

12 September 2007

## HIGHLIGHTS

- **Benchmark crudes moved close to record highs in early September**, despite the economic uncertainty stemming from the US subprime market collapse. Falling stocks in August underscored higher prices and a widening backwardation, while seasonal hurricane fears intensified.
- **Global oil product demand has been slightly revised down to 85.9 mb/d in 2007** (+1.7% over 2006) and 88.0 mb/d in 2008 (+2.4%), reflecting weaker-than-anticipated demand in both June and July, largely as a result of high prices and poor weather in OECD countries. The outcome of the recent financial market turbulence remains unclear.
- **World oil supply fell by 430 kb/d to 84.6 mb/d in August**, on North Sea and Mexican outages, plus lower Iraqi exports. Forecast non-OPEC supply remains 50.0 mb/d in 2007 and 51.1 mb/d in 2008. Saudi Arabia underpins 660 kb/d of OPEC NGL growth next year. Risks to 2008's broad-based growth are biased towards the FSU, project delays and extended field outages.
- **OPEC August crude supply averaged 30.4 mb/d** as lower Iraqi exports offset higher Angolan and Nigerian output. Effective spare capacity remained below 3 mb/d. The forecast 'call on OPEC crude and stock change' is revised down by 0.2-0.3 mb/d but reaches at least 32.4 mb/d at end-2007 and in 2008 is 300-600 kb/d higher than in 2007. In Vienna, OPEC decided to raise supply by 500 kb/d from 1 November 2007.
- **Global refinery throughput increased by 0.8 mb/d in July** to 74.2 mb/d, 1.8 mb/d higher than the 2Q low. A summer peak of 74.9 mb/d in August was tempered by economic run cuts. Runs are seen falling in September and October as further scheduled maintenance is undertaken.
- **OECD industry stocks rose by 29.8 mb in July**. The rise was dominated by product stock builds as refinery runs reached seasonal peaks, while crude stocks rose a modest 2.0 mb. Total OECD forward demand cover remained steady from June at 54.4 days, but down from 55.1 days one year ago. Preliminary US, Japanese and EU-16 data for August show a net stock draw of 7.1 mb.

Next Issue: 11 October 2007

# CONTENTS

HIGHLIGHTS .....	1
CONTENTS .....	2
LOOKING BEYOND SUBPRIME RISKS .....	3
DEMAND.....	4
Summary.....	4
OECD .....	4
Subprime Consequences.....	6
North America .....	8
Europe.....	9
Don't Forget The Weather.....	11
Pacific.....	12
Non-OECD .....	13
China.....	13
Other Non-OECD .....	14
SUPPLY .....	18
Summary.....	18
OPEC .....	19
145th Ordinary Meeting of the OPEC Conference, 11 September 2007, Vienna, Austria .....	19
Iraq Highlighting Plans for Increased Export Capacity .....	20
Non-OPEC Overview .....	22
Forecasting Through Interesting Times .....	23
OECD .....	23
North America .....	23
North Sea .....	25
Former Soviet Union (FSU) .....	25
Stakes Rise in Kashagan Row .....	26
Revisions to Non-OPEC Estimates .....	27
OECD STOCKS .....	29
Summary.....	29
OECD Inventory Position at End-July and Revisions to Preliminary Data.....	29
OECD Industry Stock Changes in July 2007.....	30
OECD North America .....	30
OECD Europe.....	31
OECD Pacific .....	31
Recent Developments in Singapore Stocks .....	31
PRICES.....	33
Summary.....	33
Overview .....	33
Spot Crude Oil Prices .....	35
Refining Margins.....	36
Spot Product Prices.....	37
End-User Product Prices in August .....	38
Freight.....	39
REFINING.....	40
Summary.....	40
Global Refinery Throughput.....	40
OECD Refinery Throughput.....	41
OECD Third and Fourth-Quarter Forecasts.....	41
OECD Data for July.....	42
OECD Refinery Yields .....	43
A Crude Sort of Friendship.....	44
Trading Places .....	45
TABLES .....	46
OIL MARKET REPORT CONTACTS	

## LOOKING BEYOND SUBPRIME RISKS

The turmoil from the US subprime mortgage market remains at the heart of every musing on oil markets. The cost of credit has clearly risen and its availability has tightened – even some small and medium-sized oil independents are complaining that it is difficult to raise finance. Economic growth will probably suffer to some degree, conferring a downside risk to oil demand, but the impact is as yet very uncertain. But despite this, the oil price has continued to rise and the backwardation in crude futures is widening.

It is not yet clear to what extent the subprime turmoil will affect US GDP, let alone being able to quantify the associated impact on other countries. The cost of risk is likely to rise, but this is a cost relative to the price of risk-free lending, rather than an absolute cost, and so its economic impact will depend on the actions of monetary and fiscal authorities in the coming weeks and the speed with which derivatives losses can be quantified. For oil, the degree to which it affects the three key growth regions, North America, the Middle East or China will be paramount. Until a clearer path emerges, we have only made a modest adjustment to oil demand growth for the rest of this year and in 2008.

There are other, possibly more substantial unknowns, which could work both ways. Price effects for one. While recent weak preliminary US demand data appear to show some effects from recent high prices, caution is needed. It is dangerous to extrapolate too much from short-term shifts in primary demand that may only reflect stock shifts from wholesalers and retailers. True price effects require sustained increases in prices. Although oil prices have been rising throughout 2007 they have done so in a mirror copy of price action in 2006. But, if the crude price remains high, it will have a lasting impact on demand next year.

Weather risks too are high. Two category-five hurricanes in the Gulf of Mexico in quick succession have elevated the awareness of the potential for outages this year. Even though Hurricane Dean did not damage Mexican production facilities, the temporary shutdown and restart resulted in a 430 kb/d loss in total Gulf of Mexico output for August - much more than the 55 kb/d seasonal average allowed for in our assessments. This adjustment rises to 440 kb/d in September and 345 kb/d in October, the equivalent of two similar-sized precautionary shut-ins. With a bit of luck, there could be some upside to the supply forecasts, but clearly, a direct hit from a major hurricane could cause, as in 2005, a much greater level of damage.

But weather issues do not come to an end in October. Winter temperatures can have a significant impact on demand. We estimate that the exceptionally mild winter in the northern hemisphere trimmed demand by around 900 kb/d in 4Q06 and 1Q07. With our forecasts estimating a return to normal, there is clearly a downside risk. Similarly, a cold spell could have the opposite impact.

Other risks are harder to quantify. Geopolitical issues could swing either way, with output paths from Iraq, Iran and Nigeria particularly unclear. Data risks will only be resolved with time, and there is the omnipresent risk of unforeseen disruptions.

For the oil market, the spot price is set by near-term issues, which are clearly skewed to the upside, even if there are perhaps downward demand-side risks as we head into 2008. Falling crude stocks in the US and Japan in August show that it is stockholders who have become the marginal supplier of oil to the market. As such, with expectations of tighter crude supplies ahead, the price at which they are prepared to release those stocks rises. That situation will only change when total stocks are deemed sufficient to see out the winter.

# DEMAND

## Summary

- **Global oil product demand** has been slightly revised down to 85.9 mb/d in 2007 (+1.7% over 2006) and 88.0 mb/d in 2008 (+2.4%). Downward revisions to the second half of 2007 reflect weaker-than-anticipated data in June and July, particularly in the 'other products' category, which has been carried through the rest of the year. Mild weather and interfuel substitution have contributed to the fall in demand. Looking ahead, continued high prices may further dent demand.
- **The forecast also incorporates a preliminary adjustment of economic growth prospects in the United States.** This is based on the OECD's *Interim Assessment* published in early September, which lowered its 2007 outlook for the US economy amid concerns regarding the housing market, although the potential spill-over effects of the subprime crisis, which became particularly acute in August, are yet to be assessed. However, it is likely that credit conditions in the US and other developed countries will tighten. As such, we may further revise our 2008 forecast as events unfold.

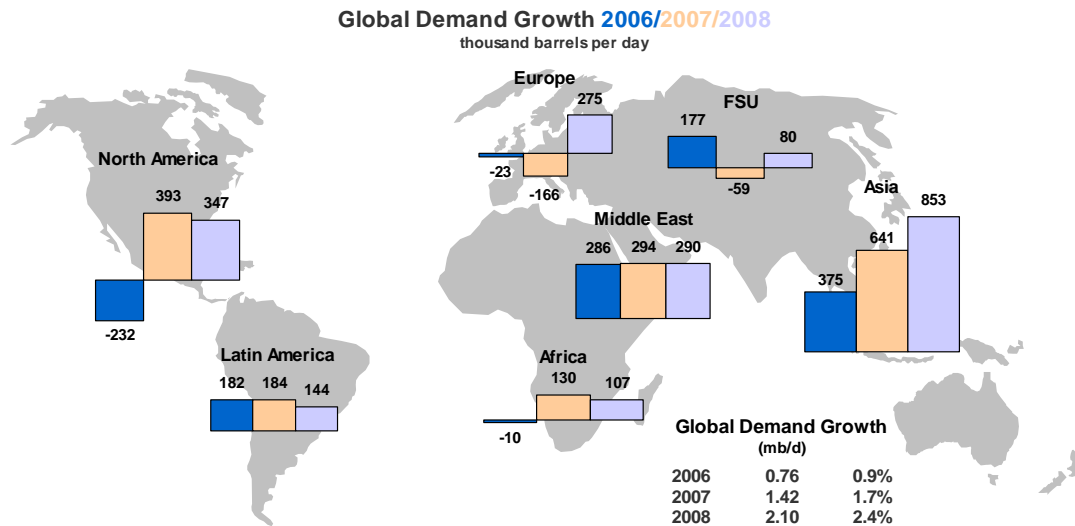
### Global Oil Demand (2006-2008)

	(million barrels per day)														
	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
Africa	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
Americas	30.3	30.4	30.8	30.7	30.6	31.0	31.0	31.3	31.4	31.1	31.5	31.5	31.8	31.8	31.6
Asia/Pacific	25.2	24.1	23.7	24.8	24.4	25.3	24.7	24.5	25.8	25.1	26.4	25.5	25.3	26.5	25.9
Europe	16.7	15.9	16.3	16.4	16.3	16.1	15.7	16.2	16.6	16.1	16.6	16.0	16.4	16.7	16.4
FSU	3.9	3.7	4.0	4.3	4.0	3.8	3.5	3.9	4.5	3.9	3.9	3.6	4.0	4.5	4.0
Middle East	6.2	6.2	6.5	6.3	6.3	6.4	6.6	6.8	6.5	6.6	6.7	6.8	7.1	6.8	6.9
<b>World</b>	<b>85.2</b>	<b>83.3</b>	<b>84.1</b>	<b>85.4</b>	<b>84.5</b>	<b>85.6</b>	<b>84.5</b>	<b>85.7</b>	<b>87.8</b>	<b>85.9</b>	<b>88.2</b>	<b>86.6</b>	<b>87.7</b>	<b>89.6</b>	<b>88.0</b>
Annual Chg (%)	0.4	0.8	1.0	1.4	0.9	0.5	1.5	1.9	2.8	1.7	3.0	2.5	2.3	2.0	2.4
Annual Chg (mb/d)	0.3	0.6	0.8	1.2	0.8	0.4	1.3	1.6	2.3	1.4	2.6	2.1	1.9	1.8	2.1
Changes from last month's report (mb/d)	-0.01	0.02	-0.01	-0.01	0.00	0.12	0.20	-0.41	-0.25	-0.09	-0.19	-0.02	-0.28	-0.16	-0.16

- **OECD oil product demand** has been revised downwards in both 2007 and 2008. Fuel oil and heating oil deliveries in June and July turned out to be weaker than expected, particularly in Europe and the Pacific, thus offsetting upward revisions in 1H07. OECD demand is now poised to increase by 0.4% in 2007 to 49.4 mb/d, and by 1.6% in 2008 to 50.2 mb/d. This forecast is based on the current economic outlook provided by major international institutions and on normal weather conditions during the forthcoming winter. However, it is open to revisions should the fallout of the subprime meltdown in the US prove to be more harmful than currently expected.
- **Non-OECD oil product demand** has remained virtually unchanged, as slight upward adjustments in China and the Middle East offset downward changes elsewhere. Overall, non-OECD demand is expected to reach 36.5 mb/d in 2007 (+3.5% on an annual basis) and 37.8 mb/d in 2008 (+3.6%). This relatively strong outlook continues to be supported by strong oil consumption in both China and the Middle East, which together account for over half of worldwide demand growth. As such, if subprime woes are limited purely to the OECD, global demand would likely remain robust.

## OECD

Preliminary data indicate that total OECD inland deliveries (a measure of oil products supplied by refineries, pipelines and terminals) remained flat in July, compared with the same month in 2006. Demand weakness in both the Pacific (-2.6% year-on-year) and Europe (-1.2%) offset North America's gains (+1.6%). The weakness in OECD Europe demand continues to be largely related to lower-than-average deliveries of heating oil in several countries, notably Germany and France, where end-users normally replenish their tanks ahead of the forthcoming winter. In July, overall, Europe's heating oil deliveries plummeted by 9.8% on an annual basis. In addition, fuel oil demand contracted by 7.3% mostly because of



relatively subdued electricity demand; poor weather, notably in northern Europe, reduced the need for air-conditioning. In OECD Pacific, demand was dragged down by weak jet fuel/kerosene (-13.6%) and gasoline deliveries (-1.6%), particularly in Japan. Unseasonably cool summer conditions curbed intra-regional air travel, leisure driving and power demand. In OECD North America, by contrast, demand continued to be supported by transportation fuels, notably in the US (where the driving season was in full swing) and Mexico, and by warm weather conditions. Regional deliveries of gasoline and diesel increased by 1.7% and 12.2%, respectively (the jump in diesel, though, reflects the ongoing shift towards low-sulphur distillates).

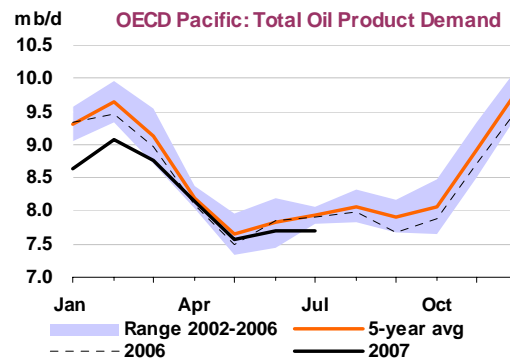
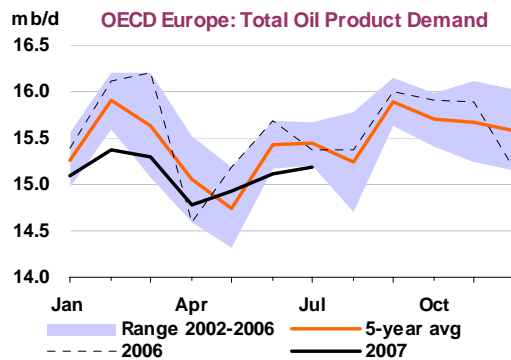
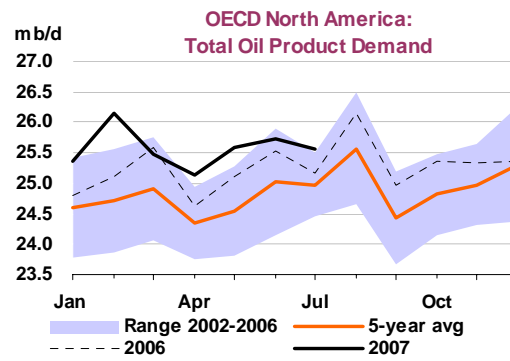
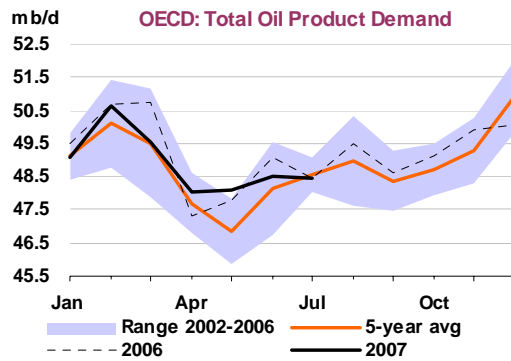
#### OECD Demand based on Adjusted Preliminary Submissions - July 2007

(million barrels per day)

	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
<b>OECD North America*</b>	<b>11.28</b>	<b>1.7</b>	<b>1.94</b>	<b>-1.2</b>	<b>4.14</b>	<b>12.2</b>	<b>0.80</b>	<b>-30.6</b>	<b>1.32</b>	<b>12.5</b>	<b>6.07</b>	<b>-0.24</b>	<b>25.55</b>	<b>1.6</b>
US50	9.74	1.3	1.71	-1.6	3.64	13.5	0.36	-48.5	0.80	20.0	4.65	-1.7	20.90	1.2
Canada	0.74	1.3	0.12	-5.1	0.17	2.6	0.29	-5.8	0.13	-9.8	0.81	6.8	2.27	1.2
Mexico	0.72	6.5	0.07	13.7	0.27	5.0	0.12	5.0	0.30	9.3	0.55	2.4	2.03	5.7
<b>OECD Europe</b>	<b>2.63</b>	<b>-2.3</b>	<b>1.34</b>	<b>1.2</b>	<b>4.29</b>	<b>5.1</b>	<b>1.58</b>	<b>-9.8</b>	<b>1.67</b>	<b>-7.3</b>	<b>3.67</b>	<b>-1.1</b>	<b>15.18</b>	<b>-1.2</b>
Germany	0.53	-0.5	0.20	1.1	0.65	3.9	0.31	-32.3	0.18	3.5	0.64	4.1	2.51	-3.6
United Kingdom	0.42	-4.2	0.34	7.9	0.42	1.6	0.13	-10.3	0.08	8.0	0.36	-3.0	1.75	-0.4
France	0.25	-1.9	0.17	2.9	0.71	6.9	0.24	-11.9	0.11	-4.6	0.47	-1.3	1.95	0.1
Italy	0.31	-2.1	0.11	4.4	0.59	6.4	0.08	-0.6	0.23	-22.4	0.36	-0.6	1.68	-2.1
Spain	0.17	-4.9	0.13	-4.9	0.54	3.6	0.19	6.6	0.22	-2.1	0.35	-0.6	1.59	0.5
<b>OECD Pacific</b>	<b>1.60</b>	<b>-1.6</b>	<b>0.59</b>	<b>-13.6</b>	<b>1.16</b>	<b>1.2</b>	<b>0.45</b>	<b>-13.1</b>	<b>0.86</b>	<b>-3.1</b>	<b>3.05</b>	<b>-0.1</b>	<b>7.71</b>	<b>-2.6</b>
Japan	1.04	-4.5	0.34	-22.7	0.56	-10.6	0.35	-19.6	0.48	-9.1	1.79	-1.4	4.56	-7.6
Korea	0.17	7.0	0.12	3.1	0.27	33.3	0.10	23.2	0.36	5.2	1.04	2.2	2.05	7.3
Australia	0.34	5.6	0.10	1.1	0.29	5.8	0.00	100.9	0.02	6.0	0.20	2.2	0.95	4.5
<b>OECD Total</b>	<b>15.51</b>	<b>0.6</b>	<b>3.88</b>	<b>-2.6</b>	<b>9.58</b>	<b>7.5</b>	<b>2.83</b>	<b>-17.3</b>	<b>3.85</b>	<b>-0.3</b>	<b>12.79</b>	<b>-0.4</b>	<b>48.44</b>	<b>0.0</b>

\* Including US territories

Overall, OECD demand is forecast to reach 49.4 mb/d in 2007 (+0.4%) and 50.2 mb/d in 2008 (+1.6%), on the premise that temperatures during the forthcoming winter will be in line with the average of the previous ten years. North American demand, which accounts for over half of OECD demand, is poised to increase by +1.4% in 2008, while Europe and the Pacific are both also seen rebounding strongly (+1.7% and +2.3%). It is important to note, however, that we have made a slight downward adjustment with regards to the 2007 GDP forecasts of the main OECD economies given the weakness of the US housing market and based on the OECD's *Interim Assessment* (5 September 2007). However, as the nature and magnitude of the potential effects of the ongoing subprime crisis, which erupted in August, are unclear and still to be fully appraised (see *Subprime Consequences*), we believe it is premature to make more drastic downward adjustments. Nevertheless, we may continue to revise these figures based on forthcoming assessments of the major economic institutions – IMF and OECD – which are due respectively in late October and early December.



### Total OECD Demand by Product

(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	Apr 07	May 07	Jun 07*	Latest month vs. May 07	Jun 06
LPG & Ethane	4.72	4.76	4.41	4.76	5.23	4.65	4.84	4.61	4.49	-0.12	-0.06
Naphtha	3.15	3.26	3.13	3.35	3.37	3.05	3.12	3.07	2.96	-0.11	0.02
Motor Gasoline	14.86	14.99	15.26	14.92	14.47	15.09	14.85	15.15	15.25	0.10	0.07
Jet & Kerosene	4.17	4.13	3.98	4.27	4.36	3.90	4.00	3.80	3.91	0.11	-0.09
Gas/Diesel Oil	13.24	13.29	12.91	13.59	13.56	12.64	12.59	12.49	12.83	0.33	-0.17
Residual Fuel Oil	4.03	4.01	3.82	3.84	4.19	3.88	3.81	3.90	3.93	0.03	0.14
Other Products	5.05	4.98	5.34	4.98	4.56	5.02	4.84	5.06	5.15	0.09	-0.50
<b>Total Products</b>	<b>49.23</b>	<b>49.41</b>	<b>48.85</b>	<b>49.71</b>	<b>49.73</b>	<b>48.22</b>	<b>48.06</b>	<b>48.09</b>	<b>48.52</b>	<b>0.44</b>	<b>-0.58</b>

\* Latest official OECD submissions (MOS)

## Subprime Consequences

As we have repeatedly noted, economic uncertainties, weather conditions, interfuel substitution and price volatility are major sources of uncertainty regarding short-term projections. This uncertainty has been dramatically brought to the fore by the ongoing problems in the US subprime mortgage market, which we have flagged over the past few months. The crisis gained momentum in August, leading to substantial volatility in the world's main stockmarkets. Financial risks, which had been sliced and sold to a wide spectrum of investors thanks to the past decade's financial innovations, have turned out to be more widely spread across the global financial system than previously thought, extending beyond mortgage companies to funds and banks as well.

Facing a potential crisis of confidence in the credit market, central banks in the US, Europe and Japan have injected massive amounts of liquidity into the system over the past few weeks. The Federal Reserve even lowered its discount rate (the price at which it lends to banking institutions) in August, while the European Central bank kept its key rate unchanged in early September, despite having strongly indicated – before the crisis erupted – that it would raise it given persistent inflationary pressures. Many observers also expect an imminent loosening of monetary conditions in the US (a cut in the federal funds rate) – although central bankers themselves appear to disagree on whether it is appropriate to lower interest rates to bail out investors and hence create a moral hazard.

## Subprime Consequences (continued)

So far, the financial turmoil has apparently been contained; stockmarkets have somewhat rebounded, but volatility remains high and there are concerns that the 'real' economy may be affected. Previous financial crises have generally followed a similar script: 1) a period of rising asset values and growing leverage; 2) an unexpected surprise (in this case, subprime woes and mounting questions about the reliability of rating agencies and the quality of asset-backed commercial paper) that prompts a frantic search of safer investments; 3) a shift from fundamentals to investor behaviour (the 'herd' effect), which leads to massive liquidations ('deleveraging') and hence falling prices; 4) tighter credit conditions if fiscal and monetary policies are not accommodating, with banks facing growing uncertainties about potential and actual losses and becoming reluctant to lend to third parties or to each other; 5) job redundancies and falling private consumption; and 6) weaker or even negative oil demand growth.

However, even though the downside risk to the current US economic outlook has arguably increased, it is unclear whether events will follow the above sequence. There is an ongoing, vigorous debate regarding the likely consequences of the subprime meltdown, not only for the US but for the world as a whole. Views range from the gloomy – the inevitability of a worldwide economic recession – to the moderately optimistic – a limited slowdown in the US and Europe, but continued strong economic growth worldwide of around 5% per year (instead of current forecasts of 5.2-5.5%).

- The massive liquidity injections by central banks (the *availability* of money), which capped the spike in short-term interest rates, may have helped to stabilise financial markets in the short-term and may prevent pullovers to other sectors and industries, thus reducing the need – or at least the magnitude – of future cuts in interest rates (the *price* of money). Nevertheless, credit may become more expensive, as investors will demand higher risk premia.
- The recent bout of global economic growth has not relied on corporate borrowing and purchases of assets that later proved worthless (as during the dotcom bubble, for example). In fact, corporate indebtedness in the main economies has sharply fallen over the past few years. However, although the present crisis has to a large extent spared equity markets *per se*, it may probably result in permanently higher borrowing costs across the economy.
- Potential losses in the subprime sector could be as high as \$300 billion, according to some estimates. However, it is yet unclear how much of that will be borne by banks and whether such losses may erode banks' profitability. Bank losses are put at \$100-\$150 billion, but a better picture will emerge with the forthcoming publication of 3Q07 results. Apart from two small regional banks in Germany, no major US or international bank has announced crippling losses, but there are concerns that some big names have been hit.
- Even though a systemic banking crisis seems remote, house prices may stall or even fall as demand dries up given more expensive financing – although probably less so in the prime sector, which so far has been largely unscathed. Nevertheless, even if foreclosures and price falls are limited to the subprime market, they will likely negatively impact consumer confidence and hence spending. Refinancing will be more costly, especially of the so-called 'jumbo' loans, which are not covered by the federal government's mortgage arms (Fanny Mae and Freddie Mac) because of their large size.
- The crisis has not yet affected other major global centres of economic activity, namely emerging countries in Asia and the Middle East. This 'decoupling' is arguably related to their relatively less sophisticated financial systems (hence less able to spread risks), but also to strong domestic demand (in the Middle East, but less so in China and the rest of Asia). But even if a slowdown in US and in other major developed economies were to curb Chinese exports, China has arguably enough savings to induce a counter-cyclical fiscal stimulus in order to keep its economy growing.
- US government securities appear have become once again a safe haven in the flight to quality – not only for private investors but for governments as well, notably in Asia (and especially China). This has lent some support to the dollar, and limits the risk of a sudden unwinding of global balance-of-payments imbalances.

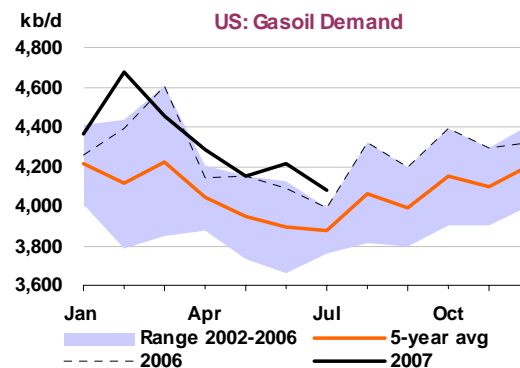
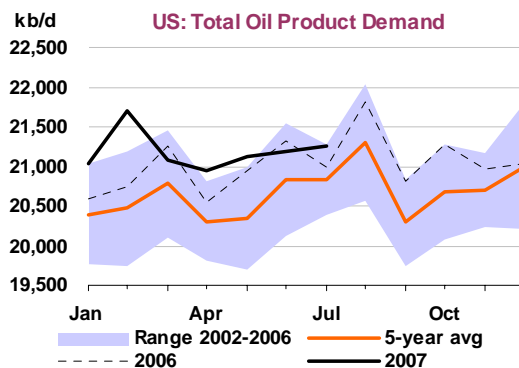
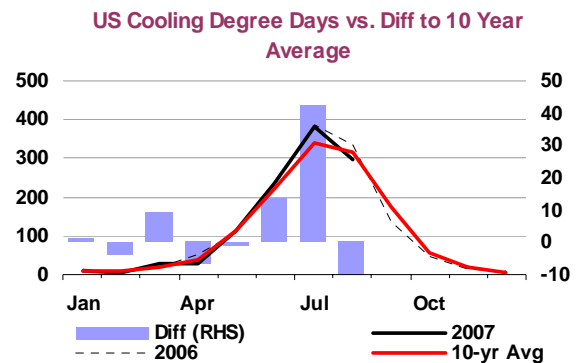
Overall, the evidence at this point suggests that the subprime crisis may not severely damage the US – and the global – economy. By the same token, even though we have slightly toned down the economic outlook of several developed economies based on the OECD's recent *Interim Assessment*, there are no indications that oil demand is poised to contract dramatically in the US – and neither in emerging economies, which account for the bulk of oil demand growth (notably China and the Middle East).

## North America

Inland deliveries in the continental **United States** – a proxy of oil product demand – rose by 1.2% in July versus the same month in 2006, according to adjusted preliminary data. This strength resulted from buoyant transportation fuel demand. Gasoline deliveries rose by 1.3% as the driving season entered in full swing, helped by warm weather conditions (there were 43 more cooling-degree days or CDDs than the 10-year average).

Meanwhile, gasoil demand (diesel and other distillates) jumped by 2.4%, suggesting that economic activity continues to be resilient. It is worth noting that the phasing out of high-sulphur, non-road-transportation, rail and marine distillate (3,000 ppm) and its replacement by a lower-sulphur product (500 ppm) is proceeding apace (even earlier than mandated), while ultra-low sulphur, road-transportation diesel (ULSD)

demand is reaching new records. Finally, fuel oil deliveries were also strong in July (+20.0%), as warm temperatures boosted power demand. Nevertheless, fuel oil's rebound has been limited by its relatively high price, which over the past few months has been higher on an energy-content basis than that of natural gas. Gas prices have been held down by abundant stocks and weak weather-driven demand.

