

# OPEC

Organization of the Petroleum Exporting Countries

## Monthly Oil Market Report

### *December 2010*

*Feature Article:  
Review of 2010 and outlook for 2011*

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# OPEC Monthly Oil Market Report

## Publishing Schedule for 2011

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Monday,	17	January
Thursday,	10	February
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Friday,	10	June
Tuesday,	12	July
Tuesday,	9	August
Monday,	12	September
Tuesday,	11	October
Wednesday,	9	November
Tuesday,	13	December

# Oil Market Highlights

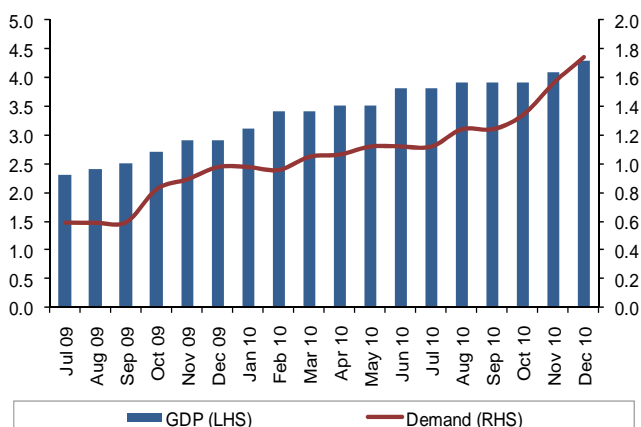
- The **OPEC Reference Basket** increased further in November, remaining above \$80/b for the entire month to average \$82.83/b. The increase came in line with developments in the futures oil market which saw front-month benchmarks Nymex WTI and ICE Brent continuing to move within the \$80-90/b range for the second month in a row and reaching 25-month highs. The upward trend was driven mainly by bearish macroeconomic sentiment, US dollar fluctuations and signs indicating a recovery in oil demand. Growing interest in the futures market was reflected in increasing volume of trading contracts and open interest for both Nymex WTI and ICE Brent. In December, the Basket continued to move above \$85/b, standing at \$87.92/b on 9 December.
- The **world economy** continues its expansion. Growth for 2010 was revised up to 4.3% from 4.1% on better-than-expected growth in the manufacturing sector. Growth in 2011 has also been revised higher to 3.8% from 3.6%. The implementation of further stimulus plans is likely to have an impact on the current global growth expectations for next year. The US is forecast to grow by 2.8% in 2010 and 2.4% in 2011. The deceleration in Japan's economy remains more pronounced with growth of 3.5% in 2010 and 1.4% in 2011. The Euro-zone is currently growing at two speeds with Germany taking the lead. Together, the region is forecast to grow by 1.5% in 2010 and 1.1% in 2011. China is forecast to grow at 9.7% in 2010 and 8.8% in 2011, while India is forecast at 8.5% and 8.0%.
- **World oil demand** growth in 2010 is now forecast at 1.5 mb/d, representing an upward revision of about 0.2 mb/d. OECD oil demand is turning out to be stronger than expected, supported by stimulus-driven economic activities. Cold winter in Europe has also strengthened heating oil consumption in December. In 2011, world oil demand growth is expected at 1.2 mb/d, unchanged from the previous report. One main factor that is suppressing oil demand growth is the higher baseline. Another factor is the energy efficiency policies along with the use of biofuel, which will put more downward pressure on oil consumption worldwide.
- **Non-OPEC oil supply** is forecast to increase 1.1 mb/d in 2010 following an upward revision of about 0.1 mb/d from last month's assessment. The main contributors to the adjustment are the US, Russia, and China. In 2011, non-OPEC oil supply is expected to increase by 0.4 mb/d over the current year. The bulk of the increase will come from Brazil, Ghana, Canada, Azerbaijan, Kazakhstan and Colombia. OPEC NGLs and non-conventional oils are expected to add 0.5 mb/d in 2011 following an increase of 0.4 mb/d in 2010. In November, OPEC crude production averaged 29.20 mb/d, according to secondary sources, a decrease of 43 tb/d over the previous month.
- The temporary product supply gap caused by the French strike has been closed and light distillate cracks have dropped back to previous levels. However, inventory draws, increased demand from China and the impact of cold weather on middle distillate cracks have helped support **product markets**. Expectations of a cold winter and the increased arbitrage to Asia are lending additional strength, although this could boost refinery runs, leading to an imbalance in the market.
- **OPEC spot fixtures** increased 0.9 mb/d in November to average 18.8 mb/d, supported by winter demand. OPEC sailings remained steady in November with only a minor rise. The increased tonnage demand driven by winter requirements strengthened spot freight rates in November from the persistently low levels seen over the previous months. VLCC spot freight rates from the Middle East to the East increased 50% over the previous month.
- **US commercial stocks** experienced a decline for the third consecutive month in November, dropping by a substantial 21.2 mb. The decline was divided between crude and products, which fell by 8.5 mb and 12.8 mb respectively. As a result, US commercial stocks narrowed the surplus with the five-year average to 84.5 mb. In October, commercial oil stocks in Japan rose 4.7 mb, reversing the downward trend of the last two months, although the deficit with the five-year average remained at 34 mb. Preliminary indications show commercial oil stocks rose by 8.8 mb in November.
- The **demand for OPEC crude** in 2010 is estimated at 28.9 mb/d, following an upward revision of around 0.1 mb/d from the previous report. This represents a decline of 0.1 mb/d compared to a year ago. The demand for OPEC crude in 2011 is expected to average 29.2 mb/d, an increase of 0.3 mb/d over the 2010 level and broadly unchanged from the previous report.



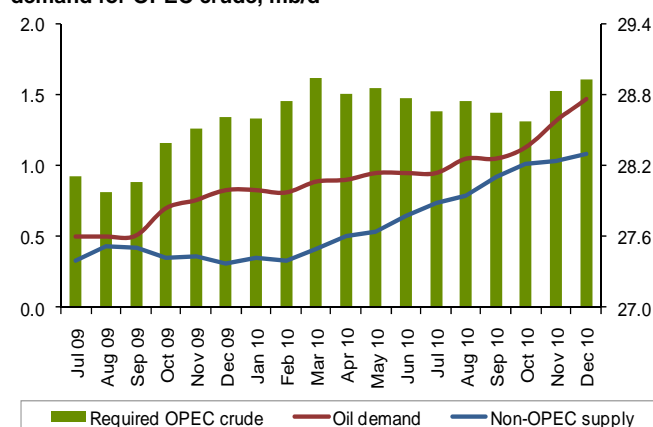
## Review of 2010 and outlook for 2011

The world economy experienced a significant recovery in 2010. Growth is now estimated at 4.3%, representing an upward revision from the initial forecast of 2.4% (see **Graph 1**). This has been an impressive reversal from the recession in 2009, although still below the 5-year average prior to the recession. Most economies grew at relatively high levels in the first half of 2010 and the expansion continued into the second half. This encouraging development was mainly due to continued government-led stimulus in the OECD, which is winding down. At the same time, developing countries, notably China, India and Brazil, are trying to dampen their strong expansion to avoid overheating. The combination of these two slowing effects is expected to produce lower growth of 3.8% in 2011. Again, the majority of the growth will come from developing Asia, mainly China, which is expected to contribute one third of next year's growth, about the same level as in the current year. However, some critical issues pose risks to the 2011 forecast, including still muted private consumption, persistently high unemployment, the sovereign debt situation in some Euro-zone countries, the fragile US housing market and China's efforts to manage growth while avoiding overheating.

**Graph 1: Revision in world GDP & oil demand growth 2010, %**



**Graph 2: Revisions to 2010 non-OPEC supply, oil demand and demand for OPEC crude, mb/d**



Both global oil demand and non-OPEC supply have also experienced a significant upward revision in 2010. World oil demand growth has been revised up from the initial forecast of 0.5 mb/d to 1.5 mb/d (see **Graph 2**). The main driver has been the stronger-than-anticipated recovery in the global economy. Developing countries remain the main contributor with more than 75% in total oil demand growth, led by China, India, the Middle East and Latin America. At the same time, OECD consumption has turned positive after four consecutive years of negative growth, driven by improvement in US demand and, to a lesser extent, consumption in the OECD Pacific. Western Europe, however, remains in negative territory. Non-OPEC supply growth for 2010 has also been revised to now stand at 1.1 mb/d, up from initial growth of 0.3 mb/d. This upward revision was mainly driven by growth in non-conventional oil and the strong performance of Russia. In contrast, OPEC NGLs experienced a downward revision from 5.3 mb/d to 4.8 mb/d, mainly due to project delays, to represent growth of 0.4 mb/d. As a result of all these adjustments, the demand for OPEC crude in 2010 has been revised up by 0.8 mb/d to 28.9 mb/d, a figure which is still below the previous year's level.

Looking ahead to 2011, current projections for world oil demand growth stand at 1.2 mb, representing a slight upward adjustment from the initial forecast last July. Demand growth this year and in the coming year are expected to offset the cumulative contraction of 1.9 mb/d in oil demand in 2008 and 2009. Non-OPEC supply in 2011 has been revised up slightly to 0.4 mb/d, while growth in OPEC NGLs has been adjusted lower by 0.1 mb/d to 0.5 mb/d. As a result of these changes, demand for OPEC crude in 2011 is expected to average 29.2 mb/d, an increase of 0.3 mb/d following three years of consecutive declines. Given the existing level of excess inventories, ample crude oil spare production capacity and idle refinery capacity, the market is expected to have a robust cushion against any sudden surge in demand or disruption in supply.

Despite a convergence in views that fundamentals are improving, the market is still facing a large degree of uncertainty as indicated by the wide divergence in forecasts for world oil demand and non-OPEC supply. Currently, forecasts for world oil demand growth in 2011 show a range of 1.0 mb/d to 1.8 mb/d, while non-OPEC supply growth projections range from -0.2 mb/d to 0.8 mb/d. These wide ranges make it challenging to assess the real needs of the market.

Over the medium and long term, the level of uncertainty is even greater. In addition to the uncertain direction of the global economy, there is also a lack of clarity over the impact that energy and environmental policies in several major consuming countries will have on future oil demand. In light of the considerable uncertainties, efforts to attain an objective assessment of market needs are essential in securing oil market stability.



# Crude Oil Price Movements

*OPEC Basket rose for the fourth consecutive month to average \$82.83/b, the highest since September 2008*

## OPEC Reference Basket

Supported by the bullish sentiment in the crude futures market, the OPEC Reference Basket increased further in November to move above \$80/b for the whole month and average \$82.83/b, the highest since the \$96.85/b of September 2008.

The OPEC Reference Basket ended October below \$80/b before it rose over eight consecutive trading days to hit \$85.81/b on 11 November, the highest since October 2008.

Following the same trend as futures prices, the OPEC Reference retreated over the following days before it hit a new 25-month high of \$86.14/b in early December.

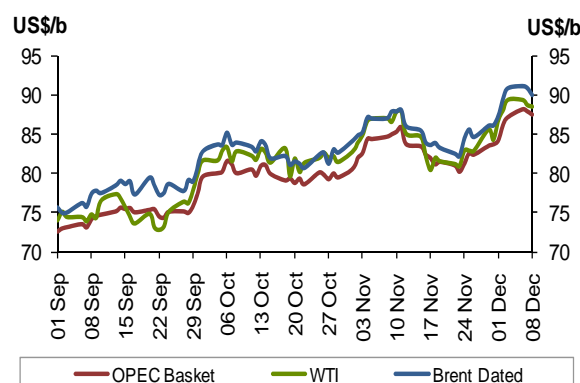
The gain of \$2.97 or 3.7% in November was attributed to all components, particularly Kuwait Export, Arab Light and Iran Heavy which rose respectively by 4.5%, 4.2% and 4.1%.

Middle Eastern crude took advantage of the bullish market sentiment as demand from Asian buyers remained healthy and naphtha as well as middle distillate cracks strengthened sharply ahead of the peak demand season for heating oil in winter. Middle Eastern crudes were also supported by Russian ESPO which sold at very strong premiums of over \$2/b. The ESPO premium to Dubai would have reached a record high of \$2.70-\$2.80/b in early December, following news that exports of ESPO via the Far East port of Kozmino would fall by 9% in the first quarter of 2011 compared to the October-December 2010 period. News of tighter ESPO supply gave more support to Middle Eastern crudes in early December.

African crudes rose by 2.8%, except Angolan Girassol, which gained a further 6.9%. Strong demand led to Girassol being assessed at a premium to Dated Brent for the first time in eight months in the first week of November. After a small weakness in the second decade of November, Girassol increased again in the last week of November, to hit the highest differential since March 2009 as Nigerian disruptions forced buyers to increase their purchases of Angolan grade. Algerian and Nigerian crudes remained supported by continuously strong purchases from Asian buyers for petrochemical feedstocks. Additionally, demand for light sweet crudes from US refiners, despite pressure from the WTI discount to Dated Brent added more support to African crudes. Demand for Nigerian and Angolan crudes by Asia-Pacific buyers continued to increase in November, helped by robust diesel demand. Another reason for growing interest in West African crudes were the higher prices for regional Asian-Pacific grades, which made African crudes more competitive.

Oriente, which showed the largest gain of more than 8% in October compared with the rest of the components, rose by just 1.3% in November, to show the lowest gain. Latin American crudes dropped sharply in mid-November due to lower demand from US refiners. Venezuelan grade Merey gained 2.6%, the second rise in a row.

Graph 1.1: Crude oil price movement



**Table 1.1: OPEC Reference Basket and selected crudes, US\$/b**

	<b>Oct 10</b>	<b>Nov 10</b>	<b>Change Nov/Oct</b>	<b>2009</b>	<b>2010</b>
<b>OPEC Reference Basket</b>	<b>79.86</b>	<b>82.83</b>	<b>2.97</b>	<b>59.85</b>	<b>76.36</b>
Arab Light	79.93	83.32	3.39	60.17	76.70
Basrah Light	79.36	82.14	2.78	59.33	75.69
Bonny Light	84.35	86.83	2.48	62.09	79.90
Es Sider	82.60	84.93	2.33	60.25	77.96
Girassol	82.55	85.80	3.25	60.63	78.38
Iran Heavy	78.99	82.24	3.25	59.34	75.66
Kuwait Export	78.10	81.59	3.49	59.44	75.25
Marine	80.31	83.41	3.10	61.17	77.13
Merey	71.21	73.07	1.86	54.71	68.96
Murban	82.20	85.36	3.16	62.56	78.86
Oriente	76.42	77.45	1.03	54.62	71.83
Saharan Blend	83.90	86.28	2.38	61.17	79.17
<b>Other Crudes</b>					
Minas	83.35	85.96	2.61	63.62	81.04
Dubai	80.22	83.72	3.50	60.57	77.02
Isthmus	79.58	82.03	2.45	59.71	76.86
T.J. Light	77.91	80.14	2.23	58.56	75.27
Brent	82.75	85.33	2.58	60.51	78.44
West Texas Intermediate	81.89	84.08	2.19	60.71	78.48
Urals	81.53	84.74	3.21	60.04	77.28
<b>Differentials</b>					
WTI/Brent	-0.86	-1.25	-0.39	0.20	0.04
Brent/Dubai	2.53	1.61	-0.92	-0.06	1.42

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

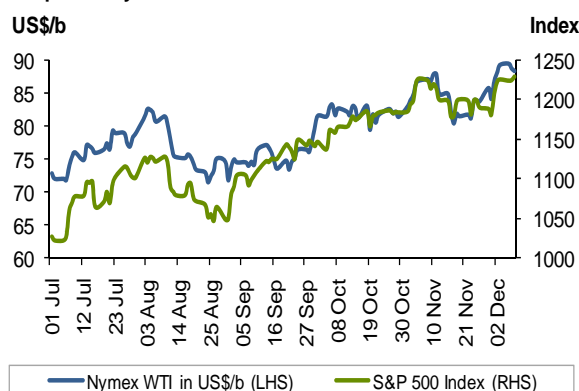
Source: Platt's, Direct Communication and Secretariat's assessments

## The oil futures market

*Crude oil futures hit a 25-month high amid a weaker US dollar and growing demand*

Crude oil futures prices continued to move within the \$80-90/b range for the second month in a row, driven by macroeconomics and bullish market sentiment following signs of a recovery in oil demand. To recall, the ICE Brent front-month price broke out of the \$70-80/b range on 29 September to be followed by Nymex WTI on 1 October, supported mainly by the value of the US dollar and macroeconomic sentiment. However, signs of growing demand in OECD countries as well as in the rest of the world,

particularly in China, in line with colder weather, gave more support to the oil markets and pushed prices to a 25-month high in November. The Nymex WTI front-month started November at just below \$83/b amid the release of positive data on manufacturing growth in China and the US before hitting \$87.81/b during the second week of the month, the highest since early October 2008. Prices were also supported by the Federal Reserve's decision to approve a second round of quantitative easing aimed at boosting the economy but seen as supportive for oil prices because of the expectation of the weaker US dollar, which effectively pushed the US dollar to a nine-month low against the euro during the first week of November. A weaker dollar makes dollar-denominated crude cheaper for holders of other currencies. Bullish reports on US jobless claims and oil inventories also contributed to the rally in oil prices over that week. However, the upward trend came to the end – albeit only temporarily – on 12 November when WTI lost almost \$3 or 3.3% to settle at \$84.88/b before dropping to \$80.44 on 17 November, the lowest in almost a month. The downward movement was attributed to a sell-off, triggered essentially by a strong US dollar, worries about Euro-zone debt and prospects of tighter monetary policy in China with implications of lower oil demand in this key consuming country. The drop in prices came despite

**Graph 1.2: Nymex WTI futures and S&P 500 Index**

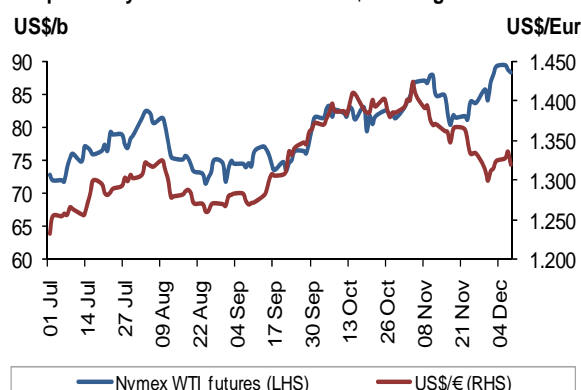


a bullish report on US crude oil inventories, to indicate that fundamentals are not the leading indicator of price movements for the moment. Prices recovered in the following days to finish at \$84.11/b on the last day of November, resulting in a monthly average of \$84.31/b, up \$2.34/b, the second highest monthly average in 2010.

The price of Nymex WTI continued to move in line with equity markets, particularly the S&P 500 Index, reflecting the financialization of oil. The co-movement indicates that, as for equity markets, oil price movements are influenced heavily by macroeconomic sentiment.

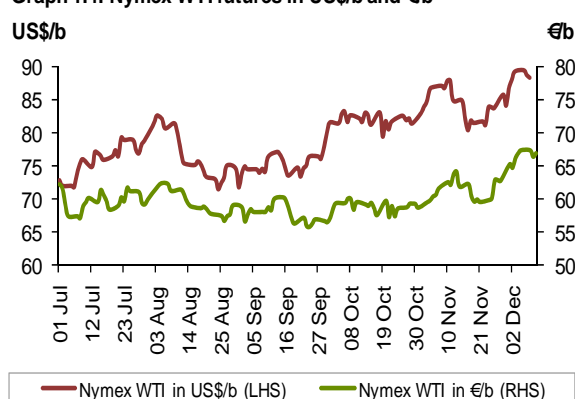
It is also noticeable that the WTI price movement and the value of the US dollar versus the euro followed the same trend. However, while the WTI front-month has moved from around \$72.7/b on 1 June to \$84.11/b on 30 November – a rise of 16% – the equivalent in euro shows that the WTI price moved from around €60/b to just €64/b, an increase of 7%. This highlights the impact of US dollar depreciation on oil price developments.

Graph 1.3: Nymex WTI futures and US\$ exchange rate



Similarly, ICE Brent followed an upward trend, but continued to trade above Nymex WTI. The ICE Brent front month hit \$88.96/b on 10 November before losing momentum and falling to \$83.25/b on 23 November on the back of the re-emergence of concerns about Euro-zone economic growth due to Ireland's debt and the possible spread to other countries, particularly Portugal and Spain. Prices recovered after concerns over Euro-zone economic growth eased following the IMF-EU bailout to Ireland. The ICE Brent front-month rose for the fourth month in a row to average \$86.16/b in November, up \$2.62 from October, the highest since the \$100.79/b of September 2008.

Graph 1.4: Nymex WTI futures in US\$/b and €/b



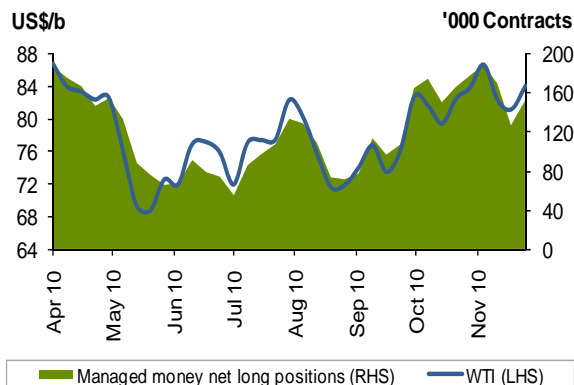
ICE Brent traded on average at \$1.85 above the Nymex WTI in November, 28¢ higher than the previous month. The widening premium of ICE Brent against Nymex WTI reflects the high level of crude oil inventories in the US compared to Europe and the growing trading volume of ICE Brent contracts.

Growing interest in ICE Brent contracts pushed trading volume of the front month to a record high of around 3.6 million contracts in November compared to less than 3.0 million contracts a year earlier and around 2.1 million contracts in November 2008. On Nymex, investment is also growing. Trading volume for the Nymex WTI front-month contract remained almost stable at a record high of 8 million contracts over the last three months, compared with 6.4 million contracts a year ago.

Open interest also increased in November. Open interest of WTI futures contracts on the Nymex moved above 1.52 million on 5 November. At the same time, open interest for crude oil futures and options rose to more than 2.8 million contracts in the second week of November, the week when WTI front-month approached \$88/b. Open interest fell in the following days, in line with a downturn in prices, but remained at strong levels of more than 1.34 million contracts for crude oil futures on 30 November, compared with less than 1.20 million contracts at the end of last year.

Speculators also increased their net long positions during November. Money managers pushed net long crude oil futures positions on Nymex to a record high of 189,000 contracts in the week through 9 November, just one day before the WTI price moved to almost \$88/b. Money managers cut net long positions over the two following weeks by 10% and 26% respectively, to around 127,000 contracts. At the same time, the WTI price fell in the same weeks. However, the last week of November showed money managers sharply increased net long positions by 20% to more than 152,000 contracts, a week when the WTI price recovered to end the month at \$84.11/b.

Graph 1.5: Nymex WTI price vs. Speculative activity



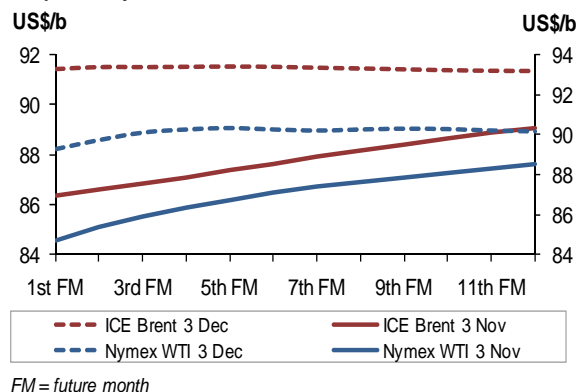
Cold weather across Europe and in the US Northeast region added more bullishness to the oil market in December making futures prices rise further with the WTI front month closing at \$88/b on 2 December and ICE Brent breaking out the \$80-90/b range to settle at \$90.69/b.

### The futures market structure

Oil futures remained in contango in November, but the curves for both Nymex WTI and ICE Brent flattened significantly.

On the Nymex, the spread between the WTI second month and the first month fell to 57¢ from 74¢ in October and \$1.27 in September. At the same time the spread between the first and the sixth month narrowed by 70¢ to average nearly \$2.20.

Graph 1.6: Nymex WTI and ICE Brent forward curve, 2010



FM = future month

The flattening of the curve was more pronounced in the case of ICE Brent when the spread between the first and the second month dropped to just 18¢, the lowest since the market shifted to contango in May 2008. The spread narrowed to just 8¢ on the last day of November. The strength of the first month compared the forward month continued in early December to see ICE Brent shift to backwardation on 2 December with December/January spread settling at minus 4¢ before it moved back into contango over the following days.

The narrowing contango was due to the fact that prompt price firmed more than the price of forward months because of the pressure from the decline in commercial inventories and would probably result in a further drop in floating storage.

*The contango narrowed significantly in November and ICE Brent shifted temporarily to backwardation in early December*

Table 1.2: Nymex WTI and ICE Brent forward price, US\$/b

Nymex WTI						
	1st FM	2nd FM	3rd FM	6th FM	12th FM	
3 Dec 2010	89.30	89.74	90.10	90.25	90.16	
3 Nov 2010	84.69	85.35	85.89	87.11	88.56	
ICE Brent						
	1st FM	2nd FM	3rd FM	6th FM	12th FM	
3 Dec 2010	91.42	91.49	91.49	91.50	91.35	
3 Nov 2010	86.38	86.58	86.85	87.64	89.06	

FM = future month

**The sour/sweet crude spread**

The bullish sentiment in the oil market and the healthy physical demand made the light-sweet/heavy-sour crude differential narrow in November.

On the spot market, the differential between WTI and Mars sour dropped from \$1.58 to \$1.40, and narrowed further in early December to stand at just 35¢ on 2 December, the lowest since early October. The strong recovery in sour crudes in the US market was driven essentially by strong demand after the return of refineries from maintenance. The cold weather also helped sour crudes by pushing demand higher following the rally in heating oil futures. Regional grades were also lifted by limited arbitrage as the WTI discount to Brent widened.

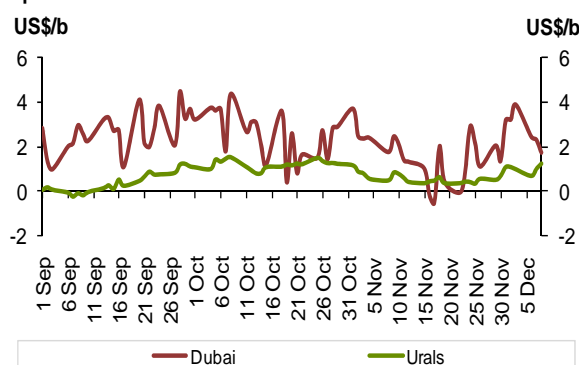
Similarly, the differential between Dated Brent and Urals more than halved in November, moving from \$1.22 to less than 60¢ before it widened again in early December as Urals crude weakened following the rise in freight rates and after export schedules showed healthy exports for December. Urals crude was also pressured as weak demand in the Mediterranean closed arbitrage opportunities between the well-supplied north and the Mediterranean.

Russian Urals strengthened in November on the back of expectations of tighter supply schedules from the Black Sea port as well as and the end of the strike in French refineries. Urals crude also got some support from delays in the Turkish waterways.

The Brent-Dubai differential continued to narrow to average \$1.61 in November, the lowest since the 86¢ of last June, but widened sharply in early December to move to around \$3.20, due to the strength of Dated Brent after the futures price moved beyond \$90/b, the highest in 25 months and shifted into backwardation.

The continuing strength of Dubai relative to Dated Brent in November was attributed to strong Middle East crudes because of robust demand from Asia, particularly from Chinese refiners and strong refining margins. The bullish sentiment in the Middle East crude market let Dubai show even a premium over Dated Brent in a couple of days in November. The strength of Middle East crude was also reflected in the shift of the December/January Dubai intermonth spread into backwardation during the third week of November, for the first time in 16 months.

Graph 1.7: Brent Dated vs. Sour grades (Urals and Dubai) spread



*The sweet/sour spread narrowed*

# Commodity Markets

Commodity prices weighed down by macroeconomic uncertainties and restocking in China

## Trends in selected commodity markets

The World Bank (WB) energy index increased at an easy pace of 3.6% m-o-m in November compared to 6.4% m-o-m in October. The non-energy commodity price index went up by 3.4% m-o-m, the same as in the previous month. Agricultural prices remained sustained by the soybean complex and beverages but important setbacks took place in grains. Considering the industrial metal complex, a considerable deceleration in prices was experienced, with negative growth seen across it, which was dampened mainly by a sharp fall in China's imports for many commodities in October as well as macro uncertainties. Gold also reported a restraint in growth.

Table 2.1: Commodity price data, 2010

Commodity	Unit	Monthly averages			% Change		
		Sep	Oct	Nov	Sep/Aug	Oct/Sep	Nov/Oct
World Bank commodity price indices for low and middle income countries (2000 = 100)							
Energy		261.1	277.7	287.8	0.4	6.4	3.6
Coal, Australia	\$/mt	94.9	97.5	102.8	5.7	2.7	5.4
Crude oil, average	\$/bbl	76.1	81.7	84.5	0.4	7.4	3.4
Crude oil, Brent	\$/bbl	77.8	82.9	85.7	1.4	6.6	3.3
Crude oil, WTI	\$/bbl	75.3	81.9	84.2	-1.7	8.8	2.9
Natural gas index	2000=100	150.4	144.7	151.6	-4.5	-3.8	4.8
Natural gas, US	\$/mmbtu	3.9	3.4	3.7	-9.3	-12.1	8.6
Non Energy		286.9	296.2	306.2	3.9	3.3	3.4
Agriculture		237.9	251.5	264.9	4.1	5.7	5.3
Beverages		255.9	257.3	264.6	-1.7	0.5	2.9
Food		234.2	248.6	260.7	5.4	6.2	4.9
Soybean meal	\$/mt	396.0	409.0	430.3	3.5	3.3	5.2
Soybean oil	\$/mt	1042.0	1157.0	1250.0	4.0	11.0	8.0
Soybeans	\$/mt	470.0	493.0	525.8	2.9	4.9	6.7
Grains		234.3	249.5	255.9	11.1	6.5	2.6
Maize	\$/mt	205.9	235.8	238.2	17.3	14.5	1.0
Sorghum	\$/mt	184.9	201.0	203.2	28.9	8.7	1.1
Wheat, Canada	\$/mt	365.0	365.6	376.2	12.0	0.2	2.9
Wheat, US, HRW	\$/mt	271.7	270.2	274.1	10.3	-0.5	1.4
Wheat, US, SRW	\$/mt	276.3	267.5	278.5	5.6	-3.2	4.1
Sugar EU	¢/kg	43.9	45.4	44.5	1.6	3.4	-1.9
Sugar US	¢/kg	84.2	84.3	85.6	9.0	0.2	1.6
Sugar, world	¢/kg	49.6	54.3	58.1	21.9	9.3	7.1
Raw Materials		237.6	255.6	275.0	4.4	7.6	7.6
Fertilizers		299.8	315.3	332.7	8.5	5.2	5.5
Base Metals		304.3	328.5	331.0	5.3	7.9	0.8
Aluminum	\$/mt	2162.3	2346.6	2333.1	2.1	8.5	-0.6
Copper	\$/mt	7709.3	8292.4	8469.9	5.8	7.6	2.1
Iron ore	¢/dmtu	212.0	182.0	182.0	0.0	-14.2	0.0
Lead	¢/kg	218.4	238.0	237.7	5.3	8.9	-0.1
Nickel	\$/mt	22643.4	23807.4	22909.3	5.7	5.1	-3.8
Steel products index	2000=100	235.0	234.8	233.5	2.0	-0.1	-0.5
Tin	¢/kg	2270.1	2634.3	2551.9	9.4	16.0	-3.1
Zinc	¢/kg	215.1	237.2	229.2	5.2	10.3	-3.4
Precious Metals							
Gold	\$/toz	1271.0	1342.0	1369.9	4.5	5.6	2.1
Silver	¢/toz	2061.1	2346.9	2657.2	11.5	13.9	13.2

\$ = US dollar

¢ = US cent

bbl = barrel

cum = cubic meter

dmtu = dry metric ton unit

kg = kilogram

mmbtu = million British thermal units

mt = metric ton

toz = troy oz

n.a. = not available

n.q. = no quotation

SGP = Singapore

Source: World Bank, Commodity price data

The **WB energy commodity index** (crude oil, natural gas and coal) rose by 3.6% m-o-m compared to 6.3% in October, driven by lower growth in WTI and Brent prices, which offset the rebound in Henry Hub (HH) natural gas and coal prices.

