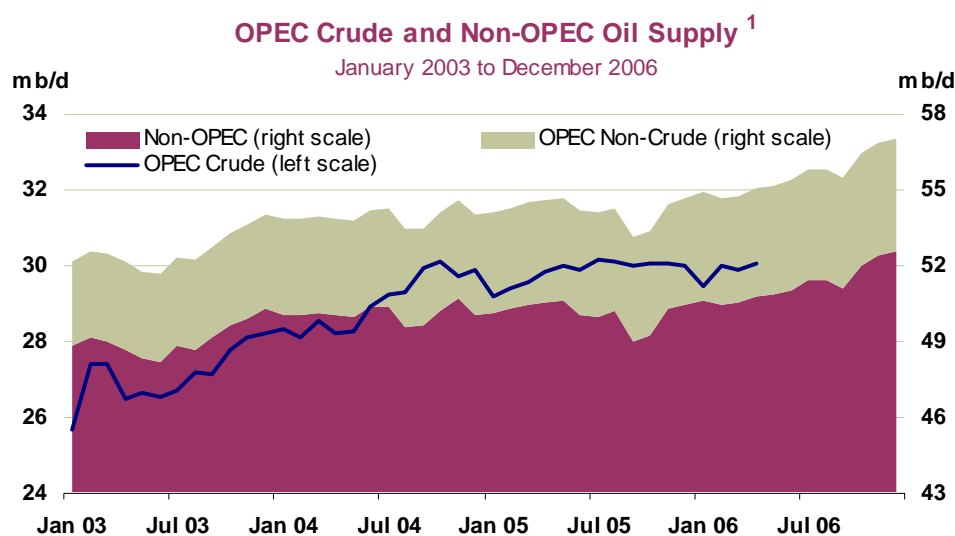


## SUPPLY

### Summary

- **World oil supply** in April gained 485 kb/d compared to March, to average 85.1 mb/d. Increases of 100 kb/d or more came from OPEC, the FSU, Africa and North America, and were in part offset by lower North Sea supply as seasonal maintenance commenced. The first quarter supply baseline was revised up by some 55 kb/d compared to last month's Report on evidence of higher North American and Chinese production and higher OPEC supply.
- **Year-on-year growth** in global supply stood at 675 kb/d in April and at 880 kb/d for the first quarter after a sharp deceleration in fourth quarter growth. Non-OPEC supply growth has been slow to recover after a spate of late-2005 outages and stood at 255 kb/d for the first quarter. Growth here is expected to accelerate through 2006. OPEC April supply stood 200 kb/d above year-ago levels.
- **Non-OPEC supply** for 2006 sees a modest 30 kb/d upward revision to 51.3 mb/d. Growth remains close to 1.2 mb/d, but is increasingly back-end loaded. Upward revisions to supply centre on the US, Canada, China and Sudan. These are countered in part by downward adjustments for Norway, Russia, Malaysia, Oman and Chad. OPEC "other liquids" supply is revised down by 85 kb/d in 2006 and 70 kb/d in 2005, as evidence has emerged of lower historical Venezuelan Orimulsion production. Despite this, OPEC non-crude growth in 2006 amounts to 260 kb/d, in addition to non-OPEC supply growth.
- **OPEC crude supply** for March was revised up by 220 kb/d to 29.9 mb/d after indications of stronger performance from both Iran and the UAE, although these were short-lived and both saw lower supply in April. In total, April OPEC supply increased by 170 kb/d to 30.0 mb/d. A 215 kb/d increase from Iraq was augmented by lesser increases from Nigeria, Venezuela, Libya and Qatar. Despite rising compared to March, April supply from Iraq and Nigeria remained constrained by security-related factors which impeded pipeline exports. UAE and Qatar production capacity was revised up modestly but OPEC effective spare capacity remains less than 2 mb/d.
- **The 'call on OPEC crude and stock change'** is revised up by 0.1 mb/d for 2005 to 29.4 mb/d due to lower estimates for Venezuelan Orimulsion supply. Although this component of supply is also lowered for 2006, this year's call is revised down by 0.2 mb/d to 29.2 mb/d due to offsetting reductions in forecast demand for North America and the FSU. The second quarter call is now 28.1 mb/d but rises to 29.7 mb/d by fourth quarter.



All world oil supply figures for April discussed in this Report are IEA estimates. Estimates for OPEC countries, Alaska and Russia are supported by preliminary April 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. 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. These aside, no contingency allowance for random events is subtracted from the supply forecast. While upside variations can occur, experience in recent years indicates that the random events listed above may cause supply losses of between 300 kb/d and 400 kb/d for non-OPEC supply each year.**

## OPEC

OPEC crude supply in April increased by 170 kb/d, from an upward-revised 29.9 mb/d level in March. Modest recovery in production from Iraq and Nigeria allowed total supply to breach 30.0 mb/d in April, approaching the highs seen in third quarter 2005. The March total was revised up by 220 kb/d to reflect higher output from Iran and the UAE. However, these two producers eased supply modestly in April, partly due to rising Asian refinery maintenance. April also saw modest increases from Venezuela, Libya and Qatar. OPEC-10 production (excluding Iraq) averaged 28.0 mb/d, equivalent to the production target in place since July 2005. Venezuela, Indonesia, Iran and Nigeria are currently unable to match target output levels, offsetting higher production by others.

Despite increases in assessed sustainable production capacity for the UAE and Qatar, to 2.7 mb/d and 830 kb/d respectively, effective spare capacity in April remained close to the 1.7 mb/d estimated for March. The inability of Indonesia, Iran, Nigeria and Venezuela to boost production on a sustainable basis in the short term means that we have netted out these countries' notional spare capacity from an OPEC total spare capacity of some 2.8 mb/d. The absence of a larger margin of upstream flexibility is one of the key drivers of current high prices, in conjunction with geopolitical risks, buoyant economic growth and a tightness in available downstream upgrading capacity.

