# Organization of the Petroleum Exporting Countries

# Monthly Oil Market Report

## October 2008

# Feature Article: Financial turmoil impacting market fundamentals

| Oil market highlights                   | 1         |
|---|-----------|
| Feature article                         | 3         |
| Crude oil price movements               | 5         |
| The oil futures market                  | 9         |
| Commodity markets                       | 11        |
| Highlights of the world economy         | 16        |
| World oil demand                        | 21        |
| World oil supply                        | 29        |
| Product markets and refinery operations | 36        |
| The tanker market                       | 40        |
| Oil trade                               | 44        |
| Stock movements                         | 54        |
| Balance of supply and demand            | <i>57</i> |



# Oil Market Highlights

- Crude oil prices continued their bearish trend with the weak economic outlook foreseen to dent oil demand growth. The strengthening of the US dollar added to the downward momentum. Financial market turmoil strengthened the gloomy sentiment dominating the global market. In monthly terms, the Basket fell \$15.56/b or nearly 14% in September to stand at an eight-month low of \$96.85/b. The Basket continued to trend sharply lower in October as the evolving crisis in the financial sector indicated an increasingly weaker outlook for the world economy and hence demand growth. The Basket reached a twelve-month low of \$72/b on 13 October, representing a decline of almost \$69/b in little more than three months.
- The world economy is now estimated to grow 3.8% this year, 0.1 percentage points (pp) below last month's estimate. The forecast for 2009 has been revised down 0.4pp to 3.3% due to downward revisions across the board, as the fallout from the financial crisis impacts the real economy. In recent days the huge rescue packages, amounting to an estimated pledge of €1.9 trillion, announced by EU members have reinforced the effect of the already agreed US \$700 billion package. The combined impact of the declared rescue plans appear to have finally succeeded in halting the downward spiral in equity markets, but it remains to be seen if this positive response will last once the details of the individual countries' plans become clearer and the implementation process begins. Time is of the essence since already weakening economies in the OECD are expected to face recession, the depth and duration of which may be contained provided the banking sector can be brought to function normally again in the near future. Within the OECD, US growth forecast for 2009 was reduced by 0.7pp to 0.6%, Euro-zone growth by 0.4pp to 0.6% and Japanese growth trimmed to 0.3%, a downward revision of 0.7pp from last month. Growth forecasts for Developing Countries and China are also 0.2pp down next year and now stand at 5.3% and 9.0% respectively.
- Declining US oil consumption continued to reduce OECD oil demand by more than 1.8% in 2008. Factors affecting world oil demand such as the slowing economy, high retail prices and hurricanes led to a decline of more than 1.0 mb/d in total OECD consumption. Non-OECD oil demand growth increased 1.2 mb/d y-o-y in September. Most of this is attributed to Asian and Middle Eastern oil demand. Total world oil demand growth for 2008 has been reduced to half of the initial forecast to stand now at 0.6 mb/d. In 2009, reduced economic growth outlook is expected to continue impacting oil demand. Hence, oil demand in the USA will be lower than initially expected, at least in the first half of the year. The likely spillover to other economies will affect oil demand elsewhere to some degree. As a result, world oil demand growth for next year has been revised down by 0.1 mb/d to show a growth of 0.8 mb/d. OECD oil demand is expected to shrink by 0.4 mb/d next year; however, non-OECD countries' oil demand growth is estimated to reach 1.1 mb/d with most of the growth coming from China, the Middle East, and India.
- Non-OPEC supply growth in 2008 has been revised down to stand at 0.3 mb/d over the previous year. The adjustments were made to accommodate the impact of hurricanes on US production, reduced oil output from Azerbaijan following a gas leak, and other factors. For 2009, non-OPEC supply growth experienced an upward revision to stand at around 1.0 mb/d. This was mainly due to revisions made to the current year. OPEC NGLs and non-conventional oils now stand at 4.7 mb/d in 2008 and 5.4 mb/d in 2009. In September, OPEC crude oil production averaged 32.2 mb/d, representing a drop of around 309 tb/d from the previous month, as production from Iraq, Saudi Arabia and Angola saw significant declines.
- Product market sentiment improved temporarily after hurricanes Gustav and Ike, lifting product prices in both the physical and futures markets. These developments in product prices along with falling crude prices due to the further deterioration of financial markets have also lifted refining economics across the globe. However, the recent bullish developments in product markets are not expected to persist, as refineries on the US Gulf Coast have returned to normal operation over the last two weeks and the risk of product shortages has eased significantly. However, with the approach of the winter season, the tight distillate situation may provide some support for crude prices, but it may not be enough to overshadow other bearish factors in the market.
- OPEC spot fixtures averaged 12.3 mb/d in September, representing a drop of 3% from the previous month, supported by lower OPEC fixtures outside the Middle East. OPEC sailings remained steady, averaging 23.3 mb/d. Arrivals in the US declined last month in line with the sharp 1.4 mb/d drop in crude imports. Spot freight rates for crude oil tankers showed a clear recovery from the weaker rates the month before, mainly due to high hurricane activity and the strong Middle East market. Product tanker freight rates rose in September with a more active West of Suez market.
- Hurricanes Gustav and Ike pushed US commercial oil stocks below the bottom of the five-year range for the first time this year in September. Inventories lost 24 mb to stand at 960 mb, with products contributing 23 mb to the draw as refineries were the most affected by the hurricanes. Crude stocks stood roughly at the five-year average of 300 mb. However, total US inventories rose sharply in the week ending 3 October as imports increased following the recovery in port infrastructure. Despite a drop in September, stocks remained comfortable in terms of days of forward cover as demand has weakened. In EU-15 plus Norway, total oil inventories fell 4.5 mb to stand at the five-year average. Crude oil remained comfortable after a build of more than 5 mb. Japan's commercial oil stocks, particularly products, continued the upward trend in August. According to preliminary data, total stocks moved above 200 mb in late September for the first time since January 2007.
- The demand for OPEC crude in 2008 is expected to average 32.0 mb/d, a decline of 260 tb/d from the previous year. In 2009, the demand for OPEC crude is expected to average 31.1 mb/d, a decline of 870 tb/d.

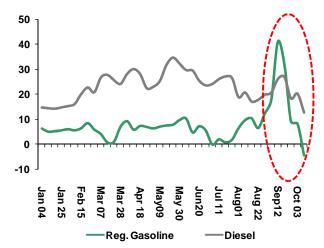
Monthly Oil Market Report\_\_\_

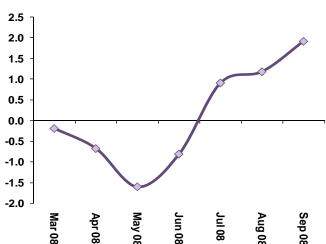
### Financial turmoil impacting market fundamentals

- Crude oil prices have continued to plunge in recent weeks, down from the record highs seen in mid-July. Benchmark WTI crude has fallen by half to below \$80/b earlier this week. With the recent sharp declines, crude oil prices now stand close to the levels seen in September of last year.
- The ongoing downward trend in crude oil prices reflects the dramatically worsening conditions in global financial markets in recent weeks and their negative impact on the real economy, as well as the decline in the demand for oil. As attempts multiply to stabilize financial markets, coordinated efforts among central banks and governments are crucial. Even if governments are successful in calming equity markets and unfreezing credit markets in the near future, the fallout on the real economy from the financial market headwinds is expected to be considerable. This comes on top of the already visibly weakening of OECD economies and a deceleration of growth in emerging markets.
- There is mounting evidence that the US economy might already be in the midst of a recession the depth and length of which remain to be seen. The same applies to the EU and Japan, which have already witnessed a contraction in GDP in the second quarter. Recent indicators point to further contraction ahead. Although emerging market economies have until lately appeared to be partly shielded from significant economic contagion, equity markets in these countries have suffered greater losses than in the advanced economies this year and their currency markets have recently been experiencing considerable volatility. However, it is expected that the damage to their economic growth can be contained if markets stabilize in the coming weeks. All these events are expected to impact different aspects of the oil market, including demand for crude and products, particularly in OECD countries and to a lesser extent in emerging market economies.

Graph 1: Gasoline and diesel crack spreads vs WTI, US\$/b

Graph 2: OECD crude oil stocks, deviation from five-year average, %





- Slowing demand in OECD countries, especially in the US, had adversely affected refining margins and operations in the first seven months of this year. Moreover, the decline in demand forced American refiners to trim refining throughputs to 88% during the peak driving season in August a time of year when refining throughputs typically surge to around 95%.
- Supply concerns particularly for products rose again following hurricanes Gustav and Ike, which temporarily affected about 3.9 mb of refining capacity at the initial stage and disrupted both crude oil and gas installations in the US Gulf. This led to huge product stock-draws and boosted crack spreads the difference between the crude and product price and refining margins worldwide in September. However, over the last two weeks, product markets lost ground significantly as refineries returned to normal operations and crack spreads for light products, especially for regular gasoline, plummeted from about \$40/b in the week ending 19 September to minus \$4/b in the week ending 10 October (see Graph 1).
- Middle distillate crack spreads have weakened, but not as much as those for gasoline. The approaching winter season and the current tight supply of middle distillates in the US and Europe combined with a possibly cold winter may provide support for crude prices to some extent. However, due to the increasing risk of demand deterioration resulting from the widening financial turmoil and economic downturn, developments in the distillate market are not likely to be sufficient to significantly support crude prices in the coming months. Additionally, new refining capacity in Asia which will come onstream in the near future, along with refining operational flexibility in the Atlantic Basin, could ease the risk of a distillate supply shortage in the coming months.
- In light of the weaker product outlook as well as the comfortable situation in OECD crude stocks (*see Graph 2*), the oil market could be considerably affected by the fallout from the recent financial turmoil on the real economy as it moves beyond the industrialized nations, which would considerably reduce demand for crude oil. In light of these growing uncertainties and the pace of weakening fundamentals, OPEC will hold an Extraordinary Meeting of the Conference on 18 November to discuss the global financial crisis, the world economic situation and the impacts on the oil market, as part of its ongoing commitment to market stability.

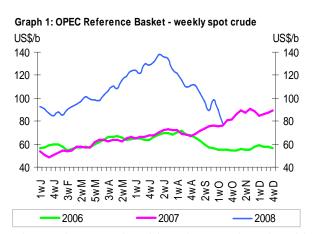
|     |       |     |        | _      |
|-----|-------|-----|--------|--------|
| Moi | nthlv | Oil | Market | Renort |

## Crude Oil Price Movements

The crisis in the financial market and the strengthening of the US dollar dominated market weakness

#### **OPEC Reference Basket**

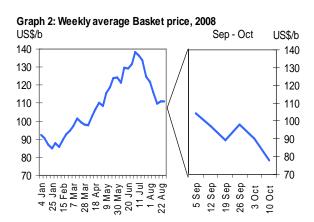
The crude oil market turned bearish at the start of September as Hurricane Gustav spared petroleum infrastructure in the Gulf of Mexico. The sentiment was enhanced by weak economic data amid a contraction in the US manufacturing index. The stronger US dollar also prompted investors to exit the market as the equity markets improved. Adding to the bearish momentum were China's lower fuel imports which were seen as indicative of slower demand. Thus, the OPEC Reference Basket averaged the first week more than 6% or



\$6.81/b lower to settle at \$104.39/b. Market weakness continued into the second week amid a further strengthening of the US dollar while OPEC was seen keeping output policy unchanged, calming market sentiment. The outlook for demand growth weakened as US refinery utilization rates fell to a three-year low. The market ignored the delay of repairs in the US Gulf Coast caused by Hurricane Gustav as Tropical Storm Ike threatened resulting in an implied output cut of some 0.5 mb/d. The Basket averaged the second week \$7.02/b or 6.7% lower to settle at \$97.37/b.

In the third week, the market shifted to the financial turmoil as Lehman Brothers declared bankruptcy sparking fears of equity risks and raising concerns of a recession. Hence, speculative investment exited dollar-dominated commodities sending the currency exchange rate lower; accordingly the petroleum market plummeted. Prospects over slower demand growth outweighed the impact of hurricanes in the Gulf of Mexico that disrupted oil supplies while halting downstream operations on the US Gulf Coast. The Basket plunged in the first two days of the week by \$8.55/b to the lowest level since February; however, volatility resumed once again as the market responded for the first time to Gulf of Mexico fundamentals. Continued depletion of crude oil stocks in the US was offset by the global move by central banks to safeguard the financial market. The fluctuation of the US dollar also lent support to energy prices. Thus, the Basket gained in the remainder of the week an accumulative \$5.69/b, but averaged \$8.17/b or 8.4% lower at \$89.20/b. The upward trend resumed into the fourth week amid the weak US dollar and prospects of tighter OPEC output. Limited arbitrage opportunities for western crude to Asia supported the eastern markets. However, the fluctuation of the US dollar and concern over the health of the financial market capped the upward movement. Nonetheless, the influx of speculative investment into energy futures contributed to the bullish market sentiment. Thus, the weekly Basket average rose \$9.0/b8 or 10.2% to \$98.28/b. In the final day of the month, fears of a recession revived sending the petroleum complex lower as US lawmakers rejected a financial bailout plan. Hence, uncertainties persisted due to the weak economy and slower demand for petroleum. The Basket closed the month at \$90.32/b.

On a monthly basis, the weaker economic outlook supported market bearishness. The strengthening of the US dollar added to the upward momentum. Lower OPEC output and tighter supply from a Mideast major kept the market in balance. The hurricanes sparing the petroleum infrastructure in the US Gulf were seen to phase out fears of a supply shortfall. Financial market turmoil triggered fears of a recession, impacting the global market. The OPEC Reference Basket fell \$15.56/b or nearly 14% to settle at



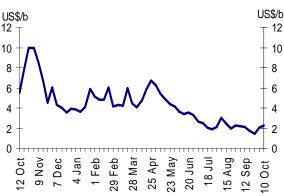
an eight-month low of \$96.85/b in September. The Basket continued to trend sharply lower in October as the evolving crisis in the financial sector indicated an increasingly weaker outlook for the world economy and hence demand growth. The Basket plunged in October to average \$80.10/b month-to-date. On 14 October, the Basket stood at \$73.49/b.

Outages from the Gulf of Mexico due to hurricanes and lightend product stockdraws supported sour grades

#### US market

Light crude firmed in the US domestic market amid depleting product stocks while demand for seasonal fuels emerged. Differentials were supported by the return of some refineries from precautionary shut-downs amid the expectation of a drop in gasoline stocks on higher demand due to the storm evacuation measures and the final peak of the summer driving season. However, the sentiment was short-lived as refineries were seen running at a higher than anticipated rate and the widened transatlantic spread capped the regional grade. The WTI/WTS spread

Graph 3: WTI spread to WTS, 2007-2008



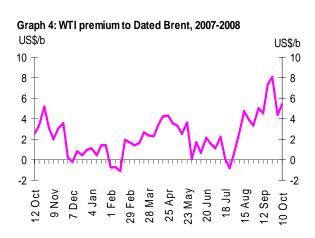
narrowed 13¢ in the first week to \$2.16/b. US gasoline stocks saw draws for the seventh consecutive week while the threat of Hurricane Ike and the effects of Gustav thinned activity. Delayed refinery operations also added to the bullish momentum for the light grade.

Thus, in the second week, the WTI/WTS spread narrowed  $4\phi$  to \$2.12/b. Although sweet crude was supported by a drop in stocks at Cushing, Oklahoma, depleting light-end products continued to support light crude amid lower refinery output. In the third week, the WTI/WTS spread narrowed  $40\phi$  to \$1.76/b. Slow recovery of oil output from the Gulf of Mexico due to Hurricanes Gustav and Ike supported the sour grade. The WTI/WTS spread narrowed in the fourth week by  $26\phi$  to \$1.46/b. However, prolonged outages from the Gulf of Mexico supported the inland grade later in the month. In September, WTI averaged \$12.43/b or 10.7% lower at \$104.15/b. The premium to WTS narrowed by  $53\phi$  to \$1.89/b, the lowest level since December 2003.

#### Weaker refinery margins and slower demand pressured North Sea crude

### North Sea market

Sluggish demand prompted by ample supplies dampened the European market. An industry conference also slowed activity on the market, enhancing the bearish momentum early in the month. In the first week, the average Brent discount to WTI was \$1.74/b wider at \$5.05/b. A fall in the front end swaps maintained the bearishness in the marketplace. However, the emerging lower October programme contributed some firmness to North Sea crude differentials. Thus, the WTI premium to Brent narrowed by 53¢ to \$4.52/b. In the third week, healthier refining margins were outweighed by



transatlantic arbitrage. Nonetheless, weakened yield margins pressured the grade once again amid the disposal of prompted barrels. Brent discount to WTI was \$2.84 wider at \$7.36/b. The bearish sentiment sustained amid lower refining margins in Rotterdam while buyers shunned the North Sea grade. The WTI/Brent spread continued to widen to a record-high of \$13.70/b with the weekly averaged spread at \$8.07/b. In September, Brent averaged \$98.13/b, representing a decline of \$14.90/b or 13%, with the discount to WTI almost double to \$6.02/b/b.

Tight September supply amid outages and healthy refining margins supported Urals crude

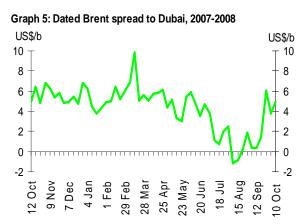
Narrower arbitrage spread dampened Mideast crude amid slow refinery procurement

#### Mediterranean market

The Mediterranean market emerged on a stronger note amid healthy refining margins for sour grade. Tight September supplies prompting higher bids kept the Urals crude differentials at firm levels. In the first week, Urals discount to Brent was nearly halved to  $36\phi$ , down from  $61\phi$ /b the week before. Market bullishness continued into the second week amid sustained healthy refinery margins. Brent premium to Urals was  $12\phi$  narrower at  $24\phi$ /b. However, the momentum was short-lived as Brent was seen firming amid an outflow of arbitrage barrels. Thus, Urals discount to Brent was  $6\phi$  wider at  $30\phi$ /b. The Mediterranean market sentiment was firming amid lower throughput along the BP-led Baku-Tbilisi-Ceyhan oil pipeline following a gas leak on 17 September that cut output from fields in the Caspian Sea, adding to market bullishness. However, rising October supply capped the sentiment pressuring the regional grade. Hence, Urals discount to Brent averaged the fourth week  $50\phi$  wider at  $80\phi$ /b. In monthly terms, Urals fell \$14.56/b or 13% in September to \$97.61/b, while the discount to Brent narrowed  $34\phi$  to  $52\phi$ /b.

#### Middle Eastern market

The market emerged in September on a weaker note as October barrels cleared at lower levels amid ample supply. Murban kerosene-rich crude was assessed at a steep discount amid higher-than-expected retroactive OSP. The narrowing arbitrage spread also supported the flow of rival grade adding to market bearishness. The average Brent/Dubai spread narrowed by \$1.51 to 35¢/b in the first week. The weak market for the Mideast crude continued in the second week with Murban clearing at a four-year low amid an overhang of October stems. Slower



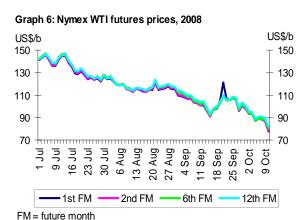
demand amid a cut in refinery throughput kept the momentum gloomy. The Brent/Dubai spread was nearly unchanged when it averaged 34¢/b. The Middle East crude remained under pressure despite clearing of prompt barrels at a weaker level and falling outright prices. Continued dampened demand due to the poor fuel crack spread pressured the Mideast crude in Asia. Weaker naphtha crack spread also added to the bearish market sentiment. In the third week, the Dubai discount to Brent averaged \$1.09 wider at \$1.43/b. In the fourth week, market sentiment was mixed amid a wide arbitrage spread and improved refining margins. However, steady supply from a Mideast major kept the market calm. Brent premium to Dubai widened significantly by \$4.6 to \$6.03/b limiting the eastward flow of rival grades. In monthly terms, Dubai averaged \$95.90/b in September for a loss of \$16.96 or 15%, with the Brent/Dubai spread averaging \$2.23/b or \$2.03 wider.

| Table 1: OPEC Reference E | Basket and se | lected crude | es, US\$/b |             |             |
|---------------------------|---------------|--------------|------------|-------------|-------------|
|                           |               |              | Change     | Year-t      | to-Date     |
|                           | <b>Aug 08</b> | Sep 08       | Sep/Aug    | <u>2007</u> | <u>2008</u> |
| OPEC Reference Basket     | 112.41        | 96.85        | -15.56     | 63.74       | 108.10      |
| Arab Light                | 113.69        | 97.57        | -16.12     | 63.36       | 108.99      |
| Basrah Light              | 109.16        | 94.84        | -14.32     | 61.12       | 105.30      |
| BCF-17                    | 110.48        | 96.17        | -14.31     | 56.41       | 99.94       |
| Bonny Light               | 116.93        | 100.48       | -16.45     | 69.69       | 114.50      |
| Es Sider                  | 111.98        | 97.28        | -14.70     | 65.83       | 110.45      |
| Girassol                  | 110.26        | 96.68        | -13.58     | 65.32       | 109.11      |
| Iran Heavy                | 108.10        | 93.04        | -15.06     | 61.55       | 104.92      |
| Kuwait Export             | 108.84        | 93.15        | -15.69     | 61.02       | 104.61      |
| Marine                    | 113.53        | 97.78        | -15.75     | 64.17       | 108.30      |
| Minas                     | 119.07        | 101.63       | -17.44     | 67.74       | 114.41      |
| Murban                    | 119.50        | 101.32       | -18.18     | 67.87       | 113.08      |
| Oriente                   | 102.13        | 89.52        | -12.61     | 56.59       | 99.16       |
| Saharan Blend             | 114.33        | 99.48        | -14.85     | 69.31       | 112.93      |
| Other Crudes              |               |              |            |             |             |
| Dubai                     | 112.86        | 95.90        | -16.96     | 63.42       | 107.25      |
| Isthmus                   | 112.63        | 100.15       | -12.48     | 61.78       | 108.93      |
| T.J. Light                | 110.04        | 96.65        | -13.39     | 59.95       | 105.86      |
| Brent                     | 113.03        | 98.13        | -14.90     | 67.14       | 111.19      |
| W Texas Intermediate      | 116.58        | 104.15       | -12.43     | 66.08       | 113.53      |
| Differentials             |               |              |            |             |             |
| WTI/Brent                 | 3.55          | 6.02         | 2.47       | -1.06       | 2.34        |
| Brent/Dubai               | 0.17          | 2.23         | 2.06       | 3.72        | 3.94        |

Source: Platt's, Direct Communication and Secretariat's assessments.

## The Oil Futures Market

Continued US dollar strength prompted by the credit crisis drove investors from the crude oil futures market The downward pressure continued in the petroleum complex with WTI crude oil futures in the Nymex plunging \$6.56/b or 5.6% to settle at \$109.71/b to average the first weekly period at \$114.73/b, down by \$1.7/b. The market remained calm as Hurricane Gustav was less damaging than expected, while the IEA and the EIA were seen ready to supply crude to the US market to cover any supply outages. The strengthening of the US dollar also prompted some liquidation in energy futures. In the weekly period, non-commercial net long positions fell 5,800 to 14,399



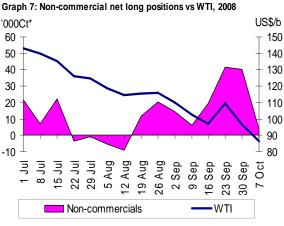
contracts as long positions depleted at a faster rate than shorts. In contrast, open interest volume inflated by a healthy 39,200 to 1,226,900 lots. With options included, open interest volume was 105,500 higher at 2,846,200 contracts.

In the second weekly period, non-commercials continued to reduce positions as shorts rose at a faster rate than longs. Net longs fell almost 8,000 to 6,300 lots. Nonetheless, open interest was 4,600 higher at 1,231,450 contracts. With options included, open interest volume increased 115,000 to 2,961,300 lots, the highest level since May. Still, net longs were down by 11,500 to 62,800 contracts. The firming of the US dollar, weak economy outlook and plummeting oil demand continued to suppress crude oil futures. Nymex WTI front month contracts averaged \$106.61/b or \$8.12 lower to close the weekly period \$6 down at \$103.26/b.

Market sentiment weakened further into the third weekly period with refinery run rates at low levels in the US Gulf Coast as Hurricane Ike delayed repairs, the US dollar strengthened and Lehman Brothers declared bankruptcy. Thus, recession fear revived raising concerns about a slump in demand growth. Nymex WTI front month contracts closed the week down by \$12.11/b or almost \$12/b to \$91.15/b, to average the week at \$98.30/b, down by \$8.31/b. Nonetheless, a bailout plan prevented the market from plunging further. Non-commercials increased net long positions by 13,000 to 19,400 contracts. Moreover, open interest contract volume rose a marginal 10,200 to 1,241,600 lots, the highest level since early August. With options included, open interest inflated significantly by 271,400 to 3,232,700 contacts, the highest level on record.

In the fourth weekly period, the market sentiment was reversed. Non-commercial net long positions increased by a healthy 22,300 to 41,700 lots, yet open interest volume deflated by a significant 128,200 to 1,113,400 lots amid a strong liquidation in commercial positions. With options included, open interest volume saw a strong reduction of 456,500 contracts amid hefty liquidation in spreading and commercials. Crude oil futures contracts surged during the fourth weekly period prompted by the covering of short positions. Bullish US petroleum data with Saudi Arabia perceived as trimming output, coupled with a force majeure declaration by Nigeria, revived the bullish market momentum. The sentiment was further inspired by the US financial sector bailout plan while the dollar weakness added to the market strength. The front month contracts surged nearly 16% or \$16.37/b in a one-day rally. The Nymex WTI prompt month contract jumped by \$15.46 or almost 17% to average the weekly period \$7.12/b firmer at \$105.42/b. Nonetheless, the downward trend resumed in the final week of the month. A bailout plan to rescue the financial system was initially rejected by law-makers igniting fear of a further downtrend in the economy. Thus, Nymex WTI closed the weekly period \$5.97 or 5.6% lower after plunging one day by a hefty \$10.52 or nearly 10%. Nonetheless, the weekly average was \$103.53/b, down by \$1.89/b. In the final weekly period, non-commercial net long positions were 1,600 lower at 40,100 lots. Moreover, open interest volume fell by nearly 21,000 to 1,092,400 contracts which made it the lowest level since August 2006. In contrast, with options included, open interest was nearly 64,000 higher at 2,840,000 contracts amid a healthy build in commercial positions.

On a monthly basis, non-commercial net long positions averaged 24,400 contracts in September, representing an increase of 20,100 contracts over the previous month, but 23,900 lots lower than in September 2007. Moreover, interest volume open averaged 1,181,151 contracts, 39,400 lots lower than in the previous month and 301,800 below last year's level. Market bearishness dominated in September despite tighter OPEC output. An already bleak economic outlook deepened with the spread of the US financial crisis. The strengthening of US dollar also drove investors away from currency-dominated commodities. Steady OPEC output amid a rise in

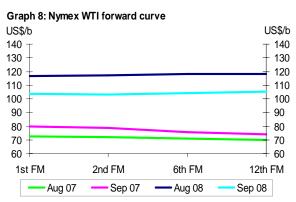


NC = Non-commercials: funds, investments and banks. Ct = \*Each contract is 1,000 barrels.

exports offset outages in the Gulf of Mexico. The Nymex WTI front month contract averaged the month at \$103.03/b, representing a decline of \$13.66 or 11.7%.

#### The Forward Structure

The forward curve flipped backwardation amid continued depletion of US crude oil stocks. The 1st/2nd month spread averaged 73¢/b compared to the 23¢/b contango in August and the \$1.15/b backwardation last year. However, the 1<sup>st</sup>/6<sup>th</sup>, 1<sup>st</sup>/12<sup>th</sup> and 1st/18th month spreads were at a 29¢/b, \$1.59/b and \$2.30/b contango compared to \$1.41/b, \$1.25/b and \$1.59/b in the previous month and the backwardated structure last year at \$3.98/b, \$5.64/b and \$6.75/b respectively. The US crude oil stocks in September were 8.2 mb lower than in



FM = future month

the previous month, at 293.6 mb. This represents a 27.3 mb decline from last year and 19.5 mb lower than the five-year average. Lower imports due to delays caused by the hurricanes and supply outages from the Gulf of Mexico added to stock depletion. The refinery utilization rate dropped by 2.6 mb/d to 12.7 mb/d with the year-to-date average at 14.7 mb/d or nearly 0.6 mb/d lower.

Outages from the Gulf of Mexico due to hurricane shut-ins and lower imports inspired prompt procurement

## **Commodity Markets**

Commodity prices continued to decline in September, dropping 9.9% following the worsening of the financial crisis and the stronger dollar Trends in selected commodity markets

Commodity prices declined in September for the third month in a row, reflecting the difficult world financial and economic situation, with the turmoil in the financial markets and imminent recession having worsened the near-term outlook for commodity markets. The IMF index fell by 9.9% in September, compared to a drop of 10.7% in the previous month. The fall embraced both non-energy prices and energy month-on-month (m-o-m) in September, respectively (see Table 2). Potassium chloride was the only commodity that grew significantly in September. Commodity prices also declined sharply in early October in the face of the worsening of the financial crisis and macroeconomic deterioration which has led to a decline in demand and expectations of further drops in the near future.

**The energy commodity index** (crude oil, natural gas and coal) decreased 11.6% in September m-o-m. **Crude oil prices** (the averaged petroleum spot price) fell 13.3% m-o-m to \$99.7/b in September and lost more ground **in early October.** 

**US natural gas price** fell 7% in September m-o-m due to weaker demand, rising inventories and growth in the shale-gas production, regardless of important disruptions in the wake of hurricanes.