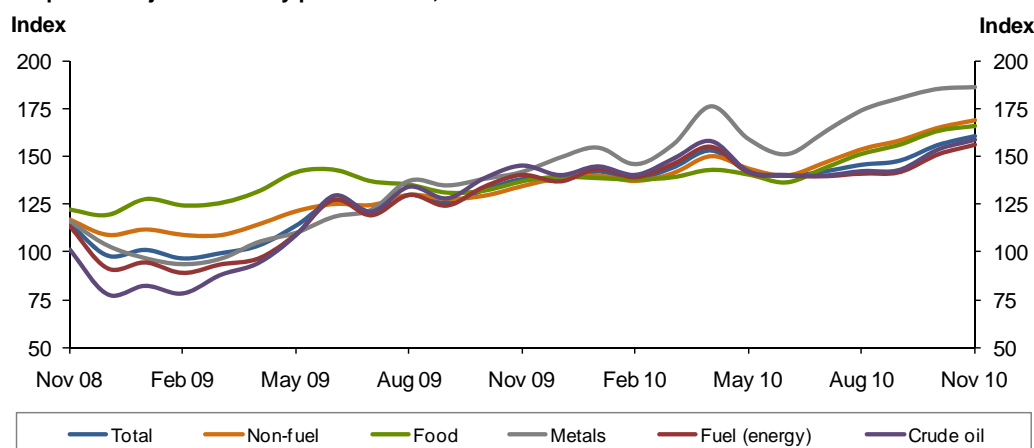
**HH natural gas** recovered on cold weather, rising 8.6% m-o-m in November compared to a hefty decline of 12% m-o-m in October. Nevertheless, this is only a temporary release and the outlook for the market remained bearish due to weak fundamental factors already mentioned such as high production, weak demand, and larger-than-expected injections into already considerable stocks.

The **WB non-energy commodity price index** kept rising at the pace of around 3% in November compared to the previous month, sustained by beverages and fertilizers and raw material, as the grain complex as well as industrial metals were highly disrupted by uncertainties surrounded global macroeconomics, Chinese high inflation, a 7% US-dollar appreciation and lower imports from China in October.

The **WB industrial metal price index** slightly grew 0.8% m-o-m in November compared to 7.9% m-o-m in October with all the metal prices declining, but copper. As already noted, macro concerns prevailed over fundamentals. On the other hand, most observers are predicting a recovery in industrial metal prices for 2011 considering that the drop in Chinese imports are the result of destocking due to high prices and that the new restocking phase will bring booming imports.

*Industrial metal prices greatly disrupted by lower Chinese imports and concerns on policy shifts as well as the Euro-zone debt crisis*

**Graph 2.1: 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

Source: IMF

**Copper** increased only 2% m-o-m in November, compared to 7.6% m-o-m in October. Copper prices achieved a 16-month high at US\$8,864/ton in the first ten days of November, before declining on sell-offs. The refined copper imports from China sank by 30% m-o-m in October, but on the positive side, production of copper semi-manufacturers remained growing healthily at 8% y-o-y. This, together with high production costs and shortages of electricity has led to a destocking phase in copper. Nevertheless, the outlook for copper remains bullish for 2011 with a phase of restocking leading to even greater imports from China.

**Aluminum** declined by 0.6% m-o-m in November compared to 8.5% in October, driven by sell-offs mainly on macroeconomic fears. As for other metals and commodities, the Ireland debt crisis, the changes in Chinese policy to fight domestic inflation, the weaker euro and a sell-off following the price peaking at \$2,443/ton all combined to exert downward pressure on the market.

The **nickel** market was the worst performer within the complex, with metal prices decreasing by 3.8% m-o-m in November compared to a 5% gain in October. However, prices have been on a roller coaster trend, being very volatile on low demand for stainless steel, technical trading, dollar appreciation and concern over the Chinese economy. The outlook for nickel is mixed due to the observation that the market will not likely be heading for a structural oversupply due to technical restrictions and because of the potential demand growth as nickel is one of the base metals with the best demand perspectives of the emerging markets.

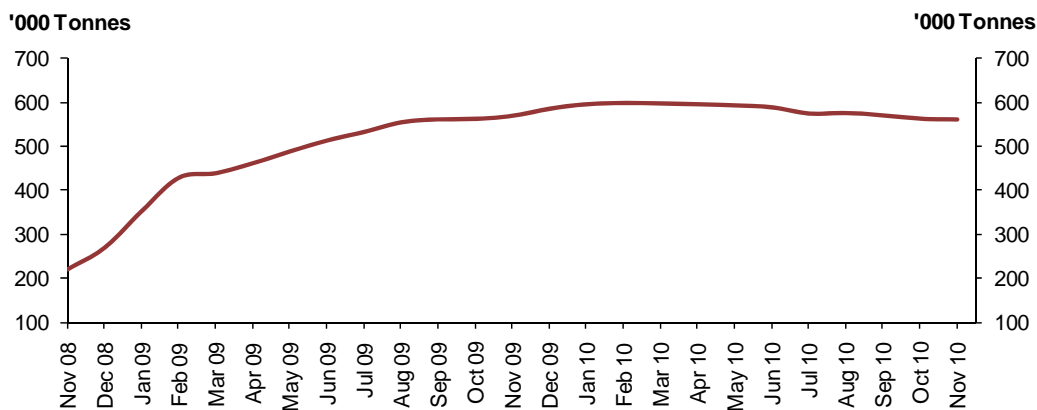
**Zinc** prices suffered a 3% m-o-m loss in November compared to 10% in October, mainly ascribed to concerns on Euro-zone debt issues, the tightening monetary policy in China and the strengthening of the dollar. Furthermore, there was an increase in margins on zinc at the Shanghai Futures Exchange (SHFE) from 7.5% to 12% adding to the downward trend in the metal prices. Combined zinc inventories on London Metals Exchange (LME) and SHFE increased by 3% m-o-m in November.

**Agricultural prices** grew by 5.3% m-o-m in November, slightly lower than the 5.7% in October. Nevertheless, grains increased by only 2.6% m-o-m compared to 6.5% the previous month. The grain markets felt the negative impact of lower imports from China and concern related to the announcement by the Chinese State Council about the adoption of tightening measures to curb inflation, including price controls.

**Corn** gained only 1% m-o-m in November, following a 14.5% increase in October. The market moved on a rollercoaster trend among positive and negative news, but the bearish mood prevailed in response to low demand for exports from the US that led to the perception that the USDA would cut its forecast, profit taking and the perception that China will cut imports due to a good crop, as well as the dollar appreciation.

The **soybean** complex behaved well due to increasing imports from China and concerns over dry weather in Latin America.

**Graph 2.2: Inventories at the London Metal Exchange (LME)**



Source: LME

**Gold prices** went up by only 2% m-o-m in November, compared to 5.6% in October, due to dollar appreciation and closing of the hedge book fostered by record prices in the later months.



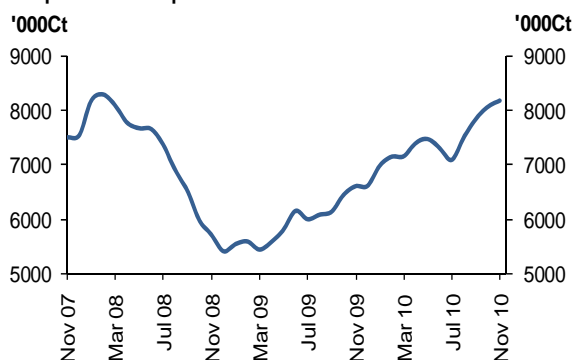
*Open interest volume for US commodity markets kept increasing at a more moderate pace in November*

### Investment flow into commodities

Open interest volume (OIV) for major US commodity markets gained 1.8% m-o-m to 8,365,286 contracts in November compared to 2.9% in October. Livestock, copper, natural gas and WTI showed a decline in OIV.

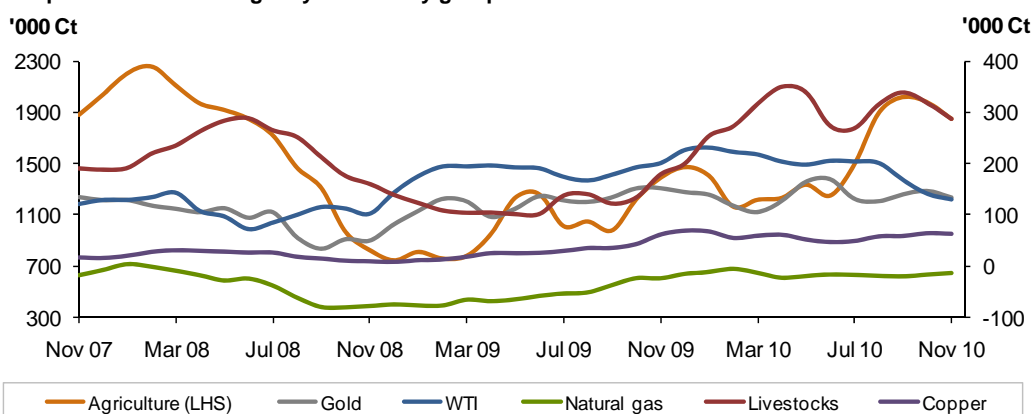
The macroeconomic and financial market problems affected risk appetite that resulted in a sell-off across the sector. The CFTC reported a further drop of 6.3% m-o-m to 2,502,784 contracts in non-commercial net length for November. This compared unfavourably to a 2.8% fall in October. A further drop of 2.7% m-o-m in longs and a 2.9% gain in shorts resulted in the net-length as percentage of OIV declining from 60.6% in October to 58.3% in November. Net length of money manager positions dipped by 3.2% m-o-m in November following a declining trend since September across all the markets. However, net positions of money managers remain at 13.5% of total open interest compared to around 5% in June 2010.

Graph 2.3: Total open interest volume



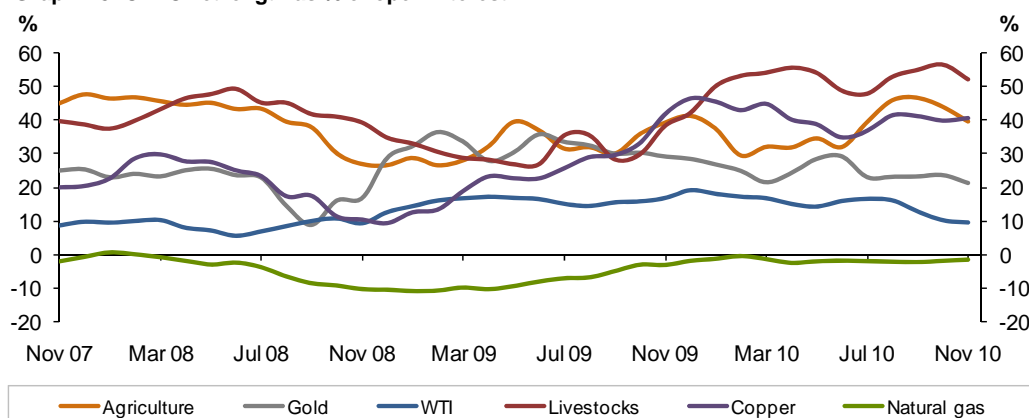
Source: CFTC

Graph 2.4: CFTC net length by commodity group



Source: CFTC

**Agricultural OIV** kept expanding by around 4% m-o-m to 4,664,372 contracts in November. Non-commercial short positions increased by almost 10%, while longs fell by 2.8%, so non-commercial net length as a percentage of OIV declined further from 43.9% to 39.6% in November. The bearish mood in the futures markets c agricultural products in the US followed the lower prices notably in the grain complex. The net length in money positions declined by 5.1% m-o-m to 809,691 contracts in November, the same decline as in October.

**Graph 2.5: CFTC net length as % of open interest**

Source: CFTC

OIV growth for **precious metals** kept decelerating in November, rising by 2.7% m-o-m to 792,098 contracts compared to 3.5% in October. Both non-commercial longs and shorts declined by nearly 3% m-o-m in November with the net length as a percentage of open interest volume moving down from 24% in October to 22.9% in November. Net length in money positions plummeted by 12% m-o-m to 222,752 contracts in November.

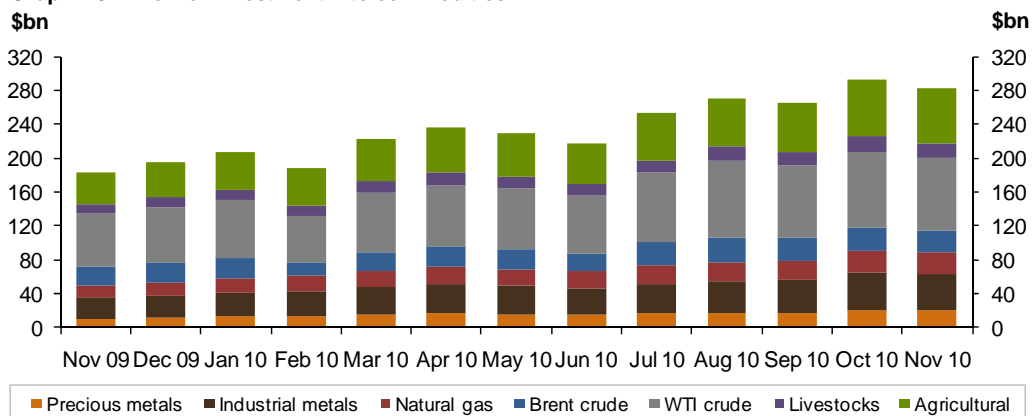
**Nymex natural gas** open interest volume kept declining by 1.9% m-o-m to 785,592 contracts in November compared to 1.2% in October. A fall of 3.6% and 4.6% m-o-m in both non-commercial longs and shorts, respectively, left the net length as percentage of OIV at minus 1.4% in November compared to minus 1.9% a month earlier.

**Copper** OIV dropped by 2.6% m-o-m to 156,410 contracts in November. An important decline compared to a 12.9% increase in the previous month. Non-commercial net length dropped by nearly 1% m-o-m to 63,516 contracts compared to 9.3% in October. With regard to the so-called money positions, the net length reported an almost 5% m-o-m fall compared to a 28.1% gain one month earlier.

**Table 2.2: CFTC data on non-commercial positions, '000 contracts**

	Open interest	Net length							
		Swap positions		Money positions		Other positions		Non- commercials	
	Nov 10	Nov	% OIV	Nov	% OIV	Nov	% OIV	Nov	% OIV
Crude Oil	1399	-16	-1	163	12	-16	-1	131	9
Natural Gas	780	153	20	-102	-13	-64	-8	-12	-2
Agriculture	4664	818	18	810	17	217	5	1,845	40
Precious Metals	792	-93	-12	223	28	52	7	182	23
Copper	155	38	24	30	19	-5	-3	63	41
Livestock	554	181	33	119	21	-12	-2	288	52
<b>Total</b>	<b>8,344</b>	<b>1,081</b>	<b>13</b>	<b>1,243</b>	<b>15</b>	<b>172</b>	<b>2</b>	<b>2,496</b>	<b>30</b>
	Open interest	Net length							
		Swap positions		Money positions		Other positions		Non- commercials	
	Oct 10	Oct	% OIV	Oct	% OIV	Oct	% OIV	Oct	% OIV
Crude Oil	1417	24	2	164	12	-46	-3	142	10
Natural Gas	801	156	19	-136	-17	-35	-4	-15	-2
Agriculture	4500	926	21	853	19	194	4	1973	44
Precious Metals	771	-109	-14	253	33	42	5	187	24
Copper	161	39	24	32	20	-7	-4	64	40
Livestock	567	183	32	152	27	-15	-3	319	56
<b>Total</b>	<b>8,217</b>	<b>1,220</b>	<b>15</b>	<b>1,318</b>	<b>16</b>	<b>133</b>	<b>2</b>	<b>2,671</b>	<b>33</b>



**Graph 2.6: Inflow of investment into commodities**

Source: CFTC

# World Economy

## Economic growth rates 2010-2011,%

	World	OECD	USA	Japan	Euro-zone	China	India
2010	4.3	2.6	2.8	3.5	1.5	9.7	8.5
2011	3.8	2.0	2.4	1.4	1.1	8.8	8.0

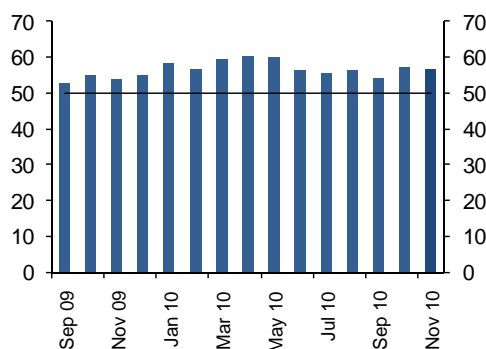
## Industrialised countries

### USA

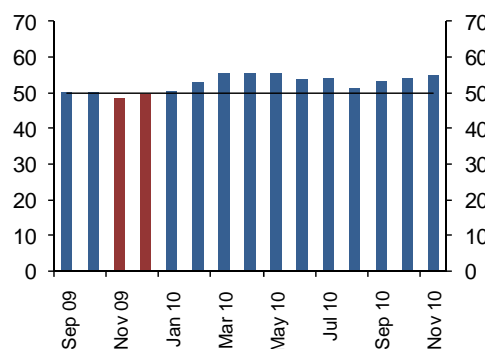
*The US economy grew by 2.5% in 3Q10, but remains dependent on government-led stimulus.*

The economic situation of the United States is continuing to improve, but it remains to be seen if it is on its way towards self-sustaining growth. Third quarter GDP growth was revised up in the second estimate from 2.0% to 2.5%, reflecting better-than-expected momentum. This level of growth compares to 1.7% in 2Q10 and to 3.7% in 1Q10. An encouraging signal is that personal consumption expenditures are again contributing a big share of this growth. They provide 2.0 percentage points to the 2.5% growth level, contributing 80% of relative weight. Still, although the recession officially ended in 2009, the economy is experiencing a difficult recovery, considering the still very high unemployment levels. When the recession ended in mid-2009, the unemployment rate stood at around 9.5%, even lower than today, despite an annualized average quarterly growth level of 2.9%. Since then, the most recent labour market report shows that the unemployment rate again moved up to 9.8%.

Graph 3.1: ISM manufacturing index



Graph 3.2: ISM non-manufacturing index



Source: Institute for Supply Management

*Unemployment now stands at 9.8%, the same level as when the recession ended*

The economy seems to be still very much dependent on government-led stimulus and it is hard to say if the contribution of consumption to GDP is dependent on this stimulus, but it seems at least very likely that without the fiscal and the monetary stimulus, this rebound in consumption would most probably not have taken place. In a most recent interview, the Chairman of the Federal Reserve Board summarized the situation of the US economy very much to the point. The first important message he was delivering was that the economy is only slightly above self-sustainability at the current relatively low growth levels. At around 2.5% growth, unemployment remains unchanged due to new employees, which are entering the job market and the efficiency gains of companies. This means that the US economy would need a significantly higher growth level in order to be able to reduce the level of unemployment, a essential part of getting the economy back on a self-sustaining path. This high unemployment is also considered by the Chairman as the main source of risk for a second dip in the US economy. This scenario could lead to consumers being very uncertain about their future and are unwilling to spend their money. Furthermore, the ratio of long-term unemployed to the total unemployed population has increased and now stands at 40%. This means that more people are potentially losing their skills and their ability to be re-integrated into the job market is becoming increasingly difficult. Furthermore, the number of employees, who could only find part time – instead of full time – work remains almost unchanged at a record high of 2.6 million.

*The combination of the most recently proposed tax cuts and the continued expansion of monetary supply by the Fed could have a significant impact on the forecast of 2011.*

An important challenge for the Fed and the US administration continues to be to avoid the potential downward-spiral of deflation. This was one of the major reasons that the central bank announced a new round of quantitative easing at the size of \$600 bn in November, dubbed QE2. In addition to this continued expansion of monetary supply, the US administration has, in agreement with congressional leaders, only recently announced a new round of fiscal stimulus measures. The deal involves a two-year extension of all expiring tax cuts, including those for upper-income taxpayers; a two-year extension of other expiring tax provisions; a new 12-month, 2% payroll tax cut for employees; and a 13-month extension of emergency unemployment benefits. This package would work out as an additional stimulus of around \$500 bn in 2011 and in 2012, according to calculations done by Morgan Stanley and based on numbers from the Congressional Budget Office (CBO).

This will make the United States the only big industrialized country so far that has not begun to tighten its fiscal policy in 2011 and the budget deficit therefore should be expected to remain at a high level of around 9% next year. Still, the package has to pass Congress and warnings are out that the long-term budgetary balance of the US economy might be endangered. Moody's, the rating agency, just recently voiced its concern about the long-term US credit outlook and the triple-A rating. The current proposal would add another trillion dollars to the current debt level of the US over only the next two years. Consequently 10-year treasury bond yields were rising 21 basis-points to again reach a level above 3% at 3.13% after the announcement. This compares to October average levels of 2.54%.

It remains to be seen what the long-term outcome of this additional stimulus will be, but it seems likely that it could have a positive impact on the short-term and could lift the growth forecast for 2011. The confidence of the market that the US is able to pay back its debt is certainly one trigger that already in the short-term could have an impact on the development of the economy. This is basically what has been voiced as well by Fitch, another rating agency, that the administration has to come up with a credible plan on how to reduce the debt and the deficit in the medium term in order to show a commitment to its triple-A rating. Thus, fiscal worries – despite currently being focused on the Euro-zone – might now get more attention in the United States as well.

Inflation, which has so far been low and almost in deflationary territory, seems to be no risk for now. The risk of high inflation is currently low, according to the Chairman of the Fed as he is convinced that the Fed is able to act timely via market instruments to avoid an oversupply of money and indeed M3 – while slightly improving on a monthly base – remains in decline on a yearly comparison. Thus, the current expansion of monetary supply of the Fed via low interest rates and quantitative easing seems reasonable, but it will be very critical to unwind these measures at the appropriate time. Total consumer price inflation has been negative on a monthly base from April to June this year and only since July managed slight increases. In October it moved up 0.23% m-o-m, translating into a 1.2% increase on a yearly base. Taking out food and energy of the basket, the so called core CPI, inflation in October was almost stable at minus 0.01% and up only 0.6% y-o-y. The chairman of the Fed did not rule out further measures of quantitative easing in the case that the labour market is not improving and inflation remains at low levels.

Further on, the housing-market in the US is still at relatively depressed levels. Although it seems that there is currently no danger of the housing market significantly pushing down the economy as it is already at low levels, it might turn out as a stronger leverage to the upside if the combination of further monetary supply and fiscal stimulus is working. This is of importance as the housing market constitutes a relative high portion of wealth for the average US household and, secondly, it was the source of the current crisis and its improvement in terms of wealth creation and in terms of repairing the balance sheets of banks, where still many of the mortgage market bonds are being held, would be essential. Existing home sales in July have plunged to a record low of 3.84 million units, which represents a 27% m-o-m decline and while it has recovered a little from those lows in August and September, it fell again by 2.2% in October. Housing prices – the main aspect of value recreation – are declining again according to the National Association of Realtors. On a yearly basis, prices fell by 2.5% in September and by 0.9% in October.

A positive momentum could have been observed even before the announcement of the new fiscal stimulus in both the manufacturing and the services sector. The ISM for manufacturing remained at almost the same elevated level in November, when it stood only 0.3 points lower at 56.6 and remains comfortably above the 50 level. The ISM for the services sector improved again from 54.3 to 55.0. This again constitutes a substantial development for the economy as the sector is responsible for around 80% of US GDP.

The forecast for the US economy in 2010 was increased to 2.8% from 2.7% previously and remains at 2.4% for 2011. This is not considering the most recently announced stimulus measures, which – if finalized – could have a significant impact on growth expectations.

*The deceleration of exports in Japan continues, while the gap is narrowing*

### **Japan**

The latest release of economic data in Japan confirms the trend of deceleration. While the expansion of exports on a yearly base continued to decelerate for the sixth consecutive month in October, retail sales turned negative for the first month. Still the 3Q10 GDP numbers were better than expected at an annualized quarterly growth level of 3.9% or non-annualized 0.9% q-o-q. This number was primarily supported by stimuli targeting at consumption which ended at the beginning of September. Domestic demand accounted for almost all of this 3Q GDP growth, while external demand was negligible. This level of growth demonstrated a successful implementation of what can be currently viewed as the latest attempt to support domestic demand despite a deflationary trend, which usually has a negative impact on consumption. The major effect of the stimulus came from the subsidized support for buying eco-friendly cars. It remains to be seen, whether the Japanese government is willing to continue this kind of support. The other effect on the strong support from domestic demand was the above average temperature in summer 2010 and that the consumer probably anticipated a tax-hike in tobacco products, which was introduced on 1 October. Those effects pushed domestic demand up by 1.1% q-o-q. This led to higher capital expenditure of 0.8% q-o-q.

*Retail sales turned negative for the first time this year, signaling weakening domestic demand for 4Q10*

While the positive domestic demand effects should expect to turn negative in the fourth quarter, as most of the seasonal rise came in anticipation of a withdrawal of stimulus or tax-increases combined with an unusually hot summer, the underlying income development demonstrated some support, mainly due to the deflationary environment, and should therefore be expected to continue to lift domestic consumption again in the first quarter of next year. Total employment income rose by 0.7% q-o-q in real terms in the third quarter, after having increased in the second quarter by 0.5% and 2.1% in the first quarter. Still it should be recalled that this positive momentum is mainly due to the deflationary scenario as the development of the nominal income was negative. This increase in income could be a supportive factor for the first quarter of 2011 to turn GDP growth to a positive level again. Exports – while decelerating on a yearly base – should also be expected to halt their deceleration in an environment that is so far characterized by ongoing strong demand from Asia, the most important export market for Japan.

Exports have continued their slide in October. Since growth has peaked in January this year at 9.0% m-o-m on a seasonally adjusted base, they turned negative for the rest of the year, with the exception of April. October was experiencing a decline of only 0.02%, improving the trend of the most recent drop, but is still negative. The increase of the yen certainly played an important role in this development. Therefore Japan's lower house of parliament decided on a stimulus worth 5.1 trillion yen (ca. \$60 bn) to protect Japanese companies from the strong yen. In addition to this funding it should not be overlooked that the decline has been narrowing since August, when exports fell by 2.6% m-o-m and in September, when exports declined by only 0.2% m-o-m. The current strong momentum in Japan's most important exports markets, i.e. China and the US, combined with an again weakening yen should have some positive effect in the months to come. On a seasonally adjusted base, exports to Asia and, within the region, to China, saw a significant turn-around of 8.1% m-o-m, a trend that, with the current underlying momentum in China, is expected to continue. This, together with an expected continuation of imports in the US in 2011 – after inventory adjustments in the 4Q10, which might lead to lower imports – should turn exports around to positive growth at the beginning of 2011.

Inflation is showing only tentative signs of improvement. Inflation turned positive in October at the level of 0.2% y-o-y. On a monthly level, this development materialized already in September, when inflation grew by 0.3%. Growth has been extended now into October, when inflation rose by 0.5%. Although this can be considered at least a starting point, the increase in October was mainly due to the hike in the tobacco tax and, to some extent, a price-rise in fresh foods. So it remains to be seen whether inflation is able to turn positive without these extraordinary effects.

Importantly, PMI numbers are still and again signaling a contraction of the economy that obviously so far only escaped a decline in the most recent quarters due to the stimulus measures. The composite PMI has been below 50 since May this year and was recorded at a level of 48.7 in November, up by 1.5 from October. The PMI for manufacturing remained almost stable at 47.3, compared to the October number of 47.2.

Due to the bigger-than-expected impact of the stimulus in 2010, the forecast was increased to 3.5% from 2.9%. Taking the described momentum into consideration, growth in 2011 should be lower than in the current year and the growth forecast for 2011 was increased from 1.3% to 1.4%.

### **Euro-zone**

The Euro-zone is currently facing three different stages of development. Firstly, the Euro-zone is continuing its recovery. 3Q10 GDP was confirmed to have expanded by 0.4% q-o-q, the same level as in the 1Q10 and after high growth of 1.0% in 2Q10. Secondly, while the solid momentum can be observed for the Euro-zone as a total, there is a strong division between the weaker – mostly peripheral – Euro-zone economies and the stronger, bigger ones. Thirdly, the sovereign debt situation of – again mostly in the smaller peripheral economies – the Euro-zone that so far have had a surprisingly small effect on the underlying economy. Those three – sometimes separately viewed – issues need a more detailed analysis and an examination of their interdependencies.

Firstly, the expansion of the Euro-zone has been impressive and, to a certain extent, unexpected, when considering that only in about April and May the monetary system of the Euro-zone was very much embattled by the sovereign-debt challenges of Greece. Despite this and probably because of the initiation of the European Stability Financial System (ESFS), the impact so far has been limited. Still, by reviewing the GDP numbers in greater detail, the gap of the economies that contribute to the Euro-zone's growth and those who are continuing their struggle for growth, seems to have widened. As for all of 2010, Germany has contributed above average growth in the 3Q10 at 0.7% q-o-q, France at least had been at par, while many other economies, mainly Spain, Italy and Greece have again posted below-average numbers. This is mainly worrying in the case of Spain and Italy, as both countries not only seem to have a stretched sovereign debt situation and relatively high unemployment, but also have relative big shares in the Euro-zone economy of almost 17% in the case of Italy and of almost 13% in the case of Spain. Problems in those big countries could have a serious impact on the region's economy.

This diversion in the growth momentum is also reflected in the most recent PMI numbers, published by Markit. The total Euro-zone composite PMI increased to 55.4 in November from 53.4 in October. While the 2-point rise in the services sector to 55.2 accounted for most of the increase of the composite index, the manufacturing index also experienced strong momentum to 55.5 from 54.1 in October. For this closely watched index, the major contribution came from Germany and France. Germany's composite PMI in November moved from 56.0 to 58.8, with manufacturing increasing even slightly more than the services sector. France's composite PMI moved from 55.3 to 56.8, and, as in Germany, experienced the majority of the support from the manufacturing sector.

Furthermore this two-speed recovery can also be observed in the most recent unemployment numbers. The total Euro-zone unemployment level increased from 10.0% in September to 10.1% in October. The most encouraging improvement of the labour market can be found in Germany, where again the unemployment rate in October was kept at 6.7%, the same level as in September and the lowest level since October 1992. In contrast, Spain is continuing its labour market deterioration. The unemployment rate

*The Euro-zone economy has continued to expand in the 3Q at 0.4% q-o-q*

*Sovereign debt issues, high unemployment and declining industrial orders in September are expected to curb this momentum*



stood at 20.7%, the same as in September and a record high. An even more worrying sign is the high youth unemployment, which for Spain increased again to 43.2% in October, up by 0.5% from September and a new record high. For the Euro-zone itself the average youth unemployment stood at 20.1% and again Germany experienced the best performance, having the lowest rate of 8.5%.

Another strong support for the economy in October came from the retail area. Retail trade grew by 0.5% m-o-m in October, which is a stark rebound from two months of decline of 0.1%. The strongest performance in this area was recorded in Germany at 2.3% m-o-m growth, showing a rebound from the 1.8% decline in September. Over the last six months, Germany's retail trade grew by 0.4%, twice the magnitude of the Euro-zone average of 0.2%. This development is most probably based on the much better shape of the labor market. Furthermore Euro-zone CPI is moving back to healthy levels. The consumer price index (CPI) in Europe increased by 1.9% y-o-y in October and reached almost the level that is being considered comfortable by the European Central Bank (ECB). The CPI showed a healthy rise from minus 0.1% y-o-y in October 2009, at a time when deflation could not have been ruled out, to the current level. A big portion of this price increase is still being triggered by energy and food. The CPI without those two items is at only 1.1%, which offers the ECB some room for further monetary expansion, although it is becoming more of a challenge in this inflationary environment. The ECB is currently significantly engaged in open market operations to buy peripheral bonds and seems to operate successfully in expanding M3, whose annual change was positive for the first time October 2009 at an expansion of 0.7%.

