OPEC

# Organization of the Petroleum Exporting Countries

# Monthly Oil Market Report

***April 2010***

*Feature Article:*

***Economic optimism driving oil price momentum***




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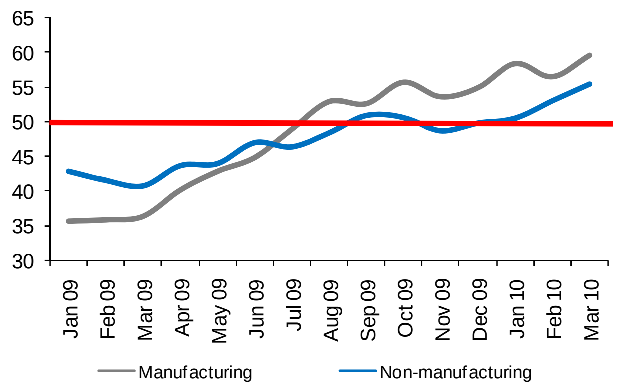
# Oil Market Highlights

- The **OPEC Reference Basket** rose $4.22 in March to average $77.21/b, the highest since the onset of the financial crisis in September 2008. Volatility was lower with the Basket fluctuating between $75.51/b and $78.70/b. The rise in the OPEC Basket was driven by the bullish sentiment of the market, supported by improving expectations about global economic growth and US dollar weakness against the euro as concerns over Greece's fiscal problems temporarily eased. Futures hit an 18-month high on 6 April with Nymex WTI front-month settling at $86.89/b, in the week when speculators pushed net long positions on the Nymex to a new record high. Prices have eased in recent days and the OPEC Reference Basket stood at $81.52/b on 13 April.
- The **world economy** continues to improve and is now expected to grow by 3.5% in 2010. The OECD is forecast to grow by 1.9% in 2010 compared to the previous forecast of 1.7%. The US is expected to contribute the most within the OECD with growth of 2.6%. Japan is forecast to grow by 1.5% and the Euro-zone by 0.7%. China and India are forecast to contribute significantly to global growth expanding at 9.5% and 7.1% respectively. Challenges to this benign outlook include concerns about the level of public debt in many OECD countries, continued high unemployment levels and the risk of a correction in China if government efforts to avoid overheating misfire.
- **World oil demand** is estimated to have contracted by 1.4 mb/d in 2009, broadly unchanged from the previous report. In 2010, global consumption is projected to increase by 0.9 mb/d, in line with the previous forecast. Economic activities in the US are playing the wild card for the world oil demand growth. All the expected growth in oil demand this year is projected to come from the non-OECD region led by Asia. Overall, most growth will come from transport and petrochemical sectors worldwide.
- **Non-OPEC oil supply** is expected to increase by 0.5 mb/d over 2009 to average 51.5 mb/d in 2010, an upward revision of 0.1 mb/d from last month. The adjustment was supported mainly by healthy production during the first few months of the year. Anticipated growth continues to be driven by Brazil, US, Russia, Colombia, Kazakhstan, and Azerbaijan, partially offset by declines in Norway, Mexico, and UK. OPEC NGLs and non-conventional oils are forecast to increase by 0.52 mb/d in 2010 to average 4.9 mb/d. In March, total OPEC crude production averaged 29.26 mb/d, a decline of 28 tb/d over the previous month.
- A combination of prolonged winter with refinery maintenance and a continuation of discretionary-run cuts by refiners have provided support for **product markets** and refining margins across the board. With completion of maintenance in the Atlantic basin in May as well as a lack of robust demand for major products, product market sentiment is not expected to strengthen further in the future to encourage refiners to change their current low run strategy. This situation would not provide sufficient support for crude market fundamentals in the coming months.
- OPEC spot fixtures increased in March by 2.36 mb/d to average 12.8 mb/d, while sailings from OPEC were steady with a minor decline of 23 tb/d. The **tanker market** for crude oil showed a mixed pattern with rates for VLCCs remaining flat due to balanced tonnage demand. In contrast, Suezmax and Aframax tankers displayed modest growth, on the back of open arbitrage. For the clean market, freight rates decreased on all reported routes, except from the Caribbean.
- **US commercial stocks** rose 5.3 mb in March driven by a build in crude which outpaced a draw in products. Inventories now stand at around 82 mb above the five-year average. EU 15 plus Norway total oil inventories fell slightly in March, but still remained about 30 mb above the seasonal average. Japan's commercial oil stocks dropped in February, but then reversed the trend in March. Inventories still show a deficit with the historical norm.
- The **demand for OPEC crude** in 2009 is estimated at 28.9 mb/d, following a downward revision of 54 tb/d from the previous report. This represents a decline of 2.3 mb/d compared to the previous year. In 2010, demand for OPEC crude is expected to average 28.8 mb/d, representing a downward adjustment of 135 tb/d from the previous assessment and a decline of 0.1 mb/d from the previous year.

# Economic optimism driving oil price momentum

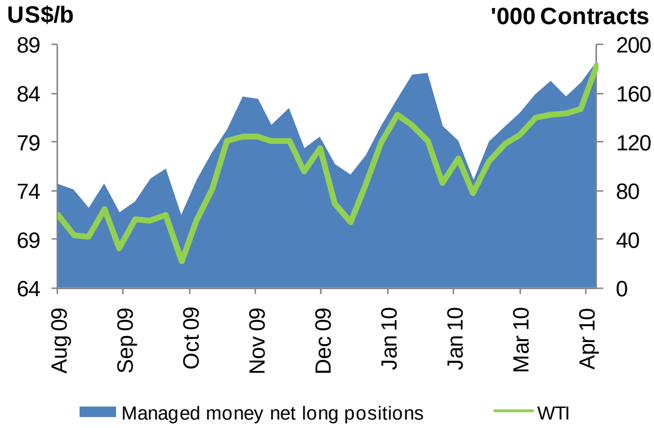
- Recently, a steady stream of positive macroeconomic indicators has lifted sentiment about world economic prospects. The latest data shows that manufacturing continues to pick up in the US (*see **Graph 1***). Services have also been improving, although this has been more gradual. Similar trends can be seen throughout the developed and developing world. Within OECD, positive signals include the employment situation in the US in March, as payrolls rose especially in the private sector, as well as improving consumer sentiment, which has been reflected in retail sales. The Bank of Japan is becoming more optimistic about the recovery on signs that exports are replacing stimulus measures as the main driver of growth. However, most of the activity is in emerging markets, particularly in China, which is seen to account for around one third of global growth this year, thanks to a massive fiscal stimulus package spread over two years.
- The more positive sentiment has also boosted investment flows into equities and commodities including oil. The S&P 500 rose by 13% since the correction in February, while the Shanghai Composite index has also improved by 7%. And, just this week, the Dow Jones Industrial average closed above 11,000, for the first time since 2008. On the Nymex, speculators, as reflected by money manager activity, have extended net long positions in the crude oil futures markets to a record high. Additionally, positive economic news in the US has also encouraged speculative activity in product markets as open interest for Nymex gasoline and heating oil futures and options have reached all-time highs.
- These developments have had a combined impact on crude oil prices. Since the beginning of the year, prices have fluctuated within a stable range of around $72-82/b, however in recent weeks, the prices moved further up to reach an 18-month high of more than $86/b on 6 April (*see **Graph 2***). In addition to the positive economic sentiment, prices have also risen on the appreciation of the US dollar against the euro.

**Graph 1: Economic recovery in US led by manufacturing**




*Source: ISM*

**Graph 2: Co-movement of oil prices and speculative activity**




- Amid this optimistic outlook, it is important not to overlook lingering concerns. Foremost among the downside risks to the outlook in the OECD is the managing of exit policies and looming fiscal imbalances. Within the OECD, the Euro-zone is still facing challenges in addition to sovereign debt issues. After positive growth in the third quarter, the Euro-zone economy slipped back to zero growth in the fourth. Additionally, unemployment is still rising and retail sales have fallen.
- In emerging markets, signs of inflation have become more evident. In India, food inflation has reached high levels and the government raised the reverse repurchase rate in March for the first time in almost two years. Inflation is also rising in China, where strong growth fuelled by the huge fiscal stimulus is leading to a general overheating of the economy.
- In light of the uncertainty in the macroeconomic environment and its potential impact on oil demand, OPEC Ministers agreed to leave production levels unchanged at the recent Meeting of the Conference in Vienna. Excess OPEC crude oil spare capacity of more than 6 mb/d in combination with higher inventories was seen as sufficient to accommodate any rise in demand. Ministers will hold their next Meeting to review the oil market in October.
- In the meantime, the recent IEF meeting in Cancun, Mexico, underlined the consensus among consumers and producers that prices around $70-80/b are essential to promote adequate investment without hindering the economic recovery. Current conditions in the world economy and the very comfortable outlook for oil market fundamentals are likely to remain supportive for prices to continue to move within this range over the coming months.

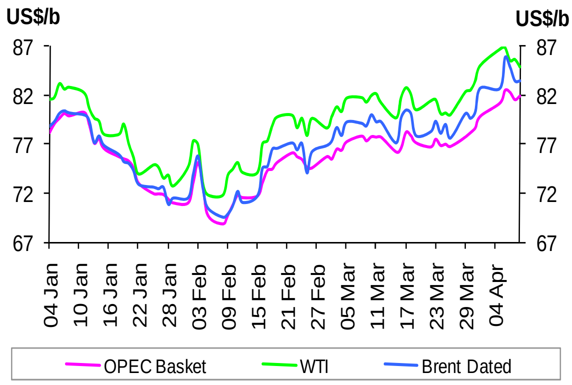
# Crude Oil Price Movements

*OPEC Reference Basket hit a 18-month high in March, driven by bullish market sentiment*

## OPEC Reference Basket

The OPEC Reference Basket increased $4.22 in March to average $77.21/b, the highest monthly average since the onset of the financial crisis in September 2008.

Graph 1: Crude oil price movement




Volatility continued to decline. The OPEC Reference Basket oscillated around $3.19/b in March, between $75.51 and $78.70/b compared with $7.28 in February and $9.28 in January. At $77.21/b, the OPEC Reference Basket is almost 70% higher than a year ago.

The upward trend was attributed to the bullish sentiment in the oil market which continued to be driven by rising positive expectations about global economic growth as well as the recovery in the value of the euro against the dollar as concerns over Greece's fiscal problems temporarily eased.

However, while the OPEC Reference Basket rose by 5.8% in March, the gain among the components varied between 3.2% and 7.4%. Brent-related crudes were the main beneficiaries with a rise of around 7%, which corresponds to the increase in Dated Brent in March, which was higher than the gain posted by WTI. The surge in Brent crude and African Brent-related crude was significant in the first half of March, supported by stronger demand for gasoline-rich crude, which pushed the gasoline crack spread higher. Brent-related crudes were also supported by Asian buying tenders. However, Brent-related crudes started to weaken in the second half of the month on the back of increasing supplies and lower demand from refiners, particularly in Europe, who started to look for cheaper alternative crudes such as North Sea grades with heavier West African grades being the most affected. The pressure on Brent-related crudes came also from the release of some barrels from storage. Middle Eastern crudes saw relatively smaller gains compared to Brent-related crudes due to abundant supplies of sour crude in the market and limited demand for fuel oil. Gains oscillated between 4.7% for Qatar Marine and 6.8% for Basrah Light.

Middle Eastern light crude market sentiment improved in early March after Abu Dhabi deepened April supply curbs on its Murban and Um Shaif grades while the heavy crude market was under pressure amid ample supply, particularly after ADNOC said it would supply more Upper Zakum crude in April than in March. The heavy market suffered more in mid-March after fuel oil cracks fell to near a five-month low while the light crude market was supported by gasoil cracks at a one-year high. The heavy market also came under more pressure after Qatar offered nine cargoes of al Shaheen crude for May loading, two more cargoes than April. The Middle Eastern light crude market strengthened in the first week of April, supported by a surge in gasoil cracks to a 14-month high while the turnaround of many Asian-Pacific refineries kept heavier grades under pressure. Latin American crudes saw the lowest gains among the Basket components, with Ecuadorian grade Oriente increasing 3.9% and Venezuelan grade Merey displaying the lowest increase of 3.2%. The limited rise in those crudes compared to the rest was attributed to the overhang as more supplies became available following the stoppage of refineries in Chile and Curacao. Two refineries were shut after an earthquake and aftershocks on 27 February and 11 March. The closure of the 320,000 b/d Isla refinery on Curacao in the Netherlands Antilles on 1 March due to power outage also contributed to the overhang and therefore put pressure on Latin American crudes. Lower demand for heavy sour crude in the US due to reduced refining throughput and poor coking margins also contributed to the decline.

The OPEC Reference Basket recovered in late March and hit an 18 month-high of $82.55/b on 6 April after six straight gains before softening in the following days to settle at $81.97/b on 9 April. The move beyond $80 in the first week of April came as a result of a bullish sentiment in the oil market (see *Futures market* below). However, prices have eased in recent days and the OPEC Reference Basket stood at $81.52/b on 13 April.

**Table 1: OPEC Reference Basket and selected crudes, US$/b**

| | Feb 10 | Mar 10 | Change Mar/Feb | 2009 | 2010 |
|---|---|---|---|---|---|
| **OPEC Reference Basket** | **72.99** | **77.21** | **4.22** | **42.98** | **75.49** |
| Arab Light | 73.32 | 77.24 | 3.92 | 42.91 | 75.75 |
| Basrah Light | 72.25 | 77.17 | 4.92 | 41.44 | 75.16 |
| Bonny Light | 75.04 | 80.40 | 5.36 | 46.81 | 77.74 |
| Es Sider | 73.59 | 78.85 | 5.26 | 43.88 | 76.32 |
| Girassol | 73.95 | 79.45 | 5.50 | 44.64 | 76.86 |
| Iran Heavy | 72.54 | 76.93 | 4.39 | 41.53 | 75.15 |
| Kuwait Export | 72.27 | 76.29 | 4.02 | 41.82 | 74.82 |
| Marine | 73.91 | 77.35 | 3.44 | 45.02 | 76.17 |
| Merey | 68.47 | 70.65 | 2.18 | 38.59 | 70.16 |
| Murban | 75.22 | 79.18 | 3.96 | 46.29 | 77.61 |
| Oriente | 69.38 | 72.11 | 2.73 | 37.91 | 71.51 |
| Saharan Blend | 74.54 | 79.70 | 5.16 | 45.52 | 77.14 |
| **Other Crudes** | | | | | |
| Minas | 76.12 | 81.60 | 5.48 | 46.43 | 79.30 |
| Dubai | 73.40 | 77.31 | 3.91 | 44.24 | 75.87 |
| Isthmus | 74.06 | 79.00 | 4.94 | 42.29 | 76.51 |
| T.J. Light | 72.87 | 77.50 | 4.63 | 41.11 | 75.13 |
| Brent | 73.64 | 78.90 | 5.26 | 44.46 | 76.37 |
| W Texas Intermediate | 76.34 | 81.25 | 4.91 | 43.00 | 78.76 |
| Urals | 72.84 | 77.04 | 4.20 | 43.74 | 75.41 |
| **Differentials** | | | | | |
| WTI/Brent | 2.70 | 2.35 | -0.35 | -1.46 | 2.39 |
| Brent/Dubai | 0.24 | 1.59 | 1.35 | 0.21 | 0.49 |

*Note: Arab Light and other Saudi Arabian crudes preliminarily based on American Crude Market (ACM) and subject to revision.*

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

## The oil futures market

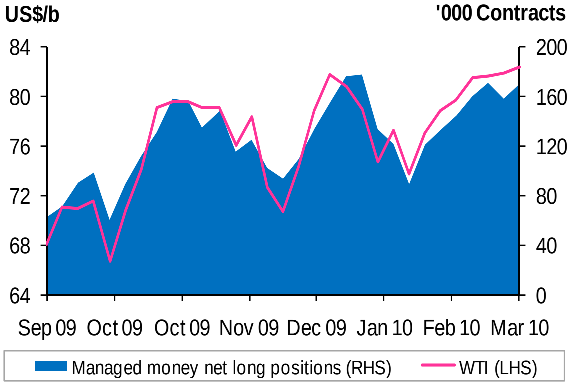
*Speculators continue to drive the price with money managers' net long positions on Nymex hitting a record-high*

Futures market sentiment improved further in March, allowing the Nymex WTI front month to hover above $80/b for most of this period to average $81.29/b, before it moved to above $86/b in the first week of April in daily terms. The monthly average was the highest since the onset of the crisis in September 2008. Again, the bullishness in the market was attributed to expectations of improving global economic recovery which is expected to result in higher demand rather than from tightness in the current supply/demand balance, particularly in OECD countries where the overhang in crude oil inventories remains high. Expectations for higher global oil demand were reinforced by forecasts by major institutions showing demand recovering in 2010 and 2011 after a two-year decline. However, WTI rose while US crude oil stocks have been building for the tenth-consecutive week to hit their highest level since June. While the gasoline price has given some support to the crude market, WTI prices continue to be influenced by the financial market, particularly the activity of speculators (*see below*). WTI was also supported by the weakness of the dollar against the euro to some extent but the relationship has waned significantly with the instability of the euro due to Greece's fiscal concerns. Also, recent comments from the US Federal Reserve that it will maintain interest rates low despite improving expectations about economic growth have also encouraged the purchase of crude oil, particularly since the futures market remained in contango. The US oil futures market and equity markets continued to move in tandem in March, emphasizing the assertion that the oil price is not reflecting just the current supply and demand balance but also the expectations fed by positive macroeconomic data.

Investment in crude oil as an asset continued to drive investors to the market and continued to support the price despite a huge overhang. For instance, the trading volume of the WTI front-month contract on the Nymex stood at more than 430,000 contracts on 10 March, almost double the level of a year ago. The daily trading volume dropped afterwards but increased again to nearly 390,000 lots on 8 April after WTI surged above $86/b on 6 April. Similarly, trading volume of ICE Brent contracts moved to almost 513,000 contracts on 5 April compared to less than 300,000 contracts a year earlier, which implies an increase of more than 70%. It is worth recalling that a record of 713,496 contracts of trading volume of ICE Brent was hit on 5 February.

Total open interest for Nymex WTI hit 1,403,466 contracts on 19 March, the highest level since the 1,426,071 contracts on 12 June 2008, a month before WTI hit its all-time high. Total open interest fell in the following days but remained at nearly 1,350,000 contracts on 8 April, which corresponds to growth of around 15% from a year earlier. The growth from a year ago was more important on ICE Brent contracts with total open interest of ICE Brent moving above 900,000 contracts in the last week of March, before it hit a record of nearly 944,000 contracts on 5 April, compared to 687,175 contracts on 6 April 2009, implying an increase of more than 37%.

**Graph 2: Nymex WTI price vs. Speculative activity**




Expectations for a stronger economic recovery and higher demand for oil encouraged speculators to increase net long crude oil futures positions on the Nymex from 88,821 positions in the week through 9 February to more than 170,000 positions in the week through 16 March. That was the highest level since 19 January 2010, the week when the WTI front-month hit a 15-month high. Money managers have almost doubled their positions in five weeks (*see **Graph 2***), contributing to rise in the price of oil. After a cut in the week through 23 March, speculators again increased net long positions alongside the rise in WTI to post a new record of 186,732 contracts in the week to 6 April, a week when the WTI front month hit a 18-month high of $86.84/b.

The bullish sentiment also helped ICE Brent to increase, which even outpaced WTI. ICE Brent averaged $79.93/b in March, an increase of $5.14 or 6.9% compared with $4.84 or 6.3% for Nymex WTI.

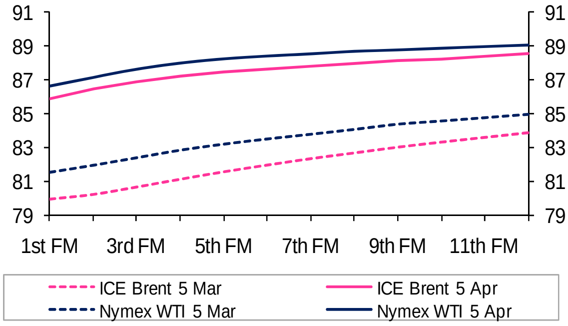
With ICE Brent increasing faster than Nymex WTI, the spread between the WTI-Brent front-month contract narrowed significantly to move from $2.68 on 16 March to turn negative on 12 April, for the first time since 21 December 2009. WTI increased at a slower rate compared to Brent because of abundant supply in the US as commercial crude oil inventories have been increasing since late January.

*The futures market remained in contango*

## The futures market structure

Both Nymex WTI and ICE Brent remained in contango but their respective curves have widened slightly. The spread between the 3rd and the 1st month of WTI rose from less than 90¢/b on 5 March to $1.0/b one month later, implying a gain of 15% whereas the difference between the 6th and the 1st month as well as between the 12th and the 1st month dropped by 11% and 30%, respectively. Similarly, the spread between the 3rd and the 1st month of ICE Brent widened to move from 72¢ to almost $1.0 while the difference between the 12th and the 1st months fell by one-third, from $3.94/b to $2.65/b. That means that the front month gain was higher than for the 6th and 12th month but slightly lower than the growth of the 3rd month, implying that supply is expected to be tighter in the very near months rather than in the later months.

**Graph 3: Nymex WTI and ICE Brent forward curve, 2010**




*FM = future month*

**Table 2: Nymex WTI and ICE Brent forward price, US$/b**

| Nymex WTI | 1st FM | 2nd FM | 3rd FM | 6th FM | 12th FM |
|---|---|---|---|---|---|
| 5 Mar 2010 | 81.50 | 81.92 | 82.37 | 83.49 | 84.96 |
| 5 Apr 2010 | 86.62 | 87.13 | 87.62 | 88.40 | 89.05 |
| **ICE Brent** | **1st FM** | **2nd FM** | **3rd FM** | **6th FM** | **12th FM** |
| 5 Mar 2010 | 79.89 | 80.17 | 80.61 | 81.91 | 83.83 |
| 5 Apr 2010 | 85.88 | 86.42 | 86.87 | 87.65 | 88.53 |

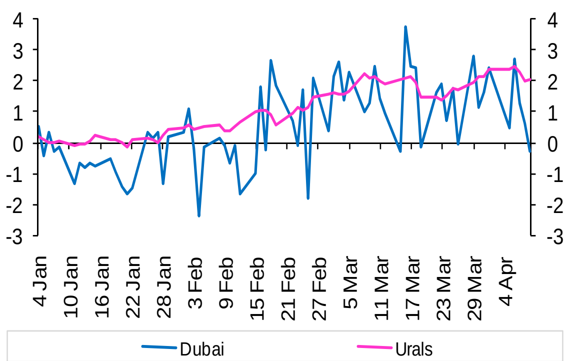
*FM = future month*

*Heavy sour crudes were under pressure due to ample supply*

## The sour/sweet crude spread

Price differentials between light sweet and heavy sour crudes continued to widen in March on the back of persistent overhang of heavy sour grades in the market.

**Graph 4: Brent Dated vs. Sour grades (Urals and Dubai) spread**




The Brent-Dubai spread remained positive most of time in March to average $1.59/b compared to 24¢/b in February. The spread even reached $3.78/b on 16 March, the highest level since end-July 2009. The widening in Brent-Dubai spread reflects the weakness of Middle East sour crudes due to ample supply, the start of refining maintenance in Asia and lower demand on poor fuel oil cracks. Additionally, Russian ESPO crude continued to put further pressure on Middle Eastern grades, particularly as it has been gaining popularity from refiners and is expected to be sold on a term basis as Russian TNK-BP is expected to start supplying Trafigura and Mitsubishi with 25,000 b/d of ESPO for six months from late April. The weakness of the medium-heavy market pushed some countries to cut their OSP for customers in Asia-Pacific.

Similarly, the Brent-Urals spread widened in March to $1.85, up more than $1 from the previous month but the spread increased further in early April to hit almost $2.50, the highest since October 2008. The strong drop in Urals crude oil differentials came as a result of abundant supply in combination with weak demand from refiners in the Mediterranean basin and Northwest Europe amid refining maintenance. Urals was also affected by reduced arbitrage opportunities to the Asia-Pacific market since the start of ESPO exports to the region. Additionally, a rise in the freight rates has reduced opportunities for arbitrage for the Russian crude to the US market and put downward pressure on the price *(see **Graph 4**).*

# Commodity Markets

*The IMF commodity prices rebounded in March supported by some industrial metals and crude oil*

## Trends in selected commodity markets

The IMF commodity price index experienced a recovery of 4% m-o-m in March, with most of the gains accruing to industrial metals and crude oil markets. In contrast, agriculture prices declined 1.5% m-o-m in March for the second consecutive month, according to the World Bank.

**Table 3: Monthly changes in selected commodity prices, 2009-2010**

| | | % Change | | % Change |
|---|---|---|---|---|
| | Jan/Dec | Feb/Jan | Mar/Feb | Mar 10/Mar 09 |
| Commodity | 3.6 | -2.3 | 4.0 | 45.9 |
| Non-fuel | 2.2 | -1.3 | 2.4 | 31.3 |
| Energy | 4.4 | -2.9 | 4.9 | 55.9 |
| Crude oil | 3.0 | -3.0 | 6.0 | 68.9 |
| US natural gas | 8.9 | -8.7 | -19.3 | 8.4 |
| Food | 1.0 | -0.6 | -0.1 | 11.2 |
| Corn | 1.6 | -3.4 | -1.7 | -3.4 |
| Wheat | -2.5 | -3.4 | -1.7 | -17.3 |
| Soybean oil | -3.3 | 0.2 | 3.4 | 25.2 |
| Soybeans | -5.7 | -6.8 | -3.6 | -7.2 |
| Sugar | -0.1 | -3.4 | -3.6 | 6.0 |
| Industrial metals | 3.5 | -5.6 | 7.1 | 62.0 |
| Aluminium | 2.2 | -7.9 | 7.7 | 65.2 |
| Copper | 5.6 | -6.8 | 8.7 | 98.0 |
| Nickel | 7.5 | 3.6 | 17.9 | 131.4 |
| Zinc | 1.7 | -10.6 | 5.5 | 86.2 |
| Gold* | -1.5 | -2.0 | 1.6 | - |

*Sources: IMF; Estimations based on data provided by the IMF.*
** World Bank index.*

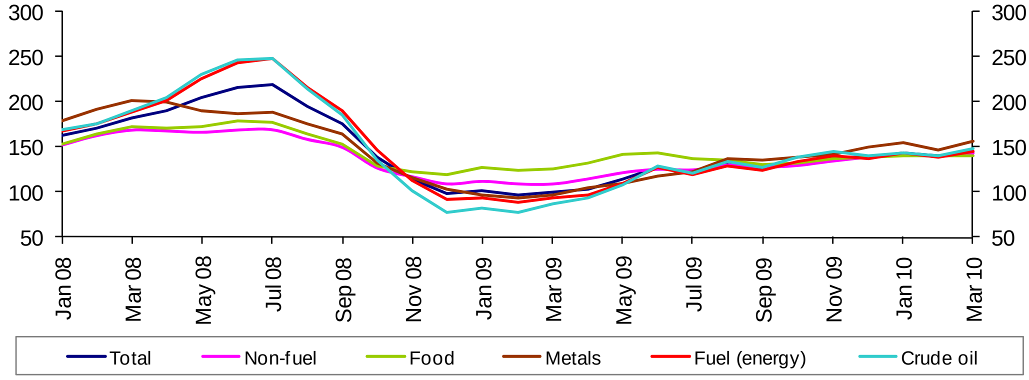
In March, commodity prices have been strongly driven by the mixed inflow of macroeconomic data, concerns on sovereign risks in Europe and appreciation of the US dollar. Following an announcement by the European Community of the debt saving plan for Greece, some commodities have recovered but the possibility of further monetary tightening in China continues to represent a risk for commodities.

*Energy prices surged 4.9% in March*

The **IMF energy price commodity index** (crude oil, natural gas and coal) rose 4.9% m-o-m in March sustained by a 6.0% m-o-m surge in crude oil prices in a very volatile market.

**Despite higher WTI, the Henry Hub gas spot price plummeted** 19.3% m-o-m in March due to flat demand. The early end of the gas withdrawal season amid milder spring temperatures softened demand. Average stocks at the end of March were well above the five-year average. News was also bearish on the supply side, with unconventional gas production as the Marcellus Shale in the Northeast Appalachian region and the Hayneville in Louisiana exerted downward pressures on prices.

**Graph 5: Major commodity price indexes, 2008-2010**




***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.* |

*In March, the non-fuel commodity price recovered from losses seen in February*

**The IMF non-fuel commodity price** (food, beverages and industrial inputs) gained 2.4% in February m-o-m mostly on an increase in cotton and rubber prices owing to supply shortfalls.

**Following a bearish trend in industrial metals over January and February, prices surged** 7.1% m-o-m in March resuming the upward trend on the back of improving demand and supply conditions both outside and inside China, falling inventories, and some positive macroeconomic news such as the stronger-than-expected European PMIs, better US employment data and announcement of a safe rescue plan for Greece. However, the price gains were not equal across the complex being concentrated in nickel and copper.

Nevertheless, important uncertainties remain about the sustainability of the global economic recovery after the reduction of the fiscal stimulus and, in particular, the possibility of a tightening of monetary policy in China. It seems that price trends for industrial metals will remain influenced by macro-trends and economic policy decisions as well as fundamentals.

**Nickel prices escalated by 17.9% m-o-m in March** (130% higher than the same time last year). This development is ascribed to an improvement in fundamentals. On the demand side, a surplus was reportedly registered in January and the stainless steel output increased by 27% y-o-y in China. On the supply-side, nickel prices benefited from supply disruptions, mainly the strikes at Vale's nickel operations in Canada. Nickel stocks on the LME dropped by nearly 5,300 tones.

**Copper prices** rose 8.7% in March m-o-m, reaching $8,000/ton in April. LME inventories declined by 37,000 tonnes to 515,500 tonnes by the end of March. Copper prices reflected the negative impact of the Greek debt crisis at the beginning of March but improved at the end of the month when a rescue plan was announced by the EU.

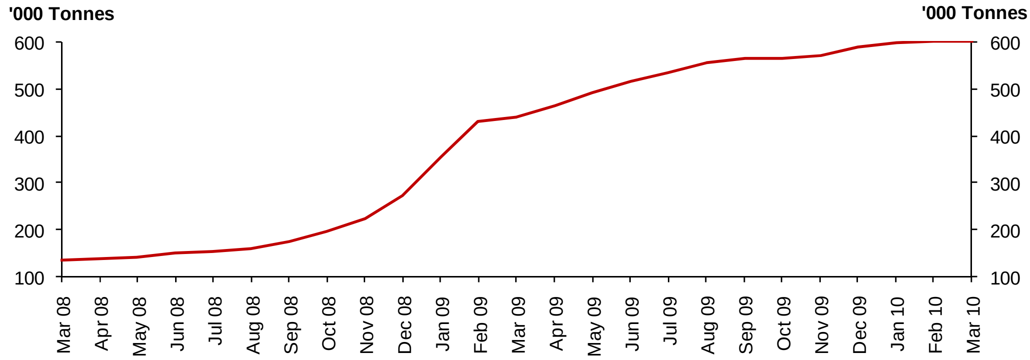
On the demand side, prices were driven by an increase in Chinese imports which jumped by more than 10% in February m-o-m owing to the higher domestic prices. On the supply side, copper prices were encouraged at the beginning of March by concerns on the possible consequences of the earthquake in Chile for the supply.

Global refined consumption increased due to higher Chinese apparent demand in 2009 and refined production was up 1% y-o-y.

**Aluminium** recovered in March after two consecutive falls in Jan-Feb, surging by 7.7% m-o-m. The performance was associated with improving demand outside China, especially restocking in the auto sector and a lack of scrap materials. Likewise, it is expected that the constraints on aluminium demand from the US in February due to weather conditions would have disappeared in March. This may have counteracted the fall in Chinese aluminium imports in February. On the supply side, a decline in North America's output in February supported prices despite the fact that China rose output by 4% in February m-o-m. Concerning aluminium LME inventories, these remain flat in March m-o-m.

The **gold price** rose 1.6% m-o-m in march after a downward trend in the previous two months. Although the same negative factors are standing — the rise in US bond yields and the US real interest rate as well as a stronger US dollar — some recovery in investment demand contributed to the price recovery in March.

