing gains	1.69	1.72	1.72	1.72	1.72	1.72	0.03
Total non-OPEC supply	46.48	47.68	48.00	47.62	48.36	47.91	1.44
Previous estimate	46.48	47.67	47.96	47.80	48.39	47.96	1.48
Revision	0.00	0.00	0.03	-0.18	-0.03	-0.04	-0.04



2003 non-OPEC supply forecast at 48.73 mb/d, which is 0.82 mb/d above 2002 level

Expectations for 2003

2003 non-OPEC supply is expected to rise by 0.82 mb/d over the 2002 level. The major contributors to the rise are North America and the FSU. The 2003 quarterly distribution is estimated at 48.48 mb/d, 48.81 mb/d, 48.45 mb/d and 49.19 mb/d respectively, resulting in a yearly average of 48.73 mb/d.

Table 13 Non-OPEC oil supply in 2003

		mb/d	!				
							Change
	2002	1Q03	2Q03	3Q03	4Q03	2003	03/02
North America	14.54	14.79	14.82	14.62	14.65	14.72	0.18
Western Europe	6.67	6.77	6.79	6.33	6.95	6.71	0.04
OECD Pacific	0.75	0.76	0.77	0.78	0.70	0.75	0.00
Total OECD	21.96	22.32	22.38	21.73	22.29	22.18	0.22
Other Asia	2.38	2.40	2.40	2.41	2.47	2.42	0.04
Latin America	3.92	3.97	3.98	3.95	4.00	3.97	0.05
Middle East	2.05	2.09	2.06	2.03	2.05	2.05	0.00
Africa	3.06	3.12	3.14	3.10	3.20	3.14	0.08
Total DCs	11.42	11.58	11.57	11.48	11.72	11.59	0.17
FSU	9.26	9.31	9.55	9.89	9.90	9.66	0.40
Other Europe	0.18	0.18	0.18	0.17	0.17	0.18	0.00
China	3.38	3.35	3.39	3.42	3.36	3.38	0.00
Total "Other regions"	12.82	12.83	13.12	13.49	13.43	13.22	0.40
Total non-OPEC production	46.19	46.73	47.06	46.70	47.44	46.98	0.79
Processing gains	1.72	1.75	1.75	1.75	1.75	1.75	0.03
Total non-OPEC supply	47.91	48.48	48.81	48.45	49.19	48.73	0.82
Previous estimate	47.96	48.48	48.78	48.63	49.23	48.78	0.82
Revision	-0.04	0.00	0.03	-0.18	-0.03	-0.04	0.00

Totals may not add, due to independent rounding.

FSU net oil export forecasts for 2002 and 2003 almost unchanged The FSU's net oil export estimate and forecast for 2002 and 2003 remain almost unchanged at 5.39 mb/d and 5.71 mb/d respectively, compared with the last MOMR.

		Table 1 FSU net oil e			
		mb/d	F		
	<u>1Q</u>	<u>2Q</u>	<u>3Q</u>	<u>4Q</u>	<u>Year</u>
1999	3.12	3.62	3.52	3.49	3.44
2000	3.97	4.13	4.47	4.01	4.14
2001	4.30	4.71	4.89	4.47	4.59
2002 (estimate)	5.00	5.66	5.63	5.24	5.39
2003 (forecast)	5.28	5.86	5.98	5.71	5.71

OPEC NGL figures

unchanged

OPEC natural gas liquids The OPEC NGL figures for 1999-2003 remain unchanged at 3.16 mb/d, 3.34 mb/d, 3.67 mb/d and 3.70 mb/d respectively, compared with the last MOMR.

OPEC NGL production — 1998–2002	
mb/d	

								Change	Change	
<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>1Q02</u>	<u>2Q02</u>	<u>3Q02</u>	<u>4Q02</u>	<u>2002</u>	02/01	<u>2003</u>	03/02
3.16	3.34	3.58	3.64	3.64	3.67	3.74	3.67	0.09	3.70	0.03

MOMR



Available secondary sources put OPEC's October production at 26.95 mb/d

OPEC crude oil production

Available secondary sources indicate that, in October, OPEC output was 26.95 mb/d, which was 1.01 mb/d higher than the revised September figure of 25.94 mb/d. Table 15 shows OPEC production, as reported by selected secondary sources.

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

	<u>2000</u>	<u>2001</u>	<u>2Q02</u>	Sept.02*	3Q02*	Oct. 02*	OctSept.
Algeria	808	820	829	945	892	955	10
Indonesia	1,278	1,214	1,128	1,126	1,118	1,105	-21
IR Iran	3,671	3,665	3,360	3,410	3,422	3,585	175
Iraq	2,552	2,383	1,511	1,909	1,755	2,425	516
Kuwait	2,100	2,030	1,878	1,938	1,919	1,962	24
SP Libyan AJ	1,405	1,361	1,309	1,350	1,332	1,362	12
Nigeria	2,031	2,097	1,932	1,997	1,961	1,986	-11
Qatar	698	683	632	671	654	690	19
Saudi Arabia	8,272	7,944	7,388	7,680	7,607	7,827	146
UAE	2,251	2,163	1,967	2,010	1,996	2,032	22
Venezuela	2,897	2,831	2,630	2,905	2,804	3,022	117
Total OPEC	27,963	27,192	24,566	25,941	25,459	26,949	1,008

Totals may not add, due to independent rounding.