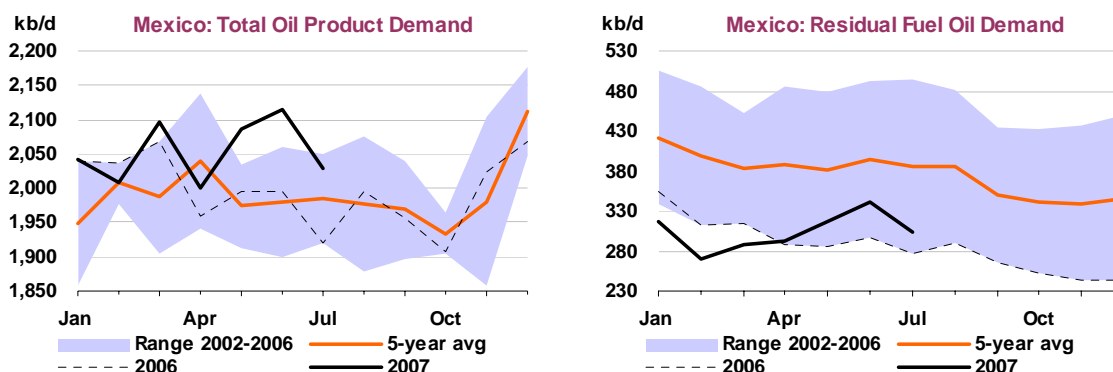


As noted, there is a risk that the spread of the housing market woes may affect credit conditions, eventually curb consumer spending and in the end take a toll on oil consumption. However, the EIA's preliminary assessment for the week ending on 31 August showed that US deliveries for gasoline and road diesel – which are highly dependent on economic conditions – remain in positive territory. Admittedly, the pace of gasoline growth is weaker than in the past, likely due to this summer's spikes in retail prices, but the dip in demand growth has been too brief to read anymore into it. The only fuel that has been contracting over the past few months is jet fuel/kerosene, but this seems mostly related to significant efficiency improvements and fuel-saving procedures in the airline industry. The corollary is that a fall in the number of passengers would probably not have a significant impact on jet fuel/kerosene demand, as was the case following the 2001 terrorist attacks. As such, until there are clearer indications of the country's economic outlook, we foresee US50 demand increasing by 1.5% to 21.2 mb/d in 2008 on the basis of current conditions and assuming normal temperatures during the forthcoming winter.

**Mexican** demand continued to soar; deliveries rose by +5.7% year-on-year in July, according to preliminary data – the third month in a row that overall demand increases at a pace of more than 4% per year. As in previous months, demand was driven by vigorous growth in transportation fuels: gasoline jumped by 6.5% on a yearly basis, jet/kerosene by 13.7% and diesel by 5%. This reflects strong economic growth, a rapidly expanding vehicle fleet and rising air travel. However, there are concerns that the



country's economic expansion could recede somewhat later this year and in 2008 if the economic woes in the US prove more important than currently expected, hence penalising Mexican imports. At this point, however, given the uncertainties surrounding the subprime meltdown, we believe it is premature to revise down our demand forecasts. As such, Mexican demand is currently poised to expand by +3.2% in 2007 to roughly 2.1 mb/d, slowing down slightly to +1.8% in 2008.



Another oil product that continues to feature buoyant growth since May, after almost two years of falling or stagnating consumption, is fuel oil. Deliveries rose by 9.3% year-on-year in July – following +14.9% in June – as a result of strong electricity demand fuelled by economic activity and growing air-conditioning needs, notably in northern Mexico, where temperatures can become very warm. In addition, fuel oil demand in July was probably also supported by the attack against several of Pemex's LPG, gasoline, crude and natural gas pipelines in west-central Mexico, which forced some large industries, such as carmakers, to find alternatives to natural gas to keep their operations running during the week-long outage. (At the time of writing, there were reports of another series of pipeline blasts in eastern Mexico, but information was sketchy.)

#### OECD North America Demand by Product

(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	Apr 07	May 07	Jun 07*	Latest month vs. May 07 Jun 06	
LPG & Ethane	2.84	2.89	2.67	2.90	3.24	2.78	2.87	2.68	2.79	0.11	0.17
Naphtha	0.44	0.45	0.46	0.49	0.42	0.45	0.42	0.46	0.45	0.00	0.04
Motor Gasoline	10.72	10.88	10.99	10.77	10.53	10.94	10.69	11.01	11.10	0.09	0.14
Jet & Kerosene	1.91	1.90	1.94	1.89	1.88	1.89	1.90	1.86	1.92	0.05	-0.07
Gas/Diesel Oil	5.18	5.31	5.07	5.28	5.48	5.13	5.13	5.10	5.15	0.05	0.13
Residual Fuel Oil	1.20	1.29	1.16	1.09	1.37	1.27	1.20	1.30	1.31	0.01	0.19
Other Products	2.97	2.94	3.14	2.92	2.73	3.03	2.93	3.16	3.00	-0.17	-0.44
<b>Total Products</b>	<b>25.26</b>	<b>25.66</b>	<b>25.43</b>	<b>25.35</b>	<b>25.65</b>	<b>25.48</b>	<b>25.14</b>	<b>25.58</b>	<b>25.72</b>	<b>0.14</b>	<b>0.17</b>

\* Latest official OECD submissions (MOS)

Meanwhile, President Calderón vetoed a biofuels bill that had been approved last April by Congress' Lower Chamber. The main motives invoked were the bill's limited scope, given its focus on sugar and corn (leaving aside other potential feedstocks), and its alleged lack of promotion of new technologies. But even if the veto is grounded on technical, rather than political reasons, the development of suitable infrastructure would be very costly, as we noted in earlier reports. In addition, it is unclear how a market in alternative energy sources may arise given the country's constitutional constraints, which dictate the state's energy monopoly.

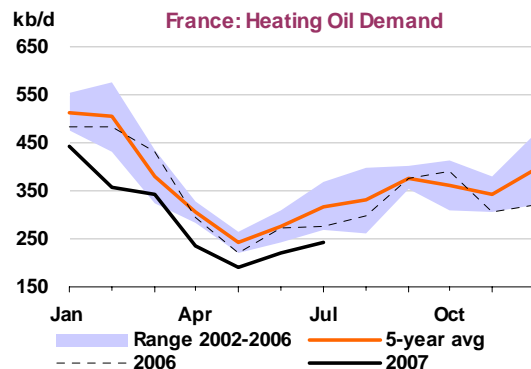
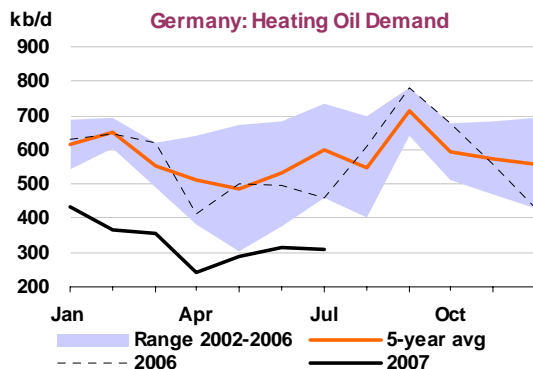
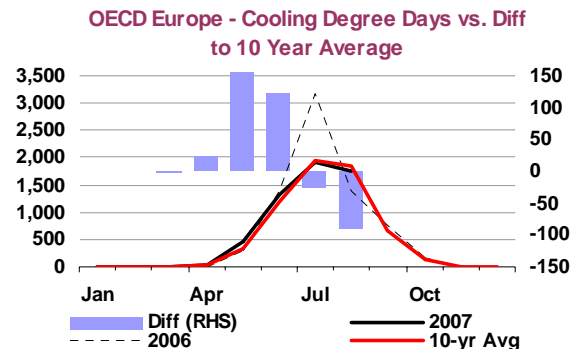
### Europe

Official submissions of June data left total European demand unchanged since last month's report. Higher figures for France (+30kb/d), Germany (+66 kb/d) and Italy (+66 kb/d) were offset by lower deliveries in Switzerland (-56 kb/d), Turkey (-68 kb/d), and the UK (-72 kb/d). The stagnation in demand

is very much related to heating and fuel oil. End-users seemingly continued drawing stocks or postponing the seasonal refilling of heating oil tanks as a result of high prices (deliveries of the fuel shrank by 9.8% on an annual basis). Moreover, the relatively poor weather, notably in northern Europe (there were almost 25 less CDDs than the 10-year average in the continent as a whole), also limited cooling and hence electricity needs; fuel oil deliveries contracted by 7.3% year-on-year. The weather is indeed becoming a swing factor that complicates forecasting; according to some meteorologists, as a result of global warming strong shifts to extreme conditions in any given region will likely become recurrent.

Oil product demand in **Germany** continued to be dragged down by weak heating oil deliveries in July. According to preliminary data, total oil product deliveries fell by 3.6% on a yearly basis, and those of heating oil were 32.3% lower. Excluding heating oil, demand for all other products actually rose by 2.6% on a yearly basis.

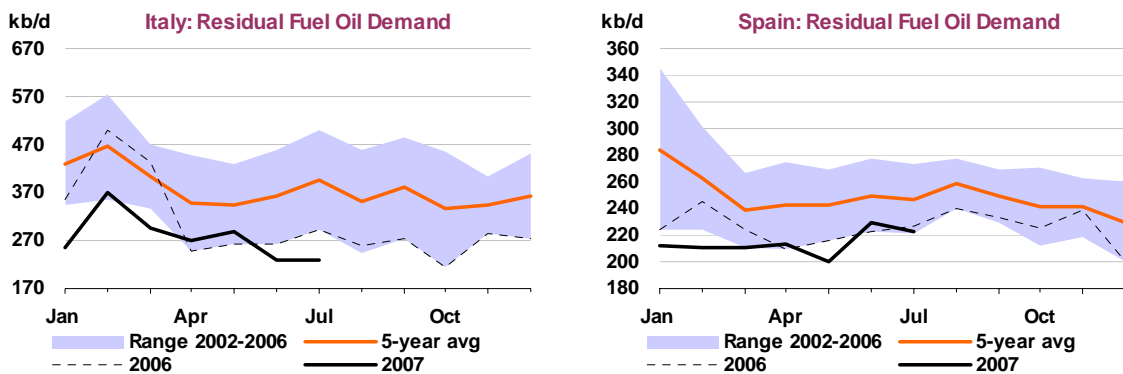
The timid recovery of the German heating oil market – the largest in the continent – that had been observed in June has apparently stalled: household stocks barely rose in July, from 55% to 56% of capacity. Consumer inventories have been trending well above historical levels this year, due to last winter's extremely mild temperatures. However, as the supply overhang is being eroded, consumers should start filling their tanks. Nevertheless, the filling pace will likely continue to depend on price fluctuations, as has been the case for the past few years.



German demand for transportation fuels, meanwhile, posted robust growth, despite July's damp and cold weather. Diesel deliveries rose by 3.9% year-on-year, followed by jet fuel/kerosene with 1.1%.

In **France**, total deliveries rose slightly (+0.1% year-on-year) in July, despite the weakness of its heating oil market (deliveries plummeted by 11.9%, according to preliminary figures). Demand was supported by healthy jet fuel deliveries (+2.9%), heralding the start of the country's holiday season.

Further south, the picture was similar, with demand in **Italy** penalised by weak residual fuel oil deliveries in July. Total demand fell by 2.1% on a yearly basis, while fuel oil contracted by 22.4%. In **Spain**, meanwhile, total demand rose by 0.5%, on the back of strong gasoil/diesel deliveries (+4.3%). Nevertheless, as in Italy, Spanish fuel oil demand remained weak, despite very warm weather, notably in the south – however, the month as a whole posted lower-than-normal temperatures, thus reducing power demand. Aside from the weather, natural gas continues to make inroads in power generation in both countries, thus reducing the pressure on hydropower and fuel-oil fired sources.



Regarding projections, we have slightly revised down the 2007 economic outlook for France, based on the OECD's *Interim Assessment*. That country is now seen growing at 1.8% this year, instead of 2.2% previously. However, this reduced pace is expected to be somewhat compensated by the United Kingdom, whose forecast GDP expansion in 2007 has been significantly revised, from 2.9% to 3.1%. Further adjustments for 2007 may occur, as some uncertainties surrounding demand data for the **Netherlands** are dispelled. We are awaiting clarification regarding changes in the Dutch reporting system and the reclassification of some products, notably concerning petrochemicals. In the meantime, Dutch demand for LPG, naphtha and 'other products' has been revised so as to be kept unchanged from last year.

Overall, European demand has been slightly adjusted downwards, and is now expected to average 15.4 mb/d in 2007 (-1.2% versus 2006); meanwhile, under current economic assumptions and expectations of normal temperatures during the forthcoming winter, we foresee that demand will rise by 1.7% to 15.6 mb/d in 2008. However, Europe's economic outlook for this year and the next could be revised in future as the effects of the US subprime crisis are fully ascertained.

### Don't Forget The Weather

Surely, short of a major economic slowdown, demand will fall anyway because of high oil prices? Albeit prices do indeed have an influence on demand, the often-made claim that last year's weakness in OECD demand (-0.9% year-on-year, equivalent to approximately 440 kb/d) was *solely* related to high crude oil prices ignores two factors that played a key role: weather conditions and interfuel substitution.

1. The extraordinarily mild temperatures that prevailed during the 2006-07 winter significantly curbed heating and fuel oil consumption in North America and Europe, and kerosene in the Pacific (where it is used for heating purposes). This occurrence, which was highly unusual, was largely behind the successive revisions to our demand forecasts in late 2006 and early 2007.
2. Non-transportation fuels were replaced by other energy sources, particularly natural gas. This, in turn, resulted from two main causes. On the one hand, environmental and logistical concerns, particularly in Europe and the Pacific, have encouraged a greater use of natural gas, thus leading to a gradual, structural decline of fuel oil demand. On the other hand, there was a circumstantial price effect, notably in North America, where many industrial users and utilities can switch away from gasoil or fuel oil to natural gas or coal, depending on the relative price of each fuel. In 2006, natural gas competed favourably with other oil-based fuels in terms of price, mostly because of mild weather conditions, reclaiming market share lost when gas prices spiked following the 2005 hurricanes.

The combination of both factors help explain why the consumption of LPG, naphtha, heating oil and fuel oil – which together account for roughly a third of total OECD demand – plummeted collectively by 5.2% in 2006 (-890 kb/d), thus contributing to a drag-down of total demand. Although some of the structural gains made by natural gas are likely to prevail, demand for some of these products is likely to bounce back. Indeed, assuming normal weather conditions in the forthcoming winter, we would expect a rebound of heating oil demand, notably in large consuming countries such as Germany or France. Summer cooling demand in the US has already prompted a resurgence in fuel oil demand, suggesting that natural gas substitution has reached a technical limit. By the same token, a cold winter would likely mean higher natural gas prices in North America, leading to further interfuel substitution back into fuel oil.

### OECD Europe Demand by Product

(million barrels per day)

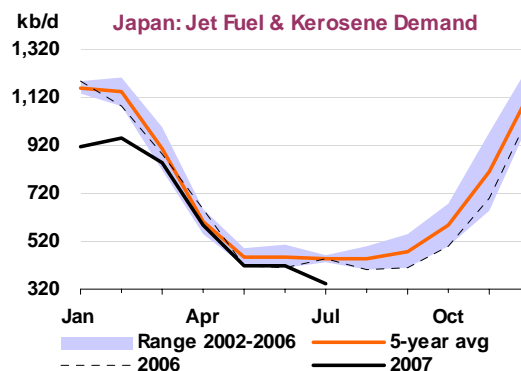
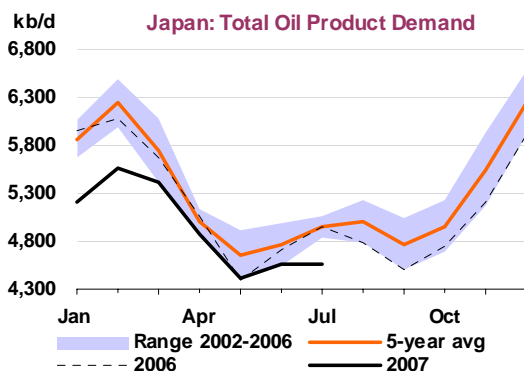
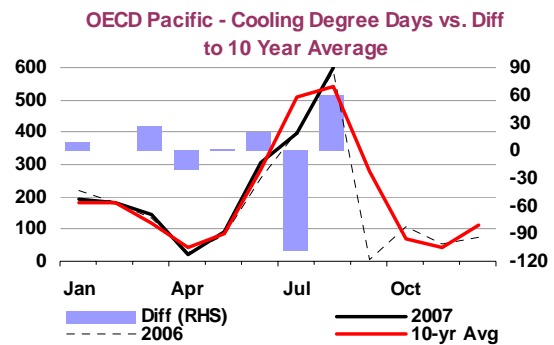
	2006	2007	3Q06	4Q06	1Q07	2Q07	Apr 07	May 07	Jun 07*	Latest month vs.	
										May 07	Jun 06
LPG & Ethane	0.96	0.95	0.84	0.91	1.01	0.95	1.00	1.03	0.83	-0.20	-0.19
Naphtha	1.11	1.13	1.07	1.14	1.21	1.04	1.05	1.06	1.01	-0.06	-0.02
Motor Gasoline	2.57	2.53	2.66	2.55	2.41	2.61	2.61	2.60	2.62	0.02	-0.04
Jet & Kerosene	1.28	1.29	1.37	1.28	1.23	1.28	1.23	1.28	1.33	0.06	-0.03
Gas/Diesel Oil	6.24	6.17	6.15	6.43	6.23	5.76	5.67	5.71	5.90	0.20	-0.20
Residual Fuel Oil	1.85	1.76	1.77	1.78	1.83	1.72	1.71	1.72	1.73	0.01	-0.05
Other Products	1.55	1.55	1.71	1.56	1.34	1.58	1.51	1.53	1.69	0.15	-0.05
<b>Total Products</b>	<b>15.56</b>	<b>15.38</b>	<b>15.57</b>	<b>15.64</b>	<b>15.25</b>	<b>14.94</b>	<b>14.78</b>	<b>14.93</b>	<b>15.11</b>	<b>0.18</b>	<b>-0.58</b>

\* Latest official OECD submissions (MOS)

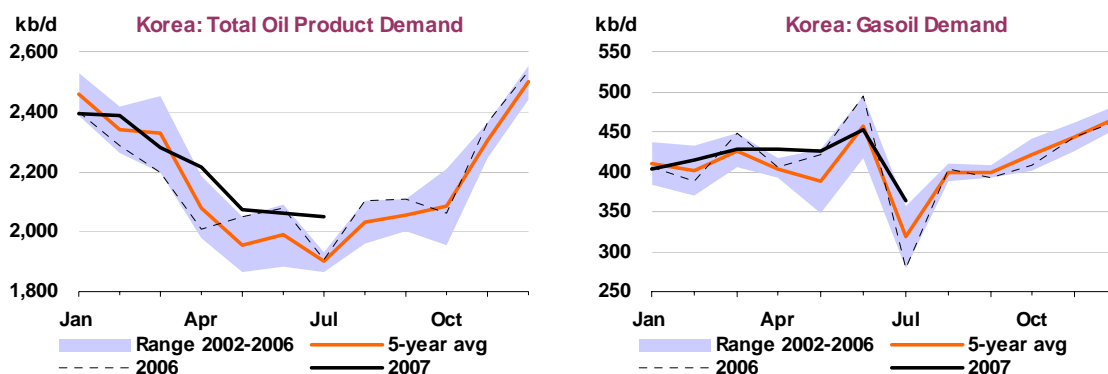
### Pacific

In July, according to preliminary data, oil product demand in the Pacific declined by 2.6%, compared with the same month in the previous year. Overall demand was curbed mostly by weak deliveries in all product categories bar naphtha (+1.0% year-on-year), diesel (+1.2%) and 'other products' (+9.5%). Thus, LPG deliveries declined by 6.8%, gasoline by 1.6%, jet fuel/kerosene by 13.6% and residual fuel by 3.1%. The largest product demand contractions occurred in Japan, and were arguably related to poor summer conditions, which curbed air travel, leisure driving and power demand. Indeed, there were almost 109 less CDDs than normal in July.

In **Japan**, oil product demand contracted by 7.6% on an annual basis in July, according to preliminary data. All products bar crude for power generation (+13.2%, included in the 'other products' category) fell. The continuing decline in the country's demand is largely structural (notably regarding transportation fuels, as the population ages and drivers turn to smaller, more efficient cars). However, July's fall but was also weather-related (conditions were poor compared with previous years and had a negative impact on leisure travel) and price-biased (retail gasoline prices have almost reached record levels over the past few months). As such, total demand was well below its five-year average.



In **Korea**, preliminary data indicate that total oil product demand soared by 7.3% year-on-year in July, mostly on strong gasoil and residual fuel oil deliveries (+30.4% and 5.2%, respectively). The strength of gasoil (diesel and other distillates) is probably indicative of a strong stock build ahead of the 7.5% diesel fuel tax hike, which kicked in on 23 July (rather than 1 July, as in 2006). Meanwhile, naphtha deliveries continued to race ahead (+6.8%), as new units are added or expanded, or come back from maintenance. In



late June, for example, the country's largest ethylene producer, Yeochun Naphtha Cracking Centre (YNCC), came back from a month-long maintenance, while Samsung Total is reportedly using more naphtha for its cracker, whose expansion was completed in early June.

### OECD Pacific Demand by Product

(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	Apr 07	May 07	Jun 07*	Latest month vs.	
										May 07	Jun 06
LPG & Ethane	0.92	0.92	0.91	0.94	0.97	0.92	0.98	0.90	0.88	-0.03	-0.04
Naphtha	1.60	1.68	1.59	1.72	1.75	1.57	1.65	1.55	1.50	-0.05	0.00
Motor Gasoline	1.57	1.58	1.61	1.60	1.53	1.54	1.55	1.54	1.52	-0.01	-0.02
Jet & Kerosene	0.98	0.95	0.67	1.10	1.25	0.73	0.87	0.66	0.66	0.00	0.01
Gas/Diesel Oil	1.83	1.81	1.69	1.88	1.85	1.75	1.79	1.68	1.77	0.09	-0.11
Residual Fuel Oil	0.98	0.96	0.89	0.97	0.99	0.89	0.90	0.88	0.88	0.01	0.00
Other Products	0.52	0.49	0.49	0.50	0.49	0.41	0.40	0.36	0.47	0.11	-0.02
<b>Total Products</b>	<b>8.40</b>	<b>8.38</b>	<b>7.85</b>	<b>8.71</b>	<b>8.83</b>	<b>7.80</b>	<b>8.15</b>	<b>7.58</b>	<b>7.69</b>	<b>0.12</b>	<b>-0.17</b>

\* Latest official OECD submissions (MOS)

Our outlook for 2008 demand in OECD Pacific remains roughly unchanged at 8.6 mb/d (+2.3% on a yearly basis). As with other OECD areas, it should again be emphasised that this forecast relies on current economic barometers – which may be revised in light of the subprime financial turmoil – and on normal winter temperatures.

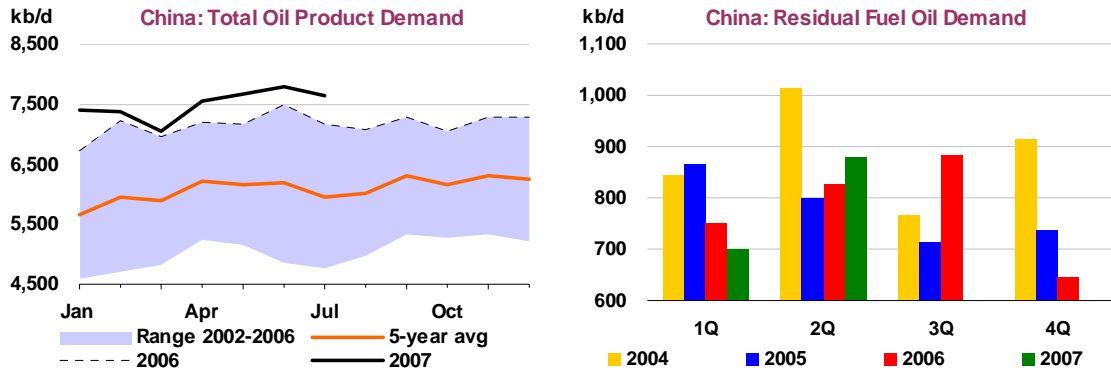
## Non-OECD

### China

In July, China's apparent demand (defined as refinery output plus net oil product imports, adjusted for fuel oil and direct crude burning, smuggling and stock changes) rose by an estimated 6.5% year-on-year, according to preliminary data. The main driver was the start of the holiday season, with transportation fuels rising sharply: demand for jet fuel/kerosene soared by 32.9%, followed by gasoline (+3.5%). Gasoil demand (which includes diesel and other distillates) was also buoyant (+5.8%), despite the beginning of the rainy season, which tends to slow down agricultural and construction activities. Naphtha demand growth, meanwhile, slowed down slightly (+4.3% year-on-year, instead of the double-digit pace seen in the previous two months) as demand for ethylene softened, possibly due to cracker maintenance. LPG demand contracted by 3.8% as temperatures rose.

Residual fuel oil consumption rebounded in July (+3.1% on a yearly basis), after a sharp fall in June (-5.5%), and more generally, a pattern of continued weakness since late 2006. The rise is probably due to the halving of the fuel oil import tax since 1 June (to 3%); imports, however, are reportedly limited to higher-spec fuel oil. As indicated in previous reports, fuel oil import prices have soared, prompted both by higher crude prices and lower availability of fuel oil, as Middle Eastern countries use more for power generation.

More interestingly, fuel oil demand is facing a structural and geographical shift. In southern Guangdong province, the supply of liquefied natural gas (LNG) – which began with the arrival of the first cargo ever in May 2006 – has been gradually displacing residual fuel oil. As such, fuel oil shipments to the port of Huangpu (near Guangzhou) have dropped by some 45% in 1H07 (compared with the same period in the previous year). Only, a few oil-fired power plants and ‘teapot’ refineries continue to use fuel oil, although high prices, as noted, have become a deterrent. Meanwhile, fuel oil shipments to the port of Qingdao, in eastern Shandong province, have risen by about 51% in 1H07, mostly to feed local teapots.



These changing patterns may explain the sudden interest by the central government to survey the number, size and capabilities of teapot refineries. On September 9, the National Development and Reform Commission (NDRC) reportedly decreed that state-owned companies and regional governments will have ten days to provide such information. The data, if made public, could greatly contribute to enhancing the understanding of China’s oil demand. The calculations of Chinese apparent demand tend to differ significantly, in part due to diverging estimates of the size of the teapot sector (which range between 500 kb/d to as much as 1.6 mb/d, with the IEA assuming 1.0 mb/d).

#### China Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2005	2006	2007	2006	2007	2006	2007
LPG & Ethane	650	633	621	-17	-13	-2.6	-2.0
Naphtha	707	826	905	119	80	16.8	9.6
Motor Gasoline	1,131	1,170	1,206	39	36	3.4	3.1
Jet & Kerosene	246	280	302	34	23	13.8	8.1
Gas/Diesel Oil	2,239	2,338	2,483	99	145	4.4	6.2
Residual Fuel Oil	778	776	800	-2	24	-0.2	3.1
Other Products	943	1,135	1,262	192	127	20.3	11.2
<b>Total Products</b>	<b>6,693</b>	<b>7,157</b>	<b>7,580</b>	<b>464</b>	<b>422</b>	<b>6.9</b>	<b>5.9</b>

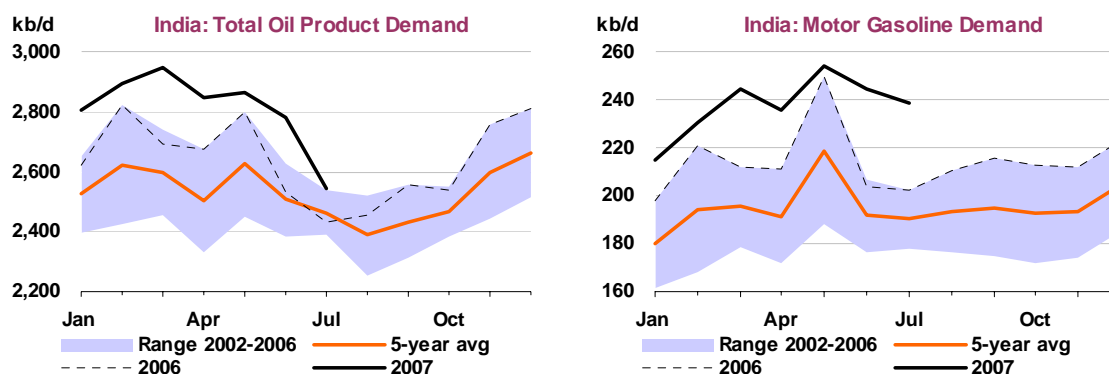
Our forecast of total Chinese oil product demand remains virtually unchanged, despite minor upward revisions to 2Q07 and 3Q07 estimates. Demand is expected to increase by 5.9% in 2007, to 7.6 mb/d, and by 5.7% in 2008, to 8.0 mb/d, on the premise of continued strong economic growth. As argued earlier, at this point it is difficult to discern the effects that China may experience from the ongoing financial turmoil in developed countries.

#### Other Non-OECD

In July, according to preliminary data, oil product sales in **India** – a proxy of demand – increased by 4.8% on a yearly basis, pulled up by continued buoyant growth in LPG (+9.3%), gasoline (+17.8%) and gasoil (+14.2%) demand. The strength of gasoline sales is directly related to the country’s rising vehicle fleet, which is expanding at some 15% per year and is thus expected to exceed 2 million vehicles by the end of the decade, compared with 1.3 million in 2006.

By contrast, 'other products' (which include bitumen, lubricants, etc.) fell again by 17% – suggesting statistical glitches that over the past few months have become a recurrent pattern of preliminary figures, which appear to underestimate actual demand. June's total oil product demand growth has been revised up to +9.8%, instead of +6.2% as previously reported, with the largest adjustment again in the 'other products' category. Naphtha demand, meanwhile, fell for the fourth consecutive month (-12.7%), suggesting that natural gas supplies are steadily growing. Despite these revisions, India's oil demand forecast remains largely unchanged when compared with last month's report. Total oil product demand is expected to rise by 4.3% in 2007 to almost 2.8 mb/d, but growth should slow down to 2.3% in 2008 (2.8 mb/d), given the resumption of naphtha's structural decline.