### OPEC Crude Production

(million barrels per day)

	1 July 2005 Target	April 2006 Production	Sustainable Production Capacity <sup>1</sup>	Spare Capacity vs April 2006 Production	Production vs. Target
Algeria	0.89	1.36	1.37	0.01	0.47
Indonesia	1.45	0.93	0.98	0.05	-0.52
Iran	4.11	3.83	4.00	0.17	-0.28
Kuwait <sup>2</sup>	2.25	2.51	2.60	0.09	0.26
Libya	1.50	1.70	1.70	0.00	0.20
Nigeria	2.31	2.13	2.60	0.47	-0.18
Qatar	0.73	0.83	0.83	0.01	0.10
Saudi Arabia <sup>2</sup>	9.10	9.50	10.80	1.30	0.40
UAE	2.44	2.61	2.70	0.10	0.16
Venezuela <sup>3</sup>	3.22	2.63	2.75	0.12	-0.59
<b>Subtotal</b>	<b>28.00</b>	<b>28.02</b>	<b>30.33</b>	<b>2.31</b>	<b>0.02</b>
Iraq		2.02	2.50	0.48	
<b>Total</b>		<b>30.04</b>	<b>32.83</b>	<b>2.79</b>	
<i>(excluding Iraq, Nigeria, Venezuela., Indonesia</i>				<i>1.67)</i>	

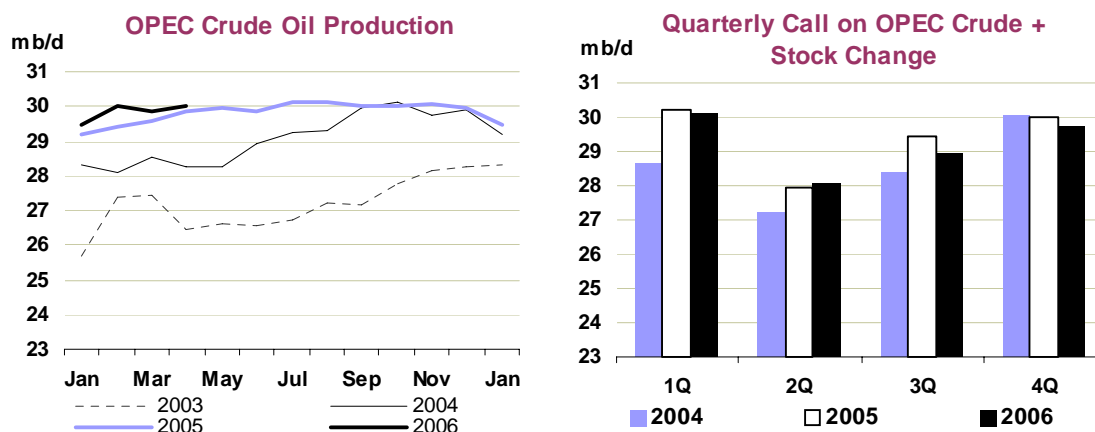
<sup>1</sup> Capacity levels can be reached within 30 days and sustained for 90 days

<sup>2</sup> Includes half of Neutral Zone Production

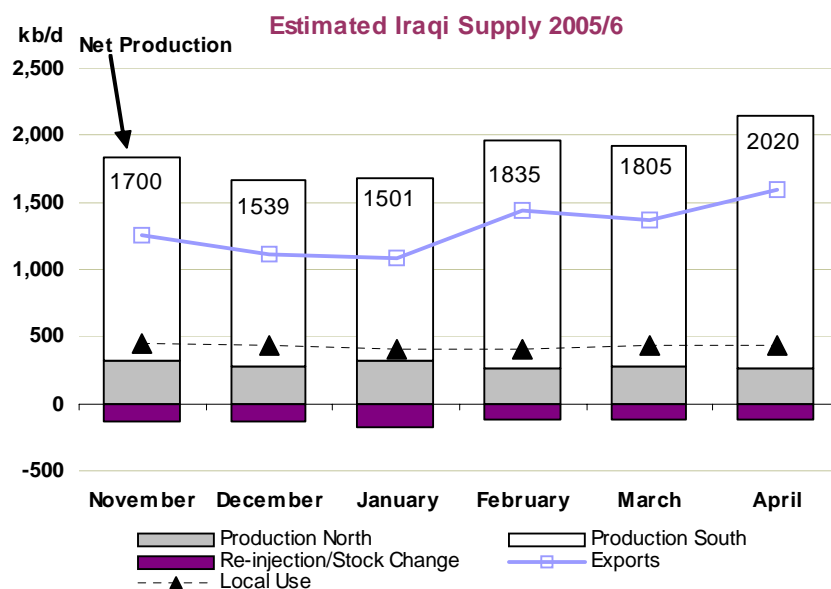
<sup>3</sup> Includes Orinoco extra-heavy oil assumed at 630 kb/d in April

OPEC representatives have acknowledged that the \$70/bbl-plus marker crude prices seen in April are a source of concern. As such, most market commentators envisage no change in production policy when OPEC meets in Caracas on 1 June. OPEC Ministers cite a combination of speculative and geopolitical pressures and downstream bottlenecks as underpinning high prices, but this seems an incomplete list without the key influence of slim margins of spare upstream capacity and actual Nigerian outages. OPEC has also expressed concerns that high prices are fostering policies in consuming countries that will curb oil demand in the longer term. The IEA and others on the consuming side have pointed out that, while conservation and alternative energies may have an impact in the longer term, there is only a limited volumetric impact likely to spring from government-sponsored action in the next 5-10 years.