**Coal prices dropped** in **September** as a result of weakening demand and the improvement in port congestion at New Castle in Australia. Volatility for this commodity was very high.

| Table 2: Monthly changes in selected commodity prices, 2007-2008 |           |          |         |               |  |  |  |  |  |
|--|-----------|----------|---------|---------------|--|--|--|--|--|
|  |           | % Change |         | % Change      |  |  |  |  |  |
|  | July/June | Aug/July | Sep/Aug | Sep 08/Sep 07 |  |  |  |  |  |
| Commodity  | 1.6       | -10.7    | -9.9    | 25.0          |  |  |  |  |  |
| Non-Energy   | 0.1       | -5.9     | -5.9    | 5.5           |  |  |  |  |  |
| Energy   | 2.2       | -12.6    | -11.6   | 36.5          |  |  |  |  |  |
| Crude  | 0.8       | -13.6    | -13.3   | 29.1          |  |  |  |  |  |
| Natural Gas  | -12.6     | -25.6    | -7.6    | 25.6          |  |  |  |  |  |
| Agriculture*   | -1.8      | -8.5     | -5.1    | na            |  |  |  |  |  |
| Food   | -0.8      | -7.5     | -6.4    | 14.2          |  |  |  |  |  |
| Com  | -7.0      | -11.9    | -0.5    | 46.1          |  |  |  |  |  |
| Soybean Oil  | -3.0      | -15.2    | -10.5   | 22.2          |  |  |  |  |  |
| Soybeans   | 3.5       | -14.1    | -6.3    | 26.0          |  |  |  |  |  |
| Wheat  | -5.8      | 0.4      | -10.3   | -9.5          |  |  |  |  |  |
| Sugar  | 1.3       | -5.0     | -4.9    | -10.9         |  |  |  |  |  |
| Industrial Metals  | 0.9       | -6.9     | -6.2    | -6.1          |  |  |  |  |  |
| Aluminium  | 3.4       | -9.9     | -8.6    | 5.4           |  |  |  |  |  |
| Copper   | 1.4       | -9.2     | -8.6    | -9.1          |  |  |  |  |  |
| Nickel   | -10.9     | -4.9     | -7.0    | -39.8         |  |  |  |  |  |
| Zinc   | -2.6      | -6.6     | 0.6     | -39.6         |  |  |  |  |  |
| Gold**   | 5.7       | -10.7    | -1.1    | 16.4          |  |  |  |  |  |

na Not available

Sources: IMF; Estimations based on data provided by the IMF.

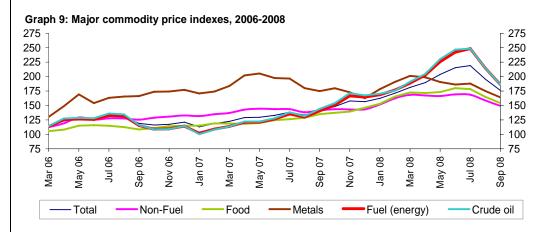
Industrial metals dropped 6.2% in September Non-energy commodities showed negative growth of 5.9% m-o-m in July with a drop across all commodity prices, especially crude oil, some food and industrial metals.

The industrial metal price index fell 6.2% m-o-m in September, and declined further in early October following the deepening economic turmoil that has already begun to affect the real economy implying a deterioration in demand, and the 4.0% dollar appreciation against the Euro. Long liquidation exerted further downward pressures on prices (see Graphs 10 and 11 below). The tighter links between industrial metal prices and industrial output has been a key factor behind the decline in most metal prices which have dropped near one-third from early July affected by the turmoil in financial markets and the certainty of recession.

<sup>\*</sup> World Bank Index

<sup>\*\*</sup> Kitco

**Aluminum prices dropped 8.6% m-o-m in September** caused by weakening demand, rallying LME stocks. Chinese imports fell 3.4% year on year (y-o-y) and 9.9% (m-o-m) and Japanese exports dropped 6.5% y-o-y prompted by low demand from the automotive and constructions sectors. LME inventories surged 201,000 tones to reach a four-year level of 1,370,000 tonnes.



#### Commodity Price Index, 2005 = 100

Total - Includes both fuel and non-fuel.

Non-fuel - Includes food and beverages and industrial inputs.

Food - Includes cereal, vegetable oils, meat, seafood, sugar, bananas and oranges.

Metals - Includes copper, aluminum, iron ore, tin, nickel, zinc, lead and uranium.

Fuel (energy) - Includes crude oil (petroleum), natural gas and coal.

Crude oil - Is the simple average of three spot prices: Dated Brent, West Texas

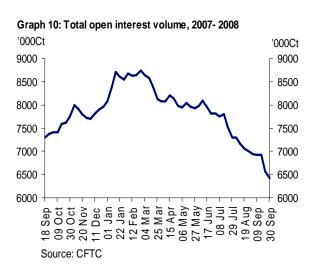
Intermediate and Dubai Fateh.

The World Bank's agricultural price index decreased 5.1% in September for the third consecutive month owing to weakening demand, falling crude oil prices and improved supply outlook. The IMF food price index further declined by 6.4%. Major losses in wheat were reported on projected 10% increase in global production; the soybean complex dropped due to on expectations of lower demand in China and for biodiesel, while sugar's 7% drop in September was related to expected low ethanol demand and a strong rise in global supplies.

Gold price declined 1.1% m-o-m in September to average 829.9 \$/oz - compared to a plum of 10.7% m-o-m in August. Despite dollar appreciation, gold has been used as a heaven safe now that economic recession is a fact. It must be noted that in early October gold prices increased by 874.10 \$/oz. As expected, gold has been favored by investors, and its price is moving in opposite direction to the major stocks indices.

Open interest in major US commodity markets experienced a drop of 390, 000 contracts to 6,793,000 in September

Investment flow into commodities September saw another decline in the open interest volume (OIV) in major US commodity markets, according to the CFTC, in parallel with the falling trend in commodity prices over the month and the worsening in the macroeconomic outlook, specially the financial crisis which finally led to the intervention of the US government with the rescue plan. It must be noted that on a monthly basis, some of the commodities most affected by the risk reduction were industrial metals closely linked to the industrial output such as copper - and those linked to agriculture (see Table and Graph 10, 11). Precious metal and crude oil were less affected by the bearish sentiment in the markets.



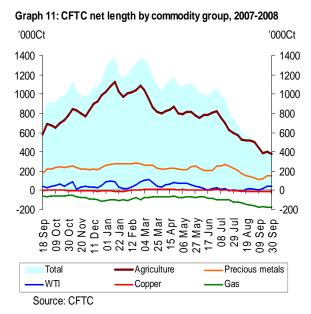
On a monthly basis, speculative net length's in major US commodity markets drop of 191,000 to 403,000 contracts was milder in September compared to a 316,000 drop in the previous month, while net length as percentage of the open interest declined from 8% in August to 5.9% in September, resulting in a milder drop in the previous August. This was ascribed to a recovery crude oil which reported an increase in non-commercial net length as percentage of open interest volume and a milder decline in the other commodities during the first 2 weeks of September which was followed by a sharp decline in total markets outstanding contracts in the context of the financial turmoil in the second part of the month.

CFTC data reveal that agricultural markets were greatly affected by the financial market turmoil. The complex saw a reduction of the net length of non-commercials as percentage of OIV from of 13.9% in August to 11.7% in September. The decline in net length of tactical investors was less pronounced in September than in August for corn and soybeans.

| CFTC positions, '000 contracts |               |               |               |           |               |           |               |          |  |  |  |
|--------------------------------|---------------|---------------|---------------|-----------|---------------|-----------|---------------|----------|--|--|--|
|                                | Net P         | Net Positions |               | Positions | Short         | positions | Open          | Interest |  |  |  |
|                                |               | Change        |               | Change    |               | Change    |               | Change   |  |  |  |
|                                | <b>Sep 08</b> | Sep/Aug       | <b>Sep 08</b> | Sep/Aug   | <b>Sep 08</b> | Sep/Aug   | <b>Sep 08</b> | Sep/Aug  |  |  |  |
| Crude Oil                      | 24            | 20            | 198           | -1        | 174           | -22       | 1181          | -39      |  |  |  |
| Natural Gas                    | -171          | -32           | 216           | 7         | 388           | 38        | 917           | -2       |  |  |  |
| Agriculture                    | 420           | -114          | 864           | -112      | 444           | 2         | 3593          | -258     |  |  |  |
| Com                            | 181           | -23           | 279           | -36       | 99            | -13       | 1053          | -123     |  |  |  |
| Soybean Oil                    | 4             | -6            | 30            | 0         | 27            | 6         | 256           | 1        |  |  |  |
| Soybeans                       | 55            | -20           | 98            | -21       | 43            | 0         | 367           | -23      |  |  |  |
| Sugar                          | 117           | -20           | 180           | -26       | 63            | -5        | 771           | -32      |  |  |  |
| Precious Metals                | 133           | -34           | 196           | -23       | 63            | 12        | 513           | -28      |  |  |  |
| Copper                         | -13           | -5            | 8             | -4        | 21            | 1         | 77            | -22      |  |  |  |
| Livestocks                     | 9             | -26           | 123           | -14       | 114           | 12        | 511           | -49      |  |  |  |
| Total                          | 403           | -191          | 1606          | -147      | 1203          | 44        | 6793          | -398     |  |  |  |

Copper has been most affected in the industrial metal complex. Massive outflow in short and long liquidation continued in copper resulting in noncommercial futures net positions as percentage of the OIV fell further into negative territory from minus 7.6 in August July to minus 16.7% in September.

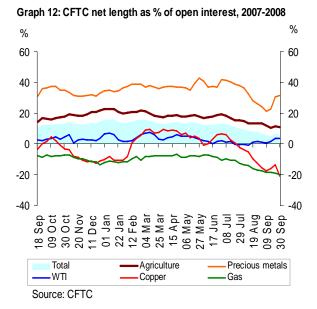
Precious metals open interest volume declined by 28,000 contracts to 513,000 contracts in September m-o-m compared to drop of 82,000 in the previous month. The decline in the non-commercial netlength as a percentage of OIV was milder in September compared to the drop in August (see Graph 11). Investment sentiment towards gold was relatively positive and as a result of the turmoil in financial markets and the gloomy outlook



for the general economy in September. There appears to be a decoupling between assets and equity markets and gold markets which is the classical response when in the face of a recession gold is used as a safe heaven.

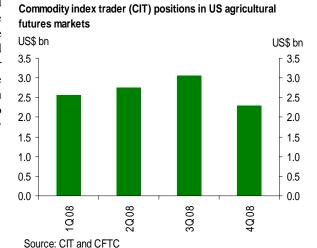
A look at the share of open interest in major US agricultural futures markets suggests that there has been a decline from the previous months in corn, soybean oil and soybeans.

The fall in commodity prices amid the turmoil in the financial markets in September has led to a liquidation in positions, according to the CFTC, with the consequence that many market participants believe that there is massive outflow of investments. CFTC data on index-related positions in US agricultural markets indicate 338,815 contracts have been liquidated by the end of the Q3. In billion dollars, it is estimated that an outflow of around \$.7.2-9.1 billion dollars took place from agricultural investment in 3Q 2008 compared to the precedent one



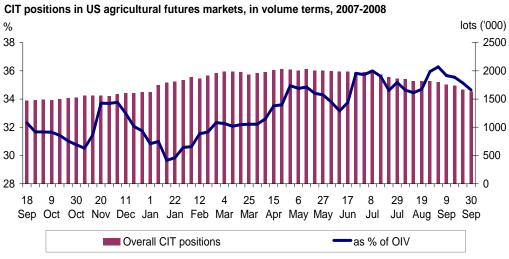
(see Graph 12). This development has led some analysts to estimate a huge investment outflow from the commodity sector, which would have achieved a \$90 bn value in the 3Q 2008. Our estimates suggest a 34% decline in investment in the two major commodity investment indices an investment outflow of 8.1 bn. (with all the sectors being affected with gold showing a milder relative loss (see Graph 12). It is worth noting that according to data from Barclays, assets under management declined over 21% to \$211 bn, flows being rather flat as inflows into exchange traded products (ETPs) and medium term notes (MTNs) nearly matching the outflow in commodity indices which is estimated at around \$5 bn. The major change may have taken place in the distribution of flows into the different commodity sectors, with agriculture being the major loser and gold registering the major inflow of investment, especially in September. Despite a pick-up in energy linked ETPs and MTNs, an overall outflow of about \$600 mn from the sector, following index-linked withdrawals.

Deteriorating macroeconomic and financial crisis together with the imminence of recession in the US and the spillover to the rest of the world has led to the worsening short-term outlook for commodities with falling and volatile commodity prices fostering a bearish investment sentiment, which reinforced the decline in commodity price.



Gold

Industrial Metals



Source: CIT and CFTC

Agricultural

Livestock

#### Investments in two principal commodity instruments (S&P GSCI and DJ-AIG) \$bn \$bn 350 350 300 300 250 250 200 200 150 150 100 100 50 50 1Q006 2Q006 3Q06 4Q06 1Q007 2Q007 3Q007 4Q007 1Q008 2Q008 3Q008

Crude Oil

Energy

## Highlights of the World Economy

| Econor | Economic growth rates 2008-2009, % |      |     |       |           |       |       |  |  |  |  |  |
|--------|------------------------------------|------|-----|-------|-----------|-------|-------|--|--|--|--|--|
|        | World                              | OECD | USA | Japan | Euro-zone | China | India |  |  |  |  |  |
| 2008   | 3.8                                | 1.5  | 1.5 | 0.6   | 1.1       | 9.9   | 7.5   |  |  |  |  |  |
| 2009   | 3.3                                | 1.0  | 0.6 | 0.3   | 0.6       | 9.0   | 7.5   |  |  |  |  |  |

#### Industrialised countries

United States of America

The fallout on the real economy from the dramatic worsening of financial market conditions in the last weeks is expected to be large. This comes on top of an already visibly weakening US economy as the drop in payrolls accelerates, home prices continue to fall and household spending is cut back. There is little doubt that the US economy is already in or is about to enter into a recession, the depth and length of which is still uncertain.

Following an initial rejection, the US Congress in early October passed the "Emergency Economic Stabilization Act", a rescue package for banks amounting to \$700 bn. Attention is now turning to the distribution of funds between purchasing troubled assets, offering loan guarantees and the important task of recapitalizing banks. The US Administration intends to move quickly to implement the financial bailout.

The IMF estimates that the world's major banks may need \$675 bn in fresh capital over the next several years. According to data compiled by Bloomberg, writedowns and losses of financial institutions to date have reached \$635 bn since the start of 2007. The International Monetary Fund anticipates final losses will amount to \$1.4 trn. So far banks have added about \$443 bn of new capital.

Meanwhile, in a globally coordinated response from major central banks, the Fed cut interest rates by 0.5%. The federal funds rate now stands at 1.5%. Identical cuts were undertaken by the ECB and the central banks of Sweden, Canada and Switzerland. But it was only after the European Union also pledged huge funds to support the banking system a few days later that financial markets responded positively and the free fall in stocks was arrested early this week. Within a week, the MSCI World Index had lost 20% of its value, erasing more than \$4 trillion from global equities. It is expected that libor rates, which have eased slightly, will fall further as the risk of bank insolvency drops following government guarantees of interbank loans in Europe. Moreover, central banks are resorting to other measures to push down money-market rates. The Fed announced on October 7 that it would create a special fund to buy U.S. commercial paper and the ECB announced it would offer financial firms unlimited euro funds. In the US there is also talk of a possible second fiscal stimulus package since the economy is expected to continue weakening even as the credit crisis eases.

On the ground, US September payrolls fell a higher-than-expected 159,000, the biggest loss in jobs in five years. The rate of unemployment remained at 6.1% unchanged from August but it is expected to resume its rise in coming months as businesses shed more jobs. This is bound to impact consumer spending negatively. Job losses were witnessed in many sectors including construction, manufacturing and retail, while job additions in government, health and education were smaller compared to previous months.

Separately, the Institute for Supply Management's closely-watched index for manufacturing moved into recession territory in September. After having remained close to the 50-mark for most of the year, it sank to 43.5 in September, the lowest level since October 2001. The subindex for new orders for factories fell to 38.8 from 48.3 the prior month, while the production measure dropped to 40.8 from 52.1. At the same time, the ISM index for non-manufacturing businesses, which represents almost 90% of economic activity, remained close to the 50 threshold separating growth from contraction. The index rose slightly to 50.6 in September from 49.5 in August.

On the housing front, the one positive sign was the rise in the pending home sales by 7.4% in August, the most since October 2001, after falling 2.7% in July. Pending home sales are considered a leading indicator since they track contract signings, which are usually one to two

October 2008

**Dramatically** worsening conditions in financial markets indicate strong fallout on the real economy is now inevitable.

16

months ahead of closings The data shows that that falling home prices have begun to attract

buyers into the market, even though is it probably only vulture investors at this stage. Moreover, this rise should be interpreted with caution as it is becoming increasingly difficult to obtain mortgage loans even for households with good credit. Thus, some of the pending sales may not close. Foreclosures accelerated in the second quarter to 2.75% from 2.47% in 1Q08. The overall mortgage delinquency rate of 6.41% was the highest since records began to be collected in 1979 by the Mortgage Bankers Association. Home prices continued to fall as shown by S&P/Case-Shiller index which dropped 16.3% from a year earlier in July, following a 15.9% decline in June. Prices have been falling every month since January 2007.

It is expected that consumer spending, which accounts for more than 70% of GDP may fall in 3Q08 for the first time since 1992. Household spending was unchanged in August with downward revisions for the previous three months. Spending rose a meager 0.1% in July.

The US economy is forecast to contract at a 0.2% annualised rate in the third quarter and by 1.2% in 4Q08. Over the whole year growth is now estimated at 1.5% in 2008 falling to 0.6% next year, down 0.7 pp from last month.

#### Japan

Japanese economic downturn to extend for the rest of the year The Japanese economy continues to weaken as the deepening financial crisis hits Japanese equity markets, which had lost this year to date almost 40% of their value by the end of the first week in October. The crisis is also affecting foreign exchange markets, with the yen rising strongly against the dollar as risk averseness dominates. The strong yen may impact exports negatively. Downside risks to growth have increased substantially and it is generally expected that the Japanese economy will show negative growth in the third quarter following the 3% annualized drop in the second quarter. Nevertheless, the Bank of Japan did not join in the recent coordinated global move by the seven central banks to lower interest rates, holding its overnight rate at 0.5%, but it has continued to provide liquidity to the banking sector.

The government admitted that the economy was weakening and it cut its assessment of capital spending and imports, as it continues to assess how the global fiancial turmoil will affect the Japanese economy. Moreover, the Japanese lower house has approved a three-month-old stimulus package drafted by the previous government but which the present government admits is inadequate to effectively stimulate the economy.

The latest quarterly Bank of Japan "Tankan" report shows that Japan's largest manufacturers have become pessimistic about economic prospects, as the deepening financial crisis impacts export markets. The confidence index among big manufacturers fell to -3 points in September from +5 in June, the fourth consecutive drop, with pessimists outnumbering optimists for the first time in five years. The report showed that large manufacturers plan to increase capital spending by only 1.7% in the year to March 31. Similarly, confidence among the smaller companies that employ the bulk of Japan's labour force — about 70% —also fell to its lowest level in five years.

At the same time, orders for Japanese machinery, a forward indicator of capital spending, fell steeply by 14.5% for the third month in August, marking the longest downward trend since the previous recession in 2001. This implies that orders in the third quarter are set to drop for the first time in five years. The Cabinet Office also downgraded its assessment of machinery orders going forward.

Meanwhile, Japan's three largest carmakers, Toyota, Nissan and Honda, are facing increasing difficulties. All three have cut global production in August, Toyota (-17%), Nissan (-5.5%) and Honda (-4.8%) as exports to the U.S. declined 30% percent m-o-m. At the same time, domestic auto sales continued to fall in September.

Another indicator of a weakening economy was the rise in the rate of corporate bankruptcies by 34% in September, the fastest pace in eight years. Bankruptcies rose to 1,408 cases in September from the same month a year earlier, but are still lower than the rate of 38.6% witnessed in March 2000. Meanwhile, the unemployment rate climbed to 4.2% in August, the highest in two years, while inflation remained at a 10-year high of 2.1%, albeit slightly lower than the 2.3% reached in July. Excluding fresh food and energy, the core consumer price index rate was flat. Meanwhile wages declined for the first time this year in August.

The external sector was also feeling the strain. In August, the trade balance recorded its first monthly deficit since the early 1980s. Exports grew a meager 0.3% in August from a year earlier after rising 8% the previous month while imports surged 17%, according to data released by the Japanese Finance Ministry. Exports to the US dropped 21.8%, to the Euro-zone by 3.6%, while they rose 16.8% to the middle East and 6.6% to Asia from year ago levels.

Overall, the Japanese economy is expected to grow at 0.6% this year- down 0.2 pp from last month, and by 0.3% in 2009, representing a downward revision of 0.7 pp.

Euro-zone

Euro-zone economies to weaken further despite the recent huge support package for the region's banks The Euro-zone economies are expected to weaken further despite the recent agreement by the 27 European Union countries to set aside around €1.9 trillion to guarantee bank loans and to take equity stakes in financial institutions. Following a week when European stocks tumbled 22%, agreement was reached on a systematic approach to the credit crisis where a coordinated effort would be made to shore up the financial sector. Equity markets surged after the agreement was reached but it remains to be seen whether the rally will endure. Of the stated €1.9 bn Germany agreed to allocate €500 bn in loan guarantees and capital, equivalent to around 20% of its GDP, France will set aside €360 bn, Netherlands \$200bn while Spain and Austria approved €100 bn each for bank guarantees and share purchases.

Euro-zone inflation eased to 3.6% in September from 3.8 in August and the 16-year high of 4% in July but still remained above the ECB's 2% target. With the economic downturn in the region, inflation is expected to ease further. In any case, the ECB disregarded its previous concerns about inflationary pressures and joined in the global coordinated cut of interest rates in early October. The ECB refinancing rate was cut by 0.5% to 3.75%, the first drop in more than five years. Further cuts may be forthcoming.

Recent data indicate that the Euro-zone economy may have contracted again in the third quarter following the 0.2% q-o-q drop in the 2Q08, as retail sales dropped, unemployment crept up and the purchasing Mangers' indices of manufacturing and services indicated that the weakness in the economy was widespread. In France, for example, the national statistic institute, Insee, reported in early October that French GDP probably shrank 0.1% in the third quarter of 2008 after a contraction of 0.3% in 2Q08. The Bank of France's index of manufacturing confidence fell the lowest in 15 years in September, adding to evidence the economy may already be in a recession. Ireland is already technically in recession, after two consecutive quarters of negative growth in the first half of 2008. The Irish economy contracted by 0.5% in 2Q08 after a 0.3% decline in 1Q08 as construction and consumer spending fell. Other countries may follow.

The Markit Economic's manufacturing index dropped to 45.0 in September from 47.6 in August, and has been below the 50 mark separating growth from contraction for four consecutive months. Similarly, the region's services industry is also contracting. In August, seasonally adjusted industrial production1 grew by 1.1% m-o-m following a drop of 0.2% in July. Compared with August 2007, industrial production fell 0.7%.

The Euro-zone unemployment rate rose to 7.5% in August, the highest level since April 2007 from a revised 7.4% in the previous month. Payrolls fell by 90,000 and around 11.6 million were unemployed in the region. While the unemployment rate increased in France and Spain, it declined in Germany to 7.2% in August from 7.3% in July. Moreover, separate figures show that German unemployment rate continued to fall in September. But for the whole region, the rate of unemployment is expected to continue to rise in coming months.

Moreover, the huge sums of money being proposed by the banking sector rescue packages will strain EU member's budgets and Germany, for example, may have to abandon his goal of eliminating the federal budget deficit by 2011. However, Germany may be in a better position than some other Euro-zone countries since it does not have the additional burden of a property—market bubble such as Spain or Ireland and labour markets continue to be robust so far. Moreover, other data for August indicate continued strength in the German economy. Factory orders rose for the first time in nine months in August while seasonally adjusted industrial production also increased by 3.4% in August m-o-m following a drop of 1.6% in July. Nevertheless, more recent data show a worsening of economic conditions.

The IFO survey of 7,000 German businesses fell to a three-year low in September, indicating that economic conditions may deteriorate in coming months. Similarly in France and Italy business confidence fell. More recent data confirm deterioration in sentiment. German investor confidence as measured by the ZEW Center for Economic research Index dropped for the first time in three months in October, to a near record low, in the aftermath of the global credit crisis threat on growth. The index fell to minus 63 from -41.1 in September.

Overall, the Euro-zone is expected to achieve a growth of 1.1% in 2008, down 0.2pp from last month, and 0.6% in 2009, a downward revision of 0.4 pp.

#### Former Soviet Union

Russia's Economy Ministry expects zero net capital inflow in 2008 The global financial crisis has been adding to the problems of the Russian economy. The flight of capital out of Russia responding to the geopolitical tensions that followed the Georgian conflict has exposed the weakness of domestic investment and forced Russian companies to rely on short-term credits. Russia's Economy Ministry expects a zero net capital inflow in 2008. The previous forecast of \$30 bn worth of net capital inflow now looks unrealistic. Net capital outflow from Russia stood at \$16.7 bn in the third quarter, while the second quarter saw a net capital inflow of \$17.5 bn. Consequently, net capital inflow amounted to a mere \$800 m in the first nine months of 2008. With global credit markets in lockdown, the government announced it would provide \$36 billion in emergency loans to Russian banks. That followed September pledges of more than \$150 billion in relief and loans for banks and for Russian companies in danger of defaulting on international debts. Inflation has jumped to 15%, about double its level a year ago, and banks are becoming strict with consumer loans. This would affect consumer spending, especially with the stagnation of property prices. The reliance of the Russian economy on the oil price might threaten the growth forecast if the oil price comes under increasing pressure.

#### **Developing Countries**

Inflation eased in China, and the Central Bank cuts interest rates The tighter monetary policy and stricter price regulations succeeded in easing the inflationary trend in China. The CPI came down from 8.7 % in February to 4.9 % in August on an annual basis. Higher rates and restrictions of money supply have contributed to moderating growth for this year. In the first half of this year, the nation's GDP expanded 10.4 %, 1.8 % percentage points slower than in the same period last year. A further moderation of the growth rate in 2009 would bring the country's economy back to its long-run sustainable growth range of 9-10%, easing the strains on energy, inflation and the environment. The Chinese government may also consider easing price regulation of processed oil and electricity in the coming months if the inflationary pressure decreases and crude prices fall to a lower level. In response to easing inflation and the current global financial turmoil China has lowered its benchmark interest rates by 0.27 percentage points and the reserve requirement ratio (RRR) by half a percentage point. There is no significant impact on the Chinese financial market from the credit crisis apart from falling equities, given the limited exposure of its financial institutions to the US financial products. China's growth next year is expected to come from the expansion of domestic demand, as its trade surplus shrinks responding to the downturn in the economies of major importers such as the US and the EU. The role of the government to stimulate the economy could be decisive in keeping the growth above 8% next year.

Reserve Bank of India predicts 8% growth in current fiscal year

The Reserve Bank of India expects the \$1.2 trillion economy to expand 8% in the 12 months ending March, the slowest pace in four years. India's economy grew 7.9% in the three months to 30 June from a year earlier, the weakest pace since the last quarter of 2004. India's industrial production grew at the weakest pace on record as interest rates at a seven-year high dampened consumer spending and companies cut output amid the global credit crisis.

## OPEC Member Countries

The Saudi Arabian Monetary Agency (SAMA) cut the repo rate in Saudi Arabia and decreased reserve requirements Official statistics showed that the Saudi inflation eased slightly in August but remained high at 10.9% compared to 11.1% in July. The SAMA cut its key benchmark lending rate for the first time in almost two years in a move to give increased liquidity to its banks. SAMA cut the reporate to 5.0% from 5.5% and also lowered reserve requirements to 10% from 13%. According to SAMA's 44th annual report, Saudi Arabia's gross domestic product grew by 3.4% in 2007 while its budget surplus in the year reached 12.3% of the GDP.

Monthly Oil Market Report

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

The US dollar continued to appreciate against all of the major currencies in the modified Geneva I + US dollar basket, with the exception of the Japanese yen. The dollar rose 4.0% versus the euro, and gained 2.3% against the Swiss franc, 5.2% versus the pound sterling, but fell 2.3% against the yen. Vis-à-vis the modified Geneva I + US dollar basket, the dollar posted a gain of 1.93%. The US currency averaged \$1.4366/€in September from \$1.4969/€in August.

The US currency's continued recovery, which started in mid-July, continued through September and into October albeit at a slower pace than in August. By October 10, the dollar had risen to \$1.3579 versus the euro or about 15% since the record-low in July. The continued strength of the dollar versus the euro despite the mounting financial turbulence can only be explained by the continued pessimism relating to the euro-zone economic prospects and their as well as the fact that the higher interest rates in the Euro-zone have become a liability for growth and are expected to fall. However, the dollar has lost some ground against the yen as decreasing risk appetite is leading to unwinding of carry trades.

In September, the OPEC Reference Basket dropped by \$15.6/b or 13.8% to \$96.85/b from \$112.4/b in August. In real terms (base June 2001=100), after accounting for inflation and currency fluctuations, the Basket price fell \$8.6/b or 12.4% to \$60.69/b from \$69.28/b. The dollar appreciated by 1.93%, as measured against the import-weighted modified Geneva I+US dollar basket, while inflation eroded the value of the barrel by over 0.2%.\*

20 October 2008

\_

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

## World Oil Demand

World oil demand growth in 2009 revised down to 0.8 mb/d

2008 demand growth revised lower to 0.6 mb/d

#### World oil demand in 2009

The ongoing financial market turmoil is expected to continue to impact oil demand well into the coming year. Oil demand in the USA will be affected negatively, at least in the first half of 2009. The expected spillover to other economies will affect oil demand elsewhere to a certain degree. Hence, world oil demand growth for 2009 was revised down by 0.1 mb/d to 0.8 mb/d, averaging 87.2 mb/d. OECD oil demand is expected to shrink by 0.4 mb/d next year; however, non-OECD oil demand growth is estimated to reach 1.1 mb/d with most of the growth coming from China, the Middle East, and India.

#### World oil demand in 2008

The declining US oil demand pushed OECD oil demand further down by more than 1.8% to average 48.3 mb/d. Factors affecting world oil demand in September such as a slowing economy, high retail prices and hurricanes led to a y-o-y decline in total OECD consumption which exceeded 1.0 mb/d. Non-OECD oil demand growth increased 1.16 mb/d y-o-y in September. Most of this is attributed to Asian and Middle Eastern oil demand.