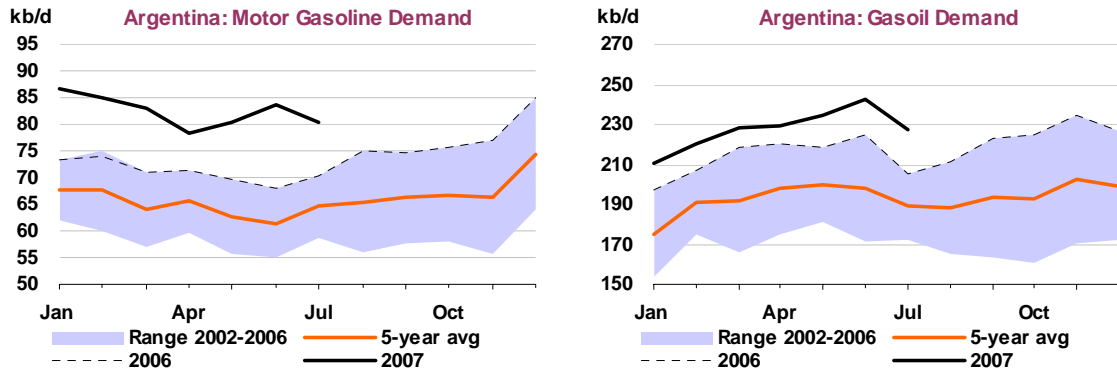
Nevertheless, the outlook of India's domestic natural gas market is still somewhat blurred, as several key pricing issues remain unsolved. One concerns the dual pricing system currently in place – whereby gas from state-owned ONGC and Oil India is sold at subsidised prices, while gas from private companies is sold at much higher market prices – with the local NOCs complaining of continuing financial losses. Another relates to the price – which must be approved by the government – at which Reliance Industries (RIL) plans to sell gas from its D6 field in the Krishna Godavari basin; the decision has been put on hold largely because of policy differences within the government coalition (for example, power and fertiliser companies, which in turn must sell their output at capped prices, have loudly complained about RIL's proposed price). Should it continue to linger on, the dispute will not only likely delay D6's development but also deter other players. Meanwhile, India finds itself in the paradoxical situation of facing electricity shortages despite having built several major gas-fired power plants, notably in Andhra Pradesh state, that currently do not have access to the fuel.



In **Argentina**, the saga surrounding mounting shortages of gasoil and natural gas has taken a new twist. In early August, the Environment Ministry decreed the preventive closure of Shell's 100,000 b/d refinery in the Dock Sud canal, on the grounds of serious pollution as well as unauthorized use of water from the Rio de la Plata. Dock Sud, an industrial zone on the outskirts of Buenos Aires, is indeed severely polluted, but this problem dates back several decades. The move appears to signal an escalation of an ongoing dispute between the government and the company. In March 2005, Shell tried to raise its retail prices, but President Néstor Kirchner himself called for a consumer boycott against the company. Since last year, moreover, Shell has been repeatedly accused of failing to supply enough diesel to its service stations – allegedly to export its production instead – and has been threatened with huge fines. Company executives also face the threat of arrest.

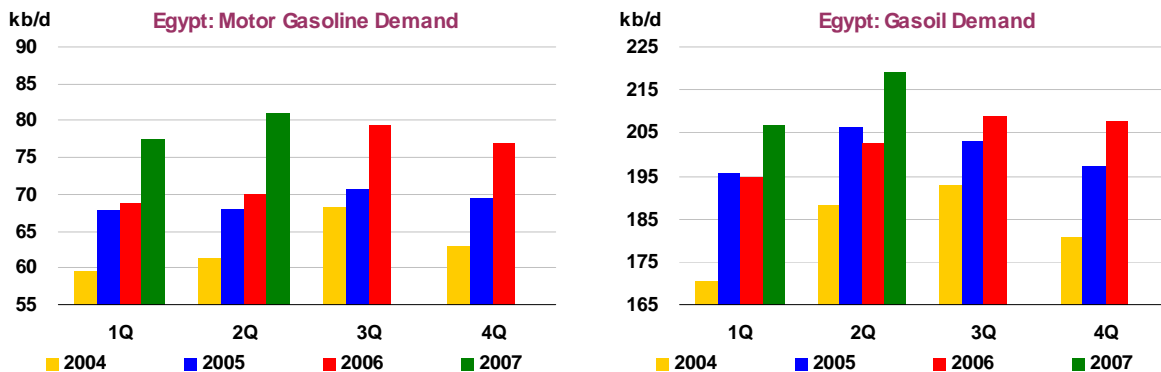
However, as we have noted in earlier reports, the shortages are essentially related to capped domestic retail prices. As the economy has recovered from the country's meltdown of 2002, oil product consumption, particularly of gasoline and gasoil, has soared and shortages have ensued. The government, reluctant to liberalise retail prices for political reasons but anxious to ensure sufficient

supplies because the shortages are disrupting key economic areas, has instead put strong pressure on private companies on the basis of a resurrected Supply Law, originally enacted in 1974.



Shell – which accounts for around 12% of the country’s fuel production – has been forced to declare *force majeure* on fuel deliveries to service stations following the refinery closure. In addition, another major private player – ExxonMobil – is reportedly considering divesting its downstream assets in Argentina (branded as Esso, with a similar share of fuel sales as Shell). An easing of tensions, though, may be in sight: in early September the Environment Ministry said that Shell’s refinery could reopen before the end of the month, provided that a clean-up plan – to be presented by the company – is accepted by the government.

Rising international prices are putting pressure on administered price schemes in yet another country: **Egypt**. Seeking to reduce its budget deficit (estimated at 7% of GDP in fiscal 2006), the government has announced that it will phase out energy subsidies over the next three years, hoping to save some \$2.6 billion over that period. It is unclear, however, whether the move will extend to gasoline and gasoil – which together account for roughly 45% of total oil product demand – or only be limited to industrial fuels (notably natural gas) and electricity.



Indeed, the government had been generally reluctant to raise transportation fuel prices for fear of sparking social unrest, but has been forced to cave in as a result of mounting international oil prices. The price of gasoline, for example, remained unchanged from 1993 to 2006 – when it was increased by 30%. Meanwhile, the price of gasoil – the fuel of choice for trucks and private minibuses – was also static from almost a decade – but doubled in December 2004 and increased again by 25% in July 2006. Still, prices remain low by international standards (gasoline costs about 23 cents per litre, and gasoil some 13 cents per litre). Coupled with strong economic growth, this has unsurprisingly stimulated the demand for both fuels (gasoline consumption is expected to soar by some 11% in 2007 when compared with 2006, while gasoil demand is forecast to jump by almost 6% this year).

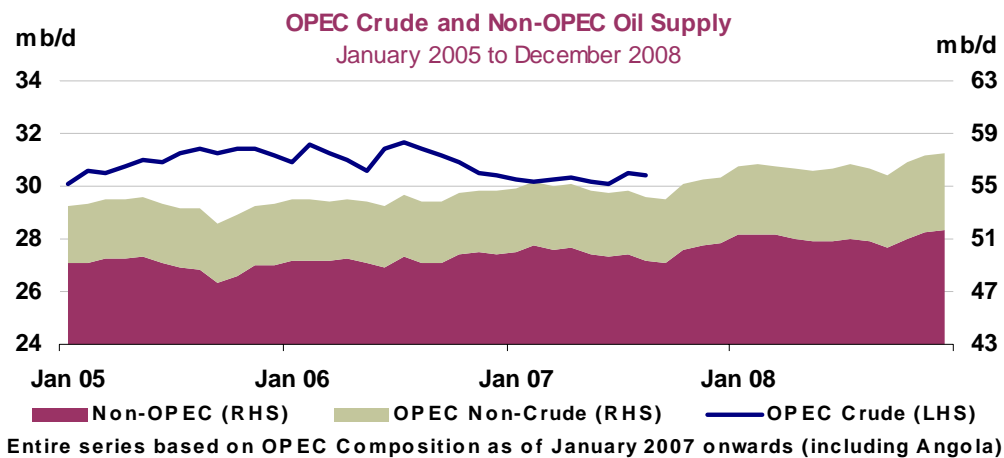


The gasoline rationing scheme in **Iran**, which was launched in June, will probably only reduce the country's gasoline demand by about 10% at best, rather than earlier official claims of a 30% reduction. The government continues prevaricating and thus postponing the day when consumers will face the full brunt of rationing. On the one hand, the price for gasoline purchases in excess of the quotas, due to be announced in September, has not yet been set. Some officials have hinted that it could be as high as 6,000 rials (about 72 cents or six times as high as subsidized rations), only to be disavowed by other government sources. On the other hand, in late August the government unexpectedly raised the quota by 100 litres (equivalent to one month), allegedly to allow Iranians to travel as the holiday season began. Meanwhile, the rationing scheme appears to be boosting, as expected, a flourishing black market: taxi fares in Tehran have reportedly soared, since many drivers are finding it more profitable to sell their quota rather than work – thus sharply reducing the availability of cabs.

# SUPPLY

## Summary

- **World oil supply** in August fell by 430 kb/d to 84.6 mb/d, as hurricane outages in Mexico and scheduled and unscheduled maintenance in the North Sea augmented an Iraqi-derived drop in OPEC crude supply. Global supply has been running below year-ago levels since June.
- **Non-OPEC production** estimates for 2007 are unchanged at 50.0 mb/d but are revised up modestly to 51.1 mb/d for 2008. Higher baseline Canadian and Mexican supply carries through the forecast, while Azerbaijan and Malaysia also see positive adjustments for 2008. A temporary lull in non-OPEC growth in 3Q07 reverts to 0.5 mb/d yearly growth in 4Q07 and around 1.0 mb/d throughout 2008. Russia, Azerbaijan, Kazakhstan, Brazil, Sudan, China, Malaysia, Australia, Canada's oilsands and the US GOM drive 2008's expansion. OPEC NGL growth also accelerates next year, driven by Saudi Arabia.
- **Russia and the Caspian states** account for 80% of 2007's non-OPEC growth and 45% of the 2008 total. But growth here, as elsewhere, is risk-prone. Speculation surrounds Russia's largest producer Rosneft's ability to finance expansion, Kazakhstan's late-decade 1.5 mb/d Kashagan project is temporarily stalled and rebel threats against the BTC pipeline in Turkey, if realised, could stem Azerbaijan's growth.
- **Recent analyses of upstream activity levels** point to strong recent capital expenditure growth but limited results in terms of reserve replacement, at least among IOCs. Exploration activity is increasing, but access to reserves remains a problem. Tight labour, raw materials and equipment markets could persist into the next decade, as could the risks of project delays and extended maintenance stoppages.
- **August OPEC crude supply** averaged 30.4 mb/d, some 80 kb/d lower than in July. Iraq (-230 kb/d) and Iran (-50 kb/d) saw lower export liftings, and thus weaker implied supply, in August, while Angola and Nigeria collectively pushed their supplies higher by a combined 120 kb/d. Individual changes in output from other producers were minor. OPEC effective spare capacity remains below 3 mb/d.
- **The 'call on OPEC crude and stock change'** is trimmed by 0.2-0.3 mb/d for the second half of 2007 and for 2008, largely on the basis of demand-side adjustments. It nonetheless rises to at least 32.4 mb/d by 4Q07. The average 2008 call increases by 450 kb/d compared with 2007.



All world oil supply figures for August discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska, Kazakhstan and Russia are supported by preliminary August supply data.

**Note: Random events present downside risk to the non-OPEC production forecast contained in this Report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific allowance has been made in the forecast for scheduled maintenance in all regions and for typical seasonal supply outages (including hurricane-related stoppages) in North America. In addition, from July 2007, a nationally-allocated (but not field-specific) reliability adjustment has also been applied for the non-OPEC forecast to reflect a historical tendency for unexpected events to reduce actual supply compared with the initial forecast. This totals -410 kb/d for non-OPEC as a whole, with downward adjustment focused in the OECD.**

## OPEC

August OPEC crude supply averaged 30.4 mb/d, some 80 kb/d lower than in July. Iraq (-230 kb/d) and Iran (-50 kb/d) saw lower export liftings, and thus weaker implied supply, while Angola and Nigeria collectively pushed their supplies higher by 120 kb/d. Individual changes in output from other producers were more minor. Turning to the OPEC-10 however, there are some signs of higher supply, with July revised up by 120 kb/d to 26.75 mb/d and August rising by a further 85 kb/d. Superficially this may suggest a slackening of compliance from cuts put in place from last November. These had seen output for OPEC-10 output hit a low of 26.57 mb/d in May, although that low level, and August's stronger 26.8 mb/d, were both partly the result of rebel activity in the Niger Delta, and subsequent recovery, rather than OPEC target considerations.

### STOP PRESS

#### 145th Ordinary Meeting of the OPEC Conference, 11 September 2007, Vienna, Austria

OPEC Ministers concluded their meeting on 11 September with an agreement that the OPEC-10 (excluding Angola and Iraq) would raise supplies to the market by 500 kb/d, effective 1 November 2007. No individual production allocations were mentioned, but comments from OPEC officials after the release of the official communiqué suggested that increases will be on top of current production. Tight US product markets, a shift of market structure into backwardation and the need to ensure adequate winter supplies were cited as justifying the increase. The communiqué said that OPEC will continue to monitor the supply/demand situation over coming months and affirmed that an Extraordinary Meeting will be held to reassess the market situation on 5 December 2007 in Abu Dhabi.

OPEC sustainable production capacity remains little-changed at 34.2 mb/d, with baseload decline marginally lowering Nigerian capacity, but this is countered by modest rises for Libya and Qatar. Capacity is expected to rise to 34.5 mb/d by the end of this year, and by a more substantial 1.3 mb/d during 2008 (attaining 35.8 mb/d by end-year). Angola, Saudi Arabia and Qatar underpin this year's capacity growth, with Saudi Arabia, Angola, Kuwait and the UAE responsible for the bulk of 2008's increase. As noted before, if OPEC production tracks the expected 'call on OPEC crude and stock change' through 4Q07, spare capacity is likely to temporarily decline from effective levels around 2.7 mb/d now.

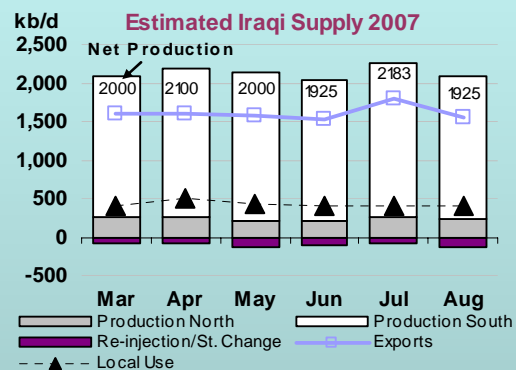
## Iraq Highlighting Plans for Increased Export Capacity

While foreign upstream investment in Iraq awaits the passing of a long-delayed hydrocarbon law, Iraqi officials have again outlined plans for raising production to 4.0 mb/d and a corresponding goal to boost crude exports. This report previously noted an inability to secure consistent offtake by refineries and export pipelines as the key *short-term* impediment to raising Iraqi supply consistently above 2.0 mb/d. While July supply hit a three year peak of 2.18 mb/d, renewed pipeline outages saw output dip in August to 1.97 mb/d. Power outages curtailed production and low stocks precluded a repeat of July's 100 kb/d of Ceyhan exports. Southern exports from Basrah and Khor al-Amaya fell from 1.68 mb/d in July to 1.56 mb/d in August, and refineries are still running at less than 60% of their 700 kb/d capacity. So what are the options for improved off-take which could drag Iraqi supply higher once again?

In the past two years, **Kirkuk-Ceyhan pipeline** outages have restricted average exports to 35 kb/d, versus notional capacity of 500 kb/d. Pre-war some 900 kb/d was exported via Ceyhan, while original design capacity of the pipelines was 1.7 mb/d. A new 500 kb/d section of pipeline between Kirkuk and Baiji has been completed, and is reportedly more heavily guarded, potentially boosting northbound exports and deliveries to the 300 kb/d Baiji refinery. Moreover, crude in storage at Ceyhan stood at 6 mb in the second week of September, ahead of a tender which should add 5 mb, or 165 kb/d, to this month's Iraqi exports. Time will tell if a sustained security improvement has occurred on this route, though there are anecdotal reports that attacks have eased and recent outages have tended to be more technical in nature.

### Iraqi Supply Capacity based on Offtake

	(thousand barrels per day)	
	Current Effective	Mid-Term Potential
Exports via:		
Ceyhan	<100	500
Basrah	1800	2000
Syria	10	300
Jordan	-	100
Basrah-Abadan	-	200
Domestic Crude Use	500	800
	<b>2400</b>	<b>3900</b>



The core of Iraq's export infrastructure recently has been the southern tanker terminals at **Basrah and Khor al-Amaya (KAA)**, with combined capacity of 1.8 mb/d. Expansion here might be limited to an extra 0.2 mb/d from KAA unless extra storage capacity above prevailing 2 mb levels is built. However, concerns remain over a potential escalation in insurgent activity in the south, an area to date immune from the export disruptions elsewhere. The Oil Minister in August said that construction could begin soon on a crude pipeline from **Basrah to Abadan in Iran**. An initial 100-200 kb/d could flow through the 350 kb/d line within six months, with Iraq receiving refined products in return.

Jordan's Energy Ministry recently disclosed that Iraqi crude supplies will recommence under the terms of an agreement signed in August 2006. Initial volumes **trucked to Jordan** will amount to 10 kb/d, but could rise later to 100 kb/d. Jordan has opted to receive lower sulphur Kirkuk crude in preference to Basrah Light. Jordan received 100 kb/d of Iraqi crude via truck pre-war in 2002/2003 under terms agreed by the UN. The Saddam regime had also been discussing plans to reinstate a pipeline direct to Jordan's Zarqa refinery. Recently Jordan has imported occasional cargoes of Iraqi crude via Aqaba on the Red Sea.

Iraq also plans to augment the current 10 kb/d of cross-border trade with Syria. A visit by Iraq's Prime Minister and Oil Minister to Damascus ended on 22 August with an agreement to reinstate the **Kirkuk to Banias pipeline**. This was used pre-2003 to supply 200-300 kb/d of crude to Syria in contravention of international sanctions, but the Iraqi segment was shut by US military action in March 2003.

All told, existing Iraqi export and refining infrastructure can accommodate some 2.4 mb/d of production, with the Syrian, Iranian and Jordanian expansions adding a further 500-600 kb/d. Full reactivation of Iraq's idled domestic refining capacity, together with feasible export potential, could take outlets for Iraqi production into a 3.5-4.0 mb/d range. This also represents the Oil Ministry's latest target production level for end-2009. How soon the necessary upstream investment environment (both in terms of security and regulatory regime) can be put in place to facilitate this rise remains to be seen.

**OPEC Crude Production<sup>1</sup>**

(million barrels per day)

	July 2007 Production	August 2007 Production	Sustainable Production Capacity <sup>2</sup>	Spare Capacity vs Aug 2007 Production	Capacity end-2007	Capacity end-2008
Algeria	1.35	1.35	1.39	0.03	1.38	1.47
Indonesia	0.83	0.84	0.87	0.04	0.88	0.88
Iran	3.92	3.87	3.95	0.08	3.88	3.97
Kuwait <sup>3</sup>	2.44	2.45	2.64	0.19	2.68	2.83
Libya	1.70	1.70	1.76	0.06	1.78	1.84
Nigeria <sup>4</sup>	2.10	2.15	2.47	0.32	2.45	2.39
Qatar	0.83	0.83	0.92	0.09	0.98	1.06
Saudi Arabia <sup>3</sup>	8.67	8.70	10.80	2.10	10.91	11.35
UAE	2.59	2.60	2.75	0.15	2.77	2.89
Venezuela <sup>5</sup>	2.34	2.36	2.60	0.25	2.62	2.60
<b>Subtotal</b>	<b>26.76</b>	<b>26.84</b>	<b>30.14</b>	<b>3.30</b>	<b>30.32</b>	<b>31.27</b>
Angola <sup>1</sup>	1.56	1.62	1.62	0.00	1.79	2.15
Iraq	2.19	1.96	2.40	0.45	2.40	2.40
<b>Total</b>	<b>30.50</b>	<b>30.41</b>	<b>34.16</b>	<b>3.75</b>	<b>34.51</b>	<b>35.82</b>

*(excluding Indonesia, Iraq, Nigeria, Venezuela 2.7)*

1 Angola joins OPEC effective 1 January 2007.

2 Capacity levels can be reached within 30 days and sustained for 90 days.

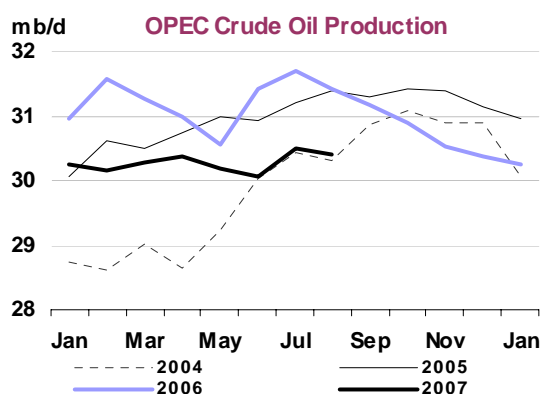
3 Includes half of Neutral Zone Production.

4 Nigeria excludes some 545 kb/d of shut-in capacity.

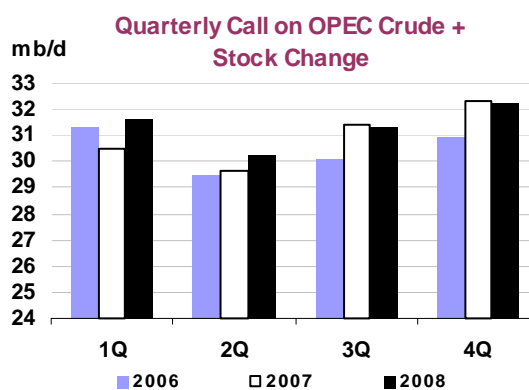
5 Includes Orinoco extra-heavy oil assumed at 475 kb/d in August

**Angolan** July output is revised down to 1.55 mb/d from an original 1.64 mb/d, with maintenance outages more prevalent than first thought. August indications show crude at 1.62 mb/d, with the Dalia field close to plateau 220 kb/d output, but start-up at the Greater Plutonia field believed to have been deferred from August into September. The first three 1 mb cargoes of Plutonio crude are not now expected to be loaded for export until late-September. Crude capacity is seen reaching 1.79 mb/d in 4Q07 and 2.1 mb/d by the end of 2008. OPEC's Secretary General visited Luanda in August and reported that, while no production allocation will be made for Angola in 2007, it would be included in 2008.

**Nigerian** supply has been revised down by 115 kb/d for July to 2.1 mb/d, rising to 2.15 mb/d in August. The July revision follows indications of both weaker exports and domestic refinery activity, while stronger exports underpin the higher August estimate. Some 550 kb/d of production remain shut-in on a long-term basis, largely Bonny, Forcados and offshore EA output. A further 100 kb/d of capacity is temporarily offline but could be reactivated at relatively short notice. We exclude the longer-term shut-ins from our 2.47 mb/d estimate for sustainable capacity. However, there are reports that the nomination of three 1 mb Forcados cargoes for October lifting will comprise some reactivated output.



Entire series based on OPEC Composition as of January 2007 onwards (including Angola)



Entire series based on OPEC Composition as of January 2007 onwards (including Angola)

State oil company NNPC is to be broken up into five operating companies according to the government, while a new National Energy Council will supervise reorganisation of the energy sector. Meanwhile, there are reports that crude pipeline repairs will allow the re-opening of the Warri and Kaduna refineries in September. Recent months have seen only sporadic operations at the Port Harcourt refinery and reinstating 335 kb/d of Warri and Kaduna capacity would help curb crippling gasoline imports.

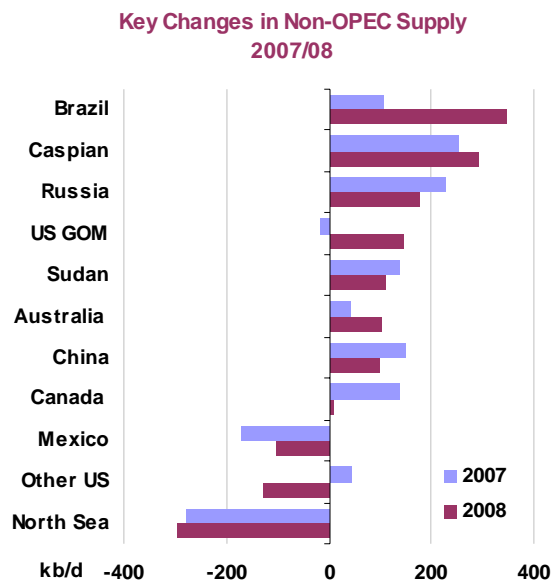
The supply estimate for **Saudi Arabia** in July is also revised up by 50 kb/d to 8.67 mb/d and further to 8.7 mb/d for August. Stronger exports account for the July change. This report uses crude supply (comprising exports and domestic refinery throughput) as a proxy for production for Saudi Arabia and some other OPEC producers. Hence data on the JODI system showing 8.9 mb/d output for Saudi Arabia in July include substantial deliveries into storage. This report would normally account for that extra oil in subsequent months when it is exported. Nonetheless, Saudi supply does appear to be edging higher, despite buyers generally suggesting flat-term volumes for the period through October.

UAE supply estimates stand at 2.59 mb/d and 2.6 mb/d for July and August respectively. Supply appears to have bottomed out at the height of OPEC cuts last February and has risen in advance of October/November maintenance at the offshore Umm Shaif, Upper and Lower Zakum fields. This could reduce production by some 600 kb/d in November, although production of distillate-rich onshore Murban crude, generally destined for Asian markets, is unlikely to be affected.

### Non-OPEC Overview

Third quarter non-OPEC growth now stands at an estimated 0.1 mb/d versus 2006, following four quarters of near-1.0 mb/d growth. While the slow-down appears dramatic, it is in line forecasts reflecting scheduled seasonal maintenance and an assumption of heavy weather-related stoppages. Last month we discussed the potential upside for US GOM supply should 2007 see a repeat of 2006's uneventful Atlantic Hurricane season. The passage of two category five hurricanes through the Caribbean in August however suggests that actually implementing upward revisions for GOM supply forecasts before the November end of the hurricane season would be premature. Hurricane Dean in the third week of August shut-in 2.6 mb/d of Mexican oil production and 2.3 bcf/d of gas, albeit damage to facilities was slight. Nonetheless we estimate that temporary, combined outages for Mexico and the US curbed supply in August by 430 kb/d, compared with this report's assumption of 55 kb/d. Our hurricane assumptions rise to 440 kb/d for September and 340 kb/d for October (based on the five-year average disruption pattern), higher than some other estimates, but perhaps beginning to look more prudent in the aftermath of Dean.

Supply growth is expected to recover to 0.5 mb/d in the fourth quarter based on seasonal supply recovery and new field start-ups. Notable in the latter category are Brazil, Australia, Malaysia, the North Sea and US GOM. Growth then averages 1.0 mb/d for most of 2008, centred on Russia, Azerbaijan, Kazakhstan, Brazil, Sudan, China, Malaysia, Australia, Canada's oilsands and the US GOM. These increments help to offset accelerating decline elsewhere in North America, the North Sea and non-OPEC Middle East. FSU growth accounts for 80% of incremental non-OPEC supply in 2007 and 45% in 2008, although the precarious nature of projections for the FSU, as elsewhere, was highlighted by recent reports on Rosneft in Russia, the Kashagan project in Kazakhstan and potential threats against the BTC pipeline in Turkey.



Biofuels growth outside of the US and Brazil contributes 145 kb/d to the 2007 growth level of 0.6 mb/d and 250 kb/d to next year's non-OPEC total of 1.1 mb/d. And despite worsening biofuel economics recently, US ethanol output growth actually appears to be running slightly ahead of our forecast.

## Forecasting Through Interesting Times

Taking a longer-term view of upstream trends, several recent studies (including analyses from Lehman Brothers, Simmons and Co, John S. Herold, the USGS and Norway's NPD) have highlighted a renewed surge in upstream activity after 20 years of underinvestment and recent resultant higher prices, but persistent questions over the reserve base. Double-digit spending growth could continue into the next decade although, as noted previously, rising costs swallow much of the increase. Moreover, despite an encouraging rise in 2005/2006 exploration activity by major companies, after a decade of decline, IOCs still struggle to replace oil production (albeit gas replacement rates have remained in excess of 100%). But the nadir seems to have been 2004, when only 50% of production was replaced and this ratio has since risen.

That said, the size of the resource base from which future production will come remains uncertain. Arctic oil is often cited as a key future source of supply and increasingly, the subject of territorial claims between Russia, Canada, the US and Denmark. The USGS recently downgraded East Greenland Rift Basin undiscovered oil resources by 80%, partly offset by a 6% increase for gas and 100% increase for NGL. But Norway's NPD has suggested that Barents Sea undiscovered oil resources may now be 20% higher.

Oil company focus does now appear more firmly centred on exploration again, although access constraints remain a problem. Reserve replacement levels could improve further if spending is sustained. Interestingly, upstream spending levels by Chinese and Russian national oil companies (NOCs) are reportedly rising by over 20% and 30% respectively in 2007. With absolute levels, and disclosure, of reserves more opaque in the rising proportion of countries where NOCs dominate, global reserve trends may be less clear cut than suggested by the SEC filings of the IOCs alone. This only adds to the already urgent need for a comprehensive, standardised and transparent system of global reserve reporting.

Other key points emerging from these studies are:

- That tight labour, raw materials, drilling and service markets will persist into the next decade;
- The rising importance for major operators of deepwater production, which could attain 10-15% of their production portfolios by around 2010;
- That typical global project cost inflation currently stands at 15-20% per year, with onshore and shallow water cost inflation potentially easing henceforward, but persisting for the deepwater ;
- The intense pressure on offshore service and maintenance capacity as companies face the need to replace ageing infrastructure. This is forcing companies to undertake more risky 'off-season' winter maintenance to ensure access to stretched service capacity.