The sovereign debt situation with the bail-out of Ireland and further support for Portugal seems to be contained, but this concern has demonstrated to re-emerge as long as there is no underlying long-term solution, i.e. as long as the weaker Euro-zone countries do not demonstrate their ability to reduce their debt levels and budget-deficits, indeed a challenging task at a time when governments need to support the growth of their economies. 10-year yields of the most challenged countries have come down from their peak levels end of November, but remain high and only slightly lower. Italy's bond-yield is even on the rise again since the beginning of December and is now trading at 4.56% only slightly lower than 4.67% recorded at the end of November. Italy is facing the most challenging refinancing of all Euro-zone countries in 2011, which already seems to worry investors. It has to refinance €300 bn, a third of which in the first quarter.

Finally, new industrial orders in September have turned negative at minus 3.8% m-o-m, which is a steep drop from the 5.1% expansion in August and which is expected to have an effect on manufacturing growth in the coming months. Most worrying, durable consumer goods even declined by 6.3%, after having gained 4.6% in August. Another disturbing element is that orders in Germany declined by 3.5% m-o-m, which should have some impact on growth in the 4Q and beyond, so it remains to be seen how this leading indicator develops over the next months, but it seems that a slow-down in the 4Q and in 2011 is likely.

Taking all the above into consideration, the forecast for 2010 was slightly increased to 1.5% from 1.4%, taking into consideration the strong growth of the first three quarters. For 2011, the forecast remains unchanged at 1.1%, expecting a slow-down compared to 2010.

## Emerging Markets

### **Brazil**

Brazil has experienced rapid economic growth since mid 2009. A combination of expansionary policies and strong commodity prices has resulted in a robust recovery, which is forecast at 7.2% for this year and 4.0% in 2011.

After slowing between April and August this year, Brazil's economic expansion resumed in September, growing by 0.7% m-o-m. Industry led the economic slowdown prior to September, partly due to the currency appreciation that fueled the impact to fill the gap between aggregate domestic demand and supply. Despite economic expansion in September, industry contracted by another 0.2%, the fifth monthly decline since April. Capital goods production fell by 2.6% and industrial capacity utilization was reduced

unexpectedly to 81.9% in September from 82.8% in August. Industrial production is expected to expand in the fourth quarter, reducing unemployment in the country. In fact unemployment rate drop to 6.2% in September, amongst the lowest on record. Meanwhile, sales rose by 0.4% and bank lending surged in September as interest charged on consumer debt fell to a record low.

### **China**

In China, real GDP growth is expected to have accelerated in 2010. Economic growth in China is estimated at 9.7% in 2010 and 8.8% in 2011. This strong economic performance has been driven by rising activities in all parts of the economy. The slower rate of GDP growth in 2011 is due to stimulus spending coming to an end along with policy tightening, leading to a downward trend in property investment growth. Export to some major OECD markets is also expected to weaken in 2011. Private consumption, nevertheless, is set to increase thanks to strong income growth and low real interest rates accompanied by relatively loose credit conditions that encourage high-value consumer purchases. Since investment in new capacity has been expanding rapidly while external demand has remained relatively weak, domestic markets are supposed to absorb the growing supply. This caused price competition among retailers of manufactured products which has had a damping impact on inflation.

After the higher-than-expected inflation of 4.4% in September, financial markets have been concerned that China will be forced to tighten monetary policy severely, including hiking policy interest rates significantly. But effectiveness of this policy is not clear. Instead Chinese authorities might adopt fiscal subsidies for lower income households and release some government food stock reserves to help limit price increases for basic consumer goods, in addition to imposing some price control. The average forecast is 3.2% for 2010 and 3.8% for 2011. Withdrawal of policy stimulus is expected to restrain any further rise in inflation over the coming quarters. An annual inflation rate of 2-2.25% is forecast over the period 2010-12. The Economist Intelligence Unit (EIU) country report forecasts inflation rate to remain below 3.9% through 2010-2013.

As far as China's monetary policy is concerned, policy makers have been focusing on controlling capital inflows, open market operation, sterilization and tightened credit supply, especially to the real estate sector. Further interest rate increases and appreciation of the yuan can be expected as a policy response to inflationary pressures and rebounding domestic demand. These policy moves could be commencing in coming months as headline CPI remains elevated and the economy risks overheating early next year.

China's fixed investment growth has moderated since early this year, with total nominal investment rising 23.6% y-o-y in October compared to 30.5% in 2009. In real terms, moderation of fixed investment has been more notable: adjusted for PPI, real fixed investment rose 18.6% y-o-y in October compared to the average 36.5% last year. Overall fix investment growth should remain resilient in 2011 and is expected to rise 20-25% y-o-y. Public sector housing investment is gathering momentum. The moderation in public investment earlier this year has stabilized recently.

### **India**

Domestic demand in Asia continues to be an important source of strength in the global economy. In South East Asian countries and India, domestic demand contributed more than 3 percentage points to GDP growth on a semi-annual basis. Only in India did net trade make a larger contribution than domestic demand. Economic growth in the current fiscal year has exceeded expectations. The economy grew by 8.8% year on year in April-June this year, and the Central Bank (RBI) has announced that the expansion of the economy was close to its potential.

On a sectoral basis, acceleration of the Indian economic growth in 2010/11 reflects a pick-up in the manufacturing and service sectors since the start of the fiscal year. Most indicators for the services sector suggest that economic activities held up well in June-September. However, there has been deceleration in industrial output over this time period. In September, growth in industrial production (IP) was reduced to 4.4% y-o-y, compared with an average expansion rate of 11.9% in April-June. September IP data

showed a deceleration to 4.4% year on year from 6.9% in August, providing another reminder that economic recovery might be diminishing and that a private investment cycle has still not turned up. However, it is worth noting that India's industrial production data is highly volatile and the current trend appears to be contradicted by survey data showing a strong pick-up in new orders in October and increased employment in the manufacturing sector.

There is no doubt, though, that the pace of economic expansion has slowed since the start of 2010. The OECD's leading indicators index for India stood at 100.2 in September, slightly lower than 100.4 in August and significantly lower than its peak of 101.1 in February 2010. It was hoped that capital formation would bounce back and lift IP growth. Looking at the IP index without capital goods (which account for 9%) it is clear that growth of the rest of production has been on a steady downward trajectory from April, averaging 7% on a three month basis. However, while capital goods did increase on a sequential basis, there was a 4.2% decline over a year ago. Capital goods surged in the early part of this year, largely on the back of significant investment in infrastructure. With fiscal stimulus being withdrawn and public spending likely on the wane, capital information growth depends on private sector investment, but there were signs of failing private sector investment gaining momentum in September.

### **Russia**

Russia's position as the second largest oil exporter made it vulnerable to the sharp drop in oil prices in 2009, with the lower prices contributing to the 7.9% contraction of the country's economy last year. Subsequent rises in the price of oil have helped reverse the trend and the economy is forecast to grow by 2.8% in 2010. The rebound in growth has thus far been driven entirely by external demand. Export volumes have regained their pre-crisis levels, and Russia has even managed to gain a global trade share over the past two years. It is expected that the Russian economy will grow by about 4-5% per annum over the next few years, aided by its strong export in oil, steel and gas.

GDP growth slowed sharply in the third quarter of 2010 to 2.7% y-o-y, from 5.2% in the second quarter. Weak export growth in the third quarter led to a slowdown in economic growth but economic expansion was also exacerbated by the drought that hit agriculture sector. The outlook for the fourth quarter is in favor of acceleration in GDP growth, although the expected improvement in investment and household consumption will not fully offset the contraction in export. As a result, economic growth in Russia is forecast at 3.8% in 2011

Although much of Russia's economic contraction in 3Q of 2010 was apparently due to a decline in agricultural output, the slowdown in growth was also visible in most other sectors. On the one hand, this was driven by a slowdown in global demand as China's destocking cycle was amongst the factors damping Russia's commodity exports. On the other hand, this was also a consequence of Russian consumers losing confidence following the summer heat wave and the spike in food prices, which eroded real disposable income.

Preliminary data suggests that real GDP of Russia grew 2.7% y-o-y in the third quarter of 2010 comparable to 3.1% in the first and 5.2% in the second quarter. Industrial output accelerated to 6.0% in October compared to 6.2% in September. This is underpinned by domestic demand. Retail sales volumes also were up by 4.3% y-o-y in October, with January-October sales up by 4.4%. Again robust domestic spending is reflected in rising domestic sales of cars that in October was 62% higher than in the same month a year ago. The recovery in car sales has been boosted by the government car scrappage scheme introduced earlier in 2010.



## OPEC Member Countries

The economic performance of all OPEC member countries has been better in 2010 compared to 2009. Although higher rates of GDP growth in MCs has been to some extent due to recovery of oil prices in 2010 compared to the previous year, a review of the economic performance of the MCs suggests that in many cases sound monetary and fiscal policies together with timely actions taken by the economic authorities have been effective in accelerating economic growth.

### **Qatar**

Having expanded as much as 9% in 2009, Qatar's GDP surged ahead in 2010 by a significant growth rate of 15% on the back of the recovery in oil and gas prices as well as rising global trade and investment. The country's production of LNG almost doubled in 2010 and two more LNG super-train are expected to come onstream by the end of the first quarter of 2011. Although in recent years concerns have been growing regarding the impact of a global slump in demand for LNG on the economy, as production of shale gas has been rising significantly in the USA and other countries, considering Qatar's current position in global gas market and its low cost of production, it is expected that the country will retain its position in global gas market in the future.

Preliminary estimates released by the Qatar Statistics Authority (QSA) reveal that nominal GDP grew by 20.4% in the second quarter of 2010, to \$27 bn, compared with the same period of 2009. The growth in the second quarter of 2010 was mainly driven by a turnaround in oil and gas prices. The sector contributed 49.8% to overall GDP, retaining its dominant position in the country's economy. Manufacturing (mainly petrochemical) rose by 15.9% y-o-y in the second quarter while finance, insurance and real estate contracted by 3.8% y-o-y.

### **Nigeria**

Nigeria's GDP is expected to grow with rates higher than 6% on average in 2010-2012. However, to achieve the country's goal of becoming one of the world 20 largest economies by 2020, the Nigerian GDP needs to grow by double digit rates in years to 2020. Despite obstacles in expansion of oil and gas industry, it is expected that oil and gas production will increase gradually particularly in deepwater fields.

The non-oil sector of the economy has been generating economic growth in Nigeria in recent years. It is expected that the service sector, particularly telecommunication and banking and finance sectors, will be a major contributor to economic growth. The agricultural sector has also performed well in recent years, with food production increasing steadily. Agriculture is expected to remain an important sector of the Nigerian economy not only because of its role in economic growth but also for its contribution to employment of the country's labour force.

*The US-dollar strengthened against the euro, the yen and the Swiss franc*

## Oil prices, US dollar and inflation

While the US dollar gained significantly in the first half of this year, it started to decline at the beginning of the second half against the modified Geneva I + US dollar basket. However, since October, it managed to gain 0.5% on a monthly average, but experience a big volatility versus the euro. Compared to the October level the US dollar rose by 1.2% in November vis-à-vis the euro, it increased by 0.5%, against the yen, versus the pound sterling it fell by 1.0% and against the Swiss-franc it rose by 1.4%. Versus the euro, the US dollar managed to rise to below the level of \$1.30/€ at the end of November at the height of the most recent sovereign debt crisis and reached \$1.2998/€, but since then has lost again and is now trading at around the \$1.32/€ level since beginning of December. The average rate for November was \$1.3732/€

To some extent this most recent development of the US dollar reflects the recently better-than-expected growth numbers in the US and with respect to the euro it as well mirrors very much the concern regarding the sovereign debt situation in the Euro-zone. While the US dollar managed some increase recently versus the yen, the main short-term issue on the currency market will be the relation of the US dollar to the euro. A further weakening of the euro from the current level against the US dollar should not be ruled out as the ECB might get engaged in further monetary expansion. This combined with continued sovereign debt worries in the Euro-zone might keep the euro under pressure.

*The OPEC Reference Basket price rose by 3.7% in November*

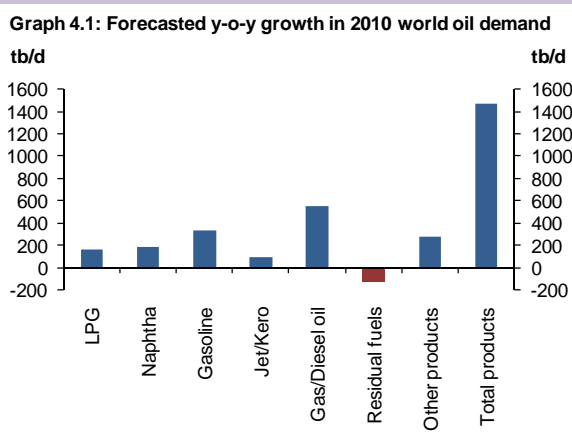
In nominal terms, the OPEC Reference Basket increased by 3.7% from \$79.86/b in October 2010 to \$82.83/b in November 2010. In real terms, after accounting for inflation and currency fluctuations, the Basket price increased by 4.4% to \$51.52/b from \$49.37/b (base June 2001=100). Over the same period, the US dollar rose by 0.5% against the import-weighted modified Geneva I + US dollar basket, while inflation declined by 0.1%\*

\* 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

## Review of world oil demand in 2010

Following the financial crisis during 2009, which was marked by continuous economic deterioration in most OECD and many non-OECD countries, the year 2010 has turned out to be much stronger in terms of oil consumption than initially anticipated. The main factors behind this positive development are massive governmental stimulus plans around the world especially in OECD countries, a faster-than-expected recovery in the world economy and the very low baseline in 2009. In the OECD, the US and North America were the main drivers of the oil consumption growth observed in 2010, followed by a smaller but still surprising increase in the Pacific. OECD Europe, however, is still showing a contraction in oil consumption. All regions in developing countries displayed oil consumption growth in 2010, the most notable being in Other Asia, the Middle East and Latin America, while the growth in the African continent was only marginal.



The unique structures in the Chinese economy, including numerous domestic economic stimuli, allowed China to be the biggest contributor to world oil consumption growth in 2010. Industrial, including petrochemical, and transport fuels showed the largest increases during the year as a result of improving economy and increased industrial activity. The petrochemical industry, especially in Asia marked substantial increases during the second half of 2010. In China, in addition to rather strong oil consumption in 2010, which is considered the strongest in the past five years, significant quantities of crude and products have been used to fill the Chinese SPR, especially during the first quarter of 2010.

While the first quarter of the year was disappointing for the OECD and rather slow for non-OECD in terms of oil consumption, these have been followed by a quite strong second and third quarters which marked the peak in oil consumption during the year, before closing with a weaker fourth quarter.

### **OECD North America**

Developments in the US economy are the most important for oil consumption worldwide. US oil demand has been the wild card for global oil consumption for the past few years. Following a rather weak first half of the year, US oil consumption showed signals of improvement during the third quarter, particularly in September. Product-wise, US consumption of distillate fuel was the initiator of this increase, while gasoline grew only moderately as a result of driving mileage. The reason behind strong oil demand in the US has been the stimulus plans that were adopted by the government which affected mostly the industrial and financial sectors. The other reason is the very low baseline in oil demand. Both reasons pushed the country's oil demand growth to exceed 0.3 mb/d.

Mexican oil consumption was flat during 2010 with minor increases in gasoline and gasoil/diesel which are being offset by declines in residual fuel oil consumption. As a result of a low baseline and numerous government stimulus packages, Canadian oil consumption displayed solid growth during this year, reaching 0.11 mb/d. In general, all incentives and stimulus plans taken by governments in the North American region to support the economy have started to have an impact on oil demand as of the second quarter of this year and are expected to affect demand next year as well.

### **OECD Europe**

The Big Four European countries (Germany, France, Italy and the UK) have exhibited a weak oil consumption pattern during the last seven years. Despite various stimulus plans targeted at lifting economic activities, the picture in oil consumption only improved slightly and reduced the contraction to only -1% for the year. In all of the OECD European countries, the sectors that were

hit the most were transport and industrial, resulting in lower consumption for distillates and gasoline. German strong economy managed to come out quickly of the financial crisis and is expected to grow by 3.3% in 2010. This has led to a positive growth in the country's oil demand usage which reached 30 tb/d in 2010. Germany is the only country among the Big Four that consumed more oil this year than last year.

### OECD Pacific

Japanese oil demand has been on a downward trend for the last 16 years resulting not only from a sliding economy, but also from an increase in energy efficiency, energy-related policies and an aging population. Despite all of these factors, the year 2010 has shown a small growth in oil consumption, which was driven mainly by the use of naphtha in petrochemical industries and the emergency fuel switch to crude burning by power plants. The remaining countries in this region displayed similar upward oil consumption trends, although at much lower volumes. South Korean oil demand bounced back during the second half of the year and is expected to be positive in 2010. For the total region, oil demand is expected to grow by 0.1 mb/d y-o-y in 2010.

### Developing Countries (DCs)

In Other Asia, Indian oil consumption in transportation – due to a boom in new car registration – as well as in the industrial sector displayed solid growth during 2010 but has been offset by a fuel substitution to natural gas in the petrochemical and power plant industries. Furthermore, bad weather negatively affected oil consumption in the agricultural sector. As a result, India's oil demand is expected to grow by less previously forecast to achieve moderate growth of 1.5% for the year. Taiwan, Singapore, and Malaysia displayed concrete growth as economic activities picked up during the year. Solid growth in most Middle East countries, especially Saudi Arabia and Kuwait was partly offset by contracting Iranian consumption as a result of lower gasoline consumption. In Latin America, Brazil, Venezuela and Ecuador were the dominant countries for growth in oil consumption. The region's oil demand grew by 3% in 2010, up from 1.3% in 2009. In Africa, Algeria, Libya and South Africa account for most of 1.9% growth in oil demand this year.

### Other Regions (OR)

Chinese oil demand growth was the highest during 2010 bouncing back remarkably from a smaller growth in 2009. Products that have been leading growth are automotive and industrial diesel oil followed by LPG and naphtha used by the petrochemical industry. While the FSU and specifically Russia showed some signs of recovery in 2010, Other Europe experienced no improvement in oil consumption and demand continued to decline. Large amounts of oil imports ended up in the country's commercial and strategic storage which was eliminated from the oil demand total.

**Table 4.1: World oil demand forecast for 2010, mb/d**

	<b>2009</b>	<b>1Q10</b>	<b>2Q10</b>	<b>3Q10</b>	<b>4Q10</b>	<b>2010</b>	<b>Change 2010/09</b>	
							<b>Volume</b>	<b>%</b>
North America	23.30	23.45	23.66	24.12	23.71	23.74	0.44	1.88
Western Europe	14.52	14.17	14.13	14.71	14.39	14.35	-0.17	-1.15
OECD Pacific	7.66	8.19	7.30	7.56	7.95	7.75	0.09	1.23
<b>Total OECD</b>	<b>45.47</b>	<b>45.81</b>	<b>45.10</b>	<b>46.39</b>	<b>46.05</b>	<b>45.84</b>	<b>0.37</b>	<b>0.81</b>
Other Asia	9.83	9.95	10.13	9.87	10.04	10.00	0.17	1.72
Latin America	5.88	5.78	6.04	6.22	6.17	6.06	0.18	3.02
Middle East	7.09	7.18	7.14	7.48	7.24	7.26	0.17	2.46
Africa	3.25	3.30	3.28	3.16	3.31	3.26	0.02	0.50
<b>Total DCs</b>	<b>26.04</b>	<b>26.21</b>	<b>26.58</b>	<b>26.73</b>	<b>26.77</b>	<b>26.57</b>	<b>0.54</b>	<b>2.06</b>
FSU	3.97	3.96	3.78	4.19	4.23	4.04	0.07	1.72
Other Europe	0.73	0.69	0.64	0.66	0.70	0.67	-0.05	-7.48
China	8.25	8.23	8.94	9.18	8.86	8.81	0.55	6.68
<b>Total "Other regions"</b>	<b>12.95</b>	<b>12.88</b>	<b>13.37</b>	<b>14.03</b>	<b>13.79</b>	<b>13.52</b>	<b>0.57</b>	<b>4.36</b>
<b>Total world</b>	<b>84.46</b>	<b>84.90</b>	<b>85.05</b>	<b>87.15</b>	<b>86.61</b>	<b>85.93</b>	<b>1.47</b>	<b>1.74</b>
Previous estimate	84.46	84.90	85.06	86.56	86.58	85.78	1.32	1.56
Revision	0.00	0.00	-0.02	0.59	0.03	0.15	0.15	0.18

*Totals may not add due to independent rounding*

## Alternative Fuels

China is gearing toward biofuel blending, not only in gasoline but in diesel as well. The country is embarking on a new initiative of 5% biodiesel blend (B5). This new blend will take effect early next year. It is not expected to dent the use of oil or affect the expected growth in oil use in the foreseeable future. This initiative will worsen the Asian deforestation problem which has become a contentious issue in the past two years. As for the US, ethanol subsidies are due to expire next month, and the country's lawmakers are in an intense debate over renewing them. Biofuel subsidies are costing the US economy a substantial amount of money. US biofuel subsidies came under attack by various international organizations since biofuel usage is considered harmful to the environment.

*As a result of various stimulus plans in the US, North American oil demand is expected to grow by 0.44 mb/d in 2010*

### OECD - North America

US industrial activities supported industrial fuel consumption in the third quarter and continued during the months of October and November. An additional 11% of distillate fuel was consumed during the last two months. Gasoline consumption during the same era experienced a weak increase as a result of the end of the seasonal summer driving. Gasoline growth was 0.7%, which is lower than the growth of 1.4% during the third quarter. This strong growth especially in distillate oil demand is partly attributed to an improved economy and low baseline of last year. The US has announced another new stimulus plan which will positively affect the country's oil usage in the next six months.

November weekly data indicated an increase of 2.5% in the usage of energy with continuing increases in distillate fuel oil but with contractions in some industrial fuel products such as residual fuel oil and propane/propylene; however November is a low seasonality for energy usage. Because of continuing uncertainties in the US economy, fourth quarter oil demand is anticipated to achieve weaker y-o-y growth than the third quarter. As in previous reports, the preliminary character of the weekly data requires caution as to whether these indications will also remain after monthly data are available. Economic impulses during the year have dragged the country's oil demand to the plus side by a little less than 2% and this expectation will last until year-end.

October oil consumption figures for Mexico were disappointing, and declines were spread in all product categories, the highest for residual fuel oil that is used in power plants. The country's October oil demand declined by 0.09 mb/d y-o-y to average 1.7 mb/d. Due to a slow economy, Mexico's oil demand has been on the decline since July and is expected to be flat for the year.

In Canada, the oil demand has been on a strong growth trend since February; this trend continued also in September led by strong increases in gasoline and distillate fuel oil usage. The country's total oil demand growth in September managed to ascend by 182 tb/d. Given the 2.8% GDP growth, the country's oil demand is expected to grow sharply this year exceeding 5% y-o-y.

As a result of various stimulus plans in the US, North American oil demand is expected to grow by 0.44 mb/d y-o-y in 2010.

US auto sales rose 17% in November from a year earlier. This stronger-than-expected gain indicates a strong return in consumer demand from the low levels of 2009. The main reasons for this strong increase were month-end discounts for new car purchases that many dealers had delayed through the recession. The biggest increases were observed for small and luxury cars by 16% and 12%. Nevertheless, demand for large cars decreased by 8%. This was the highest sales increase since September 2008, excluding August 2009, which was dominated by the cash-for-clunkers measures. In Canada, light vehicle sales during November climbed by 14% compared to the same month last year, with trucks sales growing by 27%. Latest October data for the Mexican market show sales of 74 thousand passenger cars and light trucks, a year-on-year increase of 9%. Exports in October rose by 15% as compared to the same month last year and the bulk of vehicle exports from Mexico went to the US. Approximately 11% of all new cars bought in the US are made in Mexico.

**Table 4.2: 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	23.43	23.45	0.02	0.09	22.94	23.66	0.72	3.15
Western Europe	14.89	14.17	-0.72	-4.85	14.26	14.13	-0.13	-0.92
OECD Pacific	8.12	8.19	0.07	0.84	7.27	7.30	0.03	0.38
<b>Total OECD</b>	<b>46.44</b>	<b>45.81</b>	<b>-0.63</b>	<b>-1.36</b>	<b>44.48</b>	<b>45.10</b>	<b>0.62</b>	<b>1.39</b>
Other Asia	9.73	9.95	0.22	2.26	9.89	10.13	0.24	2.39
Latin America	5.63	5.78	0.15	2.74	5.83	6.04	0.21	3.59
Middle East	6.95	7.18	0.23	3.28	7.07	7.14	0.07	1.06
Africa	3.27	3.30	0.03	0.98	3.25	3.28	0.03	0.98
<b>Total DCs</b>	<b>25.58</b>	<b>26.21</b>	<b>0.63</b>	<b>2.48</b>	<b>26.03</b>	<b>26.58</b>	<b>0.55</b>	<b>2.12</b>
FSU	3.87	3.96	0.09	2.29	3.70	3.78	0.08	2.16
Other Europe	0.74	0.69	-0.05	-6.77	0.69	0.64	-0.05	-7.37
China	7.61	8.23	0.62	8.19	8.38	8.94	0.56	6.67
<b>Total "Other regions"</b>	<b>12.22</b>	<b>12.88</b>	<b>0.66</b>	<b>5.41</b>	<b>12.78</b>	<b>13.37</b>	<b>0.59</b>	<b>4.60</b>
<b>Total world</b>	<b>84.23</b>	<b>84.90</b>	<b>0.66</b>	<b>0.79</b>	<b>83.29</b>	<b>85.05</b>	<b>1.76</b>	<b>2.11</b>

Totals may not add due to independent rounding

**Table 4.3: 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	23.28	24.12	0.85	3.64	23.55	23.71	0.16	0.66
Western Europe	14.47	14.71	0.24	1.67	14.46	14.39	-0.07	-0.45
OECD Pacific	7.25	7.56	0.31	4.28	7.99	7.95	-0.03	-0.38
<b>Total OECD</b>	<b>44.99</b>	<b>46.39</b>	<b>1.40</b>	<b>3.11</b>	<b>45.99</b>	<b>46.05</b>	<b>0.06</b>	<b>0.13</b>
Other Asia	9.76	9.87	0.11	1.17	9.93	10.04	0.11	1.09
Latin America	6.03	6.22	0.19	3.15	6.02	6.17	0.16	2.61
Middle East	7.30	7.48	0.18	2.47	7.03	7.24	0.21	3.05
Africa	3.16	3.16	0.00	-0.16	3.31	3.31	0.01	0.21
<b>Total DCs</b>	<b>26.25</b>	<b>26.73</b>	<b>0.48</b>	<b>1.83</b>	<b>26.28</b>	<b>26.77</b>	<b>0.49</b>	<b>1.85</b>
FSU	4.14	4.19	0.05	1.30	4.18	4.23	0.05	1.22
Other Europe	0.71	0.66	-0.06	-7.84	0.76	0.70	-0.06	-7.93
China	8.66	9.18	0.52	6.04	8.36	8.86	0.50	6.01
<b>Total "Other regions"</b>	<b>13.51</b>	<b>14.03</b>	<b>0.52</b>	<b>3.86</b>	<b>13.29</b>	<b>13.79</b>	<b>0.49</b>	<b>3.71</b>
<b>Total world</b>	<b>84.75</b>	<b>87.15</b>	<b>2.40</b>	<b>2.83</b>	<b>85.57</b>	<b>86.61</b>	<b>1.04</b>	<b>1.21</b>

Totals may not add due to independent rounding

### OECD - Europe

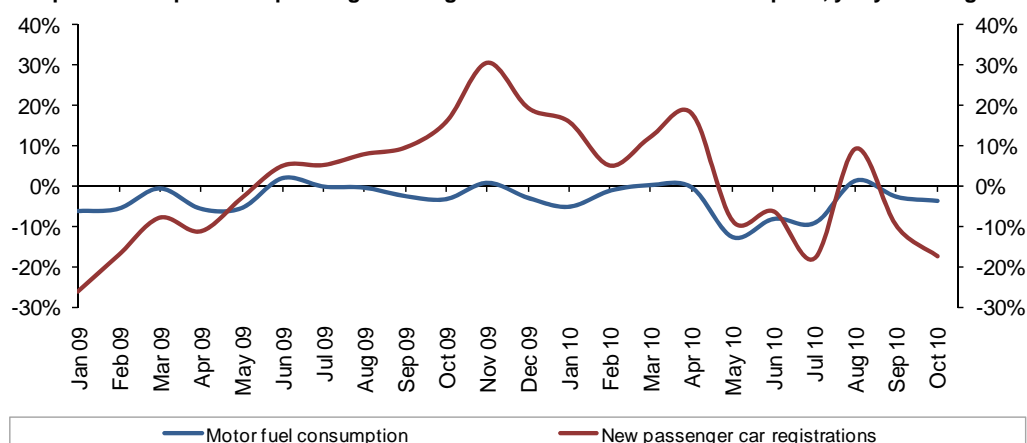
*The total contraction in OECD Europe oil demand to be less than earlier forecast and currently stands at 0.17 mb/d.*

October European oil demand data indicated a contraction for the second consecutive month after a number of months with growth in oil consumption. Debts in several European economies and continued application of rigorous state tax policies on oil are some of the factors which are imposing additional declines in European oil consumption. The European Big Four's oil demand decreased in October marginally by 0.02 mb/d as compared to an increase of 0.1 mb/d in September. Stronger distillate demand in Germany and the UK as a result of increased industrial production was the main reason for that recovery, while transportation fuels are still on the decline. During October Italian oil consumption was down by 4.9%, while UK oil consumption grew marginally by 0.5%. For France, preliminary data showed October to be weak as a result of the massive strikes in the country, which occupied almost half of the month. The immense rebound in the continent's oil demand was mainly as a result of strong recovery in Germany's energy consumption. Since the winter got off to a strong start, winter product demand is expected to be above normal this year.

The OECD Europe total contraction in oil demand is expected to be less than earlier forecast and currently stands at 0.17 mb/d.



Graph 4.2: European new passenger car registrations &amp; motor fuel consumption, y-o-y % changes



According to the latest information by ACEA, new car registrations in Europe contracted by almost 17% in October y-o-y, with all major markets decreasing significantly. Spain recorded the largest decrease of 38% followed by Italy with a decrease of 29%, and the UK whose decrease reached 22%. The German auto market, which is considered the largest in Europe, showed a decline of 20% in the same month. Ten months into 2010, demand for new cars in Europe has decreased by 6%. In detail, UK and Spain grew by 5% and 9% respectively, while France, Italy and Germany faced increases of 1%, 7% and 27% respectively.

Table 4.4: Europe Big 4\* oil demand, tb/d

	Oct 10	Oct 09	Change from Oct 09	Change from Oct 09, %
LPG	377	422	-45	-10.8
Gasoline	1,219	1,275	-56	-4.4
Jet/Kerosene	794	784	10	1.3
Gas/Diesel oil	3,441	3,334	107	3.2
Fuel oil	517	537	-20	-3.7
Other products	1,133	1,144	-11	-1.0
<b>Total</b>	<b>7,481</b>	<b>7,497</b>	<b>-16</b>	<b>-0.2</b>

\* Germany, France, Italy and the UK

### OECD - Pacific

Following a strong third quarter growth, Japanese oil demand plunged in October by 0.18 mb/d y-o-y. Gasoline usage declined by an unexpected 2.4% in the same month. Japan's oil demand in the third quarter was supported by the strong crude burning by power plants. Japan's oil demand has been on the decline for the past few years as a result of a weakening economy and increasing efficiency.

Japan's oil demand for the entire year is expected to achieve a y-o-y growth of 1.5%, representing the first observed growth since 2005. Nuclear power plants outages and excess demand on electricity pushed up demand for crude which is considered the main reason behind this growth. Another reason is the recovery in the petrochemical industry and thus naphtha demand moderately increased. Furthermore, transportation fuels and residual fuel oil are attributing to this noticeable growth with the help of a low baseline. Still, Japanese oil consumption will be heavily dependent upon the implementation of an additional economic stimulus plan, which started in the fourth quarter.

South Korea's oil demand followed the country's economic growth. The country's third quarter oil demand expanded by 0.1 mb/d y-o-y. Increases in demand occurred in all products, especially in gasoline, distillate and naphtha. South Korea's oil demand in the fourth quarter is expected to be in the green but not as strong as in the third quarter.