Total world oil demand growth now stands at half the initial figure. Robust non-OECD oil growth more than offset the sharp unprecedented decline in developing countries. Oil demand in China, the Middle East, India, and Brazil added more than 1.0 mb/d to world oil demand this year. The slow US economy is seen as the main cause of the sharp slowdown in petroleum product demand this year, contributing to a 1.0 mb/d year-to-date contraction in US oil demand. World oil demand for 2008 was revised down by 0.33 mb/d to show growth of 0.55 mb/d for an average of 86.5 mb/d.

| Table 3: World oil dem | and fore    | cast for | 2008, m | b/d   |       |             |          |          |
|------------------------|-------------|----------|---------|-------|-------|-------------|----------|----------|
|                        |             |          |         |       |       |             | Change 2 | 008/07   |
|                        | <u>2007</u> | 1Q08     | 2Q08    | 3Q08  | 4Q08  | <b>2008</b> | Volume   | <u>%</u> |
| North America          | 25.54       | 24.84    | 24.54   | 24.34 | 25.24 | 24.74       | -0.80    | -3.13    |
| Western Europe         | 15.30       | 15.20    | 14.88   | 15.32 | 15.67 | 15.27       | -0.04    | -0.23    |
| OECD Pacific           | 8.35        | 8.87     | 7.82    | 7.74  | 8.74  | 8.29        | -0.06    | -0.67    |
| Total OECD             | 49.19       | 48.90    | 47.24   | 47.39 | 49.65 | 48.30       | -0.89    | -1.81    |
| Other Asia             | 9.12        | 9.32     | 9.49    | 9.09  | 9.49  | 9.35        | 0.23     | 2.54     |
| Latin America          | 5.51        | 5.54     | 5.75    | 5.89  | 5.78  | 5.74        | 0.23     | 4.17     |
| Middle East            | 6.50        | 6.74     | 6.80    | 7.00  | 6.75  | 6.82        | 0.33     | 5.02     |
| Africa                 | 3.09        | 3.19     | 3.11    | 3.12  | 3.21  | 3.16        | 0.07     | 2.16     |
| Total DCs              | 24.21       | 24.79    | 25.15   | 25.10 | 25.22 | 25.07       | 0.85     | 3.53     |
| FSU                    | 3.98        | 3.97     | 3.89    | 4.09  | 4.44  | 4.10        | 0.12     | 2.94     |
| Other Europe           | 0.93        | 1.03     | 0.96    | 0.92  | 0.92  | 0.96        | 0.03     | 2.89     |
| China                  | 7.59        | 7.97     | 8.17    | 8.20  | 7.78  | 8.03        | 0.44     | 5.85     |
| Total "Other Regions"  | 12.50       | 12.98    | 13.02   | 13.21 | 13.14 | 13.09       | 0.59     | 4.70     |
| Total world            | 85.90       | 86.67    | 85.42   | 85.71 | 88.01 | 86.45       | 0.55     | 0.64     |
| Previous estimate      | 85.91       | 86.67    | 85.55   | 86.44 | 88.46 | 86.79       | 0.88     | 1.02     |
| Revision               | 0.00        | 0.00     | -0.13   | -0.73 | -0.45 | -0.33       | -0.33    | -0.38    |

Totals may not add due to independent rounding.

| Table 4: First and second quarter world oil demand comparison for 2008, mb/d |                |             |               |          |             |             |          |          |
|--|----------------|-------------|---------------|----------|-------------|-------------|----------|----------|
|  | Change 2008/07 |             |               |          |             |             | Change 2 | 2008/07  |
|  | <u>1Q07</u>    | <u>1Q08</u> | <b>Volume</b> | <u>%</u> | <b>2Q07</b> | <b>2Q08</b> | Volume   | <u>%</u> |
| North America  | 25.68          | 24.84       | -0.84         | -3.27    | 25.42       | 24.54       | -0.88    | -3.46    |
| Western Europe   | 15.23          | 15.20       | -0.03         | -0.22    | 14.95       | 14.88       | -0.07    | -0.45    |
| OECD Pacific   | 8.91           | 8.87        | -0.04         | -0.49    | 7.87        | 7.82        | -0.05    | -0.64    |
| Total OECD   | 49.82          | 48.90       | -0.92         | -1.84    | 48.24       | 47.24       | -1.00    | -2.06    |
| Other Asia   | 8.98           | 9.32        | 0.34          | 3.82     | 9.24        | 9.49        | 0.26     | 2.78     |
| Latin America  | 5.30           | 5.54        | 0.24          | 4.48     | 5.48        | 5.75        | 0.27     | 4.89     |
| Middle East  | 6.45           | 6.74        | 0.28          | 4.38     | 6.44        | 6.80        | 0.36     | 5.60     |
| Africa   | 3.10           | 3.19        | 0.09          | 2.83     | 3.05        | 3.11        | 0.06     | 2.03     |
| Total DCs  | 23.84          | 24.79       | 0.95          | 3.99     | 24.21       | 25.15       | 0.95     | 3.91     |
| FSU  | 3.87           | 3.97        | 0.10          | 2.70     | 3.71        | 3.89        | 0.19     | 5.03     |
| Other Europe   | 1.01           | 1.03        | 0.03          | 2.53     | 0.92        | 0.96        | 0.04     | 4.47     |
| China  | 7.48           | 7.97        | 0.50          | 6.63     | 7.77        | 8.17        | 0.40     | 5.14     |
| Total "Other Regions"  | 12.35          | 12.98       | 0.63          | 5.06     | 12.39       | 13.02       | 0.63     | 5.06     |
| Total world  | 86.01          | 86.67       | 0.66          | 0.77     | 84.84       | 85.42       | 0.58     | 0.68     |

Totals may not add due to independent rounding.

| Table 5: Third and fourth quarter world oil demand comparison for 2008, mb/d |                |       |               |          |             |       |               |          |
|--|----------------|-------|---------------|----------|-------------|-------|---------------|----------|
|  | Change 2008/07 |       |               |          |             |       | Change        | 2008/07  |
|  | <u>3Q07</u>    | 3Q08  | <b>Volume</b> | <u>%</u> | <u>4Q07</u> | 4Q08  | <b>Volume</b> | <u>%</u> |
| North America  | 25.57          | 24.34 | -1.23         | -4.81    | 25.49       | 25.24 | -0.25         | -0.98    |
| Western Europe   | 15.41          | 15.32 | -0.09         | -0.57    | 15.62       | 15.67 | 0.05          | 0.29     |
| OECD Pacific   | 7.89           | 7.74  | -0.15         | -1.90    | 8.72        | 8.74  | 0.02          | 0.23     |
| Total OECD   | 48.86          | 47.39 | -1.47         | -3.00    | 49.83       | 49.65 | -0.19         | -0.37    |
| Other Asia   | 8.94           | 9.09  | 0.15          | 1.68     | 9.31        | 9.49  | 0.18          | 1.91     |
| Latin America  | 5.65           | 5.89  | 0.24          | 4.25     | 5.61        | 5.78  | 0.18          | 3.12     |
| Middle East  | 6.62           | 7.00  | 0.38          | 5.77     | 6.47        | 6.75  | 0.28          | 4.31     |
| Africa   | 3.06           | 3.12  | 0.06          | 2.00     | 3.15        | 3.21  | 0.06          | 1.78     |
| Total DCs  | 24.27          | 25.10 | 0.83          | 3.43     | 24.54       | 25.22 | 0.69          | 2.80     |
| FSU  | 4.00           | 4.09  | 0.09          | 2.21     | 4.35        | 4.44  | 0.09          | 2.07     |
| Other Europe   | 0.90           | 0.92  | 0.02          | 2.35     | 0.90        | 0.92  | 0.02          | 2.23     |
| China  | 7.72           | 8.20  | 0.48          | 6.23     | 7.38        | 7.78  | 0.40          | 5.42     |
| Total "Other Regions"  | 12.62          | 13.21 | 0.59          | 4.68     | 12.63       | 13.14 | 0.51          | 4.04     |
| Total world  | 85.75          | 85.71 | -0.04         | -0.05    | 87.00       | 88.01 | 1.01          | 1.16     |

Totals may not add due to independent rounding.

#### Alternative Fuels

There is a growing awareness of the environmental impact of biofuels. Recently the EU considered applying a new mandate for carbon dioxide emission savings of at least 45%. Some studies by international organizations including the UN have indicated that biofuels' reputation as a green fuel is a myth. A study recently conducted by the UN strongly urged the world to abandon their biofuel blend mandate. The study blames the 60% increase in food prices on the biofuel industry. The study also argued that the world biofuel supply would end up substituting only a minor quantity of fossil fuel.

Feeling not only the heat of the food problem but also the burden of biofuel subsidies, Germany altered its mandate for biodiesel blend which was set to reach 6.25% next year. Furthermore, the country is planning to increase taxes on biodiesel in the near future. This move is not limited to Germany only, but has spread to other European countries such as the UK.

Oil demand growth in North America revised down by 0.3 mb/d for a total decline of 0.8 mb/d y-o-y

#### OECD North America

Economic turmoil in the US has undermined demand for all petroleum products so far this year. Of course demand for gasoline, the product with the highest consumption, has been hurt the most. September gasoline demand declined by 4.7% totaling a demand loss of 0.44 mb/d in the first nine months of the year. According to the Federal Highway Administration's recent data on vehicle miles traveled, American motorists cut their driven mileage by 62.6 billion miles y-o-y in the first nine months of 2008, resulting in a decline in total gasoline consumption of 250 tb/d.

Total US oil consumption declined further in the last month of the summer by 7.6% or 1.6 mb/d y-o-y. This major decline came as a result of deteriorating economic activities. Year-to-date, US oil consumption lost 1 mb/d of its annual consumption. This excessive decline has dented world oil demand growth this year and is anticipated to see a further decline next year as well.

It is anticipated that the upcoming winter will be colder, which would result in increased heating and fuel oil consumption. However, the expected slowdown in the use of other products resulting from the current economic situation will more than offset the demand for winter products.

Growing Mexican gasoline demand led to a 100% growth in imports in August, which consists of 43% of the country's total gasoline consumption. Contrary to US gasoline consumption, Mexican gasoline sales grew by 1.6% y-o-y in August to average 0.78 mb/d. Fuel oil saw the greatest rise in August, with sales increasing 17.4% adding 38 tb/d to the country's annual demand. Mexican petroleum product sales increased by almost 2% in the first three quarters of the year averaging 1.86 mb/d.

| Domestic sales of refi | ned petroleum pro   | oducts in Mexico    | (tb/d)        |            |
|------------------------|---------------------|---------------------|---------------|------------|
|                        |                     |                     |               |            |
|                        | <u>Jan-Aug 2008</u> | <u>Jan-Aug 2007</u> | Change (kb/d) | Change (%) |
| LPG                    | 287                 | 296                 | -9            | -2.9       |
| Gasoline               | 788                 | 751                 | 37            | 4.9        |
| Jet Fuel               | 69                  | 69                  | 0             | -0.1       |
| Diesel Oil             | 384                 | 356                 | 29            | 8.0        |
| Fuel Oil               | 251                 | 275                 | -24           | -8.7       |
| Other Products         | 76                  | 74                  | 2             | 2.9        |
| <b>Total Products</b>  | 1,857               | 1,822               | 35            | 1.9        |

Similar to US oil demand, Canadian petroleum product sales showed a strong decline of 6.3% y-o-y in August. The majority of the contraction came from transport fuel as total gasoline and diesel sales declined by 5.4% and 8.5%.

Although Mexico's growth in oil consumption was significant, it was not enough to offset the huge decline in the USA. Hence, North America's oil demand growth in 2008 was revised down by another 0.3 mb/d to show a total y-o-y decline of 0.8 mb/d.

#### OECD Europe

Europe demand falls Industrial

to 15.3 mb/d

Industrial usage and leisure summer travel pushed diesel demand up in Germany by 16.7% adding 154 tb/d to the country's total demand. Some 3% of this growth came as a result of substituting gasoline vehicles with diesel-operated vehicles within the country. Increased German diesel consumption caused inland deliveries of petroleum products to grow by a strong 7% y-o-y in July, pushing total growth to average 4% in the first seven months of the year. However, Germany's healthy year-to-date oil demand is not anticipated to offset the massive decline elsewhere on the continent. Furthermore, the European airline industry has been losing its strong growth by 3.7% y-o-y in the first three quarters of this year. This is already reflected in EU jet fuel consumption this year.

Given the serious decline not only in transport fuel but also in industrial fuel in the UK, France and Italy, OECD Europe oil demand is forecast to decline by 0.04% y-o-y in 2008 averaging 15.3 mb/d.

| Table 6: World oil dem | and fore    | cast for | 2009, m | b/d   |       |             |          |          |
|------------------------|-------------|----------|---------|-------|-------|-------------|----------|----------|
|                        |             |          |         |       |       |             | Change 2 | 009/08   |
|                        | <b>2008</b> | 1Q09     | 2Q09    | 3Q09  | 4Q09  | <u>2009</u> | Volume   | <u>%</u> |
| North America          | 24.74       | 24.56    | 24.19   | 23.99 | 24.99 | 24.43       | -0.31    | -1.24    |
| Western Europe         | 15.27       | 15.22    | 14.80   | 15.26 | 15.69 | 15.24       | -0.03    | -0.16    |
| OECD Pacific           | 8.29        | 8.85     | 7.75    | 7.67  | 8.71  | 8.24        | -0.05    | -0.57    |
| Total OECD             | 48.30       | 48.62    | 46.74   | 46.91 | 49.39 | 47.92       | -0.38    | -0.79    |
| Other Asia             | 9.35        | 9.47     | 9.65    | 9.25  | 9.65  | 9.51        | 0.16     | 1.69     |
| Latin America          | 5.74        | 5.67     | 5.90    | 6.04  | 5.92  | 5.88        | 0.14     | 2.51     |
| Middle East            | 6.82        | 7.02     | 7.09    | 7.29  | 7.02  | 7.10        | 0.28     | 4.14     |
| Africa                 | 3.16        | 3.26     | 3.18    | 3.19  | 3.26  | 3.22        | 0.07     | 2.07     |
| Total DCs              | 25.07       | 25.42    | 25.82   | 25.76 | 25.86 | 25.72       | 0.65     | 2.59     |
| FSU                    | 4.10        | 4.04     | 3.96    | 4.15  | 4.51  | 4.17        | 0.07     | 1.65     |
| Other Europe           | 0.96        | 1.05     | 0.98    | 0.94  | 0.94  | 0.98        | 0.02     | 1.99     |
| China                  | 8.03        | 8.37     | 8.57    | 8.60  | 8.18  | 8.43        | 0.40     | 5.00     |
| Total "Other Regions"  | 13.09       | 13.47    | 13.51   | 13.70 | 13.63 | 13.58       | 0.49     | 3.73     |
| Total world            | 86.45       | 87.51    | 86.07   | 86.37 | 88.88 | 87.21       | 0.76     | 0.87     |
| Previous estimate      | 86.79       | 87.64    | 86.32   | 87.25 | 89.40 | 87.66       | 0.87     | 1.00     |
| Revision               | -0.33       | -0.13    | -0.25   | -0.87 | -0.51 | -0.45       | -0.11    | -0.13    |

Totals may not add due to independent rounding.

|                       |       |       | Change 2           | 2009/08  |       |       |        |          |
|-----------------------|-------|-------|--------------------|----------|-------|-------|--------|----------|
|                       | 1Q08  | 1Q09  | Change 2<br>Volume | <u>%</u> | 2Q08  | 2Q09  | Volume | <u>%</u> |
| North America         | 24.84 | 24.56 | -0.28              | -1.13    | 24.54 | 24.19 | -0.35  | -1.43    |
| Western Europe        | 15.20 | 15.22 | 0.02               | 0.13     | 14.88 | 14.80 | -0.08  | -0.54    |
| OECD Pacific          | 8.87  | 8.85  | -0.03              | -0.28    | 7.82  | 7.75  | -0.07  | -0.89    |
| <b>Total OECD</b>     | 48.90 | 48.62 | -0.28              | -0.58    | 47.24 | 46.74 | -0.50  | -1.06    |
| Other Asia            | 9.32  | 9.47  | 0.15               | 1.61     | 9.49  | 9.65  | 0.16   | 1.69     |
| Latin America         | 5.54  | 5.67  | 0.14               | 2.44     | 5.75  | 5.90  | 0.15   | 2.61     |
| Middle East           | 6.74  | 7.02  | 0.28               | 4.16     | 6.80  | 7.09  | 0.29   | 4.19     |
| Africa                | 3.19  | 3.26  | 0.06               | 2.04     | 3.11  | 3.18  | 0.07   | 2.25     |
| Total DCs             | 24.79 | 25.42 | 0.63               | 2.54     | 25.15 | 25.82 | 0.67   | 2.64     |
| FSU                   | 3.97  | 4.04  | 0.07               | 1.76     | 3.89  | 3.96  | 0.06   | 1.67     |
| Other Europe          | 1.03  | 1.05  | 0.02               | 1.82     | 0.96  | 0.98  | 0.02   | 1.95     |
| China                 | 7.97  | 8.37  | 0.40               | 5.02     | 8.17  | 8.57  | 0.40   | 4.96     |
| Total "Other Regions" | 12.98 | 13.47 | 0.49               | 3.77     | 13.02 | 13.51 | 0.49   | 3.75     |
| Total world           | 86.67 | 87.51 | 0.83               | 0.96     | 85.42 | 86.07 | 0.65   | 0.77     |

Totals may not add due to independent rounding.

| Table 8: Third and four | Table 8: Third and fourth quarter world oil demand comparison for 2009, mb/d |       |        |          |       |       |                |          |  |  |  |  |
|-------------------------|--|-------|--------|----------|-------|-------|----------------|----------|--|--|--|--|
|                         | Change 2009/08   |       |        |          |       |       | Change 2009/08 |          |  |  |  |  |
|                         | 3Q08   | 3Q09  | Volume | <u>%</u> | 4Q08  | 4Q09  | Volume         | <u>%</u> |  |  |  |  |
| North America           | 24.34  | 23.99 | -0.35  | -1.44    | 25.24 | 24.99 | -0.25          | -0.99    |  |  |  |  |
| Western Europe          | 15.32  | 15.26 | -0.06  | -0.39    | 15.67 | 15.69 | 0.02           | 0.13     |  |  |  |  |
| OECD Pacific            | 7.74   | 7.67  | -0.07  | -0.90    | 8.74  | 8.71  | -0.03          | -0.29    |  |  |  |  |
| Total OECD              | 47.39  | 46.91 | -0.48  | -1.01    | 49.65 | 49.39 | -0.26          | -0.51    |  |  |  |  |
| Other Asia              | 9.09   | 9.25  | 0.16   | 1.76     | 9.49  | 9.65  | 0.16           | 1.69     |  |  |  |  |
| Latin America           | 5.89   | 6.04  | 0.15   | 2.55     | 5.78  | 5.92  | 0.14           | 2.42     |  |  |  |  |
| Middle East             | 7.00   | 7.29  | 0.29   | 4.07     | 6.75  | 7.02  | 0.28           | 4.13     |  |  |  |  |
| Africa                  | 3.12   | 3.19  | 0.07   | 2.24     | 3.21  | 3.26  | 0.06           | 1.75     |  |  |  |  |
| Total DCs               | 25.10  | 25.76 | 0.66   | 2.65     | 25.22 | 25.86 | 0.63           | 2.52     |  |  |  |  |
| FSU                     | 4.09   | 4.15  | 0.07   | 1.59     | 4.44  | 4.51  | 0.07           | 1.57     |  |  |  |  |
| Other Europe            | 0.92   | 0.94  | 0.02   | 2.03     | 0.92  | 0.94  | 0.02           | 2.18     |  |  |  |  |
| China                   | 8.20   | 8.60  | 0.40   | 4.88     | 7.78  | 8.18  | 0.40           | 5.14     |  |  |  |  |
| Total "Other Regions"   | 13.21  | 13.70 | 0.48   | 3.66     | 13.14 | 13.63 | 0.49           | 3.73     |  |  |  |  |
| Total world             | 85.71  | 86.37 | 0.67   | 0.78     | 88.01 | 88.88 | 0.87           | 0.99     |  |  |  |  |

Totals may not add due to independent rounding.

#### **OECD Pacific**

Pacific oil demand forecast to decline by 56,000 b/d In response to slowing demand for petroleum products in the Pacific, South Korea's August crude imports declined 2%. However, September crude imports bounced back to show growth of 1.1% y-o-y resulting from winter product preparation.

Japanese gasoline consumption declined by a record-high 14% in its peak month of August with retail prices reaching an all-time high. Gasoline consumption lost 0.15 mb/d y-o-y in August to average 0.96 mb/d. Japan's gasoline demand was expected to decline this year but not at the magnitude of minus 3% year-to-date. Japan's diesel sales also experienced a drastic decline of 14% y-o-y in August. As for the total domestic petroleum product sales, the August decline exceeded 9% y-o-y. As for the upcoming winter, OECD Pacific oil demand in the fourth quarter is expected to show only minor growth of 20 tb/d.

Given the negative effects of not only slowing economic activities in the Pacific but also high oil prices, OECD Pacific oil demand in 2008 is forecast to decline by 56,000 tb/d or 0.67% y-o-y to average 8.3 mb/d.

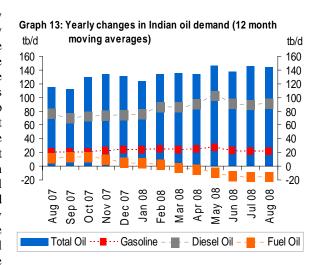
| Table 9: Japanese domestic sales, tb/d |        |                    |                      |  |  |  |  |  |  |  |  |
|--|--------|--------------------|----------------------|--|--|--|--|--|--|--|--|
|  | Aug 08 | Change from Aug 07 | Change from Aug 07 % |  |  |  |  |  |  |  |  |
| Gasoline                               | 951    | -155               | -14.0                |  |  |  |  |  |  |  |  |
| Naphtha                                | 789    | -55                | -6.5                 |  |  |  |  |  |  |  |  |
| Jet Fuel                               | 102    | 1                  | 1.3                  |  |  |  |  |  |  |  |  |
| Kerosene                               | 83     | -33                | -28.5                |  |  |  |  |  |  |  |  |
| Gas Oil                                | 495    | -82                | -14.2                |  |  |  |  |  |  |  |  |
| Other Products                         | 657    | -88                | -11.9                |  |  |  |  |  |  |  |  |
| Direct Use of Crude                    | 204    | 83                 | 69.0                 |  |  |  |  |  |  |  |  |
| Total                                  | 3,282  | -329               | -9.1                 |  |  |  |  |  |  |  |  |

Source: Ministry of Economy and Trade in Japan (METI).

Developing Countries forecast to grow at 0.85 mb/d

#### **Developing Countries**

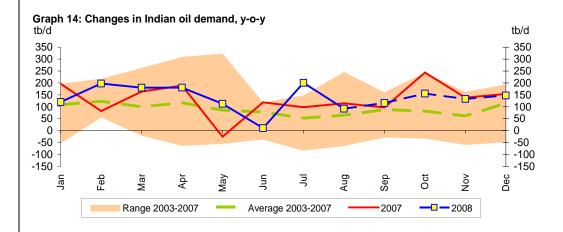
India is seeking advice on energy efficiency from Japan, a country has shown considerable progress on energy efficiency over the past few years and is considered one of the most advanced countries on this subject. This new move might help India save some wasted energy but it is not expected to make a dent in the country's energy consumption at least in the short run. The Indian government, which controls retail prices for petroleum products, ruled out any price reduction, especially with the current decline of the value of the rupee, unless international oil prices show a drastic decline in the

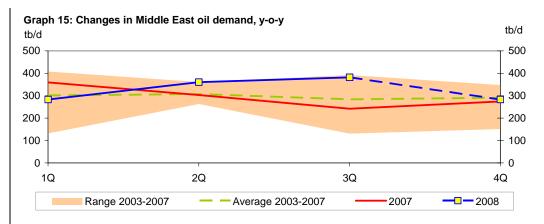


future. India raised retail prices last summer by 10%; however, this increase was not large enough to halt demand for gasoline and diesel. **Oil demand in Other Asia is expected to grow by 2.5% or 0.23 mb/d y-o-y in 2008.** The majority of the increase came from India. Indian oil demand grew by 5% y-o-y in the first eight months. Agricultural and transportation sectors pushed the demand for diesel up by 10.5% in the same period. This strong diesel demand added 100 tb/d to the initial forecast to average 0.9 mb/d. The second strongest product demand growth of 8.1% was in gasoline. New car registration grew strongly, reflecting strong economic activities. August growth, which was half of July's growth, reached 3.6% or 92 tb/d y-o-y. As projected, diesel demand growth was the highest, reaching 80 tb/d. Given the strong economic growth, India's oil demand is forecast to grow by 140 tb/d in 2008.

| Table 10: Indian oil demand by main products, tb/d |               |               |                 |                 |          |  |  |  |  |  |  |
|--|---------------|---------------|-----------------|-----------------|----------|--|--|--|--|--|--|
|  |               |               | Difference to   |                 |          |  |  |  |  |  |  |
|  | <u>Aug 08</u> | <u>Jul 08</u> | Jan 08 - Aug 08 | Jan 07 - Aug 07 | <u>%</u> |  |  |  |  |  |  |
| LPG  | 349           | 355           | 372             | 19              | 5.4      |  |  |  |  |  |  |
| Motor Gasoline                                     | 234           | 249           | 252             | 19              | 8.1      |  |  |  |  |  |  |
| Jet Kero   | 271           | 282           | 294             | 8               | 2.6      |  |  |  |  |  |  |
| Gas Diesel Oil                                     | 904           | 1,074         | 1,077           | 102             | 10.5     |  |  |  |  |  |  |
| Residual Fuel Oil                                  | 335           | 349           | 317             | -18             | -5.5     |  |  |  |  |  |  |
| Other Products                                     | 525           | 461           | 571             | 8               | 1.4      |  |  |  |  |  |  |
| Total Oil Demand                                   | 2,618         | 2,770         | 2,884           | 137             | 5.0      |  |  |  |  |  |  |

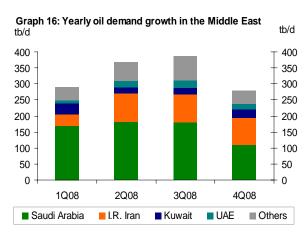
Sources: Direct Communication, Indian Ministry of Petroleum, Indianpetro, JODI plus OPEC Secretariat's estimates.





Taiwan's exports slid down as a result of low imports from China. Hence, the country's oil demand fell by 6.5% y-o-y in August, averaging the product demand at 0.9 mb/d. This decline came mostly from transport fuel with jet fuel declining the most by 16%.

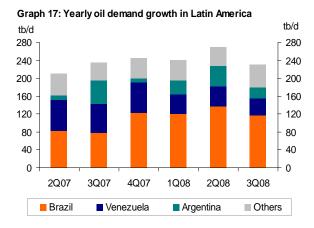
Taiwan's oil demand is expected to show growth of around 3% this year. Its diesel consumption reacted positively to the recent retail price decrease country-wide, experiencing growth of 15% y-o-y in August.



Transport and industrial fuel demand in the Middle East are on the rise in the fourth quarter. Strong construction activities led to consumption of fuel exceeding expectations. Thus, third-quarter oil demand was revised up by 0.1 mb/d. Middle East oil demand growth is forecast to reach 0.33 mb/d y-o-y in 2008.

Latin America's oil demand is on the rise. Oil demand in Brazil, Venezuela and Argentina exceeded expectations in the third quarter. Economic activities along with price controls were the main factors behind this strong appetite for energy. Regional oil demand growth was revised up by 0.05 mb/d in the third quarter. Latin America's oil demand growth in 2008 is forecast to reach 0.23 mb/d y-o-y to average 5.7 mb/d.

As a result of the strong oil demand in Other Asia, Latin America, the Middle East and Africa, oil demand growth in



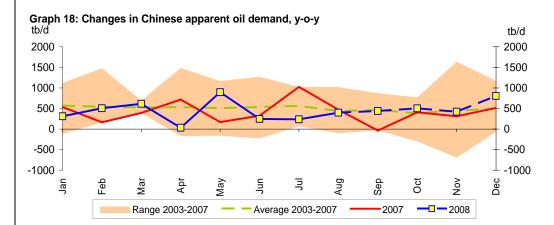
the Developing Countries is forecast to reach 0.9 mb/d y-o-y to average 25.1 mb/d in 2008.

## Other Regions

China's oil demand growth forecast at 0.44 mb/d With the ease on international oil prices, China might reduce not only the value-added tax to oil importers but also retail petroleum product prices which were hiked last June in the range of 16-25%. Economic and Olympic activities pushed airline industry growth to exceed 3.5% in the first eight months of the year. Kerosene apparent demand climbed 5.3% y-o-y in the same period. However, it is anticipated that the growth in the airline industry will slow down in the post-Olympic fourth quarter of 2008. China's gasoline demand growth peaked during the summer, which is considered the usual high seasonality. The country's apparent gasoline demand growth reached 17% in the first eight months of this year, reflecting strong growth of 27% in new vehicle registrations. The same growth rate of almost 17% applied for diesel for the

same period as a result of both industrial and agricultural demand. Given the strong growth in new car sales, China's oil demand growth is forecast at 0.44 mb/d y-o-y to average 8 mb/d.

During the month of September, the FSU apparent oil demand inched up by around 5% y-o-y. This strong growth was supported by an active economy within the region. However, Russia announced its recent export tax cut which is the first for the past 17 months. This new move is likely to affect the country's apparent demand to some degree in the future. Hence the growth for the whole of 2008 is expected to reach 0.12 mb/d y-o-y to average 4.1 mb/d.