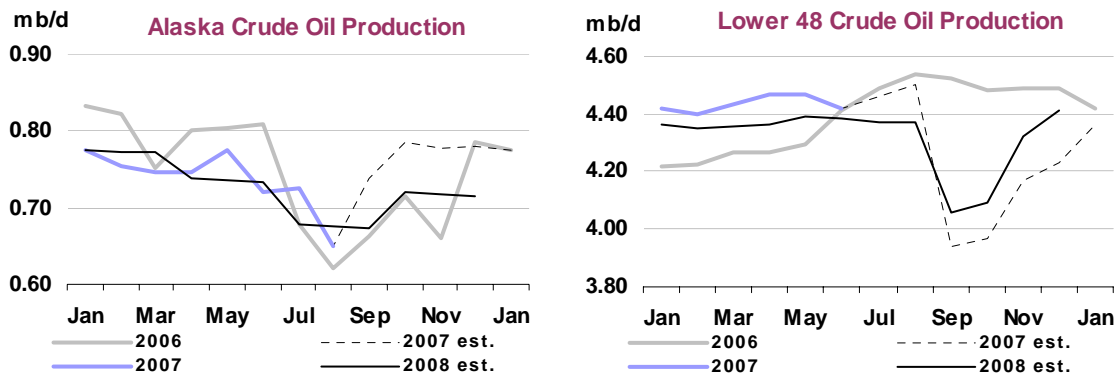
All of the above – tightening access terms, ageing infrastructure, technologically more complex operations and availability constraints for the 'nuts and bolts' companies need to sustain or augment production – suggest that project delays and unscheduled outages from the existing production base could be with us for some time to come. To paraphrase, *may we forecast in interesting times*.

## OECD

### North America

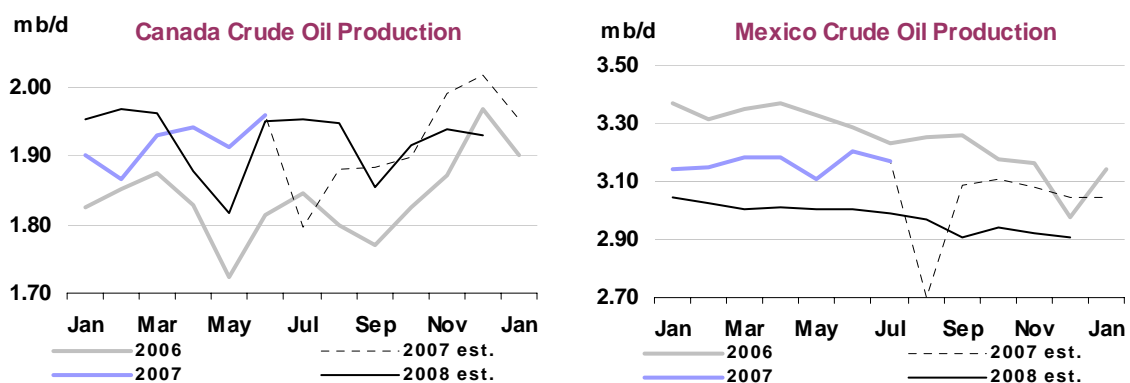
**US – August Alaska actual, others estimated:** US total oil supply projections remain relatively unchanged by recent data adjustments. The 2007 total is revised up 30 kb/d to 7.4 mb/d after Gulf of Mexico facilities emerged unscathed from August's passing of storms Dean, Erin and Felix. Heavier summer maintenance trends at ageing infrastructure on Alaska's North Slope seen this year are carried forward into the forecast for 2008, but this is offset by stronger baseline output from smaller states. June ethanol production is also running 20 kb/d ahead of initial expectations, partly offset by lower MTBE supply. Neither additive sees a change in forecast for now however. The 2008 US oil output projection remains at 7.42 mb/d (crude oil 5.04 mb/d), with a 150 kb/d GOM rise offset by declines elsewhere.

US GOM production outages caused by Atlantic hurricanes in August averaged only 5 kb/d, compared with a previous assumption of 55 kb/d based on the five year historical average (although this was overshadowed by 425 kb/d of Mexican outages compared with an August assumption of zero). Precautionary shut-ins ahead of Dean's passage reached 45 kb/d of oil on 21 August, but production was rapidly reinstated as it became clear that Dean would follow a more southerly path over Mexico. Assumed US GOM outages peak at 380 kb/d in September and 345 kb/d in October.



**Canada – June actual:** Canadian oil output is seen repeating last year's 135 kb/d rise in 2007, before flattening off at 3.34 mb/d in 2008. Oil sands supply growth of 100 kb/d-plus both years is augmented by recovering offshore east coast crude in 2007. Data through June sees a 120 kb/d upward revision for 2Q supply overall, although this is largely caused by a lower-than-expected impact from upgrader unit maintenance, and the impact on the forecast (aside from higher baseline bitumen production) is limited.

The Hibernia field offshore Newfoundland suffered water seepage problems in early September which are assumed to curb output by some 60 kb/d below 180 kb/d capacity in September and October. Meanwhile, agreement was reached on the nearby Hebron-Ben Nevis development, whereby the provincial government will take a 4.9% equity stake and receive extra royalties when prices are above \$50/bbl. In return, the government has dropped demands requiring domestic processing of Hebron oil. The Chevron-operated project could come on-stream in 2015 and attain peak output of 150 kb/d.



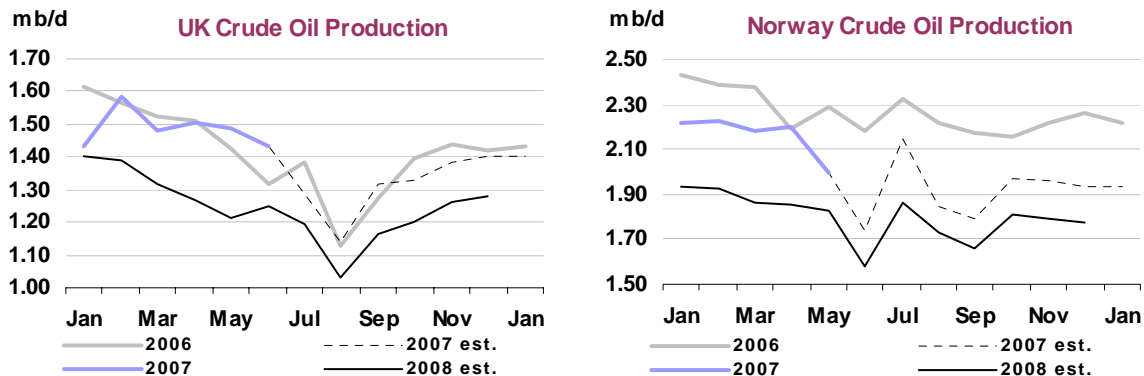
**Mexico – July actual:** Despite substantial downward revisions to Mexican August production due to the impact of Hurricane Dean, overall the Mexican output forecast sees a 15-20 kb/d upward revision for the balance of 2007 and 2008. This follows the inclusion of higher-than-expected, field-specific July production data and the lack of damage caused by Dean. That said, we still envisage steep overall decline from Mexico, with crude production of 3.1 mb/d in 2007 and 2.98 mb/d in 2008, versus 3.26 mb/d in 2006.



Offshore facilities began to be shut down on 20 August as a precautionary measure ahead of Hurricane Dean, affecting 2.6 mb/d of oil production and 2.6 bcf/d of gas. The category five hurricane weakened after passing over the Yucatan peninsula and then the offshore Campeche region. Production was restarted on 23 August but it took until 30 August to fully reinstate output to pre-storm levels. Damage levels were not believed to have been significant. This report estimates that some 425 kb/d of Mexican oil production was deferred by Dean, although a more accurate assessment will be possible next month after the release of official Mexican production data.

### North Sea

**UK and Norway – June actual, Norway July provisional:** North Sea production forecasts remain largely unchanged from last month's report. July provisional Norwegian data came in some 135 kb/d above our earlier estimate, and in line with a stronger post-maintenance rebound suggested by loading schedules. However, the impact on forecast Norwegian supply is limited, with extensive outages for maintenance expected for August and September. UK September supply is revised up by 25 kb/d on reports of an earlier-than-assumed supply recovery following reinstatement of the CATS pipeline. Most of this production was scheduled to be reinstated in the first half of September. Peak outages are estimated at a combined 70 kb/d of crude and NGL from the J-Block, Shearwater, Erskine and Armada fields.



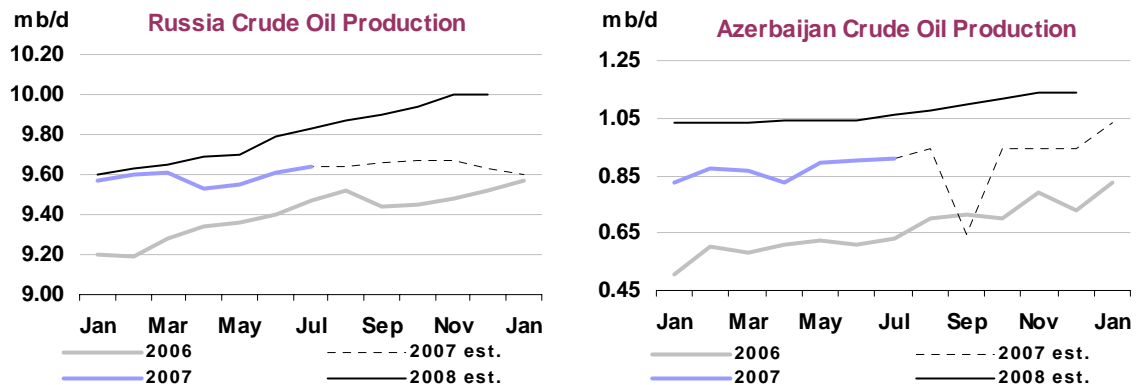
In total, Norwegian supply falls by 260 kb/d to 2.52 mb/d in 2007, with several new field start-ups moderating decline to 155 kb/d in 2008 (giving total supply of 2.36 mb/d). UK oil production (including gas liquids) is forecast flat in 2007 at 1.64 mb/d, as rising Buzzard field supply counters decline elsewhere. However, decline re-emerges from 2008, with UK production slipping by 140 kb/d to 1.50 mb/d.

### Former Soviet Union (FSU)

**Russia – July actual, August provisional:** Russian projections are also held steady, with total oil production in 2007 of 9.92 mb/d and 10.10 mb/d in 2008 representing growth of 2.5% and 1.8% respectively. Growth this year has slowed from 1Q levels near 400 kb/d, although inflated early-2007 growth levels need to be seen in the context of weak 1Q06 production due to weather. That said, August growth stood at a more modest 125 kb/d year-on-year. Recent months have seen production drift lower from Lukoil, Gazpromneft (formerly Sibneft), TNK-BP and Gazprom, partly offset by Rosneft increases.

Yearly growth by Rosneft currently stands close to 600 kb/d, with total production of 2.2 mb/d representing a five-fold increase on 2004 levels. Some commentators have suggested that organic production growth has been sacrificed to a programme of acquisitions that has reportedly pushed Rosneft debt to around \$30 billion. This is seen as potentially undermining Rosneft's ability to finance future development at fields such as Vankor, Sakhalin and Verknechonskoye, which helped underpin MTOMR projections for Russian output reaching 10.6 mb/d by end-decade. A further twist in the tale emerged from press reports in August suggesting that the government is planning to establish a new state

producer incorporating the oil assets of Rosneft, Gazprom and Surgutneftegaz. Surgutneftegaz's inclusion may in part reflect its cash-rich status, which in turn might help alleviate Rosneft debts.



**Azerbaijan – July actual:** Azeri oil production remains on track for growth of around 200 kb/d both this year and next. Prevailing output of some 950 kb/d could dip to 650 kb/d in September owing to construction work on the Central Azeri platform, part of the 700 kb/d offshore ACG complex. Work should largely be completed by October however, based on higher expected shipments via the Baku-Tbilisi-Ceyhan (BTC) pipeline. Total Azerbaijan production attains 1.1 mb/d in the second half of 2008, with increased contributions from the Azeri field and from start-up at the deep Guneshli complex. Growth will be dependent however, on maintaining the integrity of the BTC pipeline, after a Kurdish rebel group said BTC would be attacked unless Turkey desists from attacks on Kurdish rebel forces.

### Stakes Rise in Kashagan Row

The Kazakh government has ordered a three month freeze on work at the Eni-operated, 13 billion barrel Kashagan field in the shallow waters of the north Caspian sea. The government has cited environmental violations in justifying the move, while also itemising customs-related infringements, and has long been expressing concerns about cost over-runs at the delayed project. Initial estimates had the project scheduled for start-up in 2005, later deferred to 2008 and most recently to late-2010 at the earliest. Phase one plateau production of 300 kb/d is seen potentially rising in later phases to 1.5 mb/d by 2019, the latter level being 25% higher than original estimates. Total project costs have ballooned from \$55 billion to \$135 billion according to the government, with the operator citing high reservoir pressure, hydrogen sulphide contamination and extreme winter operating conditions as explanatory factors. Under the project's production sharing agreement, the developers are allowed to recoup costs before sharing revenues with the Kazakh government, so cost escalation acts to further delay government receipt of revenues.

#### Stakeholders in the Kashagan Project

Eni (operator)	18.52%	ConocoPhillips	9.26%
ExxonMobil	18.52%	Inpex	8.33%
Shell	18.52%	KazMunaiGaz	8.33%
Total	18.52%		

In August, Kazakhstan said it wanted to boost its share in the project from an original 8.3% to 40%. The Prime Minister in early-September said that state producer KazMunaiGaz should become joint operator of the project. A statement from Kazakhstan's finance ministry has now said that, in addition, it will seek at least \$10 billion in compensation for the project delays. At the time of writing, talks on Kashagan were continuing between Eni and the Kazakhstan government, with a visit by Eni's Chief Executive to Astana due for 11 September. Separately, Italy's Prime Minister is due to visit Kazakhstan in October.

## FSU Net Exports of Crude &amp; Petroleum Products

(million barrels per day)

	2005	2006	3Q2006	4Q2006	1Q2007	2Q2007	May 07	Jun 07	Jul 07	Latest month vs. Jun 07 Jul 06	
<b>Crude</b>											
Black Sea	2.27	2.22	2.27	2.08	2.30	2.23	2.29	2.07	2.11	0.04	-0.18
Baltic	1.59	1.55	1.49	1.43	1.58	1.60	1.57	1.45	1.54	0.09	-0.05
Arctic/FarEast	0.19	0.15	0.20	0.19	0.29	0.30	0.29	0.30	0.34	0.03	0.16
BTC	0.00	0.00	0.22	0.38	0.43	0.58	0.64	0.64	0.63	-0.01	0.45
<b>Crude Seaborne</b>	<b>4.05</b>	<b>4.07</b>	<b>4.18</b>	<b>4.08</b>	<b>4.60</b>	<b>4.70</b>	<b>4.80</b>	<b>4.47</b>	<b>4.62</b>	<b>0.15</b>	<b>0.38</b>
Druzhba Pipeline	1.15	1.20	1.23	1.19	1.17	1.13	1.17	1.06	1.01	-0.05	-0.28
Other Routes	0.25	0.38	0.38	0.45	0.47	0.46	0.46	0.44	0.43	-0.01	0.07
<b>Total Crude Exports</b>	<b>5.45</b>	<b>5.64</b>	<b>5.80</b>	<b>5.71</b>	<b>6.23</b>	<b>6.29</b>	<b>6.42</b>	<b>5.97</b>	<b>6.06</b>	<b>0.09</b>	<b>0.17</b>
Of Which: Transneft	4.12	4.22	4.30	4.06	4.33	4.31	4.36	4.01	4.09	0.08	-0.31
<b>Products</b>											
Fuel oil	0.93	0.95	0.94	0.95	1.04	1.15	1.16	1.17	1.17	0.00	0.23
Gasoil	0.87	0.95	0.94	0.91	0.94	0.88	0.83	1.00	1.00	0.00	0.09
Other Products	0.58	0.61	0.63	0.54	0.59	0.69	0.69	0.71	0.69	-0.02	0.00
<b>Total Product</b>	<b>2.38</b>	<b>2.51</b>	<b>2.50</b>	<b>2.40</b>	<b>2.57</b>	<b>2.73</b>	<b>2.69</b>	<b>2.88</b>	<b>2.86</b>	<b>-0.02</b>	<b>0.32</b>
<b>Total Exports</b>	<b>7.83</b>	<b>8.16</b>	<b>8.30</b>	<b>8.11</b>	<b>8.80</b>	<b>9.02</b>	<b>9.11</b>	<b>8.86</b>	<b>8.93</b>	<b>0.07</b>	<b>0.50</b>
Imports	0.02	0.04	0.05	0.04	0.02	0.04	0.03	0.04	0.04	0.00	-0.02
<b>Net Exports</b>	<b>7.81</b>	<b>8.12</b>	<b>8.25</b>	<b>8.07</b>	<b>8.78</b>	<b>8.98</b>	<b>9.08</b>	<b>8.82</b>	<b>8.89</b>	<b>0.07</b>	<b>0.52</b>

Sources: Petro-Logistics, IEA estimates

Note: Transneft data has been revised to exclude Russian CPC volumes.

According to preliminary data, **FSU net oil exports** totalled 8.89 mb/d in July, up 70 kb/d from June and 520 kb/d higher than July 2006. A 150 kb/d month-on-month increase in seaborne crude exports, including an extra 90 kb/d leaving Baltic ports, was tempered by another drop in Druzhba transits, this time by 50 kb/d (see *Refining* section, page 44). There are reports of Lukoil having curbed June-July deliveries to German refineries, in part due to pricing issues. However, latest information suggests reinstated volumes for September. Average monthly FSU product exports fell by 20 kb/d in July.

August loading schedules suggest that exports via Transneft may have been 100 kb/d below July volumes, coinciding with an increase in Russian export duties from 1 August. However, higher BTC flows may have restricted any drop in aggregate FSU supplies to around 50 kb/d. Further declines in FSU exports are anticipated later this year. The threat from late-August of a strike by Turkish ship pilots, if realised, may hinder traffic through the Turkish straits which could restrict trade flows from FSU ports in the Black Sea. Maintenance is due to reduce Caspian output by up to 300 kb/d in September, which should overshadow extra Russian barrels exported before the next rise in crude and product export duties, effective 1 October.

## Revisions to Non-OPEC Estimates

As was the case last month, adjustments to the 2007 and 2008 non-OPEC forecasts are relatively minor. The 2007 total is trimmed by 30 kb/d, to 50.0 mb/d, while 2008 supply is revised up by 75 kb/d to 51.1 mb/d. Reductions for 2007 are restricted to the current quarter (3Q) with weather and other unscheduled stoppages affecting Mexico, China and Brazil. For **Mexico**, production data for July prior to the passage of Hurricane Dean came in stronger than expected, limiting the forward impact of downward revision for August. Underlying Chinese and Brazilian growth also remains robust, dissuading us from extending adjustments to the rest of 2007. For **Brazil**, our existing forecast already anticipated some downside potential from earlier Petrobras targets, which have now been trimmed to 1.8 mb/d for 2007.

Azerbaijan, Malaysia, Canada and Mexico all now come in stronger for 2008 than in the previous forecast. In the case of **Malaysia**, July data for crude and condensate came in 30 kb/d above our projection, and Petronas reported on 17 August the start-up the country's first deepwater field, Kikeh. Plateau production of 120 kb/d is scheduled for late 2008, slightly earlier than this report's prevailing estimate.

## Revisions to Non-OPEC Oil Supply

(million barrels per day)

	Last Month's OMR				This Month's OMR				This Month vs. Last Month			
	2007	2008	07 v 06	08 v 07	2007	2008	07 v 06	08 v 07	2007	2008	07 v 06	08 v 07
North America	14.22	14.14	-0.03	-0.08	14.24	14.17	0.00	-0.07	0.02	0.03	0.02	0.01
Europe	4.88	4.59	-0.30	-0.30	4.90	4.59	-0.29	-0.31	0.01	0.00	0.01	-0.01
Pacific	0.64	0.77	0.06	0.13	0.64	0.78	0.06	0.13	0.00	0.01	0.00	0.01
<b>Total OECD</b>	<b>19.74</b>	<b>19.50</b>	<b>-0.26</b>	<b>-0.25</b>	<b>19.78</b>	<b>19.53</b>	<b>-0.23</b>	<b>-0.25</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.00</b>
Former USSR	12.60	13.01	0.50	0.41	12.58	13.05	0.48	0.47	-0.02	0.04	-0.02	0.06
Europe	0.13	0.12	-0.01	-0.01	0.13	0.12	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.84	3.92	0.17	0.08	3.82	3.92	0.15	0.10	-0.02	0.00	-0.02	0.02
Other Asia	2.70	2.80	-0.01	0.10	2.70	2.79	-0.01	0.09	0.00	-0.01	0.00	-0.01
Latin America	4.47	4.75	0.08	0.28	4.45	4.75	0.05	0.31	-0.03	0.00	-0.03	0.03
Middle East	1.65	1.61	-0.08	-0.05	1.65	1.61	-0.08	-0.05	0.00	0.00	0.00	0.00
Africa*	2.57	2.69	0.08	0.12	2.57	2.69	0.08	0.12	0.00	0.00	0.00	0.00
<b>Total Non-OECD*</b>	<b>27.97</b>	<b>28.89</b>	<b>0.72</b>	<b>0.92</b>	<b>27.91</b>	<b>28.93</b>	<b>0.65</b>	<b>1.02</b>	<b>-0.07</b>	<b>0.04</b>	<b>-0.07</b>	<b>0.10</b>
Processing Gains	1.92	1.95	0.02	0.03	1.92	1.95	0.02	0.03	0.00	0.00	0.00	0.00
Other Biofuels	0.40	0.66	0.15	0.25	0.40	0.66	0.15	0.25	0.00	0.00	0.00	0.00
<b>Total Non-OPEC*</b>	<b>50.04</b>	<b>50.99</b>	<b>0.62</b>	<b>0.95</b>	<b>50.01</b>	<b>51.07</b>	<b>0.59</b>	<b>1.05</b>	<b>-0.03</b>	<b>0.07</b>	<b>-0.03</b>	<b>0.10</b>

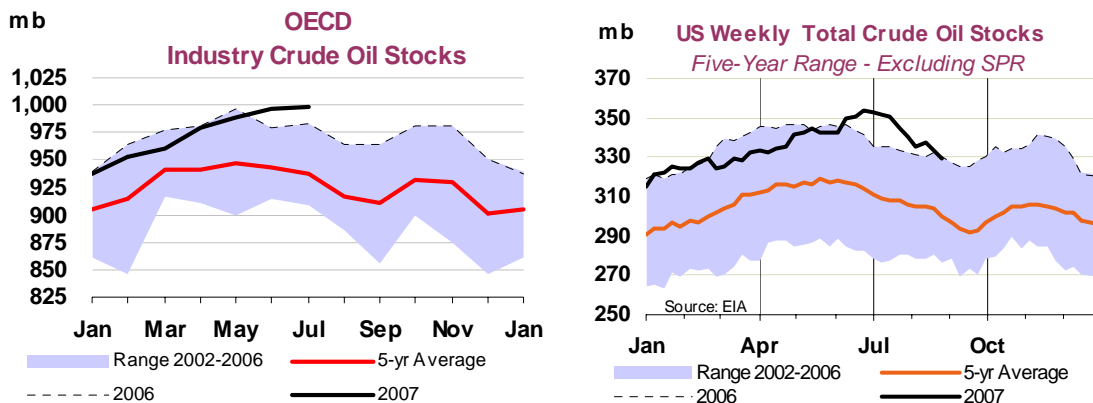
OMR = Oil Market Report

\* adjusted to exclude Angola

## OECD STOCKS

### Summary

- **OECD industry stocks rose by 29.8 mb in July**, mostly due to strong product builds in North America and the Pacific. While refinery runs reached seasonal peaks, heating oil consumer stock builds lagged historical rates in Europe, and mild weather in the Pacific tempered air conditioning use. Crude stocks in contrast rose by a mere 2.0 mb, as a 12.8 mb draw in North America offset crude builds elsewhere. Despite the stock build, which is in line with previous July increases, total OECD forward demand cover was only marginally higher than June at 54.4 days, but down from 55.1 days one year ago.



- **Preliminary data for August** show a net stock draw of 7.1 mb, as a fall in US inventories of 11.7 mb offset increases in Japan and Europe of 3.8 mb and 0.8 mb respectively. Combined crude stocks fell by 17.8 mb, while products rose by 10.7 mb. Crude stocks in the US have now fallen around 25 mb since their end-June peak.
- **Total June stock data were revised down by 3.4 mb** compared with last month's report. Total products and crude were 10.6 mb and 1.0 mb lower respectively, but were offset by an 8.3 mb upward hike in 'other' oils. The largest change was a 6.6 mb downward revision to North American product stocks.

### OECD Inventory Position at End-July and Revisions to Preliminary Data

Total OECD industry stocks rose to 2,699 mb at the end of July, 29.8 mb higher than end-June but 4.0 mb lower year-on-year. Compared with last year, crude stocks were 15.1 mb higher, which was more than offset by product and 'other' oil inventories being 17.5 mb and 1.6 mb lower respectively. While total OECD gasoline stocks are only 2.6 mb lower year-on-year, they remain at the bottom of their five-year average range.

#### Preliminary Industry Stock Change in July 2007 and Second Quarter 2007

	July (preliminary)				Second Quarter 2007							
	(million barrels)				(million barrels per day)							
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
<b>Crude Oil</b>	<b>-12.8</b>	<b>8.1</b>	<b>6.7</b>	<b>2.0</b>	<b>-0.41</b>	<b>0.26</b>	<b>0.22</b>	<b>0.06</b>	<b>0.31</b>	<b>0.10</b>	<b>-0.01</b>	<b>0.40</b>
Gasoline	-1.6	1.9	-1.1	-0.8	-0.05	0.06	-0.03	-0.03	0.04	-0.11	0.00	-0.08
Distillates	5.9	-1.9	7.1	11.1	0.19	-0.06	0.23	0.36	0.05	0.04	0.08	0.16
Fuel Oil	3.6	-0.1	2.5	5.9	0.12	0.00	0.08	0.19	-0.03	-0.02	0.00	-0.05
Other Products	10.2	0.0	0.6	10.8	0.33	0.00	0.02	0.35	0.20	-0.03	0.05	0.22
<b>Total Products</b>	<b>18.0</b>	<b>-0.2</b>	<b>9.1</b>	<b>27.0</b>	<b>0.58</b>	<b>-0.01</b>	<b>0.30</b>	<b>0.87</b>	<b>0.27</b>	<b>-0.13</b>	<b>0.12</b>	<b>0.25</b>
Other Oils <sup>1</sup>	0.7	-0.9	1.0	0.8	0.02	-0.03	0.03	0.03	0.06	0.04	0.00	0.10
<b>Total Oil</b>	<b>5.9</b>	<b>7.0</b>	<b>16.8</b>	<b>29.8</b>	<b>0.19</b>	<b>0.23</b>	<b>0.54</b>	<b>0.96</b>	<b>0.63</b>	<b>0.01</b>	<b>0.11</b>	<b>0.76</b>

<sup>1</sup> Other oils includes NGLs, feedstocks, and other hydrocarbons.

### Year-on-Year OECD Industry Stock Comparisons for July 2007

	(million barrels)					(Days of Forward Demand)			
	North America	Europe	Pacific	Total		North America	Europe	Pacific	Total
<b>Crude Oil</b>	<b>21.1</b>	<b>-8.2</b>	<b>2.2</b>	<b>15.1</b>	<b>Total Oil</b>	<b>-0.5</b>	<b>-0.4</b>	<b>-1.5</b>	<b>-0.7</b>
Total Products	-13.9	-2.1	-1.5	-17.5	Versus 2005	0.0	1.0	-0.9	0.2
Other Oils <sup>1</sup>	-7.3	3.5	2.1	-1.6	Versus 2004	2.9	0.7	2.4	2.1
<b>Total Oil</b>	<b>-0.1</b>	<b>-6.8</b>	<b>2.9</b>	<b>-4.0</b>	<b>Total Products</b>	<b>-0.8</b>	<b>-0.1</b>	<b>-1.0</b>	<b>-0.7</b>
Versus 2005	20.7	15.8	1.7	38.2	Versus 2005	-1.1	0.5	0.1	-0.4
Versus 2004	89.2	23.2	14.0	126.4	Versus 2004	0.6	-0.3	2.3	0.6

<sup>1</sup> Other oils includes NGLs, feedstocks, and other hydrocarbons.

June data were revised down by 3.4 mb, with downward changes in North America (-4.2 mb) and Europe (-1.5 mb) outweighing a 2.3 mb upward revision in the OECD Pacific. Total products for all regions were revised down by 10.6 mb, while crude decreased by 1.0 mb. These moves however were offset by an upward revision for 'other' oils of 8.3 mb, most of which was in North America.

### Revisions versus 10 August 2007 Oil Market Report

	(million barrels)							
	North America		Europe		Pacific		OECD	
	May 07	Jun 07	May 07	Jun 07	May 07	Jun 07	May 07	Jun 07
<b>Crude Oil</b>	<b>0.3</b>	<b>-2.6</b>	<b>1.9</b>	<b>0.9</b>	<b>-0.1</b>	<b>0.7</b>	<b>2.1</b>	<b>-1.0</b>
Gasoline	0.0	-0.6	0.3	-0.3	0.4	0.0	0.6	-0.9
Distillates	0.6	0.4	-0.5	-1.8	0.4	-0.1	0.4	-1.6
Residual Fuel Oil	-0.1	0.5	-1.6	-1.7	0.0	-0.4	-1.7	-1.7
Other Products	0.8	-6.8	0.0	-0.1	0.0	0.4	0.8	-6.4
<b>Total Products</b>	<b>1.2</b>	<b>-6.6</b>	<b>-1.8</b>	<b>-3.9</b>	<b>0.8</b>	<b>-0.1</b>	<b>0.2</b>	<b>-10.6</b>
Other Oils <sup>1</sup>	-0.4	5.0	0.3	1.6	0.0	1.7	-0.2	8.3
<b>Total Oil</b>	<b>1.1</b>	<b>-4.2</b>	<b>0.4</b>	<b>-1.5</b>	<b>0.8</b>	<b>2.3</b>	<b>2.2</b>	<b>-3.4</b>

<sup>1</sup> Other oils includes NGLs, feedstocks, and other hydrocarbons.