From this Report's perspective, the run up in prices has mirrored a slowing pace of net upstream capacity additions in a number of OPEC producer countries. Limited spare upstream capacity is not new, and sub-2 mb/d levels have been evident since the Venezuelan strike of early-2003. However, heightening supply risks in a number of OPEC and non-OPEC countries and surging economic and oil demand growth have focussed attention on this lack of supply flexibility. It is commonly heard that a shift of speculative capital from equity sector to commodity sector investment and a mismatch in available refining capacity are the key contributors to high prices. However, cause and effect suggest that the impact of these two phenomena themselves may be exacerbated by a lack of timely investment in new, particularly light/sweet, crude capacity.



There are also concerns that ambitious plans to expand upstream capacity may be difficult to realise in full. Capacity addition plans in OPEC countries drive an OPEC Secretariat forecast of net additions of some 1 mb/d per annum through 2010. This Report has previously cited a lower, 700-800 kb/d per annum. This partly reflects concerns, also beginning to be expressed by some OPEC Ministers, that service company and raw material constraints may adversely affect project costs and schedules.



The key driver of higher OPEC April volumes was the rise in net **Iraqi** supply. This increased from 1.8 mb/d in March to 2.0 mb/d. Tanker liftings suggests total exports of 1.59 mb/d, the highest level since September 2005. Favourable weather and increased tugboat availability boosted activity at Basrah. Liftings were again restricted to southern terminals and there have been no tanker liftings from Ceyhan in Turkey since October 2005 due to repeated sabotage on the northbound pipeline from the Kirkuk oilfields. Scheduled Basrah liftings for May are reported to amount to 1.65 mb/d.

There were, however, conflicting indications in April concerning northern exports, with some anecdotal reports suggesting that limited northbound pipeline shipments had been possible again. This appears at odds with earlier Oil Ministry statements that northbound shipments could be stalled for up to a year. Storage tanks at Ceyhan were again reported to hold less than 3 mb and a Turkish government claim for compensation for losses due to the absence of pipeline flows tends to support an absence of recent northbound crude movement.

April saw renewed reports of widespread corruption and the apparent 'disappearance' of over 150 kb/d of crude oil, based on certain estimates of production, exports and local refinery use for the southern area. Smuggling of oil products out of Iraq has long been acknowledged, inflating product import requirements, but the problem may be deeper rooted if substantial crude volumes also are involved. This Report does not rely on what may be, at times, political reports of aggregate production, assessing instead net supply on the basis of observed exports and apparent local crude use.

**Nigerian** crude supply is estimated up by 55 kb/d in April from March, and averaged 2.1 mb/d. However, there were still no indications from Shell in early May as to likely restart dates for some 450 kb/d of Forcados and EA production shuttered after attacks by Niger Delta militants. A further 100 kb/d of production from third parties normally routed via the Forcados export system also remained closed during April. Power outages are also thought to have cut ExxonMobil's Yoho field supply by some 20 kb/d for the month although this production has now been re-instated. Strike action affecting ExxonMobil facilities from early May was also averted.

However, despite ongoing production shut-ins, there were offsetting increases. Agip's Brass River production, disrupted by a pipeline attack in March, fully returned in April. There were rising deepwater supplies too from the Bonga and newly started Erha fields. Bonga and Erha could build to combined production of 400 kb/d by end-2006, although for now any increment in assessed Nigerian capacity is being deferred until the fate of disrupted onshore and shallow offshore facilities is resolved. The Movement for the Emancipation of the Niger Delta (MEND) and associated groups continue to stress that oil installations and foreign oil workers remain subject to attacks unless their demands over prisoner releases and increased local control over oil revenues are met.

**Venezuelan** crude supply for April is assessed up by some 30 kb/d at 2.63 mb/d after the return to full production of the Cerro Negro upgrading unit which was offline for maintenance in March. Heavy crude feedstock production was partially scaled back while the unit was offline. Estimates for non-crude Orimulsion production have been revised for the 2002-2006 period (see below).

Early-May saw confirmation that Venezuela's four heavy crude upgrading projects, which convert 630 kb/d of heavy Orinoco crude into 570 kb/d of synthetic oil, will be subject to higher tax rates. Royalties are to be doubled to 33.4% from a current 16.7% and income tax will be raised from 34% to 50%. There have been suggestions that Venezuela may also seek to increase its stakes in the four projects from current levels of between 30% and 50% to a minimum of 51%.

Further upside adjustment for **Iranian** export levels, now assessed at 2.5 mb/d for March, result in a 100 kb/d revision for Iranian March crude supply. This is now estimated at 3.9 mb/d, falling back to 3.8 mb/d for April. Preliminary tanker tracking data shows divergent trends for April exports, but on balance suggest a further fall in supplies last month. This is subject to revision, however, when consolidated vessel data becomes available over the next month.

Against a backdrop of escalating uncertainty over potential UN action aimed at ending Iranian work on uranium enrichment, state NIOC insisted that crude exports remain unaffected by the diplomatic row. In a separate development, parliamentary sources suggested that the South Pars gasfield will be the priority for a new investment model. The existing buyback model of service contract offered to foreign companies will be retained for other oil and gas field developments, albeit in a modified form.

**UAE** supply for March is revised up to 2.67 mb/d from last month's assessment of 2.55 mb/d. Onshore production of Murban grade crude now appears to have risen close to 1.4 mb/d and UAE capacity has been revised up to 2.7 mb/d as a result. However, April supply is assessed slightly lower at 2.6 mb/d, under the impact of weaker Asian demand and prices. Lower supplementary volumes, over and above term, offered to customers suggest that supply could remain lower in May and June.