## World Oil Supply

Non-OPEC

Forecast for 2008

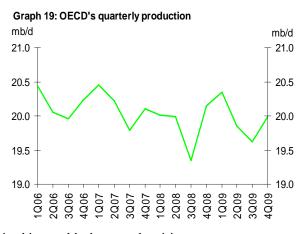
Non-OPEC supply revised down to grow by 0.31 mb/d in 2008 to average 49.74 mb/d Non-OPEC supply in 2008 is expected to increase by around 0.31 mb/d over the previous year to reach 49.74 mb/d. This represents a significant downward revision of 199 tb/d compared with last month's assessment. Downward revisions made to the US, Mexico, Australia, Malaysia, Vietnam, Brazil, Egypt, Russia, Kazakhstan, Azerbaijan, and China were partially offset by some upward revisions to Canada, Norway, UK, Argentina, and Colombia. The third and fourth quarters experienced hefty downward revisions of around 615 tb/d and 199 tb/d respectively, while the first quarter has been revised up by 25 tb/d. On a quarterly basis, non-OPEC supply now stands at 49.63 mb/d, 49.64 mb/d, 48.93 mb/d and 50.76 mb/d respectively.

| Table 11: Non-OPEC oil supply in 2008, mb/d |             |       |       |       |       |             |              |  |  |  |  |
|---|-------------|-------|-------|-------|-------|-------------|--------------|--|--|--|--|
|   |             |       |       |       |       |             | Change       |  |  |  |  |
|   | <u>2007</u> | 1Q08  | 2Q08  | 3Q08  | 4Q08  | <u>2008</u> | <u>08/07</u> |  |  |  |  |
| North America                               | 14.30       | 14.22 | 14.34 | 13.78 | 14.41 | 14.19       | -0.11        |  |  |  |  |
| Western Europe                              | 5.23        | 5.21  | 5.02  | 4.91  | 4.93  | 5.02        | -0.22        |  |  |  |  |
| OECD Pacific                                | 0.60        | 0.58  | 0.63  | 0.65  | 0.81  | 0.67        | 0.07         |  |  |  |  |
| Total OECD                                  | 20.14       | 20.01 | 19.99 | 19.35 | 20.15 | 19.87       | -0.27        |  |  |  |  |
| Other Asia                                  | 2.72        | 2.76  | 2.67  | 2.68  | 2.94  | 2.76        | 0.04         |  |  |  |  |
| Latin America                               | 3.88        | 4.00  | 4.00  | 4.14  | 4.17  | 4.08        | 0.20         |  |  |  |  |
| Middle East                                 | 1.66        | 1.63  | 1.64  | 1.63  | 1.66  | 1.64        | -0.02        |  |  |  |  |
| Africa                                      | 2.67        | 2.71  | 2.71  | 2.71  | 2.75  | 2.72        | 0.05         |  |  |  |  |
| Total DCs                                   | 10.93       | 11.10 | 11.03 | 11.16 | 11.53 | 11.20       | 0.28         |  |  |  |  |
| FSU   | 12.52       | 12.62 | 12.66 | 12.48 | 13.09 | 12.71       | 0.19         |  |  |  |  |
| Other Europe                                | 0.15        | 0.14  | 0.14  | 0.14  | 0.14  | 0.14        | 0.00         |  |  |  |  |
| China                                       | 3.77        | 3.81  | 3.86  | 3.84  | 3.91  | 3.85        | 0.09         |  |  |  |  |
| Total "Other regions"                       | 16.44       | 16.57 | 16.66 | 16.47 | 17.14 | 16.71       | 0.27         |  |  |  |  |
| Total Non-OPEC production                   | 47.50       | 47.68 | 47.69 | 46.98 | 48.81 | 47.79       | 0.28         |  |  |  |  |
| Processing gains                            | 1.92        | 1.95  | 1.95  | 1.95  | 1.95  | 1.95        | 0.03         |  |  |  |  |
| Total Non-OPEC supply                       | 49.43       | 49.63 | 49.64 | 48.93 | 50.76 | 49.74       | 0.31         |  |  |  |  |
| Previous estimate                           | 49.42       | 49.61 | 49.64 | 49.54 | 50.96 | 49.94       | 0.51         |  |  |  |  |
| Revision                                    | 0.00        | 0.02  | 0.00  | -0.61 | -0.20 | -0.20       | -0.20        |  |  |  |  |

#### **OECD**

Total OECD supply is estimated to decline by 0.27 mb/d

OECD total production is expected to average 19.87 mb/d, representing a decline of around 0.27 mb/d from the previous year. This follows a downward revision of 53 tb/d from last month's assessment. On a quarterly basis, OECD oil supply is estimated to average 20.01 mb/d, 19.99 mb/d, 19.35 mb/d 20.15 mb/d respectively. A large part of the downward revisions to OECD North America and OECD Pacific was offset by the increase in OECD Western Europe. OECD remains the only region among the



OECD with forecast growth in 2008 despite this month's downward revision.

#### USA

Hurricanes Gustav and Ike shaved 120 tb/d off US supply growth in 2008 US oil supply is expected to average 7.57 mb/d in 2008 indicating growth of 70 tb/d over the previous year, which represents a downward revision of 120 tb/d from last month's assessment. As expected, disruptions to federal Gulf of Mexico production from Hurricanes Gustav and Ike were the main factors behind the downward revision. In addition to the lost production, of which a considerable portion remains shut in, the effect of the hurricanes also delayed project start-ups and ramp-ups. The slow recovery left third-quarter production at 7.19 mb/d which is around 300 tb/d below last month's assessment. The disruption by hurricanes trailed into the fourth-quarter forecast, which is subject to revision pending further information on the recovery process, in terms of both lost production and the impact on new fields. US fourth-quarter oil production is now estimated to stand at 7.69 mb/d, which is 163 tb/d below last month's figure. As per preliminary data, US oil production stood at 6.24 mb/d in September, which was around 1.35 mb/d lower than the August figure.

#### Canada and Mexico

Oil supply from **Canada** is anticipated to grow by 90 tb/d in 2008 over the previous year to average 3.41 mb/d, indicating an upward revision of 29 tb/d from last month's assessment. The adjustment was due to actual production figures, as preliminary data for the third quarter were higher than previously estimated. On a quarterly basis, production stands at 3.30 mb/d, 3.41 mb/d, 3.46 mb/d and 3.47 mb/d respectively. Preliminary data for oil supply indicate that average September production stood at 3.42 mb/d.

**Mexico**'s oil supply is forecast to decline by 280 tb/d in 2008 from the previous year to average 3.21 mb/d, representing a minor downward revision of 17 tb/d from last month's appraisal. The main reason for this minor downward revision was the decline in the giant Cantarell field — partially offset by the increase in KMZ production — in addition to the partial shutdown due to reduced exports to the US, where the lingering impact of the hurricanes had reduced refinery demand.

#### Western Europe

Oil supply from **OECD Western Europe** is estimated to decline by 220 tb/d in 2008 over the previous year to average 5.02 mb/d, representing an upward revision of 88 tb/d compared to last month's assessment. The support for the upward revision came from Norway, UK, and Denmark.

#### Norway

Norway and UK forecasts revised up

**Norway**'s oil supply is expected to decrease by 110 tb/d in 2008 from the 2007 level to average 2.45 mb/d, following an expected upward revision of 50 tb/d from last month's estimate. Preliminary third-quarter production data required an adjustment to the forecast to accommodate the noticed increase in output, which might be due to the lower-than-expected impact of summer maintenance on production. Third-quarter average production is 2.43 mb/d, according to preliminary data. On a quarterly basis, Norway's supply stands at 2.51 mb/d, 2.39 mb/d, 2.43 mb/d and 2.45 mb/d respectively.

**UK** oil supply is anticipated to average 1.55 mb/d in 2008, around 140 tb/d lower than in the previous year, indicating an upward revision of 27 tb/d from last month's appraisal. The increase in production figures for September over the previous month, seen in the preliminary data, supported the third-quarter average as well as the upward revision. The third-quarter estimate now stands at 1.44 mb/d, an upward revision of 60 tb/d over last month's estimate. Additionally, the second-quarter figure was revised higher. On a quarterly basis, UK oil supply stands at 1.69 mb/d, 1.62 mb/d, 1.44 mb/d and 1.45 mb/d respectively.

#### Asia Pacific

#### Australia revised down

**OECD Asia Pacific**'s oil production is foreseen to increase 70 tb/d in 2008 over the previous year to average 0.67 mb/d, indicating a downward revision of 33 tb/d from last month's assessment. On a quarterly basis, total oil supply is estimated to average 0.58 mb/d, 0.63 mb/d, 0.65 mb/d and 0.81 mb/d respectively.

Oil supply from **Australia** is estimated to grow by 30 tb/d over the previous year to average 0.56 mb/d in 2008, 31 tb/d lower than the previous month's level. The downward revision was

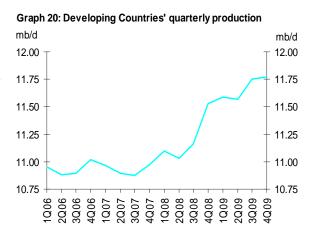
due to adjustments to production figures as well as slower ramp-ups in some projects and production decline. On a quarterly basis, production stands at 0.47 mb/d, 0.53 mb/d, 0.54 mb/d, and 0.68 mb/d respectively. The preliminary figure for September production stands at 0.54 mb/d.

**New Zealand's** oil supply forecast remained steady with a minor downward revision from last month's assessment for the second quarter, following adjustments due to actual figures.

## **Developing Countries**

Developing Countries slightly lower than expected

supply from **Developing** Countries (DCs) is expected to increase 280 tb/d over the previous year to average 11.20 mb/d in 2008. The current production average indicates a downward revision of around 74 tb/d compared to last month's estimate. Brazil remains the major contributor to the growth in group the DC followed Colombia, while Yemen has the largest decline among the group relative to the forecast. On a quarterly basis, total oil supply in DCs is foreseen to stand at 11.10 mb/d, 11.03 mb/d, 11.16 mb/d 11.53 mb/d, respectively.



**Other Asia** is forecast to average 2.76 mb/d in 2008, which represents growth of 40 tb/d over the previous year. This follows a downward revision of around 44 tb/d from last month's assessment. On a quarterly basis, Other Asia supply is expected to average 2.76 mb/d, 2.68 mb/d and 2.94 mb/d respectively. The downward revision to the forecast came from Malaysia, Vietnam and the Philippines. The longer-than-expected delay in Malaysia's SK-305 start-up was the main factor behind the downward revision, in addition to delays to the Galoc development in the Philippines and production adjustments in Vietnam.

Latin America revised down due to project start-up and ramp-up delays The **Latin America**n oil production is anticipated to increase by 0.20 mb/d over the previous year to average 4.08 mb/d in 2008. This represents a minor downward revision of 18 tb/d since last month's estimate. The downward revision came from Brazil due to project start-up shifts and the slower-than-expected ramp up as well as adjustment to production levels. Upward revisions to Argentina and Colombia were not enough to offset the downward revision to Brazil's oil supply forecast. On a quarterly basis, Latin America production stands at 4.00 mb/d, 4.00 mb/d, 4.14 mb/d and 4.17 mb/d respectively.

**Middle East** oil supply is foreseen to decline by around 20 tb/d from the previous year to average 1.64 mb/d in 2008, steady from last month's assessment. Oman is forecast to show the only growth among the group, while forecasts for Syria and Yemen indicate an annual decline. On a quarterly basis, Middle East group production stands at 1.63 mb/d, 1.64 mb/d, 1.63 mb/d and 1.66 mb/d respectively.

**African group** oil supply is projected to average 2.72 mb/d in 2008, indicating growth of around 50 tb/d over the previous year, representing a minor downward revision of 8 tb/d from last month's figure on the back of adjustments of the production levels for Congo and Egypt. On a quarterly basis, African group production stands at 2.71 mb/d, 2.71 mb/d, 2.71 mb/d and 2.75 mb/d respectively.

# FSU supply growth is forecast at 0.19 mb/d

#### FSU, Other Regions

Oil supply from the **FSU** is estimated to average 12.71 mb/d in 2008, representing growth of 0.19 mb/d over last year and a downward revision of 62 tb/d from the previous assessment. On a quarterly basis, total oil supply in the FSU is expected to average 12.62 mb/d, 12.66 mb/d, 12.48 mb/d 13.09 mb/d respectively. China's oil supply is anticipated to average 3.85 mb/d in 2008 indicating growth of around 85 tb/d from the previous year. The Other Europe group is seen remaining flat at 0.14 mb/d.

#### Russia

# Russia's oil supply to decline in 2008

Russia's oil production is now forecast to experience a minor decline of around 20 tb/d over the previous year to average 9.85 mb/d in 2008, indicating a downward revision of 30 tb/d from last month's assessment. The downward revision was made to accommodate the adjustment to preliminary third-quarter production figures as well as minor revisions to the first and the second quarters. According to preliminary data, Russia's oil supply stood at 9.84 mb/d in the third quarter, with many operators in Russia reporting losses due to the relatively high duties. On a quarterly basis, Russian oil supply is seen averaging 9.78 mb/d, 9.74 mb/d, 9.84 mb/d and 10.03 mb/d respectively.

#### Caspian

**Kazakhstan**'s oil supply is estimated to increase by 71 tb/d over the previous year to average 1.42 mb/d in 2008, representing a minor downward revision from the previous forecast. The downward revision was implemented to adjust the forecast to available production figures as well as to cover reported project ramp-up shifts. On a quarterly basis, Kazakhstan's supply figures are currently expected at 1.42 mb/d, 1.44 mb/d, 1.32 mb/d and 1.50 mb/d respectively.

#### Gas leak cuts back Azeri production in September

Azeri oil supply is expected to average 0.98 mb/d in 2008, representing growth of 120 tb/d over the previous year. The current forecast indicates a downward revision of 21 tb/d compared to last month's assessment. The downward revision came entirely from the third quarter to adjust to available production data, indicating the impact of a recent gas leak which led to curtailing Central and West Azeri production. The quarterly level now stands at 0.96 mb/d, 1.02 mb/d, 0.86 mb/d and 1.09 mb/d respectively.

#### China

Oil production from **China** is anticipated to increase by around 85 tb/d in 2008 over the previous year to average 3.85 mb/d, representing a slight 12 tb/d downward revision from last month's assessment, due to the actual production data. On a quarterly basis, China's supply is expected to average 3.81 mb/d, 3.86 mb/d, 3.84 mb/d and 3.91 mb/d respectively.

#### Forecast for 2009

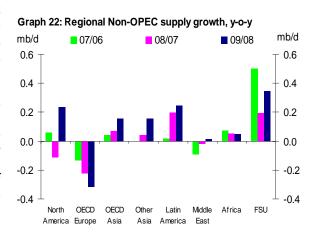
# 2009 growth expected at 0.97 mb/d

Non-OPEC oil supply is expected to average 50.70 mb/d in 2009, an increase of 0.97 mb/d over the current year and around 0.11 mb/d lower than last month's forecast. On a quarterly basis, non-OPEC supply is expected to average 51.11 mb/d, 50.55 mb/d, 50.33 mb/d and 50.83 respectively. Total non-OPEC growth increased despite the decrease in the absolute production from the previous month, mainly due to the decline in the 2008 base forecast. Minor changes to the forecast were carried out on the back of expected delays in the US and Brazil.

| Table 12: Non-OPEC oil supply in 2009, mb/d |                      |                      |                      |             |             |                      |              |  |  |  |  |  |
|---|----------------------|----------------------|----------------------|-------------|-------------|----------------------|--------------|--|--|--|--|--|
|   |                      |                      |                      |             |             |                      | Change       |  |  |  |  |  |
|   | <u>2008</u>          | <u>1Q09</u>          | <u> 2Q09</u>         | <u>3Q09</u> | <u>4Q09</u> | <u>2009</u>          | <u>09/08</u> |  |  |  |  |  |
| North America                               | 14.19                | 14.60                | 14.30                | 14.31       | 14.49       | 14.42                | 0.23         |  |  |  |  |  |
| Western Europe                              | 5.02                 | 4.91                 | 4.74                 | 4.48        | 4.68        | 4.70                 | -0.31        |  |  |  |  |  |
| OECD Pacific                                | 0.67                 | 0.83                 | 0.81                 | 0.84        | 0.82        | 0.83                 | 0.16         |  |  |  |  |  |
| Total OECD                                  | 19.87                | 20.35                | 19.86                | 19.62       | 19.99       | 19.95                | 0.08         |  |  |  |  |  |
| Other Asia                                  | 2.76                 | 2.92                 | 2.86                 | 2.94        | 2.95        | 2.92                 | 0.16         |  |  |  |  |  |
| Latin America                               | 4.08                 | 4.27                 | 4.31                 | 4.38        | 4.35        | 4.33                 | 0.25         |  |  |  |  |  |
| Middle East                                 | 1.64                 | 1.65                 | 1.66                 | 1.66        | 1.66        | 1.66                 | 0.01         |  |  |  |  |  |
| Africa                                      | 2.72                 | 2.75                 | 2.74                 | 2.78        | 2.81        | 2.77                 | 0.05         |  |  |  |  |  |
| Total DCs                                   | 11.20                | 11.59                | 11.57                | 11.75       | 11.77       | 11.67                | 0.47         |  |  |  |  |  |
| FSU   | 12.71                | 13.13                | 13.10                | 12.94       | 13.07       | 13.06                | 0.34         |  |  |  |  |  |
|   | 0.14                 | 0.14                 | 0.14                 | 0.14        | 0.14        | 0.14                 | 0.00         |  |  |  |  |  |
| Other Europe<br>China                       | 3.85                 | 3.91                 | 3.91                 | 3.90        | 3.88        | 3.90                 | 0.00         |  |  |  |  |  |
| Total "Other regions"                       | 3.63<br><b>16.71</b> | 3.91<br><b>17.19</b> | 3.91<br><b>17.14</b> | 16.98       | 17.09       | 3.90<br><b>17.10</b> | 0.04         |  |  |  |  |  |
| Total Non-OPEC production                   | 47.79                | 49.12                | 48.57                | 48.35       | 48.85       | 48.72                | 0.39         |  |  |  |  |  |
| <u> </u>                                    |                      | 1.98                 |                      |             |             |                      |              |  |  |  |  |  |
| Processing gains                            | 1.95                 | 1.98                 | 1.98                 | 1.98        | 1.98        | 1.98                 | 0.03         |  |  |  |  |  |
| Total Non-OPEC supply                       | 49.74                | 51.11                | 50.55                | 50.33       | 50.83       | 50.70                | 0.97         |  |  |  |  |  |
| Previous estimate                           | 49.94                | 51.20                | 50.64                | 50.46       | 50.96       | 50.81                | 0.88         |  |  |  |  |  |
| Revision                                    | -0.20                | -0.09                | -0.09                | -0.13       | -0.13       | -0.11                | 0.09         |  |  |  |  |  |

#### Revisions to the 2009 forecast

Oil supply from the USA is forecast to grow by 0.28 mb/d in 2009 to average 7.85 mb/d, representing a downward revision of 52 tb/d from the previous month. This revision was necessary to accommodate delays to some project start-ups and ramp-ups due to the hurricanes. Brazil's forecast was also revised down from last month's level to average 2.59 mb/d in 2009. This represents a downward revision of 52 tb/d from last month's figure and growth of 270 tb/d over the previous year. The downward revision was attributable to shifts in project startups and ramp-ups.



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

**OPEC NGLs** and non-conventional oils are estimated to average 4.71 mb/d in 2008, an increase of around 0.49 mb/d over the previous year. In 2009, OPEC NGLs are expected to average 5.36 mb/d, an increase of 0.66 mb/d over the current year.

| Table 13: OPEC NGLs + non-conventional oils, 2006-2009 |             |             |        |          |      |      |      |             |        |             |        |
|--|-------------|-------------|--------|----------|------|------|------|-------------|--------|-------------|--------|
|  |             |             | Change | <u> </u> |      |      |      |             | Change |             | Change |
|  | <u>2006</u> | <u>2007</u> | 07/06  | 1Q08     | 2Q08 | 3Q08 | 4Q08 | <b>2008</b> | 08/07  | <u>2009</u> | 09/08  |
| Total OPEC   | 4.07        | 4.21        | 0.14   | 4.47     | 4.67 | 4.77 | 4.89 | 4.71        | 0.49   | 5.36        | 0.66   |

OPEC output averaged 32.2 mb/d in September

#### OPEC crude oil production

Total OPEC crude oil production averaged 32.16 mb/d in September, according to secondary sources, representing a decrease of 308,600 b/d compared to the previous month. OPEC production not including Iraq stood at 29.92 mb/d, representing a decline of 180 tb/d from the previous month. The decrease came mainly from Iraq, Saudi Arabia, Angola, and Iran while production from Nigeria and Libya saw gains over the previous month.

| Table 14: OPEC crude oil production based on secondary sources, 1,000 b/d |             |             |             |             |             |               |        |        |         |  |
|---|-------------|-------------|-------------|-------------|-------------|---------------|--------|--------|---------|--|
|   | <u>2007</u> | <u>4Q07</u> | <u>1Q08</u> | <u>2Q08</u> | <u>3Q08</u> | <u>Jul 08</u> | Aug08  | Sep 08 | Sep/Aug |  |
| Algeria   | 1,360       | 1,386       | 1,396       | 1,404       | 1,405       | 1,401         | 1,406  | 1,407  | 1.2     |  |
| Angola  | 1,660       | 1,777       | 1,873       | 1,897       | 1,848       | 1,903         | 1,869  | 1,769  | -100.2  |  |
| Ecuador   | 507         | 509         | 505         | 502         | 503         | 504           | 502    | 503    | 1.3     |  |
| Indonesia   | 844         | 841         | 862         | 859         | 852         | 852           | 853    | 850    | -3.3    |  |
| Iran, I.R.  | 3,855       | 3,907       | 3,934       | 3,882       | 3,935       | 3,925         | 3,956  | 3,925  | -30.8   |  |
| Iraq  | 2,089       | 2,330       | 2,301       | 2,387       | 2,331       | 2,396         | 2,362  | 2,233  | -129.1  |  |
| Kuwait  | 2,464       | 2,508       | 2,535       | 2,582       | 2,600       | 2,607         | 2,599  | 2,593  | -6.6    |  |
| Libya, S.P.A.J.   | 1,710       | 1,741       | 1,751       | 1,732       | 1,691       | 1,686         | 1,670  | 1,718  | 48.0    |  |
| Nigeria   | 2,125       | 2,158       | 2,044       | 1,857       | 1,954       | 1,916         | 1,948  | 1,999  | 50.7    |  |
| Qatar   | 807         | 825         | 839         | 851         | 861         | 865           | 864    | 855    | -9.2    |  |
| Saudi Arabia  | 8,654       | 8,921       | 9,057       | 9,176       | 9,464       | 9,522         | 9,490  | 9,377  | -113.6  |  |
| UAE   | 2,504       | 2,427       | 2,586       | 2,611       | 2,609       | 2,612         | 2,612  | 2,603  | -8.7    |  |
| Venezuela   | 2,392       | 2,395       | 2,385       | 2,365       | 2,332       | 2,335         | 2,334  | 2,326  | -8.4    |  |
| Total OPEC  | 30,970      | 31,726      | 32,068      | 32,105      | 32,384      | 32,523        | 32,466 | 32,157 | -308.6  |  |
| OPEC excl. Iraq   | 28,881      | 29,396      | 29,767      | 29,718      | 30,053      | 30,127        | 30,104 | 29,924 | -179.5  |  |

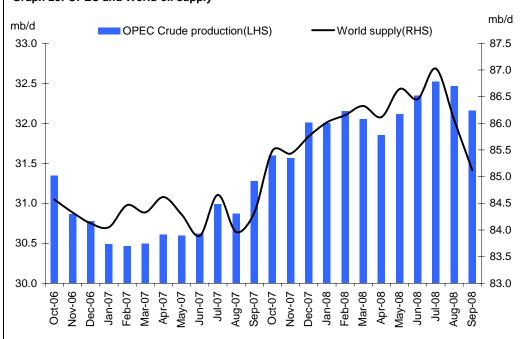
Totals may not add due to independent rounding.

#### World Oil Supply

Preliminary figures indicate that world oil supply averaged 85.12 mb/d in September, a drop of around 0.94 mb/d below the August figure. OPEC crude is estimated to have a 37.8% share in global supply. The estimate is based on preliminary data for non-OPEC supply, estimates for OPEC NGLs and OPEC crude production from secondary sources

Global supply estimated at 85.1 mb/d in September

Graph 23: OPEC and World oil supply



FSU net oil were down due to BTC pipeline shut-down

#### FSU net exports of crude and products

Total FSU net oil exports are expected to average 8.61 mb/d in 2008, an increase of 0.08 mb/d over the previous year. In 2009, total net oil exports are expected to average 8.89 mb/d, a gain of 0.28 mb/d over the 2008 estimate.

#### Current trends

Actual figures for July indicate that total crude exports from the FSU averaged 6.11 mb/d. Preliminary figure for August averaged 5.56 mb/d, a decline of 555 tb/d compared to the previous month. An explosion disrupting operations on the BTC pipeline was the main factor in bringing down total exports in August, in addition to declines in Russian pipeline exports. Russian exports through pipeline were down by around 198 tb/d. The CPC pipeline transfer increased a slight 31 tb/d in August over the previous month.

| Table 15: FSU estimated net oil exports (historical and forecast), mb/d |           |           |           |           |             |                |  |  |  |  |
|---|-----------|-----------|-----------|-----------|-------------|----------------|--|--|--|--|
|   | <u>1Q</u> | <u>2Q</u> | <u>3Q</u> | <u>4Q</u> | <u>Year</u> | Growth (y-o-y) |  |  |  |  |
| 2005  | 7.45      | 7.69      | 7.77      | 7.85      | 7.69        | 0.37           |  |  |  |  |
| 2006  | 7.88      | 8.31      | 8.19      | 8.03      | 8.10        | 0.42           |  |  |  |  |
| 2007  | 8.64      | 8.74      | 8.50      | 8.27      | 8.54        | 0.43           |  |  |  |  |
| 2008 (estimate)   | 8.65      | 8.77      | 8.40      | 8.64      | 8.61        | 0.08           |  |  |  |  |
| 2009 (forecast)   | 9.09      | 9.14      | 8.78      | 8.55      | 8.89        | 0.28           |  |  |  |  |

| Table 16: Recent FSU exports of crude and products by source, mb/d |             |             |             |       |       |               |         |  |  |  |  |
|--|-------------|-------------|-------------|-------|-------|---------------|---------|--|--|--|--|
|  | <u>2006</u> | <u>2007</u> | <u>4Q07</u> | 1Q08  | 2Q08  | <u>Jul 08</u> | Aug 08* |  |  |  |  |
| Crude  |             |             |             |       |       |               |         |  |  |  |  |
| Russian pipeline   |             |             |             |       |       |               |         |  |  |  |  |
| Black Sea  | 1,288       | 1,360       | 1,294       | 1,224 | 1,345 | 1,326         | 1,208   |  |  |  |  |
| Baltic   | 1,553       | 1,645       | 1,631       | 1,530 | 1,678 | 1,572         | 1,444   |  |  |  |  |
| Druzhba  | 1,288       | 1,122       | 1,128       | 1,130 | 1,053 | 992           | 1,039   |  |  |  |  |
| Total***   | 4,129       | 4,127       | 4,052       | 3,884 | 4,076 | 3,907         | 3,709   |  |  |  |  |
| Other routes   |             |             |             |       |       |               |         |  |  |  |  |
| Russian rail   | 313         | 290         | 300         | 296   | 342   | 282           | 222     |  |  |  |  |
| Russian - Far East   | 84          | 247         | 263         | 209   | 204   | 181           | 227     |  |  |  |  |
| Kazak rail   | 31          | 15          | 17          | 17    | 18    | 17            | 17      |  |  |  |  |
| CPC pipeline   | 661         | 701         | 678         | 624   | 709   | 622           | 653     |  |  |  |  |
| Caspian  | 396         | 249         | 205         | 191   | 196   | 128           | 231     |  |  |  |  |
| of which   |             |             |             |       |       |               |         |  |  |  |  |
| Supsa (AIOC) - Georgia   | 114         | 0           | 0           | 0     | 0     | 0             | 0       |  |  |  |  |
| Batumi - Georgia   | 177         | 138         | 121         | 105   | 121   | 81            | 97      |  |  |  |  |
| Total**  | 1,702       | 2,234       | 2,228       | 2,110 | 2,348 | 2,204         | 1,848   |  |  |  |  |
| Total crude exports  | 5,831       | 6,362       | 6,280       | 5,994 | 6,425 | 6,111         | 5,556   |  |  |  |  |
| Products   |             |             |             |       |       |               |         |  |  |  |  |
| All routes   |             |             |             |       |       |               |         |  |  |  |  |
| Fuel oil   | 861         | 841         | 913         | 1,085 | 1,131 | 1,339         | 1,314   |  |  |  |  |
| Gasoil   | 841         | 677         | 814         | 855   | 787   | 804           | 644     |  |  |  |  |
| Others   | 662         | 670         | 730         | 975   | 694   | 687           | 640     |  |  |  |  |
| Total  | 2,364       | 2,188       | 2,458       | 2,916 | 2,612 | 2,829         | 2,599   |  |  |  |  |
| Total oil exports  | 8,195       | 8,550       | 8,738       | 8,910 | 9,037 | 8,940         | 8,155   |  |  |  |  |

Source: Nefte Transport, Global Markets, Argus Fundamentals, Argus FSU, OPEC.

 <sup>\*</sup> Preliminary

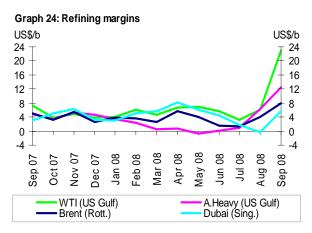
<sup>\*\*</sup> Total incl. BTC, Atasu-Alashankou and tanker shipments from Kaliningrad to Ventspils.

<sup>\*\*\*</sup> Total incl. exports to China.

# **Product Markets and Refinery Operations**

Reefing margins strengthened across the board in September

Product market sentiment improved following hurricanes temporarily Gustav and Ike, lifting product prices in both the physical and futures markets. The positive developments in product prices along with falling crude prices due to the further deterioration in the world economy lifted refining economics across the globe. But the recent bullish developments in product markets did not last long, as refineries at the US Gulf Coast were back to normal operation in the last two weeks and the risk of a product shortage has eased significantly. However, it is worth



noting that, with the approach of the winter season, the tight distillate situation may provide some support for crude prices, but this may not be enough to overshadow other bearish factors in the market or lift crude prices in the coming months.

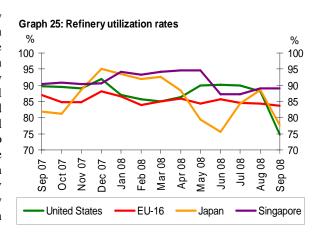
As **Graph 24** shows, refining margins for WTI crude on the US Gulf Coast jumped by \$16.74/b over the previous month to reach \$22.90/b. The bullish developments in the US have also provided support for the European refining industry and lifted their economics. In line with such movements, Brent crude oil margins at Rotterdam surged to \$8.04/b from \$4.13/b in August.

Arbitrage opportunities to the US and Europe have also given support to Asian product markets, lifting Asian product prices and refining margins. In line with these developments, refining margins for Dubai crude oil in Singapore soared to \$5.64/b from minus  $25\phi/b$  in August.

Refinery throughput slid significantly in the USA

#### Refinery operations

After the Hurricane Ivan, which adversely affected the US refinery operations in 2004, the risk of possible hurricane activities and its destructive impact on crude production and the refining industry somehow has been considered in all market projections, but due to the limited knowledge about its range and potential destructive impacts, it is difficult to predict everything in advance and to cope with the potential negative impact on refinery operations. Hurricanes Gustav and Ike also negatively affected refinery operations on the US Gulf Coast in September.