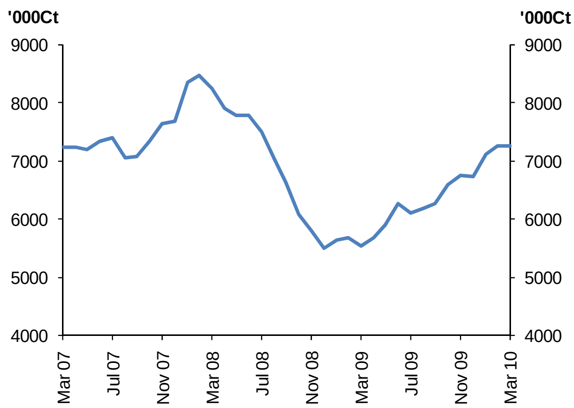
**Graph 6: Inventories at the LME**




## Investment flow into commodities

**Open interest volume** (OIV) in major commodities (agriculture, copper, natural gas, WTI, livestock and precious metals) in the US remained broadly unchanged at 7,267,772 contracts in March, compared to February. Agriculture's total outstanding contracts declined 3.6% in March m-o-m, while WTI showed an anemic (0.2%) rise in OIV in March compared to 1.4% the previous month.

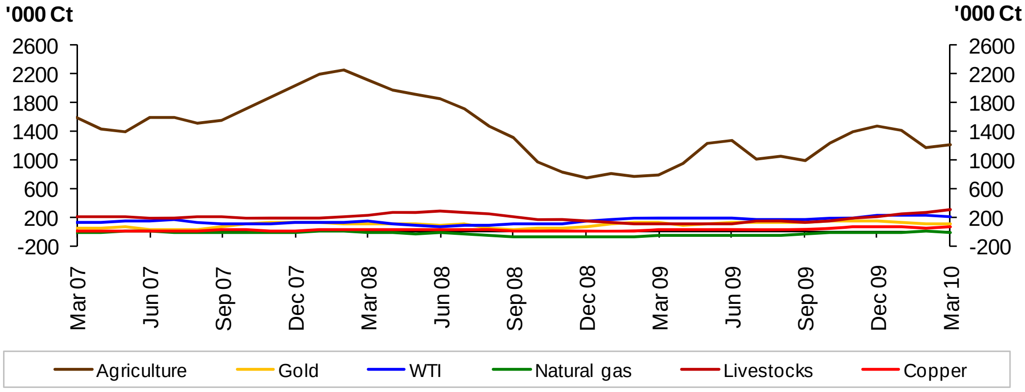
**Graph 7: Total open interest volume**




*Source: CFTC*

On the paper market, following the bearish trend in non-commercial net length observed in February, overall sentiment turned optimistic in March. Net-length in strategic investment for all markets increased by 4.2% m-o-m in March to 1,944 contracts. A fall in short positions combined with some upward movement in longs left non-commercial net length as percentage of OIV at 26.8% in March, 4.2% higher than in February.

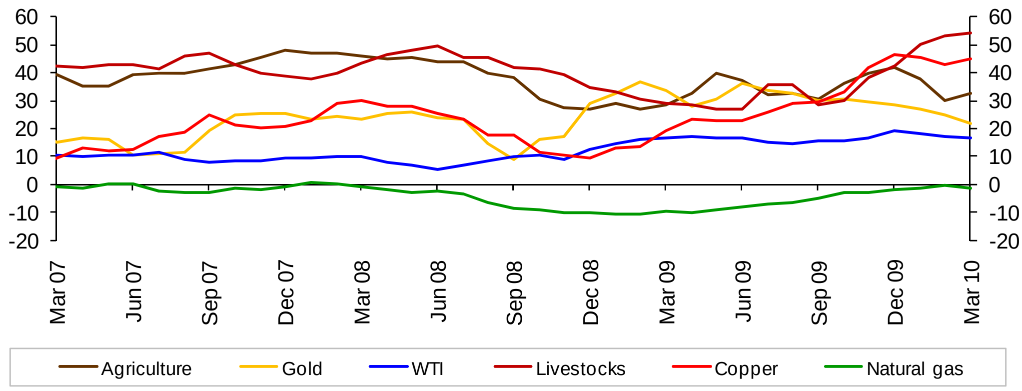
**Graph 8: CFTC net length by commodity group**




*Source: CFTC*

Speculative activity (managed money) recovered from the massive selling off in March, and while still declining by 2.5% m-o-m, this meant a substantial improvement compared to a hefty 40.2% drop reported in February. It is worth noting that the only economic group which registered losses was agriculture, while WTI increased. Copper and livestock saw substantial gains in terms of net length in managed money positions in March.

**Graph 9: CFTC net length as % of open interest**




*Source: CFTC*

**Agricultural OIV** declined 3.6% m-o-m in March. Concerning non-commercial investment, net non-commercial investment percentage of OIV rose from 29.6% in February to 32.1% in March, as short positions declined and longs increased. Nevertheless, net length in managed money positions still fell by 6.3% m-o-m while in swap positions net length increased 11.8% in March. Among the major losers in agriculture were corn, wheat, cocoa and sugar.

For **copper**, sentiment in the paper markets was bullish as long positions advanced by 7.3% while shorts gained 6.1% in March. Thus, non-commercial net length as a percentage of OIV increased from 43% to 44.9%. Managed money positions led activity.

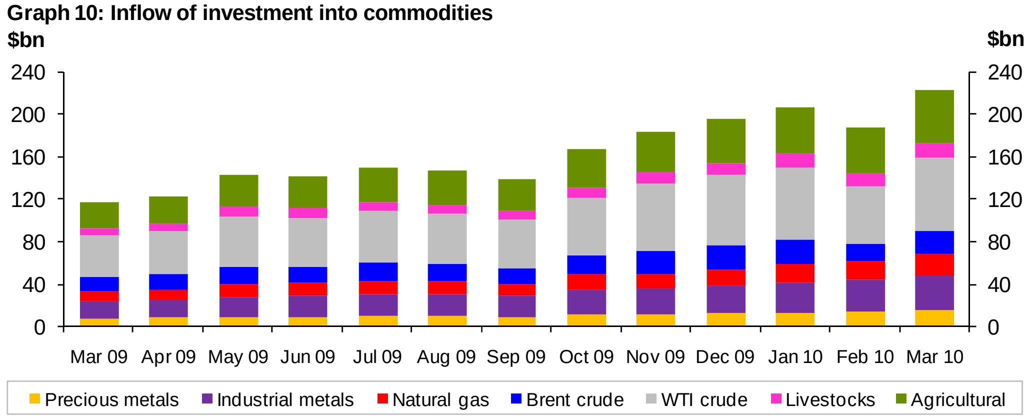
In March, **precious metals** exhibited an increase of 1.6% m-o-m in OIV to 599,098 contracts. Net non-commercial investment dropped by 7.1% m-o-m in March as shorts advanced at a faster rate than longs. Therefore, net length as a percentage of OIV fell from 25.9% to 23.8%.

**Table 4: CFTC data on non-commercial positions, '000 contracts**

| | Open interest | Net length | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Swap positions | | Money positions | | Other positions | | Non-commercials | |
| | Mar 10 | Mar | % OIV | Mar | % OIV | Mar | % OIV | Mar | % OIV |
| Crude Oil | 1317 | 108 | 8 | 160 | 12 | -49 | -4 | 219 | 17 |
| Natural Gas | 836 | 168 | 20 | -156 | -19 | -24 | -3 | -12 | -1 |
| Agriculture | 3796 | 890 | 23 | 275 | 7 | 53 | 1 | 1,219 | 32 |
| Precious Metals | 599 | -85 | -14 | 187 | 31 | 41 | 7 | 143 | 24 |
| Copper | 132 | 40 | 31 | 23 | 18 | -4 | -3 | 59 | 45 |
| Livestock | 588 | 174 | 30 | 154 | 26 | -10 | -2 | 317 | 54 |
| **Total** | **7,268** | **1,294** | **18** | **644** | **9** | **6** | **0** | **1,944** | **27** |
| | Open interest | Net length | | | | | | | |
| | | Swap positions | | Money positions | | Other positions | | Non-commercials | |
| | Feb 10 | Feb | % OIV | Feb | % OIV | Feb | % OIV | Feb | % OIV |
| Crude Oil | 1313 | 153 | 12 | 116 | 9 | -45 | -3 | 224 | 17 |
| Natural Gas | 783 | 154 | 20 | -109 | -14 | -49 | -6 | -4 | 0 |
| Agriculture | 3939 | 796 | 20 | 294 | 7 | 74 | 2 | 1164 | 30 |
| Precious Metals | 590 | -69 | -12 | 177 | 30 | 45 | 8 | 153 | 26 |
| Copper | 127 | 39 | 31 | 15 | 12 | 0 | 0 | 55 | 43 |
| Livestock | 516 | 166 | 32 | 117 | 23 | -10 | -2 | 273 | 53 |
| **Total** | **7,268** | **1,240** | **17** | **610** | **8** | **16** | **0** | **1,866** | **26** |

Estimates of the dollar inflow of investment into the two major commodity indices also suggest a renewed risk appetite for commodities. Inflows escalated by 18.4% m-o-m in March compared to a decline in February. All the sectors experienced gains following the strong decline in the previous month.

**Graph 10: Inflow of investment into commodities**




*Source: CFTC*

# Highlights of the World Economy

| Economic growth rates 2009-2010,% | | | | | | | |
|---|---|---|---|---|---|---|---|
| | World | OECD | USA | Japan | Euro-zone | China | India |
| 2009 | -0.9 | -3.4 | -2.4 | -5.2 | -4.1 | 8.7 | 6.4 |
| 2010 | 3.5 | 1.9 | 2.6 | 1.5 | 0.7 | 9.5 | 7.1 |

## Industrialised countries

***USA***

*The US grew by 5.6% in 4Q09, supported by inventory replenishing*

The state of the US economy continues its relative strength, supported and driven by ongoing stimulus measures. The latest release for 4Q09 GDP was slightly lower at 5.6% q-o-q seasonally adjusted annualized rate (saar) than in the second release at 5.9% q-o-q saar, but this level still confirms the robust growth level for 4Q09. The data continued to show that growth is being driven mainly by high and probably unsustainable inventory replenishing. Inventory replenishing contributed 3.8 percentage points to the 5.6% growth, i.e. was responsible for almost 70% of this GDP growth. On the other hand, personal consumption, which is usually responsible for around 70% of US GDP, was only contributing 1.2 percentage points, i.e. around 20%. The estimate for the growth in consumption was constantly revised down over the usual three estimates that are being provided by the Bureau of Economic Analysis (BEA). The first estimate was a solid 2.0% q-o-q rise, in the second release it was already only 1.7% and in the latest release at the end of March it was finalized at 1.6%. Government expenditures were also revised down again in this final release. While they had been estimated to stand at a level of minus 0.2% only in the first release, the final number is now a relative larger decline of 1.3% q-o-q, which again is lower than the second release number of minus 1.2% q-o-q.

*The housing sector remains weak but consumer confidence is improving*

This situation leaves the question where growth in the next quarters might come from. Consumption – while having picked up – is muted and in probably a declining trend again, government spending is declining as well and the main driver in the last quarter of 2009 has been the increase in the private inventories. This still relative fragile situation was also mirrored in the latest minutes of the 16 March meeting of the Federal Open Market Committee (FOMC), the policy-making arm of the Federal Reserve Bank, where modest downward adjustments were made to projections for real GDP growth in response to unfavourable news on housing activity, unexpectedly weak spending by state and local governments, and a substantial reduction in the estimated level of household income.

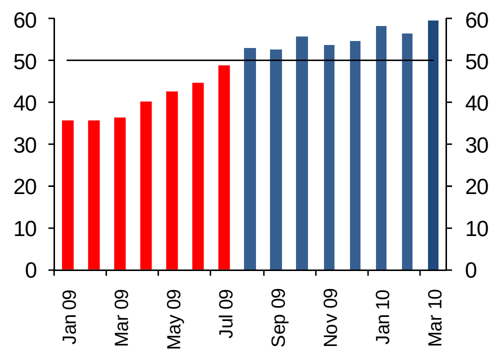
So what are the indicators for the future development? To start with, the unemployment situation has improved slightly, although it remains too early to say if this represents a turnaround. The unemployment rate remains at a level of 9.7% for the second month. Non-farm payrolls are improving and that can be taken as a positive signal for a recovery in the employment sector. This could represent the beginning of an improvement, but as the economy is still very much supported by government-led stimulus the relative small number of job creations is not more than an indication. More concerning is the fact that average hourly earnings declined by 0.1% m-o-m. The last time a contraction in hourly earnings was recorded was in April 2003. There were over 158,000 bankruptcy filings in the personal sector in the US in March, i.e. almost 7,000 per day. That is a 35% surge over February and up 19% from last year's already elevated levels. With US bankruptcy laws tightened in October 2005, US personal bankruptcies have been much lower in this new era of stricter, more punitive provisions, but that seems to have changed again due to the financial distress many households are in. This could also demonstrate that less people are willing to try to save their homes, as they realize that mortgage payments are not affordable any more.

After showing a positive trend in January when it increased by \$10.5bn, consumer credit declined by \$11.5bn in February. This might erode some of the support for March retail sales numbers. They were slightly up by 0.3% m-o-m in February. Consumer confidence rose to 52.5 in March, according to the Conference Board, while in recessions this index usually averages out to be 71.0 and in expansions 102.0, according to Gluskin Sheff + Associates Inc.

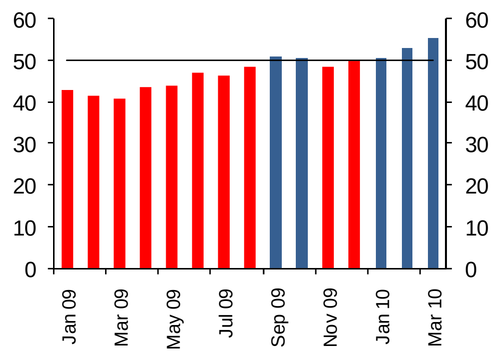
The US housing sector is again geared to the negative side in February with sales of new homes in the US unexpectedly declining by 2.2% m-o-m to a record low as blizzards, unemployment and foreclosures depressed the market. Existing home sales also fell by 0.6% m-o-m in February. This comes after a decline of 7.2% m-o-m in January and after a record-decline in December of 16.2% m-o-m, which marked the worst two-month decline on record. A positive signal was the turnaround in pending home sales. After only a minor increase in January at 0.8% m-o-m and a level of minus 7.6% m-o-m in February, the sales level recovered to 8.2% m-o-m in March. Although this might be due to the US administration's extension of the first-time buyer credits in early November to cover deals signed by 30 April and closed by 30 June, this might push potential home-buyers to become active again and pull sales forward, but could restrain demand in subsequent months, i.e. in the second half of the year. An additional concern might be that the Federal Reserve on 31 March ended its programme to purchase mortgage-backed securities, which had helped to contain borrowing costs. Consequently yields on Fannie Mae and Freddie Mac mortgage securities that guide home-loan rates rose to the highest levels in more than three months at the beginning of April. Pending home sales are an important lead indicator as they track contract signings of houses which have not yet completed sale. On home prices, the seasonally adjusted data did show an increase of 0.4% m-o-m, according to the Standard and Poors' Case-Shiller Composite-10 index but the data revealed a 0.2% dip, its fourth consecutive decline.

So while consumption remains weak and the housing sector is still fragile, businesses themselves have become more bullish about the current prospects. The services sector that is responsible for more than 70% of US GDP has improved again. The services-ISM stands now at 55.4 for March, after only 53.0 in February. Moreover, ISM manufacturing, which started to weaken in February, has increased again and is now surpassing the January level to stand at 59.6, which was the highest level since the recession started two years ago. This could be a positive signal for a further expanding economy, but while many of the components were up, the prime reason for the increase was the eight-point surge in the inventory component, so it remains to be seen if this trend can be continued.

**Graph 11a: ISM manufacturing index**




**Graph 11b: ISM non-manufacturing index**




*Source: Institute for Supply Management*

Economic developments in the US are still mixed, but slightly geared to the positive. A cautious approach towards the remainder of the year is still necessary. There is still no clear indication that consumption is improving substantially or the ailing housing sector has turned around completely. A further challenge in this respect might be the public debt situation and the limitation of available government funds in the case this recovery does not continue at the current strength. Taking the still positive momentum into consideration, the GDP forecast for the US in 2010 was increased slightly from 2.4% to 2.6%.

***Japan***

*Japan's economy continues to improve as domestic demand picked up and despite declining exports*

The main pillar of the Japanese recovery – exports – is faltering. Monthly Japanese exports declined for the first time in a year in February, adding to concerns about the strength of external demand, which has been the main driver of the country's economic recovery aside from the government-led stimulus that was responsible in supporting domestic demand. In February, seasonally adjusted exports fell 1.7% from a month earlier. It was the first drop in 12 months and came after growth of 9.1% m-o-m in January.

Japanese industrial production also suffered in February, when it recorded its first decline over the last 12 months. Factory output declined a seasonally adjusted 0.9% m-o-m, while on a yearly basis, February production was up 31.3%. According to a Ministry of Economy, Trade and Industry (METI) survey, companies continue to expand their output and plan to increase production by 1.4% in March over a month earlier.

The retail sales figures for February added to the positive momentum, showing the largest monthly gain in 13 years. Retail sales increased by 4.2% y-o-y in February, continuing the already positive trend that had started in January, when they were up by 2.3% y-o-y. On a m-o-m basis, sales also continued to increase strongly by 0.9% m-o-m in February and by 2.0% m-o-m in January. This recovery comes after a decline throughout 2009, when December was at minus 0.3% m-o-m. The January-February average was also 2.3% higher than the average for 4Q09.

The unemployment rate was also stabilizing and remained at the 10-month low of 4.9% in February. One negative piece of data was an unexpected 0.5% fall in real household consumption in February, compared to the number from a year earlier. The numbers are volatile from month to month and contradict the report on retail sales, but this might be an indication that consumers remain nervous about the strength of the recovery. An additional negative data point was that wages were down by 0.6% y-o-y in February, falling for the 21st consecutive month. Wages may start to recover this year as corporate profits improve and GDP is expanding again, but are unlikely to rise substantially while the economy is still operating so far below full capacity.

According to the latest GDP release for 4Q09, one of the biggest factors weighing on growth was private sector inventories, which fell by 0.1% q-o-q. It was estimated initially to rise by 0.1%, according to consensus estimates. Capital investments were revised down from 1.0% growth q-o-q in the first release of GDP data to 0.9%, but this was still the first rebound in seven quarters. Consumer spending as another important element of the GDP continued to grow, still obviously backed by the fiscal and monetary stimulus. It rose by 0.7% q-o-q.

Another support for the Japanese economy came from the recent release of the Tankan survey, which indicated that conditions were improving again. The Tankan saw its fourth consecutive quarterly improvement. The Tankan index, which measures the number of companies saying conditions are favorable, minus those saying they are unfavorable, rose from minus 25 in December 2009 to minus 14 in March for large manufacturers. This important and closely-watched survey showed that non-manufacturers were more optimistic as well. The index for large non-manufacturers also rose from minus 21 to minus 14. In general, the Tankan survey indicates a steady recovery, but one that is still dependent on large exporting companies and has a long way to go before it might be strong enough to use up all the excess capacity in the Japanese economy. Japan's purchasing managers index remained almost flat above the level of 50 which indicates expansion. It fell to a seasonally adjusted 52.4 in March from 52.5 in February.

According to the Tankan survey, both large manufacturers and non-manufacturers expect the latest improvements to continue into the next quarter. Manufacturers forecast that the index would improve to minus 8 in June, while the forecast from non-manufacturers improved as well to minus 10. This compares with a slight decline forecast by a Bloomberg survey of minus 15 for June, compared to the current minus 14. Small companies said conditions were improving for their business as well, but as they are probably not able to benefit much from exports, they remained much more pessimistic than bigger firms. The index for small manufacturers only rose from minus 41 to minus 30. Large manufacturers estimated that their profits would rebound by 49.3%, while non-manufacturers expected a 7.1% rise.
Beside the still relatively pessimistic view of small companies, another cautious aspect of the Tankan was that large companies said they expect to invest 0.4% less than in 2009, but this might then provide a challenge for the second half of the year, as a recovery in investment might prove to be an important support for sustained growth later this year.

The Bank of Japan (BoJ) kept monetary policy unchanged as it waited to judge the effects of its extra ¥10,000bn in three-month loans that it announced last month. At its previous meeting, the policy board increased a program of three-month, 0.1% loans to commercial banks by ¥10,000bn to ¥20,000bn. It assumes that it will take three months for those loans to be fully rolled out and the BoJ is likely to keep policy rates on hold during that time This decision might suggest as well that the economy is recovering, in line with the BoJ's expectations and that the bank is still not willing to act aggressively to end deflation. The central bank governor said the chances of a double-dip recession have faded considerably and the central bank dropped a reference to "progress in inventory adjustments" in its statement on the economy, implicitly suggesting that it thinks that businesses now have the level of stocks that they need. Deflation has continued, however the BoJ said that the moderating trend in the pace of decline has continued. Core consumer prices, excluding food and energy, fell by 1.1% y-o-y in February. This compares with minus 1.3% y-o-y in January.

Taking these improvements into consideration while at the same time remaining cautious about the continuation of these development in the second half of the year, the GDP growth forecast for Japan in 2010 was raised to 1.5% from 1.3% previously.

***Euro-zone***

*Sovereign debt issues and unemployment remain a challenge for the Euro-zone*

The main challenge of the Euro-zone remains to be the debt situation of some of its member countries, mainly Greece, followed by Portugal. The pressure on the Euro-zone increased after Portugal's credit rating was cut by Fitch, one of the big rating agencies. Further on, the European Commission warned the Euro-zone's four largest countries – Germany, France, Italy and Spain – that their economic growth forecasts for the next three years were too optimistic and putting at risk their ability to cut budget deficits.

In the meantime, Euro-zone members agreed on further support and have made a commitment in providing up to €30bn in loans to Greece over the next year and trying to ease the current debt crisis that has posed the most serious challenge to the euro in its short history. This contribution comes in addition to any support from the International Monetary Fund (IMF). The rates charged within this new facility would be around 5% for a three-year fixed loan. This is significantly below those currently demanded by investors that were driving yields of two-year Greek bonds to 7.45%, marking a new high. The Greek administration pointed out that it had not yet asked for these funds and expressed confidence that the very existence of this new facility would allow the country to access debt markets at sustainable, i.e. better, rates, than investors were asking for recently. Representatives from the European Commission, the ECB and the Greek government will meet with the IMF soon to negotiate additional features of those support measures. This will include detailed conditions and the exact size of the IMF contribution that currently is being expected to be in the range of around €15bn. The ECB also added to the support of Greece, when it reversed plans to toughen its requirements on collateral for lending, helping primarily Greek banks to refinance at the ECB. Otherwise there would have been a high likelihood that Greek bonds would have become ineligible.

In addition to those worries in the financial markets, the real economy seems to improve only slowly and without a clear sign of a strong rebound. The latest 4Q09 GDP numbers released for the Euro-zone were revised down from growth of 0.1% to now no growth at all. Gross domestic product was unchanged in 4Q09 compared with the previous three months, according to Eurostat, the European Union's statistical office. This latest revision highlights the still lacklustre rebound in the Euro-zone, where domestic demand is still low and affected by the phasing out of many government support measures that were pushing the 3Q09. Retail trade declined in February by 0.6% m-o-m, after a monthly decline already in January of 0.2% m-o-m. This might be the consequence of a still increasing unemployment level that stood at 10.0% in February in the Euro-zone, compared to 9.9% in January, a level that was maintained for three months. Again, Germany was the most successful of the bigger Euro-zone economies in fighting unemployment at a level of 7.5% for the sixth consecutive month, slightly lower than the highest post-crisis level in August 2009 at 7.6%. This is in stark contrast to Spain, that again faced an increase of 0.1% to 19.0%, almost twice the average of the Euro-zone level. Spain also marked the record level in youth unemployment again, which is now at 40.7%. This compares with a Euro-zone level of 20.0%.

Industrial new orders – a lead indicator for future industrial production – were declining by 2.0% m-o-m in January. This is in contrast to a 0.8% m-o-m increase in December, but underpins the shaky trend of the Euro-zone economy as it became relative volatile over the last months and faced a low in October 2009 at a level of minus 2.1% m-o-m. Germany recorded a 4.7% m-o-m increase in new orders, while France posted minus 10.8% m-o-m, following a 15.7% increase the month before. In contrary to this muted indication for the future growth trend, the purchasing managers' composite index (PMI), covering manufacturing and services, rose from 53.7 in February to 55.9 for the eighth consecutive month.

Inflation seems to be back to year-ago levels as it increased by 1.5% y-o-y in March and by 0.9% y-o-y in February and is approaching levels at which the European Central Bank (ECB) might become more active, while in its last meeting it kept its key-policy rate unchanged. The president of the ECB said the Euro-zone would see a moderate and uneven recovery this year and that therefore the pace of withdrawing the extraordinary ECB support depended on medium-term perspectives. The ECB started taking small steps towards ending its liquidity lifeline to the financial sector, returning to auctioning three-month money to the highest bidder rather than providing unlimited supply as it had done over the last year. However, the policy of unlimited funds at flat rates for weekly and monthly loans was extended until October.

While major positive momentum for Euro-zone domestic demand cannot currently be seen, its major export markets are improving, which should at least have an effect on the 1H10. The 2010 growth forecast was consequently slightly increased by 0.1% to 0.7%.

## Former Soviet Union

*Inflation in Russia fell to a 12-year low*

Russia's inflation rate fell to the lowest level in 12 years as a stronger ruble made imports cheaper and sluggish recovery damped consumer demand, allowing the central bank to continue cutting rates.

Rates dropped to an annual 6.5% last month from 7.2% in February, the Federal Statistics Service said. The median estimate in a Bloomberg survey of 15 economists was for the rate to decline to 6.6%. Prices advanced 0.6% from February.

Bank Rossii has cut its benchmark refinancing rate 12 times in the last year to 8.25% to help the economy recover from its worst slump on record. Interest rates will fall further if the government meets its inflation target of between 6.5% and 7.5% for the year, the Finance Minister said in March.

## Developing Countries

*Efforts to restore fiscal discipline appear to be taking hold in China*

Consumer prices in China rose 2.7% in February over a year earlier, up from January's 1.5% increase and near the government's official ceiling of 3% inflation for the year. Lending by Chinese banks fell 43% in the first quarter from a year earlier as the government winds down its stimulus and tries to cool a credit boom while keeping its recovery on track, central bank data showed this month.

Banks lent 2.6 trillion yuan ($380.7 billion) in the January-March quarter, the People's Bank of China said on its website. That compared with 4.6 trillion yuan ($670.6 billion) in loans in the first quarter of 2009 as banks ramped up loans for construction and other projects as part of a 4 trillion yuan ($586 billion) stimulus. The figures indicated the central bank's efforts to prevent runaway lending and restore financial discipline in China's state-owned banking industry might finally be taking hold, lessening the need to raise interest rates to curb inflation.

*India expected to grow by 8.2% in 2010*

Asian Development Bank predicts that India will grow by of 8.2% in 2010, although rising price pressures present a challenge to policy makers as they steer the economy's recovery. Expansionary fiscal and monetary policies are now being wound back gradually as the rebound gains traction. While trade flows have yet to return to pre-crisis levels, rising private consumption and investment are likely to underpin growth over the next two years. India posted double-digit industrial growth for a sixth straight month in February adding to pressure on the central bank to further hike interest rates to tame inflation. The Reserve Bank lifted its benchmark short-term lending rates by 25 basis points last month and analysts predict a similar move at the end of April. Indian consumer goods output, which have been particularly hit by the global crisis, was a key driver of industrial growth in February, expanding 29.9%. Production of capital goods, such as machinery, rose 44.4%.

### OPEC Member Countries

According to recent data, non-oil exports from Saudi Arabia have been trending upward in recent months, mainly since April 2009, following a severe drop in late 2008. This uptrend reflects both volume and price increases. Petrochemicals and plastics, which were 52% of gross exports in 2009, have seen strong foreign demand, especially towards year-end. Exports of these products grew 16.2% in the fourth quarter of 2009 (q-o-q), and were 10% higher y-o-y. A number of recent indicators also reveal the strength of domestic demand. Point of sale transactions (an indicator of private consumption) recorded growth of 7.3% in the last three months ending February 2010 relative to the previous three months. Credit to the private sector is up slightly in February, rising by only 0.6% m-o-m and y-o-y. However, credit conditions are expected to improve in 2010, but should remain well below averages seen in previous years.

### Oil prices, the US dollar and inflation

*The US dollar continued to appreciate against most major currencies in March*

In March, the US dollar continued its upward trend started in November 2009, strengthening further against the euro, the Japanese yen and the pound sterling but losing a little ground against the Swiss franc. The dollar appreciated 0.9% against the euro, 0.3% versus the Japanese yen and 3.8% vis-à-vis the pound sterling, only falling by 0.5% versus the Swiss-franc. Against the euro, the US currency averaged $1.3567/€ in March, up from $1.3684/€ in February.

The sovereign debt issue in Greece continued to pressure the euro, despite attempts to resolve the problem and reassure currency markets. Positive US economic data also lent support to the US currency.

In March, the OPEC Reference Basket rose by $4.2/b or 5.8% to $77.21/b from $72.99/b in February. In real terms (base June 2001=100), after accounting for inflation and currency fluctuations, the Basket price increased by $3.1/b or 6.7% to $49.98/b from $46.85/b. The dollar rose by 0.9%, as measured against the import-weighted modified Geneva I+US dollar basket, while inflation rose marginally by 0.04%.*

* *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 contracted by 1.4 mb/d in 2009*

## World oil demand in 2009

Residual fuels was the product category that declined the most last year as a result of collapse in industrial production world-wide. Diesel, which is used not only by the transport sector but also by both industrial and agricultural sectors, experienced a devastating decline which reached 0.5 mb/d last year. World transport product consumption declined due to the world economic downturn; however, gasoline consumption grew as a result of developing countries' usage. The year 2009 marked the worst year in the industry in oil demand since the 1980s. As a result of a massive decline of 1.9 mb/d in the OECD, total world oil demand declined by 1.4 mb/d y-o-y to average 84.4 mb/d in 2009.

