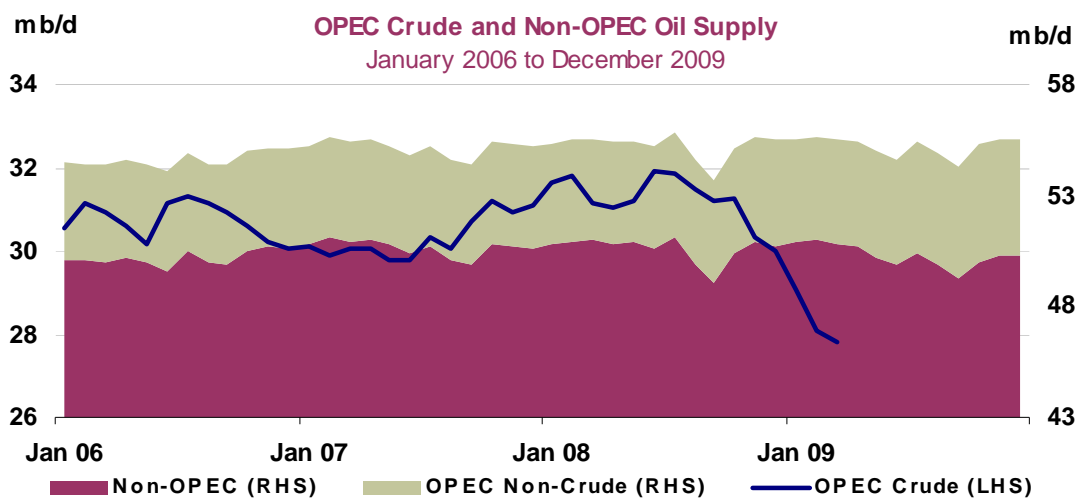


SUPPLY

Summary

- **Global oil supply fell by 400 kb/d in March , to 83.4 mb/d**, with the decline split equally among OPEC and non-OPEC producers. However, global oil supply is down a sharp 3.4 mb/d compared with levels of a year ago in response to the downturn in oil demand.
- **Non-OPEC supply declined by 170 kb/d in March**, with a 220 kb/d dip in the OECD partly offset by slightly higher non-OECD output. While 2008 production is assumed more or less unchanged since last month's forecast, 2009 output has been revised down by 320 kb/d, implying a year-on-year decline from 50.6 mb/d in 2008 to 50.3 mb/d in 2009. Around 220 kb/d of the revision is due to downward-adjusted biofuels production. Regarding crude production, lower-than-forecast Chinese, Indian, Vietnamese and Australian 1Q09 production data dragged down the forecast.
- **OPEC crude supply in March averaged 27.8 mb/d, down 235 kb/d** from the previous month. Cuts were centred among Libya, Iran and Kuwait. OPEC supplies are now hovering at their lowest level in more than five years as member countries curtail production in response to exceptionally weak global oil demand. Effective spare capacity now stands at 5.5 mb/d.
- **The call on OPEC crude and stock change now stands at 28.2 mb/d for 2009**, down 0.7 kb/d from last month and 2.6 mb/d below 2008 levels. Revisions centre primarily on substantial downward revisions to OECD demand data for 2009.



Entire series based on OPEC Composition as of January 2009 onwards (including Angola and Ecuador and excluding Indonesia)

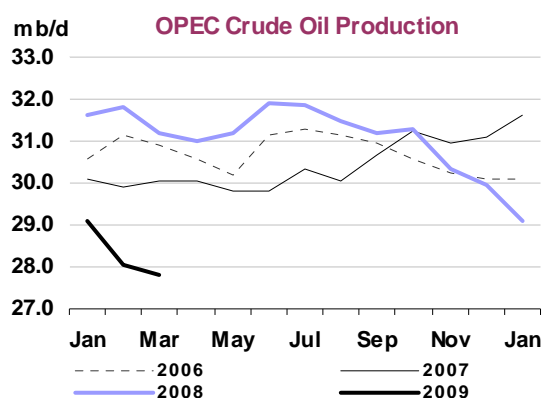
Note: Random events present downside risk to the non-OPEC production forecast contained in this report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific 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 adjustments focused in the OECD.