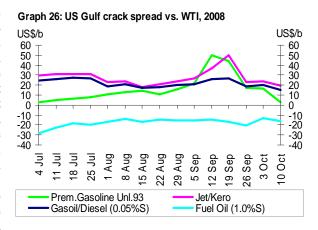
As Graph-25 shows, the refinery utilization rate in the US slipped by about 13% compared to the previous month to reach 74.8% from 88% in August. In Europe, refinery utilization rates also declined a marginal 0.7% to record 83.7%, down from 84.8% last month. In Asia, some refiners also reduced their throughput levels due to relatively low margins. In Japan, refinery utilization rates plunged by 11% to 77.6% from 88.5% in August (see Graph 25).

Looking ahead, by reducing the risk of hurricane activities, the US refinery utilization rates may increase next month. In Europe due to the increasing seasonal turnaround capacity in October, European refinery operation rates may decline further next month, but they are expected to rebound after the scheduled maintenance. In Asia, slowing refining margins would have a negative impact on refinery operations in the next months, however, they may benefit from the possible arbitrage opportunity to the US and Europe and increase their throughput levels.

The US product market performed exceptionally well in September

#### US market

Hurricanes Gustav and Ike have caused extensive offline of refining activities (about 4 mb/d) at the US Gulf Coast and accelerated the product stock-draws in September. Following developments, the US government temporarily waived the product specification restrictions and encouraged traders to export more products to the US. Huge draws on gasoline stocks in the first three weeks of September lifted gasoline prices and crack spreads significantly. As Graph 26 shows, the crack spread for premium gasoline at the US Gulf Coast versus WTI crude surged



to over \$50/b in the middle of September from about \$16/b in the latter part of August.

The short-term bubble in the gasoline spread has burst in the last few days as refineries at the US Gulf Coast were back to normal operation, and because of seasonal factors gasoline prices are not expected to improve sharply in the coming months. Additionally, bearish developments in demand may exert downward pressure on gasoline prices in the future.

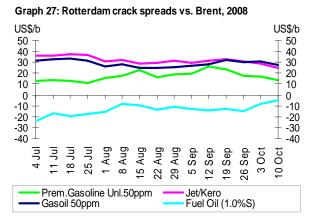
Refinery operational problems in the US Gulf Coast have also negatively affected the seasonal stock-builds of middle distillates and lifted middle distillate prices. The gasoil crack spread versus WTI crude rose to over \$26/b in the week ended 19 September from about \$17/b over the same period last month (*see Graph 26*). The jet fuel market also gained significantly due to supply disruptions by hurricanes. Since the risk of hurricanes has eased and refineries are back to normal operation, middle distillate prices have fallen in the last few days, however, due to the approaching winter season, the middle distillate market may gain part of its recent losses in the next months.

Similarly, the disruption of gas production at the US Gulf Coast after hurricanes and higher demand from utility plants in South America lifted low-sulphur and high-sulphur fuel oil prices. The low-sulphur fuel oil discount versus WTI reached minus \$13/b in the week ended 3 October from about minus \$15/b in early September. Looking ahead, amid the recovering of refinery outputs at the US Gulf Coast and the resumption of gas production in the same area, the fuel oil market is expected to lose some if its recent gain.

Arbitrage opportunities to US provided support for European gasoline market

#### European market

A combination of refinery outages at the US Gulf Coast after Hurricanes Gustav and Ike with accelerating gasoline stock-draws boosted arbitrage opportunities from Europe to the other side of the Atlantic and huge cargoes of gasoline moved to the US in the last couple of weeks. These developments lifted gasoline prices and widened its crack spread in Europe. As **Graph 27** displays, the gasoline crack spread versus Brent crude oil jumped to \$23/b in the middle of September from about \$18/b in the latter part of August. However, due to the persisting



weakness of gasoline demand in the US and the return of the US refineries to normal operation and the narrowing earlier arbitrage opportunity, the gasoline market in Europe lost its earlier strength in the last few days.

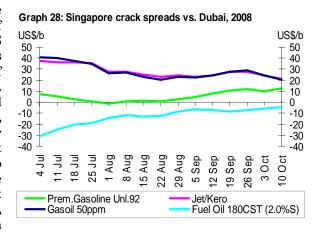
The middle distillate market in Europe was also relatively strong due to limited exports from the US, higher German household demand and tight regional supply because of refinery maintenance schedules. The gasoil crack spread against Brent crude oil on the Rotterdam market surged to around \$32/b in the middle of September from about \$26/b in the last days of August. (see *Graph 27*). The recent bullish movement in the gasoil market has eased slightly in the last few days due to the arrival of many arbitrage cargoes from Asia.

With regard to fuel oil, export opportunities to Asia provided support for high-sulphur fuel oil and narrowed its discounted crack versus Brent crude oil. The high-sulphur fuel market may lose part of its earlier strength in the near future amid higher exports from Russia and narrowing arbitrage opportunities to Asia.

#### Asian market

Asian market for light products appears oversupplied

In the absence of China from the market to purchase gasoil and lack of arbitrage opportunities to the US West Coast, Asian market players have limited opportunity to dispose of their extra middle distillate barrels. This has put pressure on regional middle distillate prices. However, arbitrage opportunities to Europe for gasoil and reversing Middle East jet/kero cargoes from Asia Western Europe have given some relief to the middle distillate market in Asia. In line with these movements, the gasoil crack declined to \$20/b in



early October from about \$24/b early in the previous month (see Graph 28). Jet fuel oil cracks have also fallen over the last weeks due to ample regional supply and sluggish demand.

Given the weaker demand from regional petrochemical plants and ample supply from Middle East and India, the naphtha market in Asia has weakened further and it fell to discounted value versus crude oil. But gasoline market circumstances improved due to export opportunities to the US and the Middle East as well as higher demand from Indonesia. The gasoline crack spread against Dubai crude rose to \$12.61/b in the week ended 10 October from \$4.50/b in early September. The current bullish developments of the gasoline market may lose ground in the future due to higher exports from India as new refineries come on stream.

As far as the fuel oil market is concerned, due to lower supply from Middle East and robust demand for bunker in the region, the high-sulphur fuel oil market remained strong in September and its crack margin improved significantly in this month. The high-sulphur fuel oil spread versus Dubai crude reached about minus \$5/b in the latter part of September (see Graph 28). However, huge western arbitrage inflows to Asia may undermine the current bullish sentiment of the Asian high-sulphur fuel oil market in the near future.

| Table 17: Refined produc | t prices, US\$/b  |               |               |        |         |
|--------------------------|-------------------|---------------|---------------|--------|---------|
|                          |                   |               |               |        | Change  |
|                          |                   | <b>Jul 08</b> | <b>Aug 08</b> | Sep 08 | Sep/Aug |
| US Gulf (Cargoes):       |                   |               |               |        |         |
| Naphtha                  |                   | 131.33        | 121.35        | 119.67 | -1.68   |
| Premium gasoline         | (unleaded 93)     | 139.77        | 129.52        | 140.24 | 10.72   |
| Regular gasoline         | (unleaded 87)     | 135.08        | 125.70        | 131.33 | 5.63    |
| Jet/Kerosene             |                   | 163.58        | 137.58        | 139.24 | 1.66    |
| Gasoil                   | (0.05% S)         | 159.07        | 134.94        | 127.14 | -7.80   |
| Fuel oil                 | (1.0% S)          | 112.31        | 100.90        | 86.94  | -13.96  |
| Fuel oil                 | (3.0% S)          | 106.44        | 97.30         | 82.12  | -15.18  |
| Rotterdam (Barges FoB):  |                   |               |               |        |         |
| Naphtha                  |                   | 142.28        | 125.53        | 111.21 | -14.32  |
| Premium gasoline         | (unleaded 10 ppm) | 145.48        | 129.93        | 120.10 | -9.83   |
| Premium gasoline         | (unleaded 95)     | 129.38        | 115.51        | 105.79 | -9.72   |
| Jet/Kerosene             |                   | 169.44        | 142.59        | 128.97 | -13.62  |
| Gasoil/Diesel            | (10 ppm)          | 165.10        | 138.28        | 127.29 | -10.99  |
| Fuel oil                 | (1.0% S)          | 114.61        | 101.99        | 84.40  | -17.59  |
| Fuel oil                 | (3.5%S)           | 100.80        | 92.38         | 81.22  | -11.16  |
| Mediterranean (Cargoes): |                   |               |               |        |         |
| Naphtha                  |                   | 119.76        | 105.72        | 92.57  | -13.15  |
| Premium gasoline         | (50 ppm)          | 146.11        | 130.39        | 119.15 | -11.24  |
| Jet/Kerosene             |                   | 167.71        | 140.74        | 126.82 | -13.92  |
| Gasoil/Diesel            | (50 ppm)          | 166.44        | 139.48        | 126.54 | -12.94  |
| Fuel oil                 | (1.0% S)          | 111.35        | 97.12         | 83.12  | -14.00  |
| Fuel oil                 | (3.5% S)          | 100.95        | 92.32         | 81.69  | -10.63  |
| Singapore (Cargoes):     |                   |               |               |        |         |
| Naphtha                  |                   | 125.41        | 108.24        | 91.89  | -16.35  |
| Premium gasoline         | (unleaded 95)     | 135.19        | 115.42        | 107.02 | -8.40   |
| Regular gasoline         | (unleaded 92)     | 134.60        | 113.91        | 104.75 | -9.16   |
| Jet/Kerosene             |                   | 167.21        | 137.57        | 121.42 | -16.15  |
| Gasoil/Diesel            | (50 ppm)          | 168.64        | 135.87        | 121.57 | -14.30  |
| Fuel oil                 | (180 cst 2.0% S)  | 109.53        | 101.07        | 88.23  | -12.84  |
| Fuel oil                 | (380 cst 3.5% S)  | 108.05        | 99.84         | 87.77  | -12.07  |

| Table 18: Refinery operations in selected OECD countries |                     |         |        |         |               |               |          |         |  |  |
|--|---------------------|---------|--------|---------|---------------|---------------|----------|---------|--|--|
|  | Refinery throughput |         |        |         |               | Refinery uti  | lization |         |  |  |
|  |                     | mb/d    |        |         | -             | %             |          |         |  |  |
|  | <b>Jul 08</b>       | Aug 08  | Sep 08 | Sep/Aug | <u>Jul 08</u> | <b>Aug 08</b> | Sep 08   | Sep/Aug |  |  |
| USA  | 15.68               | 15.36   | 13.05  | -2.31   | 89.9          | 88.0          | 74.8     | -13.20  |  |  |
| France   | 1.70                | 1.60    | 1.75   | 0.15    | 87.7          | 82.9          | 90.7     | 7.80    |  |  |
| Germany  | 2.20                | 2.20 R  | 1.90   | -0.30   | 91.1          | 91.1 R        | 78.5     | -12.60  |  |  |
| Italy  | 1.67                | 1.65    | 1.73   | 0.08    | 71.5          | 70.5          | 73.9     | 3.40    |  |  |
| UK   | 1.53                | 1.55    | 1.61   | 0.06    | 82.4          | 83.7          | 86.5     | 2.80    |  |  |
| Eur-16   | 11.86 R             | 11.84 R | 11.74  | -0.10   | 84.7 R        | 84.4 R        | 83.7     | -0.70   |  |  |
| Japan  | 3.93                | 4.12    | 3.61   | -0.51   | 84.4          | 88.5          | 77.6     | -10.90  |  |  |

R Revised since last issue.

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

## The Tanker Market

Global and OPEC spot fixtures dropped in September, while OPEC sailings remained steady OPEC spot fixtures declined by 3% in September compared to the previous month to reach 12.27 mb/d according to preliminary data. The decline was mainly due to lower OPEC fixtures outside the Middle East which dropped 7% over the same period, while OPEC fixtures from the Middle East were almost steady with a marginal increase of less than 1%. Within the Middle East, spot fixtures towards the East displayed an increase of 6%, while those towards the West showed a drop of 12%. The Middle East/East spot fixtures ended the month at 5.29 mb/d, up from 5.01 mb/d in August, while the Middle East/West route ended the month at 1.66 mb/d, down from 1.89 mb/d in August. An unprecedented drop of 1.4 mb/d of US crude oil imports in September compared to the previous month was the main reason behind lower spot fixtures for the Middle East/West route and behind lower OPEC spot fixtures in general, while China's higher crude oil imports drove the growth of spot fixtures on the Middle East route. On a y-o-y basis, OPEC spot fixtures in September indicated growth of 5% compared to September 2007, while average spot fixtures for the first three quarters of 2008 were 13.17 mb/d, indicating an increase of 6% compared to the same period last year. Similarly, global spot fixtures dropped in September by 1.5% compared to the previous month to stand at 18.81 mb/d, unchanged from the same month last year.

Sailings from OPEC were once again steady in September at 23.13 mb/d compared to 23.33 mb/d in the previous month, and were also steady compared to 23.19 mb/d in the same month last year. Middle East sailings in September were 17.43 mb/d, very close to their levels in both the previous month and a year earlier which were 17.53 mb/d and 17.54 mb/d respectively. Crude oil arrivals in the USA declined by 13% in September compared to the previous month, in line with the sharp drop in US crude oil imports this month. In contrast, North-West Europe and the Mediterranean arrivals were steady in September compared to the previous month, while arrivals in Japan were slightly lower.

| Table 19: Tanker chartering, sailings and arrivals, mb/d |               |        |        |                          |  |  |  |  |  |
|--|---------------|--------|--------|--------------------------|--|--|--|--|--|
|  | <u>Jul 08</u> | Aug 08 | Sep 08 | Change<br><u>Sep/Aug</u> |  |  |  |  |  |
| Spot Chartering  |               |        |        |                          |  |  |  |  |  |
| All areas  | 18.17         | 19.10  | 18.81  | -0.29                    |  |  |  |  |  |
| OPEC   | 12.01         | 12.60  | 12.27  | -0.33                    |  |  |  |  |  |
| Middle East/east   | 4.95          | 5.01   | 5.29   | 0.29                     |  |  |  |  |  |
| Middle East/west   | 1.72          | 1.89   | 1.66   | -0.22                    |  |  |  |  |  |
| Sailings   |               |        |        |                          |  |  |  |  |  |
| OPEC   | 23.43         | 23.33  | 23.13  | -0.20                    |  |  |  |  |  |
| Middle East  | 17.58         | 17.53  | 17.43  | -0.10                    |  |  |  |  |  |
| Arrivals   |               |        |        |                          |  |  |  |  |  |
| US Gulf Coast, US East Coast, Caribbean                  | 8.43          | 8.21   | 7.15   | -1.06                    |  |  |  |  |  |
| North West Europe  | 7.91          | 7.89   | 7.91   | 0.02                     |  |  |  |  |  |
| Euromed  | 4.59          | 4.65   | 4.70   | 0.05                     |  |  |  |  |  |
|  |               |        |        |                          |  |  |  |  |  |

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

Dirty tanker spot freight rates recovered in September with the VLCC sector displaying a monthly gain of 7%

The crude oil tanker market was volatile in September with a clear sign of recovery after an unexpected sharp decline in the previous month for almost all reported routes. High hurricane activity and subsequent delays in the US Gulf and a generally strong Middle East market were the main reasons for the recovery of freight rates in September. It is not clear yet how much the current economic slowdown, especially in the Western Hemisphere, is affecting the tanker market as this will require further time to develop. Taking all vessel categories into consideration and all reported routes for each category, spot freight rates for crude oil tankers were steady in September compared to the previous month, yet were 92% higher than in the same month last year which illustrates the extent of the strength of the market prior to August's decline. Spot freight rates on the Aframax sector routes were showing different movements in September with two routes keeping steady throughout the month, one route slipping and the other increasing. Spot freight rates in the VLCC sector were the only rates that displayed a monthly gain in September of 7% compared to August after a sharp decline of 84% in August

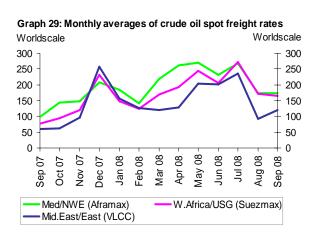
compared to July. Spot freight rates in the Suezmax sector declined by 4%, while those for the Aframax sector were steady with a marginal decline of 1%. Apart from the Aframax Caribbean/US East Coast route, dirty tanker spot freight rates for most other routes continued their rebound off the bottom during the first week of September, a process that started in the fourth week of August due to more double-hull fixing in the Middle East, higher levels of crude moving from West to East and increases of exports from Brazil and East Mediterranean. As for the rest of the month, freight rates were moving in different directions for every vessel category, each backed up by its specific market forces. The clean spot tanker market was less volatile in September compared to the dirty tanker market, with freight rates increasing by 4% on average compared to August. This gain is mainly due to increases to the West of Suez, while to the East of Suez, freight rates were generally steady.

VLCC spot freight rates displayed the only monthly gain in September, increasing on average by 7% compared to August after declining most of the previous month. Spot freight rates for VLCCs trading on the long-haul route from the Middle East to the East, which had dropped by 61% in August, increased by 29% in September over the previous month. Most of the increase in freight rates on this route took place during the first two weeks of the month with the sentiment of the market shifting to a bullish mode, supported by limited tonnage balance which gave vessel owners confidence to push rates up. Typhoon Sinlaku, which battered the Taiwanese Coast and headed to the Eastern provinces of China, was making an impact on tanker movements in this region. After declining for two consecutive months, China's crude oil imports rebounded in August to average 3.7mb/d, 13.5% or 441,000 b/d higher than in the previous month. This added support to the bullish sentiment of the market in this region. Spot freight rates on this route declined to around WS104 during the third week of the month before rebounding again to over WA130 towards the end of the month. VLCC spot freight rates on the Middle East/East route ended the month with an average rate of WS119, the same average that was achieved in March 2008. On a y-o-y basis, spot rates for this route were 98% higher than in the same month last year.

Middle East to the West spot freight rates closed the month at a much lower monthly gain of 3% in September from the previous month. Throughout the month, freight rates on this route were following the same trend as that of the Middle East to the East route, fluctuating between WS91 and WS98 and ending the month at an average of WS92, very close to their level during the period February to April 2008. On an annual basis, Middle East VLCC spot freight rates for both routes displayed an average increase of 100% in September compared to the same month last year.

On the other hand, VLCC spot freight rates for voyages from West Africa to the East went through a steady mode after increasing during the first week to end the month at an average of WS97 which indicates a decline of 8% compared to the previous month. Week September Suezmax spot freight rates in this region were an influential factor in the general softness of this market. Last month's weakening of VLCC freight rates opened, for the first time this year, an arbitrage between the Mediterranean and the East which took some VLCC vessels from the market lending some support to steady freight rates towards the end of the month. On an annual base, West Africa to the East route spot freight rates displayed an increase of 83% in September compared to the same month last year.

Suezmax spot freight rates for voyages to the US from West Africa and North-West Europe dropped in September by an average of 4% compared to the previous month. Supports to freight rates in Suezmax sector in September that came as a result of a generally more active West African market compared to the previous month and tankers getting delayed in the US Gulf as a result of successive Atlantic Hurricanes were more than offset by weaker Black Sea activity, production losses of Azari crude



following a gas leak during mid-September and more importantly by a revision in the October loading programme of Azari crude from Ceyhan which reduced the original schedule by more than 300,000 b/d. A relatively similar fashion of weekly evolvements in freight rates for both Suezmax routes was evident in September, with rates firming in the first week, sliding down for the second and third weeks before rebounding during the fourth week.

From West Africa, Suezmax spot freight rates ended the month with an average of WS165, a decline of 4% from the previous month. The drop was at 5% for the North-West Europe to the US route. On an annual base, Suezmax average freight rates for both routes displayed an increase of 108% in September compared to the same month last year.

On average, Aframax spot freight rates in September were steady compared to August, but were much stronger in the Caribbean compared to both East of Suez and the Mediterranean. It was the procession of hurricanes in the Caribbean that kept freight rates firm throughout the month on this route ending at an average of WS274, indicating an 11% gain compared to the previous month. In the Mediterranean, both across the Mediterranean and Mediterranean/North-West Europe routes were following the same freight rate fluctuations over the month, keeping steady during the first two weeks then dropping during the rest of the month. Freight rates on both Mediterranean routes ended the month at WS183 for the across the Mediterranean route and WS173 for the Mediterranean/North-West Europe route, unchanged from the previous month. To the East of Suez, Aframax spot freight rates dropped by 17% in September from the previous month mainly as a result of thin activity. On average, Aframax spot freight rates on the four reported routes displayed a mere 1% drop in September compared to the previous month, but, on an annual base, they displayed an increase of 85% over the same period last year.

| Table 20: Spot tanker crude freight rates, Worldscale |                          |               |         |        |                   |  |  |  |  |
|---|--------------------------|---------------|---------|--------|-------------------|--|--|--|--|
|   | <b>Size</b><br>1.000 DWT | Jul 08        | Aug 08  | Sep 08 | Change<br>Sep/Aug |  |  |  |  |
| Crude   | 1,000 DW1                | <u>901 00</u> | riug oo | Вер оо | Берлид            |  |  |  |  |
| Middle East/east                                      | 230-280                  | 235           | 92      | 119    | 27                |  |  |  |  |
| Middle East/west                                      | 270-285                  | 144           | 89      | 92     | 3                 |  |  |  |  |
| West Africa/east                                      | 260                      | 271           | 171     | 165    | -6                |  |  |  |  |
| West Africa/US Gulf Coast                             | 130-135                  | 178           | 105     | 97     | -9                |  |  |  |  |
| NW Europe/USEC - USGC                                 | 130-135                  | 257           | 167     | 159    | -8                |  |  |  |  |
| Indonesia/US West Coast                               | 80-85                    | 308           | 221     | 184    | -36               |  |  |  |  |
| Caribbean/US East Coast                               | 50-55                    | 248           | 247     | 274    | 27                |  |  |  |  |
| Mediterranean/Mediterranean                           | 80-85                    | 278           | 181     | 183    | 1                 |  |  |  |  |
| Mediterranean/North-West Europe                       | 80-85                    | 268           | 173     | 173    | 0                 |  |  |  |  |

Source: Galbraith's Tanker Market Report and Platt's.

Average clean spot freight rates increased by 4% in September, with West of Suez, especially the Mediterranean, displaying the highest gain The clean tanker market indicated an increase of 4% on average in September compared to the previous month for all the six reported routes. Contrary to August, the market was stronger to the West of Suez, especially in the Mediterranean, compared to the East of Suez. Lack of tonnage to support the increased Mediterranean consumption of clean products, in particular ULSD, was the main reason behind the increases in spot freight rates in this market. Freight rates for both Mediterranean routes increased by 22% each in September compared to August, the highest monthly gain compared to all other reported clean routes in this month. Trans-Atlantic clean spot freight rates increased by 3% in September compared to the previous month reflecting the expected flow of gasoline to the US in the wake of the hurricanes as well as tight tonnage throughout most of the first three weeks of the month. Freight rates on the Caribbean/US route dropped by 11% in September compared to August, despite delays around the US Gulf, mainly due to refinery shut-downs in the East Coast as a result of the Atlantic hurricanes that affected the availability of products which led to a generally more quiet market. Altogether, average West of Suez clean spot freight rates were 6% higher in September than in the previous month, but were 93% higher than in September 2007.

To the East of Suez, the market was more active on the Singapore East route compared to the Middle East to East route. Spot freight rates for the Singapore/East route maintained their

firmness that had started in August throughout September to end the month with a further gain of 5% while the Middle East to East route dropped by 3%. Lack of tonnage availability was evident in Singapore due to the open arbitrage from the Far East to the West which led to many vessels leaving the market, in addition to other vessels used in domestic movements in China. As a result, average East of Suez spot freight rates in September were steady compared to August, but on an annual basis, they were 73% higher than in the same month last year. For both East and West of Suez, average clean spot freight rates were 4% higher in September compared to the previous month, but were about 88% higher than at a year earlier.

| Table 21: Spot tanker product freight rates, Worldscale |                          |               |        |        |                   |  |  |  |  |
|---|--------------------------|---------------|--------|--------|-------------------|--|--|--|--|
|   | <b>Size</b><br>1,000 DWT | <u>Jul 08</u> | Aug 08 | Sep 08 | Change<br>Sep/Aug |  |  |  |  |
| Products  |                          |               |        |        |                   |  |  |  |  |
| Middle East/east  | 30-35                    | 302           | 364    | 353    | -12               |  |  |  |  |
| Singapore/east  | 30-35                    | 298           | 311    | 325    | 14                |  |  |  |  |
| Caribbean/US Gulf Coast                                 | 38-40                    | 389           | 378    | 337    | -41               |  |  |  |  |
| NW Europe/USEC - USGC                                   | 33-37                    | 289           | 315    | 325    | 10                |  |  |  |  |
| Mediterranean/Mediterranean                             | 30-35                    | 282           | 246    | 301    | 54                |  |  |  |  |
| Mediterranean/North-West Europe                         | 30-35                    | 291           | 256    | 311    | 54                |  |  |  |  |

Source: Galbraith's Tanker Market Report and Platt's.

### Oil Trade

OECD net oil imports were 5.9% higher in July compared to June, yet 1% lower than a year earlier

#### OECD

According to latest available data, OECD crude oil imports in July averaged 30.76 mb/d, indicating an increase of 585,000 b/d or 1.9% compared to the previous month. July crude oil imports were also 1% higher than a year earlier. Higher OECD crude oil imports in July are attributable to the increases in both the Far East and Pacific and European OECD Member Countries whose imports increased by 358,000 b/d and 264,000 b/d respectively, both compared to the previous month, while imports of North American Members declined by a marginal 38,000 b/d over the same period. For the first seven months of 2008, OECD Countries imported an average of 30.47 mb/d, indicating a slight 0.4% annual growth compared to the same period in 2007. Lower economic growth and higher retail product prices were the main reasons behind the sluggish annual growth of OECD crude oil imports over this period.

On the other hand, about 73% of the increase in OECD's crude oil imports in July were supplied from outside the OECD. OECD countries imported an average of 24.33 mb/d of crude oil from non-OECD Member Countries in July, indicating an increase of 428,000 b/d or 1.8% compared to the previous month. The increase is mainly attributable to higher crude oil imports from Russia and areas like Azerbaijan, other Africa, Kazakhstan, Brazil and Oman as crude oil imports from OPEC Member Countries were lower in July compared to the previous month. Crude oil imports from within the OECD were 6.43 mb/d in July, indicating a 2.5% or 158,000 b/d increase compared to the previous month. Canada, Mexico, Norway and the UK are the main crude oil exporters in the OECD. Crude oil imports from outside the OECD area for the first seven months of 2008 averaged 24.08 mb/d, indicating annual growth of 2.3% compared to the same period last year, while imports from within OECD averaged 6.39 mb/d, indicating an annual decline of 6.6%.

OECD product imports in July averaged 10.7 mb/d, indicating a 1.1% or 111,000 b/d increase compared to the previous month. July's product imports were also 1.9% higher than a year earlier. Average OECD product imports for the first seven months of 2008 were 10.64 mb/d, indicating low annual growth of 0.7% compared to the same period last year. About 42% of OECD product imports in July were supplied from outside the OECD, and 58% from within. July's 111,000 b/d increase in OECD product imports was the result of a rise of 327,000 b/d in imports from outside OECD countries and a decline of 216,000 b/d in imports from within the OECD. Contrary to that, OECD product imports from outside OECD countries declined by 4.3% during the first seven months of 2008 compared to the same period last year, while imports from within OECD countries increased by 4.6% over the same period.

On the export side, OECD crude oil exports averaged 5.56 mb/d in July, indicating a decline of 8.8% or 535,000 b/d compared to the previous month, and of 12.5% or 792,000 b/d compared to the same month last year. The sharp decline of Norway's crude oil exports was the main reason for lower OECD crude oil exports in July which alone declined by 29% or 452,000 b/d compared to the previous month. Average crude oil exports for the OECD countries for the first seven months of 2008 were 6.14 mb/d, about 650,000 b/d or 9.6% lower than in the same period last year.

OECD product exports in July were about 10.17 mb/d, some 207,000 b/d or 2% lower than in the previous month. Lower product exports of the USA in July by 11% or 265,000 b/d were behind this drop. On a y-o-y basis, OECD product exports in July were about 12.3% higher than in the same month last year. OECD product exports for the first seven months of 2008 were 9.62 mb/d, some 574,000 b/d or 6.3% higher than in the same period in 2007. The entire drop in OECD product exports in July compared to the previous month was the result of lower OECD imports from within the OECD countries, while product exports to countries outside the OECD remained almost unchanged.

Accordingly, OECD net oil imports in July averaged 25.73 mb/d, the highest monthly volume since February 2008, indicating a 5.9%, or 1.44 mb/d increase compared to the previous month and a lower y-o-y growth of less than 1%. At the same time, net oil imports in the first seven months of 2008 averaged 25.36 mb/d, indicating a 1.0% annual growth over the same period in 2007. During the first seven months of 2008, OECD net crude oil imports were 24.33 mb/d, up by 3.3% or 0.77 mb/d compared to the same period in 2007, while net product imports were 1.03 mb/d, down by 33% or 503,000 b/d compared to the same period last year. Net OECD

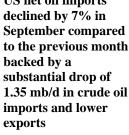
crude oil imports from outside the OECD were 24.09 mb/d in July, up by 626,000 b/d or 2.8% compared to the previous month, while net crude oil imports from within the OECD area were 1.11 mb/d, up by 495,000 b/d or 69% over the same period.

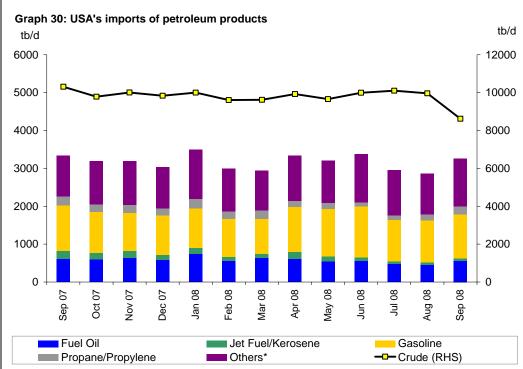
| Table 22: OECD crude and product net imports/(exports), tb/d |               |               |               |                          |  |  |  |  |
|--|---------------|---------------|---------------|--------------------------|--|--|--|--|
|  | <u>May 08</u> | <u>Jun 08</u> | <u>Jul 08</u> | Change<br><u>Jul/Jun</u> |  |  |  |  |
| Crude oil  | 23,474        | 24,081        | 25,202        | 1121                     |  |  |  |  |
| Total products   | 739           | 210           | 528           | 318                      |  |  |  |  |
| Total crude and products                                     | 24,213        | 24,291        | 25,730        | 1439                     |  |  |  |  |

Saudi Arabia was the top OECD crude oil supplier in July with a 14.7% share, down from 15.4% in the previous month, followed by Russia with 12.8%, up from 11.9% in the previous month. Canada supplied 6.5% and Norway 5.9%. Altogether, OPEC Member Countries supplied 54.3% of total OECD crude oil imports in July, down from 55.7% in the previous month. At the same time, OPEC Member Countries supplied about 16.7 mb/d of crude oil to OECD countries in July, representing 68.7% of total OECD imports from outside the OECD. For products, OPEC Member Countries' share of total OECD product imports in July was 16%, up from 14.2% in the previous month. OPEC's supply of products to the OECD countries in July was about 1.71 mb/d representing a share of 38.2% of total OECD product imports from outside OECD countries. Saudi Arabia supplied 3.75%, Algeria 2.75% and the UAE 2.2%. OECD's top non-OPEC product supplier in July was the Netherlands with 10.6%, followed by the USA with 10.21% and Russia with 9.46%.