**Graph 12: World oil consumption by products, 2009**

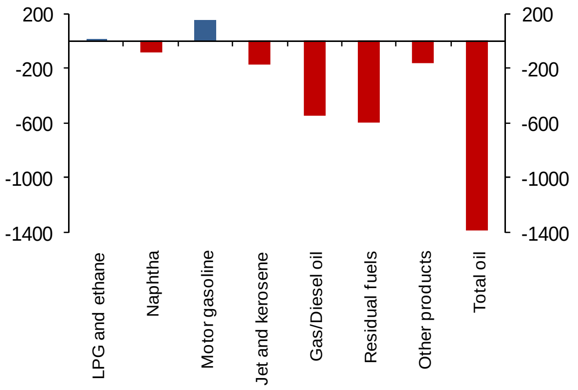



**Table 5: World oil demand forecast for 2009, mb/d**

| | 2008 | 1Q09 | 2Q09 | 3Q09 | 4Q09 | 2009 | Change 2009/08 Volume | % |
|---|---|---|---|---|---|---|---|---|
| North America | 24.17 | 23.52 | 22.91 | 23.25 | 23.57 | 23.31 | -0.86 | -3.56 |
| Western Europe | 15.33 | 14.90 | 14.24 | 14.46 | 14.59 | 14.55 | -0.78 | -5.11 |
| OECD Pacific | 8.07 | 8.14 | 7.30 | 7.27 | 8.02 | 7.68 | -0.38 | -4.77 |
| **Total OECD** | **47.57** | **46.56** | **44.45** | **44.98** | **46.18** | **45.54** | **-2.03** | **-4.26** |
| Other Asia | 9.41 | 9.45 | 9.77 | 9.59 | 9.81 | 9.66 | 0.25 | 2.61 |
| Latin America | 5.81 | 5.61 | 5.82 | 6.02 | 5.98 | 5.86 | 0.05 | 0.90 |
| Middle East | 6.90 | 6.96 | 7.08 | 7.31 | 7.04 | 7.10 | 0.20 | 2.88 |
| Africa | 3.18 | 3.26 | 3.23 | 3.16 | 3.28 | 3.23 | 0.05 | 1.49 |
| **Total DCs** | **25.30** | **25.28** | **25.90** | **26.08** | **26.10** | **25.84** | **0.54** | **2.15** |
| FSU | 4.11 | 3.82 | 3.70 | 4.14 | 4.18 | 3.96 | -0.14 | -3.52 |
| Other Europe | 0.79 | 0.77 | 0.73 | 0.77 | 0.76 | 0.76 | -0.03 | -4.11 |
| China | 7.97 | 7.61 | 8.38 | 8.56 | 8.26 | 8.21 | 0.23 | 2.94 |
| **Total "Other Regions"** | **12.87** | **12.20** | **12.82** | **13.46** | **13.21** | **12.93** | **0.06** | **0.44** |
| **Total world** | **85.74** | **84.04** | **83.17** | **84.52** | **85.49** | **84.31** | **-1.43** | **-1.66** |
| Previous estimate | 85.74 | 84.05 | 83.16 | 84.68 | 85.51 | 84.36 | -1.38 | -1.61 |
| Revision | 0.00 | -0.01 | 0.00 | -0.16 | -0.03 | -0.05 | -0.04 | -0.05 |

*Totals may not add due to independent rounding.*

**Table 6: First and second quarter world oil demand comparison for 2009, mb/d**

| | | | Change 2009/08 | | | | Change 2009/08 | |
|---|---|---|---|---|---|---|---|---|
| | 1Q08 | 1Q09 | Volume | % | 2Q08 | 2Q09 | Volume | % |
| North America | 24.77 | 23.52 | -1.25 | -5.05 | 24.42 | 22.91 | -1.51 | -6.18 |
| Western Europe | 15.29 | 14.90 | -0.39 | -2.52 | 15.07 | 14.24 | -0.83 | -5.54 |
| OECD Pacific | 8.91 | 8.14 | -0.77 | -8.60 | 7.86 | 7.30 | -0.56 | -7.16 |
| **Total OECD** | **48.96** | **46.56** | **-2.40** | **-4.91** | **47.35** | **44.45** | **-2.91** | **-6.14** |
| Other Asia | 9.52 | 9.45 | -0.07 | -0.72 | 9.58 | 9.77 | 0.20 | 2.06 |
| Latin America | 5.60 | 5.61 | 0.00 | 0.07 | 5.84 | 5.82 | -0.02 | -0.38 |
| Middle East | 6.77 | 6.96 | 0.19 | 2.87 | 6.87 | 7.08 | 0.21 | 2.99 |
| Africa | 3.22 | 3.26 | 0.04 | 1.13 | 3.19 | 3.23 | 0.04 | 1.39 |
| **Total DCs** | **25.12** | **25.28** | **0.17** | **0.66** | **25.48** | **25.90** | **0.43** | **1.67** |
| FSU | 4.17 | 3.82 | -0.35 | -8.49 | 3.79 | 3.70 | -0.09 | -2.27 |
| Other Europe | 0.83 | 0.77 | -0.06 | -6.98 | 0.76 | 0.73 | -0.03 | -3.68 |
| China | 7.97 | 7.61 | -0.37 | -4.58 | 8.17 | 8.38 | 0.22 | 2.67 |
| **Total "Other Regions"** | **12.98** | **12.20** | **-0.78** | **-5.99** | **12.72** | **12.82** | **0.10** | **0.82** |
| **Total world** | **87.06** | **84.04** | **-3.01** | **-3.46** | **85.55** | **83.17** | **-2.38** | **-2.78** |

*Totals may not add due to independent rounding.*

**Table 7: Third and fourth quarter world oil demand comparison for 2009, mb/d**

| | | | Change 2009/08 | | | | Change 2009/08 | |
|---|---|---|---|---|---|---|---|---|
| | 3Q08 | 3Q09 | Volume | % | 4Q08 | 4Q09 | Volume | % |
| North America | 23.57 | 23.25 | -0.33 | -1.39 | 23.93 | 23.57 | -0.37 | -1.53 |
| Western Europe | 15.53 | 14.46 | -1.06 | -6.83 | 15.44 | 14.59 | -0.84 | -5.47 |
| OECD Pacific | 7.54 | 7.27 | -0.26 | -3.50 | 7.97 | 8.02 | 0.04 | 0.54 |
| **Total OECD** | **46.63** | **44.98** | **-1.65** | **-3.54** | **47.34** | **46.18** | **-1.17** | **-2.47** |
| Other Asia | 9.29 | 9.59 | 0.30 | 3.19 | 9.26 | 9.81 | 0.55 | 5.96 |
| Latin America | 5.97 | 6.02 | 0.05 | 0.84 | 5.81 | 5.98 | 0.18 | 3.03 |
| Middle East | 7.09 | 7.31 | 0.22 | 3.07 | 6.86 | 7.04 | 0.18 | 2.58 |
| Africa | 3.12 | 3.16 | 0.05 | 1.46 | 3.21 | 3.28 | 0.06 | 1.98 |
| **Total DCs** | **25.47** | **26.08** | **0.61** | **2.39** | **25.13** | **26.10** | **0.97** | **3.85** |
| FSU | 4.22 | 4.14 | -0.08 | -1.94 | 4.24 | 4.18 | -0.06 | -1.41 |
| Other Europe | 0.79 | 0.77 | -0.02 | -3.00 | 0.78 | 0.76 | -0.02 | -2.68 |
| China | 8.10 | 8.56 | 0.45 | 5.58 | 7.65 | 8.26 | 0.62 | 8.11 |
| **Total "Other Regions"** | **13.12** | **13.46** | **0.35** | **2.64** | **12.67** | **13.21** | **0.54** | **4.25** |
| **Total world** | **85.22** | **84.52** | **-0.70** | **-0.82** | **85.15** | **85.49** | **0.34** | **0.40** |

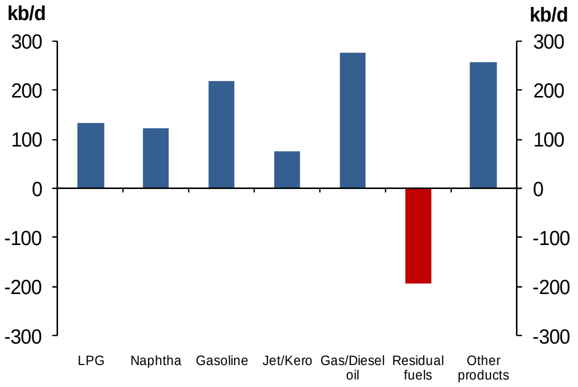
*Totals may not add due to independent rounding.*

## World oil demand in 2010

*Given the slow world economic recovery, world oil demand growth forecast at 0.9 mb/d or 1.1%*

World economic pulse is the variable that will determine the fate of global oil demand this year. Economic activities in the US are playing the wild card for world oil demand growth. Some minor improvements are seen in US oil demand resulting from better economic activities, low base in oil demand from last year, cold weather and gasoline consumption. It is still too early to draw a complete conclusion about the fate of the country's oil demand. The second quarter represents a seasonal low as far as oil consumption is concerned; however, the third quarter includes the summer driving season which has a large impact on gasoline demand. Should these two quarters not meet expectations in both industrial and transport fuels, then total world oil demand will slide from the current growth level.

**Graph 13: Expected y-o-y growth in 2010 world oil demand**



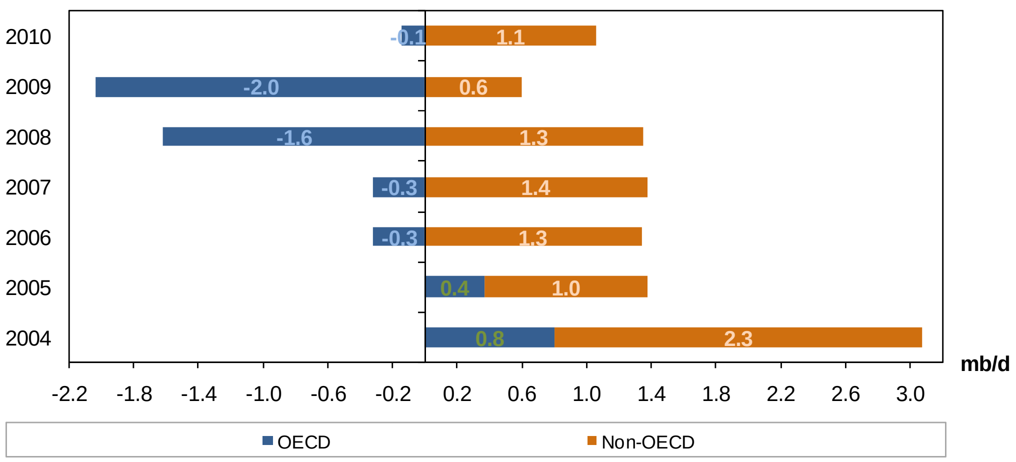
The world auto industry is still highly dependent upon government stimulus plans. Almost all new auto sales growth that was seen in the fourth quarter of last year was attributed to government incentive programmes. The question is, how long will governments be able to afford supporting the auto industry? Public debt is already piling up and the injection that happened last year might be at risk this year. This applies not only to the auto industry, but to almost all economic sectors.

All the expected growth in oil demand this year is happening in the non-OECD region led by Asia. Furthermore, most of the growth will result from transport and petrochemical activities worldwide.

Given the slow world economic recovery, world oil demand growth is forecast at 0.9 mb/d or 1.1%.

For many years, OECD region has been the main contributor to world oil demand growth until 2005. The picture has changed since 2006 as the emerging economies became the sole contributor to world oil demand. During the peak of the world financial crisis in 2009, OECD oil demand declined by almost 2.0 mb/d. OECD oil demand is forecast to bounce back; however, it will remain in the red by more than 0.1 mb/d in 2010.

**Graph 14: World oil demand growth**

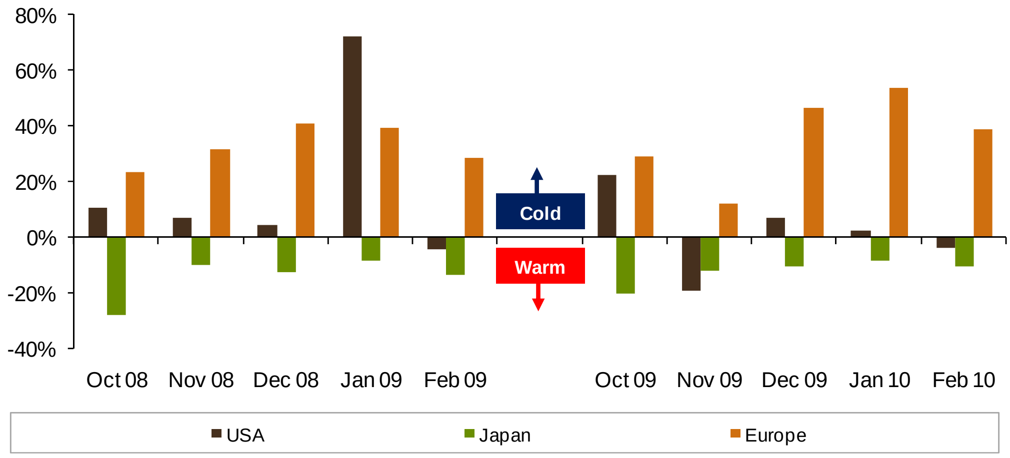



## OECD - North America

*North American oil demand is expected to grow slightly by 0.3 mb/d y-o-y to average at 23.6 mb/d, with most increases taking place during the second half of 2010*

Economic activities and retail oil product prices will be the main factors that determine total US oil demand this year. Already some economic indicators are showing improvement; however the total economy is still in shock. Gasoline usage is an important product that will be vital to total oil use. Gasoline is very sensitive to retail prices and any strength in oil prices will affect gasoline and diesel demand in the summer driving season. The Energy Information Administration said in its latest report that the price of a gallon of gasoline increased 79¢ from a year ago. Early April data showed a continuation of March gasoline consumption growth of 1.4% y-o-y which was not seen since last September. The petrochemical sector boosted demand for certain products to put total US oil demand up 0.4 mb/d. Given the fact that last year represents a low oil demand base, it is early to use March and April data as an indication for the rest of the year. The issue of raising the US Corporate Average Fuel Economy (CAFE) standard is back. The government is requesting to increase average miles per gallon to 35.5 in the next six years. That is an increase of roughly 40%. This will of course affect the gasoline demand in the medium term.

**Graph 15: Heating degree days, % of normal**




Mexican oil demand changed its rhythm inching up by 50 tb/d y-o-y in February. The usage of fuel oil increased by a third, adding another 54 tb/d to the country's oil consumption pool. Gasoline showed an increase as well. The fate of the Mexican oil demand is highly dependent upon the US economy. For the entire year, Mexico's oil demand is anticipated to remain flat.

For the third month in a row, Canadian oil demand showed growth following many months of decline. Canadian February oil demand grew by 4.1% y-o-y resulting from strong industrial and heating fuel demand. Not only the base line is low from last year's weak demand, but also the weather was cold in addition to improved economic activity. As in the US, Canada's oil demand is expected to slightly inch up this year resulting from higher demand for almost all products.

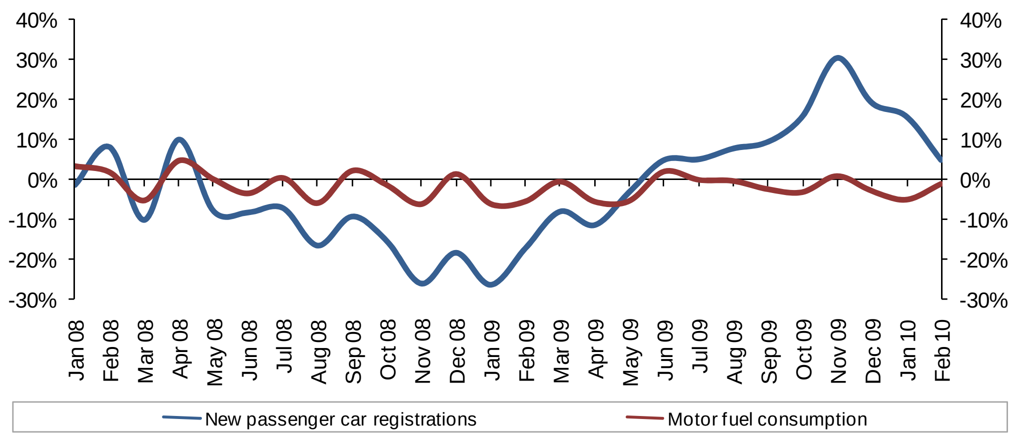
North American oil demand is expected to grow slightly by 0.3 mb/d y-o-y to average 23.6 mb/d, with most increases taking place during the second half of 2010.

## OECD – Europe

*OECD Europe oil demand is forecast to decline by 0.3 mb/d in 2010*

Although the European economy moved out of the red, the continent's oil demand is continuing to contract. Liquid energy consumption of the Big Four has been on a steep decline long before the recent financial crisis. January data indicated an 11.8% decline in total oil usage y-o-y. Almost all products showed a decline led by transport and industrial sectors. As for total OECD Europe, the total decline exceeded 1.2 mb/d. Less usage of liquid fuel is expected to continue in the near future; however for the long run, there is no expectation for Europe to increase its need for oil. As a result of low energy consumption, OECD Europe oil demand was revised down by more than 200 tb/d for each of the first and second quarters of this year. OECD Europe oil demand is forecast to decline by 0.3 mb/d in 2010 y-o-y to average 14.2 mb/d in 2010.

**Graph 16: European new passenger car registrations & motor fuel consumption, y-o-y % changes**



Although European oil demand is affected by the current economic downturn, other variables are pushing demand down as well. Europe is intent on increasing renewables and being more efficient. Governments are embarking on suppressing transport fuel consumption via tax increases. In April, the UK started its new tax increase on transport fuel, which will be carried out in three phases. Furthermore, the continent is planning on using more nuclear power in the long-term.

**Table 8: French oil demand, tb/d**

| | Jan-Feb 10 | Jan-Feb 09 | Change, tb/d | Change, % |
|---|---|---|---|---|
| Gasoline | 169 | 184 | -16 | -8.4 |
| Distillate | 967 | 1,059 | -92 | -8.6 |
| *Diesel* | *629* | *628* | *1* | *0.2* |
| *Heating oil* | *338* | *431* | *-93* | *-21.5* |
| Residual | 51 | 90 | -39 | -43.3 |
| Other products | 509 | 592 | -83 | -13.9 |
| **Total products** | **1,696** | **1,924** | **-229** | **-11.9** |

*Source: Argus Fundamentals*

## OECD - Pacific

*OECD Pacific oil demand is forecast to decline by 0.1 mb/d in 2010 averaging 7.6 mb/d*

Japanese oil demand scored substantial growth following five months of continuous decline. This sudden increase was mostly due to the low base in February 2009 and higher demand in the petrochemical industry. Another factor that affected the country's demand is the cold winter. Demand for kerosene, which is used for heating, increased by 15.4% y-o-y. Japan's oil demand is not anticipated to increase this year, although it is projected to reduce its decline by half compared to last year.

South Korean oil demand has been in the growing mode since May of last year. The country's economy circumvented the world recession last year and is estimated to grow by 4% this year. Hence, the country's oil demand is forecast to grow by 1.5% in 2010.

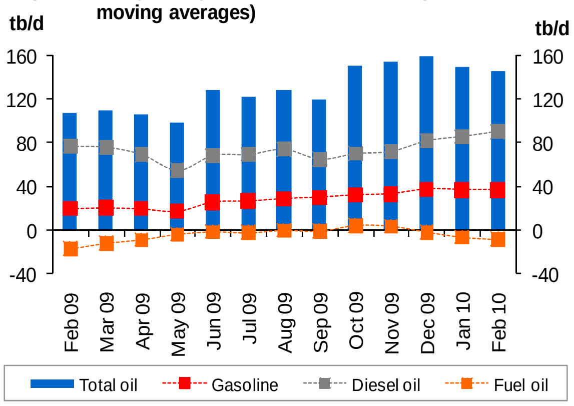
OECD Pacific oil demand is forecast to decline by 0.1 mb/d in 2010 averaging 7.6 mb/d.

## Developing Countries

*DCs forecast to grow at 0.6 mb/d in 2010*

Emerging from very positive growth in oil product consumption in the fourth quarter of last year, Taiwan's oil demand grew strongly in January adding another 153 tb/d to the oil usage pool. Due to the alternative means of transportation across the country, gasoline demand slightly declined; however the rest of the transport fuel products showed a massive increase. The demand on both diesel and jet fuel grew sharply. The country is planning to increase the biodiesel blend to 2% this year; however this move will not make a dent in the country's diesel demand.

**Graph 17: Yearly changes in Indian oil demand (12 month moving averages)**



*Oil demand growth in Other Asia for the total year is forecast to exceed 220 tb/d*

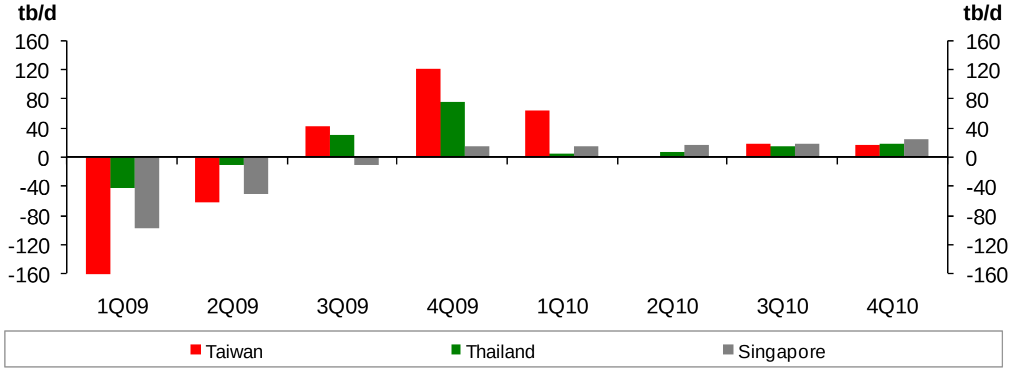
Following a decline in Indian oil usage in January, February data showed better performance but nothing compared to last year's growth. February oil demand growth was mostly attributed to the transport fuel sector. Gasoline and diesel demand pushed Indian total oil demand up by 1% in February. Industrial use of oil has not yet picked up this year. Industrial product usage plunged by a high percentage reflecting slower industrial production so far this year. Although the country's forecast GDP is on the high side at 7%, the oil demand has not yet followed suit.

India oil demand is forecast to grow by 135 tb/d in 2010 with industrial, transport, and agriculture sectors contributing the most. India's auto sales increased sharply by 33% in February y-o-y adding around 154 thousand vehicles to the street of India. Strong vehicle sales have already had an effect on transport fuel.

The rest of Other Asia demand is in a healthy mode. Economic growth is expected to hike in several Asian countries causing the continent's oil demand to grow further this year.

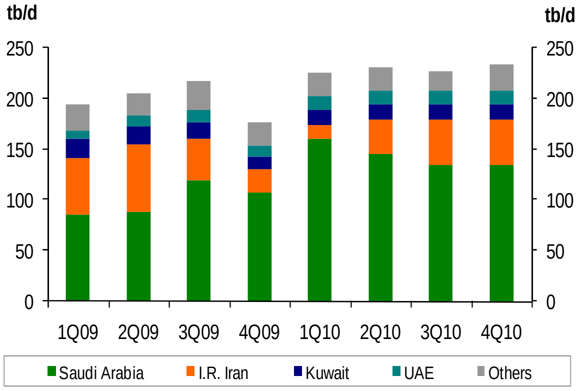
Given the optimistic picture in Other Asia, the region's oil demand growth for the total year is forecast to exceed 220 tb/d y-o-y.

**Graph 18: Oil consumption in selected Asian countries, y-o-y growth**




Middle Eastern economic activity along with subsidized transport fuel placed the region's oil demand in a strong growing motion. The region's oil demand is estimated to increase its volume by another 230 tb/d this year. Most of the demand will be concentrated on both petrochemical and transport fuel.

**Graph 19: Yearly oil demand growth in the Middle East**



Latin America's oil demand will show healthy growth led by Brazilian oil needs. The region is anticipated to increase its oil consumption by 123 tb/d this year.

Developing Countries' oil demand growth is forecast at 0.6 mb/d in 2010, averaging 26.5 mb/d.

**Graph 20: Yearly oil demand growth in Latin America**

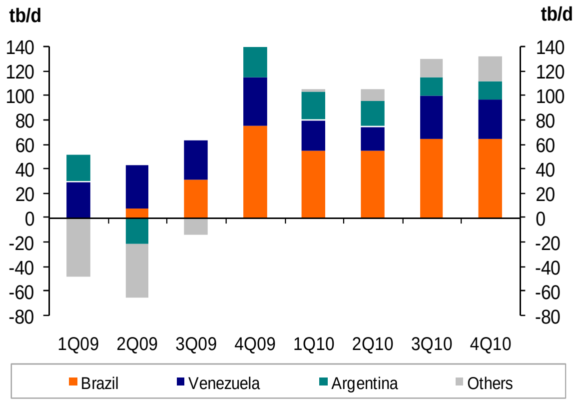



**Table 9: Taiwan oil demand, tb/d**

| | Jan 10 | Jan 09 | Change from Jan 09 | Change from Jan 09, % |
|---|---|---|---|---|
| LPG | 78 | 64 | 14 | 18.4 |
| Gasoline | 149 | 177 | -27 | -18.2 |
| Jet/Kerosene | 47 | 41 | 6 | 12.6 |
| Gas/Diesel oil | 80 | 92 | -12 | -14.7 |
| Fuel oil | 167 | 119 | 48 | 28.5 |
| Other products | 530 | 406 | 124 | 23.4 |
| **Total** | **1,052** | **899** | **153** | **14.5** |

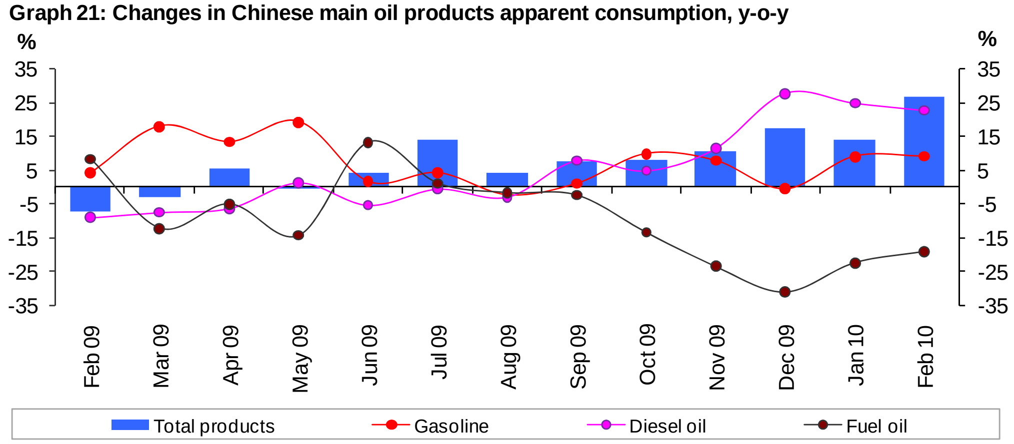
*Source: JODI*

## Other regions

*Demand in China to grow by 160 tb/d in 2010*

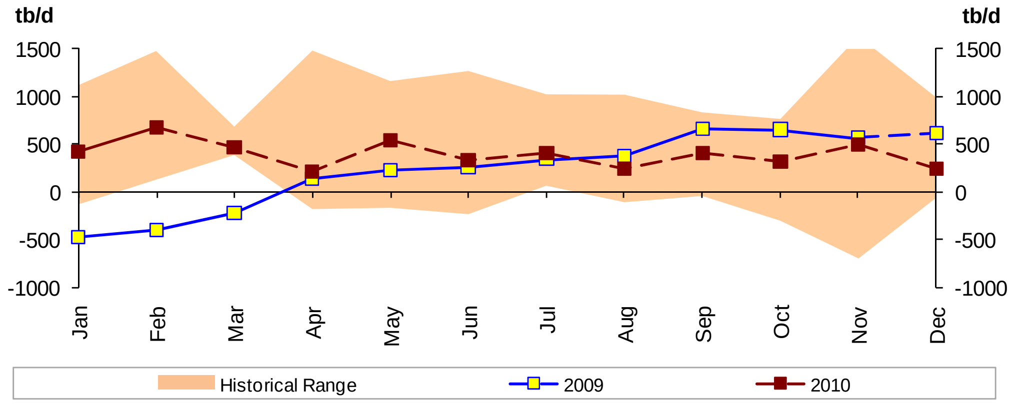
China's economy is demanding more energy as has been the case for the past few years. However, there is a downward risk as the country comes under pressure to appreciate its currency which in turn would affect its economic growth. China's oil demand reacted strongly to the government stimulus plans which aim at positive refinery margins. February data indicated a strong hike in the country's apparent demand exceeding a million barrels per day; nevertheless, the entire apparent demand does not end up being consumed as some goes to storage.

**Graph 21: Changes in Chinese main oil products apparent consumption, y-o-y**




As expected, most of the growth in oil consumption was in both transport and industrial sectors. All products experienced growth, except fuel oil which declined resulting from fuel substitution. China's apparent oil demand this year is expected to inch 4.7% higher y-o-y exceeding last year's growth by 160 tb/d. China's plans to continue the development of rural areas will call for more oil demand this year as well.

**Graph 22: Changes in Chinese apparent oil demand, y-o-y**




China's refining capacity increased by 1 mb/d last year and is expected to increase by another 0.5 mb/d this year. As a result, China's refinery throughput increased in February by 24% leading to strong growth in the country's oil imports. The country imported 4.8 mb/d in February which is 58% growth compared to the same month last year.

The FSU region has come out from its declining usage in oil demand of last year. The region's oil demand grew by 24 tb/d in February y-o-y; however, the region's oil demand growth for the entire year is forecast to be slightly positive at 33 tb/d.

**Table 10: World oil demand forecast for 2010, mb/d**

| | | | | | | | Change 2010/09 | |
|---|---|---|---|---|---|---|---|---|
| | **2009** | **1Q10** | **2Q10** | **3Q10** | **4Q10** | **2010** | **Volume** | **%** |
| North America | 23.31 | 23.69 | 23.27 | 23.52 | 23.87 | 23.59 | 0.28 | 1.18 |
| Western Europe | 14.55 | 14.22 | 13.79 | 14.30 | 14.47 | 14.20 | -0.35 | -2.39 |
| OECD Pacific | 7.68 | 8.18 | 7.20 | 7.10 | 7.90 | 7.59 | -0.09 | -1.16 |
| **Total OECD** | **45.54** | **46.08** | **44.26** | **44.92** | **46.24** | **45.38** | **-0.16** | **-0.36** |
| Other Asia | 9.66 | 9.67 | 9.99 | 9.81 | 10.03 | 9.87 | 0.22 | 2.25 |
| Latin America | 5.86 | 5.72 | 5.94 | 6.15 | 6.11 | 5.98 | 0.12 | 2.10 |
| Middle East | 7.10 | 7.19 | 7.31 | 7.53 | 7.27 | 7.33 | 0.23 | 3.23 |
| Africa | 3.23 | 3.31 | 3.29 | 3.22 | 3.32 | 3.28 | 0.05 | 1.66 |
| **Total DCs** | **25.84** | **25.89** | **26.52** | **26.71** | **26.73** | **26.47** | **0.62** | **2.41** |
| FSU | 3.96 | 3.85 | 3.73 | 4.17 | 4.22 | 4.00 | 0.03 | 0.83 |
| Other Europe | 0.76 | 0.75 | 0.73 | 0.77 | 0.78 | 0.76 | 0.00 | 0.02 |
| China | 8.21 | 8.13 | 8.72 | 8.94 | 8.64 | 8.61 | 0.40 | 4.91 |
| **Total "Other Regions"** | **12.93** | **12.74** | **13.18** | **13.89** | **13.64** | **13.36** | **0.44** | **3.38** |
| **Total world** | **84.31** | **84.71** | **83.96** | **85.51** | **86.61** | **85.21** | **0.90** | **1.06** |
| Previous estimate | 84.36 | 84.72 | 83.90 | 85.67 | 86.64 | 85.24 | 0.88 | 1.05 |
| Revision | -0.05 | -0.01 | 0.06 | -0.16 | -0.03 | -0.03 | 0.01 | 0.02 |

*Totals may not add due to independent rounding.*

**Table 11: First and second quarter world oil demand comparison for 2010, mb/d**

| | | | Change 2010/09 | | | | Change 2010/09 | |
|---|---|---|---|---|---|---|---|---|
| | 1Q09 | 1Q10 | Volume | % | 2Q09 | 2Q10 | Volume | % |
| North America | 23.52 | 23.69 | 0.17 | 0.71 | 22.91 | 23.27 | 0.36 | 1.57 |
| Western Europe | 14.90 | 14.22 | -0.68 | -4.56 | 14.24 | 13.79 | -0.44 | -3.10 |
| OECD Pacific | 8.14 | 8.18 | 0.03 | 0.42 | 7.30 | 7.20 | -0.10 | -1.38 |
| **Total OECD** | **46.56** | **46.08** | **-0.48** | **-1.03** | **44.45** | **44.26** | **-0.18** | **-0.41** |
| Other Asia | 9.45 | 9.67 | 0.22 | 2.35 | 9.77 | 9.99 | 0.21 | 2.17 |
| Latin America | 5.61 | 5.72 | 0.12 | 2.05 | 5.82 | 5.94 | 0.12 | 1.98 |
| Middle East | 6.96 | 7.19 | 0.23 | 3.24 | 7.08 | 7.31 | 0.23 | 3.26 |
| Africa | 3.26 | 3.31 | 0.05 | 1.50 | 3.23 | 3.29 | 0.06 | 1.83 |
| **Total DCs** | **25.28** | **25.89** | **0.61** | **2.42** | **25.90** | **26.52** | **0.62** | **2.38** |
| FSU | 3.82 | 3.85 | 0.03 | 0.89 | 3.70 | 3.73 | 0.03 | 0.78 |
| Other Europe | 0.77 | 0.75 | -0.02 | -2.59 | 0.73 | 0.73 | -0.01 | -0.68 |
| China | 7.61 | 8.13 | 0.53 | 6.90 | 8.38 | 8.72 | 0.33 | 3.97 |
| **Total "Other Regions"** | **12.20** | **12.74** | **0.54** | **4.42** | **12.82** | **13.18** | **0.36** | **2.78** |
| **Total world** | **84.04** | **84.71** | **0.67** | **0.80** | **83.17** | **83.96** | **0.79** | **0.95** |

*Totals may not add due to independent rounding.*

**Table 12: Third and fourth quarter world oil demand comparison for 2010, mb/d**

| | | | Change 2010/09 | | | | Change 2010/09 | |
|---|---|---|---|---|---|---|---|---|
| | 3Q09 | 3Q10 | Volume | % | 4Q09 | 4Q10 | Volume | % |
| North America | 23.25 | 23.52 | 0.27 | 1.17 | 23.57 | 23.87 | 0.30 | 1.27 |
| Western Europe | 14.46 | 14.30 | -0.16 | -1.10 | 14.59 | 14.47 | -0.12 | -0.82 |
| OECD Pacific | 7.27 | 7.10 | -0.17 | -2.39 | 8.02 | 7.90 | -0.11 | -1.42 |
| **Total OECD** | **44.98** | **44.92** | **-0.06** | **-0.13** | **46.18** | **46.24** | **0.07** | **0.14** |
| Other Asia | 9.59 | 9.81 | 0.22 | 2.25 | 9.81 | 10.03 | 0.22 | 2.22 |
| Latin America | 6.02 | 6.15 | 0.13 | 2.16 | 5.98 | 6.11 | 0.13 | 2.21 |
| Middle East | 7.31 | 7.53 | 0.23 | 3.11 | 7.04 | 7.27 | 0.23 | 3.33 |
| Africa | 3.16 | 3.22 | 0.06 | 1.93 | 3.28 | 3.32 | 0.05 | 1.40 |
| **Total DCs** | **26.08** | **26.71** | **0.63** | **2.43** | **26.10** | **26.73** | **0.63** | **2.41** |
| FSU | 4.14 | 4.17 | 0.03 | 0.75 | 4.18 | 4.22 | 0.04 | 0.91 |
| Other Europe | 0.77 | 0.77 | 0.01 | 0.65 | 0.76 | 0.78 | 0.02 | 2.63 |
| China | 8.56 | 8.94 | 0.39 | 4.50 | 8.26 | 8.64 | 0.37 | 4.51 |
| **Total "Other Regions"** | **13.46** | **13.89** | **0.42** | **3.13** | **13.21** | **13.64** | **0.43** | **3.26** |
| **Total world** | **84.52** | **85.51** | **1.00** | **1.18** | **85.49** | **86.61** | **1.13** | **1.32** |

*Totals may not add due to independent rounding.*

# World Oil Supply

## Non-OPEC

### Estimate for 2009

*Non-OPEC supply grew by 0.63 mb/d in 2009*

**Non-OPEC** supply is estimated to have averaged 51.03 mb/d in 2009, growth of 0.63 mb/d over the previous year. The estimate for 2009 encountered a minor upward revision of 14 tb/d from the previous month. While there were minor revisions in the first three quarters of 2009, however, supply estimates for the fourth quarter came on the largest revisions in 2009. Non-OPEC supply growth in 2009 was the highest since 2004. North America oil supply growth, which supported non-OPEC growth in 2009, was the highest so far this decade. Additionally, growth from the FSU and Latin America remained the key contributors to non-OPEC supply growth in 2009. In contrast, OECD Western Europe continued the declining trend in 2009. On a quarterly basis, non-OPEC supply is estimated at 50.98 mb/d, 50.69 mb/d, 50.90 mb/d and 51.55 mb/d respectively.