Expansion at the Al Dabbiya, Rumaiha and Shanayel fields since late-2005 has driven the increase in production capacity. Target production capacity of 3.5 mb/d for end-decade has been announced, with 30% of the increase earmarked to come from marginal field developments.

### Venezuelan Orimulsion Supply Data Revision

Venezuela produces heavy crude from its Orinoco region reserves which is blended with lighter grades or converted into synthetic crude oil. It also produces a proprietary boiler fuel named Orimulsion, used for power generation. While heavy crude in blended form or destined for syncrude manufacture is included in this Report's estimates of Venezuela's monthly crude oil production, Orimulsion supply is, and always has been, counted in the OPEC NGL, condensate and non-conventional oil category. As such, it is excluded from consideration for Venezuela's crude oil production capacity and output quota.

Orimulsion is a mixture, or emulsion, of 70% bitumen from the Orinoco belt, 30% water and 1% surfactant. Originally combined to address the transportation problems associated with moving highly viscous Orinoco bitumen, research showed the mixture to be a technically viable boiler fuel, competing as an alternative to coal and heavy fuel oil. Orimulsion has traditionally been sold under long term contracts to power utilities in Canada, China, Denmark, Italy, Japan and Korea. A deal signed in 2001 between Venezuela and China envisaged construction of a new 6.5 million tonnes per annum plant to augment the existing Morichal facility.

However, while the new plant entered service in April 2006, this coincided with the mothballing of the older Morichal unit, reportedly for economic reasons. Since the 2002/2003 strike at PDVSA, there has been a policy shift away from Orimulsion, with greater emphasis given to more profitable sales of synthetic crude. Research by the OPEC Secretariat has revealed that earlier estimates of Venezuelan Orimulsion supply were too high. Estimates for Orimulsion production back to 2002 have been revised down accordingly, by between 18 kb/d (2002) and 70 kb/d (for 2005). The 2006 forecast is revised down by 84 kb/d in line with reports that the new plant will build output slowly and ultimately plateau at 110-120 kb/d.

#### Venezuela: Production of Orimulsion Fuel

(thousand barrels per day)

	2000	2001	2002	2003	2004	2005	2006
Estimate OMR April 2006	106	110	122	111	155	160	160
Estimate OMR May 2006	106	110	104	58	90	90	76
Difference	0	0	-18	-53	-65	-70	-84

## OECD

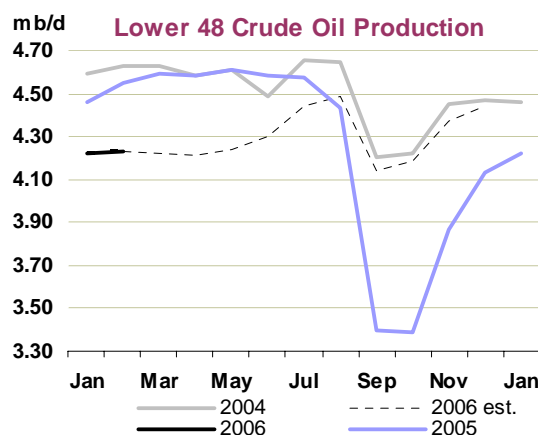
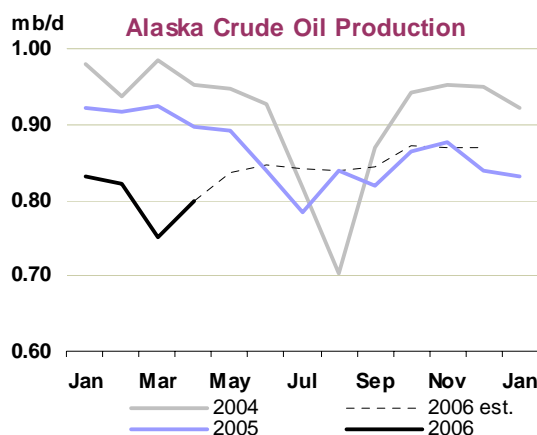
### North America

**US – Alaska April actual, others estimated:** April US oil supply averaged 7.2 mb/d (including 5.0 mb/d of crude oil) for the fourth month running, as US Gulf of Mexico (GOM) production recovery remained stalled and Alaskan production continued to suffer the after effects of the Prudhoe Bay pipeline spill. Despite this, the forecast for 2006 US supply has been revised up by 55 kb/d to 7.33 mb/d, still representing a rise of only some 50 kb/d from 2005's hurricane-impacted levels.

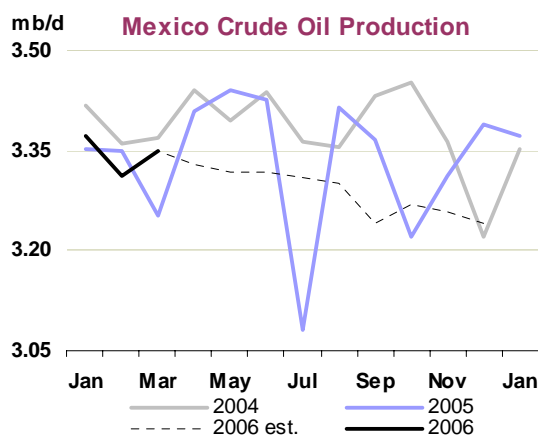
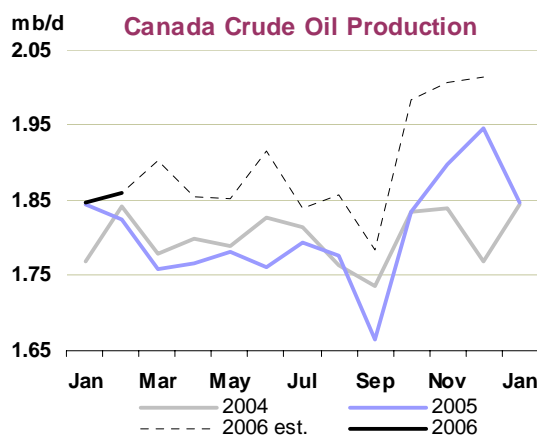
In Alaska, BP reported that the leak on its Prudhoe Bay pipeline which curbed production by 100 kb/d had been caused by a build up of bacteria which reduced the effectiveness of corrosion impeding chemicals. It had however restored 70 kb/d of lost production by late-April, rerouting these volumes via an alternative pipeline. Forecast Alaskan crude supply for 2006 of 835 kb/d is largely unchanged from last month, with modest year-on-year decline continuing the trend evident since 2003.