#### **USA**

According to official data, US crude oil imports in September recorded the lowest volume in many years, averaging 8.62 mb/d, a substantial 1.35 mb/d or 13.5% lower than in the previous month. September crude oil imports were also 1.69 mb/d or 16.4% lower than in the same month last year. The gap between the US crude oil imports in 2007 and in 2008 is increasing with the publication of almost every monthly data. Average crude oil imports for the first three quarters of 2008 were 9.72 mb/d, 3.6%, or 361,000 b/d lower than in the same period last year. This decline is attributable to the overall state of the slowing US economy which has hit sales for almost all products, apart from gasoil, since December 2007.





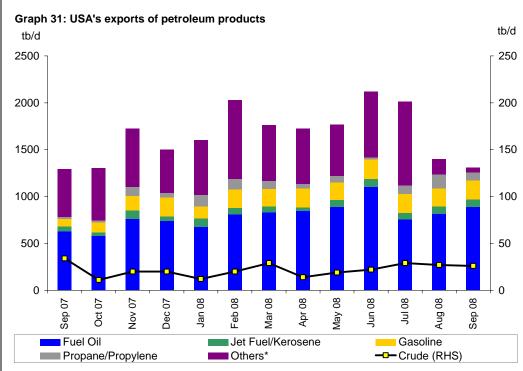
\*Others: Contains Natural Gas Liquids, Liquefied Refinery Gases (LRG's), Other Liquids and all Finished Petroleum Products except Gasoline, Jet Fuel/Kerosene, Fuel Oil and Propane/Propylene.

October 2008 45

US net oil imports

Contrary to crude oil imports, US product imports in September were at their highest level since May 2008, averaging about 3.33 mb/d, 463,000 b/d, or 16.2% higher than in the previous month, but were steady compared to September 2007. Apart from residual fuel oil, almost all major product imports were higher in September than in the previous month. Finished motor gasoline imports increased in September by 177,000 b/d or 90% compared to the previous month to reach 368,000 b/d. Despite this month-to-month increase, average US gasoline imports for the first three quarters of 2008 dropped by 18% compared to the same period in 2007 to average 361,000 b/d. Distillate fuel oil imports increased in September by 59,000 b/d or 55% compared to the previous month to average 166,000 b/d. Average distillate fuel oil imports for the first three quarters of 2008 were 208,000 b/d, indicating a drop of 54% compared to the same period last year. Residual fuel oil imports dropped in September by 16,000 b/d or 4% compared to the previous month, reaching about 366,000 b/d and were 5% higher than in August 2007. For the first three quarters of 2008, the US imported 4% less of residual fuel oil than in the same period of 2007. On average, US product imports declined by 10.6% in the first three quarters of 2008 compared with the same period last year.

On the export side, US product exports declined by 92,000 b/d or 6.4% in September compared to the previous month to average 1.34 mb/d. This represents a marginal decline of 8,000 b/d or 0.6% compared to their level a year earlier. US average product exports for the first three quarters of 2008 were 1.7 mb/d, indicating a 24.5% or 334,000 b/d growth compared to the same period last year.



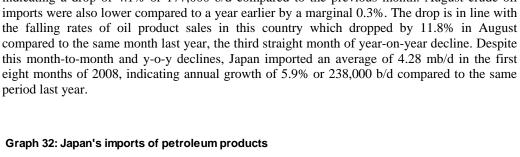
\*Others: Contains Natural Gas Liquids, Liquefied Refinery Gases (LRG's), Other Liquids and all Finished Petroleum Products except Gasoline, Jet Fuel/Kerosene, Fuel Oil and Propane/Propylene.

As a result, US net oil imports declined by 7% in September compared to the previous month to reach about 10.58 mb/d. The 791,000 b/d drop in net oil imports in September came as a result of the 1.35 mb/d drop in net crude oil imports and the 555,000 b/d increase in net product imports compared to the previous month. On a y-o-y basis, US net oil imports in September were 13.8% lower than in the same month last year. Average net oil imports for the first three quarters of 2008 were 11.18 mb/d, indicating a drop of 1.04 mb/d or 8.5% compared to the same period last year.

| Table 23: USA crude and product net imports/(exports), tb/d |               |               |        |                          |  |  |  |  |
|---|---------------|---------------|--------|--------------------------|--|--|--|--|
|   | <u>Jul 08</u> | <u>Aug 08</u> | Sep 08 | Change<br><u>Sep/Aug</u> |  |  |  |  |
| Crude oil   | 10,074        | 9,938         | 8,592  | -1346                    |  |  |  |  |
| Total products  | 923           | 1,435         | 1,990  | 555                      |  |  |  |  |
| Total crude and products                                    | 10,997        | 11,373        | 10,582 | -791                     |  |  |  |  |

Canada was the top US crude oil supplier in July with a share of 19.4%, up from 18.8% in the previous month, followed by Saudi Arabia with 16.44%, up from 14.8% in the previous month. Mexico and Venezuela came next with 11.88% and 11.75% respectively. Altogether, OPEC Member Countries supplied 55.18% of total US crude oil imports in July, down from 55.97% in the previous month. For product imports, Canada was also the top US product supplier in July with a share of 14.51%, almost steady compared to the previous month. Russia was next with a share of 11.95%, down from 15.86% in the previous month, followed by the Virgin Islands with 9.92%. For OPEC Member Countries, Algeria supplied 7.56% of total US oil product imports in July, followed by Venezuela with 5.16% and Nigeria with 2.73%. Altogether OPEC Member Countries supplied 18.5% of US product imports in June, up from 14.85% in the previous month. For US product exports in July, Mexico was the top importer with a share of 20%, down from 20.67% in the previous month, followed by Canada with 12.11% and Netherlands with 7.79%. Altogether, OPEC Member Countries imported 2.89% of total US product exports in July, down from 3.45% in the previous month. Venezuela imported 1.18% and Nigeria 1.08%.

According to Japanese published data, Japan's crude oil imports averaged 4.13 mb/d in August, indicating a drop of 4.1% or 177,000 b/d compared to the previous month. August crude oil



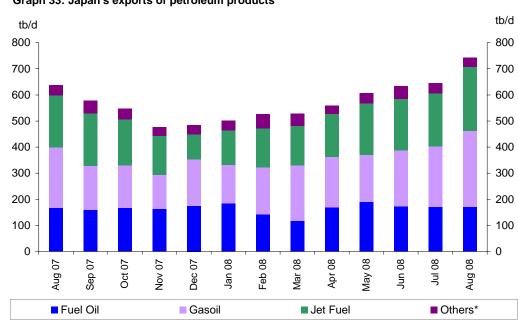
tb/d tb/d 1200 6000 1000 5000 800 4000 600 3000 400 2000 200 1000 0 Jun 08 Aug 08 Aug 07 Jul 08 07 Nov 07 8 80 80 80 80 0 0 Jan Sep Dec Feb Mar Apr ö May Fuel Oil LPG Others\* --- Crude (RHS) Naphtha

\*Others: Contains Gasoline, Jet Fuel, Kerosene, Gasoil, Asphalt and Paraffin

Japan's net oil imports dropped by 7.4% in August compared to the previous month despite higher product exports

With the inclusion of LPG import data, Japan's product imports in August dropped by 59,000b/d or 5% compared to the previous month to average about 1.13 mb/d, displaying an annual decline of 3.8% compared to a year earlier. Japan mainly imports three products LPG, naphtha and fuel oil that constitute more than 98% of its total monthly product imports. Average LPG imports in August were about 381,000 b/d, down by 18% from the previous month and by 7.8% from a year earlier. For the first eight months of 2008, Japan imported an average of 444,000 b/d of LPG almost identical to last year's average during the same period. Naphtha imports averaged 592,000 b/d in August, 2.5%, or 15,000 b/d lower than at the previous month and also lower by 5.3% compared to a year earlier. Naphtha imports for the first eight months of 2008 were 9.8% lower than at the same period last year. On the other hand, fuel oil imports in August were about 138,000 b/d, up by 36,000 b/d or 35% from the previous month, and by 56% from a year earlier. Fuel oil imports for the first eight months of 2008, fuel oil imports averaged 111,000 b/d, 78% higher than in the same period last year. Total product imports for the first eight months of 2008 averaged 1.15 mb/d, 3.7% lower compared to the same period last year.

On the export side, Japan's product exports increased by 15.5% in August compared to the previous month, and were 16.3% higher than a year earlier, averaging 854,000 b/d. Gasoil exports in August were about 336,000 b/d, up by 27% compared to the previous month and by almost the same percentage compared to a year earlier. During the first eight months of 2008, Japan exported an average of 237,000 b/d of gasoil, a substantial 64% higher than in the same period last year. Jet fuel exports in August were about 301,000 b/d, up by 19% from the previous month and by 21% from a year earlier. Jet fuel exports for the first eight months of 2008 averaged 223,000 b/d, 14% higher than in the same period last year. Fuel oil exports in August were about 182,000 b/d, steady compared to the previous month and also to a year earlier. Japan exported lower quantities of kerosene, lubricating oil, gasoline, asphalt and LPG in August, totaling 35,000 b/d. Average product exports for the first eight months of 2008 were about 680,000 b/d, indicating an annual growth of 24% or 132,000 b/d compared to the same period in 2007.



Graph 33: Japan's exports of petroleum products

\*Others: Contains LPG, Gasoline, Naphtha, Kerosene, Lubricating Oil, Asphalt and Paraffin Wax.

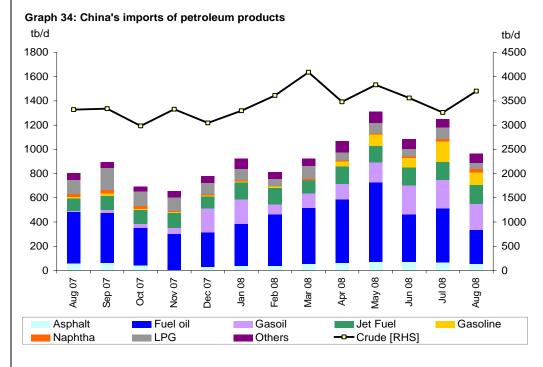
As a result, Japan's net oil imports in August were about 4.41 mb/d, indicating a drop of 351,000 b/d or 7.4% compared to the previous month and by 3.3% compared to a year earlier. With the exclusion of LPG, Japan was a net product exporter in August, with net product exports increasing to 101,000 b/d compared to 12,000 b/d in the previous month. Average net oil imports for the first eight months of 2008 were 4.76 mb/d indicating an increase of 62,000 b/d or 1.3% compared to the same period in 2007. Japan's net product imports for the first eight months of 2008 declined to 472,000 b/d from 649,000 during the same period last year, mainly due the 24% increase of its exports over the same period.

| Table 24: Japan's crude and product net imports/(exports), tb/d |               |               |               |                          |  |  |  |  |
|---|---------------|---------------|---------------|--------------------------|--|--|--|--|
|   | <u>Jun 08</u> | <u>Jul 08</u> | <u>Aug 08</u> | Change<br><u>Aug/Jul</u> |  |  |  |  |
| Crude oil   | 3,527         | 4,309         | 4,132         | -177                     |  |  |  |  |
| Total products  | 396           | 449           | 276           | -174                     |  |  |  |  |
| Total crude and products  | 3,923         | 4,758         | 4,408         | -351                     |  |  |  |  |

Saudi Arabia and the UAE were Japan's top crude oil suppliers in August with a total share of 48.4%. Saudi Arabia's share was 24.6% down from 25.6% in the previous month, while UAE's share was 23.8%, down from 25.6% in the previous month. Iran supplied 13.4% of Japan's crude oil imports in August, up from 11.8% in the previous month, while Qatar's share was 11.5%, down from 13.1% in the previous month. OPEC Member Countries supplied 88.0% of Japan's crude oil imports in August, up from 86.3% in the previous month. Top non-OPEC crude oil suppliers in August include Russia with 2.6%, almost unchanged from the previous month, and Oman with 2.5%, down from 4.1% in the previous month. On the product side, preliminary data indicate that Saudi Arabia was also Japan's top supplier in August with 17.6%, up from 15.9% in the previous month, followed by the UAE with 10.8% and Kuwait with 10.2%. Altogether, OPEC Member Countries supplied 56.1% of Japan's product imports in July, up from 50.2%% in the previous month. Top non-OPEC product suppliers in August include South Korea with 9.2% and the USA with 8.9%.

#### China

After declining for two months in a row, China's crude oil imports rebounded in August to average 3.7 mb/d, 13.5% or 441,000 b/d higher than in the previous month according to official Chinese data. China's crude oil imports in August were also 11.5% higher than in August 2007. Average crude oil imports for the first eight months of 2008 were 3.6 mb/d, indicating some 0.27 mb/d or 8.2% annual growth over the same period last year. On the other hand, China's crude oil production in August declined further by 1% or about 50,000 b/d compared to the previous month, averaging 3.78 mb/d. China's crude oil production in August was about 80,000 b/d higher than the country's crude oil imports in the same month.



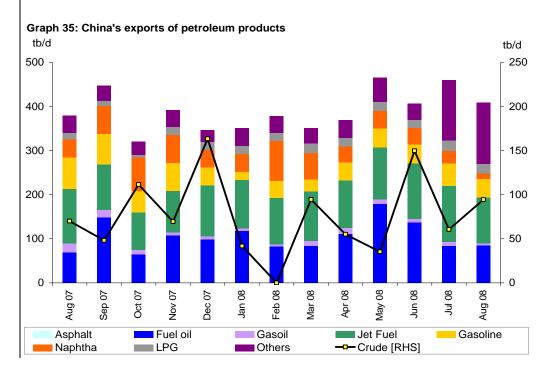
Contrary to crude imports, China's total product imports declined sharply in August compared to both the previous month and August 2007. China had been importing increasing amounts of

China's net oil imports increased 4.3% in August backed by an increase of 13% in net crude oil imports and lower volumes of product exports

> petroleum products, especially gasoil and gasoline, since January 2008 in its run-up to the Beijing Olympic Games to the extent that the country is now facing oversupply of many products which had its impact on August product imports. China imported an average of

964,000 b/d in August, 286,000 b/d or 23% lower than in the previous month, yet this level of imports was 20% higher than a year earlier. Apart from Naphtha and to a lesser extent jet fuel, imports of all major products dropped in August compared to the previous month.

China imported about 106,000 b/d of gasoline in August, down 62% from the previous month, but still very high compared to the 12,000 b/d imported in the same month in the previous year. South Korea supplied 40% of China's gasoline imports in August followed by Singapore with 38% and Taiwan with 23%. Average gasoline imports for the first eight months of 2008 were about 65,000 b/d. The average was below 3,000 b/d during the same period last year as China used to be a major gasoline net exporter in Asia. Jet fuel imports in August reached about 158,000 b/d compared to 152,000 b/d in the previous month. South Korea supplied about 46% of China's jet fuel imports in August, followed by Japan with 24% and Taiwan with 23%. Naphtha imports in August reached about 26,000 b/d compared to 23,000 b/d in the previous. Sources of China's naphtha imports were Saudi Arabia with 58% and South Korea with 42%. China's naphtha imports during the first eight months of 2008 averaged about 14,000 b/d, 51% lower than in the same period last year. Gasoil imports in August were about 214,000 b/d, 9% down from the previous month. Average January-August 2008 gasoil imports were 176,000 b/d compared to only 10,000 b/d during the same period last year. Japan supplied 35% of this volume followed by South Korea with 25% and Taiwan with 17%. The drop in China's fuel oil imports in August was the main reason behind the country's sharp decline in product imports. China imported an average of 281,000 b/d in August, 38% lower than at the previous month and 34% lower than at the same month last year. The share of China's fuel oil imports of its total product imports declined from 36% during the previous month to 29% in August. Fuel oil imports for the first eight months of 2008 declined also by 19% from the same period last year, averaging about 441,000 b/d. Venezuela was China's top fuel oil supplier in July with 21%, followed by Russia with 16% and Singapore and South Korea with 10% each. China imported an average of 51,000 b/d of LPG in August, down by 47% from the previous month and by 57% from the same month last year. Average LPG imports for the first eight months of 2008 were 77,000 b/d indicating an annual decline of 41% from the same period last year. The USA supplied 24% of China's LPG imports in August, followed by Iran with 23%. China imported about 286,000 metric tonnes of asphalt in August, down by 55,000 metric tonnes or 16% from the previous month and from 302,000 metric tonnes in August 2007. Average asphalt imports during the first eight months of 2008 were 12% lower than in the same period last year. Altogether, China imported an average of 1.04 mb/d of products in the first eight months of 2008, indicating annual growth of 11% over the same period last year. In August, fuel oil imports accounted for 27% of China's total product imports, gasoil for 22%, jet fuel for 16.4%, gasoline for 10.9%, LPG for 5% and naphtha for 2.6%.



On the export side, China's crude oil exports in August were 94,000 b/d, up from 61,000 b/d in the previous month. About 44% of China's crude oil exports in August were destined to Japan and 20% to Singapore. For the first month this year, Indonesia imported an average of 20,000 b/d of Chinese crude oil accounting for 21% of China's crude oil exports in this month. Average crude oil exports for the first eight months of 2008 were 67,000 b/d, steady or just 1% higher than in the same period last year.

China's product exports in August were 0.41 mb/d, 11% or 51,000 b/d lower than in the previous month, but 8% higher compared to August 2007. Exports of both fuel oil and LPG were steady in August compared to the previous month, while exports of all other major products were lower. Average product exports for the first eight months of 2008 were about 0.4 mb/d, 3% or 11,000 b/d higher than in the same period last year. Fuel oil exports in August were 176,000 b/d, unchanged from the previous month, but more than double their average in the same month last year. Average fuel oil exports for the first eight months of 2008 were 132,000 b/d, again more than double their average during the same period last year. The main destination for China's fuel oil exports in July was Hong Kong with 41% followed by Panama with 36%. Jet fuel exports in August were about 104,000 b/d, down from 123,000 b/d in both the previous month and the same month last year. Average jet fuel exports for January-August 2008 were 113,000 b/d, 16% higher than in the same period last year. About 44% of China's jet fuel exports in August headed to Hong Kong and 14% to the USA. Gasoline exports in August were 40,000 b/d, 21% lower than in the previous month. Average gasoline exports for the first eight months of 2008 were 36,000 b/d, 73% lower than in the same period last year. Once again, China was a net gasoline importer in August with 66,000 b/d, down from 115,000 b/d in July. Almost the entire China's gasoline exports in August headed to Singapore. China's naphtha exports in August were about 13,000 b/d, down from 28,000 b/d in the previous month and from 40,000 b/d in August 2007. Despite these declines, average naphtha exports for the first eight months of 2008 were 34% higher than in the same period last year. About 58% of China's naphtha exports in August headed to Japan and the rest to South Korea. Gasoil exports in August were 5,000 b/d, down from 8,000 b/d in the previous month, with average January-August 2008 exports down by 48% compared to the same period last year. China exported 21,000 b/d of LPG in August, 43% of which to Vietnam, 23% to Hong Kong and 21% to the Philippines. In August, fuel oil exports accounted for 39.9% of China's total product exports, jet fuel for 24.8%, gasoline for 19%, naphtha for 3.2% and gasoil for 1.1%.

With net crude oil imports at 3.6 mb/d and net product imports at 0.56 mb/d, China's net oil imports in August were 4.16 mb/d, 4.3% or 171,000 b/d higher than in the previous month and 13% higher than a year earlier. Higher net oil imports in August brought China's average net oil imports for the first eight months of 2008 to about 4.18 mb/d, 10% higher than in the same period last year.

| Table 25: China's crude and product net imports/(exports), tb/d |               |               |               |                          |  |  |  |  |
|---|---------------|---------------|---------------|--------------------------|--|--|--|--|
|   | <u>Jun 08</u> | <u>Jul 08</u> | <u>Aug 08</u> | Change<br><u>Aug/Jul</u> |  |  |  |  |
| Crude oil   | 3,410         | 3,200         | 3,607         | 407                      |  |  |  |  |
| Total products  | 677           | 791           | 555           | -236                     |  |  |  |  |
| Total crude and products  | 4,087         | 3,991         | 4,162         | 171                      |  |  |  |  |

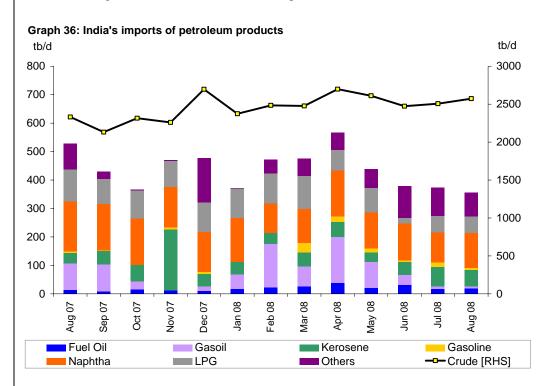
Angola was China's top crude oil supplier in August with a share of 20%, surging up from 13.2% in the previous month. Saudi Arabia was next with 14.4%, down from 18.9% in the previous month. Iran's share of China's total crude oil imports in August was 11.9%, down from 17.6% in the previous month. Altogether, OPEC Member Countries supplied 61.3% of China's crude oil imports in August, down from 64.3% in the previous month. Top non-OPEC crude oil suppliers in August include Oman with 10%, Russia with 6.4% and Sudan with 4.6%. Preliminary estimates show that OPEC Member Countries supplied about 16.13% of China's total product imports in July, down from 17.2% in the previous month. Venezuela supplied 9.1%, up from 5.5% in the previous month. Iran supplied 2.8% and Saudi Arabia supplied 2.3%. Top non-OPEC product suppliers in August include South Korea with 22.1%, Japan with 12.8% and Taiwan with 10.2%.

India's net oil imports increased in August by 3.6% supported by higher crude oil imports and lower product exports

#### India

According to preliminary data, India's crude oil imports in August increased by 66,000 b/d or 2.6% compared to the previous month to reach about 2.57 mb/d, indicating a y-o-y increase of 10.3% compared to the same month last year. Higher crude oil imports in 2008 are mainly attributable to higher overseas purchases by Essar Oil and Reliance Industries which are export-oriented companies. India's average crude oil imports for the first eight months of 2008 were about 2.52 mb/d, 4.1% or 100,000 b/d higher than in the same period last year, supported by strong domestic fuel sales which grew by 3.6% in August.

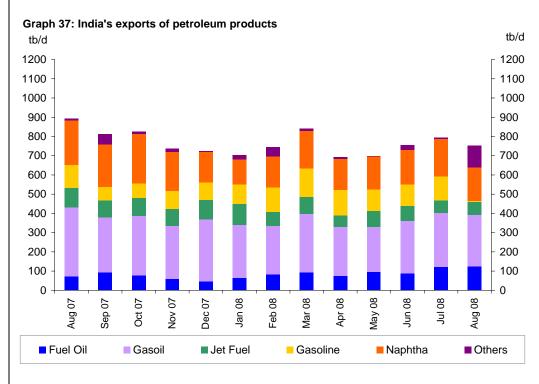
India's product imports in August averaged about 0.36 mb/d, the lowest level since November last year. Despite the fact that India's domestic product sales increased in August by about 3.6% compared to a year earlier, total product imports declined by a much higher percentage of 32% over the same period. This is mainly attributable to the fact that major private refiners in India like Reliance and Essar Oil are selling more products domestically to meet higher demand. It is for this reason that gasoil imports declined sharply in August compared to the previous months, averaging less than 10,000 b/d although gasoil sales increased in India by 9.7% over the same period last year. Higher gasoil sales in August are mainly attributable to higher demand by private power generators who have switched to gasoil over naphtha and fuel oil. Gasoil prices in India are subsidized, while naphtha and fuel oil prices are not. Gasoline imports were about 8,000 b/d in August, down from 17,000 b/d in the previous month.



LPG imports were unchanged in August compared to July at about 57,000 b/d, yet were 49% lower than a year earlier. Domestic sales of LPG dropped in August by 2% compared to August 2007. Imports of naphtha increased in August by 16% compared to the previous month to reach 123,000 b/d, yet were 30% lower than a year earlier. India imported about 19,000 b/d of fuel oil in August, up from 17,000 b/d in July, and about 57,000 b/d of kerosene, down from 67,000 b/d in July.

| Table 26: India's crude and product net imports/(exports), tb/d |               |               |               |                          |  |  |  |
|---|---------------|---------------|---------------|--------------------------|--|--|--|
|   | <u>Jun 08</u> | <u>Jul 08</u> | <u>Aug 08</u> | Change<br><u>Aug/Jul</u> |  |  |  |
| Crude oil   | 2,473         | 2,506         | 2,573         | 66                       |  |  |  |
| Total products  | -376          | -405          | -395          | 10                       |  |  |  |
| Total crude and products  | 2,097         | 2,101         | 2,177         | 76                       |  |  |  |

On the export side, India's total product exports of 752,000 b/d in August displayed a decline of 3.5% compared to the previous month and 15% compared to a year earlier. Apart from jet fuel and fuel oil, exports of all other major products declined in August compared to the previous month. Fuel oil exports in August averaged about 123,000 b/d, up marginally from 121,000 b/d in the previous month. For the first eight months of 2008, India exported 35% more of fuel oil than in the same period last year. Jet fuel exports at 67,000 b/d were unchanged in August compared to July, yet they dropped by 26% during the first eight months of 2008 compared to the same period last year. Exports of gasoil, gasoline and naphtha dropped in August compared to the previous month, with gasoline displaying the sharpest monthly decline ever both in volume and percentage. Gasoil exports averaged 269,000 b/d, 4% lower than in July, but were 25% lower than in the same month last year. For the first eight months of 2008, India exported an average of 268,000 b/d of gas oil, about 6% lower than in the same period last year. Gasoline exports dropped to a mere 5,500 b/d in August, down from 122,000 b/d in July and 118,000 b/d a year earlier. Despite this sharp drop, India exported an average of 108,000 b/d of gasoline during the first eight months of 2008, about 10% higher than in the same period last year. Naphtha exports were 175,000 b/d in August, down from 195,000 b/d in July and 234,000 b/d in August 2007. Naphtha exports during the first eight months of 2008 were 31% lower than in the same period last year. Altogether, India exported an average of 740,000 b/d of oil products during the first eight months of 2008, 13% or 109,000 b/d lower than in the same period last year.



As a result, India's net oil imports in August averaged 2.18 mb/d, displaying an increase of 3.6% or 76,000 b/d compared to the previous month, and 10% compared to a year earlier. For the first eight months of 2008, India's net oil imports averaged 2.21 mb/d, 9.7% higher than in the same period in 2007. The increase in net oil imports in August is attributable to a 66,000 b/d increase in net crude oil imports and a 10,000 b/d increase in net product imports.

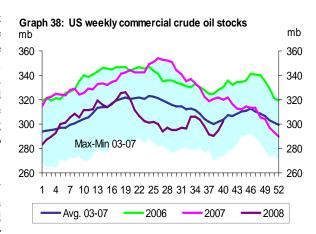
### Stock Movements

Due to hurricanes, US commercial oil inventories dropped significantly in the first three weeks of September before surging sharply in the week ending 3 October

#### **USA**

The recent successive hurricanes sent US commercial oil stocks below the bottom of the five-year range for the first time this year in September. Following a substantial draw of 24 mb, commercial stocks fell to around 960 mb at the end of September, the lowest level since May 2004, widening the gap with the five-year average to 56 mb or 6%.

As refineries were affected the most by the hurricanes, products were the main contributor to the draw with around 23 mb or 95%. In addition, lower



imports due to the closure of some ports contributed to some extent to the drop in product inventories. However, the decline in crude runs did not prevent crude oil stocks from falling, albeit marginally, because of a decline in imports.

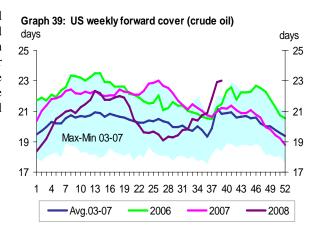
However, due to low refinery throughput, crude oil stocks fell just 1.1 mb to stand slightly above 300 mb, or roughly in line with the five-year average. However, it is worth mentioning that in summer the gap with the seasonal average rose to 27 mb.

Within products, gasoline was the main driver with a loss of almost 15 mb, the third draw in a row, and fell below the lower end of the five-year range. Gasoline stocks typically begin to build in September following the end of the driving season and the return of refineries from maintenance, but this year, stocks witnessed an unseasonal draw because of the hurricanes. Following the same trend, distillate stocks dropped 8.5 mb to stand below 123 mb and moved towards the bottom of the five-year range. Jet fuel inventories lost 4.5 mb to move to 36.6 mb, the lowest level since April 2004, while residual fuel oil stocks added a minor 0.3 mb to stand at 37.4 mb, or higher than a year ago.

The Strategic Petroleum Reserve (SPR) fell 4.2 mb after the Department of Energy decided to release crude in the form of loans in the aftermath of hurricanes. At 703 mb, SPR represents currently almost 97% of total capacity.

According to the latest data, US commercial oil stocks rose sharply in the week-ending 3 October, surging by 19.6 mb. Supported by a strong recovery in imports, crude oil stocks rose by more than 8 mb to nearly 303 mb (*see Graph 38*) and gasoline stocks helped also by increasing production from refineries by 7.2 mb but remained below 190 mb. In contrast, distillate inventories lost 0.5 mb, the sixth drop in a row. The draw was attributable to gasoil.