RIG COUNT

Non-OPEC rig count down by 21 in October

Non-OPEC

Rig activity was lower in October. North America, the major contributor, saw a decline of 35 rigs, compared with September. The rig count fell by 30 to 220 in Canada and by eight to 852 in the USA, while Mexico's rig activity rose by 3 to 68. Western Europe's activity witnessed a minor increase of two to 80 rigs.

Table 16 Non-OPEC rig count in 2002

			Change			Change
	<u>2000</u>	<u>2001</u>	02/01	Sept.02	Oct.02	OctSept.
North America	1,305	1,552	247	1,175	1,140	-35
Western Europe	125	95	-30	78	80	2
OECD Pacific	17	20	3	14	17	3
OECD	1,447	1,667	220	1,267	1,237	-30
Other Asia	83	95	12	116	120	4
Latin America	120	141	20	105	106	1
Middle East	45	50	5	65	68	3
Africa	34	36	2	46	47	1
DCs	282	321	40	332	341	9
FSU	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other Europe	3	3	0	2	2	0
China	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other regions	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total non-OPEC	1,732	1,991	260	1,601	1,580	-21

Totals may not add, due to independent rounding. Source: Baker Hughes International.

^{*} Not all sources available.

OPEC rig count up by two in October

OPEC

OPEC's rig count rose by two to 226 in October, compared with September. Most of the change was contributed by Nigeria, where the count increased by three rigs to 16, compared with last month's figure.

Table 17
OPEC rig count

			Change			Change
	<u>2000</u>	<u>2001</u>	02/01	Sept.02	Oct.02	OctSept.
Algeria	15	20	5	21	19	-2
Indonesia	32	41	9	45	46	1
IR Iran	27	30	3	34	34	0
Iraq	0	0	0	n.a.	n.a.	n.a.
Kuwait	12	9	-3	6	7	1
SP Libyan AJ	7	5	-2	10	9	-1
Nigeria	8	12	4	13	16	3
Qatar	6	9	3	11	11	0
Saudi Arabia	25	30	5	33	32	-1
UAE	13	15	3	16	16	0
Venezuela	63	67	5	37	38	1
Total OPEC	206	238	32	226	228	2

Totals may not add, due to independent rounding. Source: Baker Hughes International.

STOCK MOVEMENTS

Slight build of 0.05 mb/d in USA in October

IIC A

US commercial onland oil stocks reversed the previous month's trend, increasing by a slight 1.3 mb, at a rate of 0.05 mb/d, to 983.4 mb during the period 4 October – 1 November. Crude oil stocks rebounded, regaining most of the previous month's draw, which had been affected by the interruption of the oil flow due to two heavy tropical storms. Stocks shot up by 20.0 mb to 290.5 mb, as imports resumed their flow into storage tanks, particularly in the US Gulf Coast (PADD3) and US East Coast (PADD1), narrowing the year-on-year deficit to about 7%, from the approximate 13% observed last month. The massive build in crude stocks was almost balanced by a large draw of 13.2 mb to 192.1 mb on gasoline inventories, due to unseasonable buoyant demand, and a decline of 7.9 mb to 213.4 mb in "other oils". Distillates also experienced a draw, of 5.5 mb to 121.9 mb, amid tight supply, as US refiners, benefiting from higher gasoline prices, were forced to produce more gasoline at the expense of distillates. This decrease turned the situation of distillates from a slight surplus of less than 1%, which had occurred in the previous month, to a shortage of about 5%. Other major product stocks. notably jet kerosene and fuel oil, registered moderate builds, due to stagnant demand. The overall slight build in total oil stocks maintained the year-on-year deficit, mostly at the previous month's level of about 5%.

During the week ending 8 November, total oil stocks in the USA witnessed a slight draw of 5.0 mb to 978.4 mb. Most of the decline came from crude oil, which fell by 6.9 mb, on the back of improved refinery throughput, as well as interrupted oil flows from Alaska, due to the earthquake.

In October, the Strategic Petroleum Reserve sustained its upward trend, increasing by a further 2.9 mb to 589.1 mb and lifting the year-on-year surplus to about 8%, from the approximate 7% registered the previous month.



Table 18 US onland commercial petroleum stocks* mb

				Change			
	28 Jun.02	4 Oct.02	1 Nov.02	Oct./Sept.	1 Nov.01	8 Nov.02**	
Crude oil (excl. SPR)	321.2	270.5	290.5	20.0	313.2	283.6	
Gasoline	216.4	205.3	192.1	-13.2	207.8	194.0	
Distillate fuel	128.3	127.4	121.9	-5.5	128.9	121.4	ı
Residual fuel oil	34.6	33.6	33.8	0.2	38.2	33.5	
Jet fuel	40.3	40.6	42.5	1.9	40.3	42.2	ı
Unfinished oils	89.9	83.5	89.1	5.6	92.3	92.1	
Other oils	200.7	221.3	213.4	-7.9	211.1	211.4	
Total	1,031.4	982.1	983.4	1.3	1,031.8	978.4	
SPR	575.4	586.2	589.1	2.9	545.2	590.6	l

^{*} At end of month, unless otherwise stated.