State production data for December and aggregated US data for the first quarter 2006 again show upward revisions against forecast for the GOM, Louisiana, and Colorado. The implication from the former two producing regions is that, despite ongoing reports of substantial volumes remaining shut-in after last year's Hurricanes Katrina and Rita, production performance from facilities back in operation is running ahead of expectation. Louisiana production is revised up by 10 kb/d for 2006, while GOM supply has been adjusted up by 35 kb/d.

The US Minerals Management Service (MMS) reported on 3 May that 324 kb/d of GOM supply remains shut-in. We have revised up estimated shut-in volumes for April and May to 330 kb/d and 280 kb/d respectively, but have scaled back June average outages to below 200 kb/d. GOM supply now shows a year-on-year gain in 2006 of 80 kb/d, after net losses of 180 kb/d in 2005. Our GOM forecast remains low compared to some other projections, even after including a now more optimistic prognosis of second quarter re-start for Shell's Mars facility. However, we continue to forecast on the basis of a five year rolling average storm season, which assumes sizeable autumn outages in the area. The forecast also excludes any resumption of production in 2006 from the Typhoon field, a factor supported by Chevron's announcement that it is looking to demolish and sink its storm-damaged tension leg platform.



**Canada – Newfoundland March actual, others February actual:** While first quarter Canadian conventional crude production appears to have remained close to the 1.9 mb/d seen at the end of 2005, synthetic crude supply dropped by 60 kb/d (to 615 kb/d) due to outages affecting the Shell and Syncrude Canada facilities. However, Syncrude reported in early-May that it has now completed its expansion which will allow output to build over several months from an original 250 kb/d capacity to an eventual 350 kb/d. Partly offsetting the rise from syncrude and bitumen in 2006 (combined growth of 185 kb/d this year), is an extended outage affecting the offshore Newfoundland Terra Nova facility. Production in first half 2006 at Terra Nova is unlikely to exceed 80 kb/d of 130 kb/d capacity, while production will be shut altogether during 3Q while the tension leg platform heads for dry dock repairs.



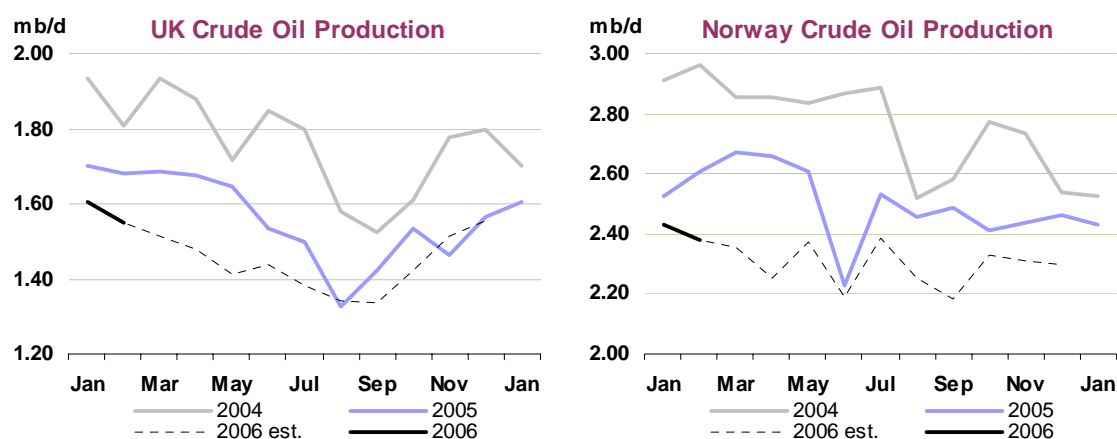
There were several indications in April that further expansion in the Canadian oil patch may be impeded by cost escalation and uncertainty over operating terms. Husky Oil announced it is rethinking its Sunrise upgrader project, citing a squeeze on labour and raw materials availability. After Chevron's announcement in early April that it was shelving the offshore Hebron development, Newfoundland authorities are seeking to introduce legislation that will force license holders to develop projects in a given time span or face expropriation.

**Mexico – March actual:** Mexican March supply came in close to forecast at 3.35 mb/d of crude and 430 kb/d of NGL. First quarter crude exports averaged 2.0 mb/d, up by 150 kb/d from 2005 and over 100 kb/d above fourth quarter levels. With production running only marginally higher than year ago and quarter ago levels, the implication is that Mexican internal demand growth is being met with increased products imports rather than higher domestic refinery crude runs.

Total oil supply in 2006 is projected to fall by 25 kb/d to 3.73 mb/d after a decline of 65 kb/d in 2005. Marginal field developments, such as the recently started northern Gulf of Mexico Lobina field, are seen as insufficient to stem decline at established structures such as Cantarell.