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

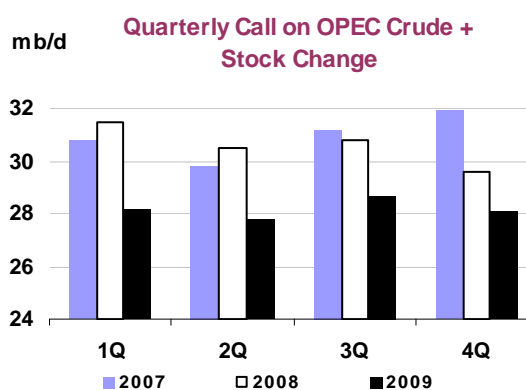
OPEC Crude

OPEC crude supply in March averaged 27.84 mb/d, down 235 kb/d from the previous month. Libya, Iran and Kuwait contributed 160 kb/d to the March reduction. OPEC supplies are now hovering at their lowest level in five years as member countries curtail production in response to exceptionally weak global oil demand. OPEC has reduced official output targets three times since its September 2008 meeting, equal to a total planned reduction of 4.2 mb/d.

Production from the 11 members with output targets, which excludes Iraq, was assessed at 25.57 mb/d in March. That is down 245 kb/d month-on-month, but about 720 kb/d above the group's 24.85 mb/d target. OPEC's compliance rate with the latest target that went into effect in January rose to 83% in March. This compares with 77% in February. Effective spare capacity stands at 5.5 mb/d.



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

OPEC has managed to remove an unprecedented 3.36 mb/d from the market since last September, IEA data show. OPEC ministers opted to rollover the existing 24.85 mb/d production target at their 15 March meeting in Vienna, with concern that another reduction in production levels might further undermine the fragile global economy topping the agenda.

Disparity in compliance with production targets was reportedly a contentious issue at the meeting and continued overproduction by some members may cause friction when OPEC ministers gather again on 28 May to review market conditions. Iran, Angola, Venezuela and Nigeria are currently producing a collective 668 kb/d over their target levels. The extent to which countries are observing targets is still a major issue, especially for countries who have substantially reduced supplies in line with targets.

Saudi Arabia held output steady in March at 7.95 mb/d, about 100 kb/d below its target level. OPEC's largest producer accounts for about 45% of the total cut in OPEC supplies since last September at 1.5 mb/d. Aramco told customers that it was holding steady its 10% cut below contractual volumes for April. Saudi Arabia's production capacity has been increased by 150 kb/d, to 11 mb/d in line with higher production volumes from the 500 kb/d Khursaniyah project. After a delayed start-up last August at an initial rate of 150 kb/d, Aramco is in the final stages of bringing the last 150 kb/d on stream this month.

Production from **Iran** was lower by 50 kb/d, at 3.65 mb/d in March, compared with an upwardly revised 3.7 mb/d the previous month. Iranian output is now running 315 kb/d above the country's 3.34 mb/d target. Iran has now reduced output levels by around 250 kb/d, equal to a 44% compliance rate. Iranian customers were told they would continue to receive full contract volumes in April, the same as March.

Crude oil production in **Kuwait** fell by 50 kb/d, to 2.25 mb/d in March. Kuwaiti output is largely in line with the country's output target. The state oil company used the weaker market climate to do unscheduled field maintenance work.

UAE output was nearly unchanged on the month at 2.25 mb/d. Compliance is now pegged at near 95% due to further cutbacks in customer nominations. Adnoc's term allocations for Murban, Umm Shaif and Lower Zakum were unchanged in May at 15% below contract volumes while cuts in supplies of medium heavy Upper Zakum were eased, with volumes down by a smaller 10% compared with April's stronger 17% cut.

Oil production in **Qatar** was slightly lower in March, down 10 kb/d to 740 kb/d last month. After implementing a 15% cut in supplies to its Asian customers in March, Qatar removed lifting restrictions for April. However, the state oil company notified Asian customers that supplies of its medium sour Qatar Marine crude would be reduced 4% in May

Iraqi oil supplies were up slightly on the month, with production assessed at 2.27 mb/d. Total exports last month averaged 1.82 mb/d compared with 1.8 mb/d in February. Exports from both the northern pipeline to Turkey's Ceyhan terminal and the southern Basrah route were disrupted last month due to weather-related delays. Exports from Basrah averaged 1.39 mb/d in March compared with 1.35 mb/d the previous month. Crude run at refineries and for power use averaged about 455 kb/d in March.