OECD Pacific oil demand is forecast to show minor growth of 0.1 mb/d in 2010, averaging 7.7 mb/d following a devastating decline last year.

*OECD Pacific demand forecast to show minor growth of 0.1 mb/d in 2010, averaging 7.7 mb/d following a devastating decline last year*

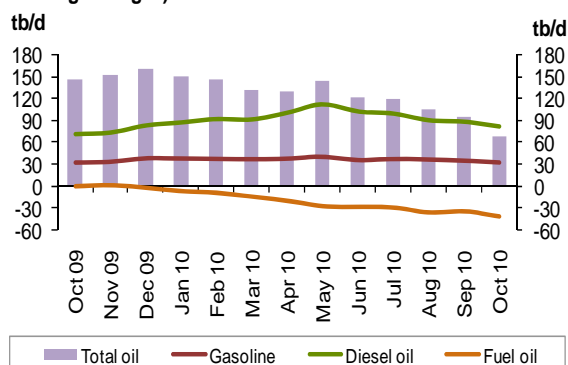
*Developing Country oil demand growth forecast at 0.54 mb/d in 2010*

*Other Asia oil demand growth revised slightly down to 0.2 mb/d*

## Developing Countries

Indian oil demand is extremely negatively affected by not only the massive fuel switching but also by the bad weather in the peak of the agricultural season. India's unexpected weakening in its oil usage cut in half the country's early oil demand growth forecast for the entire year. The country's oil demand plunged in the negative in October and has been in the red since August. Despite the normal 7% growth in both LPG and gasoline in October, the substantial decline in fuel oil squeezed the total demand to the negative by 0.1%. The country's transport fuel demand is expected to maintain its growth despite the governmental decision of partially removing price subsidies from certain petroleum products.

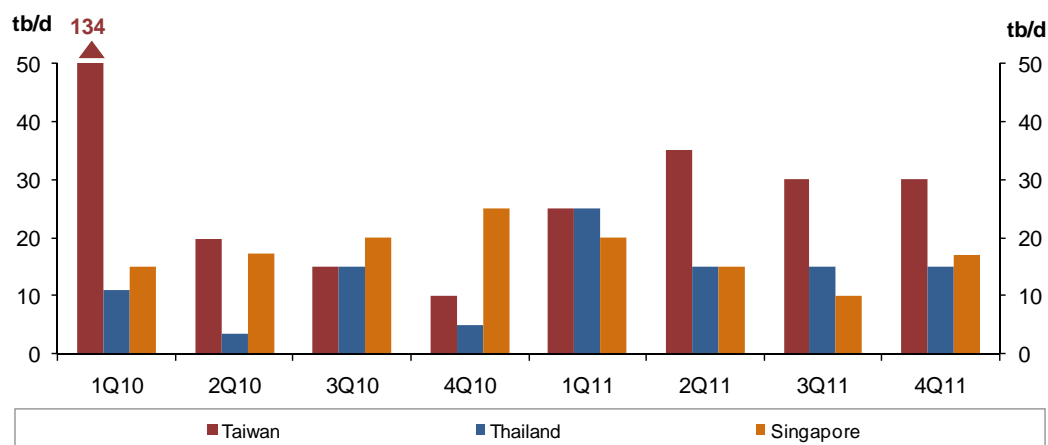
**Graph 4.3: Yearly changes in Indian oil demand (12 month moving averages)**



Strong industrial use of fuel oil inched Hong Kong's oil demand up by 5% in September y-o-y. Nevertheless, this sudden strength did not manage to pull the country's total oil demand from the red. Like Hong Kong, Philippines oil usage achieved a massive 12% growth in September. Although it is anticipated that the country's oil demand will stabilize in the final quarter of the year, a noticeable growth is not expected.

Given the unexpected slowdown in power plant fuel oil demand in India, Other Asia oil demand growth was revised slightly down to show a growth of 0.2 mb/d or 1.7% y-o-y averaging 10 mb/d.

**Graph 4.4: Oil consumption in selected Asian countries, y-o-y growth**

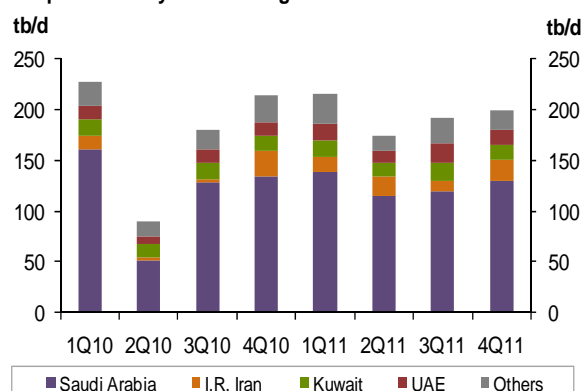




*Middle East oil demand growth forecast at 0.17 mb/d in 2010*

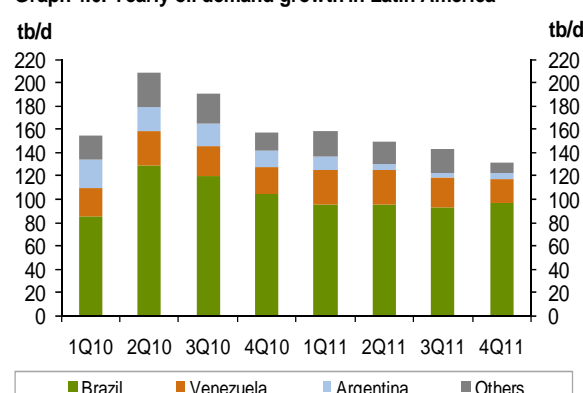
Immense oil demand by petrochemical, power plant and transport sectors hiked the Saudi oil demand by 19% or 0.34 mb/d in October y-o-y. October oil demand is at the end of the high season as the weather cools off and the demand on electricity flattens down. Crude burning and fuel oil are the two main products used by power plants. Subsidized transport fuel is also a main contributor to the country's oil demand growth this year. Despite the weakening gasoline demand in Iran in the past three quarters, the extra demand in the Saudi side helped to keep the Middle East region oil demand intact. Middle East oil demand growth is forecast at 0.17 mb/d in 2010.

**Graph 4.5: Yearly oil demand growth in the Middle East**



High transport fuel consumption hiked Brazil oil demand up by 6% in September y-o-y. Gasoline growth was over 16% and diesel growth reached 80 tb/d in September. With the lead of transport fuel, Brazil oil demand grew by 10% in the first three quarters of this year. Brazil's booming economy amplified the country's oil use for the past few years and is expected to keep this trend for this year and next year as well.

**Graph 4.6: Yearly oil demand growth in Latin America**



Developing Country oil demand growth is forecast at 0.54 mb/d in 2010, averaging 26.6 mb/d.

**Table 4.5: Consumption of petroleum products in Thailand, tb/d**

	Sep 10	Sep 09	Change, tb/d	Change, %
LPG	213	175	38	21.5
Gasoline	127	126	1	1.1
Jet Fuel/Kerosene	78	73	5	6.4
Diesel	294	292	2	0.8
Fuel oil	41	48	-7	-14.0
Other products	78	93	-15	-16.6
<b>Total</b>	<b>831</b>	<b>807</b>	<b>24</b>	<b>3.0</b>

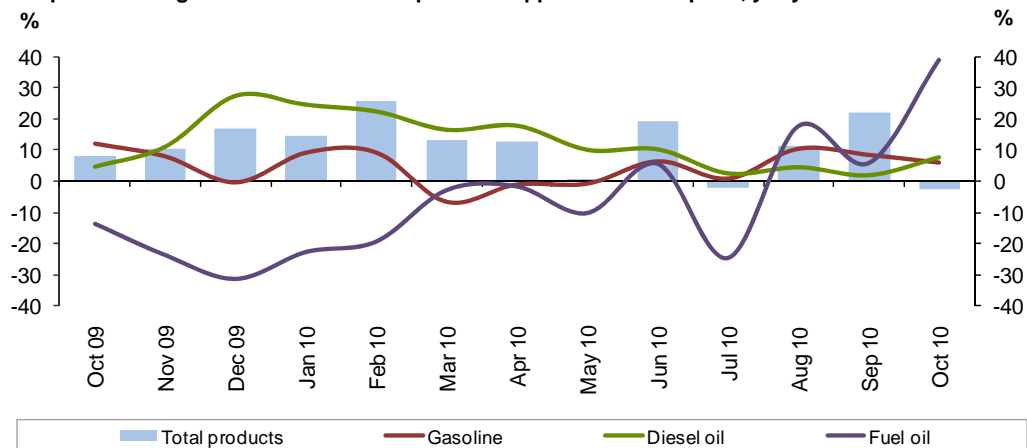
Source: JODI/EPPO

### Other regions

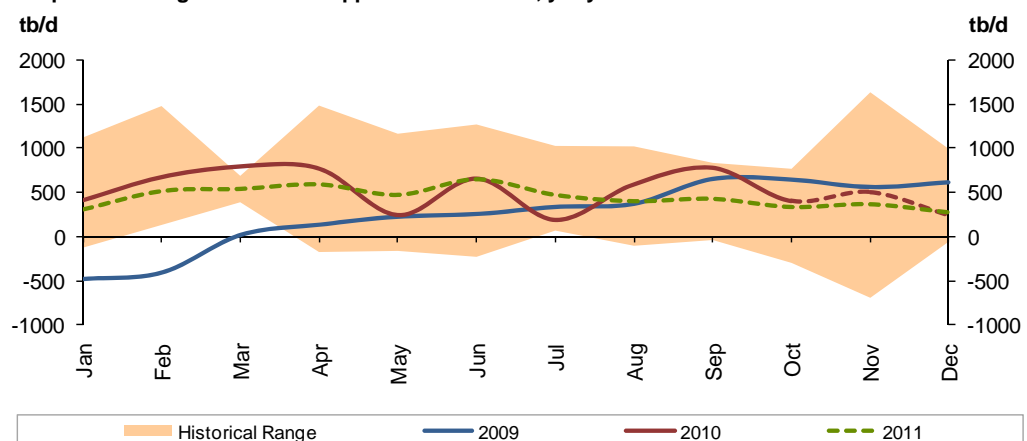
As a result of measures such as cutting electricity supply to various businesses, a shortage was caused in the Chinese diesel supply in the past two months as individual generator use increased sharply. As a response, the government aimed to take some measures to insure enough supply of petroleum products to both citizens and businesses. This event brings to mind the 2004 electricity and diesel shortage. China's booming industrial activities along with the governmental initiative to fill up available oil storage with both crude oil and petroleum products has pushed the country's apparent oil demand up by a remarkable percentage so far this year. Part of this increase is the reduction on product exports especially diesel. China is active in using its oil stocks in both filling and withdrawing. In the past few months, China increased its oil stocks by more than 0.3 mb/d; however it reversed its action in October.

Despite the decrease in oil imports by 11.9%, China's oil demand in October increased by 4.8% y-o-y averaging 8.9 mb/d. China's oil demand is expected to increase by 6.7% this year averaging 8.8 mb/d.

*China's oil demand to increase by 6.7% this year*

**Graph 4.7: Changes in Chinese main oil products apparent consumption, y-o-y**

Sales of Chinese passenger cars increased by 27% in October as compared to the same month in 2009. Many customers rushed to buy cars in anticipation of the expiration of the governmental policy incentive by the end of the year. Preliminary figures and expectations show that monthly sales in November and December would probably exceed 1 million units, as automakers' year end promotions reach their maximum. The Chinese government had in 2009 unveiled tax incentives for cars with engine sizes of 1.6 liters or less; this move was the main reason behind China surpassing the US as the world's largest auto market in 2009. The incentives, which had been scaled back since January of this year, will expire on 31 December 2010.

**Graph 4.8: Changes in Chinese apparent oil demand, y-o-y**

*FSU oil demand to show a positive growth in 2010 of 0.7 mb/d*

Russian oil demand has been back on track since the beginning of the year. Due to a booming economy, the country's oil demand is expected to grow more than earlier forecast. Hence, the FSU region's oil demand was revised up in the third and fourth quarters. The extra consumption occurred in both transport and industrial fuel. FSU oil demand is forecast to show a positive growth in 2010 totaling 0.7 mb/d or 1.7% y-o-y.

World oil demand growth forecast at 1.2 mb/d next year

## World oil demand in 2011

The prospects for world economic growth next year are gaining some optimism. This better than expected picture of the world economy has called for more oil demand; however, this has been taken into consideration in the previous forecast. Next year's world oil demand forecast is mainly affected by expectations for the world economic growth. One main factor that is suppressing the oil demand forecast is the higher baseline. Another factor is energy efficiency policies along with the use of biofuel

which will put more downward pressure on oil consumption worldwide. Recovering OECD economies will yield a 0.2 mb/d growth in the region's oil demand. The non-OECD region is expected to keep its previous year's oil demand growth momentum led by China and the Middle East. Non-OECD is expected to consume 1.0 mb/d more oil than in the current year. Hence, world oil demand growth is now forecast at 1.2 mb/d to average 87.1 mb/d next year. Petrochemical and transport sectors are expected to be dominant in world oil demand growth in 2011.

Graph 4.9: Forecasted y-o-y growth in 2011 world oil demand

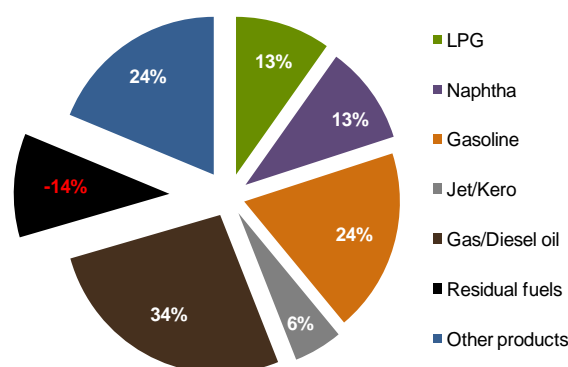
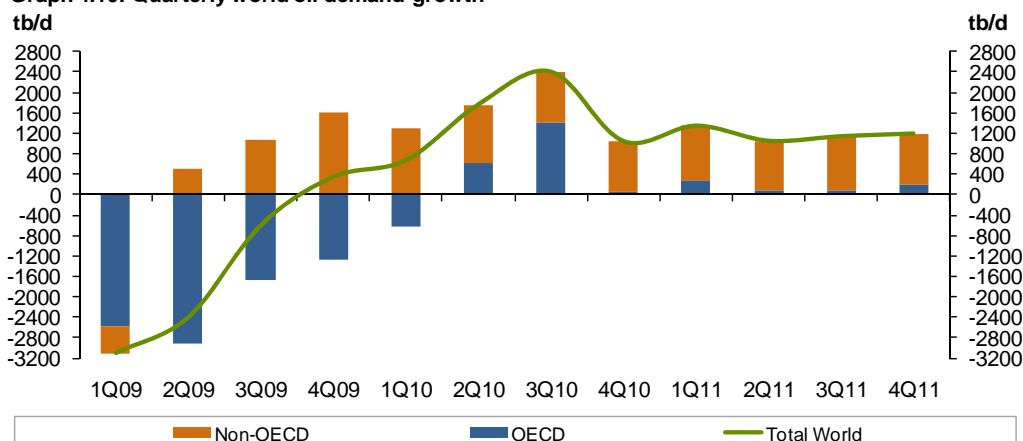


Table 4.6: World oil demand forecast for 2011, mb/d

	2010	1Q11	2Q11	3Q11	4Q11	2011	Change 2011/10	
							Volume	%
North America	23.74	23.75	23.83	24.30	24.01	23.97	0.24	0.99
Western Europe	14.35	14.19	14.08	14.63	14.31	14.30	-0.05	-0.34
OECD Pacific	7.75	8.15	7.26	7.54	7.93	7.72	-0.03	-0.41
<b>Total OECD</b>	<b>45.84</b>	<b>46.09</b>	<b>45.17</b>	<b>46.46</b>	<b>46.25</b>	<b>46.00</b>	<b>0.16</b>	<b>0.34</b>
Other Asia	10.00	10.13	10.33	10.06	10.23	10.19	0.19	1.92
Latin America	6.06	5.94	6.17	6.39	6.31	6.20	0.15	2.43
Middle East	7.26	7.40	7.31	7.67	7.44	7.46	0.20	2.69
Africa	3.26	3.32	3.30	3.18	3.34	3.29	0.02	0.73
<b>Total DCs</b>	<b>26.57</b>	<b>26.79</b>	<b>27.11</b>	<b>27.30</b>	<b>27.32</b>	<b>27.13</b>	<b>0.56</b>	<b>2.10</b>
FSU	4.04	4.03	3.81	4.22	4.27	4.09	0.04	1.06
Other Europe	0.67	0.67	0.61	0.63	0.66	0.64	-0.03	-4.26
China	8.81	8.65	9.39	9.67	9.30	9.26	0.45	5.13
<b>Total "Other regions"</b>	<b>13.52</b>	<b>13.36</b>	<b>13.81</b>	<b>14.52</b>	<b>14.23</b>	<b>13.98</b>	<b>0.47</b>	<b>3.44</b>
<b>Total world</b>	<b>85.93</b>	<b>86.24</b>	<b>86.09</b>	<b>88.29</b>	<b>87.80</b>	<b>87.11</b>	<b>1.18</b>	<b>1.37</b>
Previous estimate	85.78	86.24	86.12	87.64	87.77	86.95	1.17	1.36
Revision	0.15	0.00	-0.03	0.64	0.03	0.16	0.01	0.01

Totals may not add due to independent rounding

Graph 4.10: Quarterly world oil demand growth



**Table 4.7: First and second quarter world oil demand comparison for 2011, mb/d**

	<u>1Q10</u>	<u>1Q11</u>	<u>Change 2011/10</u>		<u>2Q10</u>	<u>2Q11</u>	<u>Change 2011/10</u>	
			<u>Volume</u>	<u>%</u>			<u>Volume</u>	<u>%</u>
North America	23.45	23.75	0.30	1.28	23.66	23.83	0.17	0.71
Western Europe	14.17	14.19	0.02	0.16	14.13	14.08	-0.05	-0.38
OECD Pacific	8.19	8.15	-0.04	-0.52	7.30	7.26	-0.04	-0.57
<b>Total OECD</b>	<b>45.81</b>	<b>46.09</b>	<b>0.28</b>	<b>0.61</b>	<b>45.10</b>	<b>45.17</b>	<b>0.07</b>	<b>0.16</b>
Other Asia	9.95	10.13	0.19	1.90	10.13	10.33	0.20	1.94
Latin America	5.78	5.94	0.16	2.75	6.04	6.17	0.14	2.24
Middle East	7.18	7.40	0.22	2.99	7.14	7.31	0.17	2.44
Africa	3.30	3.32	0.02	0.61	3.28	3.30	0.02	0.73
<b>Total DCs</b>	<b>26.21</b>	<b>26.79</b>	<b>0.58</b>	<b>2.22</b>	<b>26.58</b>	<b>27.11</b>	<b>0.53</b>	<b>1.99</b>
FSU	3.96	4.03	0.08	1.90	3.78	3.81	0.03	0.79
Other Europe	0.69	0.67	-0.02	-2.18	0.64	0.61	-0.04	-5.46
China	8.23	8.65	0.42	5.09	8.94	9.39	0.45	5.04
<b>Total "Other regions"</b>	<b>12.88</b>	<b>13.36</b>	<b>0.48</b>	<b>3.72</b>	<b>13.37</b>	<b>13.81</b>	<b>0.45</b>	<b>3.34</b>
<b>Total world</b>	<b>84.90</b>	<b>86.24</b>	<b>1.34</b>	<b>1.58</b>	<b>85.05</b>	<b>86.09</b>	<b>1.05</b>	<b>1.23</b>

*Totals may not add due to independent rounding*

**Table 4.8: Third and fourth quarter world oil demand comparison for 2011, mb/d**

	<u>3Q10</u>	<u>3Q11</u>	<u>Change 2011/10</u>		<u>4Q10</u>	<u>4Q11</u>	<u>Change 2011/10</u>	
			<u>Volume</u>	<u>%</u>			<u>Volume</u>	<u>%</u>
North America	24.12	24.30	0.17	0.72	23.71	24.01	0.30	1.26
Western Europe	14.71	14.63	-0.08	-0.54	14.39	14.31	-0.08	-0.57
OECD Pacific	7.56	7.54	-0.02	-0.28	7.95	7.93	-0.02	-0.28
<b>Total OECD</b>	<b>46.39</b>	<b>46.46</b>	<b>0.07</b>	<b>0.16</b>	<b>46.05</b>	<b>46.25</b>	<b>0.20</b>	<b>0.42</b>
Other Asia	9.87	10.06	0.19	1.89	10.04	10.23	0.19	1.93
Latin America	6.22	6.39	0.16	2.62	6.17	6.31	0.13	2.14
Middle East	7.48	7.67	0.19	2.57	7.24	7.44	0.20	2.76
Africa	3.16	3.18	0.03	0.82	3.31	3.34	0.02	0.75
<b>Total DCs</b>	<b>26.73</b>	<b>27.30</b>	<b>0.57</b>	<b>2.12</b>	<b>26.77</b>	<b>27.32</b>	<b>0.55</b>	<b>2.06</b>
FSU	4.19	4.22	0.03	0.60	4.23	4.27	0.04	0.98
Other Europe	0.66	0.63	-0.03	-3.80	0.70	0.66	-0.04	-5.60
China	9.18	9.67	0.49	5.37	8.86	9.30	0.44	4.99
<b>Total "Other regions"</b>	<b>14.03</b>	<b>14.52</b>	<b>0.49</b>	<b>3.51</b>	<b>13.79</b>	<b>14.23</b>	<b>0.44</b>	<b>3.22</b>
<b>Total world</b>	<b>87.15</b>	<b>88.29</b>	<b>1.14</b>	<b>1.30</b>	<b>86.61</b>	<b>87.80</b>	<b>1.19</b>	<b>1.37</b>

*Totals may not add due to independent rounding*

# World Oil Supply

Non-OPEC supply projected to increase by 1.09 mb/d in 2010

## Non-OPEC Forecast for 2010

Non-OPEC production is expected to grow by 1.09 mb/d in 2010, averaging 52.21 mb/d and representing a minor upward revision of 50 tb/d compared to the previous month. Healthy production data by major non-OPEC producers required the adjustment. Additionally, there were a few historical revisions that affected the forecast from 2008. The supply profiles of the US, Other Western Europe, Malaysia, Syria, Russia, and China experienced upward revisions, while the production outlook for Mexico, UK, Vietnam, Yemen, and Other Africa encountered downward revisions. However, the total upward adjustment more than offset the downward revisions. Updated actual and preliminary production data continued to show a strong level of output in 2010. The solid capital investment in the upstream sector of the industry, which has been reported to exceed \$380 billion, is among the main factors supporting the healthy growth. Additionally, the lack of major operation disruptions in the Gulf of Mexico on weather-related issues further allowed production to increase in 2010. North America remains the region with the highest expected supply growth in 2010, followed by Latin America and the FSU, while OECD Western Europe remains the region with the highest expected decline. The US is expected to show the highest production increase among all non-OPEC producers in 2010, followed by China, Brazil and Russia. Norway is estimated to encounter the largest output drop in 2010 among all non-OPEC countries, followed by the UK. According to preliminary actual and estimated data, total non-OPEC supply rose 1.10 mb/d during the first three quarters of 2010, compared to the same period 2009. On a quarterly basis, non-OPEC supply is expected to average 52.10 mb/d, 52.10 mb/d, 51.91 mb/d and 52.74 mb/d, respectively.

Graph 5.1: Regional non-OPEC supply growth, y-o-y

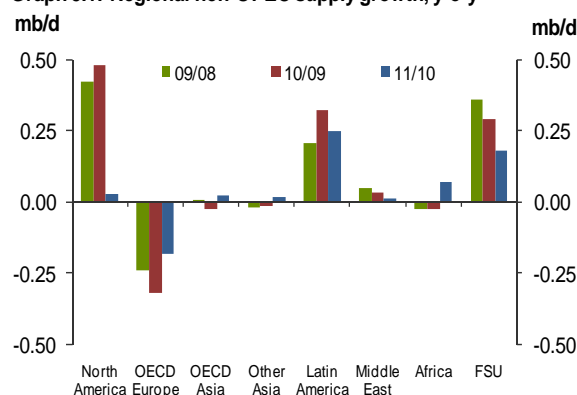


Table 5.1: Non-OPEC oil supply in 2010, mb/d

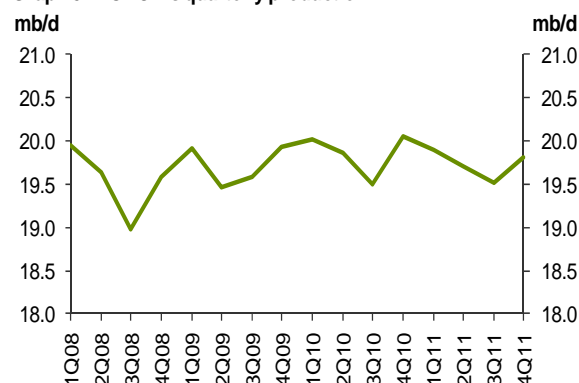
	2009	1Q10	2Q10	3Q10	4Q10	2010	Change 10/09
North America	14.36	14.71	14.86	14.88	14.92	14.84	0.48
Western Europe	4.73	4.70	4.40	4.02	4.50	4.40	-0.32
OECD Pacific	0.64	0.61	0.60	0.60	0.64	0.61	-0.02
<b>Total OECD</b>	<b>19.72</b>	<b>20.03</b>	<b>19.86</b>	<b>19.50</b>	<b>20.06</b>	<b>19.86</b>	<b>0.13</b>
Other Asia	3.70	3.68	3.67	3.72	3.69	3.69	-0.01
Latin America	4.41	4.66	4.74	4.73	4.79	4.73	0.32
Middle East	1.73	1.77	1.76	1.76	1.75	1.76	0.03
Africa	2.61	2.61	2.58	2.59	2.59	2.59	-0.02
<b>Total DCs</b>	<b>12.45</b>	<b>12.72</b>	<b>12.75</b>	<b>12.80</b>	<b>12.82</b>	<b>12.77</b>	<b>0.32</b>
FSU	12.96	13.12	13.18	13.21	13.46	13.25	0.29
Other Europe	0.14	0.14	0.14	0.14	0.14	0.14	0.00
China	3.85	4.03	4.10	4.18	4.18	4.12	0.27
<b>Total "Other regions"</b>	<b>16.95</b>	<b>17.29</b>	<b>17.42</b>	<b>17.53</b>	<b>17.78</b>	<b>17.51</b>	<b>0.56</b>
<b>Total Non-OPEC production</b>	<b>49.12</b>	<b>50.03</b>	<b>50.02</b>	<b>49.83</b>	<b>50.66</b>	<b>50.14</b>	<b>1.02</b>
Processing gains	2.00	2.08	2.08	2.08	2.08	2.08	0.08
<b>Total Non-OPEC supply</b>	<b>51.12</b>	<b>52.10</b>	<b>52.10</b>	<b>51.91</b>	<b>52.74</b>	<b>52.21</b>	<b>1.09</b>
Previous estimate	51.13	52.18	52.17	51.99	52.30	52.16	1.03
Revision	-0.01	-0.07	-0.07	-0.08	0.44	0.05	0.07

*OECD supply to increase by 0.13 mb/d in 2010, driven by North America growth*

## OECD

**Total OECD oil production is anticipated to increase by 0.13 mb/d in 2010 to average 19.86 mb/d, indicating an upward revision of 40 tb/d from the previous month.** Expected OECD growth in 2010 is seen as the second consecutive annual increase after the raise in 2009 that came following more than five years of recurring decline. North America was the main driver behind the upward revision for this month, while the OECD Western Europe negative adjustment partially offset some of the upward changes. The overall supply profile of the OECD remains relatively unchanged, with strong supply growth projected from North America, steady output from OECD pacific and a rather heavy decline from OECD Western Europe. According to preliminary data, total OECD oil production stood at 20.13 mb/d during October 2010, a rebound of 0.66 mb/d from the maintenance- and shutdown-distressed output in September. On a quarterly basis, OECD oil supply is estimated to average 20.03 mb/d, 19.86 mb/d, 19.50 mb/d, and 20.06 mb/d respectively.

Graph 5.2: OECD's quarterly production



### North America

The outlook for North America oil production in 2010 continues to improve, moving from a growth of only 70 tb/d in the initial forecast to a current increase of 0.48 mb/d. The enhanced forecast for both the US and Mexico was the main reason behind the ongoing change. The persisted output increases in the US and Mexico required continual upward adjustment to the forecast though out the year. The region currently on top of the list in term of growth among all non-OPEC regions. The assertive ramp up of production in the US and lack of production disruptions during the hurricane season, coupled with Mexico fruitful efforts to arrest production decline were the main aspects of the projection upgrades. On a quarterly basis, North America oil supply is expected to average 14.71 mb/d, 14.86 mb/d, 14.88 mb/d, and 14.92 mb/d respectively.

### US

The US Bureau of Ocean Energy Management, Regulation, and Enforcement issued the first deepwater permit for a water injection well in November after the recent deep water drilling moratorium. The permit is expected to be followed by a stream of similar approvals together with an improved time frame as many major oil companies are moving ahead with deep water investments in the Gulf of Mexico despite tougher regulations and increased cost. The increased investment is expected to endorse the position of the Gulf of Mexico as one of the main areas of prospering production in the US. Additionally, preliminary data indicates that US oil supply continues to be healthy and hence necessitated an upward revision to the supply forecast. The US oil output is forecast to increase by 0.40 mb/d in 2010 to average 8.54 mb/d, representing an upward revision of 0.06 mb/d from the previous month. The upward revision was supported by the startup and ramp-up of the Phoenix field. The healthy output from the Drosky and Woodford shale developments is further supporting the upward adjustment as well as the restart of the small Badami field in Alaska. Moreover, improved biofuel output with the addition of the Mt. Vernon plant in Indiana as well as healthy levels of NGL production are further adding to the positive factors. During the first three quarters, US oil production is estimated to have increased by 0.44 mb/d, compared to the same period of 2009. On a quarterly basis, US oil output is seen to stand at 8.44 mb/d 8.52 mb/d, 8.56 mb/d, and 8.63 mb/d respectively.

### Canada and Mexico

Reports showed that Canadian Natural Resources achieved healthy production levels during the third quarter of 2010. Additionally, the progress at the Kai Kos Dehseh developments is further supporting Canadian oil supply growth in 2010. However, the continued depressed output from the Long Lake project, where output has been

*First post-moratorium deepwater well permit issued in US*

*Canadian output to average 3.35 mb/d in 2010*



reported to remain low through the next year has negatively affected the outlook. Furthermore, maintenance at the Sable project had shutdown production for a short period. Accordingly, minor downward revisions were introduced to the Canadian oil supply forecast in the second and third quarters to adjust for updated production data; however the revisions did not influence the annual growth level. Canada oil production is expected to increase by 0.11 mb/d in 2010 to average 3.35 mb/d, flat from the previous month. During the first three quarters of 2010, Canadian oil production increased by 0.11 mb/d over the same period of 2009. Growth was supported mainly by non-conventional output. On a quarterly basis, Canada's oil production is estimated to stand at 3.27 mb/d, 3.37 mb/d, 3.37 mb/d and 3.39 mb/d respectively.

*Mexico supply to decline marginally in 2010 to average 2.95 mb/d*

The short-term closure of eastern Mexican ports on weather conditions in November prompted concerns regarding production shutdowns on the back of limited storage capacity. Additionally, the preliminary data for the first half of November indicated a drop from October levels, causing a minor downward revision to the fourth quarter supply forecast. **Mexico oil supply** is expected to decline by 30 tb/d in 2010 to average 2.95 mb/d, representing a minor downward revision of 0.01 mb/d compared to the last month. Despite the minor revision, Mexico supply profile went through various upward revisions during 2010 that were basically the result of the successful efforts undertaken to slow the decline rate. During the first three quarters, production data shows that the loss of production from the Cantarell field was mostly compensated by increased supply from the Ku-Maloob-Zaap (KMZ), southern region, and south western region. On a quarterly basis, Mexico's oil production is seen to average 2.99 mb/d, 2.97 mb/d, 2.95 mb/d, and 2.90 mb/d respectively.