Source: US Department of Energy's Energy Information Administration.

Further moderate draw of 0.26 mb/d in Eur-16 in October

Western Europe

Commercial onland oil stocks in the Eur-16 (EU plus Norway) continued to decrease in October, declining by a further 8.1 mb, at a rate of 0.26 mb/d, to 1,050.6 mb. Total major product inventories contributed solely to this draw, where distillates and gasoline led the decline, falling by 7.5 mb to 338.7 mb and by 5.2 mb to 133.6 mb, respectively. This moderate seasonal draw was mainly due to lower refinery runs, which affected especially distillates. The overall fall in total major product stocks reversed the previous month's year-on-year surplus of about 3% to a deficit of about 1% for this month. Gasoline also turned from an excess of about 4% to a shortage of about 2%, while distillates widened their deficit to about 18%, from the 16% which had been observed the previous month. Crude oil reduced the overall draw, rising by 6.2 mb to 449.2 mb and changing from last month's year-on-year deficit of about 1% to a surplus of about 1%. Heavy refinery shut-downs, coupled with closed arbitrage across the Atlantic basin, due to increasing freight rates, were behind the build in crude stocks. The overall moderate draw on total stocks in Eur-16 cancelled most of last month's excess, bringing them nearly to the same level as last year.

Table 19
Western Europe commercial oil stocks*

					Change	
	Mar.02	<u>Jun.02</u>	Sept.02	Oct.02	Oct./Sept.	Oct.01
Crude oil	440.9	444.1	443.0	449.2	6.2	445.8
Mogas	156.5	145.3	138.8	133.6	-5.2	136.0
Naphtha	24.2	24.6	21.1	21.1	0.0	25.6
Middle distillates	340.9	345.4	346.2	338.7	-7.5	323.4
Fuel oils	111.7	109.5	109.5	107.9	-1.6	119.3
Total products	633.3	624.8	615.6	601.3	-14.3	604.2
Overall total	1,074.2	1,069.0	1,058.6	1,050.6	-8.1	1,050.1

^{*} At end of month, and region consists of the Eur-16. Source: Argus Euroilstock.

Japan

Unseasonable draw of 0.24 mb/d in Japan in September

In September, commercial onland oil stocks lost almost two-thirds of the previous month's build, decreasing by an unseasonable 7.1 mb, at a rate of 0.24 mb/d, to 179.0 mb. Most of the draw occurred on crude oil, which fell by a considerable 7.1 mb to 106.4 mb, on the back of higher refinery runs, as well as lower imports. This fall widened the year-on-year deficit of crude oil to about 10%. Increasing refinery throughput resulted in a rise of 1.5 mb to 41.9 mb for middle distillates, and of 0.7 mb to 13.1 mb for gasoline. The overall draw widened further the year-on-year deficit to about 10%, from about 2% registered the previous month.

^{**} Latest available data, at time of report's release.



Table 20								
Japan's	commercial	oil	stocks*					

mb

					Change	nge		
	Mar.02	<u>Jun.02</u>	Aug.02	Sept.02	Sept./Aug.	Sept.01		
Crude oil	106.8	118.3	113.5	106.4	-7.1	118.0		
Gasoline	15.8	14.2	12.4	13.1	0.7	13.8		
Middle distillates	29.5	30.2	40.4	41.9	1.5	45.7		
Residual fuel oil	18.7	20.1	19.7	17.7	-2.0	19.9		
Total products	64.0	64.4	72.5	72.6	0.1	79.5		
Overall total **	170.9	182.7	186.1	179.0	-7.1	197.5		

^{*} At end of month.

OECD

Contra-seasonal draw of 0.69 mb/d in OECD in third quarter

In the third quarter of 2002, OECD commercial onland oil stocks (the USA, Eur-16 and Japan) are estimated to have registered a contra-seasonal draw of 63.4 mb, at a rate 0.69 mb/d. to 2,219.7 mb, compared with the second quarter. US oil led the draw, declining by 49.3 mb, at a rate of 0.54 mb/d, to 982.1 mb. This unseasonable draw took place mainly on the back of the interruption of crude oil flows, due to the storms "Isidore" and "Lili", coupled with improved refinery runs, on relatively healthy refining margins, after weeks of falling into negative territory. Eur-16 stocks also contributed to this fall, decreasing by 10.4 mb, at a rate of 0.11 mb/d, to 1,058.6 mb. Gasoline lay behind the Eur-16 decline during the third quarter, due to low production, because of poor refining margins, together with increasing movements across the Atlantic, which benefited from the opened arbitrage and strong US gasoline demand. Oil stocks in Japan declined by a slight 3.7 mb, at a rate of 0.04 mb/d, where most of the draw occurred with crude oil, due to increasing refinery runs, as well as fewer arrivals.

Table 21
Estimated stock movements in OECD* third quarter of 2002

m

			<u>Change</u>	Jun./Sept.
	Jun.02	Sept.02	$m\overline{b}$	mb/d
USA	1,031.4	982.1	-49.3	-0.54
Eur-16	1,069.0	1,058.6	-10.4	-0.11
Japan	182.7	179.0	-3.7	-0.04
OECD total	2,283.1	2,219.7	-63.4	-0.69

^{*} Includes USA, Eur-16 and Japan only. Data as at end of month.