**Graph 23: Regional non-OPEC supply growth, y-o-y**

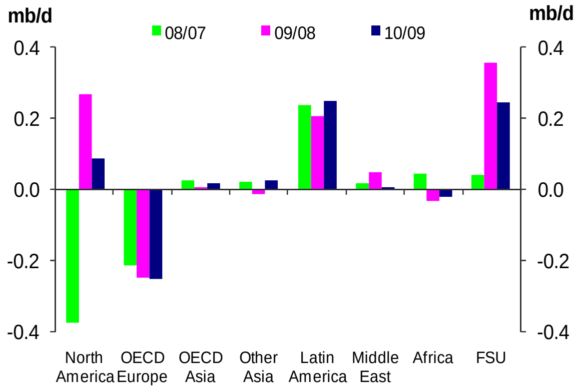



**Table 13: Non-OPEC oil supply in 2009, mb/d**

| | 2008 | 1Q09 | 2Q09 | 3Q09 | 4Q09 | 2009 | Change 09/08 |
|---|---|---|---|---|---|---|---|
| North America | 13.92 | 14.19 | 14.01 | 14.19 | 14.38 | 14.19 | 0.27 |
| Western Europe | 4.96 | 5.05 | 4.65 | 4.45 | 4.70 | 4.71 | -0.25 |
| OECD Pacific | 0.63 | 0.64 | 0.62 | 0.65 | 0.64 | 0.64 | 0.01 |
| **Total OECD** | **19.51** | **19.88** | **19.28** | **19.29** | **19.71** | **19.54** | **0.03** |
| Other Asia | 3.73 | 3.71 | 3.69 | 3.70 | 3.78 | 3.72 | -0.01 |
| Latin America | 4.20 | 4.36 | 4.38 | 4.39 | 4.51 | 4.41 | 0.21 |
| Middle East | 1.68 | 1.70 | 1.72 | 1.75 | 1.74 | 1.73 | 0.05 |
| Africa | 2.75 | 2.73 | 2.73 | 2.72 | 2.67 | 2.71 | -0.03 |
| **Total DCs** | **12.36** | **12.50** | **12.51** | **12.56** | **12.69** | **12.57** | **0.21** |
| FSU | 12.56 | 12.64 | 12.90 | 13.00 | 13.13 | 12.92 | 0.36 |
| Other Europe | 0.15 | 0.14 | 0.13 | 0.14 | 0.14 | 0.14 | -0.01 |
| China | 3.84 | 3.80 | 3.85 | 3.88 | 3.87 | 3.85 | 0.01 |
| **Total "Other regions"** | **16.55** | **16.58** | **16.88** | **17.03** | **17.14** | **16.91** | **0.36** |
| **Total Non-OPEC production** | **48.42** | **48.97** | **48.67** | **48.88** | **49.54** | **49.02** | **0.60** |
| Processing gains | 1.98 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 0.03 |
| **Total Non-OPEC supply** | **50.40** | **50.98** | **50.69** | **50.90** | **51.55** | **51.03** | **0.63** |
| Previous estimate | 50.41 | 50.98 | 50.68 | 50.90 | 51.49 | 51.02 | 0.61 |
| Revision | -0.01 | 0.00 | 0.00 | 0.00 | 0.06 | 0.01 | 0.02 |

### Revisions to the 2009 estimate

The majority of the revisions affected the fourth quarter 2009. However, there were a few minor revisions in both directions to the historical data in 2008, as well as to the first three quarters of 2009 yet these offset eachother. In the fourth quarter, supply estimates for the US, Canada, UK, Other Western Europe, Thailand, and Trinidad and Tobago encountered revisions. All of the revisions were upward, except for the UK and OECD Western Europe which experienced downward revisions. The most significant revision was introduced to Canada oil supply in the fourth quarter to adjust for updated actual production data. Additionally, US oil supply in the fourth quarter encountered an upward revision of 30 tb/d to adjust for updated production data, as US oil supply reached healthy levels during the fourth quarter. All of the revisions introduced to 2009 supply in this report totaled 14 tb/d.

## Forecast for 2010

*Non-OPEC supply expected to increase by 0.50 mb/d in 2010 mb*

**Non-OPEC** supply is expected to average 51.53 mb/d in 2010, representing an increase of 0.50 mb/d over 2009 and an upward revision of 0.10 mb/d from last month. Compared to the previous month, the upward revisions were concentrated in the first half of 2010, with the first quarter encountering the biggest revision. The third quarter also encountered a minor upward revision, while the fourth quarter experienced the only downward revision. Developing Countries experienced the largest annual upward revision followed by China and OECD, while FSU encountered a minor downward revision compared to the previous month. The main reason for the upward revisions to the supply profiles of many countries were the healthy levels of production witnessed in the first quarter. On a quarterly basis, non-OPEC supply is expected to average 51.74 mb/d, 51.42 mb/d, 51.24 mb/d and 51.71 respectively.

**Table 14: Non-OPEC oil supply in 2010, mb/d**

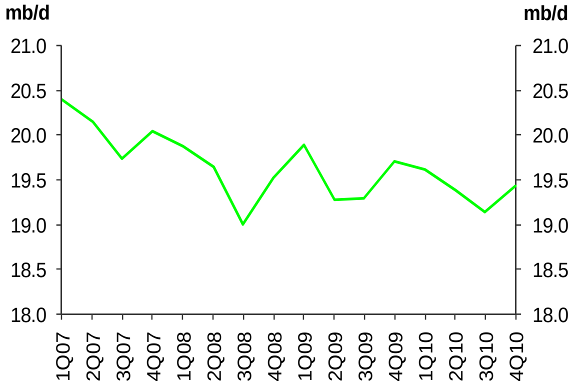
| | 2009 | 1Q10 | 2Q10 | 3Q10 | 4Q10 | 2010 | Change 10/09 |
|---|---|---|---|---|---|---|---|
| North America | 14.19 | 14.32 | 14.32 | 14.19 | 14.28 | 14.28 | 0.09 |
| Western Europe | 4.71 | 4.66 | 4.43 | 4.28 | 4.46 | 4.46 | -0.25 |
| OECD Pacific | 0.64 | 0.63 | 0.64 | 0.67 | 0.68 | 0.66 | 0.02 |
| **Total OECD** | **19.54** | **19.61** | **19.39** | **19.14** | **19.43** | **19.39** | **-0.15** |
| Other Asia | 3.72 | 3.79 | 3.74 | 3.74 | 3.72 | 3.75 | 0.03 |
| Latin America | 4.41 | 4.57 | 4.60 | 4.67 | 4.78 | 4.66 | 0.25 |
| Middle East | 1.73 | 1.75 | 1.74 | 1.73 | 1.72 | 1.73 | 0.01 |
| Africa | 2.71 | 2.68 | 2.68 | 2.70 | 2.70 | 2.69 | -0.02 |
| **Total DCs** | **12.57** | **12.79** | **12.75** | **12.84** | **12.92** | **12.83** | **0.26** |
| FSU | 12.92 | 13.14 | 13.14 | 13.13 | 13.25 | 13.17 | 0.25 |
| Other Europe | 0.14 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | -0.02 |
| China | 3.85 | 3.99 | 3.93 | 3.92 | 3.90 | 3.93 | 0.08 |
| **Total "Other regions"** | **16.91** | **17.25** | **17.19** | **17.17** | **17.27** | **17.22** | **0.31** |
| **Total Non-OPEC production** | **49.02** | **49.65** | **49.33** | **49.15** | **49.62** | **49.44** | **0.42** |
| Processing gains | 2.01 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 0.08 |
| **Total Non-OPEC supply** | **51.03** | **51.74** | **51.42** | **51.24** | **51.71** | **51.53** | **0.50** |
| Previous estimate | 51.02 | 51.47 | 51.29 | 51.21 | 51.74 | 51.43 | 0.41 |
| Revision | 0.01 | 0.27 | 0.13 | 0.03 | -0.02 | 0.10 | 0.09 |

## OECD

*OECD supply to average 19.39 mb/d in 2010*

**Total OECD oil supply is seen to drop by 0.15 mb/d in 2010 to average 19.39 mb/d, representing an upward revision of around 0.03 mb/d from last month.** The main support for growth is seen coming from the US. The upward revision came mainly from North America supply updates as OECD Western Europe supply encountered a minor upward revision and OECD Pacific remained relatively steady. Compared to the previous month, supply forecasts from the US, Mexico, Denmark, and Australia went through an upward revision with the US experiencing the largest, while supply predictions for Canada, UK, and New Zealand experienced minor downward revisions. The upward revisions to individual countries' supply profiles more than offset the downward revisions. The first quarter supply forecast came across the highest upward revisions followed by the second quarter, while the third quarter encountered the smallest upward revision and the fourth quarter was revised down, all compared to previous month's evaluation. On a quarterly basis, OECD oil supply is expected to average 19.61 mb/d, 19.39 mb/d, 19.14 mb/d and 19.43 mb/d respectively. According to preliminary data, total OECD actual supply stood at 19.64 mb/d in February.

**Graph 24: OECD's quarterly production**



***North America***

Oil supply from North America is forecast to grow by 90 tb/d over 2009 to average 14.28 mb/d in 2010, indicating an upward revision of 20 tb/d from last month. The expected supply growth for the US and Canada is seen to more than offset the anticipated decline in Mexico. On a quarterly basis, North America oil supply in 2010 is seen to stand at 14.32 mb/d, 14.32 mb/d, 14.19 mb/d, and 14.28 mb/d respectively.

***US***

*The startup of the Perdido project to support expected US growth of 0.16 mb/d in 2010*

US oil production is projected to increase by 0.16 mb/d to average 8.23 mb/d in 2010, representing an upward revision of 20 tb/d from last month. The revisions were concentrated in the first quarter as preliminary actual production data required the upward revision. Additionally, the startup of the Perdido developments in the deep water of the Gulf of Mexico further supported the revision. The project, which is considered one of the most technologically complex and remote producing platform in the Gulf of Mexico, is expected to ramp-up toward full capacity of 100 tb/d. Additionally, the Cascade and Chinook developments are reported to be on track for first oil in July of 2010, with the first FPSO in the area and an initial production target of 50 tb/d. Furthermore, the startup of the Atwater Valley well for the Telemark hub further supported the upward revisions. On the biofuels side, the US Senate decided to reinstate the biodiesel $1/gal tax credit in March which is seen to reenergize the biodiesel industry which has experienced weak economics during the first two months of the year due to the halt in the tax credit. On a quarterly basis, US oil supply is expected to average 8.25 mb/d 8.20 mb/d, 8.20 mb/d, and 8.27 mb/d respectively. According to preliminary data, US oil supply is estimated to have averaged 8.26 mb/d in February and 8.32 mb/d in March.

***Canada and Mexico***

*Canada supply to increase by 40 tb/d in 2010*

Oil production in **Canada** is expected to grow by 40 tb/d to average 3.19 mb/d in 2010, representing a minor downward revision of 10 tb/d from the previous month. The majority of the downward revision was experienced in the first quarter on the back of updated preliminary production data. The various unplanned shutdowns at different oil sand facilities have negatively affected the forecast such as the current difficulty with one of Suncor's facilities. Additionally, the changes introduced to the Alberta royalty system that will take effect in the beginning of 2011 is not seen to support production in 2010. In contrast, oil sand production from the Horizon project is seen to have reached its capacity of 0.10 mb/d from the low level experienced in December of around 50 tb/d due to a mechanical problem, which is supporting growth. On a quarterly basis, Canada's production is seen to average 3.08 mb/d, 3.22 mb/d, 3.19 mb/d and 3.25 mb/d respectively.

*Mexico supply to decline by 0.12 mb/d in 2010*

Oil supply from **Mexico** is anticipated to drop by 0.12 mb/d over 2009 to average 2.86 mb/d in 2010, representing a minor upward revision of 10 tb/d compared to the previous month. The healthier-than-expected production level during the first two months of the year necessitated the minor upward revision. The ongoing effort to stabilize production has been bearing some positive result during the past two months. However, the extent to which such endeavours will succeed shall play a major role in determining Mexico supply in 2010. The continuing development of the challenging Chicontepec field is expected to support supply and offset part of the anticipated decline at Cantarell, where the newly employed technology to maintain the pressure at the well is expected to reduce the decline rate. On a quarterly basis, Mexico's oil supply is expected to average 2.99 mb/d, 2.90 mb/d, 2.80mb/d, and 2.77 mb/d respectively.

***Western Europe***

Total **OECD Western Europe** supply is estimated to average 4.46 mb/d in 2010, representing a decline of 0.25 mb/d over 2009 and a minor upward revision of less than0.01 mb/d compared to the previous month. The revisions came mainly in the first quarter to adjust for preliminary production data. The minor upward revision came from Denmark while the UK supply experienced a minor downward revision. OECD Western Europe anticipated decline remains the largest among all non-OPEC regions dragging down the OECD supply forecast. On a quarterly basis, OECD Western Europe supply in 2010 is seen to average 4.66 mb/d, 4.43 mb/d, 4.28 mb/d, and

4.46 mb/d, respectively. Preliminary February estimates suggest a production level of 4.67 mb/d, slightly lower than January.

*Norway supply to drop 0.13 mb/d in 2010, the largest decline among all non-OPEC countries*

Oil supply from **Norway** is foreseen to decline by 0.13 mb/d over 2009 to average 2.22 mb/d in 2010, unchanged from the previous month. The current anticipated decline marks Norway supply with the largest decrease among all non-OPEC countries in 2010. Despite the steady state from the previous month, there was a minor upward revision introduced to the first quarter, yet it did not have any effect on the annual figure. The slight upward revision in the first quarter was introduced as preliminary production data suggested a slightly higher level than anticipated. Norway oil production indicated a small decline in February compared to January mainly on the back of lower NGL production due to freezing conditions while crude oil production increased slightly. The gain in crude oil production was supported by the Alvheim and Vilje developments while Vale is offline. Additionally, newly-used low pressure technology supported Oseberg supply. Norway oil production stood at 2.33 mb/d in February according to preliminary data. On a quarterly basis, Norway's supply is seen to average 2.33 mb/d, 2.20 mb/d, 2.10 mb/d and 2.25 mb/d, respectively.

*UK supply is expected to decline by 0.10 mb/d in 2010*

**UK** supply is predicted to average 1.38 mb/d in 2010, a decline of 0.10 mb/d over 2009, indicating a minor downward revision of less than 10 tb/d compared to recent months. The revision came only in the first quarter to adjust for preliminary production data. The Don field is now tied to the Brent pipeline which is slightly supporting Brent supply. Additionally, the upcoming work at Buzzard in May is expected to sharply affect the supply from the field. On a quarterly basis, UK oil supply stands at 1.45 mb/d, 1.38 mb/d, 1.33 mb/d and 1.37 mb/d respectively.

**Denmark** oil supply is expected to average 0.25 mb/d in 2010 as it encountered an upward revision of 10 tb/d. The upward revision came to adjust for updated preliminary production data for the first two months of 2010. The new data indicated a supply increase compared to the fourth quarter 2009, mainly on the back of the ramp-up of the Siri development that was shut down in August of last year. Additionally, the ramp-up of the Nini project further supported supply.

## Asia Pacific

Oil production from **OECD Asia Pacific** is seen to have experienced slight growth of 0.02 mb/d over 2009 to average 0.66 mb/d in 2010, relatively flat from the previous month. Despite the steady state, there were minor upward and downward revisions to Australia and New Zeeland supply that canceled each other out. The anticipated minor growth is seen coming mainly from Australia. On a quarterly basis, OECD Pacific oil supply is expected to average 0.63 mb/d, 0.64 mb/d, 0.67 mb/d and 0.68 mb/d respectively.

*Pyrenees started up in March*

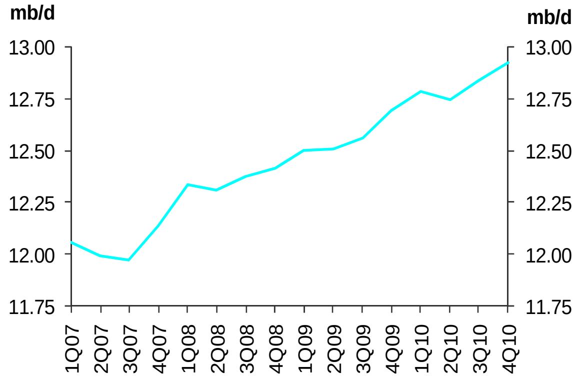
**Australia's** oil supply is seen to grow by a minor 10 tb/d to average 0.55 mb/d in 2010, indicating a minor upward revision of less than 10 tb/d compared to the previous month. The anticipated minor growth is supported by the Pyrenees project which started up in March with an expected full capacity of around 0.10 mb/d. Additionally, the resumption of output from the Woollybutt field, which is expected to return to the pre-shutdown level of 10 tb/d, is supporting the minor upward revision. On a quarterly basis, Australian supply is anticipated to average 0.53 mb/d, 0.54 mb/d, 0.57 mb/d, and 0.58 mb/d respectively.

**New Zealand** oil production is expected to remain relatively flat over 2009 to average 0.10 mb/d in 2010, indicating a downward revision of 10 tb/d compared to the previous month. The downward revision came mainly in the first quarter to adjust for preliminary production data. The downward revision came despite the first oil from the M2A well at the Maari field that is seen to add to field production.

*DC total supply to average 12.83 mb/d in 2010 for growth of 0.26 mb/d*

## Developing Countries

Graph 25: Developing Countries' quarterly production




Total supply in the **Developing Countries** (DCs) supply is forecast to increase by 0.26 mb/d over 2009 to average 12.83 mb/d in 2010, indicating an upward revision of 60 tb/d from the previous month. The upward revision came mainly from Other Asia and Latin America while Africa supply encountered a downward revision. The revision came mainly in the first quarter while the rest of the quarters experienced smaller upward revisions. Latin America remains the region with the highest projected growth among all non-OPEC regions, even in terms of upward revision of 40 tb/d compared to the previous month. The upward revision came mainly to adjust for preliminary actual production data. On a quarterly basis, DC's total oil supply is estimated to stand at 12.79 mb/d, 12.75 mb/d, 12.84 mb/d and 12.92 mb/d respectively.

*Other Asia supply to increase by 0.03 mb/d in 2010*

**Other Asia** oil supply is foreseen to increase by 0.03 mb/d to average 3.75 mb/d in 2010, indicating an upward revision of 30 tb/d compared to the previous month. The upward revision came mainly in the first quarter and was partially carried over to the rest of the quarters. Brunei oil supply experienced an upward revision of 10 tb/d due to higher-than-expected production during the first two months according to preliminary data. Similarly, Vietnam oil production forecast was revised up by 20 tb/d compared to the previous month to adjust for preliminary production data. India remains the country with the highest expected growth in the region supported by the Mangala projects. The operator of the fields reported that full capacity of the first stage of 0.13 mb/d will be reached in the second half of 2010. On a quarterly basis, Other Asia supply is expected to stand at 3.79 mb/d, 3.74 mb/d, 3.72 mb/d and 3.75 mb/d respectively.

*Latin America supply to grow by 0.25 mb/d in 2010*

**Latin America** oil production is forecast to increase by 0.25 mb/d to average 4.66 mb/d in 2010, indicating an upward revision of around 40 tb/d from last month. Argentina oil supply forecast experienced an upward revision of 10 tb/d due to healthy production figures during the first two months as per preliminary data. However, oil supply from Argentina is still expected to decline by 20 tb/d over 2009 to average 0.74 mb/d in 2010, despite the increased number of rigs, as the natural decline is seen to more than offset any new barrels. Brazil's oil supply forecast remains with the highest growth among all non-OPEC countries of 0.19 mb/d to average 2.70 mb/d in 2010. Preliminary actual production data for the first two months indicates a gradual increase in production as offshore maintenance comes to an end. Additionally, Petrobras expected the Tupi full-scale pilot project to start up in October of 2010 instead of December. Colombia oil production is expected to grow by 90 tb/d to average 0.77 mb/d in 2010, with an upward revision of 10 tb/d compared to the previous month. The anticipated growth is supported by the Rubiales developments with new technology to improve oil recovery. On a quarterly basis, Latin American supply is seen to stand at 4.57 mb/d, 4.60 mb/d, 4.67 mb/d and 4.78 mb/d respectively.

*Middle East supply to average 1.73 mb/d in 2010*

**Middle East** oil production is estimated to increase by a minor 10 tb/d over 2009 to average 1.73 mb/d in 2010, representing a slight upward revision of 10 tb/d compared to the previous month. The upward adjustment came from Oman as the country's supply forecast experienced an upward revision of 10 tb/d from last month. Oman oil supply is expected to average 0.86 mb/d in 2010, representing growth of 50 tb/d from the previous year. Updated preliminary production data required the minor revision. Other countries' supply forecasts remained unchanged from last month, with both Syria and Yemen supply anticipated to decline in 2010. On a quarterly basis, Middle East supply expected to average 1.75 mb/d, 1.74 mb/d, 1.73 mb/d, and 1.72 mb/d respectively.

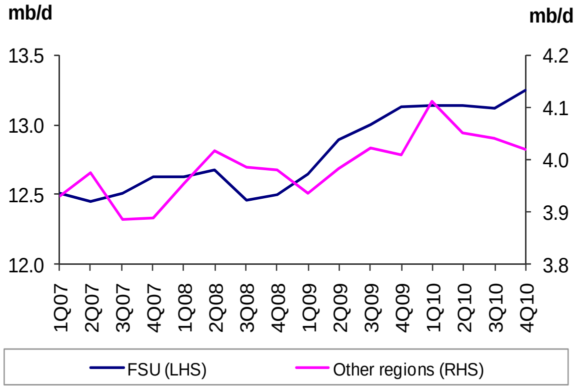
Oil supply from **Africa** is seen to decline by 20 tb/d to average 2.69 mb/d in 2010, indicating a minor downward revision of 20 tb/d from last month. The downward revision came on the back of adjustment to updated production data from Chad, Congo, Egypt, Equatorial Guinea, and South Africa. The revisions were mainly in the first quarter. Ghana Jubilee first oil is now expected in the fourth quarter with ramp-up to full capacity of 0.12 mb/d within six months as per recent reports from the operator.

## FSU, Other Regions

*FSU supply to increase by 0.25 mb/d in 2010*

**FSU** oil supply is projected to increase by 0.25 mb/d over the previous year to average 13.17 mb/d in 2010, indicating a minor downward revision of 10 tb/d from the previous month. The downward revision came from Azerbaijan while Russia oil supply experienced a minor upward revision. The healthy ramp-up of new developments as well as increased activities in mature areas supported growth. The increase in FSU supply remains the highest regional growth among all non-OPEC regions supported by Russia, Kazakhstan, and Azerbaijan. On a quarterly basis, total oil supply in the FSU is expected to stand at 13.14 mb/d, 13.14 mb/d, 13.13 mb/d, and 13.25 mb/d respectively. Other Europe is expected to decline by 20 tb/d over 2009 to average 0.12 mb/d in 2010, following a downward revision due to preliminary actual production data in the first quarter that was carried over throughout the year. China's oil supply is seen to grow by 0.08 mb/d over the previous year to average 3.93 mb/d in 2010.

**Graph 26: FSU and other region's quarterly production**




### *Russia*

*Russia supply in March marked a new post-Soviet record*

Oil supply from **Russia** is expected to grow by 0.09 mb/d over 2009 to average 10.01 mb/d in 2010, representing an upward revision of 20 tb/d from recent evaluations. The healthy production figure in the first quarter, which came higher than previously expected, necessitated the upward revision. Russia oil production reached a new post-Soviet record in March following strong production levels in January and February. The production level in the first quarter was supported by the continued ramp-up of the Vankor, Talakan, and Uvat developments. Additionally, the increase in drilling activities at other brown fields further supported supply. The minor growth at the Stolbovoye field also added to the healthy production as more wells are being drilled at the project. Furthermore, the loading programme of the second quarter indicates an increase in Russian exports which further supports the growth potential of Russian oil supply. On the other hand, the tax breaks for East Siberian fields will remain in place till the end of 2010 which will encourage producers to produce more volumes. However, in 2011, the tax break will expire except for select projects, which encounter higher duties. On a quarterly basis, Russian oil supply is anticipated to average 10.09 mb/d, 10.03 mb/d, 9.99 mb/d and 9.95 mb/d respectively. March preliminary data indicates that Russia's production stood at 10.13 mb/d, higher than the previous month.

### *Caspian*

*Kazakhstan supply to average 1.61 mb/d in 2010*

Oil production from **Kazakhstan** is predicted to increase by 70 tb/d to average 1.61 mb/d in 2010, unchanged from last month. Despite the steady state, the first quarter experienced a minor upward revision to adjust for preliminary and estimated production data during the first quarter, yet it did not have an effect on the annual figure. Furthermore, the end of the strike at the Uzen field in March slightly supported the production estimates, as the assumed loss of production due to the strike was less than 0.10 mb. On a quarterly basis, Kazakhstan supply is seen to stand at 1.61 mb/d, 1.60 mb/d, 1.57 mb/d, and 1.65 mb/d respectively.

*Azerbaijan supply to average 1.08 mb/d in 2010*

Oil supply from **Azerbaijan** is anticipated to increase by 60 tb/d to average 1.08 mb/d in 2010, representing a downward revision of less than 40 tb/d the previous month. The revision was experienced due to adjustment of preliminary actual production data. Additionally, the decline in the BTC loading programme in April due to the ACG field maintenance further supported the downward revision. On a quarterly basis, Azerbaijan oil supply is estimated to average 1.00 mb/d, 1.05 mb/d, 1.10 mb/d, and 1.16 mb/d respectively.

### China

*China supply to increase by 80 tb/d in 2010*

**China's** oil production is estimated to average 3.93 mb/d in 2010, an increase of 80 tb/d over the previous year and an upward revision of 40 tb/d from the previous month. The strong production figures from the first two months required the upward revision, which was the highest in the first quarter compared to other non-OPEC countries' revisions. The startup of the two small fields at Weizhou and Bozhong is seen to support growth. However, the strong supply figure anticipated in the first quarter is expected to slow in the coming quarters as some aging fields are seen to continue to decline. On a quarterly basis, China's oil supply is foreseen to average 3.99 mb/d, 3.93 mb/d, 3.92 mb/d, and 3.90 mb/d respectively.

## OPEC natural gas liquids and non-conventional oils

**OPEC NGLs** and non-conventional oils are estimated to have averaged 4.35 mb/d in 2009, representing growth of 0.21 mb/d over the previous year. In 2010, OPEC NGLs and nonconventional oils are expected to increase by 0.52 mb/d over the previous year to average 4.87 mb/d.

**Table 15: OPEC NGLs + non-conventional oils, 2007-2010**

| | | | Change | | | | | | Change | | Change |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2007** | **2008** | 08/07 | 1Q09 | 2Q09 | 3Q09 | 4Q09 | **2009** | 09/08 | **2010** | 10/09 |
| **Total OPEC** | **3.95** | **4.14** | 0.20 | 4.14 | 4.31 | 4.48 | 4.47 | **4.35** | 0.21 | **4.87** | 0.52 |

## OPEC crude oil production

*OPEC crude production declined by 28 tb/d in March*

OPEC total crude oil production in March averaged 29.26 mb/d based on secondary sources, representing a minor decline of 28 tb/d from the previous month. OPEC production not including Iraq stood at 26.82 mb/d, up 83 tb/d from the previous month. The minor drop in production came mainly from Iraq.

**Table 16: OPEC crude oil production based on *secondary sources*, 1,000 b/d**

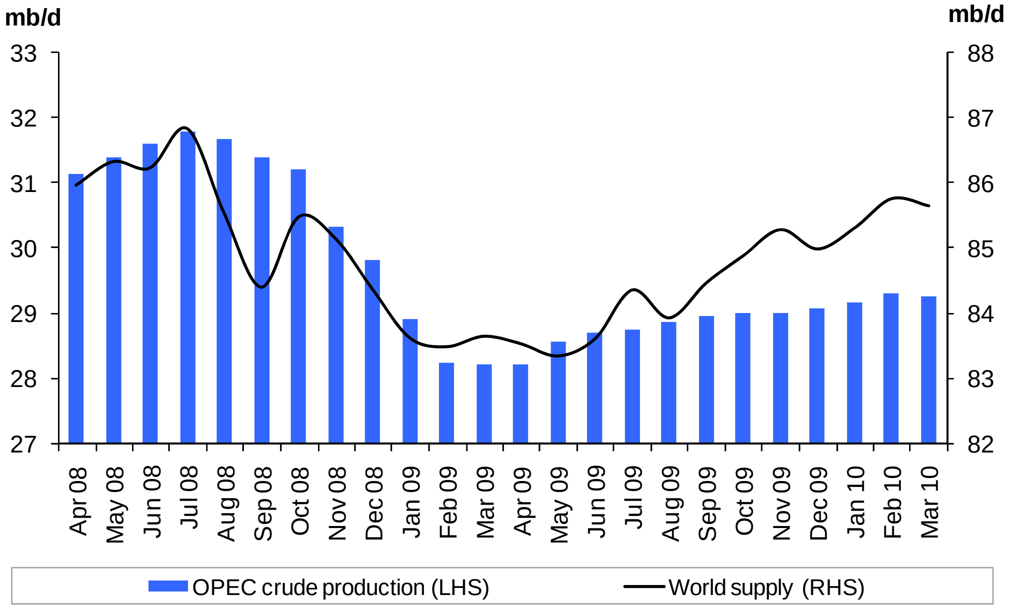
| | 2008 | 2009 | 3Q09 | 4Q09 | 1Q10 | Jan 10 | Feb 10 | Mar 10 | *Mar/Feb* |
|---|---|---|---|---|---|---|---|---|---|
| Algeria | 1,381 | 1,272 | 1,277 | 1,273 | 1,273 | 1,271 | 1,275 | 1,273 | *-2.0* |
| Angola | 1,871 | 1,786 | 1,828 | 1,873 | 1,919 | 1,898 | 1,933 | 1,929 | *-4.4* |
| Ecuador | 503 | 477 | 472 | 474 | 474 | 470 | 476 | 476 | *0.1* |
| Iran, I.R. | 3,892 | 3,725 | 3,749 | 3,728 | 3,742 | 3,733 | 3,752 | 3,741 | *-10.7* |
| Iraq | 2,341 | 2,422 | 2,499 | 2,459 | 2,482 | 2,463 | 2,551 | 2,440 | *-110.6* |
| Kuwait | 2,554 | 2,263 | 2,254 | 2,275 | 2,289 | 2,288 | 2,289 | 2,291 | *1.4* |
| Libya, S.P.A.J. | 1,718 | 1,557 | 1,557 | 1,540 | 1,541 | 1,538 | 1,543 | 1,543 | *-0.3* |
| Nigeria | 1,947 | 1,812 | 1,739 | 1,942 | 1,979 | 1,991 | 1,956 | 1,986 | *30.4* |
| Qatar | 840 | 776 | 780 | 792 | 809 | 802 | 813 | 813 | *0.5* |
| Saudi Arabia | 9,113 | 8,055 | 8,123 | 8,122 | 8,144 | 8,141 | 8,133 | 8,157 | *23.3* |
| UAE | 2,557 | 2,256 | 2,253 | 2,258 | 2,280 | 2,277 | 2,281 | 2,283 | *2.2* |
| Venezuela | 2,487 | 2,311 | 2,323 | 2,290 | 2,306 | 2,295 | 2,290 | 2,332 | *42.1* |
| **Total OPEC** | **31,205** | **28,710** | **28,854** | **29,024** | **29,238** | **29,164** | **29,291** | **29,263** | ***-28.0*** |
| **OPEC excl. Iraq** | **28,864** | **26,288** | **26,355** | **26,566** | **26,755** | **26,702** | **26,740** | **26,823** | ***82.6*** |

*Totals may not add due to independent rounding.*

# World Oil Supply

Preliminary figures indicate that global oil supply decreased 109 tb/d in March to average 85.65 mb/d compared to the previous month. The drop was due to a declines of 81 tb/d in non-OPEC supply as well as 28 tb/d in OPEC crude production. The share of OPEC crude oil in global production was steady at 34.2% in March. The estimate is based on preliminary data from non-OPEC supply, while estimates for OPEC NGLs and OPEC production are derived from secondary sources.