However, in terms of forward demand cover, crude oil stocks remained comfortably at 23.6 days, which corresponds to more than 3 days better than the average of the previous five years (*see Graph 39*), whereas gasoline and distillate stocks remained at around 1 day lower than the seasonal average.



| Table 27: US onland commercial petroleum stocks, mb |               |               |               |                |               |           |   |  |  |
|---|---------------|---------------|---------------|----------------|---------------|-----------|---|--|--|
|   |               | Change        |               |                |               |           |   |  |  |
|   | <u>Jul 08</u> | <b>Aug 08</b> | <u>Sep 08</u> | Sep 08 /Aug 08 | <b>Sep 07</b> | 03 Oct 08 | * |  |  |
| Crude oil   | 294.5         | 301.4         | 300.3         | -1.1           | 311.1         | 302.6     |   |  |  |
| Gasoline  | 205.7         | 194.4         | 179.6         | -14.8          | 200.0         | 186.8     |   |  |  |
| Distillate fuel                                     | 130.4         | 131.2         | 122.7         | -8.5           | 134.2         | 122.6     |   |  |  |
| Residual fuel oil                                   | 37.3          | 37.1          | 37.4          | 0.3            | 37.0          | 37.8      |   |  |  |
| Jet fuel  | 41.2          | 41.1          | 36.6          | -4.5           | 42.9          | 36.8      |   |  |  |
| Total   | 991.8         | 983.3         | 959.3         | -24.0          | 1,023.7       | 964.9     |   |  |  |
| SPR   | 707.2         | 707.2         | 703.0         | -4.2           | 692.8         | 702.4     |   |  |  |

<sup>\*/</sup> Latest available data at time of report's release.

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

#### Western Europe

In Europe (EU-15 plus Norway), total oil stocks fell a further 4.4 mb in September to stand at nearly 1,119 mb, broadly in line with the five-year average. The draw of 4.4 mb, which is in line with the seasonal change, resulted from a build of 5.2 mb in crude oil and a 9.6 mb decline in products.

Crude oil inventories rose 5.2 mb to 478 mb and remained above the average of the previous five years for the sixth consecutive month. The increase in European crude oil stocks, which corresponds to some extent to a contra-seasonal build, resulted from a combination of the recovery in North Sea production and a decline in refinery throughputs at the time when exports to US markets were affected by hurricanes.

| Table 28: Western Europe's oil stocks, mb |               |         |         |                         |         |  |  |  |  |
|---|---------------|---------|---------|-------------------------|---------|--|--|--|--|
|   | <u>Jul 08</u> | Aug 08  | Sep 08  | Change<br>Sep 08/Aug 08 | Sep 07  |  |  |  |  |
| Crude oil                                 | 486.1         | 472.8   | 478.0   | 5.2                     | 471.8   |  |  |  |  |
| Mogas                                     | 124.7         | 127.9   | 125.2   | -2.7                    | 123.7   |  |  |  |  |
| Naphtha                                   | 29.0          | 28.2    | 28.2    | 0.0                     | 27.3    |  |  |  |  |
| Middle distillates                        | 368.1         | 376.9   | 369.4   | -7.5                    | 379.1   |  |  |  |  |
| Fuel oils                                 | 119.5         | 117.2   | 117.9   | 0.6                     | 116.4   |  |  |  |  |
| <b>Total products</b>                     | 641.4         | 650.2   | 640.6   | -9.6                    | 646.5   |  |  |  |  |
| Total                                     | 1,127.4       | 1,123.0 | 1,118.6 | -4.4                    | 1,118.4 |  |  |  |  |

Source: Argus, Euroilstock.

However, contrary to crude oil, product stocks fell below the five-year average for the first time since February following a draw of 9.6 mb. Due to lower production from refineries, both gasoline and distillate stocks dropped. The recovery witnessed by gasoline stocks in August did not last very long and stocks moved back to resume their downward trend. Gasoline stocks fell 2.7 mb to 125 mb, implying a deficit of 7 mb with the five-year average. Nevertheless, gasoline inventories remain comfortable taking into consideration the weak demand. It is worth noting that European gasoline stocks have been above their corresponding levels of the previous year since March. Similarly, due to lower production from refineries, middle distillate stocks fell 7.5 mb to stand slightly below 370 mb, offsetting the build of the previous month and widening the deficit with the five-year average to 2%. Lower demand kept residual fuel stocks above the year ago level for the seventh consecutive month in Europe. Fuel stocks rose 0.6 mb to stand at nearly 118 mb while naphtha inventories remained unchanged at 28.2 mb, representing a gain of 1 mb over the previous year.

#### Japan

Japan's commercial oil stocks continued their upward trend adding a further 9.2 mb in August to hit 191 mb, the highest level in a year and in line with the five-year average. Once again the build was driven by products, which rose almost 15 mb on the back of a surge in refinery output following their return from deep seasonal maintenance. All the components of product stocks increased.

However, distillates were the main contributor adding a further 9.5 mb to stand above 43 mb, the highest level since last August. Following this upward trend, distillate stocks are at a very comfortable level. Gasoline stocks also added 1.9 mb to stand at 14.4 mb, representing a move above the top of the five-year range. Similarly, residual fuel oil and naphtha stocks rose 2.5 mb and 1 mb respectively and were higher than their respective levels of a year earlier.

Oil stocks in EU-15 plus Norway fell 4.4 mb to remain in line with the same level as a year ago but above the five-year average

Japan's total commercial stocks rose 9.2 mb in August to stand at the fiveyear average. Preliminary data showed a contraseasonal build in September, leaving stocks comfortable

| Table 29: Japan's c   | ommercial oil | stocks*, mb   |               |               |               |
|-----------------------|---------------|---------------|---------------|---------------|---------------|
|                       |               |               |               | Change        |               |
|                       | <u>Jun 08</u> | <u>Jul 08</u> | <b>Aug 08</b> | Aug 08/Jul 08 | <b>Aug 07</b> |
| Crude oil             | 101.2         | 106.0         | 100.3         | -5.8          | 110.3         |
| Gasoline              | 13.2          | 12.6          | 14.4          | 1.9           | 12.8          |
| Naphtha               | 10.0          | 10.8          | 11.8          | 1.0           | 11.6          |
| Middle distillates    | 28.4          | 33.6          | 43.1          | 9.5           | 43.7          |
| Residual fuel oil     | 18.9          | 18.9          | 21.4          | 2.5           | 20.8          |
| <b>Total products</b> | 70.4          | 75.8          | 90.8          | 14.9          | 88.9          |
| Total**               | 171.6         | 181.9         | 191.0         | 9.2           | 199.1         |

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

Source: METI, Japan.

In contrast, due to a surge in refinery throughput of around 0.19 mb/d, crude oil stocks fell 5.8 mb or 0.19 mb/d, offsetting the build of the previous month to move back to around 100 mb. At this level, Japan's crude oil inventories remained at the lower end of the five-year average. However, in terms of forward demand cover, the gap with the five-year average is less pronounced due to weaker demand.

According to preliminary data, Japanese commercial oil stocks added 11 mb in September, representing a contra-seasonal build and the fourth consecutive increase. With this upward trend, Japan's commercial stocks moved above 200 mb for the first time since January 2007. Crude oil was the main contributor to this surge with around 10 mb. However, due to the fact that products witnessed a contra-seasonal build, albeit small, both gasoline and distillate inventories are at comfortable levels, at the top of their respective five-year range.

<sup>\*\*</sup> Includes crude oil and main products only.

# Balance of Supply and Demand

Demand for OPEC crude in 2008 is expected to decline by 260 tb/d to 32.0 mb/d

### Estimate for 2008

The demand for OPEC crude is expected to average 32.0 mb/d, a decrease of 260 tb/d over the 2007 figure. On a quarterly basis, the demand for OPEC crude is estimated at 32.6 mb/d, 31.1 mb/d, 32.0 mb/d and 32.4 mb/d respectively.

| T. 1. 00 0 1 1 1 1 1 1                |             | 0000       |             |       |       |             |
|---------------------------------------|-------------|------------|-------------|-------|-------|-------------|
| Table 30: Summarized supply/demand    | balance to  | or 2008, i | mb/d        |       |       |             |
|                                       | <u>2007</u> | 1Q08       | <b>2Q08</b> | 3Q08  | 4Q08  | <u>2008</u> |
| (a) World Oil Demand                  | 85.90       | 86.67      | 85.42       | 85.71 | 88.01 | 86.45       |
| Non-OPEC Supply                       | 49.43       | 49.63      | 49.64       | 48.93 | 50.76 | 49.74       |
| OPEC NGLs and non-conventionals       | 4.21        | 4.47       | 4.67        | 4.77  | 4.89  | 4.71        |
| (b) Total Supply excluding OPEC Crude | 53.64       | 54.11      | 54.31       | 53.70 | 55.65 | 54.44       |
| Difference (a-b)                      | 32.27       | 32.56      | 31.11       | 32.01 | 32.36 | 32.01       |
| OPEC crude oil production (1)         | 30.97       | 32.07      | 32.10       | 32.38 |       |             |
| Balance                               | -1.30       | -0.50      | 1.00        | 0.38  |       |             |

(1) Selected secondary sources.

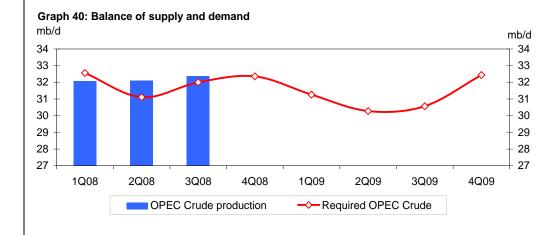
Totals may not add due to independent rounding.

### Forecast for 2009

Demand for OPEC crude in 2009 is projected to average 31.1 mb/d, a decline of around 870 tb/d compared with the 2008 figure. On a quarterly basis, the required OPEC crude is expected to average 31.3 mb/d, 30.3 mb/d, 30.6 mb/d and 32.4 mb/d respectively.

| Table 31: Summarized supply/demand b  | oalance fo  | r 2009, i   | mb/d        |       |             |             |
|---------------------------------------|-------------|-------------|-------------|-------|-------------|-------------|
|                                       | <u>2008</u> | <u>1Q09</u> | <u>2Q09</u> | 3Q09  | <u>4Q09</u> | <u>2009</u> |
| (a) World Oil Demand                  | 86.45       | 87.51       | 86.07       | 86.37 | 88.88       | 87.21       |
| Non-OPEC Supply                       | 49.74       | 51.11       | 50.55       | 50.33 | 50.83       | 50.70       |
| OPEC NGLs and non-conventionals       | 4.71        | 5.13        | 5.24        | 5.47  | 5.61        | 5.36        |
| (b) Total Supply excluding OPEC Crude | 54.44       | 56.24       | 55.79       | 55.81 | 56.44       | 56.07       |
| Difference (a-b)                      | 32.01       | 31.27       | 30.28       | 30.57 | 32.44       | 31.14       |

Totals may not add due to independent rounding.



Demand for OPEC crude in 2009 is expected to drop by 870 tb/d to 31.1 mb/d

| rabic 32. World Oil definations upply barafied, filb/d |            |      |      |      |        |               |           |        |             |      |      |      |      |      |      |             |      |
|--|------------|------|------|------|--------|---------------|-----------|--------|-------------|------|------|------|------|------|------|-------------|------|
|  | 2004       | 2005 | 2006 | 1007 | 2007 3 | 3007 40       | 4007 2007 | 7 1008 | 2008        | 3008 | 4008 | 2008 | 1009 | 2009 | 3009 | 4004        | 2009 |
| World demand   |            |      |      |      |        |               |           |        |             |      |      |      |      |      |      |             |      |
| OECD   | 49.4       | 49.8 | 49.6 | 49.8 |        |               |           |        |             |      | 49.6 | 48.3 | 48.6 | 46.7 | 46.9 | 49.4        | 47.9 |
| North America  | 25.4       | 25.6 | 25.4 | 25.7 | 25.4   | 25.6 2        | 25.5 25.5 | 5 24.8 | 24.5        | 24.3 | 25.2 | 24.7 | 24.6 | 24.2 | 24.0 | 25.0        | 24.4 |
| Western Europe   | 15.5       | 15.7 | 15.7 | 15.2 |        |               |           |        |             |      | 15.7 | 15.3 | 15.2 | 14.8 | 15.3 | 15.7        | 15.2 |
| Pacific  | 8.5        | 9.6  | 8.5  | 8.9  |        |               |           |        |             |      | 8.7  | 8.3  | 8.8  | 7.8  | 7.7  | 8.7         | 8.2  |
| DCs  | 21.8       | 22.6 | 23.3 | 23.8 |        |               |           |        |             |      | 25.2 | 25.1 | 25.4 | 25.8 | 25.8 | 25.9        | 25.7 |
| FSU  | 3.8        | 3.9  | 3.9  | 3.9  |        |               |           |        |             |      | 4.4  | 4.1  | 4.0  | 4.0  | 4.2  | 4.5         | 4.2  |
| Other Europe   | 6:0        | 6:0  | 6:0  | 1.0  |        |               |           |        |             |      | 0.0  | 1.0  | 1.1  | 1.0  | 0.9  | 6:0         | 1.0  |
| China  | 6.5        | 6.7  | 7.2  | 7.5  |        |               |           |        |             |      | 7.8  | 8.0  | 8.4  | 9.8  | 8.6  | 8.2         | 8.4  |
| (a) Total world demand                                 | 82.5       | 83.9 | 84.9 | 0.98 |        |               |           |        |             |      | 88.0 | 86.5 | 87.5 | 86.1 | 86.4 | 88.9        | 87.2 |
| Non-OPEC supply  |            |      |      |      |        |               |           |        |             |      |      |      |      |      |      |             |      |
| OECD   | 21.3       | 20.5 | 20.2 | 20.5 |        |               |           |        |             | 19.3 | 20.1 | 19.9 | 20.3 | 19.9 | 19.6 | 20.0        | 20.0 |
| North America  | 14.6       | 14.1 | 14.2 | 14.4 |        |               |           |        |             | 13.8 | 14.4 | 14.2 | 14.6 | 14.3 | 14.3 | 14.5        | 14.4 |
| Western Europe   | 6.2        | 2.7  | 5.4  | 5.5  |        |               |           |        |             | 4.9  | 4.9  | 5.0  | 4.9  | 4.7  | 4.5  | 4.7         | 4.7  |
| Pacific  | 9:0        | 9.0  | 9.0  | 9:0  |        |               |           |        |             | 0.7  | 0.8  | 0.7  | 0.8  | 0.8  | 0.8  | 8.0         | 8.0  |
| DCs  | 10.5       | 10.8 | 10.9 | 11.0 |        |               |           |        |             | 11.2 | 11.5 | 11.2 | 11.6 | 11.6 | 11.7 | 11.8        | 11.7 |
| FSU  | 11.1       | 11.5 | 12.0 | 12.5 | 12.4   | 12.5          | 12.6 12.5 | 5 12.6 | 12.7        | 12.5 | 13.1 | 12.7 | 13.1 | 13.1 | 12.9 | 13.1        | 13.1 |
| Other Europe   | 0.2        | 0.2  | 0.2  | 0.1  |        |               |           |        |             | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1         | 0.1  |
| China  | 3.5        | 3.6  | 3.7  | 3.8  |        |               |           |        |             | 3.8  | 3.9  | 3.9  | 3.9  | 3.9  | 3.9  | 3.9         | 3.9  |
| Processing gains                                       | 1.8        | 1.9  | 1.9  | 1.9  |        |               |           |        |             | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0         | 2.0  |
| Total non-OPEC supply                                  | 48.4       | 48.5 | 48.9 | 49.8 |        |               |           |        |             | 48.9 | 50.8 | 49.7 | 51.1 | 20.6 | 50.3 | 9:09        | 20.7 |
| OPEC NGLs + non-conventional oils                      | 3.9        | 4.1  | 4.1  | 4.0  |        |               | 4.3 4.2   | 2 4.5  | 4.7         | 4.8  | 4.9  | 4.7  | 5.1  | 5.2  | 5.5  | 9:9         | 5.4  |
| (b) Total non-OPEC supply and OPEC NGLs                | 52.3       | 52.5 | 52.9 | 53.8 | 53.7   |               |           | 6 54.1 |             | 53.7 | 55.7 | 54.4 | 56.2 | 22.8 | 8.52 | 56.4        | 56.1 |
| OPEC crude oil production (secondary sources)          | 30.6       | 31.6 | 31.4 | 30.5 | 30.6   |               | 31.7 31.0 | 0 32.1 | 32.1        | 32.4 |      |      |      |      |      |             |      |
| Total supply   | 82.9       | 84.2 | 84.4 | 84.3 |        | 84.3 8        | 5.6 84.6  |        |             | 86.1 |      |      |      |      |      |             |      |
| Balance (stock change and miscellaneous)               | 0.4        | 0.3  | -0.5 | -1.7 | 9:0-   | -1.4          | -1.4 -1.3 | 3 -0.5 | 1.0         | 0.4  |      |      |      |      |      |             |      |
| OECD closing stock levels (mb.)                        |            |      |      |      |        |               |           |        |             |      |      |      |      |      |      |             |      |
| Commercial   | 2538       | 2585 | 2668 | 2598 | .,     |               |           | .,     |             |      |      |      |      |      |      |             |      |
| SPR  | 1450       | 1487 | 1499 | 1507 | 1506   | 1520 15       | 1524 1524 | 4 1530 | 1529        |      |      |      |      |      |      |             |      |
| Total  | 3988       | 4072 | 4167 | 4105 | 4166   | 4176 40       | 198 4098  |        |             |      |      |      |      |      |      |             |      |
| Oil-on-water   | 902        | 928  | 916  | 914  |        |               |           |        |             |      |      |      |      |      |      |             |      |
| Days of forward consumption in OECD                    |            |      |      |      |        |               |           |        |             |      |      |      |      |      |      |             |      |
| Commercial onland stocks                               | 51         | 52   | 54   | 54   | 54     | 53            |           |        | 52          |      |      |      |      |      |      |             |      |
| SPR  | 29         | 30   | 30   | 31   | 31     | 31            | 31 3      | 32 32  | 32          |      |      |      |      |      |      |             |      |
| Total  | 80         | 82   | 82   | 82   | 85     | 84            |           |        | 87          |      |      |      |      |      |      |             |      |
| Memo items   | <i>د د</i> | 7.7  | 0.1  | 7.0  |        |               |           |        |             |      | 7 0  | 70   |      | 0.1  | 0.0  | 7.0         | 0    |
| Fourier exports  | 7.3        | 1.1  | 32.0 | 22.2 | 8./    | 8.3<br>27.E 2 | 8.3 8.3   | 0 8.7  | 8.8<br>21.1 | 8.4  | 8.0  | 8.0  | 9.1  | 9.1  | 8.8  | 8.0<br>22.4 | 6.9  |
| (a) - (b)  | 30. I      | 51.5 | 32.U | 32.7 |        |               |           |        |             |      | 97.4 | 32.U | 31.3 | 30.3 | 30.0 | 97.4        | 31.1 |

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

|   | 2004 | 2002 | 2006 | 2007 | 1008 | 2008  | 3008  | 4008  | 2008  | 1009  | 2009  | 3009  | 4004  | 2009  |
|---|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| World demand                                  |      |      |      |      |      |       |       |       |       |       |       |       |       |       |
| 0ECD  | •    |      |      |      |      | -0.1  | -0.8  | -0.4  | -0.4  | -0.1  | -0.2  | 6:0-  | -0.5  | -0.4  |
| North America                                 | •    |      |      |      |      |       | -0.7  | -0.4  | -0.3  | -0.1  |       | -0.7  | -0.5  | -0.3  |
| Western Europe                                | ٠    |      |      |      |      | -0.1  |       |       |       |       | -0.1  | -0.1  |       | -0.1  |
| Pacific                                       | ٠    |      |      |      |      | -0.1  | -0.1  |       |       |       | -0.1  | -0.1  |       | ٠     |
| DCs   | •    |      |      |      |      |       | 0.1   |       |       |       |       | 0.1   |       | ٠     |
| FSU   | •    |      |      |      |      |       |       |       |       |       |       |       |       | ٠     |
| Other Europe                                  | •    |      |      |      |      |       |       |       |       |       |       |       |       | ٠     |
| China   |      |      |      |      |      |       |       |       |       |       |       |       |       | ٠     |
| (a) Total world demand                        | ٠    |      |      |      |      | -0.1  | -0.7  | -0.5  | -0.3  | -0.1  | -0.3  | 6:0-  | -0.5  | -0.4  |
| World demand growth                           |      |      |      |      |      | -0.13 | -0.72 | -0.45 | -0.33 | -0.13 | -0.12 | -0.14 | -0.06 | -0.11 |
| Non-OPEC supply                               |      |      |      |      |      |       |       |       |       |       |       |       |       |       |
| OECD OECD                                     | •    |      |      |      |      |       |       | -0.1  |       |       |       |       |       | ٠     |
| North America                                 |      |      |      |      |      |       | -0.3  | -0.2  | -0.1  |       |       | -0.1  | -0.1  | •     |
| Western Europe                                |      |      |      |      |      |       | 0.3   |       | 0.1   |       |       |       |       | •     |
| Pacific                                       | •    |      |      |      |      |       | -0.1  |       |       |       |       |       |       | ٠     |
| DCs   | •    |      |      |      |      |       | -0.3  |       | -0.1  | -0.1  | -0.1  | -0.1  |       | -0.1  |
| FSU   | ٠    |      |      |      | •    | ,     | -0.2  | •     | -0.1  |       |       |       |       | •     |
| Other Europe                                  |      |      |      |      |      |       |       |       |       |       |       |       |       |       |
| China   | •    |      |      |      |      |       |       |       |       |       |       |       |       | •     |
| Processing gains                              | •    |      |      |      |      |       |       |       |       |       |       |       |       |       |
| Total non-OPEC supply                         |      |      |      |      |      |       | 9:0-  | -0.2  | -0.2  | -0.1  | -0.1  | -0.1  | -0.1  | -0.1  |
| Total non-OPEC supply growth                  |      |      |      |      | 0.03 | -0.01 | -0.61 | -0.22 | -0.20 | -0.12 | -0.09 | 0.48  | 0.07  | 0.09  |
| OPEC NGLs + non-conventionals                 | -0.1 | -0.1 |      | -0.1 | -0.1 | -0.1  | -0.1  | -0.1  | -0.1  | -0.1  | -0.2  | -0.2  | -0.2  | -0.1  |
| (b) Total non-OPEC supply and OPEC NGLs       | -0.1 | -0.1 |      | -0.1 | -0.1 | -0.1  | -0.8  | -0.3  | -0.3  | -0.2  | -0.3  | -0.3  | -0.3  | -0.3  |
| OPEC crude oil production (secondary sources) | •    |      |      |      |      |       |       |       |       |       |       |       |       |       |
| Total supply                                  | -0.1 | -0.1 |      | -0.1 | -0.1 | -0.1  |       |       |       |       |       |       |       |       |
| Balance (stock change and miscellaneous)      | -0.1 | -0.1 |      | -0.1 | -0.1 |       |       |       |       |       |       |       |       |       |
| OECD closing stock levels (mb )               |      |      |      |      |      |       |       |       |       |       |       |       |       |       |
| Commercial                                    |      |      |      |      | 2    | 2     |       |       |       |       |       |       |       |       |
| SPR   |      | ٠    |      |      |      |       |       |       |       |       |       |       |       |       |
| Total   |      | ٠    |      |      | 2    | 5     |       |       |       |       |       |       |       |       |
| Oil-on-water                                  |      |      |      |      |      |       |       |       |       |       |       |       |       |       |
| Days of forward consumption in OECD           |      |      |      |      |      |       |       |       |       |       |       |       |       |       |
| Commercial onland stocks                      |      |      |      |      |      | 1.0   |       |       |       |       |       |       |       |       |
| SPR   | •    |      |      |      |      |       |       |       |       |       |       |       |       |       |
| Total   | •    |      |      | 9:0  |      | 1.6   |       |       |       |       |       |       |       |       |
| Memo items                                    |      |      |      |      |      |       | ć     |       |       |       |       |       |       |       |
| FSU net exports                               |      |      |      |      |      |       | 7:0-  |       | -0.0  |       |       | •     |       |       |
| (a) - (b)                                     | _    |      |      |      |      |       |       |       |       |       |       |       |       |       |

† This compares Table 32 in this issue of the MOMR with Table 32 in the September 2008 issue. This table shows only where changes have occurred.

Monthly Oil Market Report\_\_\_

| 2                                   | 2003 2   | 2004 21   | 2005 2   | 7006    | 2007  | 1004  | 2004  | 3004 40  | 4004 10   | 1005 20   | 2005 3005   | 5 4005  | 5 1006  | 6 2006  | 3006    | 4006  | 1007  | 2007  | 3007  | 4007  | 1008  | 2008  |
|-------------------------------------|----------|-----------|----------|---------|-------|-------|-------|----------|-----------|-----------|-------------|---------|---------|---------|---------|-------|-------|-------|-------|-------|-------|-------|
| Closing stock levels mb             |          |           |          |         |       |       |       |          |           |           |             |         |         |         |         |       |       |       |       |       |       |       |
| OECD onland commercial 2,           | 2,511 2, | 2,538 2,9 | 2,585 2, | 2,668 2 | 2,574 | 2,458 | 2,538 | 2,572 2, | 2,538 2,9 | 2,533 2,6 | 2,612 2,627 | 7 2,585 | 5 2,585 | 5 2,648 | 3 2,758 | 2,668 | 2,598 | 2,659 | 2,655 | 2,574 | 2,566 | 2,604 |
| North America 1,                    | 1,161 1, | 1,193 1,7 | 1,257 1, | 1,277   | 1,231 | 1,145 | 1,193 | 1,206 1, | 1,193 1,7 | 1,201 1,2 | 1,275 1,254 | 1,257   | 7 1,240 | 772,1 0 | 7 1,351 | 1,277 | 1,238 | 1,294 | 1,285 | 1,231 | 1,215 | 1,243 |
| Western Europe                      | 915      | 915       | 934      | 963     | 938   | 913   | 925   | 936      | 915       | 942 9     | 915 942     | 2 934   | 4 937   | 7 935   | 948     | 963   | 943   | 940   | 941   | 938   | 626   | 953   |
| OECD Pacific                        | 435      | 430       | 394      | 428     | 404   | 400   | 420   | 430      | 430       | 389       | 422 432     | 12 394  | 4 408   | 8 436   | , 459   | 428   | 417   | 426   | 429   | 404   | 392   | 408   |
| OECD SPR 1.                         | 1,411 1, | 1,450 1,  | 1,487 1, | 1,499 1 | 1,524 | 1,423 | 1,429 | 1,435 1, | 1,450 1,  | 1,462 1,4 | 1,494 1,494 | 1,487   | 7 1,487 | 7 1,493 | 3 1,495 | 1,499 | 1,507 | 1,506 | 1,520 | 1,524 | 1,530 | 1,529 |
| North America                       | 040      | 829       | 289      | 169     | 669   | 654   | 999   | 672      | 8/9       | ) 069     | 969 869     | 289 91  | 889     | 069 8   | 069 (   | 691   | 169   | 695   | 969   | 669   | 702   | 708   |
| Western Europe                      | 374      | 377       | 407      | 412     | 421   | 371   | 396   | 367      | 377       | 376       | 401 405     | 15 407  | 7 407   | 7 411   | 1 412   | 412   | 415   | 413   | 423   | 421   | 424   | 417   |
| OECD Pacífic                        | 396      | 396       | 393      | 396     | 404   | 398   | 398   | 396      | 396       | 396       | 395 393     | 13 393  | 3 392   | 2 393   | 393     | 396   | 401   | 401   | 403   | 404   | 404   | 404   |
| OECD total 3,                       | 3,921 3, | 3,988 4,  | 4,072 4, | 4,167 4 | 4,098 | 3,881 | 3,967 | 4,006 3, | 3,988 3,  | 3,995 4,1 | 4,106 4,121 | 1 4,072 | 2 4,072 | 2 4,141 | 4,253   | 4,167 | 4,105 | 4,166 | 4,176 | 4,098 | 4,096 | 4,132 |
| Oil-on-water                        | 887      | 906       | 928      | 916     | 945   | 906   | 891   | 894      | 902       | 934 6     | 931 926     | 928     | 8 962   | 2 971   | 1 972   | 916   | 914   | 400   | 934   | 945   | 936   | 936   |
| Days of forward consumption in OECD |          |           |          |         |       |       |       |          |           |           |             |         |         |         |         |       |       |       |       |       |       |       |
| OECD onland commercial              | 51       | 21        | 25       | 24      | 23    | 21    | 52    | 51       | 20        | 52        | 53 5        | 52 51   | 1 53    | 3 54    | \$22    | 54    | 24    | 54    | 53    | 23    | 24    | 22    |
| North America                       | 46       | 47        | 49       | 20      | 20    | 46    | 47    | 47       | 47        | 47        | 50 4        | 49 50   | 0 49    | 6       | ) 23    | 20    | 46    | 51    | 20    | 20    | 20    | 51    |
| Western Europe                      | 26       | 28        | 09       | 63      | 19    | 09    | 09    | 26       | 28        | 19        | 9 89        | 89 09   | 8 61    | 1 60    | 09 (    | 63    | 63    | 61    | 09    | 62    | 99    | 62    |
| OECD Pacific                        | 51       | 20        | 46       | 52      | 49    | 21    | 51    | 46       | 45        | 48        | 52 4        | 49 42   | 2 52    | 2 55    | 5 52    | 48    | 53    | 54    | 49    | 46    | 20    | 23    |
| OECD SPR                            | 29       | 29        | 30       | 30      | 32    | 30    | 29    | 28       | 28        | 30        | 30 3        | 30 29   | 9 31    | 1 30    | 30      | 30    | 31    | 31    | 31    | 31    | 32    | 32    |
| North America                       | 25       | 27        | 27       | 77      | 28    | 26    | 26    | 26       | 26        | 27        | 27 2        | 72 72   | 7 27    | 7 27    | 7 27    | 27    | 27    | 27    | 27    | 28    | 59    | 29    |
| Western Europe                      | 24       | 24        | 26       | 77      | 28    | 25    | 24    | 23       | 24        | 25        | 26 2        | 26 25   | 5 27    | 7 26    | 5 26    | 27    | 28    | 27    | 27    | 28    | 78    | 27    |
| OECD Pacific                        | 46       | 46        | 46       | 47      | 49    | 20    | 49    | 45       | 42        | 49        | 49 4        | 45 42   | 2 50    | 0 49    | 9 45    | 44    | 51    | 51    | 46    | 46    | 25    | 25    |
| OECD total                          | 62       | 08        | 82       | 82      | 82    | 81    | 81    | 79       | 78        | 82        | 83 8        | 82 80   | 0 84    | 4 84    | 1 85    | 84    | 82    | 82    | 84    | 84    | 87    | 87    |