^{**} Includes crude oil and main products only. Source: MITI, Japan.

BALANCE OF SUPPLY AND DEMAND

2002 supply/demand difference revised up to 24.88 mb/d

The summarized supply/demand balance table for 2002 shows a minor upward adjustment to the world oil demand forecast of 0.01 mb/d to 76.47 mb/d, while total non-OPEC supply has been revised down by 0.04 mb/d to 51.59 mb/d, resulting in an expected annual difference of around 24.88 mb/d, up by 0.05 mb/d, compared with the last *MOMR* figure. This leaves a quarterly distribution of 25.36 mb/d, 23.03 mb/d, 25.18 mb/d and 25.97 mb/d respectively. The balance for the first quarter remains almost unchanged at -0.25 mb/d, while that of the second quarter has been revised up by 0.04 mb/d to 1.53 mb/d. The balance for the third quarter has been revised down considerably, by 0.27 mb/d to 0.28 mb/d. The 2001 balance remains almost unchanged at 0.92 mb/d.

Table 22 Summarized supply/demand balance for 2002 mb/d

	2001	1002	2002	2002	4002	2002
	<u>2001</u>	<u>1Q02</u>	<u>2Q02</u>	<u>3Q02</u>	<u>4Q02</u>	<u>2002</u>
(a) World oil demand	76.32	76.67	74.67	76.47	78.06	76.47
(b) Non-OPEC supply ⁽¹⁾	50.06	51.32	51.64	51.29	52.10	51.59
Difference (a – b)	26.26	25.36	23.03	25.18	25.97	24.88
OPEC crude oil production ⁽²⁾	27.18	25.11	24.56	25.46		
Balance	0.92	-0.25	1.53	0.28		

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

Totals may not add, due to independent rounding.

2003 supply/demand difference unchanged at 24.74 mb/d

The summarized supply/demand balance table for 2003 shows a downward revision to the world oil demand forecast of 0.05 mb/d to 77.17 mb/d and to total non-OPEC supply of 0.04 mb/d to 52.44 mb/d. This has resulted in an expected difference of around 24.74 mb/d, with a quarterly distribution of 25.4 mb/d, 22.81 mb/d, 24.68 mb/d and 26.05 mb/d respectively.

Table 23 Summarized supply/demand balance for 2003

mb/d

Difference (a – b)	24.88	25.40	22.81	24.68	26.05	24.74
(b) Non-OPEC supply ⁽¹⁾	51.59	52.15	52.48	52.15	52.96	52.44
(a) World oil demand	76.47	77.55	75.29	76.83	79.01	77.17
	<u> 2002</u>	<u>1Q03</u>	<u> 2Q03</u>	<u>3Q03</u>	<u>4Q03</u>	<u> 2003</u>

(1) Including OPEC NGLs+non-conventional oils. Totals may not add, due to independent rounding.

⁽²⁾ Selected secondary sources.

Table 24
World oil demand/supply balance

mb/d

	1999	2000	2001	1Q02	2Q02	3Q02	4Q02	2002	1003	2003	3003	4003	2003
World demand						- (
OECD	47.7	47.7	47.7	47.9	46.1	47.5	48.7	47.5	48.3	46.1	47.4	49.3	47.8
North America	23.8	24.0	23.9	23.7	23.8	24.1	24.0	23.9	23.9	23.8	24.1	24.3	24.0
Western Europe	15.2	15.1	15.3	15.2	14.6	15.3	15.8	15.2	15.3	14.7	15.3	15.9	15.3
Pacific	8.7	8.6	8.6	9.1	7.7	8.0	8.9	8.4	9.2	7.6	8.0	9.1	8.5
DCs	18.7	19.0	19.3	19.3	19.2	19.6	19.7	19.4	19.5	19.5	19.8	19.9	19.7
FSU	4.0	3.8	3.9	3.9	3.5	3.8	4.2	3.9	4.0	3.7	3.9	4.2	4.0
Other Europe	0.8	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.8	0.7
China	4.2	4.7	4.7	4.7	5.1	4.9	4.8	4.9	4.9	5.2	5.1	4.9	5.0
(a) Total world demand	75.4	76.0	76.3	76.7	74.7	76.5	78.1	76.5	77.5	75.3	76.8	79.0	77.2
Non-OPEC supply													
OECD	21.3	21.8	21.8	22.1	22.2	21.5	22.1	22.0	22.3	22.4	21.7	22.3	22.2
North America	14.1	14.2	14.4	14.6	14.6	14.4	14.5	14.5	14.8	14.8	14.6	14.6	14.7
Western Europe	6.6	6.7	6.7	6.7	6.8	6.3	6.9	6.7	6.8	6.8	6.3	6.9	6.7
Pacific	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.7	0.7
DCs	10.8	11.0	11.0	11.4	11.4	11.3	11.5	11.4	11.6	11.6	11.5	11.7	11.6
FSU	7.5	7.9	8.5	8.9	9.2	9.5	9.5	9.3	9.3	9.5	9.9	9.9	9.7
Other Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
China	3.2	3.2	3.3	3.3	3.4	3.4	3.4	3.4	3.3	3.4	3.4	3.4	3.4
Processing gains	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
Total non-OPEC supply	44.6	45.7	46.5	47.7	48.0	47.6	48.4	47.9	48.5	48.8	48.4	49.2	48.7
OPEC NGLs + non-conventionals	3.2	3.3	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.7	3.7	3.8	3.7
(b) Total non-OPEC supply and OPEC NGLs	47.7	49.1	50.1	51.3	51.6	51.3	52.1	51.6	52.1	52.5	52.2	53.0	52.4
OPEC crude oil production (secondary sources)	26.5	28.0	27.2	25.1	24.6	25.5							
Total supply	74.2	77.0	77.2	76.4	76.2	76.8							
Balance (stock change and miscellaneous)	-1.1	1.1	0.9	-0.2	1.5	0.3							
Closing stock level (outside FCPEs) mb													
OECD onland commercial	2446	2530	2622	2599	2645	2570							
OECD SPR	1228	1210	1222	1237	1247	1252							
OECD total	3674	3740	3844	3837	3892	3822							
Other onland	983	1000	1028	1026	1041	1022							
Oil-on-water	808	876	843	835	842	n.a							
Total stock	5465	5617	5715	5698	5775	n.a							
Days of forward consumption in OECD													
Commercial onland stocks	51	53	55	56	56	53							
SPR	26	25	26	27	26	26							
Total	77	78	81	83	82	79							
Memo items	<u> </u>												
FSU net exports	3.4	4.1	4.6	5.0	5.7	5.6	5.2	5.4	5.3	5.9	6.0	5.7	5.7
(a) - (b)	27.7	26.9	26.3	25.4	23.0	25.2	26.0	24.9	25.4	22.8	24.7	26.1	24.7