**Graph 27: OPEC and world oil supply**

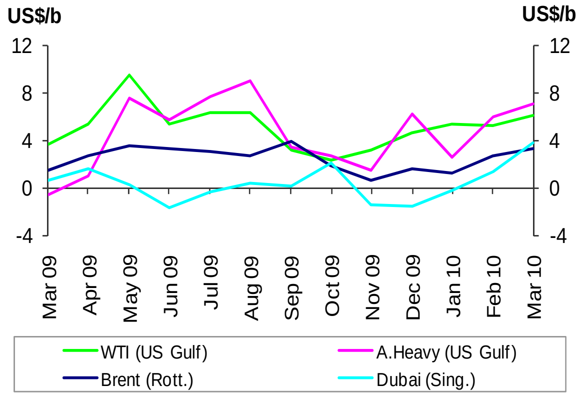


# Product Markets and Refinery Operations

*Refining margins increased across the globe in March*

**A combination of a prolonged winter with refinery maintenance and continuation of discretionary run cuts by refiners have provided support for product markets and refining margins across the board. With the completion of major maintenance in the Atlantic basin by May, as well as the lack of robust demand for major products, product market sentiment is not expected to strengthen further in the future to encourage refiners to change their current low run strategy. This situation would not be able to provide sufficient support for crude market fundamentals in the next months.**

Graph 28: Refining margins




As **Graph 28** indicates, US refining margins extended the previous upward trend and WTI crude oil margins at the US Gulf Coast rose by 84¢ to reach $6.02/b in March from $5.18/b in the previous month. In Europe, refining economics also improved compared to recent months and margins for Brent crude in Rotterdam increased by 42¢ to reach $3.27/b in March from $2.75/b in February.

In Asia, refining margins gained more than in the Atlantic Basin, as Dubai crude lost its earlier strength and differentials versus other benchmark crudes widened further in March. The improving distillate crack spread has also contributed to the positive developments in Asian refining economics. Refining margins for Dubai crude oil in Singapore soared by $2.38/b to $3.73/b in March from $1.35/b in the last month.

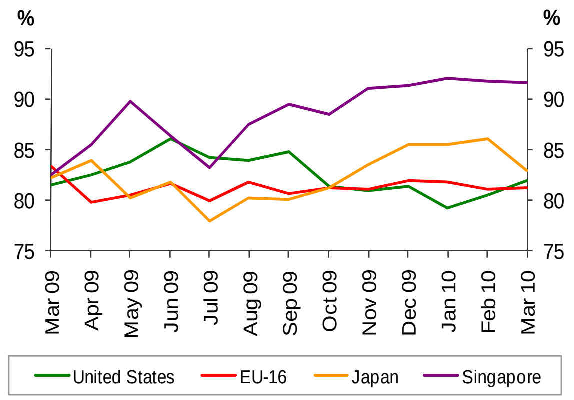
**Looking ahead, despite the mix perception for the demand for different products in the next months, improving economic activity is likely to provide some support for product demand and prices in the future. But due to ample spare refinery capacity, refining margins are not likely to see significant gains to encourage refiners to boost their runs to lend enough support to the crude market.**

## Refinery operations

*Refinery utilization rates in the US rose slightly in March*

Ample product stocks and slow recovery of demand have adversely affected refinery operations across the world, especially in the Atlantic Basin in the last couple of months. Refiners in major consuming areas did not follow their typical trend and cut runs in the same period. However, continuation of cold weather and slow refinery runs have recently increased the product stock draw, especially for middle distillates, providing support for the light and middle distillate crack spread and encouraging refiners, especially in the US, to slightly increase their throughputs. Completion of the maintenance schedule in some refineries in the US and Europe has also contributed to positive developments on refinery throughputs in the Atlantic Basin.

Graph 29: Refinery utilization rates, 2009-2010




**As Graph 29 shows, refinery utilization rates in the US rose by 1.4% to reach 81.9% in March from 80.5% in February. But, rates were still much lower than the typical level. Continuation of maintenance has also capped upward movement of**

**the European refinery utilization rates which increased marginally by 0.3pp to 81.3% in March from 81% in the previous month.**

**In Asia, the maintenance schedule has started and is likely to negatively affect Asian refinery runs in the next three months. Refinery utilization rates in Japan fell by 3.1pp in March to record 83% from 86.3% in the previous month.**

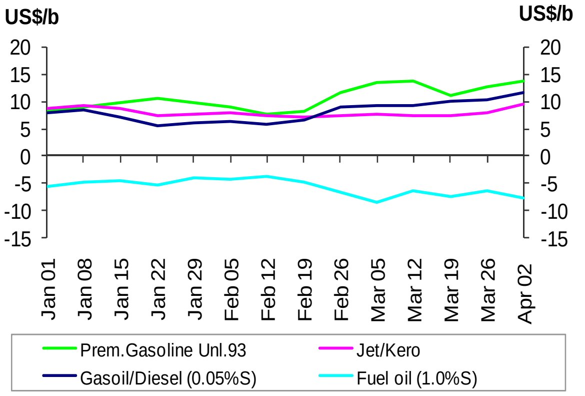
Looking ahead, supportive developments in the economy may lead to higher demand for products and boost refinery runs, but demand for light products is not expected to increase significantly in the coming months to boost refinery utilization rates.

***US market***

*Product stock draws raised bullish sentiment in the US product market*

Gasoline stock draws along with improving demand lifted gasoline prices and crack spread. As **Graph 30** shows, the gasoline crack spread in the US Gulf Coast rose to $13.58/b in the week ending 2 April from about $11/b in the latter part of February. These developments have also encouraged speculators on the Nymex to increase net long positions for gasoline, which rose from 58,591 lots in early March to 66,127 lots in the last week of the month.

**Graph 30: US Gulf crack spread vs. WTI, 2009-2010**




**According to the EIA, US gasoline demand increased in March and the four-week average reached over 9 mb on the week ending 2 April. Despite recent positive developments on the gasoline market, the risk of a supply shortage during the upcoming driving season is very limited amid persisting spare refinery capacity and comfortable gasoline stocks.**

Refinery maintenance and continuation of cold weather as well as a slight recovery of distillate demand resulting from economic recovery have also lent support to distillates and the previous imbalance of the US middle distillates market has eased significantly. According to the EIA, US distillates demand based on the four-week average soared to over 3,714 tb/d in the week ended 2 April, but remained less than in the same week last year.

Following these developments, the gasoil crack spread at the US Gulf Coast against WTI crude oil jumped to above $11/b in March from around $7/b in February. On the derivative market, while there was some volatility arising from market players' perception about future demand, speculators increased net long position on the Nymex heating oil market from 16,374 in early March to 28,387 lots in the week ended 30 April. With the end of the winter season, market participants may reduce net long positions on the Nymex heating oil market.

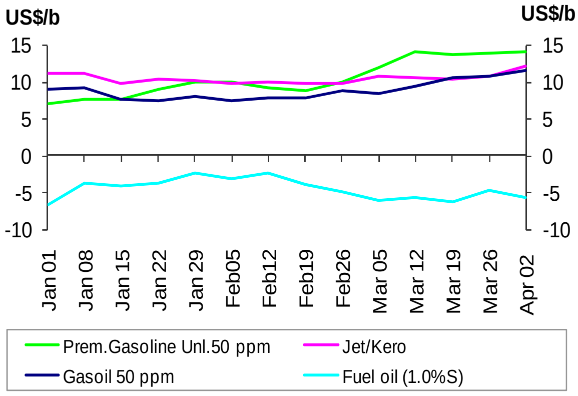
Low sulfur fuel oil market performances were weak due to a lack of demand from utility plants. The crack spread against WTI crude on the US Gulf Coast widened from about minus $6.70/b in late February to minus $7.70/b in the week ended 2 April (*see* ***Graph 30***). The high sulfur fuel oil market was also weak amid lower regional demand and a lack of export opportunities to the Asia Pacific region. With the completion of refinery maintenance, increasing fuel oil output and slowing seasonal demand, the US fuel oil market is expected to remain lacklustre in the coming months.

*European product market sentiment strengthened further in March*

### *European market*

A combination of refinery maintenance with increasing export opportunities to the US and West Africa has tightened regional supplies and provided support for the gasoline market. Gasoline crack spread against Brent crude oil at Rotterdam soared to over $14/b in the last week of March from about $10/b in the same period of the previous month (*see **Graph 31***). The current bullish sentiment of the European gasoline market may remain in the next months amid increasing seasonal demand.

**Graph 31: Rotterdam crack spreads vs. Brent, 2009-2010**




European naphtha market lost its earlier strength due to increasing regional cracker maintenance schedules and the replacement of naphtha with LPG as a feedstock by regional petrochemical units. Fewer arbitrage opportunities to Asia have also contributed to bearish developments on the European naphtha market.

**The middle distillates market also gained ground by a combination of limited inflows from the US, continuation of the cold weather and fewer regional supplies resulting from seasonal refinery turnaround. These developments have led to structural changes in both the futures and physical market for gasoil. On ICE, the gasoil market flipped from longstanding contango to backwardation and it encouraged traders to reduce off-shore distillate stocks significantly over the last few weeks. The crack spread of gasoil against Brent crude at Rotterdam also surged sharply and reached over $11/b on the week ended 2 April from about $8.75/b in the last week of February (*see Graph 31*).**

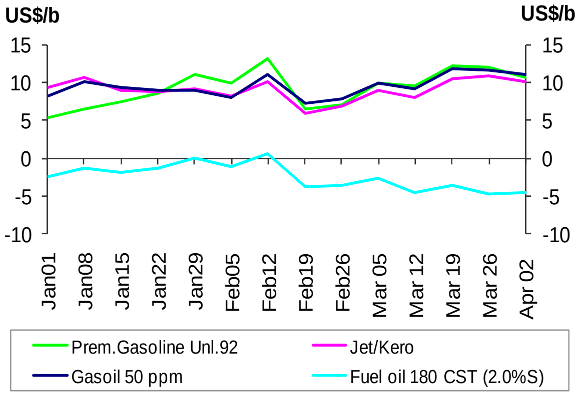
The European fuel oil market remained lackluster due to sluggish regional demand and huge imports from the US. Ahead of tightening of the Sulfur Emission Control Areas (SECAs) in Northern Europe in July, the spread between 1.5% and 1% sulfur fuel oil widened further. As **Graph 31** indicates, sluggish regional demand has also adversely affected the low sulfur fuel oil crack spread against Brent crude oil and it fell to minus $6/b in the last week of March from about minus $2.43/b in the same period of the previous month. Looking ahead, the European fuel oil market may lose ground further upon completion of regional refinery maintenance and increasing regional supply.

*Cracker maintenance schedule affected earlier strength of the Asian naphtha market in March*

### *Asian market*

Asian naphtha market sentiment has been further undermined amid lower regional demand due to increasing cracker maintenance, continuation of Indian exports and using LPG as a substitute feed stock by petrochemical units. Lower imports by China have also contributed to recent bearish developments in the Asian naphtha market. However, the Asian naphtha market is still in backwardation and with the heavy refinery maintenance schedule in the second quarter and fewer regional supplies, it appears that the Asian naphtha market is not likely to gain ground in the coming months.

**Graph 32: Singapore crack spreads vs. Dubai, 2009-2010**



**The gasoline market was supported by continuation of higher imports from Indonesia, emerging arbitrage opportunities to the US West Coast prior to driving season, and regional turnarounds. In line with these developments, the gasoline crack spread against Dubai crude oil in Singapore jumped to over $11/b in the latter part of March from about $7/b in February (*see Graph 32*).**

The Asian gasoil market was buoyed by demand from Chile and relatively tight supply resulting from increasing regional maintenance and rising technical problems in Vietnam's refinery. The gasoil crack versus Dubai in the Singapore market surged to over $11/b in March from below $8/b in February (*see* ***Graph 32***). The continued buying of low sulfur diesel by India prior to the launching of the Euro-4 fuel specification also compounded the bullish developments of the Asian middle distillates market. With the return of Chile's refinery to normal operation, the Asian distillate market may lose part of its current strength, but increasing demand from the agriculture sector should offset any adverse effects.

Increasing arbitrage cargoes from the West along with further availability of heavy crude oil and less regional demand have further deteriorated the recent bearish developments in the Asian fuel oil market and exerted more pressure on the fuel oil crack spread as a major barometer for market sentiment. The high sulfur fuel oil crack spread in the Singapore market against Dubai crude fell to minus $4.50/b in the last week of March from minus $3.50/b in the same week of the previous month. After these developments, the contango level of the Asian fuel oil market has also widened further compared to the previous month.

Looking ahead, scheduled arrivals from outside the region may offset lower regional supply resulting from increasing maintenance in the region, exerting more pressure on the Asian fuel oil market in the coming months.

**Table 17: Refined product prices, US$/b**

| | | Jan 10 | Feb 10 | Mar 10 | Change Mar/Feb |
|---|---|---|---|---|---|
| **US Gulf (Cargoes):** | | | | | |
| Naphtha | | 78.97 | 80.91 | 86.26 | 5.35 |
| Premium gasoline | *(unleaded 93)* | 83.63 | 85.43 | 95.88 | 10.45 |
| Regular gasoline | *(unleaded 87)* | 80.88 | 83.00 | 90.95 | 7.95 |
| Jet/Kerosene | | 82.27 | 83.71 | 88.89 | 5.18 |
| Gasoil | *(0.05% S)* | 80.81 | 81.94 | 86.69 | 4.75 |
| Fuel oil | *(1.0% S)* | 69.90 | 71.42 | 70.85 | -0.58 |
| Fuel oil | *(3.0% S)* | 67.93 | 69.77 | 69.78 | 0.01 |
| **Rotterdam (Barges FoB):** | | | | | |
| Naphtha | | 79.05 | 75.07 | 80.82 | 5.76 |
| Premium gasoline | *(unleaded 10 ppm)* | 84.65 | 83.11 | 92.38 | 9.27 |
| Premium gasoline | *(unleaded 95)* | 78.36 | 76.94 | 85.52 | 8.58 |
| Jet/Kerosene | | 86.46 | 83.38 | 89.50 | 6.12 |
| Gasoil/Diesel | *(10 ppm)* | 84.11 | 81.53 | 88.75 | 7.22 |
| Fuel oil | *(1.0% S)* | 72.55 | 69.94 | 73.25 | 3.31 |
| Fuel oil | *(3.5% S)* | 71.29 | 69.00 | 70.47 | 1.47 |
| **Mediterranean (Cargoes):** | | | | | |
| Naphtha | | 76.50 | 72.28 | 78.64 | 6.36 |
| Premium gasoline | *(50 ppm)* | 67.07 | 64.72 | 69.38 | 4.65 |
| Jet/Kerosene | | 84.15 | 81.53 | 87.39 | 5.86 |
| Gasoil/Diesel | *(50 ppm)* | 83.66 | 80.74 | 86.54 | 5.80 |
| Fuel oil | *(1.0% S)* | 72.10 | 69.58 | 72.39 | 2.81 |
| Fuel oil | *(3.5% S)* | 70.82 | 67.38 | 68.79 | 1.40 |
| **Singapore (Cargoes):** | | | | | |
| Naphtha | | 80.66 | 75.54 | 80.84 | 5.30 |
| Premium gasoline | *(unleaded 95)* | 88.01 | 86.25 | 90.86 | 4.61 |
| Regular gasoline | *(unleaded 92)* | 84.87 | 83.24 | 88.48 | 5.24 |
| Jet/Kerosene | | 85.87 | 82.12 | 87.49 | 5.37 |
| Gasoil/Diesel | *(50 ppm)* | 85.89 | 83.20 | 88.63 | 5.42 |
| Fuel oil | *(180 cst 2.0% S)* | 75.55 | 71.88 | 73.04 | 1.16 |
| Fuel oil | *(380 cst 3.5% S)* | 75.11 | 71.09 | 71.89 | 0.79 |

**Table 18: Refinery operations in selected OECD countries**

| | Refinery throughput mb/d | | | | Refinery utilization % | | | |
|---|---|---|---|---|---|---|---|---|
| | **Jan 10** | **Feb 10** | **Mar 10** | **Mar/Feb** | **Jan 10** | **Feb 10** | **Mar 10** | **Mar/Feb** |
| **USA** | 13.74 | 13.89 | 14.04 | 0.15 | 79.1 | 80.5 | 81.9 | 1.42 |
| **France** | 1.43 | 1.46 | 1.45 | -0.01 | 81.7 | 81.4 | 81.0 | -0.35 |
| **Germany** | 1.87 | 1.79 | 1.82 | 0.03 | 84.9 | 84.9 | 85.1 | 0.20 |
| **Italy** | 1.63 | 1.62 | 1.64 | 0.02 | 76.5 | 76.4 | 76.6 | 0.27 |
| **UK** | 1.34 | 1.30 | 1.33 | 0.03 | 76.9 | 76.7 | 76.8 | 0.09 |
| **Euro16** | 10.71 | 10.61 | 10.58 | -0.03 | 81.4 | 81.6 | 81.3 | -0.34 |
| **Japan** | 3.87 | 4.10 | 4.25 | 0.15 | 85.5 | 86.1 | 83.0 | -3.09 |

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

# The Tanker Market

*OPEC spot fixtures rose on the back of increased activity*

According to preliminary data, OPEC spot fixtures rose in March after a large drop in February, according to revised data. Middle East fixtures gained 2.19 mb/d, due to increased activity to the East as the holiday season came to an end. Compared to the same month last year, global fixtures increased by around 19% and 18% compared to the previous month. Non-OPEC spot fixtures rose around 10% from last month to average 7.45 mb/d in March. OPEC's share of total spot chartering increased slightly to 63%.

OPEC sailings were steady in March compared to the previous month with a minor decline to average 23.07 mb/d, broadly tracking OPEC production. On an annual basis, OPEC sailings showed an increase of 1% in March. Similarly, Middle East sailings were steady with a minor drop, according to preliminary data. Initial estimates indicate that North America arrivals increased 0.1% in March to average 8.47 mb/d as refiners prepared for the summer driving season. Arrivals displayed a y-o-y decline of 5%.

**Table 19: Tanker chartering, sailings and arrivals, mb/d**

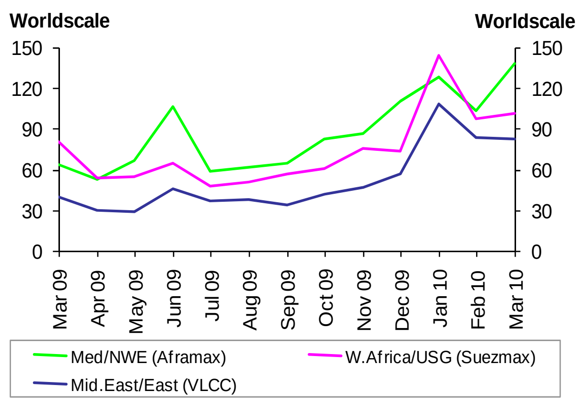
| | Jan 10 | Feb 10 | Mar 10 | Change Mar/Feb |
|---|---|---|---|---|
| **Spot Chartering** | | | | |
| All areas | 18.83 | 17.18 | 20.24 | 3.06 |
| OPEC | 12.70 | 10.43 | 12.79 | 2.36 |
| Middle East/East | 5.66 | 4.27 | 5.83 | 1.56 |
| Middle East/West | 1.74 | 1.08 | 1.71 | 0.63 |
| Outside Middle East | 5.30 | 5.08 | 5.25 | 0.17 |
| **Sailings** | | | | |
| OPEC | 22.87 | 23.30 | 23.07 | -0.23 |
| Middle East | 16.87 | 17.37 | 17.07 | -0.30 |
| **Arrivals** | | | | |
| North America | 8.42 | 8.46 | 8.47 | 0.01 |
| Europe | 12.37 | 12.34 | 12.51 | 0.17 |
| Far East | 8.15 | 8.25 | 8.23 | -0.02 |
| West Asia | 4.80 | 4.61 | 4.80 | 0.19 |

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

*VLCC spot freight remained flat, while Suezmax and Aframax gained 4% and 17% respectively*

The tanker market for crude oil showed a mixed pattern in March. Spot freight rates for VLCCs remained flat, while Suezmax and Aframax rates increased by 4% and 17% respectively backed by open arbitrage of crude oil between North West Europe and the US, regulation changes in the Mediterranean, and increased activity from Indonesia to East.

**Graph 33: Monthly averages of crude oil spot freight rates**




In the VLCC sector, balanced tonnage supply and demand in different routes in March led to flat average VLCC's spot freight rates. The Middle East to East route decreased by a modest WS1 point compared to the previous month and Middle East to West as well as West Africa to East increased by a modest WS1 point. The small decline in Middle East to East is backed by the startup of refinery maintenance in Asia, especially India and China.

The small gain in Middle East to West spot freight rates was supported by the reduced tonnage availability as well as increased crude oil imports in the West. Moreover, bullish sentiment affected west-bound shipments where US refineries, coming back onstream and gearing up for the approaching driving season, were competing to secure tonnage to transfer their volumes. However, the bullish sentiment from Middle East to West is tempered by the increasing WTI/Brent differentials posting a more-attractive note making Brent-priced crude more competitive in the US and resulting in more US imports from Northwest Europe (NWE) and West Africa and less from the long-haul Middle East. West Africa to East spot freight rates increased by WS1 over the previous month to stand at WS81, driven by increasing Chinese and South Korean crude oil imports from West Africa.

The Suezmax sector increased by WS4 points in March compared to the previous month. Spot freight rates for voyages from West Africa to the US Gulf Coast (USGC) and North West Europe to USGC and USEC increased by WS4 points compared to the previous month. The increase of the latter was supported by open transatlantic arbitrage as Brent-related crude was more attractive in the US, encouraging higher US imports from Europe. In addition, the increase of WS4 points in West Africa to USGC is also backed by increased tonnage demand as refineries, coming back onstream and gearing up for the approaching driving season, were competing to secure tonnage to transfer their volumes. Additionally, the WTI/Dubai differential drove more West African cargoes to the US.

In March, the Aframax sector displayed a healthy gain of WS19 points. Cross-Mediterranean freight rates increased by WS42 points compared to last month and Mediterranean to NWE increased by WS35 points. Support for spot freight rates from the enforcement of regulations concerning sulfur content of bunker fuel led to a drastic decrease of ship supply in the Mediterranean basin and spike of spot freight rates. As vessels moved away from the Mediterranean, this put pressure on other routes. Accordingly, the Caribbean to US East Coast route observed a decline of WS15 points or 10% compared to last month to stand at WS129 points. In contrast, Indonesia to East routes posted a gain of WS14 points backed by heavy Indonesia area enquiries which bolstered owner’s sentiments.

**Table 20: Spot tanker crude freight rates, Worldscale**

| | **Size** *1,000 DWT* | **Jan 10** | **Feb 10** | **Mar 10** | **Change Mar/Feb** |
|---|---|---|---|---|---|
| ***Crude*** | | | | | |
| Middle East/East | 230-280 | 108 | 83 | 82 | -1 |
| Middle East/West | 270-285 | 68 | 57 | 58 | 1 |
| West Africa/East | 260 | 109 | 80 | 81 | 1 |
| West Africa/US Gulf Coast | 130-135 | 144 | 97 | 101 | 4 |
| NW Europe/USEC-USGC | 130-135 | 134 | 91 | 95 | 4 |
| Indonesia/US West Coast | 80-85 | 139 | 113 | 127 | 14 |
| Caribbean/US East Coast | 80-85 | 177 | 144 | 129 | -15 |
| Mediterranean/Mediterranean | 80-85 | 123 | 95 | 137 | 42 |
| Mediterranean/North-West Europe | 80-85 | 128 | 103 | 138 | 35 |

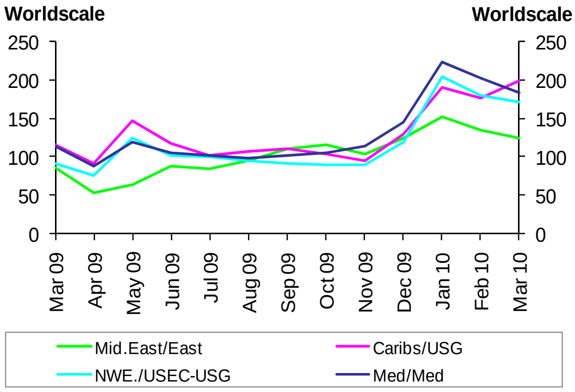
*Source: Galbraith’s Tanker Market Report and Platt's.*

*Product spot freight rates decreased on all reported routes except Caribbean/USGC*

Spot freight rates for clean tankers decreased on all reported routes except Caribbean/USGC. West of Suez rates decreased by WS6 points compared to last month and East of Suez decreased by WS6 points.

In West of Suez, spot freight rates on Caribbean/USGC experienced the only monthly increase among all reported clean routes of WS22 points. This support came from increased tonnage demand on the back of higher product demand in Chile following the earthquake.

**Graph 34: Monthly averages of clean spot freight rates**




However, the declines in spot freight rates on NWE to US East Coast/Gulf Coast, inter-Mediterranean and Mediterranean/NWE routes by WS9, WS19 and WS19 points respectively, compared to the previous month, were driven by a growing list of available tonnage and limited transatlantic arbitrage. Additionally, US gasoline imports dropped, despite data showing a decline in gasoline and middle distillate offshore stocks in the US.

In East of Suez, the decline of naphtha movement from Middle East to East brought down spot freight rates by WS10 points compared to the previous month to average WS125. However, the modest decline observed in the Singapore to East route came on the back of lower activity and a solid tonnage list.

**Table 21: Spot tanker product freight rates, Worldscale**

| | Size<br>*1,000 DWT* | Jan 10 | Feb 10 | Mar 10 | Change<br>Mar/Feb |
|---|---|---|---|---|---|
| ***Products*** | | | | | |
| Middle East/East | 30-35 | 152 | 135 | 125 | -10 |
| Singapore/East | 30-35 | 147 | 128 | 126 | -2 |
| Caribbean/US Gulf Coast | 38-40 | 191 | 178 | 200 | 22 |
| NW Europe/USEC-USGC | 33-37 | 205 | 181 | 172 | -9 |
| Mediterranean/Mediterranean | 30-35 | 224 | 203 | 184 | -19 |
| Mediterranean/North-West Europe | 30-35 | 234 | 213 | 194 | -19 |

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

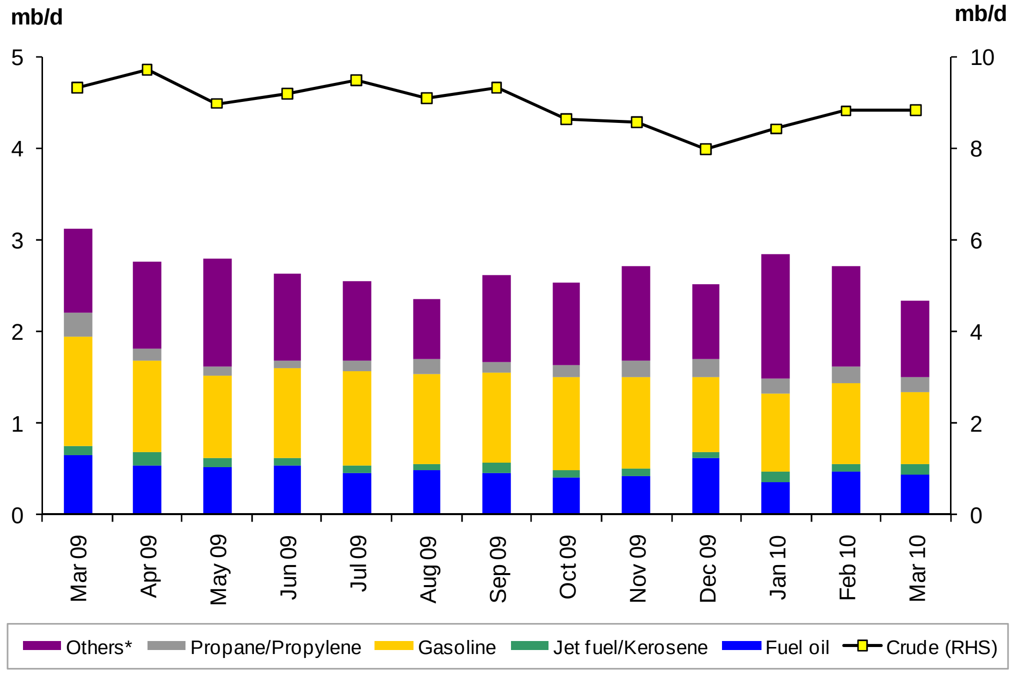
# Oil Trade

*US crude oil imports increased slightly while product imports declined*

## USA

According to preliminary data, US crude oil imports averaged 8.84 mb/d in March, 25 tb/d higher than in the previous month. On a y-o-y basis, March data showed a decline of 6.3% or 0.60 mb/d. For the last 3 months, crude oil imports showed a constant rising trend after the sharp decline in December. US product imports continue to decline in March by 13.7% or 371,000 b/d compared to the previous month to average 2.34 mb/d, and also showed a decline of 23% or 0.69 mb/d from a year ago.

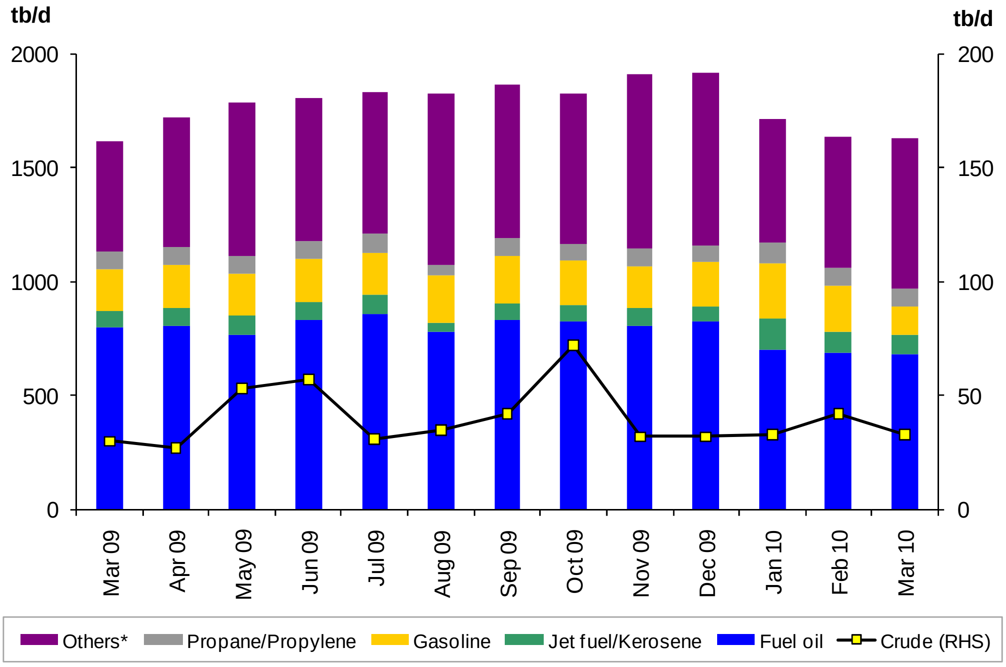
**Graph 35: USA's imports of crude and petroleum products**




**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.*

On the export side, US product exports fell slightly in March compared to the previous month, averaging 1.66 mb/d, which represents a 0.7% decline compared to the month before. On a y-o-y basis, US product exports were 9.6% or 176,000 b/d lower. As a result, US net oil imports in March were 3.4% or about 0.33 mb/d lower compared to the previous month to average 9.49 mb/d. This was the result of an increase of 30 tb/d in net crude oil imports and of a decline of 0.36 mb/d in net product imports, both compared to the previous month. March net oil imports were 10.5% lower than a year earlier, representing a decline of 1.11 mb/d from a year ago.