### **Western Europe**

Total OECD Western Europe oil production is expected to decrease by 0.32 mb/d in 2010 to average 4.40 mb/d, unchanged from the previous month. There were minor revisions to OECD Western Europe supply projection; however, they offset each other on the annual level. The second half of 2010 encountered the revisions from the previous month, with the third quarter experiencing downward revisions that were offset with upward revisions in the fourth quarter. During the first three quarters, OECD Western Europe oil supply dropped 0.36 mb/d over the same period of last year. The heaviest decline came in the third quarter, where OECD Western Europe supply experienced a decline of 0.45 mb/d. On a quarterly basis, OECD Western Europe supply is expected to stand at 4.70 mb/d, 4.40 mb/d, 4.02 mb/d and 4.50 mb/d respectively.

*Gjoa started up in November*

Preliminary production data showed that **Norway** supply encountered a healthy rebound in October after the maintenance and shutdown-impacted output of the third quarter. Data indicates that supply from Statfjord, Gullfaks, Oseberg, Ekofisk, Troll, and Grane experienced significant increases in October compared to the previous month. The startup of the Gjoa field in November is expected to further support oil production to meet the expected level in the fourth quarter. Rising output from the Volund is expected to support production in the fourth quarter. Norway oil supply is foreseen to decline by 0.20 mb/d in 2010 and average 2.16 mb/d, flat from the previous month. Despite the above positive indicators of improved supply from Norway, however, the shutdown of the Visund project due to corrosion, as well as the Gullfaks halt on drilling for various reviews are expected to negatively affect production levels. Additionally, the backlog of maintenance work that impend shutdown to fields such as Statfjord and Gullfaks further add to the uncertainties of the Norway supply forecast. On a quarterly basis, Norway production is expected to average 2.33 mb/d, 2.12 mb/d, 1.93 mb/d and 2.27 mb/d respectively.

*Alba field resumed operation after a short shutdown*

According to updated production data, **UK** oil supply declined by 0.11 mb/d during the first three quarters of 2010 compared to the same period of 2009. The updated data indicated that UK third quarter oil supply came below our previously expected level due to maintenance and shutdowns, therefore, a downward revision was introduced in the third quarter to adjust for actual production figures. Oil supply from the UK is forecast to decline by 0.11 mb/d in 2010 to average 1.37 mb/d, indicating a downward revision of 0.02 mb/d compared to the previous month. The bulk of the downward revision came in the third quarter however, a minor downward revision was introduced to the fourth quarter forecast as part of the downward revision in the third quarter was carried over to the fourth. Additionally the brief shutdown of the Alba field had backed the downward revision. On a quarterly basis, UK oil supply is expected to average 1.51 mb/d, 1.40 mb/d, 1.21 mb/d and 1.37 mb/d respectively.

**Other Western Europe** oil production is estimated to average 0.63 mb/d in 2010, steady from the previous month, indicating a minor upward revision of 0.01 mb/d on updated production data. Additionally, increased drilling at the Emlichheim project as well as the restart Rijn field are expected to further support the production level of Other Western Europe.

### Asia Pacific

Total **OECD Pacific** oil output is foreseen to decline by 20 tb/d in 2010 to average 0.61 mb/d, relatively unchanged from the previous month. On a quarterly basis, total OECD Pacific supply is seen to stand at 0.61 mb/d, 0.60 mb/d, 0.60 mb/d, and 0.64 mb/d respectively.

*Australia supply to average 0.52 mb/d in 2010*

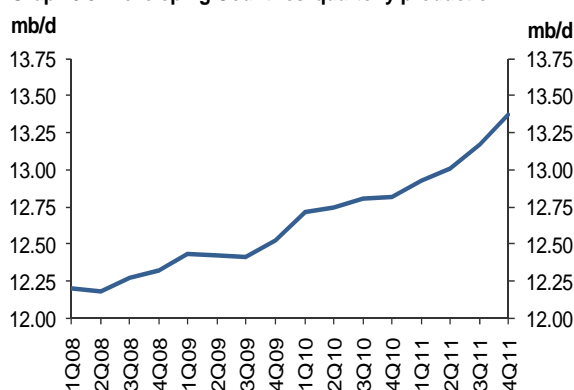
According to updated production data, Australia oil supply declined by 30 tb/d during the first three quarters in 2010 compared to the same period the previous year. Additionally, output was expected to increase in the third quarter however, the flooding in the Cooper basin due to heavy rain negatively affected production. Furthermore, the decline in mature production areas further affected supply. **Australia** oil supply is anticipated to decline by 20 tb/d in 2010 to average 0.52 mb/d, steady from the previous assessment despite a downward revision in the third quarter. On a quarterly basis, Australian oil supply is seen to average 0.51 mb/d, 0.50 mb/d, 0.50 mb/d and 0.54 mb/d respectively.

**New Zealand** oil production is expected to remain steady in 2010 compared to the previous year and average 0.10 mb/d, unchanged from the previous month. The Maari field restarted production in November after a shutdown due to an oil leak.

### Developing Countries

Developing Countries (DCs) oil production is forecast to grow by 0.32 mb/d in 2010 to average 12.77 mb/d, representing a downward revision of 50 tb/d compared to previous MOMR. The downward revision came mainly from revisions to Other Asia and Africa groups, largely on historical adjustment, while supply projections for Latin America and the Middle East remained relatively unchanged. Latin America is currently expected to be the region with the second highest supply growth following North America. DC's oil supply went through a gradual growth so far in 2010 and expected to continue the trend toward the year end. During the first three quarter on 2010, DCs oil production increased by 0.33 mb/d compared to the same period last year. The experienced growth in the first three quarters came mainly from Latin America. On a quarterly basis, DC's oil supply is seen to average 12.72 mb/d, 12.75 mb/d, 12.80 mb/d, and 12.82 mb/d, respectively.

Graph 5.3: Developing Countries' quarterly production



*DC supply expected to increase by 0.32 mb/d to average 12.77 mb/d*



*Other Asia supply  
to average  
3.69 mb/d in 2010*

The largest supply forecast downward revision within the DC's came from **Other Asia** group. Vietnam oil supply experienced a downward revision of 0.04 mb/d compared to previous month's assessment. The downward revision came as updated production data required a historical adjustment dating back to 2008. Vietnam oil supply is expected to decline by 0.03 mb/d in 2010 to average 0.35 mb/d. Reports indicate that Vietnam crude oil production experienced a decline of 12% during the first eleven months of 2010 compared to the same period of 2009. Other Asia oil production is expected to remain relatively steady with a minor drop of 0.01 mb/d in 2010 to average 3.69 mb/d, indicating a downward revision of 0.03 mb/d compared to previous MOMR. Indonesia oil supply is expected to remain steady in 2010 and average 1.03 mb/d, flat from previous evaluation. During the first three quarters of 2010, Indonesia oil production increased by 0.01 mb/d. However, fourth quarter oil supply is expected to decline compared to the third quarter of 2010 and the fourth quarter of 2009 due to various outages as well as the shutdown of the Belanak field as the mooring buoy sank. Thailand oil production forecast remain steady from recent month's level. The fourth quarter oil supply is expected to be slightly lower than the third due to the affect of the Songkhla field shutdown, which has already restarted, due to weather conditions. Malaysia oil production is expected to decline by 0.02 mb/d in 2010 to average 0.70 mb/d, indicating an upward revision of 0.01 mb/d compared to previous MOMR. The upward revision was introduced to adjust the forecast to actual production data in the second half of 2010. Additionally, reports suggested that the government is offering incentives for the oil and gas industry to focus on marginal fields. In Singapore, the world largest renewable diesel plant started up operation in November. On quarterly basis, Other Asia oil supply is expected to average 3.68 mb/d, 3.67 mb/d, 3.72 mb/d, and 3.69 mb/d, respectively.

*Tupi output to  
reach 100 tb/d in  
2H12*

Brazil and Colombia oil supply growth is seen to be the main driver of **Latin America** growth in 2010. Brazil oil production is expected to increase by 0.22 mb/d in 2010 to average 2.72 mb/d, unchanged from last month's figure. The third quarter oil production declined compared to the second quarter due to maintenance and shutdown. According to the preliminary data, Brazil oil supply increased in October after reaching the lowest level since January in September. The increase was supported by the Tupi started, which is expected to average 0.05 mb/d in 2011 and reach 0.08 mb/d at the end of 2011 and peak at 0.10 mb/d in the second half of 2012. Latin America oil supply is anticipated to increase by 0.32 mb/d in 2010 to average 4.73 mb/d, flat from previous MOMR. Colombia oil production is foreseen to increase by 0.11 mb/d in 2010 to average 0.79 mb/d, unchanged from last month's level. The inauguration of a new central processing facility is expected to further support Colombia oil supply growth in the short term. The new facility is estimated to add 0.10 mb/d to Colombia production coming mainly from the Rubiales and Quifa fields. On the other hand, civil unrest and road blockades led to shutdown of small volume in late November for few days that is estimated to slightly affect the production. In Argentina, the government will increase the biodiesel blend to 10% instead of 7% starting from 2011. In Bolivia, oil supply is expected to increase on the back of growth from the Sabalo and Alberto developments. On a quarterly basis, Latin America oil production is seen to average 4.66 mb/d, 4.74 mb/d, 4.73 mb/d, and 4.79 mb/d, respectively.

*Syria oil production  
seen to increase  
slightly in 2010*

Syria oil supply increased slightly during the first three quarters of 2010 compared to the same period of 2009, against a previous expectation of a decline. Oil production from Syria is expected to increase by 0.01 mb/d in 2010 to average 0.42 mb/d, an upward revision of 10 tb/d compared to last month's level. Output from Dijla, Hayan, and Syrian Chinese operators increase during the first three quarter of 2010 compared to the same period of 2009 in addition to new supply from Elba and Albu-Kamal, while production from Syria Petroleum – Syria biggest producer – Al-Furat, Dair Al-Zour and Oudeh encountered small decline. **Middle East** oil supply is estimated to increase by 30 tb/d in 2010 to average 1.76 mb/d, flat from previous MOMR. Yemen oil supply forecast experienced a downward revision of 10 tb/d mainly to adjust for production data. Additionally, the pipeline explosion that led to shutdown of 10 tb/d had further affected the forecast. On a quarterly basis, Middle East oil supply is estimated to average 1.77 mb/d, 1.76 mb/d, 1.76 mb/d, and 1.75 mb/d, respectively.

*Ghana's Jubilee is expected to startup in Dec 2010*

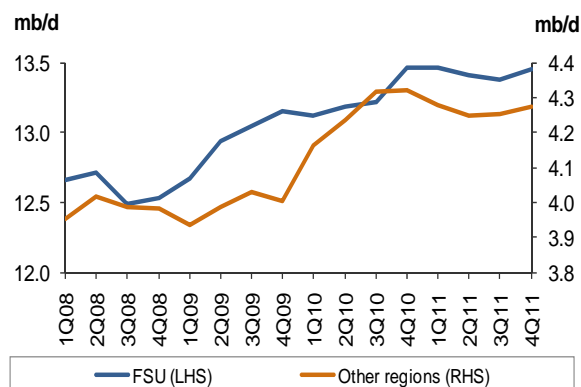
In Ghana, the operator is testing the Jubilee FPSO ahead of the expected startup in Dec 2010, the field is estimated to have an initial output of 60 tb/d that will increase to 0.12 mb/d as new well are drilled and tied. Historical revisions were introduced to Cameroon that goes back to 2008 and negatively affected the supply forecast, however, the annual decline figure remained unchanged from previous month's assessment. Third quarter production data showed that Cameroon oil supply continue the downward trend on mature area decline. **Africa** oil production is expected to decline by 20 tb/d in 2010 to average 2.59 mb/d, indicating a downward revision of 20 tb/d from last *MOMR*. On a quarterly basis, Africa oil supply is seen to stand at 2.61 mb/d, 2.58 mb/d, 2.59 mb/d, and 2.59 mb/d, respectively.

### FSU, Other Regions

*FSU supply to increase by 0.29 mb/d in 2010 to average 13.25 mb/d*

**FSU** total oil supply is projected to increase by 0.29 mb/d in 2010 to average 13.25 mb/d, indicating an upward revision of 30 tb/d compared to previous *MOMR*. The upward revision came mainly from Russia as updated production data required an upward revision. Russia, Kazakhstan, and Azerbaijan remain as the major drivers of growth in the FSU, where the output increase went through a gradual rise. On a quarterly basis, total FSU oil supply is estimated to average 13.12 mb/d, 13.18 mb/d, 13.21 mb/d, and 13.46 mb/d, respectively. China oil production is seen to increase by 0.27 mb/d in 2010 to average 4.12 mb/d. Other Europe group supply is estimated to remain flat from 2009 and average 0.14 mb/d in 2010.

Graph 5.4: FSU and other region's quarterly production



### Russia

*Russia oil production to increase by 0.21 mb/d in 2010 to average 10.13 mb/d*

Russia oil production in November was slightly shy of the record high achieved in October, down by only 0.01 according to the preliminary data. November oil supply figure suggest that Russia oil supply can maintain the new high level of around 10.30 mb/d. Accordingly, an upward revision was experienced during the fourth quarter to adjust to new level. **Russia oil supply** is forecast to increase by 0.21 mb/d in 2010 to average 10.13 mb/d, an upward revision of 0.03 mb/d compared to previous *MOMR*. December oil production level might bring another upward revision to the Russia oil supply in 2010, if output remains within the level of October and November. The startup of the small Sokolovskoe field supported the upward revision. The largely unexpected level growth so far this year in Russia oil supply was backed partially by the Vankor oil project. The increased of Vankor oil production was supported by the tax break. The field was fully exempt in the first half of 2010. Since then, one third of the duty was applied on the exports of the field which was extended to May 2011, after that export is expected to pay the full duty value. On a quarterly basis, Russian oil supply is expected to average 10.09 mb/d, 10.12 mb/d, 10.13 mb/d, and 10.18 mb/d, respectively. Russia oil production averaged 10.26 mb/d in November.

### Caspian

*Karachaganak supply returned from maintenance*

Kazakhstan oil production is expected to increase during the fourth quarter as the Karachaganak field returned from maintenance. The field output average 0.10 mb/d in September, a decline of 0.15 mb/d from the normal level on the back of maintenance work. **Kazakhstan** oil output is seen to increase by 0.06 mb/d in 2010 to average 1.60 mb/d, unchanged from previous *MOMR*. Fourth quarter oil production is expected to increase by 0.09 mb/d, compared to the third quarter, supported by the return from maintenance of the Tengiz and Karachaganak fields. On a quarterly basis, Kazakhstan oil supply is seen to average 1.61 mb/d, 1.56 mb/d, 1.57 mb/d, and 1.66 mb/d, respectively.

*Azeri supply to increase by 80 tb/d in the fourth quarter*

Azerbaijan oil production is expected to increase by 0.08 mb/d during the fourth quarter compared to the third as output return from maintenance. **Azerbaijan** oil supply is expected to grow by 0.04 mb/d in 2010 to average 1.10 mb/d, unchanged from previous month's assessment. On a quarterly basis, Azerbaijan oil supply is estimated to average 1.01 mb/d, 1.09 mb/d, 1.10 mb/d, and 1.18 mb/d, respectively.

*China output to increase by 0.27 mb/d in 2010 to average 4.12 mb/d*

### China

China have been successful during the first ten months of 2010 to slow down the decline rate for its most mature fields such as the Daqing, where the production loss averaged less than 0.5% compared to 3.5% in previous years. The supply increase from China was driven by operators other than the major two producers as new offshore development supported the growth in 2010. **China** oil supply is forecast to increase by 0.27 mb/d in 2010 to average 4.12 mb/d, representing an upward revision of 30 tb/d compared to last *MOMR*. The growth is only second to the US among all non-OPEC countries. A revision was introduced to the fourth quarter to adjust to new production data for October and that level is expected to continue throughout the fourth quarter. On a quarterly basis, China oil supply is estimated to stand at 4.03 mb/d, 4.10 mb/d, 4.18 mb/d, and 4.18 mb/d, respectively.

*Non-OPEC supply to grow by 0.41 mb/d in 2011 to average 52.62 mb/d*

### Forecast for 2011

**Non-OPEC oil supply is forecast to grow by 0.41 mb/d in 2011 to average 52.62 mb/d. This represents an upward revision of 50 tb/d to the growth figure and an upward adjustment of 100 tb/d to the total level.** There were various upward and downward revision to the 2011 supply forecast compared to previous assessment. Additionally, some upward revisions were partially coming from historical changes in 2008 as well as revisions to 2010. Non-OPEC supply is expected to decline in the second and third quarter of 2011 on maintenance and then rebound in the fourth quarter. The growth is expected to come mainly from Brazil, Ghana, Canada, Azerbaijan, Kazakhstan, and Colombia, while Norway, UK, and Mexico oil supply seen to decline. The risk and uncertainties associated with the supply forecast remains high especially for Russia, US, China, Brazil, Canada, Norway, UK, and Mexico. On a quarterly basis, non-OPEC supply is expected to average 52.64 mb/d, 52.46 mb/d, 52.39 mb/d, and 52.99 mb/d, respectively.

**Table 5.2: Non-OPEC oil supply in 2011, mb/d**

	2010	1Q11	2Q11	3Q11	4Q11	2011	Change 11/10
North America	14.84	14.84	14.87	14.81	14.94	14.87	0.03
Western Europe	4.40	4.41	4.18	4.06	4.24	4.22	-0.18
OECD Pacific	0.61	0.64	0.64	0.64	0.63	0.64	0.02
<b>Total OECD</b>	<b>19.86</b>	<b>19.89</b>	<b>19.70</b>	<b>19.51</b>	<b>19.81</b>	<b>19.73</b>	<b>-0.13</b>
Other Asia	3.69	3.69	3.68	3.72	3.73	3.70	0.02
Latin America	4.73	4.88	4.92	5.01	5.12	4.98	0.25
Middle East	1.76	1.76	1.77	1.77	1.79	1.78	0.01
Africa	2.59	2.60	2.64	2.67	2.74	2.66	0.07
<b>Total DCs</b>	<b>12.77</b>	<b>12.93</b>	<b>13.01</b>	<b>13.17</b>	<b>13.38</b>	<b>13.12</b>	<b>0.35</b>
FSU	13.25	13.46	13.42	13.38	13.46	13.43	0.18
Other Europe	0.14	0.13	0.13	0.13	0.14	0.13	0.00
China	4.12	4.15	4.12	4.12	4.14	4.13	0.01
<b>Total "Other regions"</b>	<b>17.51</b>	<b>17.74</b>	<b>17.67</b>	<b>17.64</b>	<b>17.73</b>	<b>17.69</b>	<b>0.19</b>
<b>Total Non-OPEC production</b>	<b>50.14</b>	<b>50.56</b>	<b>50.38</b>	<b>50.32</b>	<b>50.92</b>	<b>50.54</b>	<b>0.41</b>
Processing gains	2.08	2.08	2.08	2.08	2.08	2.08	0.00
<b>Total Non-OPEC supply</b>	<b>52.21</b>	<b>52.64</b>	<b>52.46</b>	<b>52.39</b>	<b>52.99</b>	<b>52.62</b>	<b>0.41</b>
Previous estimate	52.16	52.39	52.29	52.41	53.00	52.52	0.36
Revision	0.05	0.25	0.17	-0.01	0.00	0.10	0.05

## Revisions to the 2011 forecast

There were many upward and downward revisions to the non-OPEC supply forecast in 2011 from the the previous *MOMR*. Various revisions came as a result of historical adjustments between 2008 and 2010. However, the main revisions that altered the supply growth forecast for 2011 were made to Russia's and China's output projections. Russia oil production is expected to increase by 20 tb/d in 2011 to average 10.15 mb/d, an upward revision of 70 tb/d compared to the previous forecast. The upward revision came as production data in November approached the record high achieved in October indicating the sustainability of such strong production levels. The same situation was applied to China, where output is forecast to increase by 10 tb/d in 2011 to average 4.13 mb/d, indicating an upward revision of 70 tb/d compared to previous forecast.

## OPEC natural gas liquids and non-conventional oils

**OPEC NGLs** and non-conventional oils are expected to increase by 0.44 mb/d in 2010 to average 4.79 mb/d. In 2011, OPEC NGLs and nonconventional oils are forecast to grow by 0.45 mb/d over the current year to average 5.24 mb/d.

Table 5.3: OPEC NGLs + non-conventional oils, 2008-2011

	2008	2009	Change					2010	Change		2011	Change
			09/08	1Q10	2Q10	3Q10	4Q10		10/09		11/10	
<b>Total OPEC</b>	<b>4.14</b>	<b>4.35</b>	0.21	4.60	4.77	4.81	4.98	<b>4.79</b>	0.44	<b>5.25</b>		0.46

## OPEC crude oil production

Total OPEC crude oil production decreased slightly by 43 tb/d in November compared to the previous month to average 29.20 mb/d, according to secondary sources. Crude oil output experienced an increase of more than 20 tb/d in Algeria, Iran, Libya, and Saudi Arabia, while crude production from Angola, Nigeria, UAE, and Venezuela decreased by more than 20 tb/d in November compared to the previous month. OPEC crude production, not including Iraq, stood at 26.83 mb/d in November, a decline of 29 tb/d from the previous month.

Table 5.4: OPEC crude oil production based on secondary sources, 1,000 b/d

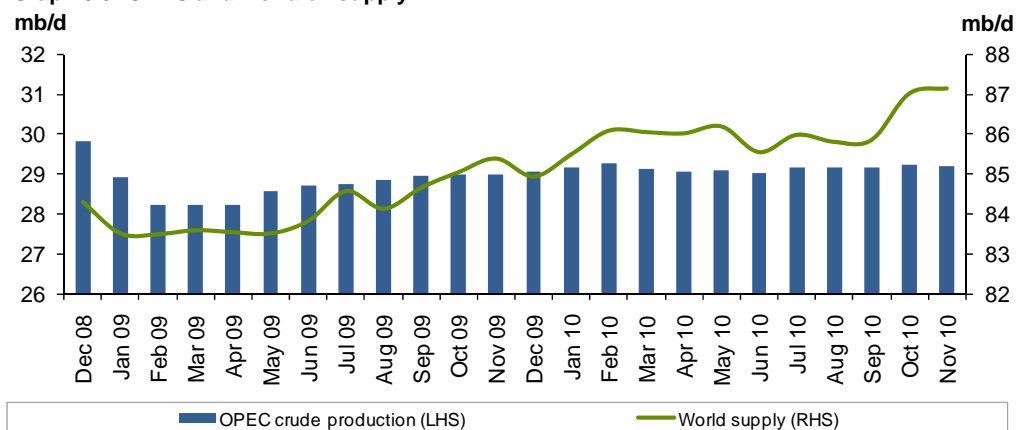
	2009	4Q09	1Q10	2Q10	3Q10	Sep 10	Oct 10	Nov 10	Nov/Oct
Algeria	1,270	1,270	1,271	1,270	1,269	1,270	1,266	1,287	20.8
Angola	1,786	1,873	1,912	1,850	1,749	1,694	1,744	1,707	-37.7
Ecuador	477	474	474	471	474	471	470	461	-9.7
Iran, I.R.	3,725	3,728	3,743	3,730	3,694	3,670	3,678	3,720	42.5
Iraq	2,422	2,459	2,463	2,361	2,357	2,414	2,384	2,370	-13.7
Kuwait	2,263	2,275	2,288	2,305	2,313	2,313	2,319	2,307	-12.2
Libya, S.P.A.J.	1,557	1,540	1,543	1,561	1,567	1,564	1,563	1,600	36.7
Nigeria	1,812	1,942	1,987	1,971	2,115	2,145	2,206	2,143	-62.3
Qatar	781	795	803	801	805	808	811	823	12.5
Saudi Arabia	8,055	8,122	8,127	8,126	8,222	8,227	8,196	8,240	44.5
UAE	2,256	2,258	2,280	2,309	2,318	2,314	2,325	2,293	-31.7
Venezuela	2,309	2,284	2,291	2,294	2,285	2,271	2,283	2,250	-32.8
<b>Total OPEC</b>	<b>28,712</b>	<b>29,019</b>	<b>29,181</b>	<b>29,050</b>	<b>29,166</b>	<b>29,163</b>	<b>29,244</b>	<b>29,201</b>	<b>-43.0</b>
<b>OPEC excl. Iraq</b>	<b>26,290</b>	<b>26,560</b>	<b>26,719</b>	<b>26,689</b>	<b>26,810</b>	<b>26,749</b>	<b>26,860</b>	<b>26,831</b>	<b>-29.3</b>

Totals may not add due to independent rounding

## World Oil Supply

Preliminary data indicates that global oil supply increased 0.13 mb/d in November to average 87.16 mb/d. Non-OPEC supply experienced growth of 0.18 mb/d, while OPEC crude oil production decreased by 43 tb/d. The share of OPEC crude oil in global supply remained unchanged at 34% in November. The estimate is based on preliminary data for non-OPEC supply, estimates for OPEC NGL and OPEC crude oil production from secondary sources.

*OPEC crude oil production averaged 29.2 mb/d in November*

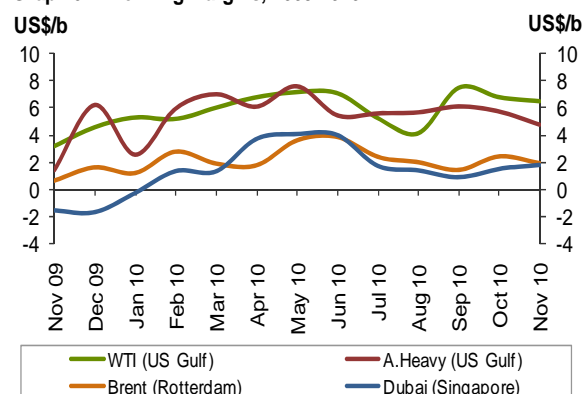
**Graph 5.5: OPEC and world oil supply**

# Product Markets and Refinery Operations

*Product markets lost the temporary reprieve as the European tightening ended*

The temporary product supply gap caused by the French strike has been closed and light distillate cracks have dropped back to previous levels. However, inventory draws, increased diesel demand from China and the impact of cold weather on middle distillate cracks have helped support product markets. Looking ahead, the approaching end of the refinery maintenance season and stronger distillate demand could encourage increasing runs in some areas, which could cause an imbalance in the market in favour of light distillates, pressuring refinery margins over the coming months.

Graph 6.1: Refining margins, 2009-2010



Refining margins for WTI crude oil at the US Gulf Coast kept part of the ground recovered during the last months. However, this was more a result of lower WTI prices due to a build in inventories in Cushing, Oklahoma rather than by product market sentiment. Margins have shown a slightly drop of less than 50¢/b to stand around \$6.50/b in November. In Europe, the refining industry lost the advantage from the tightened product supply situation generated by the strikes in France and more expensive crude caused the margin for Brent crude in Rotterdam to drop by 50¢/b.

Refining margins for Dubai crude oil in Singapore were supported by the gains in light and middle distillate cracks, due to higher naphtha demand from the petrochemical sector and the jump in the Chinese diesel demand. Refinery margins rose in November to stand around \$2/b.

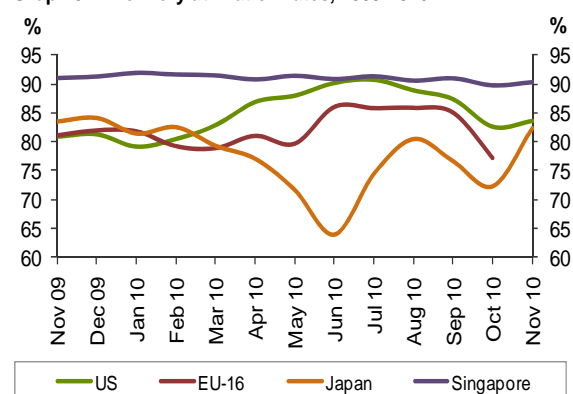
*Distillate demand drove refining margins*

## Refinery operations

American refiners have continued to keep refinery runs at moderate levels in an effort to protect margins. During the last months this supply restraint has allowed the gasoline and distillate stocks to continue dropping, thus allowing the stronger distillate demand to protect US refining margins.

European refiners are returning from maintenance, but are keeping moderated throughputs after the French strike, while Japanese runs hit a 9-month high of 83% and other Asian refiners, such as China and India, are on the rise to face the recent jump in distillate demand and run over 90%.

Graph 6.2: Refinery utilization rates, 2009-2010



Looking ahead, the strong demand in the middle distillates sector and the colder weather forecast for this winter could encourage refiners to raise throughputs significantly during the coming months, which could lead to an unbalanced market mainly with higher gasoline supply, which is expected to once again pressure the market.



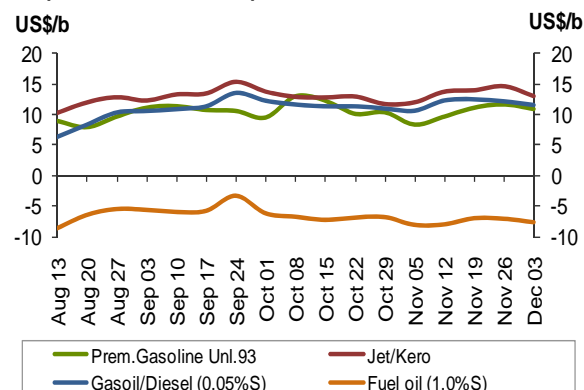
*Weak gasoline market lost the short respite from Europe last month*

### US market

**According to the EIA, US gasoline demand kept falling to reach a level of around 9 mb/d, representing a six-month low.**

With the end of the French refinery strike, open arbitrage to Europe and weak regional demand have resulted in a more than \$2/b drop in gasoline cracks, starting in November. In addition, export opportunities to South America were limited by the restarting of the 104 tb/d Amuay Refinery FCC unit.

Graph 6.3: US Gulf crack spread vs. WTI, 2010



Gasoline losses were counteracted by some support coming from the continuous reduction in inventories and from the temporary supply shortage due to regional refinery shutdowns.

The lack of supply from Europe and an internal arbitrage from the US Gulf Coast to the Midcontinent allowed a small but insufficient recovery in the gasoline crack until the Citgo Lemont and Marathon refineries restarted operations late November.

**These developments caused the gasoline crack spread in the US Gulf Coast to lose the recovery shown last month and drop to \$10.30/b on average in November from the \$11.10/b seen in October.**

Middle distillate demand kept increasing in the US to 4.09 mb/d in November versus 3.96 mb/d in October, a high for the year and 491 tb/d higher than the y-o-y average.

Stronger domestic diesel demand for the industrial sector and healthy heating oil demand ahead of the winter season as well as additional export opportunities to Latin America – mainly to Colombia – kept sentiment positive in the distillates market. Additional support came from the supply side due to moderated refinery runs, thus continuing the decreasing trend for distillate stocks.

The gasoil crack at the US Gulf Coast has gained ground over the last months to average \$11.90/b in November, an increase of 50¢/b over the October average.

Following these developments, on Nymex, heating oil managed money traders kept net long positions over 50,000 lots in November.

Low market activity for high sulphur fuel oil as limited arbitrage from the US Gulf Coast to Asia and pressured margins, despite some export opportunities to Latin America. The fuel oil crack lost \$1/b.

*Product market sentiment turned bearish in Europe*

### European market

The positive momentum created by the supply gap ceased after the end of the French refinery and port strike, and light distillates, which had received the most support from the strike, dropped back to the previous month's crack levels.

Additional losses came from the demand side as export opportunities to West Africa tightened – unloading delays in the port of Lagos limited the level of exports to this region – and reduced gasoline imports from the US, which could not be offset by some export opportunities to the Mideast Gulf, caused a \$1/b fall in the weak gasoline crack margins. The gasoline crack spread against Brent crude oil at Rotterdam dropped to an average of \$11.80/b in November from \$12.70/b in October.

European naphtha markets remained healthy due to higher runs in the naphtha cracks driven by a stronger petrochemical sector and higher demand from Asia.