Table 25
World oil demand/supply balance: changes from last month's table †

	1999	2000	2001	1Q02	2Q02	3Q02	4Q02	2002	1Q03	2Q03	3Q03	4Q03	2003
World demand													
OECD	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-	-0.1
North America	-	-	-	_	-	-	-	-	-0.1	-	-	_	-
Western Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	_	-	-	_	-	-	-	-	_	_	_	-	-
DCs	-	-	-	-	-	0.1	-	-	-	-	0.1	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) Total world demand	-	-	-	_	-	0.1	-	-	-0.2	0.1	-	-0.1	-
Non-OPEC supply													
OECD	_	-	-	_	-	-0.2	-0.1	-0.1	_	-	-0.2	-0.1	-0.1
North America	_	-	-	_	-	-0.1	-	-	_	_	-0.1	-	-
Western Europe	-	_	_	_	-	-0.1	-0.1	-0.1	_	_	-0.1	-0.1	-0.1
Pacific	-	_	_	_	-	-	_	-	_	_	_	_	-
DCs	-	_	_	_	-	-	_	-	_	_	_	_	-
FSU	_	-	-	_	-	-	_	_	_	-	_	-	-
Other Europe	-	_	_	_	-	-	_	-	_	_	_	_	_
China	-	_	_	_	-	-	_	-	_	_	_	_	-
Processing gains	_	_	-	_	_	_	_	_	_	_	_	_	-
Total non-OPEC supply	_	_	-	_	_	-0.2	=	_	_	_	-0.2	_	-
OPEC NGLs + non-conventionals	_	_	_	-	-	_	_	_	_	-	_	-	-
(b) Total non-OPEC supply and OPEC NGLs	-	_	_	_	-	-0.2	-	-	_	_	-0.2	_	_
OPEC crude oil production (secondary sources)	-	_	-	-	-	-							
Total supply	-	-	-	_	-	-0.2							
Balance (stock change and miscellaneous)	-	_	-	-	-	-0.3							
Closing stock level (outside FCPEs) mb													
OECD onland commercial	-	_	_	1	-1	_							
OECD SPR	-	_	_	_	-	_							
OECD total	-	_	_	1	-1	_							
Other onland	_	-	-	_	-	-							
Oil on water	_	_	1	1	_	_							
Total stock	_	_	1	2	_	_							
Days of forward consumption in OECD													
Commercial onland stocks	_	_	-	_	_	_							
SPR	-	_	-	-	-	-							
Total	-	_	-	-	-	-							
Memo items													
FSU net exports	-	_	-	-	-	-	-	-	-	-	_	-	-
(a) - (b)	_	_	-	_	_	0.2	=	0.1	-0.2	_	0.2	_	_

 $^{^{\}dagger}$ This compares Table 24 in this issue of the MOMR with Table 23 in the October 2002 issue. This table shows only where changes have occurred.