OPEC Crude Production

(million barrels per day)

	Jan 2009 Supply	Feb 2009 Supply	Mar 2009 Supply	Sustainable Production Capacity ¹	Spare Capacity vs Mar 2009 Supply	Implied January Target	March Supply vs Target	Percent Compliance
Algeria	1.27	1.25	1.22	1.43	0.21	1.20	0.02	92%
Angola	1.76	1.65	1.65	2.10	0.44	1.52	0.13	45%
Ecuador	0.50	0.48	0.46	0.50	0.04	0.43	0.03	61%
Iran	3.79	3.70	3.65	4.00	0.35	3.34	0.31	44%
Kuwait ²	2.46	2.30	2.25	2.65	0.40	2.22	0.03	93%
Libya	1.65	1.58	1.52	1.77	0.25	1.47	0.05	80%
Nigeria ³	1.86	1.80	1.78	2.50	0.72	1.67	0.11	66%
Qatar	0.78	0.75	0.74	0.90	0.16	0.73	0.01	93%
Saudi Arabia ²	8.10	7.95	7.95	11.00	3.05	8.05	(0.10)	108%
UAE	2.36	2.25	2.25	2.85	0.61	2.22	0.02	94%
Venezuela ⁴	2.18	2.10	2.10	2.40	0.30	1.99	0.11	69%
OPEC-11	26.70	25.81	25.57	32.10	6.53	24.85	0.72	83%
Iraq	2.37	2.26	2.27	2.50	0.23			
Total OPEC	29.07	28.07	27.84	34.60	6.76			
<i>(excluding Iraq, Nigeria, Venezuela</i>					<i>5.51)</i>			

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

2 Includes half of Neutral Zone production.

3 Nigeria excludes some 0.5 mb/d of shut-in capacity.

4 Includes Orinoco extra-heavy oil assumed at 420 kb/d in March.

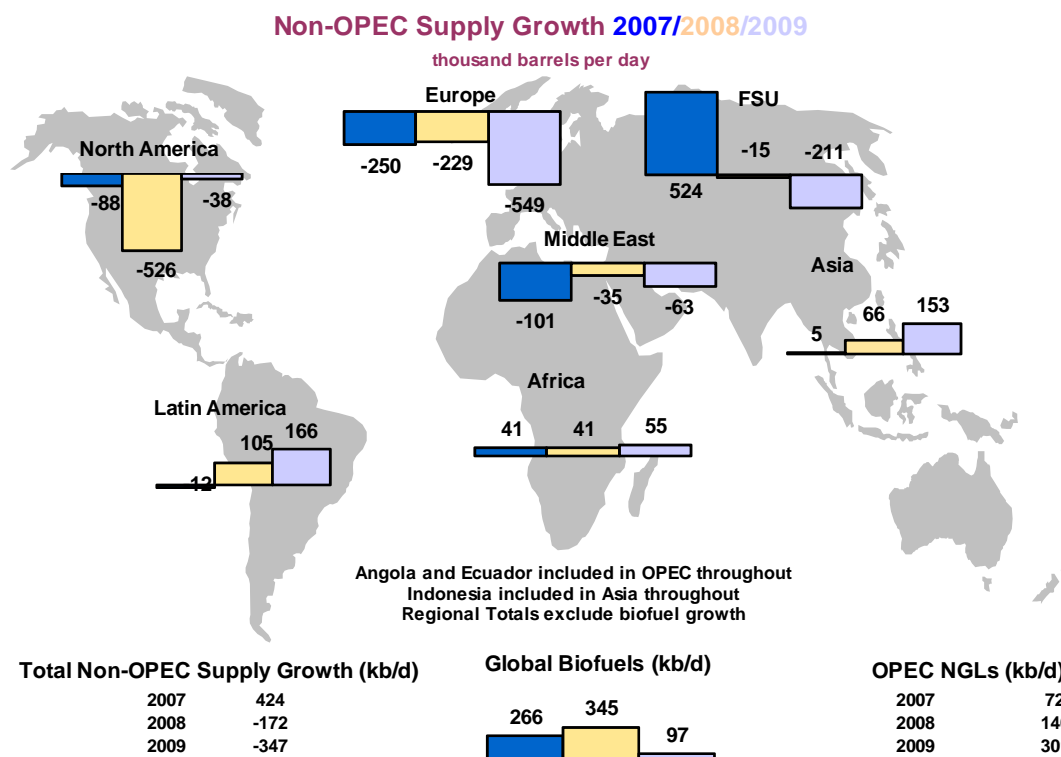
5 Compliance rate calculated from baseline September production in OPEC's MOMR.