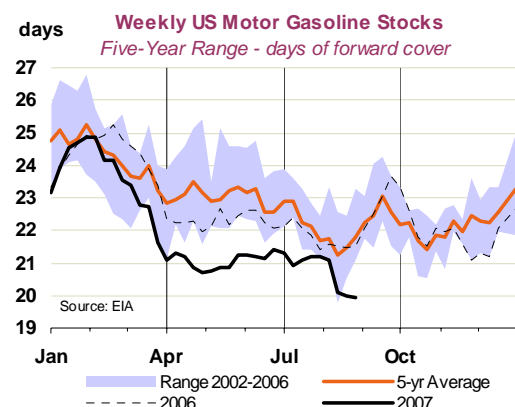
## OECD Industry Stock Changes in July 2007

### OECD North America

Total North American industry inventories rose by 5.9 mb in July, with product stock builds outweighing a drop in crude. Total crude stocks fell by 12.8 mb but remain above their five-year average range. US refineries belatedly reached near-average throughputs during the peak summer demand season, though some plants remained dogged by problems. Hence US crude stocks fell by 12.0 mb, while in Mexico they were down by 0.8 mb.

In contrast, North American product stocks built by 18.0 mb in July. The greatest increase stemmed from 'other products', which rose by 10.2 mb, while middle distillates and residual fuel oil built by 5.9 mb and 3.6 mb respectively. Gasoline inventories however fell by 1.6 mb and remain below their five-year average range. 1.3 mb of this drop was in the US, while Mexico registered a further 0.3 mb draw.

In August, preliminary data for the US show a further 12.5 mb draw in crude stocks, bringing them down to levels of a year ago at the end of the month and 24.4 mb lower than their end-June peak. Half of this draw took place on the US Gulf Coast, where stocks had been (and remain) above average. WTI futures' move into backwardation in late July likely contributed to the incentive to reduce inventories, but it is also a reflection of the tight crude market. Cushing, Oklahoma, crude stocks meanwhile rose by 630 kb in August, but failed to put any downward pressure on prices. Looking ahead, lower Mexican output due to shutdowns ahead of Hurricane Dean should also show up in either US or Mexican crude stocks data.

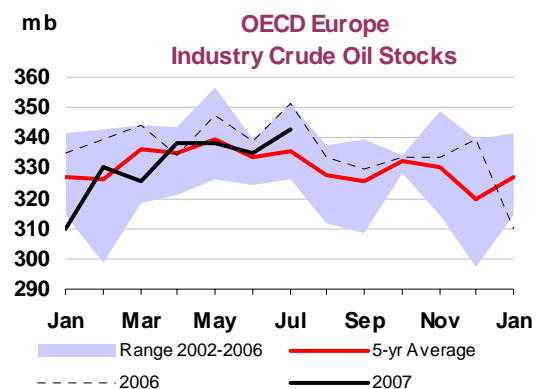


August product stock data showed a further drop of 12.7 mb in US gasoline stocks, bringing levels to their lowest since Hurricanes Katrina and Rita hit the US Gulf Coast in the late summer of 2005. This represents 20 days of forward demand, the lowest level of cover since August 2003. However, the sharp fall in gasoline inventories was offset by increases in distillates (+5.1 mb), 'other' oil (+4.1 mb) and unfinished products (+1.0 mb), while fuel oil levels fell by 1.6 mb. In total, US products thus rose by 0.8 mb. Despite their increase, total distillate stocks also remain at the bottom of their five-year average range in terms of forward demand cover.

### OECD Europe

Total European industry stocks built by 7.0 mb in July, but in contrast to North America, this stemmed from an increase of 8.1 mb in crude, while products declined marginally. This was largely due to a strong build of 8.2 mb in Norway, where production bounced back after field maintenance, increasing by 450 kb/d over June. Meanwhile, in the large European consuming countries, crude stock increases in Italy and France of 1.5 mb and 1.4 mb respectively were offset by a 3.0 mb draw in the Netherlands.

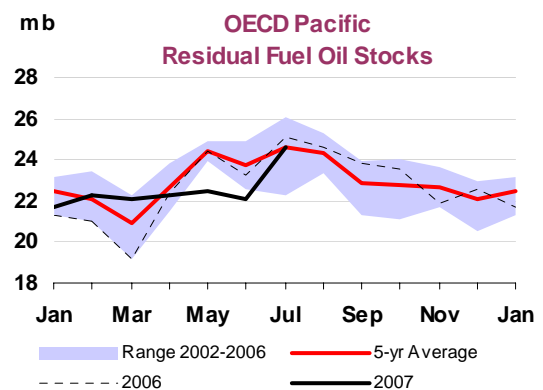
Total European products were virtually unchanged in July, falling by a marginal 0.2 mb, despite refinery throughputs reaching 13.6 mb/d, a rise on June. A distillate draw of 1.9 mb cancelled out a gasoline build of the same volume. Preliminary August data for the Amsterdam-Rotterdam-Antwerp region showed a net stock build and light and middle distillate stocks remaining above average.



### OECD Pacific

July inventory data for the Pacific showed a total build of 16.8 mb which, despite bringing levels in line with their five-year average, still leaves regional forward demand cover at the lowest in the OECD. Of the increase 6.7 mb (5.1 mb of which was in Japan) stemmed from crude stocks, as refineries boosted inventories ahead of peak summer throughputs in August and some Japanese problems.

Total Pacific product stocks rose by 9.1 mb by the end of July. Most of this increase was in distillates, which built by 7.1 mb, though fuel oil also rose by 2.5 mb, perhaps on additional purchases to counter additional demand for electricity generation. Despite lower throughputs, around two-thirds of the total product stock build (5.2 mb) was in Korea, and the rest in Japan (3.9 mb).

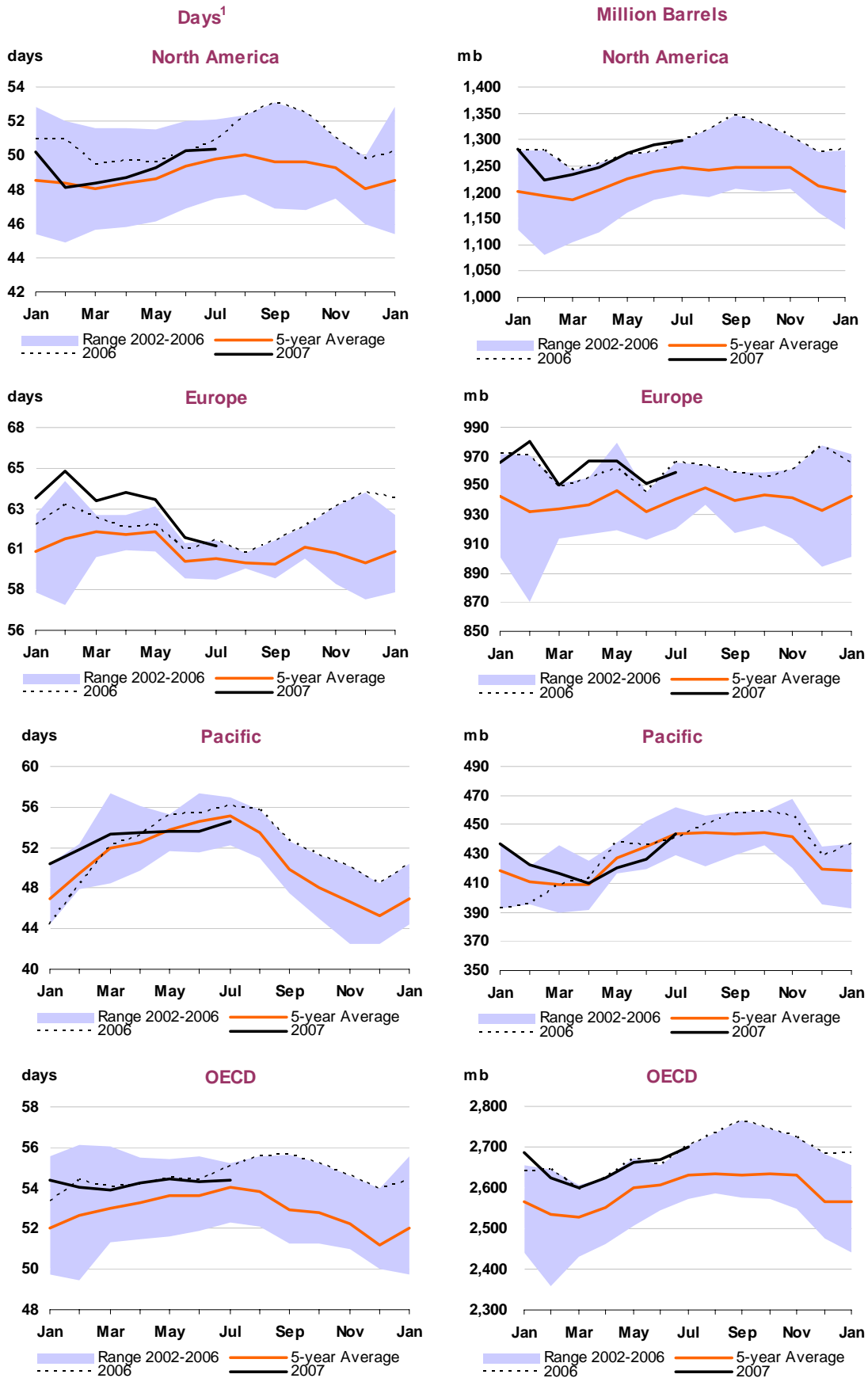


Preliminary August data for Japan show a modest stock build of 3.8 mb in total. A draw of 6.0 mb in crude stocks was countered by 9.8 mb rise in product stocks, 6.3 mb of which was due to a seasonal rise in kerosene. The latter are 2.0 mb lower than one year ago – when stocks were exceptionally high – but remain above their four-year average.

### Recent Developments in Singapore Stocks

Singapore product inventories, as surveyed by International Enterprise, were virtually unchanged at the end of August. A fall in light distillates balanced a rise in middle distillates, while fuel oil stocks were unchanged. Middle distillates remain below their five-year average range on strong shipments to Europe and Latin America. Fuel oil inventories in contrast are above average but could tighten again in September, as a lower 1.9-2.0 million tonnes of residue is due to arrive from the west in September, compared with around 2.5 million tonnes in August.

### Regional OECD End-of-Month Industry Stocks (in days of forward demand and millions barrels of total oil)



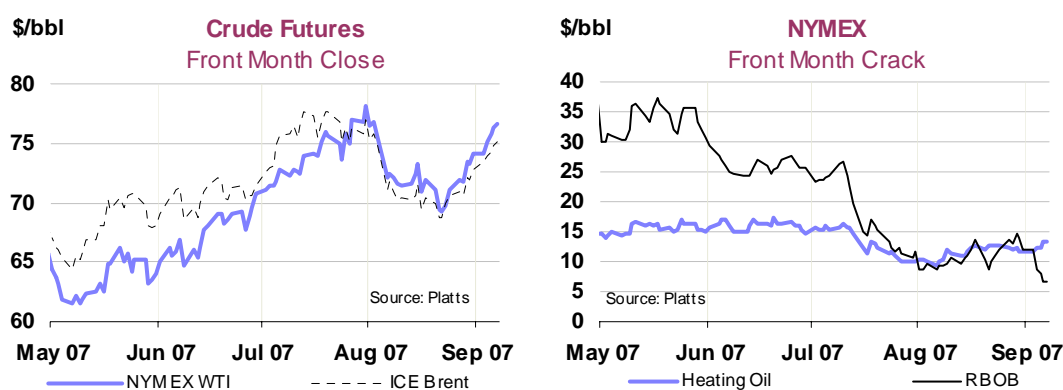
1 Days of forward demand are based on average demand over the next three months



## PRICES

### Summary

- **Oil prices remained strong in early September**, despite worries of an economic downturn related to US subprime mortgage problems. Falling stocks in August underscored higher prices and a widening backwardation, while seasonal hurricane fears intensified. Category-five Hurricane Dean caused little damage to oil installations, but cut Mexican supply by 425 kb/d in August and (with Hurricane Felix) served as a reminder of the vulnerability of infrastructure in the region. Expectations of no output change at OPEC's 11 September meeting in Vienna had supported prices in August and early September. But in the event, the group decided to raise supply by 500 kb/d.
- **Geopolitical concerns moved back into focus**, as Syrian claims of an Israeli air strike stoked existing Middle Eastern tension and the US and Iran continued their verbal sparring over events in Iraq. Denmark and Germany claimed to have prevented serious terrorist attacks in the lead-up to the sixth anniversary of 9/11. However, the geopolitical impact on oil prices has not been significant, barring continued support from crude supply shut-ins in Nigeria, where US authorities this month warned of terrorist attacks on western interests.
- **Refining margins were mixed in August**, with gains seen in Europe but not matched elsewhere. European cracking margins remain stronger than on the US Gulf Coast, and a pick-up in hydroskimming margins encouraged simple refineries to restart or hike runs.
- **Oil product prices generally followed crude**, keeping crack spreads steady. Distillates have now overtaken gasoline following the end of the summer driving season. Low gasoline stocks could present a challenge if demand stays strong over the coming months, constraining the seasonal switch to higher heating oil output, but this may be partly offset by the move to winter-specification gasoline.
- **Crude tanker rates**, already at multi-year lows in early August, showed no real recovery throughout the month. A slight mid-month rebound in VLCC rates from the Middle East to Japan, possibly buoyed by higher OPEC eastbound sailings, was short-lived. Clean tanker rates fell on most routes in August.

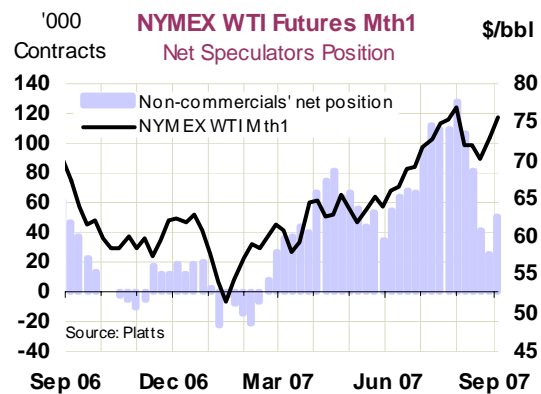
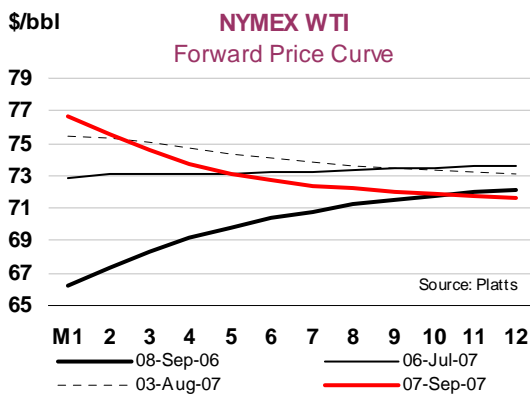


### Overview

Oil prices fell in August on average, but strengthened again late in the month and in early September, as tight fundamentals and renewed geopolitical concerns outweighed worries of an economic downturn. Before OPEC's decision on 11 September to raise output by 500 kb/d, the market's apparent assumption that no change would occur had supported prices. Hurricane Dean, which hit the Mexican coast in mid-August, caused no long-lasting damage, but knocked out 425 kb/d of crude production and served as a

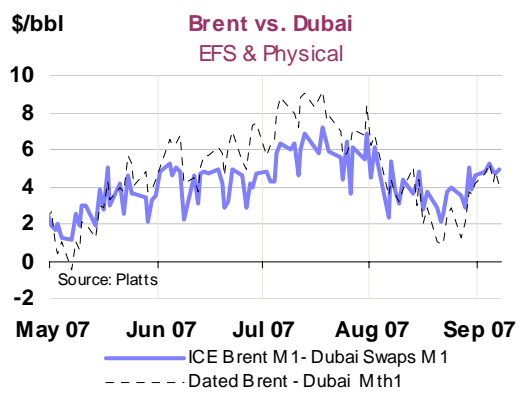
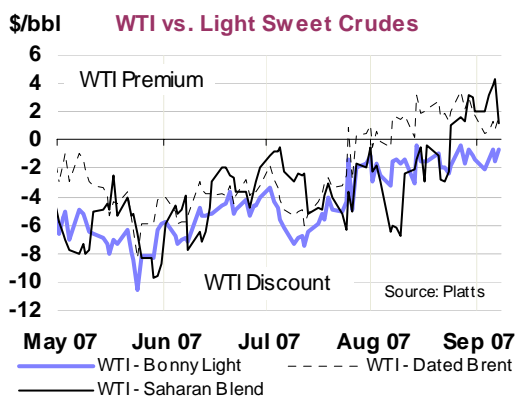
reminder that last year's absence of storm outages was unusual. Indications that the US government was prepared to offer oil from the strategic reserve should supplies be hit, helped to moderate the price effect, but the rapid development of another category five hurricane, Felix, shortly afterwards accentuated awareness of the potential for storm damage.

But until mid-August, oil prices had come under pressure from spill-over economic concerns stemming from the collapse of the US subprime mortgage sector. The financial market volatility also triggered some liquidation of speculative (long) positions held in crude futures. However, there was also an increase in non-commercial short positions, suggesting funds started to position themselves for a possible economic slowdown. Non-commercial net-longs and open interest picked up again in early September as prices resumed their uptrend.



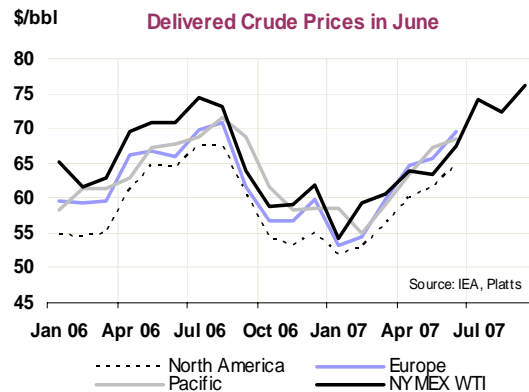
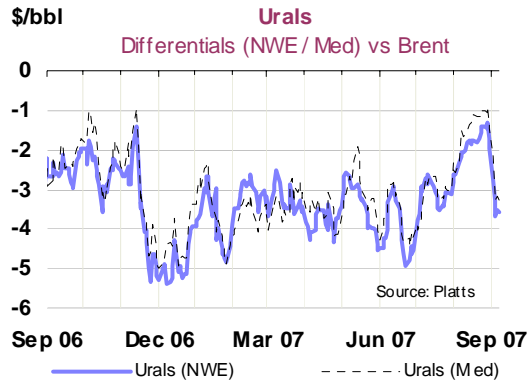
Nearly all futures contracts remain in backwardation, and in most cases steepened. Crude stocks fell by a combined 18.5 mb in the US and Japan in August, based upon weekly data, while refinery issues in the US have kept utilisation below average and gasoline and distillate stocks at low levels of forward cover. Refiners' need to produce more heating oil ahead of winter will prove a challenge due to low gasoline stocks, though this may be partly offset by the seasonal switch to winter-grade fuel, into which it is easier to blend ethanol and other, more volatile components (and hence raises volumes).

Geopolitical concerns have moved back into focus. Tension is evident in the Middle East, after (unconfirmed) Syrian reports of an Israeli air strike in early September and tough rhetoric between the US and Iran over the latter's alleged influence in Iraq. In Europe, Danish and German security forces prevented allegedly serious and advanced plans for major terrorist attacks around the anniversary of the 11 September 2001 attacks. Lastly, the US government warned of a possible threat of an attack on western interests in Nigeria.



## Spot Crude Oil Prices

Crude was the greater market driver, rather than products, in August and early September as refineries reached peak summer output levels. Weekly data for the US, Japan and EU-16 show a 17.8 mb stock draw in August, and crude futures remain steeply backwardated. On the other hand, the US saw lower-than-average refinery utilisation and relatively high crude imports. Physical WTI strengthened versus other Atlantic Basin light sweet crudes such as Dated Brent or Bonny Light, potentially attracting barrels, and related refinery margins on the US Gulf Coast increased in August. US sour in contrast weakened against WTI on higher Canadian inflows, after oil sands upgraders returned from maintenance. Sweet/sour differentials widened in all regions.



In **Europe**, Dated Brent was also supported by improved refining margins and rose in late August and early September. Previously, however, the benchmark weakened and saw its premium to medium sour narrow. Russian Urals moved to within \$1/bbl of Brent as Middle Eastern crude supply remained tight, and news reports indicated several spot cargoes moving to Asia. Brent may yet weaken again, as the restart of the CATS pipeline should increase supply of related crude. Conversely, maintenance work on the Forties field will soon come to an end, raising its quality, which had been diminished due to a higher proportion of higher-sulphur Buzzard. Urals has also subsequently been pressured by the announcement of a 5 mb Kirkuk tender for mid-September loading.

The narrow Brent/Dubai spread in late August encouraged strong **Asia-Pacific** interest in West African crudes. September-loading volumes reportedly increased to 1.3 mb/d, still lower than in July, but higher than August's 860 kb/d. Nigerian Bonny Light rose to a \$4/bbl premium in late August on strong buying.

### Spot Crude Oil Prices and Differentials Table Unavailable

Middle Eastern sour also weakened significantly against Dated Brent from mid-August. Differentials could be boosted by a substantial volume of Abu Dhabi crude reportedly set to be offline due to maintenance in October/November, as well as seasonal interest in kerosene-rich grades by Japanese refiners wishing to build heating fuel stocks ahead of the winter. Perhaps in view of anticipated lower UAE volumes, but also amid more favourable fuel oil differentials, Saudi Arabia raised its official selling prices (OSPs) for all crude grades to Asia-Pacific for October.

## Refining Margins

Refining margins were mixed in August. Spreads in Europe increased across-the-board as middle distillate (and some gasoline) cracks rose, in contrast to the US and Asia. After we reported one month ago that marginal refiners such as Conoco's Wilhelmshaven and Preem's Gothenburg plants had shut down and reduced runs respectively on deteriorating margins, more profitable hydroskimming operations have subsequently seen refiners hike runs by a total of 250 kb/d again. Cracking margins also rose, particularly in Northwest Europe.

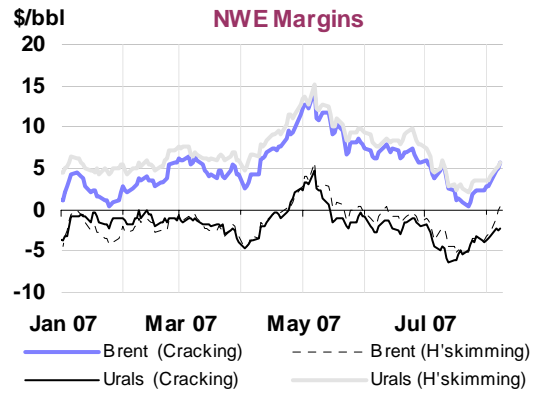
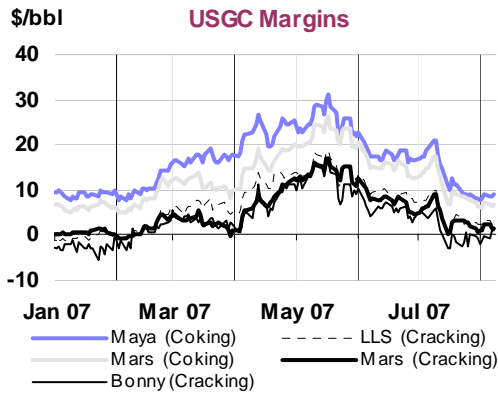
In the US, most margins were down on weakened gasoline cracks. Only Gulf Coast cracking rose, but this was due to steeper late-August crude price falls. Some distillate cracks there also improved in August, in contrast to the depressed West Coast, as was true for jet. Cracking margins in August were once again better in Europe than on the US Gulf Coast, which was likely another reason for more West African crude heading to Asia. Lastly, Asian margins all deteriorated in August. Chinese refineries are suffering from low domestic retail prices, reportedly causing them to cut runs, as they cannot pass on their higher costs.

### Selected Refining Margins in Major Refining Centres

		Monthly Average			Change	Average for week ending:				
		Jun 07	Jul 07	Aug 07	Aug 07-Jul 07	08 Aug	15 Aug	22 Aug	29 Aug	05 Sep
<b>NW Europe</b>	Brent (Cracking)	6.82	2.98	5.74	2.76	4.32	5.83	6.35	6.73	5.85
	Urals (Cracking)	8.47	4.07	5.62	1.55	4.70	5.57	6.16	6.12	6.56
	Brent (Hydroskimming)	-0.90	-3.50	-0.03	3.47	-1.29	0.36	0.60	0.72	-0.59
	Urals (Hydroskimming)	-1.24	-4.31	-1.83	2.48	-2.40	-1.79	-1.20	-1.73	-1.38
<b>Mediterranean</b>	Es Sider (Cracking)	7.17	3.06	4.09	1.03	2.91	4.02	4.79	4.90	4.88
	Urals (Cracking)	7.65	3.80	4.87	1.07	3.89	4.83	5.45	5.53	5.62
	Es Sider (Hydroskimming)	-0.64	-3.38	-1.62	1.76	-2.38	-1.36	-1.02	-1.23	-1.58
	Urals (Hydroskimming)	-1.85	-4.39	-2.29	2.10	-2.74	-2.17	-1.88	-2.10	-2.18
<b>US Gulf Coast</b>	Bonny (Cracking)	7.80	2.55	3.32	0.77	0.22	3.37	5.15	5.16	4.69
	Brent (Cracking)	5.72	1.09	3.59	2.50	0.05	3.57	5.79	5.70	4.45
	LLS (Cracking)	9.39	4.96	5.62	0.66	2.88	5.42	7.49	7.03	6.84
	Mars (Cracking)	7.90	4.07	3.19	-0.88	1.68	3.11	3.91	4.23	4.03
	Mars (Coking)	15.46	10.89	9.44	-1.45	6.62	9.11	10.98	11.20	11.14
	Maya (Coking)	17.92	13.54	12.17	-1.37	8.64	11.98	14.32	14.03	14.87
<b>US West Coast</b>	ANS (Cracking)	8.91	3.95	-0.44	-4.38	-1.17	0.18	0.30	-0.63	-0.94
	Kern (Cracking)	10.83	7.53	4.38	-3.15	3.75	5.91	4.58	4.36	3.09
	Oman (Cracking)	8.57	6.99	2.58	-4.41	2.77	3.65	1.82	2.21	1.98
	Kern (Coking)	27.25	20.97	12.79	-8.18	10.81	12.92	12.40	14.94	14.78
<b>Singapore</b>	Dubai (Hydroskimming)	-0.60	-0.64	-1.17	-0.53	-0.60	-0.84	-1.63	-1.75	-1.38
	Tapis (Hydroskimming)	-3.33	-5.38	-5.57	-0.19	-7.32	-5.81	-4.23	-4.68	-5.89
	Dubai (Hydrocracking)	4.17	3.56	2.27	-1.30	2.51	2.44	2.02	1.86	2.33
	Tapis (Hydrocracking)	-0.54	-2.59	-3.25	-0.66	-4.91	-3.30	-2.00	-2.56	-3.43
<b>China</b>	Cabinda (Hydroskimming)	-3.11	-6.09	-6.38	-0.30	-5.29	-4.63	-1.80	-2.95	-4.44
	Daqing (Hydroskimming)	-2.31	-8.51	-10.67	-2.16	-10.08	-9.05	-6.48	-6.04	-6.68
	Dubai (Hydroskimming)	-1.07	-1.03	-1.06	-0.02	-0.89	-1.13	-1.98	-2.21	-1.72
	Daqing (Hydrocracking)	2.86	-3.61	-6.76	-3.15	-6.16	-4.91	-3.10	-2.66	-2.71
	Dubai (Hydrocracking)	3.67	3.11	2.28	-0.83	2.16	2.11	1.62	1.34	1.96

For the purposes of this report, refining margins are calculated for various complexity configurations, each optimized for processing the specific crude in a specific refining centre on a 'full-cost' basis. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability for a given refining centre. No attempt is made to model or otherwise comment upon the relative economics of specific refineries running individual crude slates and producing custom product sales, nor are these calculations intended to infer the marginal values of crudes for pricing purposes.

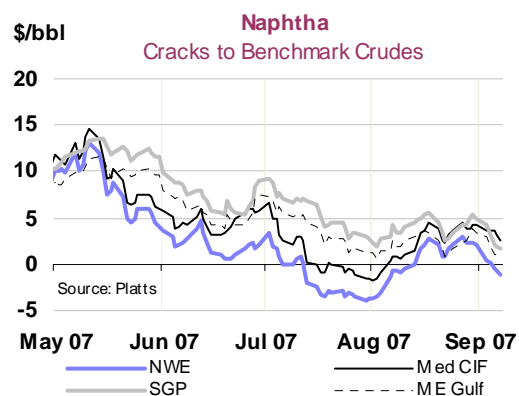
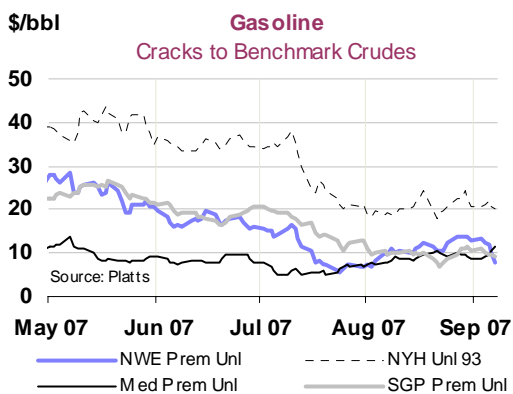
\*The China refinery margin calculation represents a model based on spot product import/export parity, and does not reflect internal pricing regulations.  
Sources: IEA, Purvin & Gertz Inc.