Table 26
World oil stocks (excluding former CPEs) at end of period

	1996	1997	1998	1999	2000	2001	1Q00	2Q00	3Q00	4Q00	1Q01	2Q01	3Q01	4Q01	1Q02	2Q02	3Q02
Closing stock level mb																	
OECD onland commercial	2,514	2,615	2,697	2,446	2,530	2,622	2,419	2,510	2,542	2,530	2,525	2,597	2,661	2,622	2,599	2,645	2,570
North America	1,138	1,211	1,283	1,127	1,146	1,263	1,108	1,165	1,180	1,146	1,159	1,231	1,269	1,263	1,235	1,259	1,217
Western Europe	899	912	962	881	930	915	902	900	910	930	918	909	918	915	929	940	915
OECD Pacific	476	492	453	437	454	444	409	445	452	454	447	457	473	444	435	447	438
OECD SPR	1,199	1,207	1,249	1,228	1,210	1,222	1,234	1,232	1,237	1,210	1,210	1,207	1,205	1,222	1,237	1,247	1,252
North America	566	563	571	567	543	552	569	569	572	543	544	545	547	552	563	578	589
Western Europe	330	329	362	346	354	353	349	349	353	354	351	347	345	353	353	348	346
OECD Pacific	303	315	315	315	313	316	315	315	312	313	314	314	313	316	321	321	317
OECD total	3,713	3,822	3,946	3,674	3,740	3,844	3,653	3,742	3,778	3,740	3,734	3,804	3,866	3,844	3,837	3,892	3,822
Other onland	993	1,022	1,055	983	1,000	1,028	977	1,001	1,010	1,000	999	1,017	1,034	1,028	1,026	1,041	1,022
Oil-on-water	798	812	859	808	876	843	840	866	849	876	914	836	874	843	835	842	n.a
Total stock	5,503	5,656	5,860	5,465	5,617	5,715	5,470	5,609	5,638	5,617	5,647	5,658	5,774	5,715	5,698	5,775	n.a.
Days of forward consumption in OECD																	
OECD onland commercial	54	56	57	51	53	55	52	52	52	52	54	55	55	55	56	56	53
North America	50	52	54	47	48	53	47	48	48	47	49	51	54	53	52	52	51
Western Europe	60	60	63	58	61	60	62	59	59	61	62	59	59	60	63	61	58
OECD Pacific	53	58	52	51	53	53	51	53	51	48	56	57	54	49	57	56	49
OECD SPR	26	26	26	26	25	26	27	26	25	25	26	25	25	25	27	26	26
North America	25	24	24	24	23	23	24	23	23	22	23	23	23	23	24	24	25
Western Europe	22	21	24	23	23	23	24	23	23	23	24	22	22	23	24	23	22
OECD Pacific	34	37	36	37	37	38	39	38	36	33	39	39	36	35	42	40	36
OECD total	80	82	83	77	78	81	79	78	78	77	80	80	81	80	83	82	79
Days of global forward consumption	85	87	88	82	84	85	84	84	83	83	86	85	86	85	87	86	n.a.