### North Sea

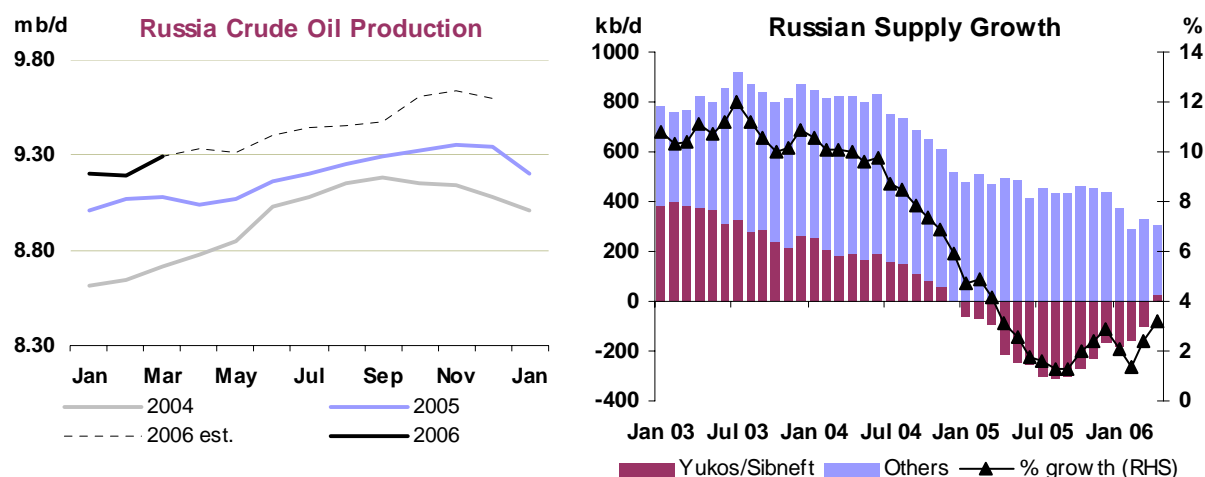
**UK – February actual:** Forecast UK oil supply for 2006 is largely unchanged from last month's projection. A 50 kb/d downward adjustment to February supply gives way to upward adjustments of between 10 kb/d and 30 kb/d for the second to fourth quarters. Loading schedules for the main systems for the March through May period suggest that additional downward adjustments after lower February out-turn are unwarranted. The increases later in the year compared to last month's projection affect the Forties, Fulmar, Beryl and Teal production systems. Some 15 kb/d of Brodgar/Callanish field output has been added to Forties supply for late 2006. In all therefore, offshore production averages 1.72 mb/d in 2006 from 1.8 mb/d in 2005. The next sizeable increase in UK production capacity will come from Nexen's Buzzard field, which was reported in early-May to be on schedule for late-2006 start up. An initial plateau production of some 100 kb/d next year (with 180 kb/d later) could temporarily halt overall UK decline in 2007.



**Norway – February actual, March provisional:** Field specific data for February show higher Ekofisk, Haltenbanken and condensate supply than assumed last month, but an unchanged aggregate supply level. This totalled 2.4 mb/d of crude and 535 kb/d of NGL/condensate. Counteracting February reductions affect the Oseberg/Troll and Statfjord/Gullfaks systems. A 30 kb/d downward adjustment to 2006 Norwegian supply is centred on lower baseline supply from these fields. Provisional March data show a 50 kb/d drop in total liquids supply, while peak spring maintenance in April is likely to have seen production drop by a further 100 kb/d, to 2.25 mb/d of crude and 500 kb/d of other liquids. A rebound in supply is expected in May, before heavy maintenance kicks in again in June, August and September. In all, lighter scheduled maintenance in 2006, allied to new production from the Kristin, Fram East and Gullfaks and Oseberg satellites helps stem liquids decline this year. Total oil supply falls by 100 kb/d to 2.86 mb/d in 2006 after a sharper 220 kb/d fall in 2005.

### Former Soviet Union (FSU)

**Russia – March actual, April provisional:** March and April Russian production has been revised down by 10 kb/d and 90 kb/d respectively compared to last month's Report. Output in March averaged 9.6 mb/d, with 9.62 mb/d in April. Production nonetheless seems to have recovered modestly from the weather-related disruptions seen in January and February. In all, first quarter growth averaged 2% versus year earlier, despite freezing weather, suggesting further recovery is possible for the balance of the year. Importantly, provisional April data show output from assets formerly held by Yukos and Sibneft growing for the first time since 2004. These companies underpinned the strong growth seen in Russian output during 2000-2004 but slumping investment since mid-2004 then saw these two operators become the main drag on Russian supply.



Huge uncertainty continues to surround prospects for these entities which have been, or are in the process of being, taken over by state producers Rosneft and Gazprom. On the upside, Rosneft suggested in April that it would adopt the erstwhile approach of its subsidiary Yuganskneftegaz in applying new technologies and improved reservoir management techniques to sustain production growth at existing fields. This Report retains a more downbeat forecast for the remaining independent Yukos producing assets until the fate of the bankruptcy-threatened company becomes clearer. In all, Russian production growth in 2006 is pegged at 2.5% following 2.7% in 2005 and 9% annually during 2000-2004.