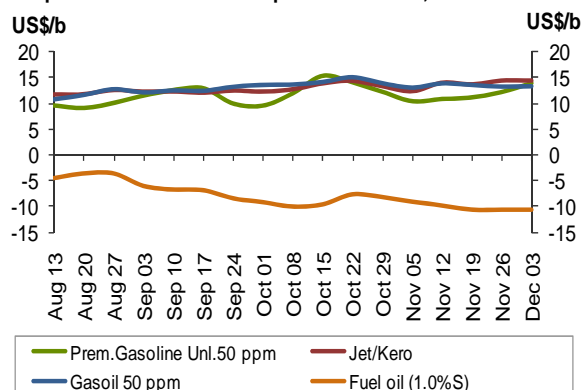
Middle distillate demand has been capped by weaker-than-expected diesel and heating oil demand during November, which, along with the higher inflows coming from the US, have led middle distillate cracks in Europe to move back to the level before the French strike.

**The gasoil crack spread against Brent crude at Rotterdam lost \$1/b to return to around \$13/b in November, from an average of \$14/b in October. Expectations of lower temperatures during the winter and arbitrage to Asia can restore the positive momentum to the European gasoil market.**

The European fuel oil market continued losing ground during last month by limited arbitrage opportunities and an oversupply situation due to higher Russian exports.

The low sulfur fuel oil the crack spread against Brent dropped sharply from minus \$9/b in October to minus \$10.2/b in November, the lowest value for six months.

Graph 6.4: Rotterdam crack spreads vs. Brent, 2010



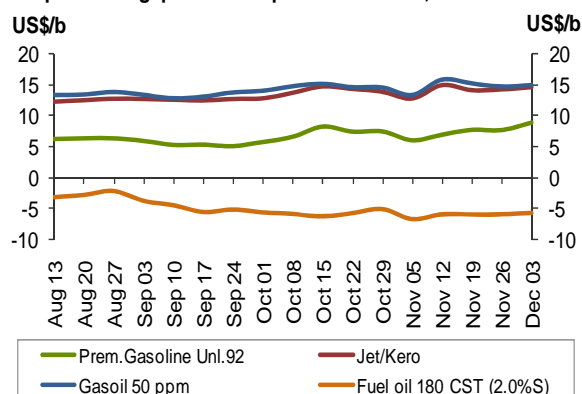
### Asian market

*Peak diesel demand in China supported margins in the region*

Asian naphtha market sentiment has kept ground gained due to very healthy regional demand – mainly from China – and crackers are running at full capacity with improved margins in the petrochemical sector.

In the beginning of November, the Asian gasoline market lost part of the momentum created during October; however, it recovered ground with stronger regional demand, mainly from Vietnam and Indonesia. Additional support came from the supply side, because of some refineries running at maximum gasoil mode.

Graph 6.5: Singapore crack spreads vs. Dubai, 2010



**The gasoline crack spread against Dubai crude oil in Singapore increased from \$7.2/b in October up to \$7.5/b average value in November. With the end of the maintenance season in Asia and higher runs in refineries, the gasoline market will return to the bearish side.**

Middle distillates cracks remained supported by the requirement for regional heating oil and the jump in the Chinese diesel demand.

According to its Five-Year Plan, Beijing aims to reduce energy consumption by 20% per unit of GDP compared to 2005 levels, and in this effort has led coal power stations to lower utilization, creating a power rationing situation, which has forced large consumers in the industrial sector to turn to diesel-generator plants. This subsequent uptick in demand has led to diesel shortages in many major cities and has caused the Chinese oil sector to start to import diesel again.

The gasoil crack spread in Singapore against Dubai kept the ground gained and reached \$15.8/b in mid-November, the highest level in six months and has maintained a high level of around \$15/b in the last weeks of this month. It is expected that support will continue to come from the agriculture and fishing sectors with additional demand from the power generation sector since last month.

The Asian fuel oil market was supported by higher Chinese demand and lower-than-expected Western arbitrage inflows, which offset the oversupplied market and avoided further decline in the cracks.

Following these developments, the high sulfur fuel oil crack spread in Singapore against Dubai remained flat from last month at an average of around minus \$6/b. Higher refinery runs in Asia could pressure fuel oil market sentiment in the region.

**Table 6.1: Refined product prices, US\$/b**

		<b>Sep 10</b>	<b>Oct 10</b>	<b>Nov 10</b>	<b>Change Nov/Oct</b>
<b>US Gulf (Cargoes):</b>					
Naphtha		80.89	86.39	88.87	2.47
Premium gasoline	(unleaded 93)	85.64	93.35	94.33	0.98
Regular gasoline	(unleaded 87)	82.98	87.79	89.46	1.66
Jet/Kerosene		88.86	94.49	97.56	3.07
Gasoil	(0.05% S)	87.05	93.36	96.03	2.67
Fuel oil	(1.0% S)	69.80	74.91	76.47	1.56
Fuel oil	(3.0% S)	67.12	71.51	72.31	0.80
<b>Rotterdam (Barges FoB):</b>					
Naphtha		75.12	83.47	86.37	2.91
Premium gasoline	(unleaded 10 ppm)	89.26	96.08	96.83	0.75
Premium gasoline	(unleaded 95)	86.77	93.41	94.14	0.73
Jet/Kerosene		90.19	96.35	99.07	2.72
Gasoil/Diesel	(10 ppm)	90.47	96.88	98.67	1.79
Fuel oil	(1.0% S)	70.23	73.78	75.18	1.40
Fuel oil	(3.5% S)	67.81	71.94	74.09	2.15
<b>Mediterranean</b>					
Naphtha		73.69	81.71	84.35	2.64
Premium gasoline	(50 ppm)	90.86	97.81	99.91	2.10
Jet/Kerosene		88.41	94.45	96.79	2.34
Gasoil/Diesel	(50 ppm)	90.47	96.65	97.50	0.86
Fuel oil	(1.0% S)	70.21	72.92	74.36	1.45
Fuel oil	(3.5% S)	66.78	71.75	72.38	0.64
<b>Singapore (Cargoes):</b>					
Naphtha		74.52	82.97	87.26	4.29
Premium gasoline	(unleaded 95)	82.55	89.71	93.21	3.51
Regular gasoline	(unleaded 92)	80.58	87.66	91.15	3.49
Jet/Kerosene		87.81	94.30	97.87	3.58
Gasoil/Diesel	(50 ppm)	88.53	94.97	98.59	3.63
Fuel oil	(180 cst 2.0% S)	70.07	74.42	77.67	3.25
Fuel oil	(380 cst 3.5% S)	68.92	73.05	75.85	2.80

**Table 6.2: Refinery operations in selected OECD countries**

	Refinery throughput			Refinery utilization		
	mb/d			%		
	<u>Oct 10</u>	<u>Nov 10</u>	<u>Nov/Oct</u>	<u>Oct 10</u>	<u>Nov 10</u>	<u>Nov/Oct</u>
<b>USA</b>	14.02	14.18	0.17	82.6	83.6	1.03
<b>France</b>	0.62	1.34	0.72	38.0	74.1	36.10
<b>Germany</b>	1.94	2.00	0.06	83.6	86.0	2.38
<b>Italy</b>	1.67	1.73	0.06	78.5	81.0	2.54
<b>UK</b>	1.40	1.39	-0.01	78.7	78.1	-0.60
<b>Euro16</b>	10.11	11.18	1.07	82.0	85.0	3.00
<b>Japan</b>	3.36	3.77	0.41	72.2	82.3	10.10

Sources: OPEC statistics; Argus; Euroilstock Inventory Report; IEA; EIA/DoE; METI; PAJ

# Tanker Market

*OPEC spot fixtures rose in November on increased tonnage demand*

According to preliminary data, OPEC spot fixtures increased in November to reach 18.8 mb/d. The rise of around 5% in November compared with the previous month was supported by winter season demand. The level of OPEC spot fixtures indicated an annual increase of more than 18% on the back of increased output. Global spot fixtures experienced a similar trend and increased in November by around 5.5% compared to a month earlier. Middle East spot fixtures increased in November for both west- and eastbound voyages. Eastbound fixtures increased by around 4% in November while westbound fixtures rose 7%. Winter demand was one of the main reasons for the increase in Westbound spot fixtures in November. On an annual basis, Middle East to West spot fixtures increased 56% in November.

OPEC sailings remained nearly steady in November according to preliminary data compared to a month earlier, which was partially in line with production levels. Middle East sailings indicated an increase of 2% in November. However, sailings are expected to increase in the coming month as chartering activities indicated healthy growth which influenced freight rates in November. Initial estimates show that the US and West Asia arrivals decreased 1% and 0.6% in November, while Northwest Europe and West Asia rose slightly by 1% and 2%.

**Table 7.1: Tanker chartering, sailings and arrivals, mb/d**

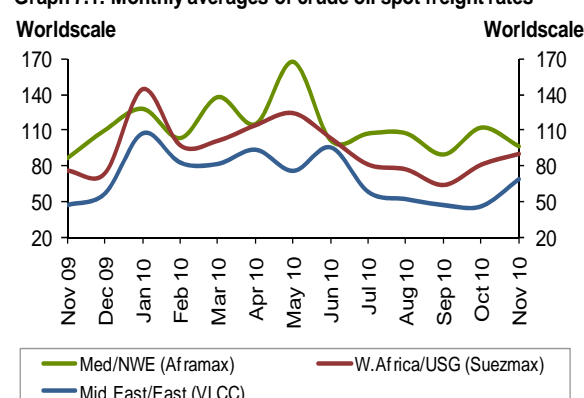
	Sep 10	Oct 10	Nov 10	Change Nov/Oct
<b>Spot Chartering</b>				
All areas	16.79	17.93	18.80	0.87
OPEC	11.82	12.62	13.30	0.68
Middle East/East	4.75	5.93	6.17	0.24
Middle East/West	1.54	1.17	1.25	0.08
Outside Middle East	5.53	5.52	5.88	0.36
<b>Sailings</b>				
OPEC	23.20	23.07	23.35	0.28
Middle East	17.11	16.99	17.26	0.27
<b>Arrivals</b>				
North America	9.60	8.57	8.46	-0.11
Europe	11.41	12.38	12.39	0.01
Far East	8.18	8.00	8.16	0.16
West Asia	4.78	4.79	4.76	-0.03

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

*Crude oil spot freight rates increased on higher tonnage demand*

After several months of bearish momentum, spot freight rates rebounded in November 2010 across all tanker sectors. Dirty tanker spot freight rates registered high gains with the VLCC average freight rate increasing by 36%, 12% for Suezmax and 2% for Aframax, compared to the previous month. In the clean segment, the gains were more modest with east of Suez spot freight rates increasing 9% compared to the previous month and west of Suez rates edging up by 7%.

**Graph 7.1: Monthly averages of crude oil spot freight rates**



Crude oil spot freight rates rebounded in November 2010. Gains in VLCC spot freight rates in November 2010 came from high activities on all VLCC's routes. Spot freight rates on the Middle East to East route registered a healthy gain of 50% compared to the previous month, the highest since January 2010. The increase was supported by stronger tonnage demand for lifting from the Middle East to South Korea, Thailand, China, Japan, and India.

On the westbound route, VLCC freight rates exhibited a healthy increase of 32% compared to the previous month on the back of increased activity in the first decade of December. Winter demand in the western hemisphere drove activity levels higher and influenced spot freight rates, in addition to the support from the eastbound freight rate increase.

VLCCs spot freight rates for the long-haul route from West Africa to the East rose 27% in November compared to a month earlier. The enhanced market momentum in the previous routes as well as demand for VLCCs from South America for deliveries to China and India supported spot freight rates. During the second half of the month, activity in the VLCC West Africa to East route increased sharply, as some owners opted to move their vessels from West Africa to the other side of the Atlantic to capitalize on the lucrative deliveries from South America to China. However, improved VLCC rates in West Africa prompted some owners to relocate their VLCCs from the Middle East, a move that had pressured spot freight rates and limited gains.

The upward market momentum across all VLCC routes was further supported by the expectation of more cargo loadings in December. However, the decline of oil being stored in floating storage since June, increased tonnage availability and limited the spot freight rate increase.

In November, Suezmax spot freight rates increased 12% compared to a month earlier. For the West Africa to West route, Suezmax spot freight rates gained 11% compared to the previous month. This increase was mainly supported by the spillover effect from the VLCC market. Additionally, Indian tenders further improved tonnage demand, especially for Suezmax. The production disruption in West Africa further supported Suezmax spot freight rates as some owners insisted on higher rates. On the Northwest Europe to US route, Suezmax spot freight rates increased by 12% compared to a month earlier. The increase in activities, on the back of production returning from maintenance in the North Sea as well as the preparation for the winter season, supported the rates. Additionally, Turkish straits delays with total transit time mounting to more than 20 days in from black sea to Mediterranean, further supported rates.

The development of the Aframax spot freight rates was mixed in November as spot freight rates experienced increases and decreases on different routes. In East of Suez, Aframax spot freight rates increased by 9% compared to the previous month, partially on the back of winter demand in Japan. West of Suez Aframax spot freight rates increased by 7% compared to the previous month. However, while Caribbean spot freight rates increased by 32% supported by replacement business, the Mediterranean Aframax spot freight rates dropped by 20% for Northwest Europe and 14% for the Mediterranean due to tonnage oversupply in the area as the end of the French strike released some tonnage as well as the rush of owners to relocate their units to the Mediterranean to take advantage of the demurrage created by Turkish strait delays.

**Table 7.2: Spot tanker crude freight rates, Worldscale**

<b>Crude</b>	<b>Size 1,000 DWT</b>	<b>Sep 10</b>	<b>Oct 10</b>	<b>Nov 10</b>	<b>Change Nov/Oct</b>
Middle East/East	230-280	47	46	69	23
Middle East/West	270-285	36	34	45	11
West Africa/East	260	53	52	66	14
West Africa/US Gulf Coast	130-135	64	81	90	9
NW Europe/USEC-USGC	130-135	61	75	84	9
Indonesia/US West Coast	80-85	93	90	105	15
Caribbean/US East Coast	80-85	103	96	127	31
Mediterranean/Mediterranean	80-85	87	117	94	-23
Mediterranean/North-West Europe	80-85	89	112	96	-16

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

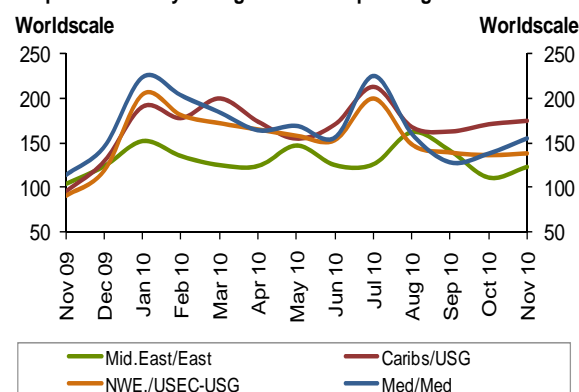


*Clean spot freight rates rose in November, supported by increased activities*

Clean spot freight rates rose on all selected routes in November, supported by winter demand.

Clean East of Suez spot freight rate gained 9%, outpacing the gain seen in West of Suez of 7%. Clean tanker spot freight rates from the Middle East to the East experienced an increase of 8% compared to the previous month. The increase was driven partially by the movement of jet fuel and gasoline to China, which absorbed tonnage from market. Stronger gasoline and fuel demand in Japan and Vietnam as well as improved naphtha trade in the region were all factors supporting the increase in clean spot freight rates.

**Graph 7.2: Monthly averages of clean spot freight rates**



The West of Suez clean tanker spot freight rates increased on all reported routes in November compared to the previous month. Clean spot freight rates in the Caribbean rose 2.3% while clean Northwest Europe to the US rates edged up by 1.5% compared to last month. The consecutive increase in spot freight rates on the Caribbean to US route was supported by Latin American demand for distillates as Colombia, Argentina and other Latin American countries tendered for middle distillate supplies. The modest gain in Northwest Europe to the US was supported by increased arbitrage in the US Gulf Coast to the Midcontinent which removed tonnage from the Transatlantic route.

In the Mediterranean, clean spot freight rates experienced a gradual increase throughout November, supported by delays in the Turkish Straits as well as some arbitrage cargos to Asia-Pacific. Clean spot freight rates for tankers moving between both sides of the Mediterranean rose 12% in November compared to the previous month, while clean spot freight rates for tankers moving from the Mediterranean to Northwest Europe gained 11.5%.

**Table 7.3: Spot tanker product freight rates, Worldscale**

Products	Size 1,000 DWT	Worldscale			Change Nov/Oct
		Sep 10	Oct 10	Nov 10	
Middle East/East	30-35	141	111	123	12
Singapore/East	30-35	137	127	136	9
Caribbean/US Gulf Coast	38-40	163	171	175	4
NW Europe/USEC-USGC	33-37	139	136	138	2
Mediterranean/Mediterranean	30-35	128	138	155	17
Mediterranean/North-West Europe	30-35	138	148	165	17

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

# Oil Trade

## US crude oil imports fell further in November

### USA

US crude oil imports dropped for the fourth consecutive month to average around 8.47 mb/d in November, according to preliminary weekly data. The drop of more than 230 tb/d from October is attributed to the fact that refiners tend to use more stored supplies to keep inventories low for year-end tax considerations. Another reason for decline in US crude oil imports comes from limited opportunities of arbitrage because of the weakness of WTI relative to crudes. Furthermore, increasing freight rates contributed to the drop in crude oil imports. At 8.47 mb/d, US crude oil imports were around 2.7% lower than in October and down 3.1% from a year earlier.

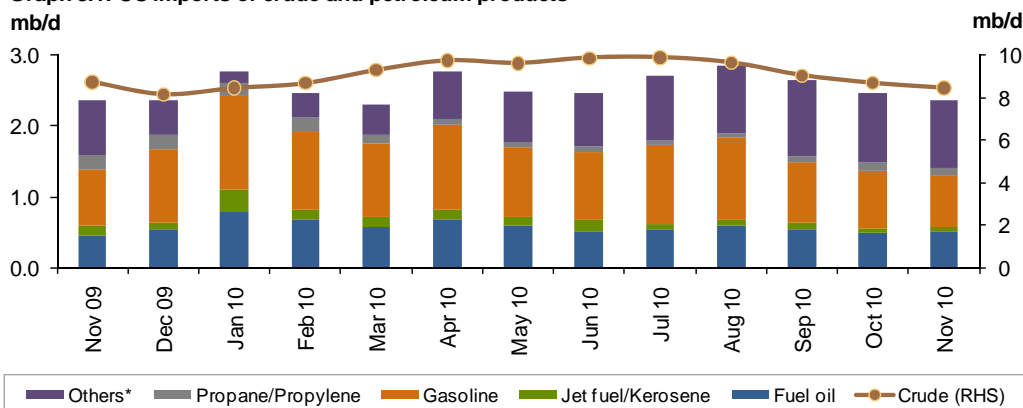
However, despite the drop over the last four months, US crude oil imports for the period January-November 2010 were 1.4% higher than in the same period of a year earlier. Stronger imports compared with a year earlier were driven by higher refinery throughput in 2010, which rose sharply, particularly since the second quarter. Higher crude oil imports and refinery throughput translated also into higher demand for products this year compared with last year.

On the products side, imports fell for the third month in a row to average around 2.37 mb/d, the lowest since last March. Again, the main reason for the drop of some 90 tb/d was for end-year tax purposes.

Almost 80% of the decline in US product imports comes from gasoline. It is worth noting that the drop in US gasoline imports rose sharply in November to reach almost 90 tb/d compared with a decline of 34 tb/d in October to explain the end-year tax effect on imports, particularly with a huge amount still in storage. Distillates and fuel oil imports rose by 11 tb/d, the same as jet fuel/kerosene.

In contrast to crude oil, so far this year product imports over the last 11 months were at around 2.59 mb/d, down 147 tb/d from the same period of last year. However, the fact that demand for products was growing while imports were declining explained the draw in inventories which remained at very high levels, showing a significant overhang.

**Graph 8.1: US imports of crude and petroleum products**



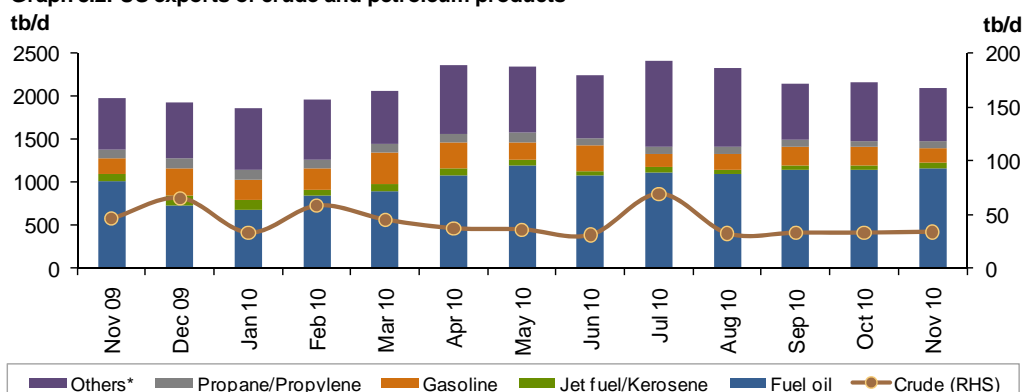
\*Others: Contains natural gas liquids, liquefied refinery gases (LRG's), other liquids and all finished petroleum products except gasoline, jet fuel/kerosene, fuel oil and propane/propylene

Exports of refined products edged down slightly to less than 2.1 mb in November. However, gasoline stocks fell some 32 tb/d or 16% to average 173 tb/d. The drop in gasoline stocks was attributed to the combinations of two factors: to compensate the decline in imports and the limited opportunities of exports to Europe compared to October when the strike in French refineries supported imports of products.

Consequently, US net crude imports dropped a further 235 tb/d in November to average 8.43 mb/d. The same decline applies when compared to a year earlier. Net product imports showed a drop of around 34 tb/d from October and more than 110 tb/d from a year ago to average 269 tb/d.

**As a result, total US net oil imports were 269 tb/d lower than in October 2010 and 374 tb/d down from October 2009.**

**Graph 8.2: US 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 official data, the US imported 4.75 mb/d of crude oil from OPEC Member Countries in September. That was 53 tb/d more than in August and accounted for 51.8% in total US crude oil imports of 9.17 mb/d for that month. It is worth recalling that US crude oil imports fell by around 320 tb/d in September with Russia accounting for almost the third of the decline and Mexico for nearly 20%.

Imports from Iraq surged by more than 50% to average 422 tb/d, slightly below the level of July and imports from Nigeria rose 17.5% to move back above 1 mb/d. Imports from Saudi Arabia remained stable at nearly 1.1 mb/d, making Saudi Arabia the fourth main supplier of the US with 11.8% after Canada (21.1%), Nigeria (12.1%), Mexico (11.8%).

**Table 8.1: US crude and product net imports, tb/d**

	Sep 10	Oct 10	Nov 10	Change Nov/Oct
Crude oil	9,107	8,667	8,433	-235
Total products	505	303	269	-34
<b>Total crude and products</b>	<b>9,612</b>	<b>8,970</b>	<b>8,702</b>	<b>-268</b>

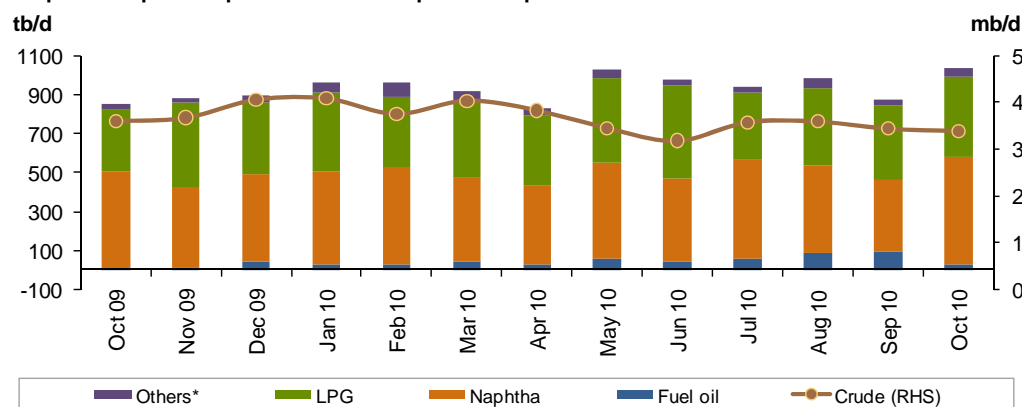
## Japan

Japan's crude oil imports fell slightly to 3.39 mb/d in October, down 52 tb/d or 1.5% from the previous month. However, compared to a year ago, the decline was significant, up to 210 tb/d or 5.8%. The decline of October was the second drop in a row and marked the first year-on-year decrease in four months.

Japan imported more than 0.9 mb/d from Saudi Arabia, which remained the main supplier with 26.7% followed by the UAE with 0.72 mb/d or 21.2% and Qatar with 0.35 mb/d or 10.5%. The main countries accounting for less than 10% are Kuwait with 9.3% and Iran and Russia with around 7.5% each.

Compared with a year ago, imports from the Middle East fell 9.5% to 2.92 mb/d. Russia saw its exports to Japan increase significantly in 2010. Japan imported more than 0.25 mb/d from Russia in October 2010 compared with less than 0.14 mb/d a year earlier. The rise in Russia's exports to Japan was reinforced by the export of ESPO pipeline. Japan received, for the first time, the equivalent of 55 tb/d of ESPO in last March, four months after the inauguration of the pipeline. Similarly, imports from Iraq almost doubled to nearly 0.19 mb/d.

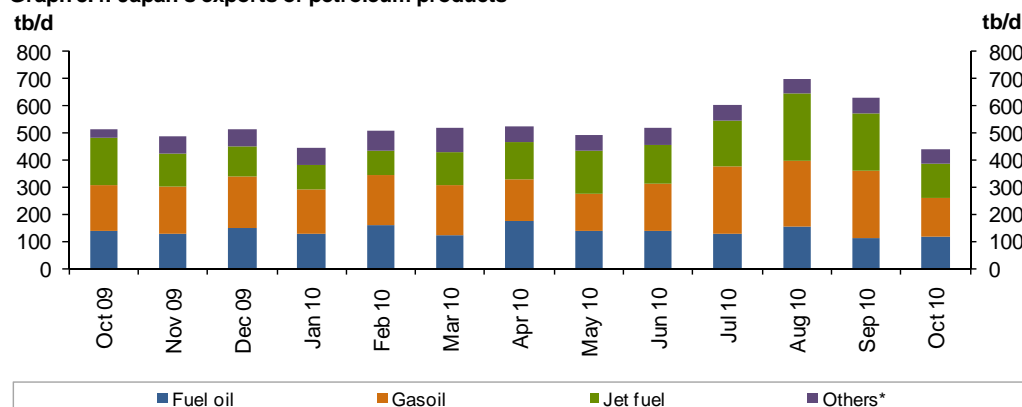
*While crude oil imports from the Middle East dropped almost 10%, Japan's imports from Russia rose more than 80% y-o-y in October*

**Graph 8.3: Japan's imports of crude and petroleum products**

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

For the period January-October 2010, Japan's crude oil imports remained almost stable at 3.63 mb/d compared with 3.61 mb/d a year earlier.

Contrary to crude oil, Japanese product imports, excluding LPG, jumped 128 tb/d or almost 26% in October to 622 tb/d, the highest since December 2007. The sharp increase in product imports was driven by naphtha which saw imports hit 553 tb/d, growth of 183 tb/d or 50% from September and 11.2% from a year ago. Naphtha imports were supported by growing demand for ethylene production in petrochemical units, particularly after Japanese refiner Idemitsu Kosan restarted a naphtha cracker at its Tokuyama plant in western Japan on schedule in the first week of October following planned maintenance which shut down the unit on 6 September. LPG imports rose 28 tb/d to 411 tb/d.

**Graph 8.4: Japan's exports of petroleum products**

\*Others: Contains LPG, gasoline, naphtha, kerosene, lubricating oil, asphalt and paraffin wax

Japan's product exports, excluding LPG, fell 68 tb/d or almost 10% in October to 437 tb/d, the second lowest level so far this year after the 436 tb/d of January. LPG exports remained marginal at less than 4 tb/d.

However, the balance shows Japan's total net oil imports, including LPG, recovered in October to 3.99 tb/d, up 294 tb/d from the previous month. Nevertheless, crude oil net imports were down 52 tb/d at 3.39 mb/d and products including LPG at 0.59 mb/d, up 346 tb/d.

**Table 8.2: Japan's crude and product net imports, tb/d**

	Aug 10	Sep 10	Oct 10	Change Oct/Sep
Crude oil	3,594	3,445	3,394	-52
Total products	284	247	592	346
<b>Total crude and products</b>	<b>3,878</b>	<b>3,692</b>	<b>3,986</b>	<b>294</b>

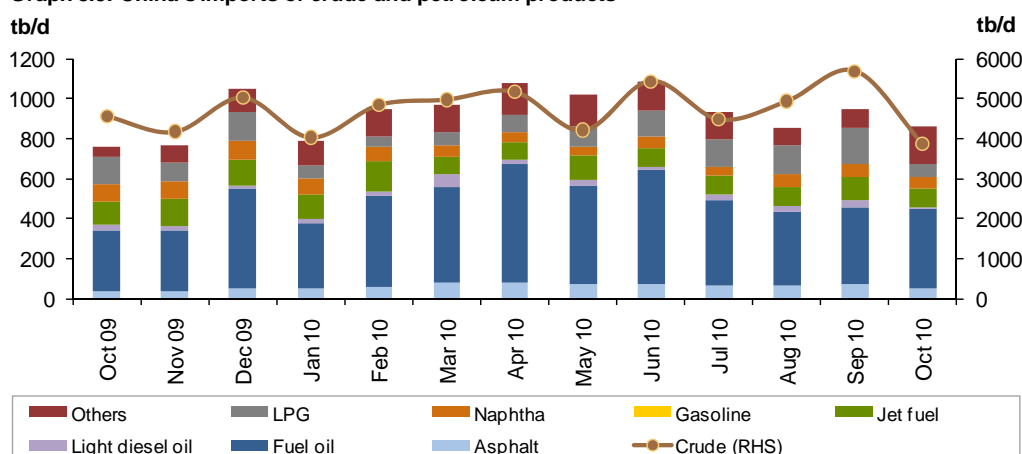
*China crude oil imports fell to a 19-month low in October*

## China

China's crude oil imports fell sharply from a record high of 5.69 mb/d in September to average 3.87 mb/d in October. The sharp decline of more than 1.8 mb/d or 32% from September came as a result of refiners already having huge levels of stocks and confirmed that most of the imported crude in September went to storage, misleading the picture of oil demand. Another reason for the decline in crude oil imports would be a cut in refinery throughputs in October. At 3.87 mb/d, Chinese crude oil imports were almost 0.7 mb/d or 15% down from a year ago. Crude oil exports also dropped in October to average 62,000 b/d compared with 96,000 b/d in September.

Chinese crude oil imports averaged more than 4.76 mb/d in the first ten months of 2010, almost 20% more than at the same period a year ago, to reflect growing refinery throughput, demand and increasing storage.

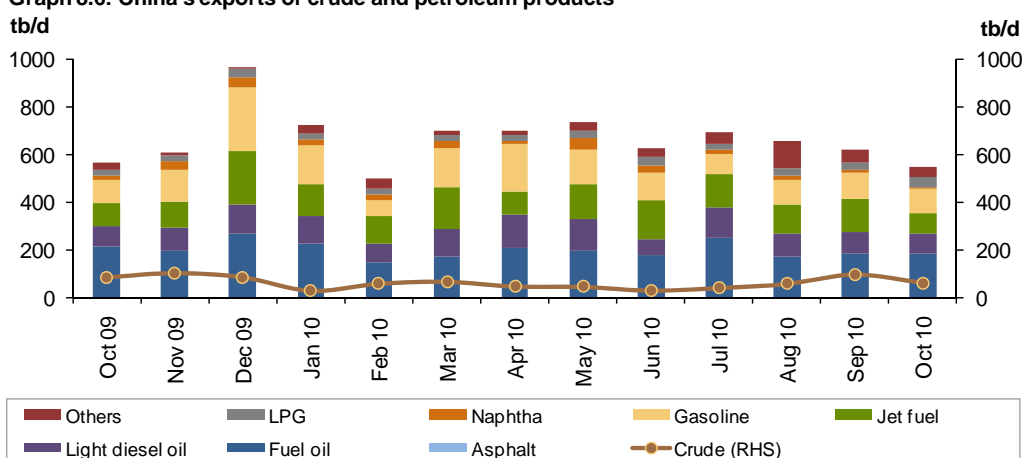
**Graph 8.5: China's imports of crude and petroleum products**



Saudi Arabia remained the largest supplier of crude oil to China in 2010 with almost 20% followed by Angola with 17% and Iran with 9%. However, while Angola saw its share gain 1.6 percentage points, Iran's share lost more than 3.5 percentage points in the first ten months of 2010.