**Graph 36: USA's exports of crude and petroleum products**




**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.*

According to the latest data available, Canada was the top crude oil supplier to the US in January, supplying about 1.88 mb/d, down from 2.05 mb/d in the previous month. Mexico was next, supplying about 1.03 mb/d, down from about 1.06 mb/d a month earlier. Nigeria and Saudi Arabia came next with 1.00 mb/d and 0.96 mb/d respectively. OPEC Member Countries supplied about 4.20 mb/d or 50.0% of total US crude oil imports in January, up from 3.85 mb/d the previous month and down from 5.02 mb/d the same month a year earlier. For product imports, Canada was again the top product supplier to the US in January, supplying 0.71 mb/d, compared to 0.60 mb/d in the previous month. Russia followed with 0.33 mb/d, up from 0.22 mb/d compared to last month. Virgin Islands was next with 0.31 mb/d, up from 0.29 mb/d a month earlier, followed by Algeria with 0.17 mb/d, down from 0.21 mb/d. For OPEC Member Countries, in addition to Algeria, Venezuela supplied the US with 80 tb/d of products in January followed by Nigeria with 20 tb/d. Altogether, OPEC Member Countries supplied about 302,000 b/d or 10.9% of total US product imports in January, down from 336,000 b/d the previous month. For US product exports, Mexico was the top importer in January, importing 0.32 mb/d of US products. Canada was next with 0.21 mb/d followed by Singapore with 0.12 mb/d and Ecuador with 0.10 mb/d. Altogether, OPEC Member Countries imported an average of 120,000 b/d of US products in January compared to 130,000 b/d in the previous month.

**Table 22: USA crude and product net imports, tb/d**

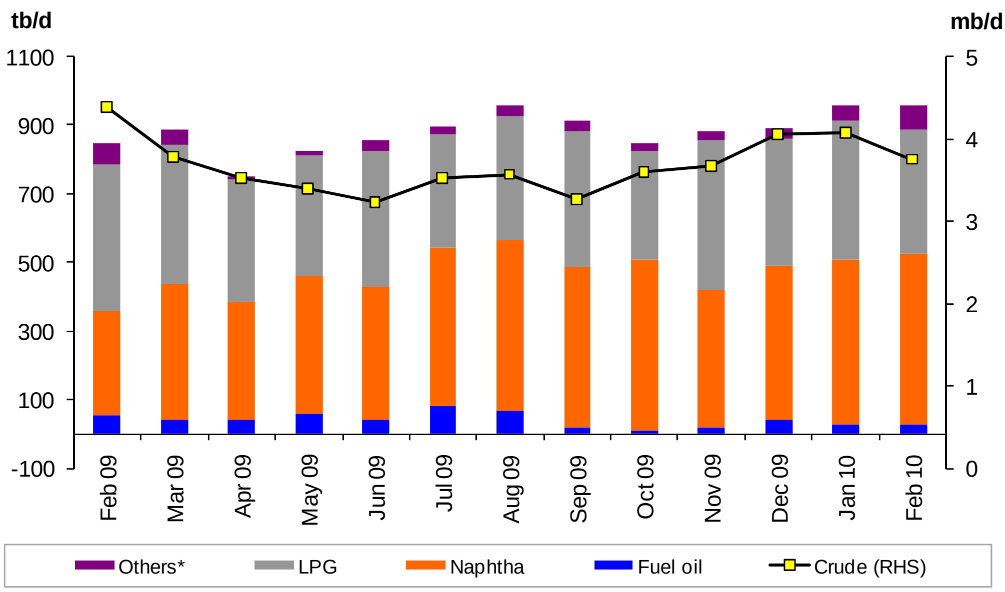
| | Jan 10 | Feb 10 | Mar 10 | Change Mar/Feb |
|---|---|---|---|---|
| Crude oil | 8,399 | 8,786 | 8,811 | 25 |
| Total products | 1,141 | 1,040 | 681 | -359 |
| **Total crude and products** | **9,540** | **9,826** | **9,492** | **-334** |

*Crude oil imports to Japan declined, while product imports continued to rise*

## Japan

According to latest official data, Japan's crude oil imports decreased by 8% or 327,000 b/d in February to 3.76 mb/d compared to the month before. This level was even lower than the same month a year ago, where crude oil imports stood at 4.40 mb/d a decrease around 14.5% or 636,000 b/d compared to this year's level.

**Graph 37: Japan's imports of crude and petroleum products**

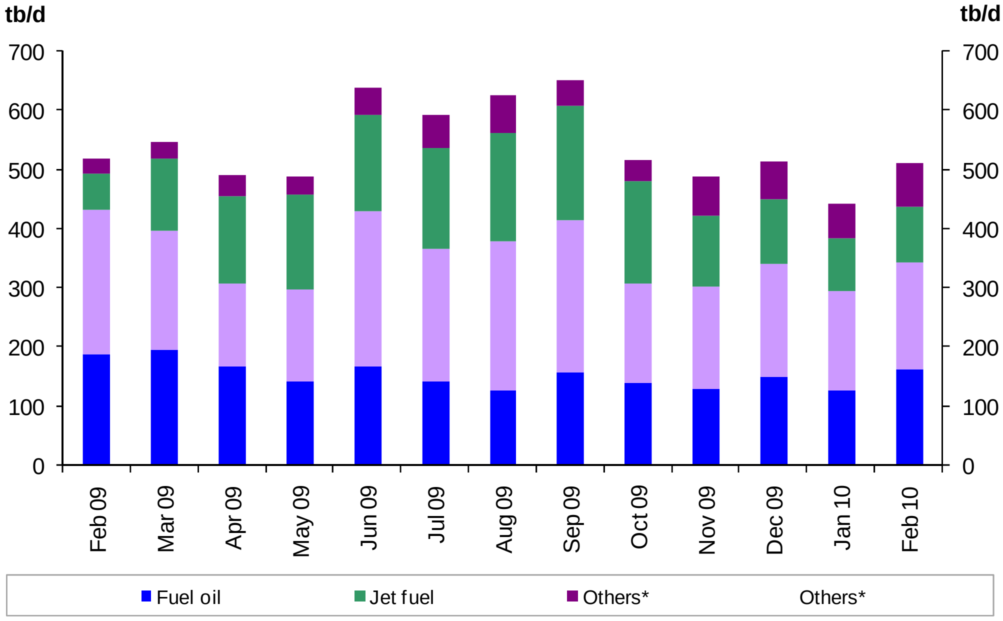



**Others: Contains gasoline, jet fuel, kerosene, gasoil, asphalt and paraffin wax.*

Japan's product imports continued to rebound also in February at about 0.96 mb/d and displayed an increase of 23% in the period from January to February compared to the same period a year ago. Japan mainly imported naphtha and LPG in February. Naphtha has increased in February by 20,200 b/d or 4.2% whereas LPG has dropped around 42,000 b/d or 10.3% correspondingly. Naphtha and LPG imports accounted for around 52% and 38% of the country's total monthly product imports in February. Fuel oil imports in February averaged 26,000 b/d compared to 28,000 b/d in the previous month and 53,000 b/d a year ago.

On the export side, Japan's product exports averaged 511,000 b/d in February, 15.1% or 67,000 b/d higher compared to the previous month and 2% lower than the same month a year ago. In February, gasoil, fuel oil and jet fuel, the country's main product exports, accounted for about 86% of the country's total product exports in February. Gasoil exports represented 36% of Japan's total product exports in January, jet fuel for 19% and fuel oil 32%.

**Graph 38: 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 February were at about 4.21 mb/d, indicating a decline of 393,000 b/d or 8.5% compared to the previous month and representing a decline of 513,000 b/d or around 11% compared to a year earlier. Net crude imports also declined by 327,000 b/d standing at 3.76 mb/d and net product imports were also declining by 66,000 b/d and stood at 0.45 mb/d.

**Table 23: Japan's crude and product net imports, tb/d**

| | Dec 09 | Jan 10 | Feb 10 | Change Feb/Jan |
|---|---|---|---|---|
| Crude oil | 4,056 | 4,084 | 3,757 | -327 |
| Total products | 379 | 517 | 450 | -66 |
| **Total crude and products** | **4,435** | **4,600** | **4,207** | **-393** |

Saudi Arabia was Japan's top crude oil supplier in January with 0.96 mb/d or 25.6% of Japan's total crude oil imports. The UAE was next, supplying 0.72 mb/d, which represents 19.2%. Qatar supplied 0.43 mb/d or 11.5%, closely followed by Iran 0.40 mb/d or 10.8%. Altogether, OPEC Member Countries supplied 3.12 mb/d or 83.1% of Japan's crude oil imports in February, down from 3.39 mb/d in the previous month. Top non-OPEC crude oil suppliers in February include Oman with 0.19 mb/d, down from 0.24 mb/d a month earlier and Russia with 0.26 mb/d, up from 0.15 mb/d in the previous month.

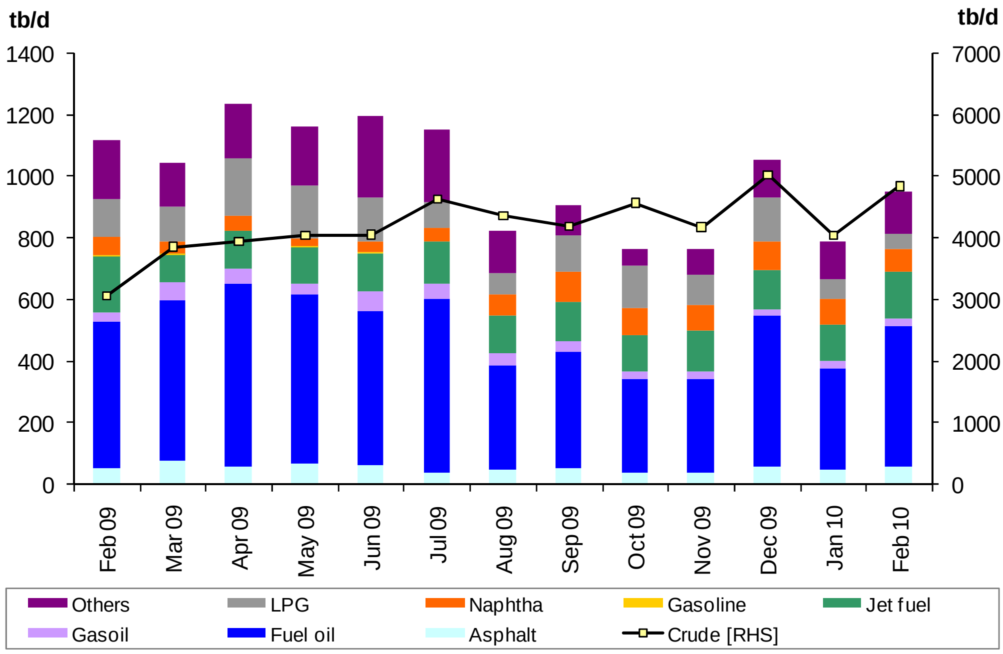
On the product-side, not including of LPG imports, preliminary data indicates that Saudi Arabia was Japan's top supplier in February with 183,000 b/d, up from 171,000 b/d in the previous month, followed by the UAE with 125,000 b/d, down from 111,000 b/d in February. Altogether, OPEC Member Countries supplied about 0.43 mb/d or 68% of Japan's product imports in February, 0.60 mb/d from 0.56 mb/d a month ago. Top non-OPEC product suppliers in February include Russia, with about 28,000 b/d, followed by Oman with 23,000 b/d and Indonesia with 16,000 b/d.

*China increased crude oil and product imports in February*

## China

According to Chinese official data, China's crude oil import rose in February 2010 to 4.85 mb/d, which represents a increase of around 20% compared to the sharp decline of crude import last month. On an annual basis, China crude oil imports in February indicates an increase of 58% or 1.7 mb/d. Imports of oil products stood at 0.95 mb/d, 20% higher than the month before but 15% lower compared to the previous year. A major reason for the crude oil import surge could be the fast-growing crude oil throughput during the period, which is creating larger demand for crude oil. Besides this, the economic recovery has also provided momentum for an expansion of imports. China's domestic crude oil throughput has kept breaking monthly records as the additional capacity came on stream.

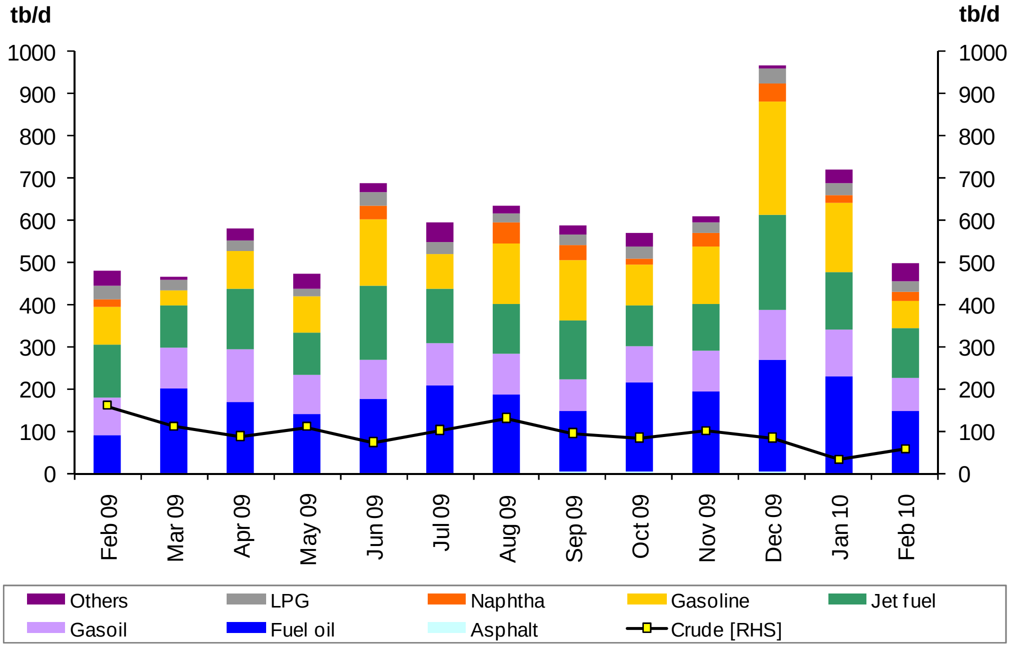
**Graph 39: China's imports of crude and petroleum products**




On the export side, China crude and product exports declined in February by 0.2 mb/d or 26% compared to the previous month to average 0.56 mb/d. Crude oil exports experienced a minor increase, while product exports saw a decline of 31% compared to the previous year.

China's diesel exports in the first two months hit 250,000 b/d, up 113.2% over the same period in 2009, supported by the increase in production. The trend of diesel export growth is likely to continue, despite a resurgence of domestic demand, as the increase in consumption is not keeping up with the even faster supply capacity expansion of refineries.

**Graph 40: China's exports of crude and petroleum products**




Due to the high volume of fuel oil imports, China remains net importer of product oil. However, product oil net imports have declined 46% y-o-y in the first two months, as fuel oil, diesel and jet fuel imports declined sharply, while naphtha, lube oil and base oil all saw considerable surges during the same period. Fuel oil imports, which represent some 60% of total product oil imports, reached 0.32 mb/d in January and 0.31 mb/d in February. Together this represents a decline of 27% compared to the first two months of last year. The majority of fuel oil imports have flowed to local refineries in Shandong province, serving as major feedstock to produce diesel and gasoline. Guangdong province, which used to be the major destination of fuel oil imports, has now reduced its monthly share.

Since China returned to being a naphtha net importer in 2009, the country's naphtha imports have shown an uphill trend. Naphtha imports registered 75,000 b/d in February which represents a 16% increase compared to the year before.

As a result, China net oil imports increased sharply in February by 1.15 mb/d or 28% compared to the previous month for an average of 5024 mb/d. The increase was supported by the rise in imports and decline in exports.

Saudi Arabia was China's largest crude oil supplier with 0.95 mb/d or 20% of total imports. Angola represented 14% of the total imports or 0.67 mb/d, a little less than the 0.74 mb/d average for the first two months of last year. Significant volumes from OPEC suppliers came also from Iran 0.38 mb/d and Iraq 0.25 mb/d which represents a share of 8% and 5% respectively. Altogether, OPEC Member Countries supplied China with about 2.88 mb/d or 60% of its crude oil imports in February, up from 2.47 mb/d of the previous month.

**Table 24: China's crude and product net imports, tb/d**

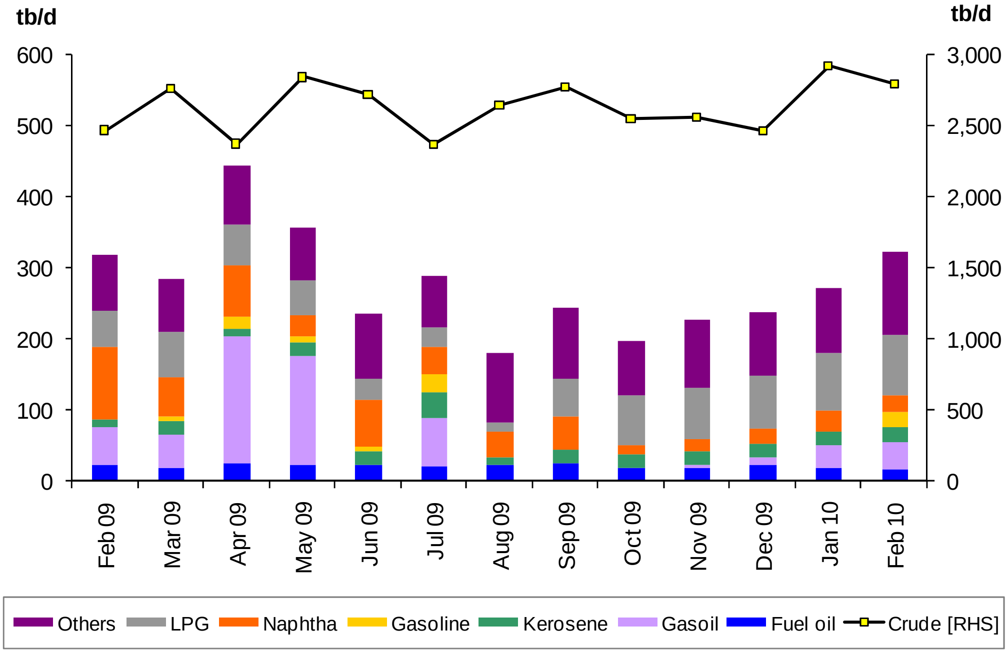
| | Dec 09 | Jan 10 | Feb 10 | Change Feb/Jan |
|---|---|---|---|---|
| Crude oil | 4,943 | 4,015 | 4,788 | 773 |
| Total products | 85 | 69 | 450 | 382 |
| **Total crude and products** | **5,028** | **4,084** | **5,238** | **1155** |

*India's net oil imports decline in February as crude imports fell*

## India

According to preliminary data, India's crude oil imports declined in February, compared to the previous month, by 0.13 mb/d or 4.3%. Crude imports in February were 325 tb/d higher compared to the same month a year ago, which represent an increase of around 13%. India's crude oil imports during the first two months of the year averaged 2.86 mb/d, which represents an increase of 15.6% compared to the same period last year.

**Graph 41: India's imports of crude and petroleum products**




India's product imports continued to increase in February by about 50,000 b/d, representing a 19% increase compared to the previous month, and standing at a level of 0.32 mb/d, about 1.7% higher compared to the same month a year ago. After a six-month period of no gasoline imports, February data showed imports of 21 tb/d. Gasoil imports continue to rise further in February to a level of around 40 tb/d representing a 30% increase from the month before. LPG imports continued to increase slightly in February as well, averaging about 85,000 b/d, compared to 82,000 b/d the previous month and 79,000 b/d a year earlier. Naphtha imports declined to 21,000 b/d, which is 7,600 b/d below the previous month on the back of lower domestic sales.

In February, India imported an average of 0.32 mb/d of products compared to 0.27 mb/d a month before, indicating a 19% m-o-m increase. The higher import figure was supported by the increase in gasoline and gasoil imports.

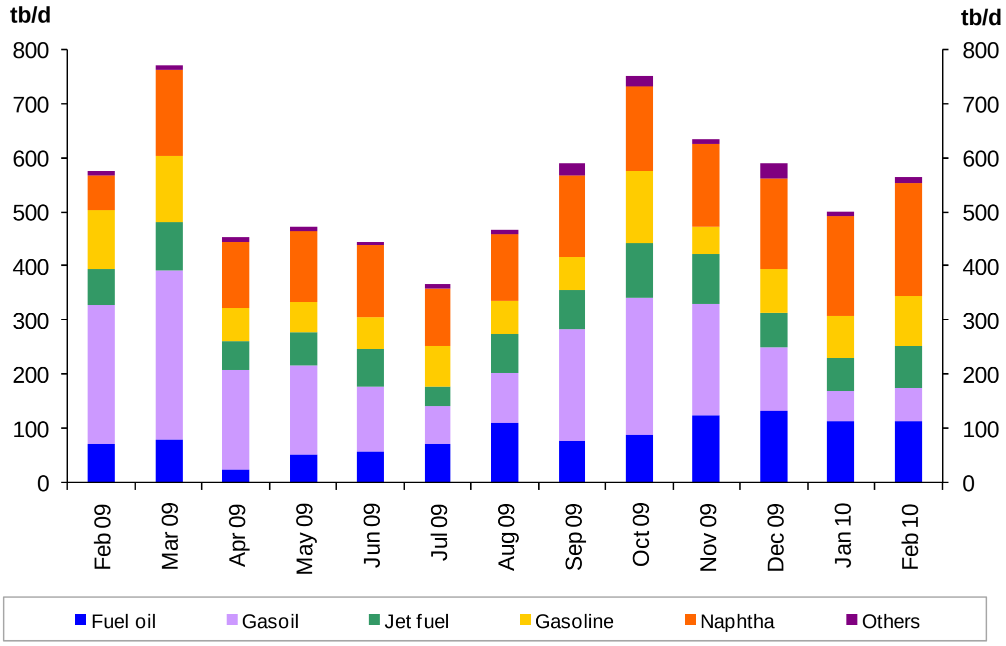
**Table 25: India's crude and product net imports, tb/d**

| | Dec 09 | Jan 10 | Feb 10 | Change Feb/Jan |
|---|---|---|---|---|
| Crude oil | 2,466 | 2,920 | 2,793 | -127 |
| Total products | -354 | -229 | -243 | -14 |
| **Total crude and products** | **2,112** | **2,691** | **2,550** | **-141** |

On the export side, India's total product exports of 566,000 b/d in February were 65,000 b/d or 13% higher compared to the previous month and 2% lower compared to a year earlier. The increase in exports can be attributed to the rise in jet fuel exports, which stood at 79 tb/d representing an increase of 18,000 b/d. Gasoil, gasoline and naphtha exports contributed less to the overall February increase.

As a result, India's net product imports rose by 14,000 b/d or 6.2% compared to the previous month. India's total net oil imports for February averaged 2.55 mb/d, a decline of 5.2% or 141,000 b/d compared to last month and an increase of 15.4% compared to the same period last year.

**Graph 42: India's exports of petroleum products**




## FSU

*Bad weather hit FSU crude exports*

FSU crude exports in February declined by 2.3% on the month to 6.56mn b/d due to severe weather conditions. However, compared to February 2009, exports were higher due to the launch of ESPO blend exports from Kozmino and increased loadings at Gdansk, which offset falls at Primorsk.

The export route through the Caspian Pipline Consortium (CPC) was down by 10% on the month after bad weather hit loadings at its Yuzhnaya Ozereyevka terminal, near Novorossiysk. Technical issues at the Tengiz field (Tengizchevriol – TCO) also contributed to the decline.

Exports by Kazakh producers were lower as Russia started to cut crude allocations at berths 6 and 7 to make way for product exports. Exports of Azeri Light from the Supsa port also fell as the terminal suspended loadings for a few days in the second half of the month during bad weather. Also, shipments along the Baku-Tbilisi-Ceyhan (BTC) pipeline fell, by around 20,000 b/d, on the month, partially due to maintenance at the ACG. However, the state-controlled Azeri oil firm Socar increased crude exports from Novorossiysk to balance lower supplies to its refineries in Baku.

According to loading schedules Russian seaborne crude exports are to rise by more than 6% to 2.86 mb/d in March, following February's drop. It is expected that Primorsk and Kozmino will lead the increase, while Black Sea loadings are set to fall. Gdansk exports are expected to drop by almost 10%, with Kazakh crude accounting for all loadings. Rail exports in February increased and stood at 392,000 b/d, up by almost 40% compared to January.

FSU product exports in February fell compared to the moth before, as also the cold weather restricted some fuel loadings. Fuel oil exports were down by 15% compared to last month, but there was a slight rise in exports of fuel oil from Russia by rail which rose by 1.1% following the previous month's cut, although rail gasoil exports dipped by 1.7%. The decline reflects rising demand from the agricultural sector for diesel in the run-up to the sowing season, as well as widespread maintenance at the country's refineries. Looking at the scheduled fuel oil exports in March — a 60% increase is projected compared to the February schedule. This increase reflects the inclusion of fuel oil for Tallinn, which was not scheduled to load any fuel oil in February. At the same time, warmer weather should speed up discharge at ports after freezing conditions slowed work down in January-February, particularly at Baltic and White Sea ports.

**Table 26: Recent FSU exports of crude and products by source, kb/d**

| | 2008 | 2009 | 2Q09 | 3Q09 | 4Q09 | Jan 10 | Feb 10* |
|---|---|---|---|---|---|---|---|
| **Crude** | | | | | | | |
| **Russian pipeline** | | | | | | | |
| Black Sea | 1,248 | 1,201 | 1,170 | 1,120 | 1,152 | 1,027 | 994 |
| Baltic | 1,559 | 1,577 | 1,591 | 1,567 | 1,613 | 1,549 | 1,425 |
| Druzhba | 1,077 | 1,112 | 1,065 | 1,110 | 1,130 | 1,175 | 1,101 |
| **Total**** | **3,905** | **3,922** | **3,876** | **3,816** | **3,904** | **3,961** | **3,785** |
| **Other routes** | | | | | | | |
| Russian rail | 283 | 280 | 278 | 291 | 284 | 281 | 392 |
| Russian-Far East | 220 | 283 | 264 | 279 | 305 | 309 | 297 |
| Kazak rail | 17 | 18 | 17 | 17 | 17 | 17 | 17 |
| Vadandey | 20 | 155 | 155 | 148 | 148 | 152 | 149 |
| Ventspils | n.a. | n.a. | 13 | 13 | 5 | 0 | 0 |
| CPC | 675 | 736 | 729 | 737 | 741 | 788 | 709 |
| BTC | 648 | 805 | 794 | 870 | 874 | 688 | 668 |
| Atasu-Alashankou | 121 | 157 | 166 | 185 | 178 | 192 | 219 |
| Caspian | 185 | 281 | 275 | 297 | 303 | 305 | 304 |
| **Total crude exports***** | **6,089** | **6,653** | **6,568** | **6,654** | **6,752** | **6,716** | **6,561** |
| **Products** | | | | | | | |
| Gasoline | 210 | 229 | 216 | 181 | 147 | 260 | 233 |
| Naphtha | 217 | 273 | 273 | 270 | 261 | 288 | 292 |
| Jet | 37 | 52 | 61 | 47 | 41 | 28 | 27 |
| Gasoil | 810 | 949 | 946 | 960 | 896 | 1,003 | 1,023 |
| Fuel oil | 1,069 | 1,114 | 1,193 | 1,200 | 1,135 | 1,113 | 951 |
| VGO | 196 | 233 | 243 | 225 | 228 | 265 | 232 |
| **Total** | **2,539** | **2,850** | **2,933** | **2,883** | **2,708** | **2,957** | **2,758** |
| **Total oil exports** | **8,628** | **9,503** | **9,500** | **9,537** | **9,460** | **9,673** | **9,319** |

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

* *Preliminary.*

** *Total incl. exports of minor volumes to China and Pacific.*

*** *Total crude exports incl. minor volumes of Kaliningrad.*

*Because of rounding, some totals may not agree exactly with the sum of their component parts.*

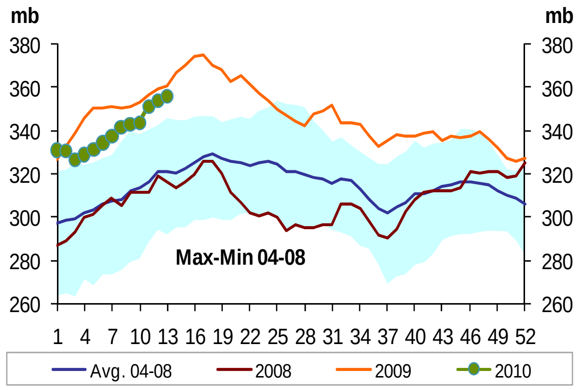
# Stock Movements

*US commercial inventories rose in March, widening the surplus with the five-year average to 82 mb*

## USA

US commercial inventories at the end of March rose 5.3 mb, reversing a revised drop of 10.6 mb in February. Crude and product stocks moved in opposite directions as crude stocks built 14.0 mb, while product stocks fell by 9 mb. At 1049.6 mb, US commercial stocks stood at 33 mb below a year ago during the same period, but remained at a comfortable level of 82 mb or 8.4% above the last five-year average. It is worth noting that at the end of the first quarter 2010, US commercial stocks indicated a slight contra-seasonal build driven by ample crude supply, while the stock-draw in products abated this build.

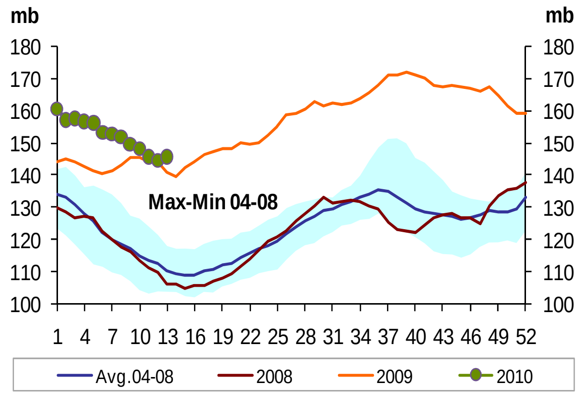
**Graph 43: US weekly commercial crude oil inventories**




At the end of March, US commercial crude stocks rose for the third consecutive month accumulating more than 30 mb to stand at 356.2 mb, the highest since June 2009. This build was driven by a continued increase in imports averaging 9.1 mb/d, around 300,000 b/d more than the previous month. In the week ending 2 April, crude imports stood at a higher level of 9.6 mb, up 500 tb/d from the previous week, indicating a continued healthy level of crude imports in the US. This represents a six-month high for crude flows into the US as refineries are clearly expecting stronger crude runs for the driving season. The build in crude stocks occurred despite refiners boosting runs. In fact, US throughputs climbed by around 200 tb/d to 14.2 mb/d, which corresponds to a refinery utilization rate of 82.2%, or one percentage point higher than the previous month. This strong build shows that factors outside fundamentals are behind the recent increase in crude oil prices. US crude oil stocks stood at 35 mb at the end of March or 11% above the seasonal norm, but remain 33 mb below the same period last month.