Crude oil production **Nigeria** fell 20 kb/d in March, to 1.78 mb/d. The lower output is due to yet another attack by militants on a pipeline, this time affecting Chevron's Escravos. The attack forced the shut-in of around 11.5 kb/d on 16 March. Despite the small decline in output last month, there is no shortage of Nigerian crude in the market. Traders have been taking advantage of the contango in the market and storing a large quantity of crude on floating tankers over the past three months. In March a number traders sold their cargoes into the market

Angolan crude oil production was unchanged in March at 1.65 mb/d. Angola, whose minister is the current OPEC president, is producing 133 kb/d above its target, equating to 45% of the required cut. Angola may be reluctant to impose further output restrictions on operating companies, especially since it has already lowered output by around 175 kb/d since last September.

Non-OPEC Overview

While 2008 production has been kept more or less flat, downward revisions to 2009 non-OPEC supply amount to around 320 kb/d, implying a year-on-year decline from 50.6 mb/d in 2008 to 50.3 mb/d in 2009. Of the 320 kb/d revision, 220 kb/d stem from an in-depth reappraisal of biofuels output. Biofuels have so far been hit probably harder by the economic downturn and lower oil prices than non-OPEC



crude oil output and the economics of non-subsidised production look questionable in many areas (see *Biofuels Production Growth to Slow in 2009*). This sizeable revision to the biofuels forecast for 2009 masks the fact that US fuel ethanol production was revised down by around 115 kb/d, but offset by a similar upgrade for Brazilian ethanol. In other words, net of offsetting US and Brazilian changes, the downward revision was in other areas – largely in OECD Europe, but also in China and other Asian countries.

Revisions to Non-OPEC Oil Supply

(million barrels per day)

	Last month's OMR				This month's OMR				Change			
	2008	2009	08 v 07	09 v 08	2008	2009	08 v 07	09 v 08	2008	2009	08 v 07	09 v 08
North America	13.94	14.05	-0.32	0.11	13.92	13.93	-0.35	0.01	-0.02	-0.12	-0.03	-0.10
Europe	4.75	4.22	-0.21	-0.53	4.80	4.26	-0.22	-0.54	0.05	0.04	-0.01	-0.01
Pacific	0.64	0.72	0.02	0.07	0.64	0.70	0.02	0.05	0.00	-0.02	0.00	-0.02
Total OECD	19.33	18.98	-0.51	-0.35	19.36	18.88	-0.55	-0.48	0.03	-0.10	-0.04	-0.13
Former USSR	12.75	12.52	-0.02	-0.23	12.76	12.54	-0.01	-0.21	0.00	0.02	0.00	0.02
Europe	0.12	0.11	-0.01	-0.01	0.12	0.11	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.79	3.90	0.06	0.11	3.79	3.87	0.06	0.08	0.00	-0.03	0.00	-0.03
Other Asia*	3.66	3.70	-0.02	0.04	3.66	3.68	-0.02	0.02	0.00	-0.02	0.00	-0.02
Latin America*	4.02	4.32	0.16	0.31	4.12	4.34	0.19	0.22	0.10	0.02	0.03	-0.08
Middle East	1.62	1.57	-0.03	-0.06	1.62	1.56	-0.03	-0.06	0.00	-0.01	0.00	-0.01
Africa*	2.57	2.62	0.04	0.05	2.57	2.63	0.04	0.05	0.00	0.00	0.00	0.01
Total Non-OECD*	28.54	28.74	0.18	0.20	28.64	28.73	0.22	0.10	0.10	-0.01	0.03	-0.11
Processing Gains	2.24	2.29	0.07	0.04	2.24	2.29	0.07	0.04	0.00	0.00	0.00	0.00
Other Biofuels	0.46	0.58	0.13	0.12	0.37	0.36	0.09	-0.01	-0.09	-0.22	-0.04	-0.13
Total Non-OPEC*	50.57	50.58	-0.12	0.02	50.61	50.26	-0.17	-0.35	0.04	-0.32	-0.05	-0.36

OMR = Oil Market Report

* adjusted to include Indonesia and exclude Angola and Ecuador throughout

Spending Cuts May Worsen Decline

The global economic/financial crisis, weaker demand for oil and lower oil prices have dented the prospects for non-OPEC supply. Our forecasts already capture project deferrals and cancellations, which for 2009 and 2010 are estimated to account for a gross 1 mb/d (although some of this will enter production later on).