On the product side, China imported 860 tb/d of petroleum products in October, 87 tb/d or 9.2% less than in September. Despite the decline, China's product imports remained almost 100 tb/d or 13% higher than a year earlier. Light diesel oil imports plunged by around 72% in October, jet fuel fell 15% and naphtha dropped by 10%.

**Graph 8.6: China's exports of crude and petroleum products**



Product exports fell for the third consecutive month to average 548 tb/d in October, down 72 tb/d or 12% from last September and down 20% from a year earlier. Gasoline and light diesel oil imports fell by 6% each, while jet fuel dropped by 40%. However, for the period January-October, China's product exports were some 100 tb/d or 18% higher than a year earlier.

The sharp decline of more than 1.8 mb/d in crude oil pushed China's net oil imports to 4.13 mb/d, the lowest since the 4.01 mb/d of last January. Compared to a year earlier, China's net oil imports were 12% less in October 2010. Nevertheless, if we consider the period January-October, China's net oil imports show year-on-year growth of 664 tb/d or more than 15% in 2010, reflecting growing demand in 2010 compared with 2009.

Table 8.3: China's crude and product net imports, tb/d

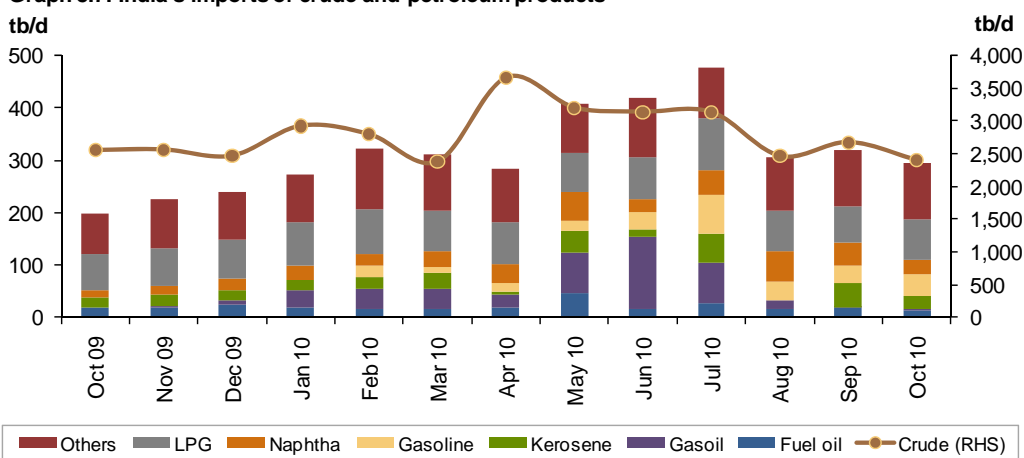
	Aug 10	Sep 10	Oct 10	Change Oct/Sep
Crude oil	4,884	5,594	3,813	-1781
Total products	203	327	312	-14
<b>Total crude and products</b>	<b>5,087</b>	<b>5,921</b>	<b>4,126</b>	<b>-1795</b>

## India

*India's crude oil imports fell due to refinery shutdowns*

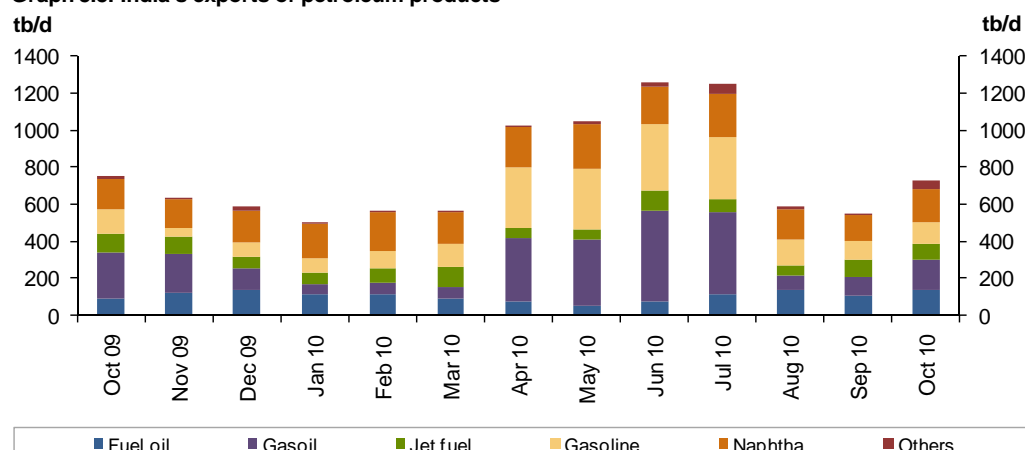
India's crude oil imports fell 275 tb/d or 10% in October to return to around 2.4 mb/d, the level of August. The decline in crude oil imports was attributed essentially to a move by Reliance Industries, which operates the largest refining complex in the world, to cut crude imports to 1.06 mb/d, down 11% from a month ago ahead of a partial shutdown of units at its 660,000 b/d plant at Jamnagar in the western Gujarat state for over three weeks, beginning end-October. However, compared to a year ago, the decline was more pronounced at more than 23%.

Graph 8.7: India's imports of crude and petroleum products



For the period January-October 2010, India's crude oil imports averaged 2.87mb/d compared with 2.68 mb/d a year earlier. The increase in crude oil imports reflects the growing demand from refiners to cover increasing demand for petroleum products and exports. Reliance Industries, the main refiner and exporter of products, increased its crude oil imports by almost 20% over the same period.



**Graph 8.8: India's exports of petroleum products**

Product imports also dropped in October to average less than 300 tb/d for the first time since last April, but were up 50% over year-ago levels.

Indian product exports, which fell in September to their lowest level of 548 tb/d since last January, recovered in October to 727 tb/d, up almost 180 tb/d. However, despite the one-third growth, product exports remained well below the nearly 1.26 mb/d of June-July. It is worth mentioning that, pushed by Reliance Industries, India's product exports rose beyond 1 mb/d for the first time in April 2010.

**As a result, India's oil trade showed total net crude oil and product imports fell almost 480 tb/d or 20% in October to move below 2 mb/d for the first time since October 2009.**

**Table 8.4: India's crude and product net imports, tb/d**

	<u>Aug 10</u>	<u>Sep 10</u>	<u>Oct 10</u>	<u>Change Oct/Sep</u>
Crude oil	2,461	2,673	2,398	-275
Total products	-286	-228	-431	-204
<b>Total crude and products</b>	<b>2,175</b>	<b>2,445</b>	<b>1,966</b>	<b>-479</b>

## FSU

*FSU crude oil exports rose 6% to 6.75 mb/d in October*

FSU crude exports recovered from their 22-month low of 6.36 mb/d in September to return to around 6.75 mb/d in October, almost the same level as a year earlier. Russian exports accounted for 63% of FSU crude oil exports in October.

For the year-to-end October, FSU exports stood at 6.73 mb/d, around 114 tb/d higher than a year earlier. The growth of 114 tb/d was taken by Russia which saw its crude oil exports increase by more than 150 tb/d over the same period.

Exports through the Russian pipeline gained almost 260 tb/d or 6.8% to average 4.05 mb/d and exports through other routes rose 124 tb/d or 4.8% to 2.69 mb/d.

The recovery in FSU crude oil exports was seen in Transneft exports, which took advantage of a significant decline in export duties and rose from 3.80 mb/d to 4.05 mb/d.

Transneft exports of the ESPO blend through the Taishet-Skovorodino pipeline increased further in October to hit the highest level of 356 tb/d since the start of exports through this pipeline. Russia's ESPO exports to the Far-East continued to benefit from lower duty rates. Exports through Druzhba pipeline exports edged lower, falling to 1.12 mb/d from 1.19 mb/d in September.

Exports from the Ukraine Pivdenne remained low, with just 0.02 mb/d last month in October. Reduced loadings were also monitored at Novorossiysk Transneft's overall Black Sea exports at 941 tb/d compared to more than 1 mb/d in the first quarter 2010. Exports from De-Kastri were also boosted by the start-up at the Odoptu field. Overall

exports from De-Kastri increased to 180 tb/d in October, from 14 tb/d in September and around just 5 tb/d during August.

Exports of Sakhalin Energy consortium crude Vityaz also rose from to 90 tb/d in September to 120 tb/d in October. CPC's export rose to 760 tb/d from 730 tb/d in September. The increase came after the completion of field maintenance in Kazakhstan and the growing output of the Kazakh grade Tengiz, which represents the basis of the CPC throughputs. BTC Blend exports also rose to a level of 820 tb/d from the previous level of 0.78 mb/d, which incorporates the increasing production from Azerbaijan's Azeri-Chirag-Guneshili block.

FSU product exports also recovered in October to average 2.75 mb/d, 79 tb/d or 3% from the previous month. However, within products the picture is mixed with gasoline and naphtha declining by 17% and 18% to 120 tb/d and 227 tb/d, respectively, while VGO exports jumped almost 27% to 289 tb/d.

**All in all, total FSU oil exports increased 461 tb/d or 5.1% in October to 9.5 mb/d, which corresponds to growth of 308 tb/d or 3.4% from a year ago.**

**Table 8.5: Recent FSU exports of crude and products by source, tb/d**

	<u>2008</u>	<u>2009</u>	<u>1Q10</u>	<u>2Q10</u>	<u>3Q10</u>	<u>Sep 10</u>	<u>Oct 10*</u>
<b>Crude</b>							
<b>Russian pipeline</b>							
Black Sea	1,248	1,201	1,027	976	1,038	842	941
Baltic	1,559	1,577	1,526	1,629	1,530	1,450	1,640
Druzhba	1,077	1,112	1,123	1,091	1,155	1,185	1,118
Kozmino	n.a.	n.a.	0	323	320	320	356
<b>Total</b>	<b>3,905</b>	<b>3,922</b>	<b>3,932</b>	<b>4,019</b>	<b>4,043</b>	<b>3,797</b>	<b>4,054</b>
<b>Other routes</b>							
Russian rail	283	280	364	324	331	282	251
Russian-Far East	220	283	293	296	204	233	296
Kazakh rail	17	18	18	18	6	0	0
Vadandey	20	155	163	167	150	142	138
Kaliningrad	0	0	21	22	24	16	30
CPC	675	736	736	732	755	732	776
BTC	648	805	679	809	812	779	816
Kenkiyak-Alashankou	121	157	205	200	205	208	202
Caspian	185	281	296	271	195	177	182
<b>Total crude exports</b>	<b>6,089</b>	<b>6,653</b>	<b>6,711</b>	<b>6,858</b>	<b>6,726</b>	<b>6,364</b>	<b>6,746</b>
<b>Products</b>							
Gasoline	210	229	215	155	127	145	120
Naphtha	217	273	273	270	289	278	227
Jet	37	52	27	31	23	17	8
Gasoil	810	949	976	892	822	743	867
Fuel oil	1,069	1,114	1,445	1,312	1,331	1,267	1,243
VGO	196	233	238	287	232	228	289
<b>Total</b>	<b>2,539</b>	<b>2,850</b>	<b>2,790</b>	<b>2,947</b>	<b>2,824</b>	<b>2,677</b>	<b>2,756</b>
<b>Total oil exports</b>	<b>8,628</b>	<b>9,503</b>	<b>9,493</b>	<b>9,805</b>	<b>9,542</b>	<b>9,041</b>	<b>9,502</b>

\* Preliminary

Totals may not add due to independent rounding

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

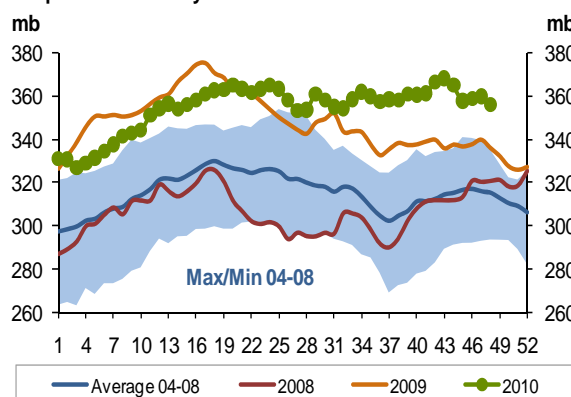
# Stock Movements

*US commercial stocks fell in November but remained at around 85 mb above the five-year average*

## USA

At the end of November, **US commercial inventories** declined substantially by 21.2 mb for the third consecutive month. This drop was divided between crude and products which declined by 8.5 mb and 12.8 mb respectively. With this drop, US commercial stocks stood at 1106.1 mb, which is the lowest level observed since June 2010. However, they still remained at comfortable levels, representing a surplus of 84.5 mb or 8.3% with the five-year average. It is worth noting that this is the first month that the deficit went below the cap of 100 mb for the last five months. When compared to the previous year, US commercial stocks stood at 18.3 mb or 1.7% above a year ago.

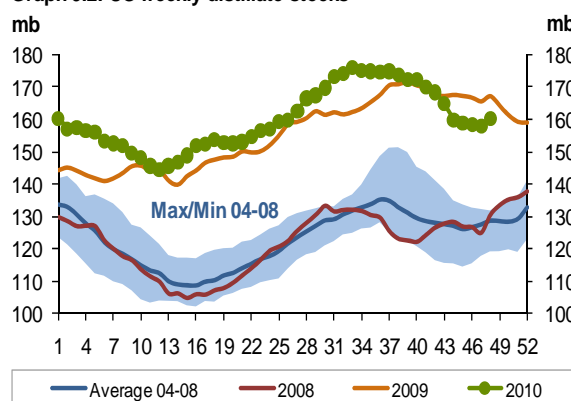
Graph 9.1: US weekly commercial crude oil inventories



At the end of November, US commercial crude stocks declined by 8.5 mb, reversing the build occurred in the previous month, pushing them to slightly below 360 mb. The drop was driven by higher utilization rates as US crude oil refinery input rose by almost 200 tb/d to average 14.1 mb/d, or 270 tb/d more than a year ago. This level corresponds to a refinery utilization rate of 82.6%, 0.8 percentage points higher than the previous month. Refiners are operating at their highest level for two months and they are running at almost 3 percentage points above a year ago over the same period. Refiners are expected to increase their runs in the coming weeks, supporting more crude stock-draws for year-end tax purposes. The draw in US commercial crude stocks was also supported by lower crude imports, which declined by 340 tb/d to average 8.3 mb/d. This level is also 300 tb/d below last year's figure over the same period. US crude stocks stood at 46.4 mb above the five-year average, less than the 60 mb surplus experienced in last August.

**Total product stocks** also fell, even more than crude, reaching 746.4 mb, the lowest level in six months. This draw was driven by the fall in distillates and gasoline and to lesser extent to jet fuel, while residual fuel stocks saw a small build. This draw has narrowed the surplus with the seasonal norm to 38 mb from 53 mb a month ago, but stood slightly 0.6% below a year ago. Distillate stocks have been falling since September, losing more than 12 mb, more than half of the decline occurred in November. This decline was supported by falling heating oil stocks indicating that cold weather has pushed for more use of heating oil. In fact, distillate demand in November rose by more 300 tb/d over the same period last year to stand around 3.9 mb/d. This draw was limited by relatively stronger distillate production reaching 4.3 mb/d. With cold weather becoming more prevalent, it would be expected that demand would climb, leading to greater distillate stock-draws, however, the availability of adequate spare refining capacity combined with ample distillate inventories should temper rising prices. In fact, distillate stocks in the US at the end of November stood at 24.4 mb or 18.3% above the five-year average. US gasoline stocks dropped 2.1 mb to 210.2 mb, reaching the lowest level since more than a year, reversing the surplus with a year ago from the previous month to a deficit of 4.3%.

Graph 9.2: US weekly distillate stocks



However, they remained 2.1% above the five-year average. This draw could be attributed to lower gasoline output by nearly 200 tb/d to an average of 8.8 mb, allowing an increase in distillate production amid seasonal winter demand. The drop in gasoline inventories came despite lower gasoline demand, which declined by around 100 tb/d to a total of 8.9 mb/d. Gasoline demand remains weak, consistent with the season; however, it climbed slightly during the last week of the month due to the Thanksgiving holiday. Jet fuel oil stocks also dropped by 0.9 mb to 44.9 mb, while residual fuel oil inventories rose 0.2 mb to 40.9 mb, reflecting lower demand. Both products indicate a surplus of 0.3% and 0.7%, respectively, with the five-year average.

During the week ending 3 December, the picture was mixed, US crude oil stocks fell while refined products rose as refineries produced more products. In fact, US crude oil stocks fell by 3.8 mb to 355.9 mb, the lowest in 15 weeks leaving them at 6% above a year ago and 12.7% more than the five-year average. This drop was driven by the jump in US refinery crude runs as refiners boosted utilization rates to 87.5% from just 82.6% the previous week. US crude oil refinery inputs averaged 14.9 mb/d, 789 tb/d above a week earlier. The drop in US crude oil stocks was limited by higher crude imports which increased by 607 tb/d to a total of 9.1 mb/d. Gasoline stocks rose 3.8 mb for the third consecutive week, driven by higher production reaching a new record high of 9.4 mb/d. This build came despite 300 tb/d increase in demand. Distillate stocks also increased by 2.15 mb against market expectation. At 160.2 mb/d, distillate stocks remained 4% below a year ago but indicate a surplus with five year average of around 25.5%.

**Table 9.1: US onland commercial petroleum stocks, mb**

	Sep 10	Oct 10	Nov 10	Change Nov 10/Oct 10	Nov 09	03 Dec 10 *
<b>Crude oil</b>	360.1	368.2	359.7	-8.5	336.9	355.9
Gasoline	219.3	212.3	210.2	-2.1	219.7	214.0
Distillate fuel	166.7	164.9	158.1	-6.8	171.1	160.2
Residual fuel oil	39.8	40.6	40.9	0.2	36.4	40.1
Jet fuel	46.8	45.8	44.9	-0.9	42.4	45.7
<b>Total</b>	<b>1130.3</b>	<b>1127.3</b>	<b>1106.1</b>	<b>-21.2</b>	<b>1087.8</b>	<b>1100.8</b>
SPR	726.5	726.6	726.5	0.0	726.1	726.5

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

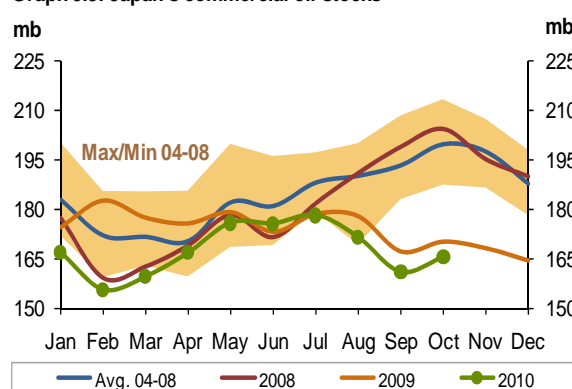
Source: US Department of Energy's Energy Information Administration

## Japan

*Commercial oil stocks in Japan rose in October, preliminary data for November indicates a further build*

In October, **commercial oil inventories** in Japan reversed the downward trend for the last two consecutive months and rose by 4.7 mb to stand at 165.6 mb. Despite this build, the deficit with the seasonal norm remained at 34 mb or 17%, while the gap with a year ago over the same period stood at 4.4 mb or 2.6%. The build in October came from product inventories as they rose by 4.8 mb, while crude oil stocks abated this build as they declined by 0.2 mb.

**Graph 9.3: Japan's commercial oil stocks**



Crude oil stocks went down for the third consecutive month, accumulating more than a 17 mb stock draw and stood at 88.9 mb, which is the lowest level since February. The slight drop in Japanese crude oil stocks came as a result of a decline of 1.5% in crude oil imports averaging 3.39 mb, a level which was also 5.8% below a year ago. This draw came despite lower refinery runs by 4.3 % to 72.2%, but remained 4.1% above last year. With this draw, the deficit with the five-year average has increased to 21.8% from 17.7% a month ago. At the same, the surplus with a year ago occurred last month was reversed to a deficit of 2.7% in October.

Japanese **product inventories** in October reversed the decline observed last month

and rose by 4.8 mb to stand at 76.7 mb, the highest level since December 2009. The build could be attributed to the decline of 3.3% in Japanese total oil product sales or 3.1% from a year ago averaging 3.1 mb/d, the lowest level for the month in 22 years. However the decline in Japanese oil product sales in October marked the first decline in four months after the heat wave this summer pushed up oil demand. The build in product stocks narrowed the deficit with the seasonal norm to 10.8% from 15.6% a month earlier, while the gap with a year ago has been reduced significantly from 11.2% to stand only at 2.4%.

All product stocks experienced a build in October with the bulk of the increase coming from middle distillate stocks as they showed a build of 3.2 mb. In fact, all the components of total distillates rose, indicating a build of 10.8% in kerosene stocks followed by a 9.0% build in gasoil stocks, while jet fuel rose by 8.1%. The drop in distillate sales was behind the build in inventories, with sale of kerosene, used mainly for heating, leading the fall to decline by 15.7% amid mostly warmer-than-average weather. Higher kerosene production by 18% also contributed to this build. Jet fuel and gasoil sales also dropped by 8.4% and 8.1% respectively. At 35.5 mb, middle distillate stocks reached the highest level since December 2009 but remained at 3.7% below a year ago and 21% lower than the five-year average. Gasoline stocks saw a build of 0.8 mb to 13.2 mb, reversing the deficit versus the historical norm a month earlier and stood at 0.1% above the five-year average. However, they remained at 2% below a year ago at the same time. The build in gasoline stocks could be attributed to the 2.4% decline in gasoline sales as consumers have a tendency to switch to hybrid cars. The increase in gasoline imports also contributed to the build in gasoline stocks. Fuel oil inventories saw a slight build of 0.5 mb to 16.3 mb, remaining 17.4% below the seasonal norm; however, they stood almost at the same level as the previous year over the same period. Within fuel oil stocks, fuel oil A saw a rise of 1.9% while fuel oil B.C went up by 3.7%. The build in fuel oil A was driven by a 6.0% increase in production, while the build in fuel oil B.C, which is used mainly by large ships and utilities, could be attributed to the drop of 8.3% in domestic sales. Naphtha stocks rose also by 0.5 mb after two consecutive months of decline to stand at 11.7 mb or 2.4% below a year ago over the same period. This could be mainly attributed to the increase in imports as domestic sales experienced a decline.

**Table 9.2: Japan's commercial oil stocks\*, mb**

	<u>Aug 10</u>	<u>Sep 10</u>	<u>Oct 10</u>	<u>Change</u> <u>Oct 10/Sep 10</u>	<u>Oct 09</u>
<b>Crude oil</b>	97.2	89.1	88.9	-0.2	91.4
Gasoline	12.8	12.4	13.2	0.8	13.5
Naphtha	13.4	11.2	11.7	0.5	12.0
Middle distillates	32.9	32.3	35.5	3.2	36.8
Residual fuel oil	15.2	15.8	16.3	0.5	16.3
<b>Total products</b>	74.3	71.8	76.7	4.9	78.5
<b>Total**</b>	<b>171.5</b>	<b>160.9</b>	<b>165.6</b>	<b>4.7</b>	<b>170.0</b>

\* At end of month

\*\* Includes crude oil and main products only

Source: METI, Japan

Preliminary indications for November based on weekly data published by the PAJ show that commercial oil stocks rose by 8.8 mb for the second consecutive month to stand at 174.4 mb. The build was driven mainly by a 7.2 mb increase in crude, while product inventories rose by 1.6 mb. Despite this build, Japanese total commercial oil stocks remained at 11.7% below the five-year average, however the deficit with a year ago observed in October was reversed to a surplus of 3.8% in November. The build in crude oil stocks came despite an increase in crude runs as refineries ran at highest rates to meet the expected rise in demand for heating fuels. In the week ending 27 November, refiners were running at 85.5%, the highest in 21 months. Within products, with the exception of middle distillates, all components went up with the bulk of the increase coming from gasoline as it rose by 1.0 mb to stand at 14.2 mb, the highest level since the week ending 26 June. The build in gasoline came on the back of lower gasoline domestic sales. With this build, gasoline stocks stood 5.2% above the five-year average and 3.6% above a year ago. Middle distillate stocks dropped by 1.4 mb to stand at 34.1 mb, remaining 10.1% below a year ago and 23% lower than the five year average.



Kerosene stocks as part of middle distillates saw the bulk of the draw as heating fuel output was less than sales volumes. Kerosene inventories in the past have often peaked at the end of November ahead of winter demand; however this year refiners started drawing kerosene early, reflecting the change in inventory management as kerosene demand has been falling steadily compared to previous years. Fuel oil stocks rose 0.8 mb to 17.12 mb, driven by weak fuel oil demand, but remained at 12.7% below the five-year average. At 78.2 mb, total product stocks at the end of November remained at 7.5% below the five-year average, almost in line with a year ago.

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

*Product stocks in Singapore fell in October, preliminary data for November shows a further drop*

At the end of October, **product stocks held in Singapore** fell by 0.8 mb for the second consecutive month. At 46.71 mb, Singapore product stocks stood at the lowest level since June 2010, but remained 0.5 mb or 1.1% above a year ago at the same period. The picture was mixed, both light distillates and fuel oil stocks fell 1.3 mb, while middle distillates rose by 1.8 mb. Singapore light distillate stocks were at the lowest level since the beginning of this year to stand at 10.2 mb, almost in line with the level observed a year ago. The fall in light distillate stocks came on the back of lower gasoline imports combined with firm demand from Indonesia. At 20.8 mb, fuel oil stocks also reached the lowest level since almost one year, and stood at 3.3% below the previous year at the same period. Lower influx of western cargoes was behind this draw. It was reported that western arrivals for November are estimated at around 3.1 million tonnes compared to 3.6 million tonnes in October. In contrast, the build of middle distillates to 14.8 mb, the highest level in two months was driven by weak demand and high regional refinery runs, however middle distillate inventories will likely fall in coming weeks due to firmer demand and tighter supplies in China and expected higher imports by Indonesia. Middle distillate stocks in October stood at 9.2 mb above a year ago over the same period, reversing the deficit experienced for last two months.

Preliminary data for the end of November, based on weekly information, showed that product inventories in Singapore continued to fall as they declined by 0.93 mb to stand at 44.98 mb leaving them 3.0 mb or 6.3% below a year ago at the same period. However it should be noted that during the week ending 25 November, product inventories in Singapore reached 49.33 mb, the highest level since April. Within products, the picture was mixed at the end of November. Light distillates rose 0.2 mb, while middle distillates and residual fuel stocks fell by 0.7 mb and 0.5 mb respectively. The build of light distillate stocks to 10.4 mb could be attributed to weaker gasoline demand in the region. But with the expectation of firmer gasoline demand, especially from Indonesia and Vietnam, gasoline stocks are expected to drop in coming weeks. Light distillate inventories in Singapore remained almost at the same level as the previous year over the same period. In contrast, middle distillate stocks fell to 14.18 mb, but remained at around 1.0 mb or 6.6% above a year ago. The draw in middle distillates came on the back of higher exports to Indonesia as some arbitrage cargoes were headed to Europe. Fuel oil stocks dropped also and stood at 20.39 mb, widening the deficit with a year ago at the same period to 16%. Lower western arbitrage arrivals were behind the fall in fuel oil stocks.

*Product stocks in ARA dropped in October, however preliminary data for November indicates a build*

**Product stocks in ARA** at the end of October continued falling for the second consecutive month and declined by nearly 2.56 mb to stand at 35.7 mb, the lowest level since August 2009. This draw has widened the deficit with a year ago to 4.3% from 3.7% a month earlier. All products experienced a draw with the bulk coming from gasoline stocks as they declined by 1.18 mb. At 6.63 mb, gasoline stocks stood at 0.4 mb or 6.4% above last year at the same time. The draw in gasoline stocks could be attributed to the French strike at France's main oil port of Fos-Lavera. Gasoil stocks also fell 0.3 mb to 17.66 mb, leaving them at 2.1 mb or 10.7% below a year ago at the same period. This draw was driven by lower imports. Jet fuel oil stocks dropped 0.66 mb to 5.3 mb, but remained 0.7 mb or 11.2% below the previous year. Fuel oil stocks also declined 0.3 mb to 5.58 mb showing a surplus of 0.8 mb or 15% compared to the previous year at the same period.

Preliminary data for November on weekly information shows product stocks in ARA reversed the decline observed for the last two months and increased by 0.53 mb to stand at 36.25 mb. However, despite this build, they remained 1.8 mb or 4.7% below



last year. Within products, the picture was mixed; Gasoil and naphtha saw a build, while gasoline, fuel oil and jet fuel experienced a drop at the end of November. Gasoline inventories saw a large drop of 2.45 mb for the second consecutive month to stand at 4.18 mb, losing almost 39% compared to a year ago at the same period. The main reason behind this drop is the high level of prices which reached a two-year high amid relatively strong imports. Higher exports, especially to China supported this drop. Fuel oil stocks fell slightly by 0.3 mb to 5.58 mb putting them at around 15% more than the previous year. On the upside, gasoil saw a substantial increase of 3.26 mb to 20.9 mb, reversing the deficit incurred over the last six months to a surplus of 1.3 mb or 6.7% with last year. This build came despite cold weather in Europe, but the contango structure of gasoil price futures is helping investors to cover the price risk by storing more gasoil.

# Balance of Supply and Demand

*Required OPEC crude for 2010 estimated at 28.9 mb/d, down 0.1 mb/d from 2009*

## Estimate for 2010

Demand for OPEC crude for 2010 has been revised up by 0.1 mb/d to currently stand at 28.9 mb/d. This revision reflects upward adjustments in both world oil demand and non-OPEC supply. With respect to the quarters, the main revisions occurred in the third and the fourth quarter as up-to-date data became available. The current estimate represents a decline of 0.1 mb/d from the previous year. The first quarter of the year is still showing a drop of 1.0 mb/d while the second quarter remains flat. The third quarter is estimated to see positive growth of 1.3 mb/d while the fourth quarter is projected to return to negative growth at 0.6 mb/d.

**Table 10.1: Summarized supply/demand balance for 2010, mb/d**

	2009	1Q10	2Q10	3Q10	4Q10	2010
(a) World oil demand	84.46	84.90	85.05	87.15	86.61	85.93
Non-OPEC supply	51.12	52.10	52.10	51.91	52.74	52.21
OPEC NGLs and non-conventionals	4.35	4.60	4.77	4.81	4.98	4.79
(b) Total supply excluding OPEC crude	55.47	56.70	56.87	56.72	57.72	57.00
Difference (a-b)	28.99	28.20	28.18	30.43	28.89	28.93
OPEC crude oil production	28.71	29.18	29.05	29.17		
Balance	-0.28	0.98	0.87	-1.26		

*Totals may not add due to independent rounding*

## Forecast for 2011

The demand for OPEC crude for next year is projected to average 29.2 mb/d, broadly unchanged from the previous month, however, the third quarter was revised up, reflecting the adjustment in the base line. Required OPEC crude is forecast to increase by 0.3 mb/d following three consecutive annual declines. The first half is expected to see average growth of around 0.3 mb/d, while the third is forecast to see slight growth of 0.1 mb/d. The fourth quarter is projected to see higher growth of 0.5 mb/d compared to the same quarter this year.