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

(million barrels per day)

	2004	2005	2Q2005	3Q2005	4Q2005	1Q2006	Jan-06	Feb-06	Mar-06	Latest month vs. Feb-06	Mar-05
<b>Crude</b>											
Black Sea	2.20	2.27	2.38	2.30	2.23	2.25	2.03	2.28	2.46	0.18	0.07
Baltic	1.51	1.59	1.61	1.57	1.55	1.54	1.48	1.56	1.58	0.02	-0.05
Artic/FarEast	0.25	0.19	0.19	0.22	0.17	0.10	0.09	0.07	0.13	0.06	-0.04
<b>Crude Seaborne</b>	3.96	4.05	4.18	4.08	3.95	3.89	3.59	3.90	4.16	0.26	-0.02
Druzba Pipeline	1.10	1.15	1.10	1.14	1.23	1.20	1.20	1.21	1.18	-0.03	0.09
Other Routes	0.23	0.25	0.26	0.24	0.26	0.31	0.28	0.33	0.32	-0.01	0.10
<b>Total Crude Exports</b>	5.29	5.45	5.54	5.46	5.44	5.39	5.07	5.45	5.67	0.22	0.17
Of Which: Transneft	3.76	4.20	4.26	4.26	4.32	4.31	4.17	4.40	4.37	-0.03	0.22
<b>Products</b>											
Fuel oil	0.90	0.93	0.91	1.02	1.04	0.87	0.92	0.73	0.95	0.23	0.18
Gasoil	0.84	0.87	0.80	0.85	0.95	1.01	1.00	1.04	0.98	-0.06	0.07
Other Products	0.46	0.58	0.56	0.58	0.60	0.60	0.62	0.60	0.57	-0.03	0.00
<b>Total Product</b>	2.19	2.38	2.27	2.45	2.58	2.47	2.54	2.37	2.50	0.13	0.25
<b>Total Exports</b>	7.48	7.83	7.81	7.91	8.02	7.87	7.61	7.82	8.17	0.36	0.42
Imports	0.01	0.02	0.01	0.02	0.02	0.02	0.03	0.01	0.02	0.00	0.00
<b>Net Exports</b>	7.47	7.81	7.80	7.89	8.00	7.85	7.58	7.80	8.16	0.35	0.42

Sources: Petro-Logistics, IEA estimates

FSU net exports continued to recover in March from depressed January levels, reaching 8.16 mb/d from 7.8 mb/d in February. 65% of March's increase came from seaborne crude exports, notably liftings from Black Sea ports. A sharp rise in fuel oil exports was partially countered by lower shipments of gasoil and other products in March. Based upon provisional indicators, net FSU exports overall are thought to have moved higher in April and May. April's rise was likely driven by higher oil products offsetting lower Russian crude export volumes, notably due to pipeline maintenance affecting the Black Sea port of Novorossiysk. Transneft export schedules for May indicate a potential 175 kb/d increase in crude compared to April, with producers likely to want to maximise deliveries ahead of a 7% increase in export duty to \$199.8/tonne on 1 June.

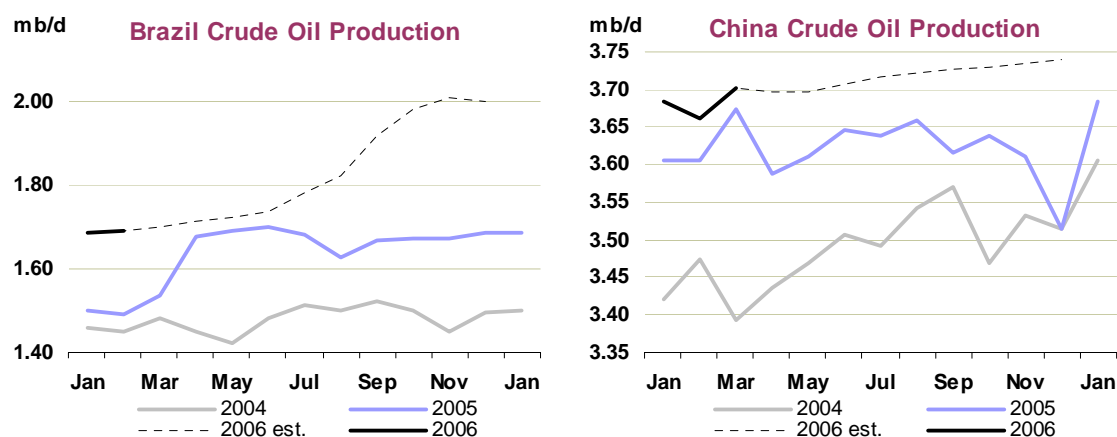
### Update on New FSU Export Outlets

A number of developments in recent months have affected the prospects for, and timing of, potential expansion in FSU crude export capacity:

- The DeKastri terminal which will handle crude exports from Russia's **Sakhalin 1** project is due for completion in July 2006. Sakhalin liquids production is due to reach 250 kb/d later in 2006. Current Sakhalin production of 43 kb/d is routed to Rosneft's Komsomolsk refinery.
- Russia's President Putin instructed pipeline monopoly Transneft to re-route the **East Siberia-Pacific Ocean (ESPO) pipeline** 40 km north of the environmentally sensitive Lake Baikal. Although a token start to construction was announced on 28 April, uncertainty surrounds the project. Transneft reports that a feasibility study on the new route will take up to a year. It is unclear whether an initial 600 kb/d phase of the project, feeding crude to China, will ultimately be augmented by a second phase, feeding the Pacific Coast and taking capacity to 1.6 mb/d. Proven reserves in East Siberia may be insufficient to fill either phase of the line, potentially diverting West Siberian production from Europe. Targeted phase 1 completion by end-2008 may be overly ambitious.
- Latest market reports suggest the first cargo of Azeri crude from the Mediterranean port of Ceyhan via the 1.0 mb/d **BTC pipeline** will be lifted in late-May. Rising volumes of production from the Azeri-Chirag-Guneshli fields in the Caspian Sea have to date been exported via the Black Sea ports of Supsa, Batumi and Novorossiysk, but like other Black Sea flows these are subject to bottlenecks in the Turkish Straits. BTC completion also provides an alternative, if temporary, outlet for Russian and Kazakh crude, before rising Azeri production late-decade.
- It was reported in early-May that initial volumes of Kazakh crude had reached China via the recently completed 200 kb/d **Atasu-Alashankou pipeline**. Up to 135 kb/d (33 mb) of crude will be supplied to China via this route in May-December 2006, including some 30 kb/d of Russian crude. Flows are scheduled to reach pipeline capacity by end-2007.
- A doubling of capacity of the **CPC pipeline** to 1.35 mb/d is scheduled for late-2007, subject to Russian approval. Russia holds a 24% stake in CPC and its port of Novorossiysk is the endpoint for the line. The new CPC General Director is a former official of Russian state oil company Zarubezhneft. Delays in CPC expansion could undermine plans to boost output at Kazakhstan's Tengiz project, although Tengizchevroil is lining up alternative, stop-gap export slots via rail to Odessa and Aktau. Russia has dragged its heels on CPC expansion, seeking higher tariffs and parallel development of a Turkish Straits by-pass as conditions for expansion.
- Turkey has approved ENI's proposed 1.0 mb/d **Samsun-Ceyhan** Turkish Straits by-pass pipeline. A competing project involving TNK-BP, Rosneft, Sibneft and Chevron announced the formation of a consortium to build the 1.2 mb/d **Bourgas-Alexandroupolis** pipeline. Both projects remain a long way from activation however.