In contrast to the continued build in crude, total products stocks fell 8.7 mb for the sixth consecutive month, driven by the fall in gasoline, distillates and jet fuel, while residual fuels saw a build. Despite this draw, total products remained at 47 mb or 7% above the five-year average. US gasoline stocks fell 9.6 mb to 222.4 mb, mainly due to higher demand averaging 9.1 mb/d, which is 150,000 b/d more than the same period a year-ago. Gasoline demand in the US continued on the path established in previous weeks, surpassing 9.0 mb/d for the third consecutive week. This is a signal that gasoline demand will strengthen compared to 2009 despite higher retail prices. Despite this draw, gasoline inventories remained at 6 mb higher than a year earlier and 13 mb or 6% above the seasonal norm. Distillate stocks which include heating oil and diesel dropped for the fourth consecutive month by 5.2 mb to 145.7 mb, but still remained at comfortable levels indicating a surplus of 34 mb or 30% over the five-year average. The drop in distillates could be attributed to higher exports to South America due to refinery maintenance and upgrades. This drop came despite rising output as apparent demand remained almost unchanged at 3.7 mb/d. On a weekly basis, distillate stocks in the week ending 2 April marked the first stock build since the end of January, driven by higher production with

**Graph 44: US weekly distillate stocks**



refiners' boosting throughputs by nearly 470 tb/d. Until domestic demand picks up or foreign markets resume higher consumption, the outlook for distillates is expected to remain bearish with ample supply.

Residual fuel oil rose 1.6 mb to 41.1 mb, the highest level since June 2008, reflecting lower demand, while jet fuel dropped for the second consecutive month by 1.1 mb to 42.1 mb. Both products indicate a surplus of 4% and 8% respectively with their five-year average.

**Table 27: US onland commercial petroleum stocks, mb**

| | Jan 10 | Feb 10 | Mar 10 | Change Mar 10/Feb 10 | Mar 09 |
|---|---|---|---|---|---|
| **Crude oil** | 333.9 | 342.2 | 356.2 | 14.0 | 365.8 |
| Gasoline | 232.1 | 231.9 | 222.4 | -9.6 | 216.7 |
| Distillate fuel | 163.0 | 150.9 | 145.7 | -5.2 | 143.6 |
| Residual fuel oil | 40.3 | 39.5 | 41.1 | 1.6 | 39.0 |
| Jet fuel | 43.7 | 43.2 | 42.1 | -1.1 | 41.6 |
| **Total** | **1,054.9** | **1,044.3** | **1,049.6** | **5.3** | **1,082.2** |
| SPR | 726.6 | 726.6 | 726.6 | 0.0 | 712.8 |

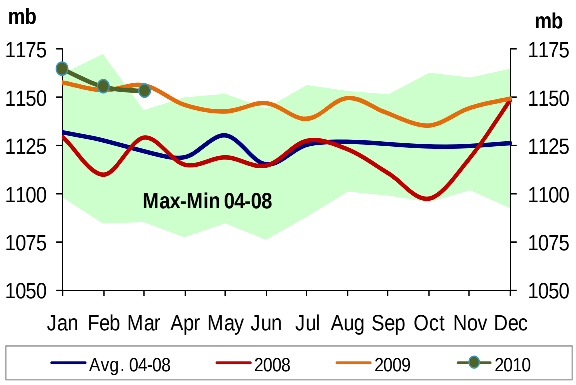
*Source: US Department of Energy's Energy Information Administration.*

## Europe

*EU 15 plus Norway total oil inventories fell slightly in March, but still remained around 30 mb above the seasonal average*

European total oil inventories (EU plus Norway) declined slightly by 2.3 mb, driven by a fall of 7.5 mb in products, while crude stocks rose 5.3 mb. At 1153 mb, European inventories stood at 30.3 mb or 3% above the five-year average; however, they remained at 27 mb below a year ago.

**Graph 45: EU-15 plus Norway's total oil stocks**




Crude oil stocks stood at 476.3 mb in March, up from the February level, but still 26 mb below a year ago. This build was mainly on the back of weakening refinery runs as they declined by around 90 tb/d to average 10.3 mb/d from a month earlier, and almost 700 tb/d down from March 2009. This represents the lowest refinery runs since EU records began in 1990. The large scale of refinery maintenance in Europe reduced refinery utilization rates to 78.7% in March from 79.4% in the previous month. Despite the build in crude oil inventories, they remained 6.4 mb or 1.3% below the seasonal norm.

On the products side, lower refinery runs have started to impact all major product inventories indicating a stock-draw for the second consecutive month. Despite this draw, total product stocks at 677.0 mb still represent a surplus of 23 mb from a year ago and 37.4 mb or 6% above the five-year average. Middle distillates saw the bulk of the drop, declining by 5.0 mb to 413.3 mb, but remained at a very comfortable level with a surplus of 21.1 mb compared to the previous year and 52.2 mb or 14.4% above the seasonal average. Gasoline stocks fell 1.2 mb to 119.9 mb and were down 20.5 mb or 14.6% compared to the five-year average, yet in line with year-ago levels. The increase in gasoline exports to the US ahead of the driving season contributed to the decline in gasoline stocks.

Residual fuel oil fell less than 1 mb in March to 107.8 mb despite weaker demand. Fuel oil stocks stood at 5.5 mb below last year and 3.6 mb or 3.2% lower than the historical norm.

**Table 28: Western Europe's oil stocks, mb**

| | Jan 10 | Feb 10 | Mar 10 | Change Mar 10/Feb 10 | Mar 09 |
|---|---|---|---|---|---|
| **Crude oil** | 472.2 | 471.1 | 476.3 | 5.3 | 502.1 |
| Mogas | 122.5 | 121.0 | 119.9 | -1.2 | 120.1 |
| Naphtha | 36.5 | 36.5 | 36.1 | -0.4 | 28.3 |
| Middle distillates | 423.9 | 418.3 | 413.3 | -5.0 | 392.2 |
| Fuel oils | 109.2 | 108.6 | 107.8 | -0.9 | 113.3 |
| **Total products** | 692.1 | 684.5 | 677.0 | -7.5 | 653.9 |
| **Total** | **1,164.3** | **1,155.5** | **1,153.3** | **-2.3** | **1,156.0** |

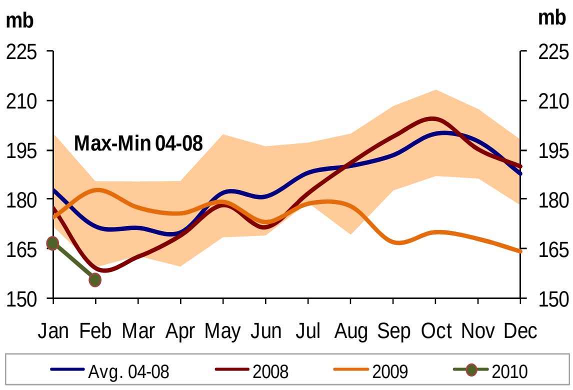
*Source: Argus, Euroilstock.*

## Japan

*Japan's commercial oil stocks fell in February, but then reversed the trend in March*

In February, commercial oil inventories in Japan reversed the build observed last month and decreased by 11.2 mb to reach 155.6 mb, a level not seen since early 2008. With this draw, the deficit with a year-ago and with the seasonal norm has widened to 15% and 11% respectively. The draw in February came for both crude and total products, which decreased by 7.7 mb and 3.4 mb respectively.

**Graph 46: Japan's commercial oil stocks**




At 86.8 mb, crude oil stocks stood at the lowest level since September 2009, losing almost all the build occurred during the last four months. The strong draw came as a result of a huge decline of 8% in crude imports to average 3.76 mb/d or around 15% below a year ago. The increase in refinery rate by 1.1% percentage points to 82.4% also contributed to this stock draw. However, refiners are still running 2.5% below last year during the same period. With this draw, the deficit with the previous year has increased to 19% compared with 11% in January, while the gap with the last five-year average has widened to 15% from 11% a month earlier.

On the products side, Japanese inventories in February also fell 3.4 mb to 68.8 mb, the lowest level since February 2008. The draw could be attributed to the increase of 4.2% in Japan's total oil product sales or 7.9% from a year earlier. This represents the biggest rise since September 2007 as robust demand for petrochemicals continued to boost naphtha sales. Total product stocks ended February at 6.8 mb or 9% below last year, while the deficit with the average norm remained at 3.5 mb or 4.9%. Within products, both gasoline and naphtha rose by around 0.3 mb, while distillates and residual fuel stocks saw a drop of 3.4 mb and 0.6 mb respectively. The draw in gasoline stocks could be attributed to the huge decline in imports of 26% which outpaced the rise of 3.2% in gasoline sales. At 14.5 mb, gasoline stocks remained 1.3% above a year earlier, representing a surplus of 1.5% with the five-year average. Naphtha stocks also rose to 9.7 mb, but remained well below the same period a year ago. It is worth noting that naphtha sales jumped about 30% in February versus the previous year at the same period as petrochemical markers kept naphtha cracker runs higher to meet healthy Chinese demand for plastics.

Total distillates declined by 3.4 mb for the third consecutive month to 28.9 mb. All the components of distillates saw a drop, with kerosene representing the largest stock draw of 16% followed by gasoil with around 7%, while jet fuel oil stocks declined slightly by 0.5%. The draw in kerosene came as domestic sales rose by 5.8% combined with a 13% fall in output. Lower gasoil output by 6.8% was behind the fall in gasoil inventories as domestic consumption increased slightly. In February, distillate stocks stood at 8.6% below a year ago and 5.8% less than the five-year average. Fuel oil stocks declined slightly by 0.6 mb to 15.6 mb, driven by the 7.7% fall in Fuel Oil B.C as a result of lower production. However, Fuel Oil A inventories rose by 2.2% on the back of higher imports as domestic sales remained flat. Total fuel oil stocks at the end of February remained at around 15% below a year ago and the five-year average.

**Table 29: Japan's commercial oil stocks*, mb**

| | Dec 09 | Jan 10 | Feb 10 | Change Feb 10/Jan 10 | Feb 09 |
|---|---|---|---|---|---|
| **Crude oil** | 92.5 | 94.6 | 86.8 | -7.8 | 107.1 |
| Gasoline | 12.1 | 14.3 | 14.5 | 0.2 | 14.3 |
| Naphtha | 10.1 | 9.4 | 9.7 | 0.3 | 11.2 |
| Middle distillates | 33.2 | 32.3 | 28.9 | -3.4 | 31.7 |
| Residual fuel oil | 16.3 | 16.2 | 15.6 | -0.6 | 18.4 |
| **Total products** | 71.7 | 72.2 | 68.8 | -3.4 | 75.6 |
| **Total**** | **164.2** | **166.8** | **155.6** | **-11.2** | **182.6** |

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

Preliminary indications based on weekly data published by PAJ shows Japanese total commercial oil stocks rising by 4.1 mb to 159.7 mb at the end of March. This build is driven mainly by crudes as they increased by 3.3 mb and to a lesser extent by the build of 0.8 mb in products. Despite this build, Japanese oil stocks remained 10% below a year ago and 8.4% below the seasonal norm. The build in crude could be attributed to the decline in crude runs, which corresponds to a refinery utilization rate of around 78%. This lower refinery rate reflects the beginning of spring refinery maintenance. At 90.1 mb, crude oil inventories at the end of March were 12.7% below a year ago and 14% less than the five-year average. Within products, the picture was mixed. Gasoline and distillate stocks declined by 1.2 mb and 1.9 mb respectively, while fuel oil and naphtha increase by 2.6 mb and 1.2 mb respectively. At 69.6 mb, total products at the end of March remained around 6% below a year ago.

## Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

*Singapore products rose in February and further builds are expected in March*

At the end of February, Singapore products stocks rose 2.1 mb to 47.0 mb to represent 7.4 mb above the same period last year. With products, the picture was mixed with fuel oil stocks seeing a build of 2.8 mb followed by a slight build in light distillate inventories, while middles distillate stocks fell by 0.7 mb for the second consecutive month.

At 23.16 mb, fuel oil stocks were at the highest level since end-December as supply from the West and the Middle East continued to outpace the relatively firm marine fuel demand in the region. It was reported that Saudi Aramco had exported around 500,000 tonnes of spot fuel oil in the month of February, 150,000 tonnes more than the previous month. Fuel oil stocks ended February at 4.6 mb above a year ago. Light distillate stocks in February stood around 10.0 mb, an eight-week high on increased gasoline exports. March light distillate stocks are expected to increase further due to continued higher exports from China, however this trend could reversed later as the US summer driving season is approaching implying higher gasoline demand. In contrast to the build in fuel oil and light distillate stocks, middle distillate inventories fell to 13.86 mb. This drop could be attributed to a stocking up of low-sulphur diesel in India ahead of the country's rollout for cleaner fuels next month. Additionally, the increased flow from Asia to South America on the back of a supply disruption in Chile has also contributed to the decline in middle distillates in Singapore.

Preliminary data for the end of March based on weekly information shows a further build by 1.7 mb in Singapore product inventories driven by the increase in light distillates and to a lesser extent by fuel oil, while middle distillate inventories continued their draw for the third consecutive month. At 48.69 mb, total product stocks remained at 7.0 mb above a year ago at the same time. Light distillates rose 2.3 mb to 12.3 mb, the highest level ever on the back of higher gasoline supply which outpaced gasoline demand. Singapore fuel oil stocks rose slightly by 0.6 mb to 23.81 mb due to higher fuel oil inflows from the West averaging around 3.3 million tonnes in March versus 3.0 million tonnes in February. Middle distillate stocks fell 1.3 mb to 12.61 mb due to tighter supply following heavy refinery maintenance in parts of Asia and Europe as well as higher demand from Vietnam.

*ARA product stocks fell in February but preliminary data shows a slight build in March*

In Amsterdam-Rotterdam-Antwerp (ARA), product stocks fell in February by 3.6 mb for the second consecutive month to stand at 36.3 mb. Despite this draw, product inventories remained at 2.6 mb above a year ago. With the exception of naphtha, which remained unchanged, all other products indicate a draw. Gasoil stocks fell 0.7 mb to 17.8 mb at the end of February due to the beginning of refinery maintenance which caused tightness in the regional market. Additionally, higher exports to West Africa have also contributed to the draw. Gasoil stocks remained at 3.0 mb above a year ago at the same period. Gasoline stocks held in ARA fell around 2.0 mb to 6.56 mb due to the increase in exports and higher regional demand. Gasoline stocks at the end of February were slightly below a year earlier at the same period. Improved local demand saw jet fuel declining to 6.4 mb, but remained in line with previous year.

Preliminary data for the end of March indicates a marginal build of 0.6 mb in ARA product stocks versus the previous month. At 36.9 mb, product stocks remained at 2.1 mb above a year ago during the same period. With the exception of gasoil stocks which declined by 2.8 mb, all other product stocks indicate a build. Gasoline and fuel oil inventories saw the highest build, increasing by 1.5 mb and 1.7 mb respectively.

# Balance of Supply and Demand

## Estimate for 2009

*Required OPEC crude for 2009 estimated at 28.9 mb/d, down 2.3 mb/d from the previous year*

Demand for OPEC crude has been revised down by around 54,000 b/d to currently stand at 28.9 mb/d driven by a downward revision of 0.1 mb/d in the second half of the year. This change resulted from a combination of an adjustment in world oil demand as well as non-OPEC supply. Demand for OPEC crude still represents a considerable decline of 2.3 mb/d from the previous year. The first half experienced negative growth of around 3.0 mb/d compared to the same period last year, while the decline is seen narrowing in the second half to show a loss of only 2.1 mb/d in the third quarter followed by a decline of 1.1 mb/d in the fourth.

**Table 30: Summarized supply/demand balance for 2009, mb/d**

| | 2008 | 1Q09 | 2Q09 | 3Q09 | 4Q09 | 2009 |
|---|---|---|---|---|---|---|
| **(a) World oil demand** | **85.74** | **84.04** | **83.17** | **84.52** | **85.49** | **84.31** |
| Non-OPEC supply | 50.40 | 50.98 | 50.69 | 50.90 | 51.55 | 51.03 |
| OPEC NGLs and non-conventionals | 4.14 | 4.14 | 4.31 | 4.48 | 4.47 | 4.35 |
| **(b) Total supply excluding OPEC crude** | **54.54** | **55.12** | **54.99** | **55.38** | **56.03** | **55.38** |
| **Difference (a-b)** | **31.20** | **28.92** | **28.18** | **29.14** | **29.46** | **28.93** |
| OPEC crude oil production | 31.20 | 28.46 | 28.49 | 28.85 | 29.02 | 28.71 |
| Balance | 0.01 | -0.46 | 0.31 | -0.29 | -0.44 | -0.22 |

*Totals may not add due to independent rounding.*

## Forecast for 2010

*Demand for OPEC crude in 2010 forecast at 28.8 mb/d, a decline of 0.1 mb/d from the previous year*

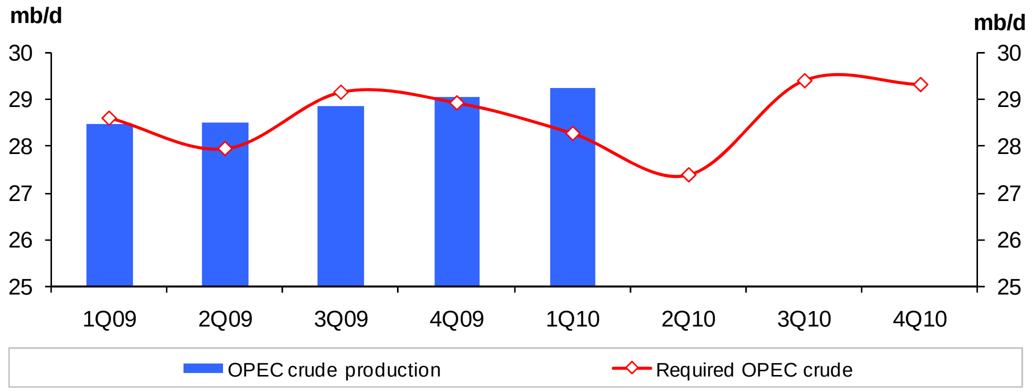
Demand for OPEC crude in 2010 is projected to average 28.8 mb/d, following a downward revision of about 135 tb/d from the previous assessment as some up-to-date data become available for world oil demand and non-OPEC supply for the first quarter. Demand for OPEC crude is forecast to fall by 0.1 mb/d from a year earlier following two consecutive annual declines. The first half of the year still shows a drop of 0.3 mb/d, while the second half is estimated to see positive growth of around 0.3 mb/d in the third quarter and 0.2 mb/d in the fourth, indicating a gradual recovery.

**Table 31: Summarized supply/demand balance for 2010, mb/d**

| | 2009 | 1Q10 | 2Q10 | 3Q10 | 4Q10 | 2010 |
|---|---|---|---|---|---|---|
| **(a) World oil demand** | **84.31** | **84.71** | **83.96** | **85.51** | **86.61** | **85.21** |
| Non-OPEC supply | 51.03 | 51.74 | 51.42 | 51.24 | 51.71 | 51.53 |
| OPEC NGLs and non-conventionals | 4.35 | 4.59 | 4.78 | 4.93 | 5.17 | 4.87 |
| **(b) Total supply excluding OPEC crude** | **55.38** | **56.33** | **56.21** | **56.17** | **56.88** | **56.40** |
| **Difference (a-b)** | **28.93** | **28.38** | **27.75** | **29.34** | **29.73** | **28.81** |
| OPEC crude oil production | 28.71 | 29.24 | | | | |
| Balance | -0.22 | 0.86 | | | | |

*Totals may not add due to independent rounding.*

**Graph 47: Balance of supply and demand**



## Table 32: World oil demand/supply balance, mb/d

| | 2004 | 2005 | 2006 | 2007 | 2008 | 1Q09 | 2Q09 | 3Q09 | 4Q09 | 2009 | 1Q10 | 2Q10 | 3Q10 | 4Q10 | 2010 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| World demand | | | | | | | | | | | | | | | |
| OECD | 49.5 | 49.8 | 49.5 | 49.2 | 47.6 | 46.6 | 44.4 | 45.0 | 46.2 | 45.5 | 46.1 | 44.3 | 44.9 | 46.2 | 45.4 |
| North America | 25.4 | 25.6 | 25.4 | 25.5 | 24.2 | 23.5 | 22.9 | 23.2 | 23.6 | 23.3 | 23.7 | 23.3 | 23.5 | 23.9 | 23.6 |
| Western Europe | 15.5 | 15.7 | 15.7 | 15.3 | 15.3 | 14.9 | 14.2 | 14.5 | 14.6 | 14.5 | 14.2 | 13.8 | 14.3 | 14.5 | 14.2 |
| Pacific | 8.5 | 8.6 | 8.5 | 8.4 | 8.1 | 8.1 | 7.3 | 7.3 | 8.0 | 7.7 | 8.2 | 7.2 | 7.1 | 7.9 | 7.6 |
| DCs | 21.9 | 22.7 | 23.4 | 24.4 | 25.3 | 25.3 | 25.9 | 26.1 | 26.1 | 25.8 | 25.9 | 26.5 | 26.7 | 26.7 | 26.5 |
| FSU | 3.8 | 3.9 | 4.0 | 4.0 | 4.1 | 3.8 | 3.7 | 4.1 | 4.2 | 4.0 | 3.9 | 3.7 | 4.2 | 4.2 | 4.0 |
| Other Europe | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 | 0.8 |
| China | 6.5 | 6.7 | 7.2 | 7.6 | 8.0 | 7.6 | 8.4 | 8.6 | 8.3 | 8.2 | 8.1 | 8.7 | 8.9 | 8.6 | 8.6 |
| (a) Total world demand | 82.6 | 84.0 | 85.0 | 86.0 | 85.7 | 84.0 | 83.2 | 84.5 | 85.5 | 84.3 | 84.7 | 84.0 | 85.5 | 86.6 | 85.2 |
| Non-OPEC supply | | | | | | | | | | | | | | | |
| OECD | 21.3 | 20.4 | 20.1 | 20.1 | 19.5 | 19.9 | 19.3 | 19.3 | 19.7 | 19.5 | 19.6 | 19.4 | 19.1 | 19.4 | 19.4 |
| North America | 14.6 | 14.1 | 14.2 | 14.3 | 13.9 | 14.2 | 14.0 | 14.2 | 14.4 | 14.2 | 14.3 | 14.3 | 14.2 | 14.3 | 14.3 |
| Western Europe | 6.2 | 5.7 | 5.3 | 5.2 | 5.0 | 5.1 | 4.7 | 4.4 | 4.7 | 4.7 | 4.7 | 4.4 | 4.3 | 4.5 | 4.5 |
| Pacific | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 |
| DCs | 11.6 | 11.9 | 12.0 | 12.0 | 12.4 | 12.5 | 12.5 | 12.6 | 12.7 | 12.6 | 12.8 | 12.7 | 12.8 | 12.9 | 12.8 |
| FSU | 11.1 | 11.5 | 12.0 | 12.5 | 12.6 | 12.6 | 12.9 | 13.0 | 13.1 | 12.9 | 13.1 | 13.1 | 13.1 | 13.3 | 13.2 |
| Other Europe | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 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 | 3.8 | 3.9 | 3.9 | 3.9 | 3.8 | 4.0 | 3.9 | 3.9 | 3.9 | 3.9 |
| Processing gains | 1.8 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| Total non-OPEC supply | 49.6 | 49.6 | 50.0 | 50.5 | 50.4 | 51.0 | 50.7 | 50.9 | 51.6 | 51.0 | 51.7 | 51.4 | 51.2 | 51.7 | 51.5 |
| OPEC NGLs + non-conventional oils | 3.7 | 3.9 | 3.9 | 3.9 | 4.1 | 4.1 | 4.3 | 4.5 | 4.5 | 4.4 | 4.6 | 4.8 | 4.9 | 5.2 | 4.9 |
| (b) Total non-OPEC supply and OPEC NGLs | 53.3 | 53.5 | 53.9 | 54.5 | 54.5 | 55.1 | 55.0 | 55.4 | 56.0 | 55.4 | 56.3 | 56.2 | 56.2 | 56.9 | 56.4 |
| OPEC crude oil production (secondary sources) | 29.6 | 30.7 | 30.5 | 30.2 | 31.2 | 28.5 | 28.5 | 28.9 | 29.0 | 28.7 | 29.2 | | | | |
| Total supply | 82.9 | 84.2 | 84.4 | 84.7 | 85.7 | 83.6 | 83.5 | 84.2 | 85.1 | 84.1 | 85.6 | | | | |
| Balance (stock change and miscellaneous) | 0.3 | 0.2 | -0.6 | -1.4 | 0.0 | -0.5 | 0.3 | -0.3 | -0.4 | -0.2 | 0.9 | | | | |
| OECD closing stock levels (mb) | | | | | | | | | | | | | | | |
| Commercial | 2538 | 2587 | 2669 | 2567 | 2696 | 2740 | 2752 | 2773 | 2663 | 2663 | | | | | |
| SPR | 1450 | 1487 | 1499 | 1524 | 1527 | 1547 | 1561 | 1564 | 1564 | 1564 | | | | | |
| Total | 3988 | 4073 | 4167 | 4091 | 4223 | 4287 | 4313 | 4337 | 4228 | 4228 | | | | | |
| Oil-on-water | 905 | 954 | 919 | 951 | 967 | 901 | 902 | 871 | 912 | 912 | | | | | |
| Days of forward consumption in OECD | | | | | | | | | | | | | | | |
| Commercial onland stocks | 51 | 52 | 54 | 54 | 59 | 62 | 61 | 60 | 58 | 59 | | | | | |
| SPR | 29 | 30 | 30 | 32 | 34 | 35 | 35 | 34 | 34 | 34 | | | | | |
| Total | 80 | 82 | 85 | 86 | 93 | 96 | 96 | 94 | 92 | 93 | | | | | |
| Memo items | | | | | | | | | | | | | | | |
| FSU net exports | 7.3 | 7.7 | 8.0 | 8.5 | 8.5 | 8.8 | 9.2 | 8.9 | 8.9 | 9.0 | 9.3 | 9.4 | 9.0 | 9.0 | 9.2 |
| (a) - (b) | 29.3 | 30.5 | 31.1 | 31.5 | 31.2 | 28.9 | 28.2 | 29.1 | 29.5 | 28.9 | 28.4 | 27.8 | 29.3 | 29.7 | 28.8 |

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

## Table 33: World oil demand/supply balance: changes from last month's table † , mb/d

| | 2004 | 2005 | 2006 | 2007 | 2008 | 1Q09 | 2Q09 | 3Q09 | 4Q09 | 2009 | 1Q10 | 2Q10 | 3Q10 | 4Q10 | 2010 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| World demand | | | | | | | | | | | | | | | |
| OECD | - | - | - | - | - | - | - | -0.2 | -0.1 | -0.1 | -0.1 | - | -0.2 | -0.1 | -0.1 |
| North America | - | - | - | - | - | - | - | - | 0.1 | - | 0.1 | 0.2 | - | 0.1 | 0.1 |
| Western Europe | - | - | - | - | - | - | - | -0.2 | -0.2 | -0.1 | -0.3 | -0.2 | -0.2 | -0.2 | -0.2 |
| Pacific | - | - | - | - | - | - | - | - | - | - | 0.1 | - | - | - | - |
| DCs | - | - | - | - | - | - | - | - | 0.1 | - | - | 0.1 | - | 0.1 | - |
| FSU | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Other Europe | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| China | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| (a) Total world demand | - | - | - | - | - | - | - | -0.2 | - | - | - | - | -0.2 | - | - |
| *World demand growth* | *-* | *-* | *-* | *-* | *-* | *-0.01* | *-* | *-0.16* | *-0.03* | *-0.05* | *-* | *0.05* | *-* | *-* | *0.01* |
| Non-OPEC supply | | | | | | | | | | | | | | | |
| OECD | - | - | - | - | - | - | - | - | - | - | 0.1 | - | - | - | - |
| North America | - | - | - | - | - | - | - | - | 0.1 | - | - | - | - | - | - |
| Western Europe | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Pacific | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| DCs | - | - | - | - | - | - | - | - | - | - | 0.1 | - | - | - | 0.1 |
| FSU | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Other Europe | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| China | - | - | - | - | - | - | - | - | - | - | 0.1 | 0.1 | - | - | - |
| Processing gains | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total non-OPEC supply | - | - | - | - | - | - | - | - | 0.1 | - | 0.3 | 0.1 | - | - | 0.1 |
| *Total non-OPEC supply growth* | *-* | *-* | *-* | *-* | *-0.01* | *-* | *0.01* | *-* | *0.07* | *0.02* | *0.28* | *0.13* | *0.04* | *-0.09* | *0.09* |
| OPEC NGLs + non-conventionals | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| (b) Total non-OPEC supply and OPEC NGLs | - | - | - | - | - | - | - | - | 0.1 | - | 0.3 | 0.1 | - | - | 0.1 |
| OPEC crude oil production (secondary sources) | - | - | - | - | - | - | - | - | - | - | - | | | | |
| Total supply | - | - | - | - | - | - | - | - | 0.1 | - | - | | | | |
| Balance (stock change and miscellaneous) | - | - | - | - | - | - | - | 0.1 | 0.1 | - | - | | | | |
| OECD closing stock levels (*mb*) | | | | | | | | | | | | | | | |
| Commercial | - | 1 | 1 | 1 | -5 | -7 | -8 | -8 | - | - | | | | | |
| SPR | - | - | - | - | - | - | - | - | - | - | | | | | |
| Total | - | 1 | 1 | 1 | -5 | -7 | -8 | -8 | - | - | | | | | |
| Oil-on-water | - | - | - | - | - | - | - | - | - | - | | | | | |
| Days of forward consumption in OECD | | | | | | | - | - | - | - | | | | | |
| Commercial onland stocks | - | - | - | - | - | - | - | - | - | - | | | | | |
| SPR | - | - | - | - | - | - | - | - | - | - | | | | | |
| Total | - | - | - | - | - | - | - | - | - | - | | | | | |
| Memo items | | | | | | | | | | | | | | | |
| FSU net exports | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| (a) - (b) | - | - | - | - | - | - | - | -0.2 | -0.1 | - | -0.3 | -0.1 | -0.2 | - | -0.1 |

*† This compares Table 32 in this issue of the MOMR with Table 31 in the March 2010 issue.*