**Table 10.2: Summarized supply/demand balance for 2011, mb/d**

	2010	1Q11	2Q11	3Q11	4Q11	2011
(a) World oil demand	85.93	86.24	86.09	88.29	87.80	87.11
Non-OPEC supply	52.21	52.64	52.46	52.39	52.99	52.62
OPEC NGLs and non-conventionals	4.79	5.08	5.22	5.33	5.38	5.25
(b) Total supply excluding OPEC crude	57.00	57.72	57.67	57.72	58.37	57.87
Difference (a-b)	28.93	28.52	28.42	30.57	29.43	29.24

*Totals may not add due to independent rounding*

**Graph 10.1: Balance of supply and demand**

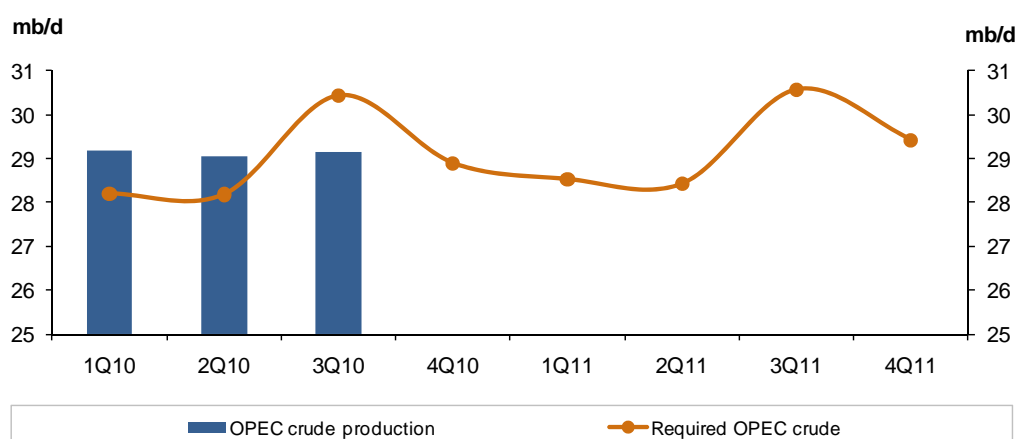


Table 10.3: World oil demand/supply balance, mb/d

	2005	2006	2007	2008	2009	1Q10	2010	3Q10	4Q10	2010	1Q11	2011	3Q11	4Q11	2011
<b>World demand</b>															
OECD	49.9	49.6	49.3	47.6	45.5	45.8	45.1	46.4	46.1	45.8	46.1	45.2	46.5	46.2	46.0
North America	25.6	25.4	25.5	24.2	23.3	23.5	23.7	24.1	23.7	23.7	23.8	23.8	24.3	24.0	24.0
Western Europe	15.7	15.7	15.5	15.4	14.5	14.2	14.1	14.7	14.4	14.4	14.2	14.1	14.6	14.3	14.3
Pacific	8.6	8.5	8.4	8.0	7.7	8.2	7.3	7.6	8.0	7.7	8.1	7.3	7.5	7.9	7.7
DCs	22.7	23.5	24.6	25.5	26.0	26.2	26.6	26.7	26.8	26.6	26.8	27.1	27.3	27.3	27.1
FSU	3.9	4.0	4.0	4.1	4.0	4.0	3.8	4.2	4.2	4.0	4.0	3.8	4.2	4.3	4.1
Other Europe	0.8	0.9	0.8	0.8	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.6
China	6.7	7.2	7.6	8.0	8.3	8.2	8.9	9.2	8.9	8.8	8.7	9.4	9.7	9.3	9.3
(a) Total world demand	84.1	85.2	86.4	85.9	84.5	84.9	85.0	87.2	86.6	85.9	86.2	86.1	88.3	87.8	87.1
<b>Non-OPEC supply</b>															
OECD	20.4	20.1	20.0	19.5	19.7	20.0	19.9	19.5	20.1	19.9	19.9	19.7	19.5	19.8	19.7
North America	14.1	14.2	14.3	13.9	14.4	14.7	14.9	14.9	14.9	14.8	14.8	14.9	14.8	14.9	14.9
Western Europe	5.7	5.3	5.2	5.0	4.7	4.7	4.4	4.0	4.5	4.4	4.4	4.2	4.1	4.2	4.2
Pacific	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
DCs	11.9	12.0	12.0	12.2	12.5	12.7	12.7	12.8	12.8	12.8	12.9	13.0	13.2	13.4	13.1
FSU	11.5	12.0	12.5	12.6	13.0	13.1	13.2	13.2	13.5	13.2	13.5	13.4	13.4	13.5	13.4
Other Europe	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.6	3.7	3.8	3.8	3.9	4.0	4.1	4.2	4.2	4.1	4.1	4.1	4.1	4.1	4.1
Processing gains	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Total non-OPEC supply	49.6	49.9	50.4	50.3	51.1	52.1	52.1	51.9	52.7	52.2	52.6	52.5	52.4	53.0	52.6
OPEC NGLs + non-conventional oils	3.9	3.9	3.9	4.1	4.3	4.6	4.8	4.8	5.0	4.8	5.1	5.2	5.3	5.4	5.3
(b) Total non-OPEC supply and OPEC NGLs	53.5	53.8	54.4	54.5	55.5	56.7	56.9	56.7	57.7	57.0	57.7	57.7	57.7	58.4	57.9
<b>OPEC crude oil production (secondary sources)</b>	30.7	30.5	30.2	31.2	28.7	29.2	29.0	29.2							
<b>Total supply</b>	84.2	84.4	84.6	85.7	84.2	85.9	85.9	85.9							
<b>Balance (stock change and miscellaneous)</b>	0.1	-0.8	-1.9	-0.2	-0.3	1.0	0.9	-1.3							
<b>OECD closing stock levels (mb)</b>															
Commercial	2587	2668	2572	2697	2679	2679	2762	2750							
SPR	1487	1499	1524	1527	1567	1567	1563	1555							
Total	4073	4167	4096	4224	4246	4246	4325	4305							
Oil-on-water	954	919	948	969	873	873	876	905							
<b>Days of forward consumption in OECD</b>															
Commercial onland stocks	52	54	54	59	58	59	60	60							
SPR	30	30	32	34	34	35	34	34							
Total	82	84	86	93	93	94	93	93							
<b>Memo items</b>															
FSU net exports	7.7	8.0	8.5	8.5	9.0	9.2	9.4	9.0	9.2	9.2	9.4	9.6	9.2	9.2	9.3
(a) - (b)	30.6	31.4	32.0	31.4	29.0	28.2	28.2	30.4	28.9	28.9	28.5	28.4	30.6	29.4	29.2

Note: Totals may not add up due to independent rounding

Table 10.4: World oil demand/supply balance: changes from last month's table\*, mb/d

	2005	2006	2007	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011
<b>World demand</b>															
OECD	-	-	-	-	-	-	-	0.6	-	0.1	-	-	-	-	-
North America	-	-	-	-	-	-	-	0.3	-	0.1	-	-	-	-	-
Western Europe	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-	-
DCs	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-
(a) Total world demand	-	-	-	-	-	-	-	0.6	-	0.2	-	-	-	-	0.2
<b>World demand growth</b>	-0.05	-	-	-	-	-	-0.02	0.59	0.03	0.15	-	-0.02	0.05	-	0.01
<b>Non-OPEC supply</b>															
OECD	-	-	-	-	-	-	-	-	0.2	-	0.1	0.1	-	-0.1	-
North America	-	-	-	-	-	-	-	-	0.2	-	0.1	0.1	-	-	-
Western Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-0.1	-0.1	-	-	-	-	-	-0.1	-	-
FSU	-	-	-	-	-	-	-	-	0.1	-	0.1	0.1	-	-	0.1
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	0.1	-	0.1	0.1	0.1	0.1	0.1
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	-	-0.1	-0.1	-0.1	0.4	-	0.3	0.2	-	-	0.1
<b>Total non-OPEC supply growth</b>	0.01	-	-	-	-0.01	-0.12	-0.09	-0.07	0.53	0.07	0.33	0.24	0.07	-0.45	0.05
<b>OPEC NGLs + non-conventionals</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	-	-	-	-	-	-0.1	-0.1	-0.1	0.4	-	0.3	0.2	-	-	0.1
<b>OPEC crude oil production (secondary sources)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total supply</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Balance (stock change and miscellaneous)</b>	-	-	-	-	-	-0.1	-0.1	-0.1	-0.7	-	-	-	-	-	-
<b>OECD closing stock levels (mb)</b>															
Commercial	-	-	-	-	4	4	1	-	-	-	-	-	-	-	-
SPR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	4	4	1	-	-	-	-	-	-	-	-
<b>Oil-on-water</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Days of forward consumption in OECD</b>															
Commercial onland stocks	-	-	-	-	-	-	-0.8	-	-	-	-	-	-	-	-
SPR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-1.2	-	-	-	-	-	-	-	-
<b>Memo items</b>															
FSU net exports	-	-	-	-	-	-	-	-	0.1	-	0.1	0.1	-	-	0.1
(a) - (b)	-	-	-	-	-	0.1	0.1	0.7	-0.4	0.1	-0.3	-0.2	0.6	-	-

\* This compares Table 10.3 in this issue of the MOMR with Table 10.3 in the November 2010 issue

This table shows only where changes have occurred

Table 10.5: OECD oil stocks and oil on water at the end of period

	2003	2004	2005	2006	2007	2008	2006	3Q06	4Q06	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09	3Q09	4Q09	1Q10	2Q10	3Q10
<b>Closing stock levels mb</b>																								
OECD onland commercial	2,511	2,538	2,587	2,668	2,572	2,697	2,649	2,761	2,668	2,601	2,661	2,646	2,572	2,572	2,602	2,664	2,697	2,750	2,758	2,778	2,664	2,679	2,762	2,750
North America	1,161	1,193	1,257	1,277	1,229	1,301	1,277	1,351	1,277	1,238	1,294	1,285	1,229	1,216	1,240	1,282	1,301	1,355	1,388	1,390	1,309	1,322	1,378	1,395
Western Europe	915	915	935	963	937	989	936	949	963	943	940	929	937	961	953	951	989	988	969	968	972	972	979	954
OECD Pacific	435	430	394	429	407	407	436	461	429	420	428	432	407	394	409	431	407	408	401	419	383	386	405	401
OECD SPR	1,411	1,450	1,487	1,499	1,524	1,527	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	1,567	1,563	1,555
North America	640	678	687	691	699	704	690	690	691	691	692	695	699	702	708	704	704	715	726	727	729	729	729	728
Western Europe	374	377	407	412	421	416	411	412	412	415	413	423	421	423	414	414	416	424	427	429	426	429	424	419
OECD Pacific	396	396	393	396	404	406	393	393	396	401	401	403	404	404	404	403	406	408	408	408	409	409	411	408
<b>OECD total</b>	<b>3,922</b>	<b>3,988</b>	<b>4,073</b>	<b>4,167</b>	<b>4,096</b>	<b>4,224</b>	<b>4,142</b>	<b>4,256</b>	<b>4,167</b>	<b>4,108</b>	<b>4,168</b>	<b>4,166</b>	<b>4,096</b>	<b>4,101</b>	<b>4,128</b>	<b>4,186</b>	<b>4,224</b>	<b>4,297</b>	<b>4,319</b>	<b>4,342</b>	<b>4,228</b>	<b>4,246</b>	<b>4,325</b>	<b>4,305</b>
Oil-on-water	882	905	954	919	948	969	975	974	919	916	891	917	948	935	925	885	969	899	899	869	906	873	876	905
<b>Days of forward consumption in OECD</b>																								
OECD onland commercial	51	51	52	54	54	59	54	55	54	54	54	53	52	54	56	56	58	62	61	60	58	59	60	60
North America	46	47	49	50	51	56	50	53	50	49	51	50	50	50	53	54	56	59	60	59	56	56	57	59
Western Europe	59	58	60	62	61	68	60	60	63	62	60	59	61	64	61	62	66	69	67	67	69	69	67	66
OECD Pacific	51	50	47	51	51	53	55	53	48	53	54	49	46	50	54	54	50	56	55	52	47	53	54	50
OECD SPR	28	29	30	30	32	34	30	30	30	31	31	30	31	32	33	32	33	35	35	34	34	35	34	34
North America	25	26	27	27	29	30	27	27	27	27	27	27	28	29	30	29	30	31	31	31	31	31	30	31
Western Europe	24	24	26	27	27	29	26	26	27	27	26	27	27	28	27	27	28	30	29	30	30	30	29	29
OECD Pacific	46	46	46	47	50	53	50	45	44	51	51	46	45	52	54	51	50	56	56	51	50	56	54	51
<b>OECD total</b>	<b>79</b>	<b>80</b>	<b>82</b>	<b>84</b>	<b>86</b>	<b>93</b>	<b>84</b>	<b>85</b>	<b>84</b>	<b>85</b>	<b>85</b>	<b>83</b>	<b>84</b>	<b>87</b>	<b>88</b>	<b>89</b>	<b>91</b>	<b>97</b>	<b>96</b>	<b>94</b>	<b>92</b>	<b>94</b>	<b>93</b>	<b>93</b>

n.a. not available

Table 10.6: Non-OPEC supply and OPEC natural gas liquids, mb/d

	2005	2006	2007	2008	08/07	Change	10/09	2009	09/08	Change	10/10	2010	30/10	40/10	2010	10/09	Change	30/11	40/11	2011	Change	11/10
USA	7.34	7.36	7.47	7.50	0.03	7.84	8.08	8.29	8.36	8.14	0.64	8.44	8.52	8.63	8.54	0.40	8.54	8.57	8.51	8.52	8.53	-0.01
Canada	3.03	3.20	3.31	3.27	-0.04	3.32	3.13	3.23	3.27	3.24	-0.03	3.27	3.37	3.39	3.35	0.11	3.40	3.41	3.43	3.53	3.44	0.09
Mexico	3.77	3.69	3.49	3.17	-0.31	3.04	2.97	2.94	2.96	2.98	-0.19	2.99	2.97	2.90	2.95	-0.03	2.90	2.89	2.87	2.90	2.89	-0.06
North America	14.14	14.24	14.26	13.94	-0.33	14.21	14.18	14.46	14.59	14.36	0.42	14.71	14.86	14.92	14.84	0.48	14.84	14.87	14.81	14.94	14.87	0.03
Norway	2.97	2.78	2.56	2.47	-0.09	2.53	2.21	2.29	2.39	2.36	-0.11	2.33	2.12	2.27	2.16	-0.20	2.20	2.02	1.97	2.08	2.07	-0.09
UK	1.89	1.71	1.69	1.58	-0.11	1.63	1.57	1.27	1.46	1.48	-0.10	1.51	1.40	1.21	1.37	-0.11	1.35	1.30	1.27	1.32	1.31	-0.07
Denmark	0.38	0.34	0.31	0.28	-0.03	0.28	0.27	0.27	0.24	0.26	-0.02	0.25	0.23	0.24	0.24	-0.02	0.23	0.23	0.20	0.21	0.22	-0.02
Other Western Europe	0.49	0.51	0.62	0.64	0.03	0.62	0.62	0.64	0.63	0.63	-0.02	0.61	0.63	0.65	0.63	0.03	0.63	0.63	0.63	0.63	0.63	0.00
Western Europe	5.72	5.34	5.17	4.97	-0.20	5.07	4.67	4.47	4.71	4.73	-0.24	4.70	4.40	4.50	4.40	-0.32	4.41	4.18	4.06	4.24	4.22	-0.18
Australia	0.53	0.51	0.53	0.53	0.01	0.55	0.53	0.55	0.53	0.54	0.01	0.51	0.50	0.54	0.52	-0.02	0.54	0.55	0.55	0.55	0.55	0.04
Other Pacific	0.05	0.05	0.08	0.10	0.02	0.09	0.09	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.00	0.09	0.08	0.08	0.08	0.09	-0.01
OPEC Pacific	0.58	0.56	0.60	0.63	0.03	0.64	0.62	0.65	0.63	0.64	0.01	0.61	0.60	0.60	0.61	-0.02	0.61	0.64	0.64	0.64	0.64	0.02
Total OPEC	20.44	20.14	20.04	19.54	-0.50	19.91	19.47	19.58	19.94	19.72	0.19	20.03	19.86	19.50	20.06	0.13	19.89	19.70	19.51	19.81	19.73	-0.13
Brunei	0.21	0.22	0.19	0.17	-0.01	0.17	0.15	0.16	0.19	0.17	0.00	0.18	0.16	0.17	0.17	0.00	0.17	0.17	0.17	0.17	0.17	0.00
India	0.76	0.78	0.80	0.80	0.00	0.77	0.78	0.79	0.80	0.79	-0.01	0.82	0.83	0.88	0.85	0.07	0.88	0.90	0.91	0.90	0.90	0.05
Indonesia	1.12	1.07	1.02	1.04	0.02	1.03	1.02	1.03	1.03	1.03	-0.01	1.03	1.04	1.03	1.01	0.03	1.00	1.00	0.99	0.98	1.00	-0.03
Malaysia	0.77	0.76	0.76	0.76	0.00	0.74	0.72	0.73	0.71	0.73	-0.03	0.73	0.70	0.69	0.68	-0.02	0.67	0.67	0.66	0.66	0.66	-0.04
Thailand	0.29	0.32	0.33	0.36	0.02	0.37	0.37	0.36	0.37	0.37	0.01	0.35	0.35	0.36	0.35	-0.02	0.35	0.35	0.35	0.35	0.35	0.00
Vietnam	0.39	0.37	0.35	0.33	-0.01	0.40	0.39	0.37	0.33	0.37	0.04	0.35	0.35	0.34	0.35	-0.03	0.34	0.35	0.38	0.40	0.37	0.02
Asia others	0.26	0.26	0.26	0.26	0.00	0.25	0.26	0.25	0.25	0.25	-0.01	0.22	0.24	0.24	0.24	0.00	0.25	0.26	0.26	0.26	0.26	0.02
Other Asia	3.79	3.78	3.72	3.72	0.02	3.74	3.70	3.68	3.69	3.70	-0.02	3.68	3.67	3.72	3.69	-0.01	3.69	3.68	3.72	3.73	3.70	0.02
Argentina	0.78	0.77	0.77	0.78	0.01	0.78	0.77	0.74	0.76	0.76	-0.02	0.77	0.76	0.75	0.75	0.00	0.75	0.75	0.75	0.75	0.75	-0.01
Brazil	1.98	2.11	2.22	2.38	0.16	2.47	2.49	2.51	2.55	2.51	0.12	2.67	2.73	2.71	2.78	0.22	2.85	2.86	2.92	2.99	2.90	0.18
Colombia	0.53	0.54	0.54	0.60	0.06	0.65	0.67	0.68	0.73	0.68	0.09	0.77	0.79	0.80	0.81	0.11	0.84	0.86	0.88	0.91	0.87	0.08
Trinidad & Tobago	0.18	0.18	0.16	0.16	-0.01	0.15	0.15	0.15	0.15	0.15	0.00	0.15	0.15	0.14	0.15	0.00	0.13	0.13	0.13	0.14	0.13	-0.02
L. America others	0.30	0.26	0.28	0.28	0.01	0.31	0.30	0.31	0.30	0.30	0.02	0.30	0.31	0.30	0.31	0.00	0.31	0.32	0.34	0.32	0.32	0.02
Latin America	3.77	3.87	3.97	4.20	0.23	4.36	4.38	4.39	4.50	4.41	0.21	4.66	4.74	4.73	4.73	0.32	4.88	4.92	5.01	5.12	4.98	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	0.00	0.21	0.21	0.21	0.21	0.21	0.00
Oman	0.78	0.75	0.71	0.76	0.05	0.79	0.80	0.83	0.83	0.81	0.06	0.86	0.87	0.87	0.86	0.05	0.89	0.91	0.92	0.94	0.91	0.05
Syria	0.45	0.44	0.41	0.41	0.00	0.41	0.41	0.41	0.41	0.41	0.00	0.42	0.43	0.42	0.41	0.00	0.42	0.41	0.40	0.40	0.41	-0.01
Yemen	0.41	0.37	0.33	0.30	-0.03	0.30	0.30	0.29	0.30	0.29	-0.01	0.28	0.28	0.27	0.26	-0.03	0.26	0.25	0.25	0.25	0.25	-0.02
Middle East	1.85	1.76	1.66	1.68	0.02	1.71	1.72	1.75	1.74	1.73	0.05	1.77	1.76	1.76	1.76	0.03	1.76	1.77	1.77	1.79	1.78	0.01
Chad	0.18	0.15	0.15	0.15	0.00	0.14	0.14	0.14	0.14	0.14	-0.01	0.14	0.14	0.14	0.13	0.00	0.12	0.12	0.12	0.12	0.12	-0.01
Congo	0.24	0.25	0.24	0.26	0.02	0.27	0.27	0.27	0.29	0.27	0.02	0.30	0.30	0.30	0.30	0.00	0.30	0.31	0.31	0.32	0.31	0.01
Egypt	0.70	0.66	0.66	0.69	0.04	0.72	0.72	0.69	0.71	0.71	0.01	0.71	0.72	0.73	0.71	0.00	0.72	0.72	0.71	0.70	0.71	0.00
Equatorial Guinea	0.36	0.37	0.37	0.38	0.01	0.37	0.36	0.35	0.34	0.36	-0.02	0.33	0.33	0.32	0.32	-0.03	0.32	0.31	0.32	0.33	0.32	-0.01
Gabon	0.25	0.25	0.25	0.24	-0.01	0.23	0.23	0.23	0.25	0.24	0.00	0.25	0.23	0.25	0.24	0.00	0.22	0.23	0.23	0.23	0.23	-0.01
South Africa	0.19	0.19	0.18	0.18	0.00	0.18	0.18	0.17	0.16	0.17	-0.01	0.18	0.18	0.18	0.18	0.00	0.18	0.18	0.18	0.18	0.18	0.00
Sudan	0.34	0.40	0.50	0.48	-0.02	0.47	0.48	0.48	0.48	0.48	0.00	0.47	0.46	0.46	0.46	-0.02	0.45	0.46	0.46	0.45	0.46	0.00
Africa other	0.23	0.29	0.28	0.27	-0.01	0.27	0.26	0.25	0.25	0.26	-0.01	0.24	0.23	0.23	0.25	-0.01	0.29	0.32	0.34	0.41	0.34	0.10
Africa	2.49	2.55	2.62	2.64	0.02	2.63	2.62	2.60	2.60	2.61	-0.03	2.61	2.58	2.59	2.59	-0.02	2.60	2.64	2.67	2.74	2.66	0.07
Total DCs	11.90	11.96	11.96	12.24	0.29	12.44	12.42	12.42	12.53	12.45	0.21	12.72	12.75	12.80	12.77	0.32	12.93	13.01	13.17	13.38	13.12	0.35
FSU	11.55	12.02	12.53	12.60	0.06	12.67	12.93	13.05	13.16	12.96	0.36	13.12	13.18	13.21	13.46	0.29	13.46	13.42	13.38	13.46	13.43	0.18
Russia	9.44	9.65	9.87	9.78	-0.08	9.78	9.87	9.97	10.07	9.92	0.14	10.09	10.12	10.13	10.13	0.21	10.16	10.16	10.13	10.15	10.15	0.02
Kazakhstan	1.23	1.30	1.35	1.41	0.06	1.48	1.51	1.54	1.61	1.54	0.12	1.61	1.56	1.57	1.60	0.06	1.69	1.66	1.65	1.71	1.68	0.08
Azerbaijan	0.44	0.65	0.87	0.94	0.07	0.97	1.11	1.09	1.06	1.06	0.12	1.01	1.09	1.10	1.10	0.04	1.19	1.18	1.18	1.18	1.18	0.09
FSU others	0.44	0.42	0.44	0.46	0.01	0.45	0.44	0.44	0.44	0.44	-0.02	0.42	0.42	0.41	0.44	-0.02	0.42	0.42	0.42	0.42	0.42	0.00
Other Europe	0.16	0.15	0.15	0.15	-0.01	0.14	0.13	0.14	0.14	0.14	-0.01	0.14	0.14	0.14	0.14	0.00	0.13	0.13	0.13	0.14	0.13	0.00
China	3.64	3.69	3.77	3.84	0.07	3.79	3.86	3.89	3.87	3.85	0.01	4.03	4.10	4.18	4.18	0.27	4.15	4.12	4.12	4.14	4.13	0.01
Non-OPEC production	47.69	47.97	48.45	48.36	-0.09	48.96	48.82	49.08	49.63	49.12	0.76	50.03	50.02	49.83	50.66	1.02	50.56	50.38	50.32	50.92	50.54	0.41
Processing gains	1.91	1.96	1.99	1.97	-0.02	2.00	2.00	2.00	2.00	2.00	0.03	2.08	2.08	2.08	2.08	0.08	2.08	2.08	2.08	2.08	2.08	0.00
Non-OPEC supply	49.60	49.93	50.43	50.33	-0.11	50.96	50.82	51.08	51.63	51.12	0.79	52.10	52.10	51.91	52.74	1.09	52.64	52.46	52.39	52.99	52.62	0.41
OPEC NGL	3.74	3.76	3.86	4.04	0.18	3.99	4.19	4.41	4.37	4.24	0.21	4.49	4.67	4.71	4.87	0.44	4.95	5.06	5.15	5.20	5.09	0.40
OPEC Non-conv entional	0.16	0.14	0.09	0.11	0.02	0.11	0.11	0.11	0.11	0.11	0.00	0.10	0.10	0.10	0.11	0.00	0.13	0.16	0.18	0.18	0.16	0.06
OPEC (NGL+NCF)	3.89	3.89	3.95	4.14	0.19	4.10	4.30	4.52	4.48	4.35	0.21	4.60	4.77	4.81	4.98	0.44	5.08	5.22	5.33	5.38	5.25	0.46
Non-OPEC & OPEC (NGL+NCF)	53.49	53.82	54.38	54.47	0.09	55.06	55.12	55.59	56.10	55.47	1.00	56.70	56.87	56.72	57.72	1.53	57.72	57.67	57.72	58.37	57.87	0.87

Note: Totals may not add due to independent rounding. Indonesia has been included in non-OPEC supply for purpose of comparison



Table 10.7: World Rig Count

	Change				Change				Change				Change				Change									
	2005	2006	06/05	2007	30/07	40/07	2007	07/06	1Q08	2Q08	3Q08	4Q08	2008	08/07	1Q09	2Q09	3Q09	4Q09	2009	09/08	1Q10	2Q10	3Q10	Oct 10	Nov 10	Nov/Oct
USA	1,381	1,647	267	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	1,345	1,508	1,622	1,668	1,683	15
Canada	458	470	12	139	348	356	344	-126	507	169	432	408	379	35	328	91	177	277	218	-161	470	166	364	348	420	72
Mexico	107	83	-24	88	96	93	92	9	96	106	103	106	103	11	128	128	135	123	128	26	118	106	84	74	87	13
North America	1,945	2,200	255	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	1,933	1,780	2,070	2,090	2,190	100
Norway	17	17	0	19	18	17	18	1	17	21	21	21	20	2	25	18	18	20	20	0	21	18	13	20	22	2
UK	21	27	5	29	27	22	26	-1	19	21	24	24	22	-4	22	19	16	15	18	-4	15	20	21	20	22	2
Western Europe	70	77	7	80	79	77	78	0	91	97	101	103	98	20	90	82	76	85	83	-15	87	96	92	95	100	5
OECD Pacific	25	26	2	30	32	30	29	2	32	39	39	34	36	7	27	25	26	23	25	-11	22	18	23	24	21	-3
Total OECD	2,078	2,347	269	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	2,042	1,893	2,185	2,209	2,311	102
Other Asia	200	202	2	213	212	216	212	10	213	220	218	212	216	4	212	212	213	233	217	1	235	249	253	250	255	5
Latin America	129	149	19	177	171	179	175	27	187	184	195	197	191	16	164	147	149	169	157	-34	183	203	220	209	220	11
Middle East	131	132	1	146	154	154	149	18	158	165	175	171	167	18	162	151	139	147	150	-18	152	150	163	157	162	5
Africa	8	10	2	12	14	14	14	4	10	13	14	11	12	-2	8	11	9	12	10	-2	20	19	19	18	18	0
Total DCs	468	493	25	549	550	563	551	58	569	583	602	591	586	36	546	520	510	561	534	-52	589	621	655	634	655	21
Non-OPEC Rig Count	2,546	2,840	294	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	2,632	2,514	2,840	2,843	2,966	123
Algeria	21	24	4	26	28	28	27	2	26	27	24	26	26	-1	24	30	27	27	27	1	23	28	24	25	24	-1
Angola	3	4	1	4	3	5	4	1	5	6	5	5	5	1	5	3	3	4	4	-1	10	8	9	6	10	4
Ecuador	12	11	0	10	11	10	11	-1	7	9	12	13	10	-1	10	10	10	10	10	0	11	11	11	12	11	-1
Iran	40	44	4	51	51	50	50	6	50	50	50	51	50	0	51	52	52	52	52	2	52	52	52	52	52	0
Iraq	0	0	0	0	0	0	0	0	29	29	29	29	29	29	36	36	36	36	36	7	36	36	36	36	36	0
Kuwait	12	14	1	13	13	11	12	-1	12	11	12	12	12	0	12	11	14	13	13	0	19	18	21	23	23	0
Libya	9	10	1	12	14	14	13	3	14	15	15	15	15	2	15	13	14	15	14	-1	17	17	14	15	15	0
Nigeria	9	10	1	7	8	10	8	-1	9	8	6	6	7	-1	7	6	6	7	6	-1	11	13	18	19	20	1
Qatar	12	11	-1	12	13	14	13	2	11	12	11	11	11	-1	9	9	9	9	9	-2	8	8	9	8	10	2
Saudi Arabia	37	65	28	76	78	77	77	11	78	77	76	76	77	0	72	67	67	66	68	-9	68	67	67	68	66	-2
UAE	16	16	0	15	15	14	15	-2	12	12	13	12	12	-2	13	12	13	12	12	0	13	13	13	14	13	-1
Venezuela	68	81	13	80	77	71	76	-5	82	81	77	81	80	4	69	64	54	54	60	-20	66	64	70	82	74	-8
OPEC Rig Count	238	290	51	305	311	302	305	16	336	337	330	336	335	29	322	314	302	305	311	-24	334	335	344	360	354	-6
Worldwide Rig Count*	2,785	3,130	345	2,995	3,249	3,250	3,208	78	3,438	3,237	3,630	3,519	3,456	248	2,813	2,133	2,180	2,483	2,402	-1,054	2,965	2,849	3,184	3,203	3,320	117
of which:																										
Oil	980	1,124	144	1,167	1,254	1,285	1,242	119	1,408	1,351	1,479	1,490	1,432	190	1,283	1,069	1,182	1,356	1,222	-210	1,590	1,534	1,783	1,841	1,923	82
Gas	1,746	1,947	201	1,764	1,931	1,904	1,903	-44	1,969	1,814	2,070	1,948	1,950	47	1,450	993	965	1,092	1,125	-825	1,333	1,276	1,356	1,319	1,353	34
Others	21	17	-4	17	20	25	20	4	26	32	36	37	33	12	35	35	34	37	35	3	43	40	42	43	45	2

\*1 Excludes China and FSU

na: Not available

Note: Totals may not add up due to independent rounding

Source: Baker Hughes International &amp; Secretariat's Estimates

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## OPEC Basket average price

US\$ per barrel

<b>↑</b> up \$2.97 in November	<b>November 2010</b>	<b>82.83</b>
	October 2010	79.86
	Year-to-date	76.36

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## November OPEC production

in million barrels per day, according to secondary sources

<b>↓</b> down 0.04 in November	<b>November 2010</b>	<b>29.20</b>
	October 2010	29.24

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## World economy

Global growth was revised up from 4.1% to 4.3% for 2010 and from 3.6% to 3.8% for 2011. OECD growth was increased from 2.4% to 2.6% for 2010, but remained unchanged at 2.0% for 2011. China's growth now stands at 9.7% and 8.8% in 2010 and 2011 respectively. India's forecast for 2010 remains at 8.5%, while 2011 has been revised up from 7.7% to 8.0%.

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## Supply and demand

in million barrels per day

<b>2010</b>		<b>2011</b>	
World demand	85.9	World demand	87.1
Non-OPEC supply	52.2	Non-OPEC supply	52.6
OPEC NGLs	4.8	OPEC NGLs	5.3
<b>Difference</b>	<b>28.9</b>	<b>Difference</b>	<b>29.2</b>

Totals may not add due to independent rounding

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## Stocks

US commercial inventories at the end of November experienced a decline for the third consecutive month, dropping by a substantial 21.2 mb. This decline was divided between crude and products, which fell by 8.5 mb and 12.8 mb respectively. With this drop, US commercial stocks narrowed the surplus with the five-year average to 84.5 mb. In Japan, preliminary indications for November show that commercial oil stocks rose by 8.8 mb.