Table 27
Non-OPEC supply and OPEC natural gas liquids

mb/d

				Change						Change						Change
	1999	2000	2001	01/00	1Q02	2Q02	3Q02	4Q02	2002	02/01	1Q03	2Q03	3Q03	4Q03	2003	03/02
USA	8.11	8.11	8.05	-0.06	8.17	8.24	8.00	7.97	8.09	0.04	8.15	8.22	7.98	7.95	8.07	-0.02
Canada	2.60	2.69	2.74	0.05	2.84	2.83	2.86	2.88	2.85	0.11	2.94	2.93	2.96	2.98	2.95	0.10
Mexico	3.35	3.45	3.57	0.11	3.61	3.57	3.59	3.61	3.60	0.03	3.71	3.67	3.69	3.71	3.70	0.10
North America	14.05	14.25	14.36	0.11	14.61	14.64	14.44	14.46	14.54	0.18	14.79	14.82	14.62	14.65	14.72	0.18
Norway	3.06	3.32	3.42	0.09	3.32	3.38	3.22	3.35	3.32	-0.10	3.34	3.40	3.24	3.37	3.34	0.02
UK	2.84	2.64	2.53	-0.11	2.60	2.56	2.30	2.73	2.55	0.02	2.62	2.58	2.32	2.75	2.57	0.02
Denmark	0.30	0.36	0.35	-0.02	0.38	0.37	0.35	0.40	0.38	0.03	0.38	0.37	0.35	0.40	0.38	0.00
Other Western Europe	0.43	0.41	0.40	-0.01	0.42	0.44	0.42	0.43	0.43	0.03	0.42	0.44	0.42	0.43	0.43	0.00
Western Europe	6.63	6.74	6.70	-0.04	6.73	6.75	6.30	6.90	6.67	-0.03	6.77	6.79	6.33	6.95	6.71	0.04
Australia	0.59	0.77	0.71	-0.06	0.71	0.71	0.72	0.65	0.70	-0.01	0.71	0.71	0.72	0.65	0.70	0.00
Other Pacific	0.07	0.06	0.06	0.00	0.05	0.06	0.05	0.04	0.05	-0.01	0.05	0.06	0.05	0.04	0.05	0.00
OECD Pacific	0.66	0.83	0.77	-0.07	0.76	0.77	0.78	0.70	0.75	-0.02	0.76	0.77	0.78	0.70	0.75	0.00
Total OECD*	21.34	21.82	21.82	0.00	22.10	22.16	21.51	22.06	21.96	0.14	22.32	22.38	21.73	22.29	22.18	0.22
Brunei	0.18	0.19	0.20	0.00	0.21	0.20	0.20	0.22	0.21	0.01	0.21	0.20	0.20	0.22	0.21	0.00
India	0.75	0.74	0.73	-0.01	0.74	0.74	0.75	0.75	0.75	0.01	0.76	0.76	0.77	0.77	0.77	0.02
Malaysia	0.70	0.68	0.69	0.00	0.73	0.75	0.75	0.75	0.75	0.06	0.74	0.76	0.76	0.76	0.76	0.01
Papua New Guinea	0.09	0.07	0.06	-0.01	0.05	0.05	0.05	0.05	0.05	-0.01	0.06	0.06	0.06	0.06	0.06	0.01
Vietnam	0.26	0.31	0.35	0.04	0.34	0.33	0.33	0.36	0.34	-0.01	0.34	0.33	0.33	0.36	0.34	0.00
Asia others	0.20	0.24	0.26	0.02	0.28	0.28	0.29	0.31	0.29	0.03	0.28	0.28	0.29	0.31	0.29	0.00
Other Asia	2.18	2.23	2.28	0.05	2.36	2.36	2.37	2.44	2.38	0.10	2.40	2.40	2.41	2.47	2.42	0.04
Argentina	0.84	0.79	0.80	0.01	0.80	0.79	0.79	0.80	0.79	-0.01	0.79	0.78	0.78	0.79	0.78	-0.01
Brazil	1.36	1.49	1.57	0.08	1.75	1.80	1.80	1.81	1.79	0.22	1.78	1.83	1.83	1.84	1.82	0.03
Colombia	0.82	0.70	0.61	-0.08	0.61	0.59	0.56	0.57	0.58	-0.03	0.61	0.59	0.56	0.57	0.58	0.00
Ecuador	0.38	0.40	0.41	0.01	0.40	0.39	0.39	0.38	0.39	-0.02	0.41	0.40	0.40	0.39	0.40	0.01
Peru	0.11	0.10	0.10	-0.01	0.10	0.10	0.10	0.10	0.10	0.00	0.11	0.11	0.11	0.11	0.11	0.01
Trinidad & Tobago	0.14	0.14	0.13	-0.01	0.14	0.14	0.14	0.15	0.14	0.01	0.15	0.15	0.15	0.17	0.15	0.01
L. America others	0.11	0.12	0.13	0.01	0.13	0.12	0.12	0.13	0.12	-0.01	0.13	0.12	0.12	0.13	0.12	0.00
Latin America	3.76	3.74	3.75	0.01	3.92	3.93	3.90	3.95	3.92	0.17	3.97	3.98	3.95	4.00	3.97	0.05
Bahrain	0.19	0.19	0.19	0.00	0.19	0.19	0.19	0.19	0.19	0.00	0.19	0.19	0.19	0.19	0.19	0.00
Oman	0.91	0.95	0.95	0.00	0.94	0.92	0.89	0.92	0.92	-0.03	0.94	0.92	0.89	0.92	0.92	0.00
Syria	0.55	0.54	0.53	-0.01	0.51	0.50	0.50	0.49	0.50	-0.03	0.51	0.50	0.50	0.49	0.50	0.00
Yemen	0.42	0.45	0.47	0.01	0.45	0.45	0.45	0.44	0.45	-0.02	0.45	0.45	0.45	0.44	0.45	0.00
Middle East	2.06	2.13	2.13	0.00	2.09	2.06	2.03	2.05	2.05	-0.08	2.09	2.06	2.03	2.05	2.05	0.00
Angola	0.76	0.75	0.74	-0.01	0.92	0.92	0.92	0.98	0.94	0.19	0.94	0.94	0.94	1.00	0.96	0.02
Cameroon	0.10	0.10	0.08	-0.02	0.08	0.08	0.08	0.08	0.08	0.00	0.09	0.09	0.08	0.09	0.09	0.01
Congo	0.27	0.27	0.27	0.00	0.27	0.26	0.25	0.27	0.26	0.00	0.27	0.26	0.25	0.27	0.26	0.00
Egypt	0.83	0.80	0.76	-0.04	0.75	0.76	0.74	0.74	0.75	-0.01	0.76	0.77	0.75	0.75	0.76	0.01
Gabon	0.36	0.34	0.31	-0.03	0.31	0.31	0.30	0.31	0.31	0.00	0.32	0.32	0.31	0.32	0.32	0.01
South Africa	0.17	0.19	0.19	0.00	0.19	0.19	0.19	0.18	0.19	0.00	0.19	0.19	0.19	0.18	0.19	0.00
Africa other	0.28	0.41	0.46	0.05	0.52	0.54	0.54	0.56	0.54	0.08	0.55	0.57	0.57	0.60	0.57	0.03
Africa	2.78	2.85	2.80	-0.05	3.04	3.06	3.02	3.12	3.06	0.26	3.12	3.14	3.10	3.20	3.14	0.08
Total DCs	10.78	10.95	10.96	0.01	11.41	11.40	11.31	11.55	11.42	0.45	11.58	11.57	11.48	11.72	11.59	0.17
FSU	7.47	7.91	8.53	0.62	8.92	9.15	9.48	9.49	9.26	0.74	9.31	9.55	9.89	9.90	9.66	0.40
Other Europe	0.18	0.18	0.18	0.00	0.18	0.18	0.17	0.17	0.18	0.00	0.18	0.18	0.17	0.17	0.18	0.00
China Non OBEC production	3.21 42.99	3.23 44.09	3.30 44.79	0.07 0.69	3.35 45.96	3.39 46.28	3.42 45.90	3.36 46.64	3.38 46.19	0.08	3.35 46.73	3.39 47.06	3.42 46.70	3.36 47.44	3.38 46.98	0.00 0.79
Non-OPEC production	1.58	1.65	1.69	0.69	45.96 1.72	1.72	45.90 1.72	46.64 1.72	1.72	1.41 0.03	46.73 1.75	1.75	46.70 1.75	1.75	46.98 1.75	0.79
Processing gains Non-OPEC supply	1.58 44.56	45.74	46.48	0.04 0.73	47.68	48.00	47.62	48.36	47.91	0.03 1.44	1.75 48.48	48.81	48.45	1.75 49.19	48.73	0.03 0.82
OPEC NGLs + non-conventionals	3.16	3.34	3.58	0.73	3.64	3.64	3.67	48.36 3.74	3.67	0.09	3.67	3.67	3.70	3.77	3.70	0.82
OT EC MOUST HOR-CORVERUORAIS	3.10	3.34	3.30	0.24	3.04	3.04	3.07	3./4	3.0/	0.09	3.0/	3.0/	3.70	3.11	3.70	0.03