### Other Non-OPEC

**Brazil – February actual:** Output began on 21 April at the 180 kb/d P-50 platform at the Albacore Leste field in the deepwater Campos Basin. One of five new offshore developments due online in 2006, Albacore Leste received much fanfare as heralding Brazilian oil self sufficiency although, depending upon the definition of self-sufficiency, that event may actually be deferred until later in the year. Nonetheless, Brazil is likely to see a second consecutive year of 150-200 kb/d crude supply growth in 2006 as developments in the Campos, Sergipe and Espirito Santo Basins are brought into production. A near-doubling in Brazilian crude supply since the late-1990s has largely been achieved by state producer Petrobras. However, April saw announcements on progress at two foreign operated fields, Frade and Chinook, which could add a combined 200 kb/d of capacity by late decade. Operators of these fields are Shell and Norsk Hydro respectively.



**China – March actual:** Production for March came in 70 kb/d higher than expected, with output in most areas exceeding expectation. An earlier sharp decline in mature Daqing field output appears to have stabilised. The Chinese forecast is revised up by 30 kb/d for 2006 to 3.71 mb/d. This is the second straight year of near-100 kb/d growth, and is centred on offshore developments and higher production from the onshore Changqing and Yanchang fields. In addition to increasing forays into overseas upstream activity, Chinese operators are seeing growing results from onshore central and northwestern areas.

#### Revisions to Other Non-OPEC Estimates

Modest downward adjustments to forecast 2006 production apply to Turkmenistan and Uzbekistan based on first quarter data. This is despite March start-up of offshore Caspian Block 1 production by Petronas in Turkmenistan. A 15 kb/d downward adjustment for 2006 Malaysian supply tips the country's production into modest decline this year, oil output reaching 815 kb/d in 2006 from 827 kb/d in 2005. Supply for Oman in 2006 is revised down by 10 kb/d to 745 kb/d (including condensate), with ongoing decline unlikely to be turned around before 2008 when an extensive EOR programme kicks in. 2006 production for Chad is cut by 10 kb/d to 180 kb/d, flat versus 2005. However, threats of an imminent production stoppage have been averted by resolution of a funding dispute between the government and the World Bank. In contrast to otherwise mainly downward non-OECD adjustments, production for Sudan is revised up by 15 kb/d after much-delayed start at CNPC's Melut Basin fields.

#### Revisions to Non-OPEC Oil Supply

(million barrels per day)

	Last Month's OMR			This Month's OMR			This Month vs. Last Month		
	2005	2006	06 vs. 05	2005	2006	06 vs. 05	2005	2006	06 vs. 05
North America	14.09	14.25	0.17	14.09	14.33	0.24	0.00	0.07	0.07
Europe	5.64	5.41	-0.23	5.64	5.40	-0.24	0.00	-0.02	-0.02
Pacific	0.58	0.55	-0.04	0.58	0.55	-0.04	0.00	0.00	0.00
<b>Total OECD</b>	<b>20.31</b>	<b>20.22</b>	<b>-0.10</b>	<b>20.31</b>	<b>20.27</b>	<b>-0.04</b>	<b>0.00</b>	<b>0.05</b>	<b>0.05</b>
Former USSR	11.63	12.09	0.46	11.63	12.04	0.41	0.00	-0.05	-0.05
Europe	0.16	0.15	-0.01	0.16	0.15	-0.01	0.00	0.00	0.00
China	3.62	3.68	0.06	3.62	3.71	0.09	0.00	0.03	0.03
Other Asia	2.73	2.80	0.08	2.73	2.79	0.07	0.00	-0.01	-0.01
Latin America	4.28	4.48	0.19	4.29	4.48	0.19	0.00	0.00	0.00
Middle East	1.83	1.80	-0.03	1.83	1.79	-0.04	0.00	-0.01	-0.01
Africa	3.67	4.13	0.46	3.67	4.14	0.47	0.00	0.01	0.01
<b>Total Non-OECD</b>	<b>27.93</b>	<b>29.14</b>	<b>1.21</b>	<b>27.93</b>	<b>29.11</b>	<b>1.18</b>	<b>0.00</b>	<b>-0.03</b>	<b>-0.03</b>
Processing Gains	1.86	1.90	0.04	1.86	1.90	0.04	0.00	0.00	0.00
<b>Total Non-OPEC</b>	<b>50.10</b>	<b>51.25</b>	<b>1.15</b>	<b>50.10</b>	<b>51.28</b>	<b>1.18</b>	<b>0.00</b>	<b>0.03</b>	<b>0.03</b>

OMR = Oil Market Report