## Spot Product Prices

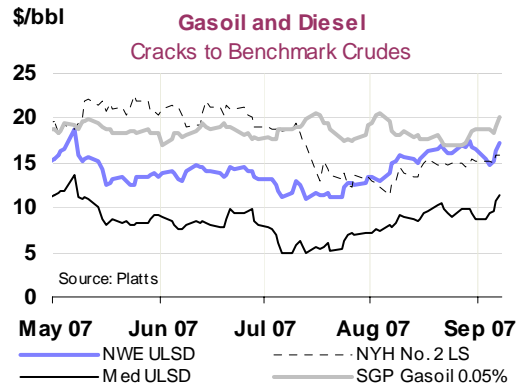
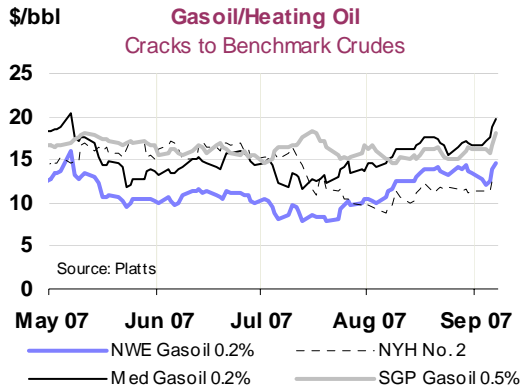
With the end of the driving season in the northern hemisphere, the emphasis is shifting to the heating fuels markets, and on the NYMEX, heating oil is now trading at a premium to gasoline. Nevertheless, gasoline stocks, at least in the US, remain tighter, both in absolute terms and in days of forward cover (the latter at their lowest in four years at 20 days). Refiners' need to concentrate on gasoline output when they would usually hike distillate output will likely keep markets tight, though this will be partly offset by the impending switch to winter-specification gasoline, which is easier to produce.

US **gasoline** supplies are tight in all areas east of the Rockies, but particularly so in the Midwest, which has seen more than its fair share of refinery problems this year. The US Environmental Protection Agency (EPA) even granted North Dakota a waiver to import lower-specification Canadian gasoline in order to prevent shortages after some pipeline problems. Meanwhile, in Asia, gasoline took strength from higher-than-average imports from Vietnam and Indonesia for September, and some additional Chinese purchases on the spot market. Naphtha in contrast was especially weak, with cracks dipping towards parity with crude again in early September. Cracker problems in Taiwan kept demand low, while deferred Indian refinery maintenance kept its exports high.



**Distillate** cracks have by now overtaken gasoline in all markets and made headway especially in Europe, for heating oil, diesel and jet fuel. In Asia, support came from healthy purchases from India and Vietnam, but also exports to Europe and Chile. In the US, total distillate stocks are in line with their five-year average in absolute terms, but at the bottom of the range in terms of forward demand cover, at 31 days.

**Fuel oil** cracks weakened slightly in August and early September, with peak summer utility demand over and refineries at high utilisation rates. In Asia, reports indicated that independent Chinese 'teapot' refineries imported less straight-run fuel oil in August, due to weak margins. Additional demand from



Japanese utility TEPCO for electricity generation also proved to be lower than anticipated when the company was forced to shut its largest nuclear power station. Additional pressure on Asian cracks in September may come from higher incoming arbitrage volumes from the west.

**End-User Product Prices in August**

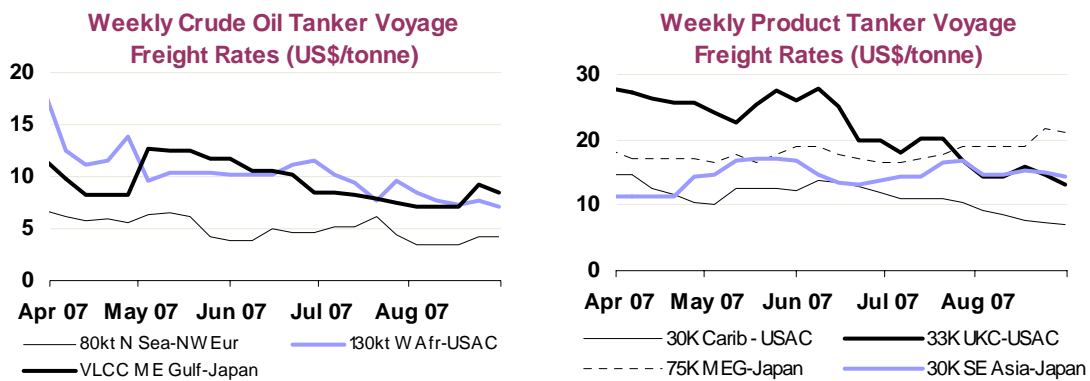
OECD gasoline end-user prices in US dollars ex-tax fell by 5.9% on average in August, excepting Japan, where they rose by 8.0%. Diesel prices mostly fell in Europe, but rose in Japan and the US by 6.7% and 0.3% respectively. In contrast, the ex-tax price of LSFO in US dollars saw some notable rises of 6.1% in Germany, 4.5% in Japan and 3.1% in the UK.

Spot Product Prices  
**Table Unavailable**

## Freight

Crude tanker rates, already at multi-year lows on certain routes in early August, remained very weak throughout the month. Low oil-in-transit volumes and the resultant vessel surplus continue to keep VLCC rates unseasonably low. An expanding tanker fleet has been a bearish influence this year and while scrapping activity has apparently remained modest, conversions to more profitable dry bulk carriers have risen.

VLCC rates from the Middle East Gulf to Japan languished just above the \$7/tonne mark for the first half of August. This reflected weak tanker fundamentals, even by summer standards. A temporary \$2/tonne mid-month jump to over \$9/tonne resulted from greater chartering activity on the route, coinciding with reports of an upturn in September OPEC sailings, especially on eastbound routes. Rising OECD refinery throughputs from October, after autumn maintenance, also offered potential support for near-term demand for crude transportation. Still, Japan-bound rates faded to finish August at \$8.50/tonne. VLCC rates from the Middle East Gulf to the US Gulf were equally weak in August, remaining flat at around \$14/tonne. This compares with rates of \$25/tonne at the end of August 2006; a busy period of chartering before OPEC cuts were implemented.



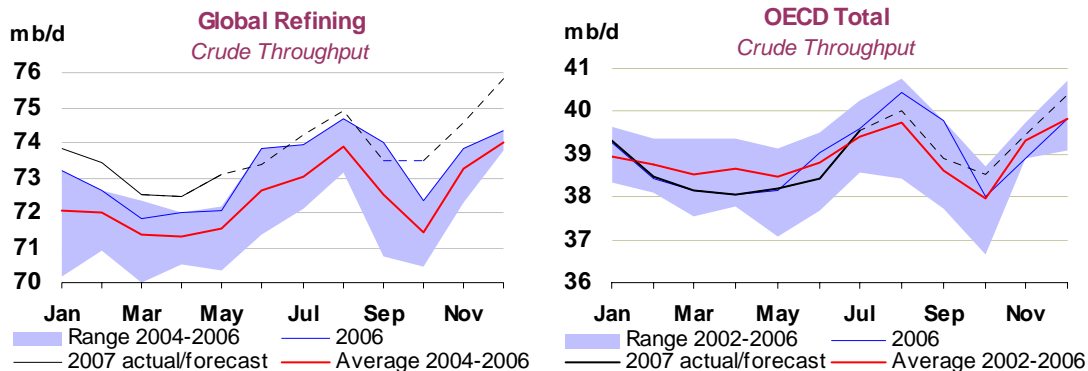
Crude tanker rates from West Africa fell to their lowest point for two years, in \$/tonne terms, by early September. Suezmax rates to the US Atlantic finished near \$7/tonne, down by \$2/tonne on the month. Transatlantic VLCC rates fell by even more. Despite greater demand for eastbound voyages, regional vessel demand has otherwise been undermined by recent refinery outages and approaching maintenance. Caspian production maintenance will reduce September BTC (Baku-Tbilisi-Ceyhan) export volumes, potentially adding downside to Mediterranean Suezmax rates in the coming weeks.

Clean tanker rates broadly fell in August, with the exception of LR1 routes (75,000 tonnes) from the Middle East Gulf to Japan. Rates on this trade rose by \$2/tonne on the month to end at over \$21/tonne in early September. Support came from firm naphtha demand from North Asian petrochemical plants, plus reports of reduced regional vessel availability following some gasoil arbitrage trade from Asia to Europe. In Western markets, transatlantic 35,000-tonne clean rates to the US drifted from a mid-month peak of \$16/tonne to around \$13/tonne, despite improving arbitrage economics at the end of August.

# REFINING

## Summary

- **Global refinery crude throughput in July is estimated at 74.2 mb/d**, 0.8 mb/d higher than in June and 0.3 mb/d higher year-on-year. Higher runs in the OECD (+1.1 mb/d) and the FSU were offset by declining crude runs in Asia. Chinese crude throughput declined by 300 kb/d on the back of planned maintenance work and poor margins, with voluntary run cuts reducing crude runs by around 200 kb/d. Peak summer crude runs in August are estimated to have averaged 74.9 mb/d, up 0.7 mb/d from July.
- **Global crude throughput forecasts for the third and fourth quarters have been reduced by 0.3 mb/d.** Crude runs are now expected to average 74.2 mb/d and 74.6 mb/d respectively. Higher planned maintenance, weaker than expected August throughputs and downward revisions to demand estimates, underpin the reductions. Offsetting these negative influences, we have revised up our Asian crude throughput forecast following a re-assessment of Indonesian and Singaporean crude runs.



- **July OECD refinery crude throughput is estimated at 39.5 mb/d**, 1.1 mb/d higher than in June. Higher crude runs in the US, France and Japan account for the majority of the increase. Renewed refinery reliability problems in the US in August are expected to weigh on OECD crude throughput. Elsewhere higher runs, notably in Japan, should result in OECD crude throughput reaching a summer peak of 40.0 mb/d.
- **Refineries in Europe achieved record-low fuel oil yields in June**, as a result of new upgrading capacity additions in France and Finland. Pacific fuel oil yields remain low relative to historical levels and are likely to fall further in the fourth quarter with the commissioning of LG Caltex's new heavy oil upgrading unit. North American gasoline yields improved, with US yields at the top of the five-year range, suggesting reliability problems eased over the course of the month.

## Global Refinery Throughput

Global refinery throughput is estimated to have averaged 74.2 mb/d in July, an increase of 0.8 mb/d from June and 0.3 mb/d higher than July 2006. Higher runs in all three OECD regions, underpinned the increase with North America accounting for 0.6 mb/d, and the Pacific 0.4 mb/d. Non-OECD crude throughput slipped slightly from June levels, despite Russian refineries reaching a post-Soviet record of just over 4.7 mb/d. Lower crude runs in China, following the record runs achieved in June, were partly a result of the start of maintenance at PetroChina's Dalian refinery and Sinopec's Maoming plant. However, the extent of the decline in July crude runs suggests that Chinese refiners were voluntarily curtailing runs by around 200 kb/d during the month due to the high price of crude relative to domestic price levels. Elsewhere the start of maintenance at ExxonMobil's Singapore refinery and several Indian refineries results in a month-on-month decline in Asian crude throughput.



**Global Refinery Crude Throughput<sup>1</sup>**

	million barrels per day								
	Apr 07	May 07	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07
<b>OECD Crude Runs</b>									
North America	17.9	18.1	18.4	18.9	18.9	18.4	18.1	18.5	19.0
Europe	13.3	13.6	13.4	13.6	13.9	13.6	13.5	13.6	13.9
Pacific	6.9	6.5	6.6	7.0	7.3	6.9	6.9	7.4	7.5
Total OECD	38.1	38.2	38.4	39.5	40.0	38.9	38.5	39.5	40.4
<b>NON-OECD Crude Runs</b>									
FSU	5.6	5.6	5.8	6.0	5.8	5.6	5.7	5.8	5.9
Europe	0.7	0.6	0.7	0.8	0.8	0.8	0.8	0.7	0.8
China	6.5	6.6	6.8	6.5	6.3	6.4	6.5	6.6	6.7
Other Asia	8.0	8.3	8.0	7.5	8.0	8.2	8.3	8.2	8.3
Latin America	5.5	5.4	5.4	5.4	5.6	5.4	5.5	5.5	5.5
Middle East	6.0	6.0	6.1	6.2	6.2	6.0	5.9	5.9	5.9
Africa	2.1	2.3	2.1	2.4	2.3	2.2	2.4	2.4	2.4
Total Non-OECD	34.4	34.9	35.0	34.7	34.9	34.6	34.9	35.1	35.4
<b>Total Crude Runs</b>	<b>72.4</b>	<b>73.1</b>	<b>73.4</b>	<b>74.2</b>	<b>74.9</b>	<b>73.5</b>	<b>73.5</b>	<b>74.6</b>	<b>75.8</b>

<sup>1</sup> Crude runs in *italics* are estimates

August crude throughput is estimated to have averaged 74.9 mb/d, an increase of 0.7 mb/d from July. Higher OECD crude runs and a rebound in Asian throughput, on the back of lower maintenance result in crude runs reaching their summer peak, despite weaker Chinese runs. Market reports suggest that the independent (or “teapot”) refining sector in China significantly reduced its activity levels in August for similar reasons. Chinese fuel oil imports, the majority of which are used by teapot refiners as feedstock, declined to 1.5 million tonnes (mmt) from 3.1 mmt in July because of poor refining economics. It is likely that a similar level of voluntary runs cuts to July were in effect in August at Sinopec and PetroChina refineries, despite pressure by the NDRC for refiners to raise crude runs. Some reports point to product shortages during August, as a result of the low level of crude runs which we estimate were just above 6.3 mb/d, over 0.5 mb/d below the June peak.

September crude runs are forecast to average 73.5 mb/d, a decline of 1.4 mb/d month-on-month. Planned maintenance work in the OECD, Latin America, Africa and the Middle East all contribute to the decline. Updated estimates for planned refinery maintenance lead us to reduce our global third and fourth-quarter crude throughput estimates by an average of 0.2 mb/d. Offsetting some of this downward adjustment we have re-assessed the likely level of crude throughput at refineries in Singapore and Indonesia, which are revised up by just over 0.1 mb/d.

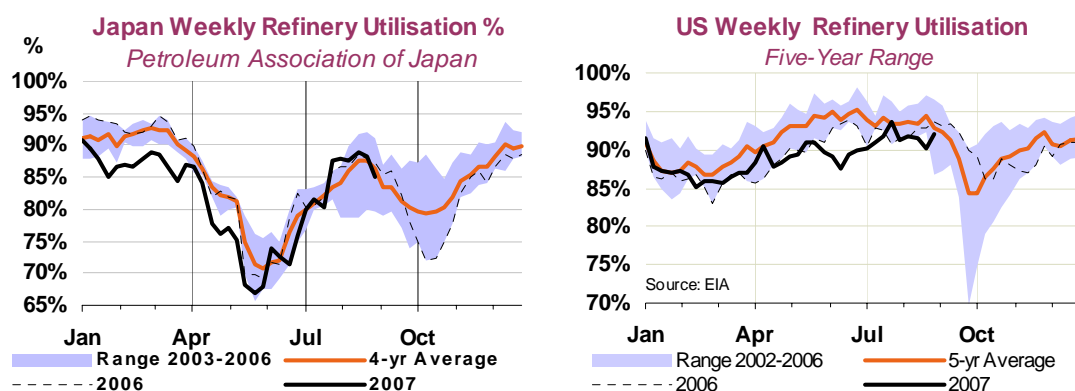
## OECD Refinery Throughput

### *OECD Third and Fourth-Quarter Forecasts*

Third-quarter OECD crude throughput is expected to average 39.5 mb/d, a downward revision of 0.3 mb/d from last month’s report, reflecting the impact of refinery problems in the US and higher estimates for European and Pacific refinery maintenance. Similarly, August throughput (the summer peak in crude runs) is now expected to be 40.0 mb/d, down from 40.4 mb/d estimated in last month’s report. For the fourth quarter we have reduced the assumed utilisation rate of marginal capacity of OECD refineries to reflect the lower demand outlook published this month. Consequently, fourth-quarter crude runs are now forecast to average 39.5 mb/d, an increase of 0.5 mb/d year-on-year.

September OECD crude throughputs are anticipated to decline by 1.1 mb/d as the seasonal maintenance work in all regions begins in earnest. Japanese crude runs started declining in late August as work commenced at two refineries, while in Europe the peak in planned outages appears to be early October, with maintenance at refineries in France, Sweden and the Netherlands. As a result of this work, OECD throughputs are expected to decline to 38.5 mb/d in October, but thereafter runs, (assuming normal weather), increase rapidly to 40.4 mb/d in December.

Weekly data for the US point to crude runs averaging 15.7 mb/d in August, below the 16.2 mb/d peak reached in late July. The mid-month slump in refinery activity was due to a series of operational problems at refineries on the Gulf Coast, perhaps most prominently, the fire at Chevron's Pascagoula refinery which closed one 160 kb/d crude unit, possibly for several months.



Elsewhere, a return of operational problems in the US Midwest, in combination with heavy regional planned maintenance and reports of problems with product pipelines supplying the region, reduced gasoline stocks. As a result of these problems, North Dakota was forced to obtain a waiver from the EPA to import Canadian gasoline, given the tight supply situation. Japanese weekly data point to runs dipping to 4.1 mb/d in late August with the start of maintenance at refineries operated by Shell and Cosmo Oil. Crude runs are expected to dip further over the course of September and into October, but are not expected to reach the level seen in October 2006.

### OECD Data for July

OECD crude throughput in July averaged 39.5 mb/d, 0.4 mb/d below last month's forecast. Crude runs were approximately 0.1 mb/d lower than expected in all regions. Crude throughput was up 1.1 mb/d from June levels, with increases from the US, France and Japan.

#### Refinery Crude Throughput and Utilisation in OECD Countries

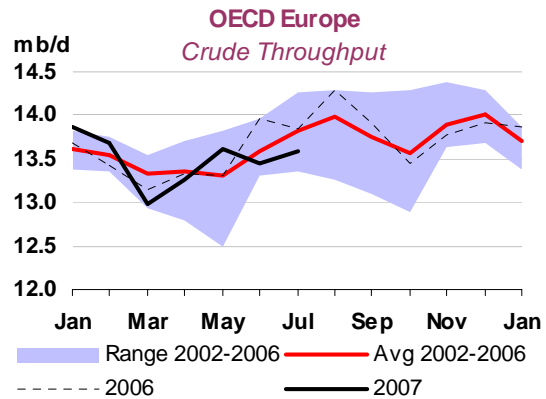
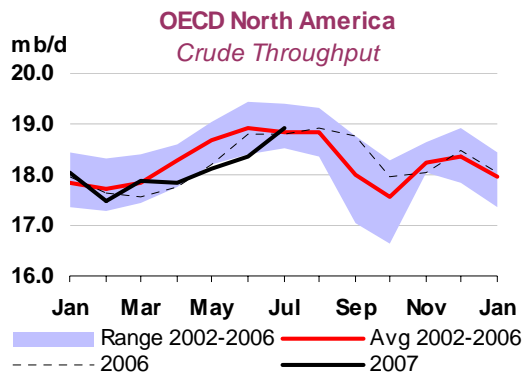
	million barrels per day						Change from		Utilisation rate <sup>2</sup>	
	Feb 07	Mar 07	Apr 07	May 07	Jun 07	Jul 07	Jun 07	Jul 06	Jul 07	Jul 06
<b>OECD North America</b>										
US <sup>3</sup>	14.43	14.84	15.04	15.37	15.24	15.82	0.58	0.16	90.61	90.09
Canada	1.77	1.81	1.57	1.54	1.86	1.90	0.04	0.02	94.18	93.02
Mexico	1.26	1.24	1.24	1.23	1.26	1.20	-0.06	-0.04	78.19	71.96
Total	17.47	17.89	17.85	18.14	18.36	18.93	0.56	0.14	90.04	89.09
<b>OECD Europe</b>										
France	1.71	1.50	1.59	1.88	1.56	1.78	0.22	0.07	91.06	86.79
Germany	2.31	2.21	2.19	2.15	2.29	2.30	0.01	-0.07	95.20	97.46
Italy	1.93	1.91	1.83	1.88	1.85	1.83	-0.02	-0.05	78.23	80.61
Netherlands	0.97	0.88	1.01	1.04	0.95	1.03	0.08	0.09	84.86	76.81
Spain	1.14	1.17	1.22	1.19	1.16	1.15	0.00	-0.04	90.59	93.79
UK	1.42	1.49	1.60	1.63	1.56	1.55	-0.01	-0.07	81.90	86.00
Other OECD Europe	4.20	3.81	3.83	3.85	4.08	3.94	-0.13	-0.19	84.07	85.74
Total	13.67	12.98	13.27	13.62	13.45	13.58	0.14	-0.26	86.10	86.90
<b>OECD Pacific</b>										
Japan	4.11	4.04	3.88	3.32	3.45	3.92	0.46	0.07	83.79	82.30
Korea	2.51	2.48	2.37	2.43	2.45	2.39	-0.06	-0.04	87.43	94.26
Other OECD Pacific	0.70	0.75	0.70	0.71	0.70	0.71	0.01	0.01	88.66	86.96
Total	7.32	7.27	6.95	6.45	6.61	7.02	0.42	0.05	85.48	86.59
<b>OECD Total</b>	38.46	38.14	38.06	38.21	38.42	39.53	1.12	-0.07	87.83	87.87

<sup>1</sup> Estimate

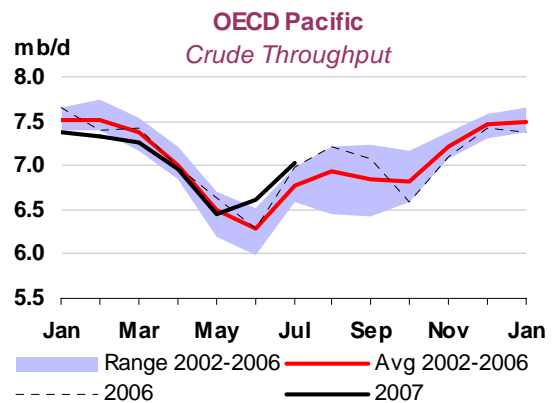
<sup>2</sup> Based on crude throughput and current operable refining capacity

<sup>3</sup> US\$0

North American crude runs were 0.6 mb/d higher in July than in June. Higher US throughput, primarily on the Gulf Coast, was the sole contributor. The completion of planned work at ExxonMobil's Beaumont refinery and improved reliability at refineries elsewhere boosted runs, despite the problems evident in the US Midwest. Pacific crude runs were boosted by the recovery in Japanese throughput, as spring maintenance was completed, and despite crude throughput restrictions faced by some refiners with problems at upgrading units. Korean runs were down marginally as the return to service of a 75 kb/d crude unit at SK Incheon's refinery, was more than offset by maintenance at several refineries.



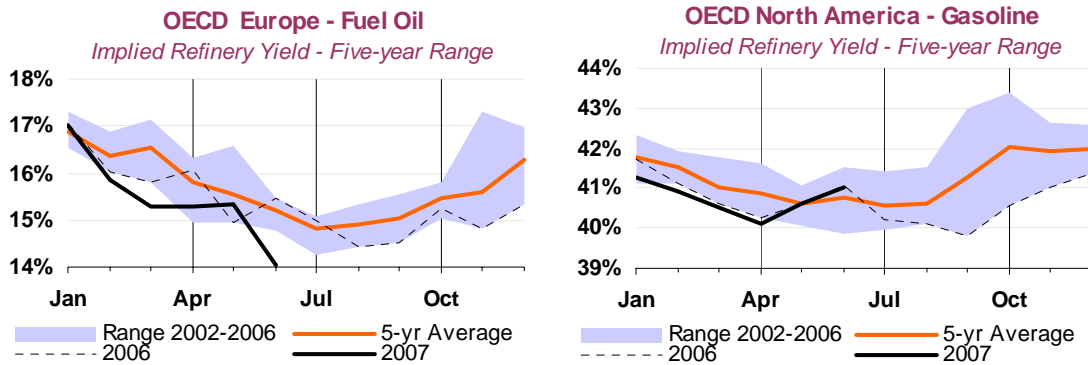
European crude throughput rose by 0.1 mb/d in July but remained below 2006 levels and in the bottom half of the five-year range. Poor hydroskimming margins, (-\$4.31/bbl for Urals in July), explain some of the decline. Indications that offline capacity in July is substantially lower than last year, suggest that run cuts in Europe in July were more broad-based than some reports suggested. Consequently, we now estimate that voluntary run cuts were around 250 kb/d during the month. The rebound in hydroskimming margins by the middle of the month prompted hydroskimming refineries in Sweden, and latterly in Germany, to raise rates back towards full capacity.



## OECD Refinery Yields

June data for OECD refineries indicate that overall yields were in line with the previous year's level. However, fuel oil yields posted a marginal decline on the month, driven by European yields reaching record lows. This decline in fuel oil is linked to the start-up of hydrocracking units in Finland and France, with both countries reporting materially lower fuel oil yields. Pacific fuel oil yields remain at the bottom of the five-year range and are likely to fall further over the balance of the year as LG Caltex has announced the start-up of its 55 kb/d heavy oil upgrading unit at the Yosu refinery.

North American gasoline yields improved for the second month running, and moved back in line with 2006 levels. US gasoline yields recovered to the top end of the range for June, supporting the view that May's reported refinery problems eased over the month. However, with gasoline cracks of \$24/bbl, \$8bbl above year-ago level, some refinery level constraints clearly remained in place. Unplanned shutdowns at Canadian refineries during the month cut gasoline yields by three percentage points (10% of the gasoline yield), reducing regional averages. The strong level of US gasoline imports during June appears to have supported European gasoline yields which rose above previous year and the five-year average for the first time since October 2006. European jet/kerosene yields saw a corresponding dip, while naphtha yields recovered slightly from the 10-year low reached in May.

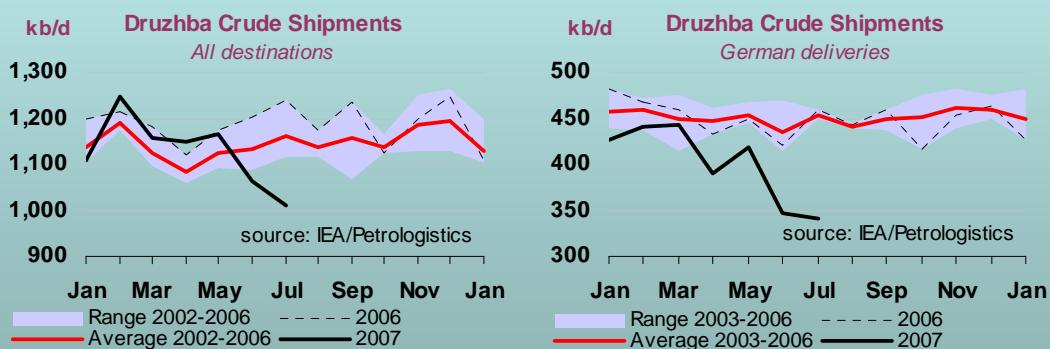


Pacific jet/kerosene yields appear to have reached their seasonal trough in June, albeit above the five-year range and 2006 levels. The corresponding peak in gasoil/diesel yields, linked to the annual Korean tax increase, also seems to have been reached, although this year's the later than usual implementation may yet be reflected in July data. The balance of the year is expected to witness a revival in kerosene yields as refineries prepare for the peak winter heating demand, although the start of SK Energy's new distillate hydrotreater, which allows it to produce an additional 120 kt per month of ultra-low-sulphur diesel, may alter the relative economics in the future.

### A Crude Sort of Friendship

Crude runs in OECD Europe have lagged 2006 levels for four of the seven months reported so far in 2007. We routinely point towards factors such as maintenance and unplanned shutdowns as reducing the overall level of refinery activity. However, recent reports indicate that Russian supplies to OECD Europe via the Druzhba pipeline have also seen reduced volumes. This decline is not linked to a lack of demand on the part of the refineries, but rather a move by suppliers to obtain better commercial returns for the crude, by using alternative export routes, in the face of increased Druzhba transit fees.

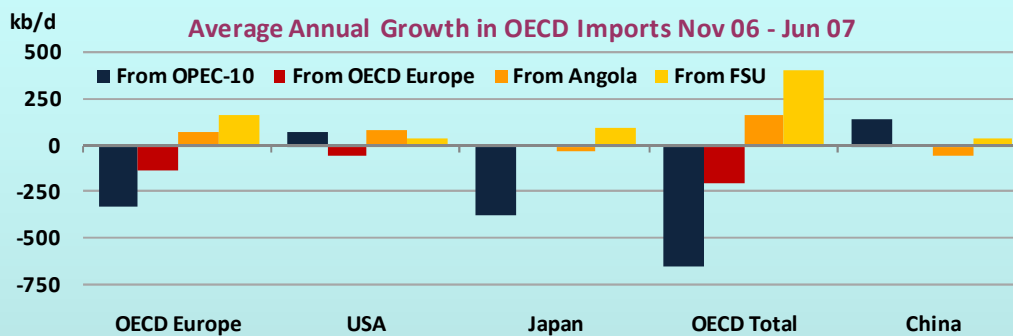
In the medium term it is likely that the expansion of alternative Russian export routes, (see *FSU Supply Growth Prospects II – Diversifying Export Routes*, in the *Medium-Term Oil Market Report* released in July 2007), and continued investment in Russian refining capacity, will result in increased competition for the Urals crude. As a consequence Russian oil companies, such as Lukoil, are reportedly expecting the differential for Urals supplied to European refiners via the Druzhba pipeline to rise by as much as \$3/bbl. However, ahead of the possibility of a tighter Urals crude market in Europe, it would appear that some exporters are attempting to improve their returns average realisations by using alternative export routes and therefore constrain pipeline exports, particularly to German refiners.



Recent reports indicate that exports have subsequently recovered, although some suggest that revised terms are yet to be agreed for supplies in the fourth quarter and beyond. The scale of the decline in Russian volumes serves as a reminder that pipeline supplies can be variable, particularly when there are alternative export routes for a supplier. As long as refiners can obtain crude by other routes a fair market price should be attainable by refiners and suppliers and a fair economic rent extracted by the pipeline operator. Where there is a lack of alternatives for either party then obtaining a fair market price becomes more difficult and periodic renegotiations are likely to occur.

## Trading Places

Flexibility in sourcing crude imports is increasingly important for OECD refiners. Over recent years, the sector has been stretched not only by stricter product specifications and unplanned refining outages, but also by reductions to the availability of established crude supplies. Between November 2006 and June 2007, declining North Sea production and the tightening of OPEC quotas has pushed OECD imports from these suppliers 850 kb/d lower than previous-year levels, on average. Over the same period, OECD refinery throughputs decreased by 180 kb/d compared with year-ago, only fractionally easing the pressure to find suitable alternative barrels.