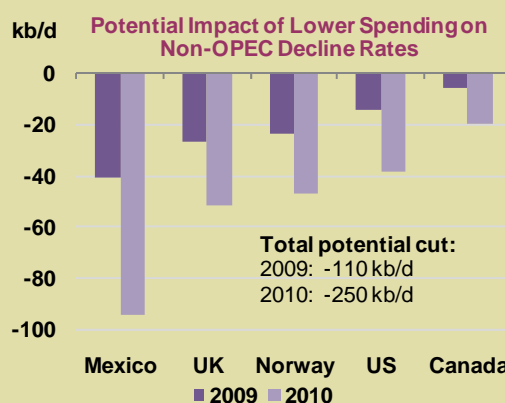
Analysts' spending surveys now envisage upstream spending to be down significantly in 2009, by around 15-20%. Most agree that while many majors and large NOCs will keep spending stable on the whole, independents and smaller oil companies will slash it most. Also of significance is the consensus that spending will be hit hardest in North America, the UK, Norway and Russia. But the precise effect is not yet evident in monthly reported production data. Project slippage, which we do monitor, is only part of the likely impact. Another feature is likely to be lower production from mature oilfields where drilling or pressure maintenance activity is curtailed.

In order to model what the potential impact could be, we have developed the following scenario. According to calculations published in the July 2008 *Medium-Term Oil Market Report (MTOMR)*, the average (1999-07) *observed* decline rate in mature non-OPEC fields was 7.7%. The IEA's November 2008 *World Energy Outlook (WEO)*, on the other hand, estimated that the *natural* decline rate (i.e. without offsetting investment) in post-peak non-OPEC fields is around 11%. For illustration in this scenario we have modelled the effect of 2009's lower spending, nudging up decline rates by around 20% to average 9.4%.

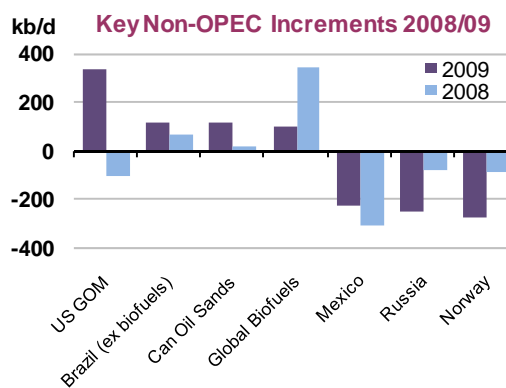
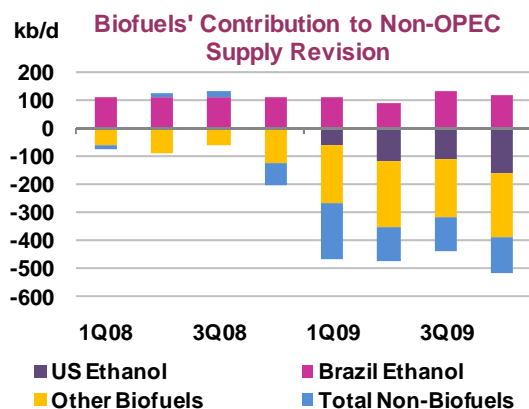
We have applied this steeper decline rate scenario proportionally to all declining fields in selected mature basins, where we assume the impact of lower spending will be felt first and hardest. This includes the US onshore (including Alaska), Canada (including bitumen, though here we apply a lower *growth* rate, rather than 'decline' *per se*), the UK, Norway and Mexico (albeit spending is slated to rise). Together, these maturing fields total up to almost 10 mb/d. We already hold a quite pessimistic outlook on Russian production, so for the purpose of this scenario have not applied the steeper decline rate there. Other countries may be prone to a similar effect from lower spending, which means the total impact could be higher. Potentially offsetting that, however, is the fact that not all of the mature fields in the countries we have looked at will necessarily be adversely affected to the same degree.