^{*} Former East Germany is included in the OECD.

Table 28 Non-OPEC Rig Count

								Change					Change
	1999	2000	1Q01	2Q01	3Q01	4Q01	2001	01/00	1Q02	2Q02	3Q02	Oct02	Oct-Sep
USA	608	916	1,141	1,239	1,231	1,004	1,156	240	818	806	853	852	-8
Canada	246	344	515	252	320	278	342	-2	383	147	250	220	-30
Mexico	43	44	50	48	56	62	54	10	63	61	62	68	3
North America	897	1,305	1,706	1,539	1,607	1,344	1,552	247	1,264	1,014	1,165	1,140	-35
Norway	17	22	24	22	22	22	23	1	20	20	17	19	0
UK	18	18	18	25	28	26	24	6	28	30	24	23	-2
Denmark	2	3	4	5	4	5	4	1	5	4	3	6	3
Other Western Europe	77	82	43	44	42	47	44	-38	39	38	33	32	1
Western Europe	114	125	89	95	96	100	95	-30	92	91	76	80	2
Australia	10	10	11	11	10	10	10	0	9	9	9	7	-1
Other Pacific	6	7	10	9	8	10	9	2	8	7	7	10	4
OECD Pacific	16	17	20	20	18	20	20	3	17	16	16	17	3
Total OECD*	1,027	1,447	1,815	1,655	1,721	1,464	1,667	220	1,373	1,121	1,257	1,237	-30
Brunei	3	2	3	3	2	2	3	1	2	3	3	3	0
India	46	49	51	48	50	50	50	1	52	54	55	56	2
Malaysia	6	7	10	11	13	12	11	4	12	13	15	15	-1
Papua New Guinea	1	0	0	1	2	1	1	1	1	1	1	1	0
Vietnam	9	8	9	8	8	8	8	0	8	8	9	10	-1
Asia others	16	16	22	23	24	18	22	5	26	29	33	35	4
Other Asia	81	83	96	95	98	90	95	12	100	109	116	120	4
Argentina	35	57	69	74	77	64	71	14	49	45	49	51	0
Brazil	19	23	28	30	29	26	28	5	27	27	27	25	-2
Colombia	12	14	15	16	14	16	15	1	13	13	10	9	0
Ecuador	3	7	9	10	10	11	10	3	10	9	8	9	2
Peru	2	4	4	4	3	3	4	0	2	2	2	2	0
Trinidad & Tobago	3	4	6	5	4	5	5	1	5	4	4	5	0
L. America others	13	12	9	8	6	6	7	-4	4	4	4	5	1
Latin America	86	120	141	147	144	130	141	20	110	103	104	106	1
Bahrain			0	0	0	0	0	0	0	0	0		0
Oman	19	24	24	24	25	26	25	1	27	29	30	31	1
Syria	13	14	19	19	20	19	19	5	20	21	23	24	0
Yemen	4	6	6	6	5	6	6	0	8	9	9	11	2
Middle East	36	45	49	49	49	51	50	5	57	60	64	68	3
Angola	5	6	6	5	4	6	5	0	5	6	6	7	1
Cameroon			0	0	0	0	0	0	0	0	0	0	0
Congo	3	3	1	2	1	1	1	-1	1	1	1	1	0
Egypt	17	18	21	22	22	23	22	4	22	23	22	24	2
Gabon	2	2	2	4	1	1	2	0	1	2	2	2	0
South Africa	1	1	2	1	0	1	1	0	1	1	1	0	-1
Africa other	4	5	4	5	5	3	4	0	11	12	12	13	-1
Africa	30	34	36	40	34	35	36	2	41	45	44	47	1
Total DCs	232	282	322	330	325	307	321	40	307	317	328	341	9
FSU													
Other Europe	4	3	3	3	3	4	3	0	2	2	2	2	0
China													
Non-OPEC Rig count	1,263	1,732	2,140	1,988	2,049	1,774	1,991	260	1,682	1,440	1,587	1,580	-21

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