Since last November, Japan and OECD Europe have respectively imported 375 kb/d and 330 kb/d less OPEC-10 (excluding non-quota Angola and Iraq) crude than the previous year, on average. Drops in incoming Saudi Arabian crude account for over half of these declines. Conversely, US imports from OPEC-10 have grown by 80 kb/d.

Within the US crude slate, Algerian crude imports have doubled in the last 18 months, to over 450 kb/d, supplanting Europe as the main destination for gasoline-rich Saharan Blend. This trend could relate to outages to complex refinery units, intensifying the need to import crudes which more readily yield gasoline. By contrast, US imports from Venezuela and Iraq have declined noticeably since last November, the latter relating to geopolitical disruptions.

Otherwise, OECD refiners have generally sourced recent incremental crude cargoes from rising supplies outside the OPEC quota system, tracing global supply growth trends. OECD imports of FSU crude have posted average annual growth of 400 kb/d over this eight-month period, absorbing much of the coinciding 600 kb/d average FSU supply growth. While almost half of these extra cargoes went to Europe, Japanese imports of FSU grades, at zero for the first half of 2006, have averaged 115 kb/d since November. Angolan exports to the OECD (785 kb/d, almost all to US and Europe) grew by 160 kb/d between November 2006 and June 2007, almost exactly matching supply growth there. Generally speaking, Angolan and Caspian grades are a natural replacement, in terms of crude quality, for North Sea crude, while Urals could be considered a suitable alternative to lighter Middle Eastern grades.

Patchy trade data clouds the picture for non-OECD importers. China import data reveal that growth in imports from OPEC-10 countries has remained strong at around 140 kb/d since last November. A boost in CNPC production in Sudan has pushed Chinese imports of Sudanese crude from a declining trend in 2006, to growth of 180 kb/d on average since last autumn. Conversely, Angolan imports have weakened after firm growth in 2006. Indian crude import growth from OPEC has decreased slightly since last autumn, with tanker data indicating extra barrels instead coming from Angola, Malaysia and Mexico, plus a few cargoes from Azerbaijan.

During a period of lower throughputs, OECD refiners have absorbed greater volumes of re-invigorated non-OPEC supply. Price will ultimately decide whether these new trade patterns endure in the face of higher OPEC supplies. However, without extra OPEC output, any weakening of non-OPEC supply growth will obviously dent growth in these emerging trades. Higher refinery throughputs would then place even more focus on OECD crude stocks.

**Table 1**  
**WORLD OIL SUPPLY AND DEMAND**  
(million barrels per day)

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
<b>OECD DEMAND</b>																	
North America	25.4	25.5	25.2	25.1	25.4	25.4	25.3	25.7	25.5	25.7	25.8	25.7	26.0	25.9	26.0	26.1	26.0
Europe	15.5	15.6	15.9	15.2	15.6	15.6	15.6	15.3	14.9	15.5	15.8	15.4	15.7	15.2	15.7	15.9	15.6
Pacific	8.5	8.6	9.2	7.8	7.9	8.7	8.4	8.8	7.8	8.0	8.9	8.4	9.3	8.0	8.1	9.0	8.6
<b>Total OECD</b>	<b>49.4</b>	<b>49.7</b>	<b>50.3</b>	<b>48.1</b>	<b>48.9</b>	<b>49.7</b>	<b>49.2</b>	<b>49.7</b>	<b>48.2</b>	<b>49.1</b>	<b>50.6</b>	<b>49.4</b>	<b>51.0</b>	<b>49.0</b>	<b>49.8</b>	<b>51.0</b>	<b>50.2</b>
<b>NON-OECD DEMAND</b>																	
FSU	3.8	3.8	3.9	3.7	4.0	4.3	4.0	3.8	3.5	3.9	4.5	3.9	3.9	3.6	4.0	4.5	4.0
Europe	0.7	0.7	0.8	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.7	0.8	0.8
China	6.4	6.7	7.0	7.3	7.2	7.2	7.2	7.3	7.7	7.6	7.7	7.6	7.7	8.1	8.1	8.1	8.0
Other Asia	8.6	8.8	9.0	9.0	8.7	8.9	8.9	9.2	9.2	8.9	9.1	9.1	9.4	9.4	9.2	9.4	9.3
Latin America	5.0	5.1	5.2	5.3	5.4	5.4	5.3	5.3	5.5	5.6	5.5	5.5	5.5	5.6	5.7	5.7	5.6
Middle East	5.7	6.0	6.2	6.2	6.5	6.3	6.3	6.4	6.6	6.8	6.5	6.6	6.7	6.8	7.1	6.8	6.9
Africa	2.8	2.9	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
<b>Total Non-OECD</b>	<b>33.0</b>	<b>34.1</b>	<b>34.9</b>	<b>35.2</b>	<b>35.2</b>	<b>35.7</b>	<b>35.3</b>	<b>35.9</b>	<b>36.3</b>	<b>36.6</b>	<b>37.2</b>	<b>36.5</b>	<b>37.2</b>	<b>37.6</b>	<b>37.9</b>	<b>38.6</b>	<b>37.8</b>
<b>Total Demand<sup>1</sup></b>	<b>82.3</b>	<b>83.7</b>	<b>85.2</b>	<b>83.3</b>	<b>84.1</b>	<b>85.4</b>	<b>84.5</b>	<b>85.6</b>	<b>84.5</b>	<b>85.7</b>	<b>87.8</b>	<b>85.9</b>	<b>88.2</b>	<b>86.6</b>	<b>87.7</b>	<b>89.6</b>	<b>88.0</b>
<b>OECD SUPPLY</b>																	
North America	14.6	14.1	14.2	14.2	14.3	14.3	14.2	14.4	14.4	14.0	14.2	14.2	14.4	14.1	14.0	14.1	14.2
Europe	6.1	5.6	5.5	5.1	4.9	5.2	5.2	5.2	4.9	4.6	4.8	4.9	4.9	4.5	4.4	4.6	4.6
Pacific	0.6	0.6	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.8
<b>Total OECD</b>	<b>21.2</b>	<b>20.3</b>	<b>20.2</b>	<b>19.8</b>	<b>19.9</b>	<b>20.1</b>	<b>20.0</b>	<b>20.2</b>	<b>19.9</b>	<b>19.3</b>	<b>19.7</b>	<b>19.8</b>	<b>20.0</b>	<b>19.4</b>	<b>19.1</b>	<b>19.6</b>	<b>19.5</b>
<b>NON-OECD SUPPLY</b>																	
FSU	11.2	11.6	11.8	12.0	12.2	12.4	12.1	12.5	12.5	12.5	12.7	12.6	12.8	13.0	13.1	13.3	13.0
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	0.1	0.1
China	3.5	3.6	3.7	3.7	3.7	3.6	3.7	3.7	3.8	3.8	3.9	3.8	3.9	3.9	3.9	3.9	3.9
Other Asia	2.7	2.7	2.7	2.7	2.7	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8
Latin America	4.1	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.5	4.6	4.4	4.7	4.8	4.8	4.7	4.8
Middle East	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.6	1.6	1.6	1.6	1.6
Africa <sup>2</sup>	3.4	3.7	3.9	3.8	3.9	4.0	3.9	2.6	2.5	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7
<b>Total Non-OECD</b>	<b>27.0</b>	<b>27.9</b>	<b>28.4</b>	<b>28.5</b>	<b>28.8</b>	<b>29.0</b>	<b>28.7</b>	<b>27.8</b>	<b>27.7</b>	<b>27.8</b>	<b>28.3</b>	<b>27.9</b>	<b>28.7</b>	<b>28.9</b>	<b>29.0</b>	<b>29.2</b>	<b>28.9</b>
Processing Gains <sup>3</sup>	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
Other Biofuels <sup>4</sup>	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
<b>Total Non-OPEC<sup>5</sup></b>	<b>50.1</b>	<b>50.2</b>	<b>50.8</b>	<b>50.5</b>	<b>50.8</b>	<b>51.3</b>	<b>50.8</b>	<b>50.3</b>	<b>50.0</b>	<b>49.4</b>	<b>50.4</b>	<b>50.0</b>	<b>51.3</b>	<b>50.9</b>	<b>50.7</b>	<b>51.4</b>	<b>51.1</b>
Non-OPEC excl. Angola <sup>2</sup>	49.1	49.0	49.3	49.2	49.3	49.9	49.4	50.3	50.0	49.4	50.4	50.0	51.3	50.9	50.7	51.4	51.1
<b>OPEC</b>																	
Crude <sup>6</sup>	28.9	29.7	29.9	29.7	30.0	29.2	29.7	30.2	30.2								
NGLs	4.2	4.5	4.6	4.6	4.6	4.7	4.6	4.8	4.8	4.8	5.0	4.9	5.2	5.4	5.6	5.8	5.5
<b>Total OPEC</b>	<b>33.1</b>	<b>34.2</b>	<b>34.5</b>	<b>34.3</b>	<b>34.7</b>	<b>33.9</b>	<b>34.3</b>	<b>35.0</b>	<b>35.0</b>								
OPEC incl. Angola <sup>2</sup>	34.1	35.5	35.9	35.6	36.1	35.3	35.7	35.0	35.0								
<b>Total Supply<sup>7</sup></b>	<b>83.2</b>	<b>84.4</b>	<b>85.2</b>	<b>84.8</b>	<b>85.4</b>	<b>85.2</b>	<b>85.2</b>	<b>85.2</b>	<b>85.0</b>								
<b>STOCK CHANGES AND MISCELLANEOUS</b>																	
<b>Reported OECD</b>																	
Industry	0.1	0.1	0.0	0.6	1.2	-0.9	0.2	-0.9	0.8								
Government	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0								
<b>Total</b>	<b>0.2</b>	<b>0.2</b>	<b>0.0</b>	<b>0.7</b>	<b>1.2</b>	<b>-0.8</b>	<b>0.3</b>	<b>-0.9</b>	<b>0.8</b>								
Floating Storage/Oil in Transit	0.0	-0.1	0.1	-0.1	0.3	-0.6	-0.1	0.2	-0.1								
Miscellaneous to balance <sup>8</sup>	0.6	0.5	-0.2	0.9	-0.1	1.2	0.5	0.3	-0.2								
<b>Total Stock Ch. &amp; Misc</b>	<b>0.8</b>	<b>0.7</b>	<b>0.0</b>	<b>1.5</b>	<b>1.4</b>	<b>-0.3</b>	<b>0.7</b>	<b>-0.4</b>	<b>0.4</b>								
<b>Memo items:</b>																	
Call on OPEC crude + Stock ch. <sup>9</sup>	28.1	29.0	29.9	28.2	28.7	29.5	29.0	30.6	29.8	31.4	32.4	31.1	31.7	30.3	31.4	32.3	31.4
Adjusted Call on OPEC + Stock ch. <sup>10</sup>	28.7	29.6	29.7	29.0	28.5	30.7	29.5	30.9	29.6	31.9	32.8	31.3	32.1	30.8	31.8	32.8	31.9
"Call" incl. Angola <sup>2</sup>	29.1	30.3	31.3	29.5	30.1	30.9	30.5	30.6	29.8	31.4	32.4	31.1	31.7	30.3	31.4	32.3	31.4
"Adjusted Call" incl. Angola <sup>2</sup>	29.7	30.8	31.1	30.4	30.0	32.1	30.9	30.9	29.6	31.9	32.8	31.3	32.1	30.8	31.8	32.8	31.9

<sup>1</sup> Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply.

<sup>2</sup> With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC and Africa totals, for the period January 2007 onwards.

Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively.

<sup>3</sup> Net volumetric gains and losses in the refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses.

<sup>4</sup> Biofuels from sources outside Brazil and US.

<sup>5</sup> Non-OPEC supplies include crude oil, condensates, NGL and non-conventional sources of supply such as synthetic crude, ethanol and MTBE.

No allowance is made in the non-OPEC forecast for exceptional events which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.

<sup>6</sup> As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL & non-conventional category, but Orimulsion production reportedly ceased from January 2007.

<sup>7</sup> Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.

<sup>8</sup> Includes changes in non-reported stocks in OECD and non-OECD areas.

<sup>9</sup> Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.

<sup>10</sup> Equals the "Call on OPEC + Stock Ch." with "Miscellaneous to balance" added for historical periods and with an average of "Miscellaneous to balance" for the most recent 8 quarters plus an extra 350 kb/d allowance for average understatement of non-OPEC supply added for forecast periods.

**Table 1A**  
**WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1**  
(million barrels per day)

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
<b>OECD DEMAND</b>																	
North America	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-0.1	-	-0.1	-0.1	-0.1
Europe	-	-	-	-	-	-	-	0.1	0.1	-0.1	-	-	-	-	-0.1	-	-
Pacific	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1	-	0.1	-
<b>Total OECD</b>	-	-	-	-	-	-	-	0.1	0.1	-0.4	-0.2	-0.1	-0.2	-0.1	-0.2	-	-0.1
<b>NON-OECD DEMAND</b>																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-0.1	-0.1	-0.1
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Non-OECD</b>	-	-	-	-	-	-	-	-	0.1	-	-0.1	-	-	0.1	-	-0.1	-
<b>Total Demand</b>	-	-	-	-	-	-	-	0.1	0.2	-0.4	-0.3	-0.1	-0.2	-	-0.3	-0.2	-0.2
<b>OECD SUPPLY</b>																	
North America	-	-	-	-	-	-	-	-	0.1	-0.1	0.1	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total OECD</b>	-	-	-	-	-	-	-	-	0.1	-	0.1	-	-	0.1	-	-	-
<b>NON-OECD SUPPLY</b>																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Non-OECD</b>	-	-	-	-	-	-	-	-	-	-0.2	-	-0.1	0.1	-	-	-	-
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Non-OPEC</b>	-	-	-	-	-	-	-	-	0.1	-0.2	-	-	0.1	0.1	-	0.1	0.1
Non-OPEC excl. Angola	-	-	-	-	-	-	-	-	0.1	-0.2	-	-	0.1	0.1	-	0.1	0.1
<b>OPEC</b>																	
Crude	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total OPEC</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPEC incl. Angola	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Supply</b>	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-
<b>STOCK CHANGES AND MISCELLANEOUS</b>																	
<b>REPORTED OECD</b>																	
Industry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Government	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous to balance	-	-	-	-	-	-	-	-0.1	-0.2	-	-	-	-	-	-	-	-
<b>Total Stock Ch. &amp; Misc</b>	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-	-	-	-	-	-
<b>Memo items:</b>																	
Call on OPEC crude + Stock ch.	-	-	-	-	-	-	-	0.1	0.1	-0.2	-0.3	-0.1	-0.3	-0.1	-0.3	-0.2	-0.2
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	-0.1	-0.2	-0.3	-0.1	-0.3	-0.1	-0.3	-0.3	-0.3
"Call" incl. Angola <sup>2</sup>	-	-	-	-	-	-	-	0.1	0.1	-0.2	-0.3	-0.1	-0.3	-0.1	-0.3	-0.2	-0.2
"Adjusted Call" incl. Angola	-	-	-	-	-	-	-	-	-0.1	-0.2	-0.3	-0.1	-0.3	-0.1	-0.4	-0.3	-0.3

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

**Table 2**  
**Summary of Global Oil Demand**

	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008	
<b>Demand (mb/d)</b>																	
North America	25.49	25.17	25.09	25.43	25.35	25.26	25.65	25.48	25.66	25.83	25.66	26.03	25.85	26.05	26.08	26.00	
Europe	15.61	15.89	15.15	15.57	15.64	15.56	15.25	14.94	15.50	15.82	15.38	15.72	15.22	15.65	15.94	15.63	
Pacific	8.57	9.24	7.82	7.85	8.71	8.40	8.83	7.80	7.96	8.92	8.38	9.27	7.98	8.06	8.96	8.57	
Total OECD	49.67	50.30	48.07	48.85	49.71	49.23	49.73	48.22	49.12	50.57	49.41	51.02	49.05	49.76	50.98	50.20	
FSU	3.80	3.91	3.73	3.97	4.30	3.98	3.77	3.51	3.93	4.46	3.92	3.86	3.58	4.01	4.53	4.00	
Europe	0.72	0.80	0.75	0.70	0.75	0.75	0.83	0.77	0.71	0.77	0.77	0.85	0.79	0.73	0.79	0.79	
China	6.69	6.96	7.29	7.17	7.20	7.16	7.27	7.67	7.64	7.73	7.58	7.75	8.10	8.05	8.15	8.01	
Other Asia	8.79	8.95	8.96	8.66	8.90	8.87	9.17	9.22	8.94	9.13	9.11	9.37	9.44	9.16	9.39	9.34	
Latin America	5.13	5.15	5.29	5.40	5.38	5.31	5.32	5.49	5.60	5.55	5.49	5.46	5.63	5.74	5.70	5.64	
Middle East	5.99	6.16	6.21	6.47	6.27	6.28	6.43	6.58	6.78	6.50	6.57	6.69	6.84	7.10	6.83	6.86	
Africa	2.94	2.97	2.97	2.86	2.93	2.93	3.11	3.08	2.98	3.09	3.06	3.22	3.18	3.09	3.20	3.17	
Total Non-OECD	34.08	34.91	35.20	35.24	35.74	35.27	35.90	36.31	36.59	37.23	36.51	37.21	37.57	37.90	38.57	37.81	
World	83.75	85.21	83.27	84.09	85.45	84.50	85.63	84.54	85.71	87.80	85.92	88.23	86.62	87.66	89.55	88.02	
<i>of which:</i>																	
US50	20.80	20.49	20.60	20.86	20.73	20.67	20.88	20.74	20.98	21.06	20.92	21.19	21.13	21.32	21.25	21.22	
Euro4	8.22	8.49	7.94	8.15	8.18	8.19	7.88	7.72	8.07	8.25	7.98	8.21	7.91	8.18	8.30	8.15	
Japan	5.31	5.89	4.72	4.75	5.29	5.16	5.39	4.61	4.76	5.43	5.05	5.74	4.73	4.80	5.41	5.17	
Korea	2.19	2.29	2.04	2.04	2.32	2.17	2.35	2.12	2.10	2.36	2.23	2.42	2.15	2.14	2.40	2.28	
Mexico	2.05	2.05	1.98	1.96	2.00	2.00	2.05	2.07	2.05	2.07	2.06	2.09	2.10	2.09	2.12	2.10	
Canada	2.30	2.26	2.17	2.26	2.26	2.24	2.34	2.33	2.28	2.32	2.32	2.37	2.28	2.29	2.33	2.32	
Brazil	2.19	2.18	2.20	2.28	2.30	2.24	2.25	2.28	2.36	2.36	2.31	2.31	2.34	2.42	2.42	2.37	
India	2.58	2.71	2.67	2.48	2.70	2.64	2.88	2.83	2.55	2.76	2.75	2.95	2.89	2.61	2.82	2.82	
<b>Annual Change (% per annum)</b>																	
North America	0.5	-1.6	-0.8	-0.6	-0.7	-0.9	1.9	1.5	0.9	1.9	1.6	1.5	1.5	1.5	1.0	1.4	
Europe	0.8	1.1	-0.7	-0.6	-1.0	-0.3	-4.0	-1.4	-0.5	1.1	-1.2	3.1	1.9	1.0	0.8	1.7	
Pacific	0.8	-2.5	-2.7	-2.1	-0.3	-1.9	-4.5	-0.2	1.4	2.4	-0.3	5.0	2.2	1.3	0.5	2.3	
Total OECD	0.6	-0.9	-1.1	-0.8	-0.7	-0.9	-1.1	0.3	0.5	1.7	0.4	2.6	1.7	1.3	0.8	1.6	
FSU	1.2	2.4	0.6	4.8	10.5	4.6	-3.7	-5.9	-0.9	3.8	-1.5	2.6	2.0	2.1	1.6	2.0	
Europe	4.2	3.4	3.4	3.4	3.4	3.4	2.9	2.7	2.6	2.2	2.6	2.3	2.6	2.6	2.6	2.5	
China	4.2	4.2	12.1	7.1	4.6	6.9	4.5	5.2	6.6	7.3	5.9	6.5	5.6	5.4	5.4	5.7	
Other Asia	2.0	-0.2	-0.8	1.6	2.8	0.8	2.4	2.9	3.2	2.6	2.8	2.2	2.4	2.6	2.8	2.5	
Latin America	2.9	3.7	3.2	2.9	4.4	3.6	3.3	3.8	3.6	3.2	3.5	2.7	2.6	2.6	2.7	2.6	
Middle East	4.6	4.8	4.2	4.7	5.3	4.8	4.4	5.8	4.8	3.7	4.7	4.1	3.9	4.6	4.9	4.4	
Africa	6.1	-1.3	-0.9	-0.1	1.1	-0.3	4.6	3.7	4.3	5.2	4.4	3.6	3.4	3.4	3.6	3.5	
Total Non-OECD	3.3	2.4	3.4	3.7	4.6	3.5	2.8	3.2	3.8	4.2	3.5	3.7	3.5	3.6	3.6	3.6	
World	1.7	0.4	0.8	1.0	1.4	0.9	0.5	1.5	1.9	2.8	1.7	3.0	2.5	2.3	2.0	2.4	
<b>Annual Change (mb/d)</b>																	
North America	0.12	-0.41	-0.19	-0.14	-0.19	-0.23	0.48	0.38	0.23	0.48	0.39	0.38	0.38	0.38	0.25	0.35	
Europe	0.12	0.17	-0.11	-0.09	-0.15	-0.05	-0.64	-0.21	-0.07	0.17	-0.19	0.47	0.28	0.16	0.12	0.26	
Pacific	0.07	-0.24	-0.22	-0.17	-0.03	-0.16	-0.42	-0.02	0.11	0.21	-0.03	0.44	0.17	0.10	0.04	0.19	
Total OECD	0.32	-0.47	-0.52	-0.41	-0.37	-0.44	-0.57	0.15	0.27	0.86	0.18	1.29	0.83	0.64	0.41	0.79	
FSU	0.05	0.09	0.02	0.18	0.41	0.18	-0.15	-0.22	-0.04	0.16	-0.06	0.10	0.07	0.08	0.07	0.08	
Europe	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
China	0.27	0.28	0.79	0.47	0.32	0.46	0.31	0.38	0.47	0.53	0.42	0.48	0.43	0.42	0.42	0.43	
Other Asia	0.17	-0.02	-0.07	0.13	0.25	0.07	0.22	0.26	0.27	0.23	0.25	0.21	0.22	0.23	0.26	0.23	
Latin America	0.14	0.19	0.16	0.15	0.23	0.18	0.17	0.20	0.20	0.17	0.18	0.14	0.14	0.14	0.15	0.14	
Middle East	0.26	0.28	0.25	0.29	0.31	0.29	0.27	0.36	0.31	0.23	0.29	0.26	0.26	0.31	0.32	0.29	
Africa	0.17	-0.04	-0.03	0.00	0.03	-0.01	0.14	0.11	0.12	0.15	0.13	0.11	0.11	0.10	0.11	0.11	
Total Non-OECD	1.09	0.81	1.16	1.25	1.57	1.20	0.99	1.11	1.35	1.49	1.24	1.32	1.25	1.31	1.34	1.30	
World	1.40	0.34	0.64	0.84	1.20	0.76	0.41	1.26	1.62	2.35	1.42	2.61	2.08	1.95	1.76	2.10	
<b>Revisions to Oil Demand from Last Month's Report (mb/d)</b>																	
North America	0.00	0.00	0.04	0.00	0.00	0.01	-0.01	0.03	-0.11	-0.05	-0.03	-0.06	0.00	-0.10	-0.08	-0.06	
Europe	0.02	0.00	0.00	0.00	0.00	0.00	0.10	0.09	-0.14	-0.04	0.00	-0.03	-0.02	-0.10	-0.02	-0.05	
Pacific	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.12	-0.08	-0.05	-0.08	-0.06	-0.03	0.05	-0.03	
Total OECD	0.02	0.00	0.04	0.00	0.00	0.01	0.10	0.11	-0.37	-0.16	-0.08	-0.17	-0.08	-0.23	-0.05	-0.13	
FSU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	
China	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.01	0.00	0.02	0.03	-0.02	0.01	
Other Asia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	-0.04	-0.08	-0.03	-0.02	0.00	-0.08	-0.12	-0.05	
Latin America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.01	0.00	0.02	0.00	0.01	0.01	
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	-0.01	-0.01	0.01	-0.01	0.02	0.02	0.03	0.01	
Africa	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.01	0.01	-0.01	-0.01	0.00	0.01	0.02	-0.01	-0.01	0.00	
Total Non-OECD	-0.01	-0.01	-0.02	-0.01	-0.01	-0.01	0.02	0.09	-0.04	-0.09	0.00	-0.02	0.07	-0.04	-0.12	-0.03	
World	0.01	-0.01	0.02	-0.01	-0.01	0.00	0.12	0.20	-0.41	-0.25	-0.09	-0.19	-0.02	-0.28	-0.16	-0.16	
<b>Revisions to Oil Demand Growth from Last Month's Report (mb/d)</b>																	
World	0.01	-0.02	0.02	-0.02	-0.02	-0.01	0.13	0.18	-0.40	-0.24	-0.09	-0.31	-0.22	0.14	0.09	-0.07	



**Table 3**  
**WORLD OIL PRODUCTION**  
(million barrels per day)

	2006	2007	2008	1Q07	2Q07	3Q07	4Q07	1Q08	Jun 07	Jul 07	Aug 07
<b>OPEC</b>											
Crude Oil											
Saudi Arabia	8.93			8.34	8.37				8.35	8.40	8.42
Iran	3.89			3.88	3.92				3.90	3.92	3.87
Iraq	1.90			1.89	2.01				1.93	2.19	1.96
UAE	2.62			2.55	2.56				2.59	2.59	2.60
Kuwait	2.21			2.16	2.08				2.07	2.17	2.17
Neutral Zone	0.58			0.55	0.55				0.55	0.55	0.56
Qatar	0.82			0.80	0.80				0.81	0.83	0.83
Angola <sup>5</sup>				1.53	1.58				1.55	1.56	1.62
Nigeria	2.24			2.22	2.07				2.07	2.10	2.15
Libya	1.71			1.69	1.69				1.70	1.70	1.70
Algeria	1.35			1.33	1.36				1.37	1.35	1.35
Venezuela	2.56			2.44	2.37				2.37	2.34	2.36
Indonesia	0.89			0.85	0.84				0.83	0.83	0.84
Total Crude Oil	29.69			30.22	30.19				30.06	30.50	30.41
Total NGLs <sup>1</sup>	4.63	4.85	5.51	4.76	4.80	4.83	5.03	5.21	4.80	4.82	4.83
<b>Total OPEC</b>	<b>34.32</b>			<b>34.99</b>	<b>34.99</b>				<b>34.86</b>	<b>35.32</b>	<b>35.24</b>
OPEC incl. Angola <sup>6</sup>	35.73			34.99	34.99				34.86	35.32	35.24
<b>NON-OPEC<sup>2</sup></b>											
<b>OECD</b>											
<b>North America</b>											
United States	14.25	14.24	14.17	14.36	14.42	14.01	14.19	14.45	14.37	14.24	13.91
Mexico	3.68	3.51	3.41	3.57	3.58	3.40	3.51	3.46	3.62	3.57	3.11
Canada	3.19	3.33	3.34	3.35	3.28	3.25	3.43	3.51	3.24	3.13	3.31
<b>Europe</b>											
UK	1.66	1.64	1.50	1.76	1.70	1.47	1.64	1.65	1.63	1.50	1.37
Norway	2.78	2.52	2.36	2.72	2.46	2.42	2.47	2.49	2.17	2.61	2.35
Others	0.74	0.74	0.72	0.74	0.73	0.74	0.73	0.73	0.73	0.74	0.74
<b>Pacific</b>											
Australia	0.53	0.57	0.67	0.53	0.56	0.57	0.61	0.63	0.61	0.57	0.55
Others	0.05	0.08	0.11	0.06	0.06	0.08	0.10	0.10	0.06	0.07	0.08
<b>Total OECD</b>	<b>20.01</b>	<b>19.78</b>	<b>19.53</b>	<b>20.17</b>	<b>19.94</b>	<b>19.28</b>	<b>19.75</b>	<b>20.04</b>	<b>19.57</b>	<b>19.73</b>	<b>19.01</b>
<b>NON-OECD</b>											
<b>Former USSR</b>											
Russia	12.10	12.58	13.05	12.55	12.50	12.53	12.75	12.85	12.51	12.61	12.64
Others	9.69	9.92	10.10	9.91	9.87	9.95	9.96	9.93	9.91	9.94	9.94
Others	2.40	2.66	2.95	2.63	2.63	2.58	2.79	2.92	2.60	2.67	2.69
<b>Asia</b>											
China	6.39	6.52	6.71	6.45	6.48	6.51	6.66	6.66	6.51	6.34	6.63
Malaysia	3.67	3.82	3.92	3.75	3.79	3.83	3.92	3.93	3.83	3.65	3.91
India	0.75	0.75	0.79	0.74	0.74	0.75	0.77	0.77	0.75	0.75	0.75
Others	0.79	0.82	0.81	0.82	0.81	0.82	0.82	0.82	0.82	0.81	0.82
Others	1.17	1.13	1.18	1.14	1.14	1.11	1.15	1.15	1.11	1.14	1.14
<b>Europe</b>											
Others	0.15	0.13	0.12	0.14	0.14	0.13	0.13	0.13	0.13	0.13	0.13
<b>Latin America</b>											
Brazil	4.39	4.45	4.75	4.38	4.39	4.45	4.57	4.74	4.41	4.40	4.46
Argentina	2.10	2.20	2.55	2.15	2.14	2.19	2.33	2.52	2.18	2.14	2.20
Colombia	0.77	0.77	0.75	0.77	0.77	0.77	0.76	0.76	0.77	0.77	0.77
Ecuador	0.53	0.54	0.55	0.52	0.53	0.55	0.55	0.55	0.53	0.55	0.55
Others	0.54	0.50	0.47	0.50	0.51	0.50	0.48	0.48	0.50	0.50	0.50
Others	0.45	0.44	0.44	0.44	0.44	0.45	0.45	0.44	0.44	0.45	0.45
<b>Middle East<sup>3</sup></b>											
Oman	1.74	1.65	1.61	1.67	1.66	1.66	1.63	1.64	1.65	1.67	1.66
Syria	0.75	0.71	0.68	0.72	0.72	0.70	0.69	0.69	0.71	0.71	0.70
Yemen	0.42	0.39	0.36	0.40	0.39	0.38	0.38	0.37	0.39	0.39	0.38
Others	0.38	0.37	0.38	0.36	0.36	0.38	0.37	0.39	0.36	0.38	0.38
<b>Africa</b>											
Egypt	3.91	2.57	2.69	2.58	2.54	2.57	2.60	2.65	2.54	2.56	2.57
Angola <sup>5</sup>	0.67	0.63	0.62	0.64	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Gabon	1.37										
Others	0.23	0.23	0.24	0.23	0.23	0.23	0.23	0.24	0.23	0.23	0.23
Others	1.63	1.71	1.83	1.71	1.68	1.70	1.74	1.79	1.67	1.69	1.71
<b>Total Non-OECD</b>	<b>28.67</b>	<b>27.91</b>	<b>28.93</b>	<b>27.77</b>	<b>27.70</b>	<b>27.84</b>	<b>28.34</b>	<b>28.67</b>	<b>27.74</b>	<b>27.71</b>	<b>28.08</b>
Processing Gains <sup>4</sup>	1.90	1.92	1.95	1.92	1.92	1.92	1.92	1.95	1.92	1.92	1.92
Other Biofuels <sup>5</sup>	0.26	0.40	0.66	0.40	0.40	0.40	0.40	0.66	0.40	0.40	0.40
<b>TOTAL NON-OPEC</b>	<b>50.84</b>	<b>50.02</b>	<b>51.07</b>	<b>50.26</b>	<b>49.96</b>	<b>49.44</b>	<b>50.41</b>	<b>51.32</b>	<b>49.64</b>	<b>49.76</b>	<b>49.41</b>
Non-OPEC excl. Angola <sup>6</sup>	49.43	50.02	51.07	50.26	49.96	49.44	50.41	51.32	49.64	49.76	49.41
<b>TOTAL SUPPLY</b>	<b>85.16</b>			<b>85.24</b>	<b>84.95</b>				<b>84.50</b>	<b>85.08</b>	<b>84.65</b>

<sup>1</sup> Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Venezuelan Orimulsion (but not Orinoco extra-heavy oil), and non-oil inputs to Saudi Arabian MTBE. Orimulsion production will reportedly cease from January 2007.