| ਰ             |
|---------------|
| Š             |
| , mb          |
| ⊏             |
|               |
| <u>v</u>      |
| .0            |
| 3             |
| О             |
|               |
| gas           |
| Ö             |
| O             |
|               |
| Ō             |
| ≒             |
| モ             |
| Ø             |
| =             |
| ()            |
| PEC           |
| $\overline{}$ |
| $\ddot{\sim}$ |
| U             |
| and OPEC na   |
| ⊒             |
| g             |
| >             |
| Ź             |
| ö             |
| ₹             |
| SI            |
| PEC:          |
| PEC           |
| ш             |
| а_            |
| 0             |
| Ţ             |
| =             |
| 끅             |
| ~             |
| .22           |
| e 35          |
| 93            |
| - A1          |

|  | 2004          | 2005  | 2006  | Change<br>06/05 | 1007  | 2007  | 3007  | 4007         | 2007  | Change<br>07/06 | 1008         | 2008        | 3008  | 4008  | 2008  | Change<br>08/07 | 1009       | 5006  | 3006  | 4009  |       | Change<br>09/08 |
|--|---------------|-------|-------|-----------------|-------|-------|-------|--------------|-------|-----------------|--------------|-------------|-------|-------|-------|-----------------|------------|-------|-------|-------|-------|-----------------|
| * 0  | 1,7           | -     | ,6 5  | 0               |       | 1     | -     | 17.          | , L   |                 |              | -           | 140   |       |       | 0 0             | , r        |       |       |       |       | 000             |
| USA  | 7.05          | 2.02  | 7.30  | 0.02            | 7.40  | 7.58  | 1.41  | 7.54         | 7.50  | 0.14            | 7.04         | 7.75        | 9.19  | V0.7  | 7.57  | 0.07            | 68.7       |       |       |       | 7.83  | 0.00            |
| Callada  | 2.07          | 5.03  | 3.20  | 0.17            | 40.0  | 9.24  | 0.30  | 9.00         | 3.32  | 0.12            | 0.30         | 0.4         | 0.40  | 0.4/  | 14.0  | 0.09            | 0.30       |       |       |       | 5.50  | 0.03            |
| Nexico   | 3.83          | 3.17  | 3.69  | 80.0<br>1       | 3.38  | 3.59  | 3.45  | 5.53         | 3.49  | -0.21           | 3.29         | 3.18        | 5. 13 | 3.24  | 3.21  | -0.28           | 5.18       |       |       |       | 3.07  | -Q. 14          |
| North America  | 14.56         | 14.14 | 14.24 | D. II           | 14.38 | 14.41 | 14.22 | 14.20        | 14.30 | 0.06            | 14.22        | 14.34       | 13.78 | 14.41 | 14.19 |                 | 14.60      |       |       |       | 4.42  | 0.23            |
| Norway   | 3.19          | 2.97  | 2.78  | -0.19           | 2.72  | 2.46  | 2.48  | 2.57         | 2.56  | -0.22           | 2.51         | 2.39        | 2.43  | 2.45  | 2.45  | -0.11           | 2.40       |       |       |       | 2.30  | -0.15           |
| ON   | 0.30          | 0.38  | 1.71  | 9 9             | 0.31  | 0.73  | 0.30  | 0.31         | 0.31  | 70.07<br>W      | 1.09<br>0.28 | 70.1        | 0.00  | 0.43  | 0.30  | 0. 14           | 0.31       |       |       |       | 0.30  | - G             |
| Other Western Europe                                     | 0.50          | 0.51  | 0.54  | 0.03            | 0.68  | 0.69  | 69.0  | 69:0         | 0.68  | 0.15            | 0.73         | 0.72        | 0.74  | 0.71  | 0.73  | 0.04            | 0.73       |       |       |       | 0.73  | 0.00            |
| Western Europe   | 6.18          | 5.74  | 5.37  | -0.37           | 5.50  | 5.20  | 4.95  | 5.29         | 5.23  | -0.13           | 5.21         | 5.02        | 4.91  | 4.93  | 5.02  | -0.22           | 4.91       |       |       |       | 4.70  | -0.31           |
| Australia  | 0.52          | 0.53  | 0.51  | -0.02           | 0.51  | 0.54  | 0.54  | 0.51         | 0.53  | 0.02            | 0.47         | 0.53        | 0.54  | 99.0  | 0.56  | 0.03            | 69.0       |       |       |       | 89.0  | 0.13            |
| Other Pacific  | 0.05          | 0.05  | 0.05  | 0.00            | 90'0  | 90.0  | 0.09  | 0.11         | 80:0  | 0.03            | 0.11         | 0.10        | 0.11  | 0.13  | 0.11  | 0.04            | 0.14       |       |       |       | 0.14  | 0.03            |
| OECD Pacific   | 0.57          | 0.58  | 0.56  | -0.02           | 0.57  | 0.61  | 0.63  | 19:0         | 09:0  | 0.04            | 0.58         | 0.63        | 0.65  | 0.81  | 29.0  | 0.07            | 0.83       |       |       |       | 0.83  | 0.16            |
| Total OECD   | 21.31         | 20.45 | 20.17 | -0.28           | 20.45 | 20.22 | 19.79 | 20.11        | 20.14 | -0.03           | 20.01        | 19.99       | 19.35 | 20.15 | 19.87 | -0.27           | 20.35      |       |       |       | 19.95 | 80.0            |
| Brunei   | 0.21          | 0.21  | 0.22  | 0.01            | 0.20  | 0.18  | 0.19  | 0.19         | 0.19  | -0.03           | 0.19         | 0.16        | 0.16  | 0.18  | 0.17  | -0.02           | 0.18       |       |       |       | 0.18  | 0.01            |
| India  | 0.79          | 0.76  | 0.79  | 0.03            | 0.82  | 0.81  | 0.81  | 0.82         | 0.82  | 0.02            | 0.83         | 0.81        | 0.81  | 0.82  | 0.82  | 00.00           | 0.81       |       |       |       | 0.82  | 0.00            |
| Malaysia   | 0.79          | 0.77  | 0.76  | -0.01           | 0.75  | 0.75  | 0.76  | 0.80         | 0.76  | 0.01            | 0.78         | 9.76        | 0.74  | 98.0  | 0.79  | 0.02            | 0.85       |       |       |       | 0.83  | 0.04            |
| Thailand   | 0.25          | 0.30  | 0.32  | 0.02            | 0.33  | 0.34  | 0.34  | 0.34         | 0.34  | 0.02            | 0.34         | 0.35        | 0.35  | 0.35  | 0.35  | 0.01            | 0.36       |       |       |       | 0.36  | 0.01            |
| Vietnam  | 0.42          | 0.39  | 0.37  | -0.02           | 0.36  | 0.35  | 0.34  | 0.35         | 0.35  | -0.02           | 0.34         | 0.31        | 0.34  | 0.43  | 0.36  | 0.01            | 0.42       |       |       |       | 0.44  | 0.08            |
| Asia others  | 0.18          | 0.26  | 0.26  | 0.0             | 0.27  | 0.27  | 0.27  | 0.26         | 0.27  | 00:00           | 0.28         | 0.28        | 0.28  | 0.30  | 0.28  | 0.02            | 0.30       |       |       |       | 0.30  | 0.01            |
| Other Asia<br>Argentina                                  | 7.00          | 2.08  | 27.7  | 0.04            | 2.73  | 72.0  | 11.7  | 2.76<br>0.75 | 21.7  | 0.00            | 67.7         | 7.70        | 2.08  | 2.94  | 07.7  | 0.04            | 26.7       |       |       |       | 2.92  | 0.16            |
| Againia  | 1.80          | 1.98  | 2.11  | 0.00            | 2.15  | 2.15  | 2.16  | 2.14         | 2.15  | 0.04            | 2.23         | 2.28        | 2.34  | 2.42  | 2.32  | 0.02            | 2.71       |       |       |       | 2.59  | 72.0            |
| Colombia   | 0.54          | 0.53  | 0.54  | 0.01            | 0.53  | 0.53  | 0.54  | 0.55         | 0.54  | 000             | 0.57         | 0.59        | 0.61  | 0.60  | 0.59  | 0.05            | 0.61       |       |       |       | 0.61  | 0.02            |
| Trinidad & Tobago  | 0.16          | 0.18  | 0.18  | 00:0            | 0.16  | 0.16  | 0.16  | 0.15         | 0.16  | -0.02           | 0.16         | 0.15        | 0.16  | 0.16  | 0.16  | 0.00            | 0.16       |       |       |       | 0.16  | 0.00            |
| L. America others  | 0.26          | 0.30  | 0.26  | -0.03           | 0.26  | 0.27  | 0.27  | 0.28         | 0.27  | 0.00            | 0.27         | 0.28        | 0.28  | 0.27  | 0.28  | 0.01            | 0.27       |       |       |       | 0.27  | 0.00            |
| Latin America  | 3.55          | 3.77  | 3.86  | 0.09            | 3.88  | 3.88  | 3.88  | 3.88         | 3.88  | 0.02            | 4.00         | 4.00        | 4.14  | 4.17  | 4.08  | 0.20            | 4.27       |       |       |       | 4.33  | 0.25            |
| Bahrain  | 0.21          | 0.21  | 0.21  | 0.00            | 0.21  | 0.21  | 0.21  | 0.21         | 0.21  | 0.00            | 0.21         | 0.21        | 0.21  | 0.21  | 0.21  | 00.00           | 0.21       |       |       |       | 0.21  | 0.00            |
| Oman   | 0.79          | 0.78  | 0.75  | -0.03           | 0.73  | 0.72  | 0.71  | 0.70         | 0.71  | -0.03           | 0.72         | 0.74        | 0.74  | 0.78  | 0.75  | 0.03            | 0.79       |       |       |       | 0.80  | 0.05            |
| Syria  | 0.49          | 0.45  | 0.42  | -0.03           | 0.41  | 0.40  | 0.40  | 0.39         | 0.40  | -0.02           | 0.39         | 0.38        | 0.38  | 0.38  | 0.38  | -0.02           | 0.37       |       |       |       | 0.37  | -0.01           |
| Yemen  | 0.41          | 0.41  | 0.37  | 0.03            | 0.35  | 0.34  | 0.33  | 0.33         | 0.34  | -0.04           | 0.31         | 0.31        | 0.30  | 0.29  | 0.30  | -0.03           | 0.29       |       |       |       | 0.28  | -0.03           |
| Middle East  | 0.90          | 1.85  | 0.15  | 0.10            | 1.09  | 1.0/  | CO. 1 | 1.03         | 1.00  | 6.09            | 1.03         | 40.<br>1.04 | 50.7  | 0.10  | 40.E  | -0.02           | 51.0       |       |       |       | 01.0  | 0.01            |
| Condo  | 0.10          | 0.24  | 0.25  | 0.07            | 0.25  | 0.23  | 0.24  | 0.25         | 0.24  | 0.0             | 0.26         | 0.26        | 0.26  | 0.29  | 0.27  | 0.02            | 0.30       |       |       |       | 0.33  | 0.07            |
| Egypt  | 0.71          | 0.70  | 0.67  | -0.02           | 0.64  | 0.63  | 0.63  | 0.63         | 0.63  | -0.04           | 0.62         | 0.61        | 0.61  | 0.63  | 0.62  | -0.01           | 0.62       |       |       |       | 0.61  | -0.01           |
| Equatorial Guinea  | 0.30          | 0.36  | 0.37  | 0.01            | 0.36  | 0.37  | 0.37  | 0.37         | 0.37  | 0.00            | 0.38         | 0.38        | 0.38  | 0.38  | 0.38  | 0.01            | 0.38       |       |       |       | 0.37  | -0.01           |
| Gabon  | 0.25          | 0.25  | 0.25  | 0.00            | 0.25  | 0.25  | 0.25  | 0.25         | 0.25  | 0.00            | 0.24         | 0.24        | 0.24  | 0.26  | 0.24  | -0.01           | 0.26       |       |       |       | 0.27  | 0.02            |
| South Africa   | 0.19          | 0.19  | 0.19  | 0.00            | 0.18  | 0.18  | 0.18  | 0.18         | 0.18  | -0.01           | 0.17         | 0.17        | 0.17  | 0.17  | 0.17  | -0.01           | 0.16       |       |       |       | 0.16  | -0.01           |
| Sudan  | 0.30          | 0.34  | 0.40  | 90:0            | 0.50  | 0.50  | 0.48  | 0.51         | 0.50  | 0.10            | 0.52         | 0.52        | 0.52  | 0.50  | 0.52  | 0.02            | 0.50       |       |       |       | 0.50  | -0.01           |
| Africa other   | 0.21          | 0.25  | 0.32  | 0.07            | 0.34  | 0.34  | 0.34  | 0.37         | 0.35  | 0.03            | 0.38         | 0.38        | 0.38  | 0.39  | 0.38  | 0.03            | 0.40       |       |       |       | 0.41  | 0.03            |
| Total DCs  | 10.48         | 10.82 | 10.94 | 0.07            | 10.96 | 10.90 | 10.88 | 10.98        | 10.93 | 0.0             | 11.10        | 11.03       | 11.16 | 11.53 | 11.20 | 0.03            | 11.59      |       |       |       | 1.67  | 0.03            |
| FSU  | 11.14         | 11.55 | 12.02 | 0.47            | 12.51 | 12.45 | 12.50 | 12.62        | 12.52 | 0.50            | 12.62        | 12.66       | 12.48 | 13.09 | 12.71 | 0.19            | 13.13      |       |       |       | 13.06 | 0.34            |
| Russia   | 9.19          | 9.44  | 9.62  | 0.21            | 9.87  | 9.83  | 68.6  | 9.87         | 6.87  | 0.22            | 9.78         | 9.74        | 9.84  | 10.03 | 9.85  | -0.02           | 10.01      |       |       |       | 9.93  | 80:0            |
| Kazakhstan   | 1.18          | 1.23  | 1.30  | 0.07            | 1.35  | 1.34  | 1.35  | 1.36         | 1.35  | 0.05            | 1.42         | 1.44        | 1.32  | 1.50  | 1.42  | 0.07            | 1.54       |       |       |       | 1.52  | 0.10            |
| Azerbajan<br>ESII others                                 | 0.31          | 0.44  | 0.65  | 0.21            | 0.85  | 0.86  | 0.81  | 0.92         | 0.86  | 0.21            | 0.96         | 7.02        | 0.86  | 1.09  | 0.98  | 0.12            | 1.11       |       |       |       | 1.14  | 0.16            |
| Other Furone   | 0.17          | 0.16  | 0.15  | 0.02            | 0.15  | 0.15  | 0.15  | 0.14         | 0.15  | 0.07            | 0.14         | 0.14        | 0.14  | 0.14  | 0.14  | 0.00            | 0.14       |       |       |       | 0.14  | 000             |
| China  | 3.50          | 3.64  | 3.69  | 90:0            | 3.78  | 3.82  | 3.73  | 3.75         | 3.77  | 0.07            | 3.81         | 3.86        | 3.84  | 3.91  | 3.85  | 0.09            | 3.91       |       |       |       | 3.90  | 0.04            |
| Non-OPEC production                                      | 46.60         | 46.61 | 46.98 | 0.36            | 47.85 | 47.53 | 47.05 | 47.59        | 47.50 | 0.53            | 47.68        | 47.69       | 46.98 | 48.81 | 47.79 | 0.28            | 49.12      |       |       |       | 18.72 | 0.93            |
| Processing gains   | 1.83          | 1.86  | 1.90  | 0.04            | 1.92  | 1.92  | 1.92  | 1.93         | 1.92  | 0.02            | 1.95         | 1.95        | 1.95  | 1.95  | 1.95  | 0.03            | 1.98       |       |       |       | 1.98  | 0.03            |
| Non-OPEC supply  | 48.43         | 48.48 | 48.88 | 0.40            | 49.77 | 49.45 | 48.97 | 49.52        | 49.43 | 0.55            | 49.63        | 49.64       | 48.93 | 50.76 | 49.74 | 0.31            | 51.11      |       |       |       | 0.70  | 0.97            |
| OPEC NGL   | 3.73          | 3.91  | 3.93  | 0.02            | 3.94  | 4.12  | 4.21  | 4.21         | 4.12  | 0.20            | 4.37         | 4.57        | 4.67  | 4.79  | 4.60  | 0.47            | 5.02       | 5.13  | 5.29  | 5.43  | 5.22  | 0.62            |
| ODEC AICL - NCE  | - 6           | 2 5   | ± 5   | 20.02           | 0.00  | 00.0  | 0.0   | 2 5          | 0.03  | 50.0            | = :          |             | - F   | = 8   | 5 .   | 0.02            | - <b>:</b> |       |       |       | ± 6   | to:0            |
| OPEC (NGL+NCF)   | 3.90          | 4.07  | 4.07  | 0.00            | 4.02  | 4.21  | 4.30  | 4.31         | 4.21  | 0.14            | 4.47         | 4.67        | 4.77  | 4.89  | 4.71  | 0.49            | 5.13       | 5.24  |       |       | 5.36  | 99:0            |
| Non-OPEC & OPEC (NGL+NCF)                                | 52.33         | 52.54 | 52.94 | 0.40            | 53.79 | 53.66 | 53.27 | 53.83        | 53.64 | 69.0            | 54.11        | 54.31       | 53.70 | 55.65 | 54.44 | 0.81            | 56.24      | 55.79 | 55.81 | 56.44 | 26.07 | 1.63            |
| Note: Totals may not add up due to independent rounding. | ndent roundir | .g.   |       |                 |       |       |       |              |       |                 |              |             |       |       |       |                 |            |       |       |       |       |                 |

| Table 36: World Rig Count | Count |       |          |       |       |       |       |            |          |       |       |       |   |       |        |       |       |       |       |   |          |
|---------------------------|-------|-------|----------|-------|-------|-------|-------|------------|----------|-------|-------|-------|---|-------|--------|-------|-------|-------|-------|---|----------|
|                           |       |       | Change   |       |       |       |       |            | Change   |       |       |       |   | J     | Change |       |       |       |       |   | Change   |
|                           | 2004  | 2002  | 05/04    | 10.06 | 20 06 | 30.06 | 40 06 | 2006       | 90/90    | 10.07 | 20 07 | 30.07 | 40.07                                   |       | 90/10  | 10 08 | 20 08 | Aug08 | Sep08 | 30.08                                   | Sep/Aug  |
| USA                       | 1,190 | 1,378 | 188      | 1,519 | 1,632 | 1,719 | 1,719 | 1,648      | 270      | 1,733 | 1,757 | 1,788 | 1,790                                   | 1,767 | 119    | 1,770 | 1,864 | 1,987 | 2,014 | 1,978                                   | 27       |
| Canada                    | 369   | 490   | 121      | 999   | 282   | 464   | 440   | 470        | -20      | 532   | 139   | 348   | 356                                     | 344   | -126   | 202   | 169   | 449   | 435   | 432                                     | -14      |
| Mexico                    | 110   | 107   | -3       | 82    | 82    | 77    | 84    | 83         | -24      | 06    | 88    | 96    | 93                                      | 92    | 6      | 96    | 106   | 104   | 102   | 103                                     | -2       |
| North America             | 1,669 | 1,975 | 306      | 2,269 | 1,999 | 2,290 | 2,243 | 2,200      | 225      | 2,355 | 1,984 | 2,232 | 2,240                                   | 2,203 | c      | 2,373 | 2,139 | 2,540 | 2,551 | 2,512                                   | 11       |
| Norway                    | 17    | 17    | 0        | 19    | 20    | 16    | 6     | 16         | <u>-</u> | 16    | 19    | 18    | 17                                      | 18    | 2      | 17    | 21    | 17    | 21    | 21                                      | 4        |
| NK                        | 16    | 21    | 2        | 29    | 27    | 26    | 15    | 24         | 33       | 25    | 29    | 27    | 22                                      | 26    | 2      | 19    | 21    | 24    | 22    | 24                                      | -2       |
| Western Europe            | 99    | 99    | 0        | 77    | 78    | 73    | 99    | 73         | 80       | 72    | 78    | 9/    | 73                                      | 75    | 2      | 71    | 78    | 79    | 18    | 83                                      | 2        |
| OECD Pacific              | 22    | 25    | 3        | 25    | 28    | 25    | 28    | 27         | 2        | 24    | 30    | 32    | 30                                      | 29    | 2      | 32    | 39    | 38    | 41    | 39                                      | 3        |
| Total OECD                | 1,755 | 2,065 | 310      | 2,371 | 2,105 | 2,389 | 2,336 | 2,300      | 235      | 2,450 | 2,091 | 2,340 | 2,342                                   | 2,306 | 9      | 2,476 | 2,256 | 2,657 | 2,673 | 2,634                                   | 16       |
| Other Asia                | 126   | 142   | 16       | 153   | 150   | 156   | 152   | 153        | 11       | 158   | 157   | 151   | 150                                     | 154   | _      | 149   | 154   | 157   | 154   | 155                                     | ç        |
| Latin America             | 116   | 129   | 13       | 137   | 151   | 153   | 153   | 149        | 20       | 183   | 178   | 173   | 181                                     | 178   | 29     | 181   | 181   | 196   | 204   | 181                                     | 80       |
| Middle East               | 70    | 72    | 2        | 72    | 79    | 82    | 82    | 80         | œ        | 82    | 82    | 87    | 98                                      | 82    | 2      | 68    | 91    | 93    | 92    | 93                                      | Ţ        |
| Africa                    | 51    | 54    | c        | 26    | 62    | 89    | 77    | <i>L</i> 9 | 13       | 75    | 80    | 88    | 88                                      | 83    | 16     | 84    | 06    | 66    | 103   | 46                                      | 4        |
| Total DCs                 | 363   | 397   | 34       | 421   | 442   | 429   | 472   | 449        | 52       | 510   | 510   | 200   | 515                                     | 511   | 62     | 512   | 520   | 545   | 553   | 540                                     | 80       |
| Non-OPEC Rig Count        | 2,120 | 2,465 | 345      | 2,794 | 2,549 | 2,850 | 2,806 | 2,751      | 286      | 2,950 | 2,593 | 2,842 | 2,850                                   | 2,808 | 22     | 3,006 | 2,795 | 3,220 | 3,244 | 3,192                                   | 24       |
| Algeria                   | 19    | 21    | 2        | 21    | 21    | 28    | 27    | 24         | က        | 25    | 26    | 28    | 28                                      | 27    | က      | 26    | 27    | 23    | 26    | 24                                      | က        |
| Angola                    | 3     | 3     | 0        | 4     | 4     | 4     | 4     | 4          | -        | 2     | 4     | es    | 2                                       | 4     | 0      | 2     | 9     | 2     | 4     | 2                                       | Ţ        |
| Ecuador                   | 10    | 12    | 2        | 12    | 1     | 1     | 12    | 11         | <u>-</u> | 12    | 10    | 11    | 10                                      | 11    | 0      | 7     | 6     | 12    | 14    | 12                                      | 2        |
| Indonesia                 | 49    | 54    | 2        | 22    | 43    | 46    | 52    | 49         | ς        | 49    | 29    | 09    | 99                                      | 22    | 80     | 99    | 19    | 63    | 09    | 99                                      | 5-       |
| Iran                      | 41    | 40    | <u>-</u> | 40    | 45    | 47    | 45    | 44         | 4        | 51    | 51    | 51    | 20                                      | 20    | 9      | 20    | 20    | 20    | 20    | 20                                      | 0        |
| Iraq                      | na    | na    | na       | na    | na    | na    | na    | na         | na       | na    | na    | na    | na                                      | na    | na     | na    | na    | na    | na    | na                                      | na       |
| Kuwait                    | 10    | 12    | 2        | 12    | 13    | 14    | 15    | 14         | 2        | 14    | 13    | 13    | ======================================= | 12    | -5     | 12    | 11    | 13    | 12    | 12                                      | <u>-</u> |
| Libya                     | 10    | 6     | <u>-</u> | 6     | 6     | 10    | 12    | 10         | -        | 13    | 12    | 14    | 14                                      | 13    | 3      | 14    | 15    | 15    | 16    | 15                                      | _        |
| Nigeria                   | 80    | 6     | _        | 10    | 6     | 10    | 10    | 10         | -        | 80    | 7     | 80    | 10                                      | 80    | -2     | 6     | 80    | 4     | 7     | 9                                       | 3        |
| Qatar                     | 6     | 12    | 3        | 13    | 10    | Ξ     | 6     | Ξ          | <u>.</u> | Ε     | 12    | 13    | 14                                      | 13    | 2      | =     | 12    | 10    | Ξ     | ======================================= | _        |
| Saudi Arabia              | 32    | 36    | 4        | 54    | 09    | 70    | 76    | 99         | 29       | 76    | 9/    | 78    | 77                                      | 11    | 12     | 78    | 77    | 75    | 76    | 76                                      | _        |
| UAE                       | 16    | 16    | 0        | 17    | 16    | 16    | 16    | 16         | 0        | 14    | 15    | 15    | 14                                      | 14    | -5     | 12    | 12    | 13    | 13    | 13                                      | 0        |
| Venezuela                 | 55    | 19    | 12       | 78    | 83    | 82    | 7.7   | 81         | 14       | 76    | 80    | 77    | 71                                      | 9/    | -5     | 82    | 81    | 70    | 78    | 7.7                                     | 80       |
| OPEC Rig Count            | 262   | 291   | 29       | 325   | 324   | 352   | 355   | 339        | 48       | 354   | 362   | 371   | 368                                     | 362   | 23     | 372   | 375   | 353   | 367   | 366                                     | 14       |
| Worldwid Rig Count*       | 2,382 | 2,756 | 374      | 3,119 | 2,873 | 3,202 | 3,161 | 3,090      | 334      | 3,304 | 2,955 | 3,213 | 3,218                                   | 3,170 | 80     | 3,378 | 3,170 | 3,573 | 3,611 | 3,558                                   | 38       |
| of which:                 |       |       |          |       |       |       |       |            |          |       |       |       |   |       |        |       |       |       |       |   |          |
| liO                       | 877   | 626   | 82       | 1,069 | 1,060 | 1,169 | 1,156 | 1,114      | 155      | 1,266 | 1,155 | 1,257 | 1,288                                   | 1,239 | 125    | 1,374 | 1,320 | 1,440 | 1,462 | 1,443                                   | 22       |
| Gas                       | 1,486 | 1,777 | 291      | 2,035 | 1,802 | 2,016 | 1,983 | 1,959      | 182      | 2,017 | 1,782 | 1,934 | 1,906                                   | 1,910 | -49    | 1,970 | 1,819 | 2,098 | 2,109 | 2,079                                   | Ξ        |
| Others                    | 20    | 22    | 2        | 14    | 13    | 18    | 21    | 16         | 9-       | 20    | 19    | 20    | 24                                      | 21    | 5      | 34    | 31    | 35    | 40    | 36                                      | 2        |
|                           |       |       |          |       |       |       |       |            |          |       |       |       |   |       |        |       |       |       |       |   |          |

\*/Excludes China and FSU.
na - Not available.
Source: Baker Hughes International & Secretariat's Estimates.
Note: Tddals may not add up due to independent rounding.

### Contributors to the OPEC Monthly Oil Market Report

### **Editor-in-Chief**

Hasan M. Qabazard, Director, Research Division

email: <a href="mailto:hqabazard@opec.org">hqabazard@opec.org</a>

#### **Editor**

Mohammad Alipour-Jeddi, Head, Petroleum Studies Department

email: majeddi@opec.org

**Analysts** 

Crude Oil Price Movements Fayez Al-Nassar

and Oil Futures Market

Commodity Markets

e-mail: fal-nassar@opec.org

Dr. O. López-Gonzalez

e-mail:olopez@opec.org

Highlights of the World Economy Mohamed El-Shahati

email: melshahati@opec.org

Claude Clemenz

email: cclemenz@opec.org

World Oil Demand Esam Al-Khalifa

email: ekhalifa@opec.org

World Oil Supply Haidar Khadadeh

email: hkhadadeh@opec.org

Product Markets and Refinery Safar Keramati

Operations email: <u>skeramati@opec.org</u>

The Tanker Market and Oil Trade Osam Abdul-Aziz

Emil: oabdul-aziz@opec.org

Stock Movements Brahim Aklil

email: baklil@opec.org

Technical and editorial team Aziz Yahyai

email: ayahyai@opec.org

Douglas Linton

email: dlinton@opec.org

#### **Data services**

Fuad Al-Zayer, Head Data Services Department (fzayer@opec.org)

Puguh Irawan (pirawan@opec.org), Ramadan Janan (rjanan@opec.org)

Monika Psenner (World Economy), Firouz Azarnia (Product, Refinery, & Tanker), Hannes Windholz (Oil Trade), Pantelis Christodoulides (World Oil Demand, Stock Movements), Sheela Kriz (Crude Oil Prices),

Production, design and circulation

Ada Fritsch, Jennett Paulich, Andrea Birnbach, Gabriele Berger, Evelyn Oduro-Kwateng

Unless separately credited, material may be reproduced without permission, but kindly mention OPEC as source.

# OPEC Basket average price

US\$ per barrel

→ down 15.56 in September September 2008 96.85

 August 2008
 112.41

 Year-to-date
 108.10

# September OPEC production

in million barrels per day, according to secondary sources

| Algeria   | 1.41 | SP Libyan AJ | 1.72  |
|-----------|------|--------------|-------|
| Angola    | 1.77 | Nigeria      | 2.00  |
| Ecuador   | 0.50 | Qatar        | 0.86  |
| Indonesia | 0.85 | Saudi Arabia | 9.38  |
| IR Iran   | 3.93 | $U\!AE$      | 2.60  |
| Iraq      | 2.23 | Venezuela    | 2.33  |
| Kuwait    | 2.59 | TOTAL        | 32.16 |

# Supply and demand

in million barrels per day

2008 2009

World demand 86.5 World demand 87.2 Non-OPEC supply 54.4 Non-OPEC supply 56.1 **Difference 32.0 Difference 31.1** 

Non-OPEC supply includes OPEC NGLs and non-conventional oils. Totals may not add due to independent rounding.

### Stocks

OECD commercial oil inventories stood at 2,645 mb at end-August, representing more than 54 days of forward cover. Despite a slump in September, stocks remained comfortable, particularly crude oil.

# World economy

World GDP growth revised down to 3.8% in 2008 and 3.3% for 2009.