*This table shows only where changes have occurred.*

## Table 34: OECD oil stocks and oil on water at the end of period

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 1Q05 | 2Q05 | 3Q05 | 4Q05 | 1Q06 | 2Q06 | 3Q06 | 4Q06 | 1Q07 | 2Q07 | 3Q07 | 4Q07 | 1Q08 | 2Q08 | 3Q08 | 4Q08 | 1Q09 | 2Q09 | 3Q09 | 4Q09 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Closing stock levels *mb* | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OECD onland commercial | 2,473 | 2,511 | 2,538 | 2,587 | 2,669 | 2,567 | 2,696 | 2,533 | 2,612 | 2,627 | 2,587 | 2,586 | 2,649 | 2,761 | 2,669 | 2,599 | 2,659 | 2,651 | 2,567 | 2,571 | 2,602 | 2,662 | 2,696 | 2,740 | 2,752 | 2,773 | 2,663 |
| North America | 1,175 | 1,161 | 1,193 | 1,257 | 1,277 | 1,229 | 1,301 | 1,202 | 1,275 | 1,254 | 1,257 | 1,240 | 1,277 | 1,351 | 1,277 | 1,238 | 1,294 | 1,285 | 1,229 | 1,216 | 1,240 | 1,282 | 1,301 | 1,348 | 1,383 | 1,386 | 1,306 |
| Western Europe | 890 | 915 | 915 | 935 | 963 | 931 | 988 | 942 | 915 | 942 | 935 | 938 | 936 | 949 | 963 | 942 | 937 | 934 | 931 | 961 | 954 | 949 | 988 | 985 | 968 | 967 | 974 |
| OECD Pacific | 408 | 435 | 430 | 394 | 429 | 407 | 406 | 389 | 422 | 432 | 394 | 408 | 436 | 461 | 429 | 420 | 428 | 432 | 407 | 394 | 409 | 431 | 406 | 408 | 401 | 419 | 383 |
| OECD SPR | 1,347 | 1,411 | 1,450 | 1,487 | 1,499 | 1,524 | 1,527 | 1,462 | 1,494 | 1,494 | 1,487 | 1,487 | 1,493 | 1,495 | 1,499 | 1,507 | 1,506 | 1,520 | 1,524 | 1,529 | 1,526 | 1,522 | 1,527 | 1,547 | 1,561 | 1,564 | 1,564 |
| North America | 601 | 640 | 678 | 687 | 691 | 699 | 704 | 690 | 698 | 696 | 687 | 688 | 690 | 690 | 691 | 691 | 692 | 695 | 699 | 702 | 708 | 704 | 704 | 715 | 726 | 727 | 729 |
| Western Europe | 357 | 374 | 377 | 407 | 412 | 421 | 416 | 376 | 401 | 405 | 407 | 407 | 411 | 412 | 412 | 415 | 413 | 423 | 421 | 423 | 414 | 414 | 416 | 424 | 427 | 429 | 426 |
| OECD Pacific | 389 | 396 | 396 | 393 | 396 | 404 | 406 | 396 | 395 | 393 | 393 | 392 | 393 | 393 | 396 | 401 | 401 | 403 | 404 | 404 | 404 | 403 | 406 | 408 | 408 | 408 | 409 |
| **OECD total** | 3,820 | 3,922 | 3,988 | 4,073 | 4,167 | 4,091 | 4,223 | 3,995 | 4,106 | 4,121 | 4,073 | 4,074 | 4,142 | 4,256 | 4,167 | 4,107 | 4,165 | 4,171 | 4,091 | 4,101 | 4,128 | 4,184 | 4,223 | 4,287 | 4,313 | 4,337 | 4,228 |
| Oil-on-water | 815 | 882 | 905 | 954 | 919 | 951 | 967 | 934 | 932 | 925 | 954 | 962 | 975 | 974 | 919 | 919 | 895 | 920 | 951 | 935 | 919 | 886 | 967 | 901 | 902 | 871 | 912 |
| Days of forward consumption in OECD | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OECD onland commercial | 51 | 51 | 51 | 52 | 54 | 54 | 59 | 52 | 53 | 52 | 51 | 54 | 54 | 55 | 54 | 54 | 54 | 53 | 52 | 54 | 56 | 56 | 58 | 62 | 61 | 60 | 58 |
| North America | 48 | 46 | 47 | 50 | 50 | 51 | 56 | 47 | 50 | 49 | 50 | 49 | 50 | 53 | 50 | 49 | 51 | 51 | 50 | 50 | 53 | 54 | 55 | 59 | 59 | 59 | 56 |
| Western Europe | 58 | 59 | 58 | 60 | 63 | 61 | 68 | 61 | 58 | 60 | 58 | 61 | 60 | 60 | 63 | 63 | 61 | 60 | 61 | 64 | 61 | 61 | 66 | 69 | 67 | 66 | 67 |
| OECD Pacific | 47 | 51 | 50 | 47 | 51 | 50 | 53 | 48 | 52 | 49 | 43 | 52 | 55 | 53 | 48 | 53 | 54 | 49 | 46 | 50 | 54 | 54 | 50 | 56 | 55 | 52 | 50 |
| OECD SPR | 28 | 29 | 29 | 30 | 30 | 32 | 34 | 30 | 30 | 30 | 29 | 31 | 30 | 30 | 30 | 31 | 31 | 30 | 31 | 32 | 33 | 32 | 33 | 35 | 35 | 34 | 34 |
| North America | 24 | 25 | 26 | 27 | 27 | 29 | 30 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 28 | 29 | 30 | 29 | 30 | 31 | 31 | 31 | 31 |
| Western Europe | 23 | 24 | 24 | 26 | 27 | 27 | 29 | 25 | 26 | 26 | 25 | 27 | 26 | 26 | 27 | 28 | 27 | 27 | 28 | 28 | 27 | 27 | 28 | 30 | 29 | 29 | 29 |
| OECD Pacific | 45 | 46 | 46 | 46 | 47 | 50 | 53 | 49 | 49 | 45 | 42 | 50 | 50 | 45 | 44 | 51 | 51 | 46 | 45 | 51 | 54 | 51 | 50 | 56 | 56 | 51 | 53 |
| **OECD total** | 79 | 79 | 80 | 82 | 85 | 86 | 93 | 82 | 83 | 82 | 81 | 84 | 84 | 85 | 84 | 85 | 85 | 84 | 84 | 87 | 89 | 88 | 91 | 96 | 96 | 94 | 93 |

## Table 35: Non-OPEC supply and OPEC natural gas liquids, mb/d

| | 2004 | 2005 | 2006 | 2007 | Change 07/06 | 1Q08 | 2Q08 | 3Q08 | 4Q08 | 2008 | Change 08/07 | 1Q09 | 2Q09 | 3Q09 | 4Q09 | 2009 | Change 09/08 | 1Q10 | 2Q10 | 3Q10 | 4Q10 | 2010 | Change 10/09 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| USA | 7.65 | 7.34 | 7.36 | 7.50 | 0.14 | 7.64 | 7.75 | 7.20 | 7.42 | 7.50 | 0.00 | 7.85 | 7.97 | 8.13 | 8.32 | 8.07 | 0.57 | 8.25 | 8.20 | 8.20 | 8.27 | 8.23 | 0.16 |
| Canada | 3.07 | 3.03 | 3.20 | 3.32 | 0.12 | 3.30 | 3.12 | 3.30 | 3.28 | 3.25 | -0.07 | 3.30 | 3.07 | 3.12 | 3.09 | 3.14 | -0.10 | 3.08 | 3.22 | 3.19 | 3.25 | 3.19 | 0.04 |
| Mexico | 3.83 | 3.77 | 3.69 | 3.49 | -0.21 | 3.29 | 3.18 | 3.13 | 3.09 | 3.17 | -0.31 | 3.04 | 2.97 | 2.94 | 2.96 | 2.98 | -0.19 | 2.99 | 2.90 | 2.80 | 2.77 | 2.86 | -0.12 |
| North America | 14.56 | 14.14 | 14.24 | 14.30 | 0.06 | 14.22 | 14.05 | 13.63 | 13.80 | 13.92 | -0.38 | 14.19 | 14.01 | 14.19 | 14.38 | 14.19 | 0.27 | 14.32 | 14.32 | 14.19 | 14.28 | 14.28 | 0.09 |
| Norway | 3.19 | 2.97 | 2.78 | 2.56 | -0.22 | 2.51 | 2.39 | 2.38 | 2.54 | 2.45 | -0.10 | 2.52 | 2.20 | 2.28 | 2.38 | 2.34 | -0.11 | 2.33 | 2.20 | 2.10 | 2.25 | 2.22 | -0.13 |
| UK | 2.10 | 1.89 | 1.71 | 1.69 | -0.02 | 1.66 | 1.65 | 1.41 | 1.58 | 1.58 | -0.11 | 1.63 | 1.56 | 1.27 | 1.46 | 1.48 | -0.10 | 1.45 | 1.38 | 1.33 | 1.37 | 1.38 | -0.10 |
| Denmark | 0.39 | 0.38 | 0.34 | 0.31 | -0.04 | 0.28 | 0.28 | 0.27 | 0.28 | 0.28 | -0.03 | 0.28 | 0.27 | 0.27 | 0.24 | 0.26 | -0.02 | 0.27 | 0.24 | 0.24 | 0.24 | 0.25 | -0.02 |
| Other Western Europe | 0.48 | 0.49 | 0.51 | 0.62 | 0.11 | 0.62 | 0.65 | 0.67 | 0.66 | 0.65 | 0.03 | 0.62 | 0.62 | 0.63 | 0.62 | 0.63 | -0.02 | 0.62 | 0.61 | 0.61 | 0.61 | 0.61 | -0.01 |
| Western Europe | 6.16 | 5.72 | 5.34 | 5.17 | -0.17 | 5.08 | 4.96 | 4.73 | 5.06 | 4.96 | -0.21 | 5.05 | 4.65 | 4.45 | 4.70 | 4.71 | -0.25 | 4.66 | 4.43 | 4.28 | 4.46 | 4.46 | -0.25 |
| Australia | 0.52 | 0.53 | 0.51 | 0.53 | 0.02 | 0.47 | 0.53 | 0.55 | 0.58 | 0.53 | 0.01 | 0.55 | 0.53 | 0.55 | 0.54 | 0.54 | 0.01 | 0.54 | 0.53 | 0.57 | 0.58 | 0.55 | 0.01 |
| Other Pacific | 0.05 | 0.05 | 0.05 | 0.08 | 0.03 | 0.11 | 0.11 | 0.10 | 0.09 | 0.10 | 0.02 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.00 | 0.09 | 0.11 | 0.10 | 0.10 | 0.10 | 0.00 |
| OECD Pacific | 0.57 | 0.58 | 0.56 | 0.60 | 0.04 | 0.58 | 0.63 | 0.64 | 0.67 | 0.63 | 0.03 | 0.64 | 0.62 | 0.65 | 0.64 | 0.64 | 0.01 | 0.63 | 0.64 | 0.67 | 0.68 | 0.66 | 0.02 |
| Total OECD | 21.29 | 20.44 | 20.15 | 20.08 | -0.07 | 19.88 | 19.65 | 19.00 | 19.52 | 19.51 | -0.57 | 19.88 | 19.28 | 19.29 | 19.71 | 19.54 | 0.03 | 19.61 | 19.39 | 19.14 | 19.43 | 19.39 | -0.15 |
| Brunei | 0.21 | 0.21 | 0.22 | 0.19 | -0.03 | 0.19 | 0.16 | 0.17 | 0.18 | 0.17 | -0.01 | 0.17 | 0.15 | 0.16 | 0.18 | 0.17 | 0.00 | 0.19 | 0.18 | 0.18 | 0.18 | 0.18 | 0.01 |
| India | 0.79 | 0.76 | 0.78 | 0.80 | 0.02 | 0.80 | 0.79 | 0.79 | 0.81 | 0.80 | 0.00 | 0.78 | 0.78 | 0.79 | 0.81 | 0.79 | -0.01 | 0.82 | 0.82 | 0.85 | 0.88 | 0.84 | 0.06 |
| Indonesia | 1.15 | 1.12 | 1.07 | 1.02 | -0.04 | 1.05 | 1.04 | 1.04 | 1.03 | 1.04 | 0.02 | 1.03 | 1.02 | 1.02 | 1.03 | 1.03 | -0.01 | 1.03 | 1.03 | 1.02 | 1.01 | 1.02 | 0.00 |
| Malaysia | 0.79 | 0.77 | 0.76 | 0.76 | 0.00 | 0.78 | 0.75 | 0.77 | 0.74 | 0.76 | 0.00 | 0.75 | 0.73 | 0.73 | 0.71 | 0.73 | -0.03 | 0.70 | 0.70 | 0.69 | 0.67 | 0.69 | -0.04 |
| Thailand | 0.25 | 0.29 | 0.32 | 0.33 | 0.02 | 0.34 | 0.36 | 0.36 | 0.36 | 0.36 | 0.02 | 0.37 | 0.37 | 0.36 | 0.37 | 0.37 | 0.01 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.00 |
| Vietnam | 0.42 | 0.39 | 0.37 | 0.35 | -0.02 | 0.36 | 0.33 | 0.31 | 0.34 | 0.33 | -0.01 | 0.35 | 0.37 | 0.37 | 0.41 | 0.38 | 0.04 | 0.41 | 0.37 | 0.35 | 0.33 | 0.36 | -0.01 |
| Asia others | 0.18 | 0.26 | 0.26 | 0.27 | 0.00 | 0.27 | 0.27 | 0.27 | 0.28 | 0.27 | 0.01 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.00 | 0.27 | 0.27 | 0.28 | 0.28 | 0.28 | 0.01 |
| Other Asia | 3.81 | 3.79 | 3.78 | 3.71 | -0.06 | 3.79 | 3.70 | 3.71 | 3.74 | 3.73 | 0.02 | 3.71 | 3.69 | 3.70 | 3.78 | 3.72 | -0.01 | 3.79 | 3.74 | 3.74 | 3.72 | 3.75 | 0.03 |
| Argentina | 0.80 | 0.78 | 0.77 | 0.77 | 0.00 | 0.79 | 0.79 | 0.78 | 0.77 | 0.78 | 0.01 | 0.78 | 0.77 | 0.73 | 0.76 | 0.76 | -0.02 | 0.76 | 0.74 | 0.73 | 0.72 | 0.74 | -0.02 |
| Brazil | 1.80 | 1.98 | 2.11 | 2.22 | 0.12 | 2.33 | 2.38 | 2.42 | 2.40 | 2.38 | 0.16 | 2.47 | 2.49 | 2.51 | 2.55 | 2.50 | 0.12 | 2.60 | 2.64 | 2.72 | 2.83 | 2.70 | 0.19 |
| Colombia | 0.54 | 0.53 | 0.54 | 0.54 | 0.00 | 0.57 | 0.59 | 0.61 | 0.62 | 0.60 | 0.06 | 0.65 | 0.66 | 0.68 | 0.73 | 0.68 | 0.08 | 0.75 | 0.76 | 0.77 | 0.79 | 0.77 | 0.09 |
| Trinidad & Tobago | 0.16 | 0.18 | 0.18 | 0.16 | -0.02 | 0.16 | 0.15 | 0.16 | 0.16 | 0.16 | 0.00 | 0.16 | 0.16 | 0.15 | 0.16 | 0.16 | 0.00 | 0.15 | 0.14 | 0.14 | 0.14 | 0.14 | -0.01 |
| L. America others | 0.26 | 0.30 | 0.26 | 0.27 | 0.00 | 0.27 | 0.27 | 0.28 | 0.31 | 0.28 | 0.01 | 0.31 | 0.30 | 0.31 | 0.31 | 0.31 | 0.03 | 0.32 | 0.31 | 0.31 | 0.31 | 0.31 | 0.01 |
| Latin America | 3.55 | 3.77 | 3.87 | 3.96 | 0.10 | 4.12 | 4.18 | 4.24 | 4.26 | 4.20 | 0.24 | 4.36 | 4.38 | 4.39 | 4.51 | 4.41 | 0.21 | 4.57 | 4.60 | 4.67 | 4.78 | 4.66 | 0.25 |
| Bahrain | 0.21 | 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 | 0.00 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.00 |
| Oman | 0.79 | 0.78 | 0.75 | 0.71 | -0.04 | 0.74 | 0.74 | 0.76 | 0.78 | 0.76 | 0.05 | 0.78 | 0.79 | 0.83 | 0.83 | 0.81 | 0.05 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.05 |
| Syria | 0.49 | 0.45 | 0.44 | 0.42 | -0.02 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.00 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.00 | 0.41 | 0.39 | 0.39 | 0.38 | 0.39 | -0.02 |
| Yemen | 0.41 | 0.41 | 0.37 | 0.33 | -0.04 | 0.32 | 0.31 | 0.30 | 0.29 | 0.30 | -0.03 | 0.30 | 0.30 | 0.30 | 0.29 | 0.30 | -0.01 | 0.27 | 0.28 | 0.27 | 0.27 | 0.27 | -0.03 |
| Middle East | 1.90 | 1.85 | 1.76 | 1.66 | -0.10 | 1.68 | 1.67 | 1.68 | 1.68 | 1.68 | 0.02 | 1.70 | 1.72 | 1.75 | 1.74 | 1.73 | 0.05 | 1.75 | 1.74 | 1.73 | 1.72 | 1.73 | 0.01 |
| Chad | 0.16 | 0.18 | 0.15 | 0.15 | 0.00 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.00 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | -0.01 | 0.14 | 0.12 | 0.12 | 0.11 | 0.12 | -0.02 |
| Congo | 0.24 | 0.24 | 0.25 | 0.24 | 0.00 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.02 | 0.26 | 0.27 | 0.27 | 0.27 | 0.27 | 0.01 | 0.27 | 0.28 | 0.28 | 0.28 | 0.28 | 0.01 |
| Egypt | 0.71 | 0.70 | 0.67 | 0.67 | 0.00 | 0.68 | 0.68 | 0.69 | 0.70 | 0.69 | 0.02 | 0.70 | 0.69 | 0.68 | 0.66 | 0.68 | -0.01 | 0.67 | 0.67 | 0.68 | 0.68 | 0.67 | -0.01 |
| Equatorial Guinea | 0.30 | 0.36 | 0.37 | 0.37 | 0.00 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.01 | 0.37 | 0.36 | 0.35 | 0.34 | 0.36 | -0.02 | 0.33 | 0.34 | 0.33 | 0.33 | 0.33 | -0.02 |
| Gabon | 0.25 | 0.25 | 0.25 | 0.25 | 0.00 | 0.24 | 0.24 | 0.25 | 0.25 | 0.24 | -0.01 | 0.26 | 0.26 | 0.27 | 0.27 | 0.26 | 0.02 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.01 |
| South Africa | 0.19 | 0.19 | 0.19 | 0.18 | -0.01 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.00 | 0.18 | 0.18 | 0.18 | 0.16 | 0.17 | 0.00 | 0.18 | 0.16 | 0.16 | 0.16 | 0.16 | -0.01 |
| Sudan | 0.30 | 0.34 | 0.40 | 0.50 | 0.10 | 0.50 | 0.49 | 0.47 | 0.44 | 0.48 | -0.02 | 0.46 | 0.48 | 0.47 | 0.47 | 0.47 | -0.01 | 0.47 | 0.48 | 0.48 | 0.47 | 0.48 | 0.01 |
| Africa other | 0.21 | 0.25 | 0.32 | 0.35 | 0.03 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.03 | 0.38 | 0.37 | 0.36 | 0.35 | 0.36 | -0.01 | 0.35 | 0.36 | 0.38 | 0.41 | 0.37 | 0.01 |
| Africa | 2.36 | 2.52 | 2.59 | 2.70 | 0.11 | 2.75 | 2.76 | 2.74 | 2.73 | 2.75 | 0.04 | 2.73 | 2.73 | 2.72 | 2.67 | 2.71 | -0.03 | 2.68 | 2.68 | 2.70 | 2.70 | 2.69 | -0.02 |
| Total DCs | 11.63 | 11.93 | 12.00 | 12.04 | 0.04 | 12.34 | 12.31 | 12.38 | 12.42 | 12.36 | 0.32 | 12.50 | 12.51 | 12.56 | 12.69 | 12.57 | 0.21 | 12.79 | 12.75 | 12.84 | 12.92 | 12.83 | 0.26 |
| FSU | 11.14 | 11.55 | 12.02 | 12.52 | 0.50 | 12.62 | 12.67 | 12.46 | 12.49 | 12.56 | 0.04 | 12.64 | 12.90 | 13.00 | 13.13 | 12.92 | 0.36 | 13.14 | 13.14 | 13.13 | 13.25 | 13.17 | 0.25 |
| Russia | 9.19 | 9.44 | 9.65 | 9.87 | 0.22 | 9.78 | 9.74 | 9.81 | 9.80 | 9.78 | -0.08 | 9.78 | 9.88 | 9.97 | 10.07 | 9.92 | 0.14 | 10.09 | 10.03 | 9.99 | 9.95 | 10.01 | 0.09 |
| Kazakhstan | 1.18 | 1.23 | 1.30 | 1.35 | 0.05 | 1.42 | 1.44 | 1.33 | 1.47 | 1.41 | 0.06 | 1.48 | 1.51 | 1.55 | 1.61 | 1.54 | 0.12 | 1.61 | 1.60 | 1.57 | 1.65 | 1.61 | 0.07 |
| Azerbaijan | 0.31 | 0.44 | 0.65 | 0.86 | 0.21 | 0.96 | 1.03 | 0.85 | 0.78 | 0.91 | 0.04 | 0.94 | 1.08 | 1.05 | 1.01 | 1.02 | 0.11 | 1.00 | 1.05 | 1.10 | 1.16 | 1.08 | 0.06 |
| FSU others | 0.47 | 0.44 | 0.42 | 0.44 | 0.02 | 0.46 | 0.46 | 0.46 | 0.45 | 0.46 | 0.02 | 0.44 | 0.44 | 0.44 | 0.43 | 0.44 | -0.02 | 0.45 | 0.45 | 0.47 | 0.48 | 0.46 | 0.03 |
| Other Europe | 0.17 | 0.16 | 0.15 | 0.15 | 0.00 | 0.15 | 0.15 | 0.14 | 0.14 | 0.15 | -0.01 | 0.14 | 0.13 | 0.14 | 0.14 | 0.14 | -0.01 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | -0.02 |
| China | 3.50 | 3.64 | 3.69 | 3.77 | 0.07 | 3.81 | 3.87 | 3.84 | 3.84 | 3.84 | 0.07 | 3.80 | 3.85 | 3.88 | 3.87 | 3.85 | 0.01 | 3.99 | 3.93 | 3.92 | 3.90 | 3.93 | 0.08 |
| Non-OPEC production | 47.74 | 47.71 | 48.02 | 48.56 | 0.54 | 48.79 | 48.65 | 47.82 | 48.41 | 48.42 | -0.14 | 48.97 | 48.67 | 48.88 | 49.54 | 49.02 | 0.60 | 49.65 | 49.33 | 49.15 | 49.62 | 49.44 | 0.42 |
| Processing gains | 1.83 | 1.91 | 1.96 | 1.99 | 0.03 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | -0.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 0.03 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 0.08 |
| Non-OPEC supply | 49.56 | 49.62 | 49.98 | 50.55 | 0.57 | 50.77 | 50.63 | 49.80 | 50.39 | 50.40 | -0.15 | 50.98 | 50.69 | 50.90 | 51.55 | 51.03 | 0.63 | 51.74 | 51.42 | 51.24 | 51.71 | 51.53 | 0.50 |
| OPEC NGL | 3.54 | 3.74 | 3.76 | 3.86 | 0.11 | 3.97 | 4.05 | 4.07 | 4.04 | 4.04 | 0.18 | 4.04 | 4.20 | 4.38 | 4.37 | 4.25 | 0.21 | 4.49 | 4.68 | 4.82 | 5.06 | 4.77 | 0.52 |
| OPEC Non-conventional | 0.17 | 0.16 | 0.14 | 0.08 | -0.05 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.02 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.00 | 0.10 | 0.11 | 0.11 | 0.11 | 0.10 | 0.00 |
| OPEC (NGL+NCF) | 3.71 | 3.89 | 3.89 | 3.95 | 0.05 | 4.08 | 4.16 | 4.18 | 4.15 | 4.14 | 0.20 | 4.14 | 4.31 | 4.48 | 4.47 | 4.35 | 0.21 | 4.59 | 4.78 | 4.93 | 5.17 | 4.87 | 0.52 |
| Non-OPEC & OPEC (NGL+NCF) | 53.27 | 53.51 | 53.87 | 54.49 | 0.62 | 54.85 | 54.79 | 53.98 | 54.54 | 54.54 | 0.05 | 55.12 | 54.99 | 55.38 | 56.03 | 55.38 | 0.84 | 56.33 | 56.21 | 56.17 | 56.88 | 56.40 | 1.02 |

Notes: Totals may not add up due to independent rounding. Indonesia has been included in Non-OPEC supply for comparison purpose.

**Table 36: World Rig Count**

| | | | | Change | | | | | | Change | | | | | | Change | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2005 | 2006 | 06/05 | 1Q07 | 2Q07 | 3Q07 | 4Q07 | 2007 | 07/06 | 1Q08 | 2Q08 | 3Q08 | 4Q08 | 2008 | 08/07 | 1Q09 | 2Q09 | 3Q09 | 4Q09 | 2009 | 09/08 | Feb10 | Mar10 | Mar/Feb |
| USA | 1,381 | 1,647 | 267 | 1,733 | 1,756 | 1,788 | 1,790 | 1,767 | 119 | 1,770 | 1,864 | 1,978 | 1,898 | 1,877 | 111 | 1,326 | 936 | 956 | 1,108 | 1,081 | -796 | 1,350 | 1,419 | 69 |
| Canada | 458 | 470 | 12 | 532 | 139 | 348 | 356 | 344 | -126 | 507 | 169 | 432 | 408 | 379 | 35 | 328 | 91 | 177 | 277 | 218 | -161 | 564 | 386 | -178 |
| Mexico | 107 | 83 | -24 | 90 | 88 | 96 | 93 | 92 | 9 | 96 | 106 | 103 | 106 | 103 | 11 | 128 | 128 | 135 | 123 | 128 | 26 | 120 | 110 | -10 |
| North America | 1,945 | 2,200 | 255 | 2,355 | 1,983 | 2,231 | 2,240 | 2,202 | 2 | 2,373 | 2,139 | 2,513 | 2,411 | 2,359 | 157 | 1,782 | 1,154 | 1,267 | 1,508 | 1,428 | -931 | 2,034 | 1,915 | -119 |
| Norway | 17 | 17 | 0 | 16 | 19 | 18 | 17 | 18 | 1 | 17 | 21 | 21 | 21 | 20 | 2 | 25 | 18 | 18 | 20 | 20 | 0 | 19 | 25 | 6 |
| UK | 21 | 27 | 5 | 25 | 29 | 27 | 22 | 26 | -1 | 19 | 21 | 24 | 24 | 22 | -4 | 22 | 19 | 16 | 15 | 18 | -4 | 15 | 16 | 1 |
| Western Europe | 70 | 77 | 7 | 75 | 80 | 79 | 77 | 78 | 0 | 91 | 97 | 101 | 103 | 98 | 20 | 90 | 82 | 76 | 85 | 83 | -15 | 83 | 94 | 11 |
| OECD Pacific | 25 | 26 | 2 | 24 | 30 | 32 | 30 | 29 | 2 | 32 | 39 | 39 | 34 | 36 | 7 | 27 | 25 | 26 | 23 | 25 | -11 | 22 | 18 | -4 |
| Total OECD | 2,078 | 2,347 | 269 | 2,494 | 2,141 | 2,387 | 2,385 | 2,352 | 4 | 2,532 | 2,317 | 2,698 | 2,593 | 2,535 | 183 | 1,945 | 1,299 | 1,368 | 1,616 | 1,557 | -978 | 2,139 | 2,027 | -112 |
| Other Asia | 200 | 202 | 2 | 206 | 213 | 212 | 216 | 212 | 10 | 213 | 220 | 218 | 212 | 216 | 4 | 212 | 212 | 213 | 233 | 217 | 1 | 237 | 241 | 4 |
| Latin America | 129 | 149 | 19 | 175 | 177 | 171 | 179 | 175 | 27 | 187 | 184 | 195 | 197 | 191 | 16 | 164 | 147 | 149 | 169 | 157 | -34 | 183 | 192 | 9 |
| Middle East | 131 | 132 | 1 | 144 | 146 | 154 | 154 | 149 | 18 | 158 | 165 | 175 | 171 | 167 | 18 | 162 | 151 | 139 | 147 | 150 | -18 | 153 | 151 | -2 |
| Africa | 8 | 10 | 2 | 16 | 12 | 14 | 14 | 14 | 4 | 10 | 13 | 14 | 11 | 12 | -2 | 8 | 11 | 9 | 12 | 10 | -2 | 19 | 18 | -1 |
| Total DCs | 468 | 493 | 25 | 540 | 549 | 550 | 563 | 551 | 58 | 569 | 583 | 602 | 591 | 586 | 36 | 546 | 520 | 510 | 561 | 534 | -52 | 592 | 602 | 10 |
| Non-OPEC Rig Count | 2,546 | 2,840 | 294 | 3,035 | 2,690 | 2,937 | 2,948 | 2,903 | 62 | 3,101 | 2,900 | 3,300 | 3,183 | 3,121 | 219 | 2,491 | 1,819 | 1,878 | 2,177 | 2,091 | -1,030 | 2,731 | 2,629 | -102 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| Algeria | 21 | 24 | 4 | 25 | 26 | 28 | 28 | 27 | 2 | 26 | 27 | 24 | 26 | 26 | -1 | 24 | 30 | 27 | 27 | 27 | 1 | 22 | 29 | 7 |
| Angola | 3 | 4 | 1 | 5 | 4 | 3 | 5 | 4 | 1 | 5 | 6 | 5 | 5 | 5 | 1 | 5 | 3 | 3 | 4 | 4 | -1 | 11 | 8 | -3 |
| Ecuador | 12 | 11 | 0 | 12 | 10 | 11 | 10 | 11 | -1 | 7 | 9 | 12 | 13 | 10 | -1 | 10 | 10 | 10 | 10 | 10 | 0 | 11 | 11 | 0 |
| Iran | 40 | 44 | 4 | 51 | 51 | 51 | 50 | 50 | 6 | 50 | 50 | 50 | 51 | 50 | 0 | 51 | 52 | 52 | 52 | 52 | 2 | 52 | 52 | 0 |
| Iraq | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 0 | 29 | 29 | 0 |
| Kuwait | 12 | 14 | 1 | 14 | 13 | 13 | 11 | 12 | -1 | 12 | 11 | 12 | 12 | 12 | 0 | 12 | 11 | 14 | 13 | 13 | 0 | 16 | 21 | 5 |
| Libya | 9 | 10 | 1 | 13 | 12 | 14 | 14 | 13 | 3 | 14 | 15 | 15 | 15 | 15 | 2 | 15 | 13 | 14 | 15 | 14 | -1 | 20 | 16 | -4 |
| Nigeria | 9 | 10 | 1 | 8 | 7 | 8 | 10 | 8 | -1 | 9 | 8 | 6 | 6 | 7 | -1 | 7 | 6 | 6 | 7 | 6 | -1 | 12 | 11 | -1 |
| Qatar | 12 | 11 | -1 | 11 | 12 | 13 | 14 | 13 | 2 | 11 | 12 | 11 | 11 | 11 | -1 | 9 | 9 | 9 | 9 | 9 | -2 | 9 | 8 | -1 |
| Saudi Arabia | 37 | 65 | 28 | 76 | 76 | 78 | 77 | 77 | 11 | 78 | 77 | 76 | 76 | 77 | 0 | 72 | 67 | 67 | 66 | 68 | -9 | 67 | 68 | 1 |
| UAE | 16 | 16 | 0 | 14 | 15 | 15 | 14 | 15 | -2 | 12 | 12 | 13 | 12 | 12 | -2 | 13 | 12 | 13 | 12 | 12 | 0 | 13 | 13 | 0 |
| Venezuela | 68 | 81 | 13 | 76 | 80 | 77 | 71 | 76 | -5 | 82 | 81 | 77 | 81 | 80 | 4 | 69 | 64 | 54 | 54 | 60 | -20 | 68 | 65 | -3 |
| OPEC Rig Count | 238 | 290 | 51 | 303 | 305 | 311 | 302 | 305 | 16 | 336 | 337 | 330 | 336 | 335 | 29 | 315 | 307 | 295 | 298 | 304 | -31 | 330 | 331 | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| Worldwide Rig Count* | 2,785 | 3,130 | 345 | 3,338 | 2,995 | 3,249 | 3,250 | 3,208 | 78 | 3,438 | 3,237 | 3,630 | 3,519 | 3,456 | 248 | 2,806 | 2,126 | 2,173 | 2,476 | 2,395 | -1,061 | 3,061 | 2,960 | -101 |
| of which: | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oil | 980 | 1,124 | 144 | 1,264 | 1,167 | 1,254 | 1,285 | 1,242 | 119 | 1,408 | 1,351 | 1,479 | 1,490 | 1432 | 190 | 1,276 | 1062 | 1175 | 1349 | 1215 | -217 | 1,638 | 1,571 | -67 |
| Gas | 1,746 | 1,947 | 201 | 2,013 | 1,764 | 1,931 | 1,904 | 1,903 | -44 | 1,969 | 1,814 | 2,070 | 1,948 | 1950 | 47 | 1,450 | 993 | 965 | 1092 | 1125 | -825 | 1,381 | 1,345 | -36 |
| Others | 21 | 17 | -4 | 20 | 17 | 20 | 25 | 20 | 4 | 26 | 32 | 36 | 37 | 33 | 12 | 35 | 35 | 34 | 37 | 35 | 3 | 44 | 44 | 0 |

**/Excludes China and FSU.*

*na - Not available.*

*Source: Baker Hughes International & Secretariat's Estimates.*

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

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# Data Summary April 2010

## OPEC Basket average price

*US$ per barrel*

| | | |
|---|---|---|
| up $4.22 in March | **March 2010** | **77.21** |
| | February 2010 | 72.99 |
| | Year-to-date | 75.49 |

## March OPEC production

*in million barrels per day, according to secondary sources*

| | | |
|---|---|---|
| down 0.03 in March | **March 2010** | **29.26** |
| | February 2010 | 29.29 |

## World economy

***The world economy continues to improve and is now expected to grow in 2010 at an upwardly revised 3.5%, from 3.4% previously. In the OECD, US growth was revised to 2.6%, Japan to 1.5% and the Euro-zone to 0.7%. In Developing Asia, China was revised up to 9.5% and India to 7.1%.***

## Supply and demand

*in million barrels per day*

| **2009** | | **2010** | |
|---|---|---|---|
| World demand | 84.3 | World demand | 85.2 |
| Non-OPEC supply | 51.0 | Non-OPEC supply | 51.5 |
| OPEC NGLs | 4.4 | OPEC NGLs | 4.9 |
| **Difference** | **28.9** | **Difference** | **28.8** |

*Totals may not add due to independent rounding.*

## Stocks

***US commercial stocks rose 5.3 mb in March, driven by a build in crude which outpaced a draw in products. Inventories now stand at around 82 mb above the five-year average. EU 15 plus Norway total oil stocks fell slightly in March, but still remained about 30 mb above the seasonal average. Japan's commercial oil stocks increased in March but still showed a deficit with the historical norm.***

*Issued 14 April 2010.*
***Next report to be issued on 11 May 2010.***

*Data covers period up to the end of March 2010 unless otherwise stated.*