<sup>2</sup> Comprises crude oil, condensates, NGLs and oil from non-conventional sources. No allowance is made in the non-OPEC forecast for exceptional events, which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.

<sup>3</sup> Includes small amounts of production from Israel, Jordan and Bahrain.

<sup>4</sup> Net volumetric gains and losses in refining (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.

<sup>5</sup> Comprises Fuel Ethanol and Biodiesel supply from outside Brazil and US.

<sup>6</sup> With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively.

**Table 4**  
**OECD INDUSTRY STOCKS<sup>1</sup> AND QUARTERLY STOCK CHANGES**

	RECENT MONTHLY STOCKS <sup>2</sup>					PRIOR YEARS' STOCKS <sup>2</sup>			STOCK CHANGES			
	in Million Barrels					in Million Barrels			in mb/d			
	Mar2007	Apr2007	May2007	Jun2007	Jul2007*	Jul2004	Jul2005	Jul2006	3Q2006	4Q2006	1Q2007	2Q2007
<b>North America</b>												
Crude	462.5	473.3	480.6	490.3	477.5	406.9	433.8	456.4	0.02	-0.25	0.28	0.31
Motor Gasoline	230.0	223.6	230.4	233.5	231.9	240.3	236.5	238.7	0.03	-0.02	-0.14	0.04
Middle Distillate	190.7	192.5	196.4	195.3	201.2	193.3	207.1	209.2	0.26	-0.08	-0.30	0.05
Residual Fuel Oil	47.2	47.0	44.3	44.7	48.3	42.5	46.3	52.4	0.01	-0.03	-0.03	-0.03
Total Products <sup>3</sup>	630.7	630.8	648.9	654.9	672.9	650.6	690.3	686.8	0.60	-0.33	-0.71	0.27
Total <sup>4</sup>	1233.3	1248.2	1274.0	1291.0	1297.0	1207.7	1276.2	1297.0	0.77	-0.76	-0.48	0.63
<b>Europe</b>												
Crude	325.4	337.9	338.5	334.8	343.0	328.0	339.8	351.1	-0.10	0.11	-0.16	0.10
Motor Gasoline	110.2	104.1	102.9	100.1	101.9	110.3	103.8	97.3	0.04	0.11	-0.04	-0.11
Middle Distillate	267.7	276.7	279.7	271.0	269.1	245.7	254.3	265.3	0.16	0.06	-0.12	0.04
Residual Fuel Oil	72.0	70.6	70.5	69.9	69.7	78.4	71.4	74.9	-0.04	0.04	-0.04	-0.02
Total Products <sup>3</sup>	551.7	552.5	552.4	539.9	539.7	537.1	531.4	541.8	0.24	0.15	-0.21	-0.13
Total <sup>4</sup>	950.4	966.5	967.3	951.7	958.7	935.5	942.8	965.4	0.15	0.20	-0.30	0.01
<b>Pacific</b>												
Crude	172.4	168.5	170.5	171.6	178.3	182.7	183.8	176.1	-0.07	-0.02	-0.01	-0.01
Motor Gasoline	24.5	24.0	25.5	24.1	23.0	23.8	24.4	23.5	-0.01	-0.01	0.03	0.00
Middle Distillate	60.9	59.3	63.9	67.9	74.9	62.7	68.1	75.4	0.18	-0.14	-0.14	0.08
Residual Fuel Oil	22.1	22.3	22.5	22.1	24.6	22.3	25.7	25.1	0.01	-0.01	-0.01	0.00
Total Products <sup>3</sup>	171.1	167.3	176.5	182.0	191.1	174.7	186.3	192.6	0.30	-0.30	-0.14	0.12
Total <sup>4</sup>	416.5	409.5	420.3	426.6	443.4	429.4	441.7	440.5	0.25	-0.33	-0.13	0.11
<b>Total OECD</b>												
Crude	960.2	979.7	989.5	996.8	998.8	917.5	957.4	983.6	-0.15	-0.16	0.11	0.40
Motor Gasoline	364.6	351.7	358.8	357.6	356.8	374.4	364.8	359.4	0.06	0.08	-0.15	-0.08
Middle Distillate	519.2	528.5	540.0	534.2	545.2	501.6	529.5	549.9	0.60	-0.15	-0.55	0.16
Residual Fuel Oil	141.3	139.9	137.4	136.7	142.6	143.2	143.4	152.4	-0.02	-0.01	-0.08	-0.05
Total Products <sup>3</sup>	1353.6	1350.5	1377.7	1376.8	1403.7	1362.4	1408.0	1421.2	1.14	-0.47	-1.05	0.25
Total <sup>4</sup>	2600.3	2624.2	2661.5	2669.2	2699.0	2572.6	2660.8	2703.0	1.17	-0.89	-0.92	0.76

**OECD GOVERNMENT-CONTROLLED STOCKS<sup>5</sup> AND QUARTERLY STOCK CHANGES**

	RECENT MONTHLY STOCKS <sup>2</sup>					PRIOR YEARS' STOCKS <sup>2</sup>			STOCK CHANGES			
	in Million Barrels					in Million Barrels			in mb/d			
	Mar2007	Apr2007	May2007	Jun2007	Jul2007*	Jul2004	Jul2005	Jul2006	3Q2006	4Q2006	1Q2007	2Q2007
<b>North America</b>												
Crude	688.6	689.4	690.3	690.3	690.3	665.7	698.8	687.9	0.00	0.01	0.00	0.02
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
<b>Europe</b>												
Crude	174.3	174.7	175.0	175.3	175.3	158.0	164.6	174.6	0.02	-0.01	-0.01	0.01
Products	239.9	241.1	239.9	238.9	238.9	207.9	238.4	235.7	-0.01	0.00	0.05	-0.01
<b>Pacific</b>												
Crude	385.1	385.1	385.0	385.0	385.0	386.7	384.2	382.2	0.01	0.03	0.01	0.00
Products	11.8	11.8	11.8	11.8	11.8	11.0	11.3	11.8	0.00	0.00	0.00	0.00
<b>Total OECD</b>												
Crude	1248.0	1249.1	1250.3	1250.6	1250.6	1210.4	1247.6	1244.7	0.03	0.04	0.00	0.03
Products	253.7	254.9	253.7	252.7	252.7	220.9	251.8	249.5	-0.01	0.00	0.05	-0.01
Total <sup>4</sup>	1502.7	1505.0	1505.0	1504.2	1504.2	1432.3	1500.4	1495.2	0.02	0.04	0.05	0.02

\* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

**Table 5**  
**TOTAL STOCKS ON LAND IN OECD COUNTRIES<sup>1</sup>**  
(millions of barrels' and 'days)

	End June 2006		End September 2006		End December 2006		End March 2007		End June 2007 <sup>3</sup>	
	Stock Level	Days Fwd <sup>2</sup> Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
<b>North America</b>										
Canada	169.7	75	179.2	79	180.1	77	182.5	78	186.4	-
Mexico	42.1	22	47.0	24	42.3	21	40.5	20	43.8	-
United States <sup>4</sup>	1731.6	83	1788.3	87	1722.9	83	1678.8	81	1731.0	-
<b>Total<sup>4</sup></b>	<b>1965.5</b>	<b>78</b>	<b>2036.5</b>	<b>81</b>	<b>1967.4</b>	<b>77</b>	<b>1923.9</b>	<b>76</b>	<b>1983.3</b>	<b>77</b>
<b>Pacific</b>										
Australia	38.9	42	35.3	37	34.8	37	34.3	37	38.6	-
Japan	627.2	132	649.1	123	630.8	117	615.3	133	618.7	-
Korea	155.4	76	160.5	69	151.8	65	156.1	74	158.3	-
New Zealand	6.8	48	7.0	46	7.1	46	7.7	49	7.8	-
<b>Total</b>	<b>828.3</b>	<b>105</b>	<b>851.9</b>	<b>98</b>	<b>824.6</b>	<b>93</b>	<b>813.4</b>	<b>104</b>	<b>823.4</b>	<b>103</b>
<b>Europe<sup>5</sup></b>										
Austria	19.7	62	19.0	64	21.9	76	23.8	78	24.3	-
Belgium	30.4	54	30.5	53	30.2	48	28.2	49	28.2	-
Czech Republic	19.5	88	19.3	94	19.7	101	20.2	92	20.5	-
Denmark	20.4	110	21.2	113	18.5	97	18.3	96	17.1	-
Finland	30.5	139	26.8	118	26.6	114	29.5	141	26.3	-
France	188.7	98	187.5	96	192.4	98	177.0	96	185.7	-
Germany	283.1	103	281.9	104	282.8	117	290.5	120	285.6	-
Greece	34.9	84	36.7	76	36.8	79	33.6	87	36.4	-
Hungary	17.6	107	17.4	97	16.5	107	18.0	106	15.9	-
Ireland	12.6	71	13.9	70	12.5	62	12.9	69	11.1	-
Italy	126.0	75	134.1	78	133.1	79	133.9	80	133.0	-
Luxembourg	1.0	17	0.9	15	1.0	16	0.9	15	0.9	-
Netherlands	123.1	119	121.1	119	118.6	135	117.7	135	117.3	-
Norway	21.8	93	29.4	127	35.1	156	20.2	78	24.0	-
Poland	35.7	66	37.3	70	41.5	89	43.9	90	50.1	-
Portugal	24.7	80	23.8	83	24.0	77	23.7	77	24.7	-
Slovak Republic	7.7	90	7.4	95	7.5	101	7.0	83	6.9	-
Spain	129.2	82	133.9	84	134.8	83	129.3	81	130.5	-
Sweden	39.6	116	38.6	104	33.8	94	35.6	99	32.2	-
Switzerland	39.3	143	38.9	135	38.1	150	38.7	173	38.5	-
Turkey	51.6	78	53.7	83	55.5	88	56.8	94	57.4	-
United Kingdom	99.0	56	97.4	54	108.5	60	105.8	59	100.3	-
<b>Total</b>	<b>1356.0</b>	<b>87</b>	<b>1370.5</b>	<b>88</b>	<b>1389.2</b>	<b>92</b>	<b>1365.6</b>	<b>92</b>	<b>1366.8</b>	<b>88</b>
<b>Total OECD</b>	<b>4149.9</b>	<b>85</b>	<b>4259.0</b>	<b>86</b>	<b>4181.2</b>	<b>84</b>	<b>4102.9</b>	<b>85</b>	<b>4173.5</b>	<b>85</b>
<b>DAYS OF IEA Net Imports<sup>6</sup></b>	<b>-</b>	<b>116</b>	<b>-</b>	<b>118</b>	<b>-</b>	<b>122</b>	<b>-</b>	<b>121</b>	<b>-</b>	<b>121</b>

<sup>1</sup> Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.

<sup>2</sup> Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.

<sup>3</sup> End June 2007 forward demand figures are IEA Secretariat forecasts.

<sup>4</sup> US figures exclude US territories. Total includes US territories.

<sup>5</sup> Data not available for Iceland.

<sup>6</sup> Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions. Net exporting IEA countries are excluded.

### TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government <sup>1</sup>	Industry	Total	Government <sup>1</sup>	Industry
		controlled			controlled	
		<i>Millions of Barrels</i>			<i>Days of Fwd. Demand<sup>2</sup></i>	
2Q2004	3974	1429	2545	81	29	52
3Q2004	4016	1435	2581	80	28	51
4Q2004	3997	1450	2547	79	29	50
1Q2005	4005	1462	2543	82	30	52
2Q2005	4116	1494	2623	84	30	53
3Q2005	4132	1494	2638	83	30	53
4Q2005	4083	1487	2597	81	30	52
1Q2006	4085	1487	2598	85	31	54
2Q2006	4150	1493	2657	85	31	54
3Q2006	4259	1495	2764	86	30	56
4Q2006	4181	1499	2683	84	30	54
1Q2007	4103	1503	2600	85	31	54
2Q2007	4173	1504	2669	85	31	54

<sup>1</sup> Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

<sup>2</sup> Days of forward demand calculated using actual demand except in 2Q2007 (when latest forecasts are used).

**Table 6**  
**IEA Member Country Destinations of Selected Crude Streams<sup>1</sup>**  
(million barrels per day)

	2004	2005	2006	3Q06	4Q06	1Q07	2Q07	Apr 07	May 07	Jun 07	Year Earlier	
											Jun 06	change
<b>Saudi Light &amp; Extra Light</b>												
North America	0.55	0.46	0.60	0.62	0.60	0.68	0.73	0.81	0.80	0.57	0.57	0.00
Europe	1.03	0.90	0.78	0.72	0.78	0.72	0.62	0.70	0.55	0.61	0.84	-0.22
Pacific	1.24	1.31	1.32	1.29	1.28	1.17	1.20	1.28	1.10	1.22	1.20	0.02
<b>Saudi Medium</b>												
North America	0.80	0.81	0.64	0.68	0.61	0.47	0.59	0.57	0.50	0.69	0.50	0.19
Europe	0.11	0.16	0.14	0.14	0.10	0.05	0.10	0.06	0.18	0.05	0.15	-0.09
Pacific	0.23	0.26	0.35	0.35	0.32	0.34	0.31	0.36	0.28	0.30	0.35	-0.06
<b>Saudi Heavy</b>												
North America	0.22	0.17	0.21	0.21	0.19	0.15	0.05	0.04	0.09	0.04	0.28	-0.25
Europe	0.23	0.23	0.18	0.21	0.14	0.09	0.16	0.21	0.11	0.17	0.25	-0.08
Pacific	0.15	0.25	0.23	0.22	0.23	0.20	0.18	0.21	0.19	0.13	0.19	-0.06
<b>Iraqi Basrah Light<sup>2</sup></b>												
North America	0.71	0.60	0.52	0.60	0.46	0.52	0.39	0.31	0.37	0.48	0.72	-0.24
Europe	0.21	0.23	0.32	0.40	0.36	0.29	0.27	0.29	0.20	0.33	0.23	0.10
Pacific	0.12	0.06	0.08	0.10	0.07	0.11	0.18	0.15	0.17	0.21	0.14	0.07
<b>Iraqi Kirkuk</b>												
North America	0.02	-	0.00	0.01	-	-	-	-	-	-	-	-
Europe	0.08	0.05	0.01	0.04	0.01	0.04	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
<b>Iranian Light</b>												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.24	0.20	0.26	0.31	0.27	0.31	0.30	0.32	0.37	0.20	0.30	-0.10
Pacific	0.16	0.15	0.13	0.10	0.11	0.12	0.06	0.06	0.04	0.09	0.03	0.06
<b>Iranian Heavy<sup>3</sup></b>												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.57	0.63	0.58	0.67	0.60	0.55	0.60	0.65	0.63	0.52	0.72	-0.21
Pacific	0.65	0.62	0.56	0.51	0.61	0.66	0.63	0.63	0.55	0.71	0.35	0.36
<b>Venezuelan Light &amp; Medium</b>												
North America	0.67	0.82	0.66	0.62	0.57	0.65	0.63	0.66	0.69	0.56	0.59	-0.03
Europe	0.01	0.04	0.11	0.08	0.11	0.09	0.07	0.13	0.04	0.03	0.22	-0.19
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
<b>Venezuelan 22 API and heavier</b>												
North America	0.88	0.72	0.72	0.74	0.72	0.55	0.69	0.72	0.73	0.62	0.73	-0.11
Europe	0.05	0.06	0.06	0.06	0.05	0.06	0.09	0.07	0.12	0.09	0.05	0.03
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
<b>Mexican Maya</b>												
North America	1.36	1.27	1.24	1.30	1.15	1.19	1.18	1.17	1.29	1.07	1.26	-0.19
Europe	0.16	0.17	0.16	0.16	0.15	0.14	0.11	0.11	0.01	0.20	0.21	-0.02
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
<b>Mexican Isthmus</b>												
North America	-	0.03	0.04	0.01	0.02	0.02	0.01	-	0.03	0.01	0.01	0.00
Europe	0.01	0.03	0.01	0.00	0.01	0.01	0.06	0.00	0.18	0.01	-	-
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
<b>Russian Urals</b>												
North America	0.12	0.13	0.09	0.16	0.05	0.11	0.12	0.21	0.10	0.06	0.24	-0.18
Europe	1.86	1.77	1.68	1.66	1.54	1.85	1.93	2.06	1.73	2.02	1.90	0.12
Pacific	0.01	0.00	0.00	0.01	-	0.00	-	-	-	-	-	-
<b>Nigerian Light<sup>4</sup></b>												
North America	0.80	0.90	0.79	0.78	0.72	0.96	0.77	0.70	0.84	0.75	0.78	-0.03
Europe	0.28	0.35	0.33	0.39	0.37	0.23	0.27	0.22	0.28	0.32	0.30	0.02
Pacific	0.11	0.05	0.04	0.02	0.03	0.02	0.02	0.01	0.05	-	0.06	-
<b>Nigerian Medium</b>												
North America	0.23	0.17	0.17	0.16	0.17	0.24	0.15	0.17	0.08	0.22	0.23	-0.01
Europe	0.04	0.07	0.10	0.08	0.14	0.06	0.02	0.03	-	0.02	0.13	-0.11
Pacific	0.01	0.01	0.00	0.01	-	0.02	-	-	-	-	-	-

<sup>1</sup> Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report.

IEA North America includes United States and Canada.

IEA Europe includes all countries in OECD Europe except Hungary, Poland and the Slovak Republic.

IEA Pacific data includes Australia, New Zealand, Korea and Japan.

<sup>2</sup> Iraqi Total minus Kirkuk.

<sup>3</sup> Iranian Total minus Iranian Light.

<sup>4</sup> 33 API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

**Table 7**  
**Regional OECD Imports<sup>1,2</sup>**  
(thousand barrels per day)

	2004	2005	2006	3Q2006	4Q2006	1Q2007	2Q2007	Apr-07	May-07	Jun-07	Year Earlier	
											Jun-06	% change
<b>Crude Oil</b>												
North America	8431	8457	8156	8686	7937	8038	8152	8050	8277	8125	8055	1%
Europe	9478	9792	9771	10158	9770	9344	9773	9947	9765	9609	10257	-6%
Pacific	6659	6801	6813	6680	6674	6953	6347	6469	6139	6440	5940	8%
<b>Total OECD</b>	<b>24569</b>	<b>25050</b>	<b>24740</b>	<b>25524</b>	<b>24381</b>	<b>24335</b>	<b>24273</b>	<b>24466</b>	<b>24182</b>	<b>24174</b>	<b>24836</b>	<b>-3%</b>
<b>LPG</b>												
North America	24	18	14	12	28	16	14	14	16	12	10	20%
Europe	225	248	249	210	263	260	246	288	248	201	254	-21%
Pacific	541	527	579	595	497	565	588	581	596	587	549	7%
<b>Total OECD</b>	<b>790</b>	<b>793</b>	<b>842</b>	<b>818</b>	<b>788</b>	<b>841</b>	<b>848</b>	<b>883</b>	<b>861</b>	<b>799</b>	<b>813</b>	<b>-2%</b>
<b>Naphtha</b>												
North America	99	115	62	64	96	33	31	35	34	25	36	-29%
Europe	282	273	312	304	314	271	223	254	223	191	250	-24%
Pacific	769	746	754	810	783	838	812	710	859	866	844	3%
<b>Total OECD</b>	<b>1150</b>	<b>1133</b>	<b>1128</b>	<b>1178</b>	<b>1193</b>	<b>1141</b>	<b>1066</b>	<b>999</b>	<b>1115</b>	<b>1082</b>	<b>1130</b>	<b>-4%</b>
<b>Gasoline<sup>3</sup></b>												
North America	794	1034	1148	1166	944	916	1362	1248	1440	1394	1279	9%
Europe	137	165	154	122	157	231	216	189	216	244	180	35%
Pacific	105	102	97	74	96	76	83	49	98	100	140	-28%
<b>Total OECD</b>	<b>1035</b>	<b>1301</b>	<b>1399</b>	<b>1363</b>	<b>1197</b>	<b>1223</b>	<b>1661</b>	<b>1486</b>	<b>1755</b>	<b>1737</b>	<b>1599</b>	<b>9%</b>
<b>Jet &amp; Kerosene</b>												
North America	101	173	152	203	130	179	204	221	187	205	139	47%
Europe	293	375	375	398	407	328	352	371	434	250	431	-42%
Pacific	77	66	71	43	76	49	36	29	44	35	38	-9%
<b>Total OECD</b>	<b>471</b>	<b>614</b>	<b>598</b>	<b>644</b>	<b>612</b>	<b>557</b>	<b>592</b>	<b>621</b>	<b>665</b>	<b>489</b>	<b>608</b>	<b>-20%</b>
<b>Gasoi/Diesel</b>												
North America	123	143	172	181	116	130	142	156	122	147	128	15%
Europe	751	845	960	901	937	876	628	669	569	648	817	-21%
Pacific	74	79	81	65	81	83	97	79	95	118	109	8%
<b>Total OECD</b>	<b>947</b>	<b>1067</b>	<b>1213</b>	<b>1147</b>	<b>1134</b>	<b>1089</b>	<b>867</b>	<b>905</b>	<b>786</b>	<b>914</b>	<b>1055</b>	<b>-13%</b>
<b>Heavy Fuel Oil</b>												
North America	453	527	340	309	254	362	323	360	290	321	371	-13%
Europe	397	491	478	419	502	457	421	441	378	444	502	-12%
Pacific	76	85	92	76	65	79	97	95	96	100	107	-6%
<b>Total OECD</b>	<b>926</b>	<b>1102</b>	<b>910</b>	<b>804</b>	<b>821</b>	<b>898</b>	<b>841</b>	<b>896</b>	<b>764</b>	<b>865</b>	<b>980</b>	<b>-12%</b>
<b>Other Products</b>												
North America	872	1024	1106	1298	991	1035	1211	1154	1308	1169	1149	2%
Europe	676	781	898	924	916	841	839	881	814	823	798	3%
Pacific	256	248	243	224	267	256	207	167	237	214	184	16%
<b>Total OECD</b>	<b>1805</b>	<b>2052</b>	<b>2247</b>	<b>2445</b>	<b>2174</b>	<b>2131</b>	<b>2257</b>	<b>2202</b>	<b>2359</b>	<b>2206</b>	<b>2132</b>	<b>4%</b>
<b>Total Products</b>												
North America	2466	3034	2995	3233	2559	2670	3287	3187	3398	3273	3112	5%
Europe	2759	3177	3426	3278	3496	3263	2925	3094	2882	2801	3233	-13%
Pacific	1898	1852	1918	1888	1865	1947	1920	1710	2026	2019	1971	2%
<b>Total OECD</b>	<b>7123</b>	<b>8063</b>	<b>8339</b>	<b>8399</b>	<b>7920</b>	<b>7880</b>	<b>8132</b>	<b>7991</b>	<b>8305</b>	<b>8093</b>	<b>8317</b>	<b>-3%</b>
<b>Total Oil</b>												
North America	10897	11490	11150	11919	10496	10708	11439	11237	11675	11398	11752	-3%
Europe	12237	12969	13197	13436	13266	12607	12698	13040	12647	12409	13490	-8%
Pacific	8558	8654	8731	8568	8539	8900	8267	8179	8165	8460	7911	7%
<b>Total OECD</b>	<b>31692</b>	<b>33113</b>	<b>33079</b>	<b>33923</b>	<b>32301</b>	<b>32215</b>	<b>32405</b>	<b>32457</b>	<b>32487</b>	<b>32267</b>	<b>33153</b>	<b>-3%</b>

1 Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.

2 Excludes intra-regional trade

3 Includes additives

**© OECD/IEA 2007. All Rights Reserved**

The International Energy Agency ('IEA') makes every attempt to ensure, but does not guarantee, the accuracy and completeness of the information or the clarity of content of the *Oil Market Report* (hereafter the '*OMR*'). The IEA shall not be liable to any party for any inaccuracy, error or omission contained or provided in this *OMR* or for any loss, or damage, whether or not due to reliance placed by that party on information in this *OMR*.

The Executive Director and Secretariat of the IEA are responsible for the publication of the *OMR*. Although some of the data are supplied by IEA Member-country governments, largely on the basis of information they in turn receive from oil companies, neither these governments nor these oil companies necessarily share the Secretariat's views or conclusions as expressed in the *OMR*. The *OMR* is prepared for general circulation and is distributed for general information only. Neither the information nor any opinion expressed in the *OMR* constitutes an offer, or an invitation to make an offer, to buy or sell any securities or any options, futures or other derivatives related to such securities.

This *OMR* is the copyright of the OECD/IEA and is subject to certain terms and conditions of use. These terms and conditions are available on the IEA website at <http://www.iea.org/oilmar/licenceomr.html>. In relation to the Subscriber Edition (as defined in the *OMR*'s online terms and conditions), the spot crude and product price assessments are based on daily Platts prices, converted when appropriate to US\$ per barrel according to the Platts specification of products (© Platts – a division of McGraw-Hill Inc.). Any reproduction of information from the spot crude and product price tables requires the prior permission of Platts.

# OIL MARKET REPORT CONTACTS

## Editorial Enquiries

### Editor

Head, Oil Industry & Markets Division

Lawrence Eagles

(+33) 0\*1 40 57 65 90

e-mail: lawrence.eagles@iea.org

### Demand

Eduardo Lopez

(+33) 0\*1 40 57 65 93

e-mail: eduardo.lopez@iea.org

### Supply

David Fyfe

(+33) 0\*1 40 57 65 94

e-mail: david.fyfe@iea.org

### Prices/OECD Stocks

Julius Walker

(+33) 0\*1 40 57 65 22

e-mail: julius.walker@iea.org

### Refining

David Martin

(+33) 0\*1 40 57 65 95

e-mail: david.martin@iea.org

### Demand

Toril Ekeland Bosoni

(+33) 0\*1 40 57 66 36

e-mail: toril.bosoni@iea.org

### Statistics/Freight/Trade

James Ryder

(+33) 0\*1 40 57 66 18

e-mail: james.ryder@iea.org

### End-User Prices/Statistical Support

Miklós Bánkuti

(+33) 0\*1 40 57 67 76

e-mail: miklos.bankuti@iea.org

### Editorial Assistant

Anne Mayne

(+33) 0\*1 40 57 65 96

e-mail: anne.mayne@iea.org

Fax:

(+33) 0\*1 40 57 65 99/40 57 65 09

\* 0 only within France

## Media Enquiries

### Press Office

Gwyn Darling

(+33) 0\*1 40 57 65 54

e-mail: ieapressoffice@iea.org

## Subscription and Delivery Enquiries

Oil Market Report Subscriptions (Attn: Ms. Sandra Coleman)

International Energy Agency

BP 586-75726 PARIS Cedex 15, France

Tel. +33 (0) 1 40 57 65 57

Fax. +33 (0) 1 40 57 65 59

e-mail: sandra.coleman@iea.org

## User's Guide and Glossary to the IEA Oil Market Report

For information on the data sources, definitions, technical terms and general approach used in preparing the *Oil Market Report (OMR)*, *Medium-Term Oil Market Report (MTOMR) Report and Annual Statistical Supplement* (current issue of the statistical supplement dated 10 August 2007), readers are referred to the *Users' Guide* at [www.oilmarketreport.org/glossary.asp](http://www.oilmarketreport.org/glossary.asp). It should be noted that the spot crude and product price assessments are based on daily Platts prices, converted when appropriate to US\$ per barrel according to the Platts specification of products (© 2007 Platts - a division of McGraw-Hill Inc.).

The *Oil Market Report* is published under the responsibility of the Executive Director and Secretariat of the International Energy Agency. Although some of the data are supplied by Member-country Governments, largely on the basis of information received from oil companies, neither governments nor companies necessarily share the Secretariat's views or conclusions as expressed therein. © OECD/IEA 2007