The net effect of this hike in decline rates would be to reduce production by 360 kb/d in total by end-2010, of which 110 kb/d occurs in 2009 and 250 kb/d in 2010, with the effect being compounded thereafter. The impact is felt least strongly in Canada, as current oil sands output is forecast to remain relatively constant and relatively flat production is assumed at the large East Coast offshore fields. On the other hand, in Mexico, where we track a relatively small number of sizeable fields, that are anyway mostly in steep decline, the effect is greater, with a combined 2009/10 potential downward revision of 135 kb/d.

Until more early-2009 production data become available, this lower output scenario is not incorporated as the baseline output forecast. The topic will be revisited in greater depth in this summer's *MTOMR*, which will both fine-tune the analysis and extend it beyond 2010. But the implication is clear – further downward adjustments to the non-OPEC forecast could arise in light of weaker spending levels.



Regarding crude production, lower-than-forecast Chinese, Indian, Vietnamese and Australian 1Q09 production data dragged down the non-OPEC forecast for the quarter and the year. This was only partly offset by higher Latin American and European output, both of which were, however, related to biofuels revisions. Meanwhile, Russian production picked up again slightly in March, bringing up the yearly number slightly, while reported and preliminary Azeri data for January and February respectively appeared to confirm our recent assumption that the country's production will remain largely flat year-on-year.

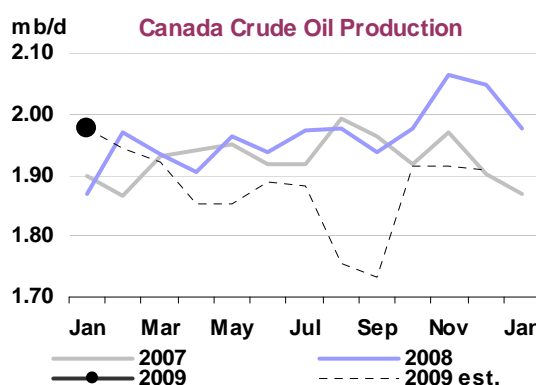
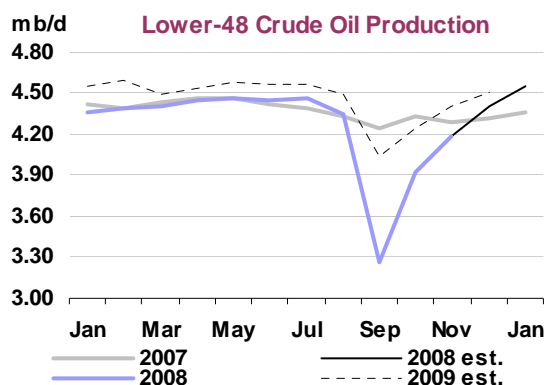


In sum, 2008 total non-OPEC production remains more or less unchanged at 50.6 mb/d, but is set to fall to 50.3 mb/d in 2009. Moreover, anticipated lower capital expenditure this year might well lead to substantial further downward revisions, as we review in a scenario, though not yet in our base case forecast (see *Spending Cuts May Worsen Decline*).

OECD

North America

US – Alaska March actual, others estimated: March oil production in the US was largely unchanged compared with forecast, but fell by around 100 kb/d from February. Higher-than-forecast Alaskan and Texan production was largely offset by lower crude output elsewhere and sharply lower fuel ethanol. In Alaska, it appears that we had overestimated typical winter outages. At the time of writing in early April, activity at the Mount Redoubt volcano near Anchorage had forced preventive shut-ins at the Cook Inlet field southwest of Anchorage, after suspended tanker loading operations at a terminal caused storage to fill up. Most likely, only small volumes will be shut-in, but the duration of problems is not yet clear.



In the US Lower-48, reported November data brought sizeable upward revisions to the forecast. On the other hand, this was broadly offset by downward revisions to Gulf of Mexico production in the same period. Once again, we have attributed this to an underestimation of hurricane-related shut-ins, but also to a slower-than-anticipated ramp-up of production from the large Thunder Horse platform. Other developments include the start-up of BHP Billiton’s Shenzi project in late March, with peak capacity of 100 kb/d. The Clipper field’s start-up on the other hand was delayed, from April to an assumed October of this year. Overall, US crude output is expected to grow to 5.1 mb/d in 2009, from last year’s 4.95 mb/d.

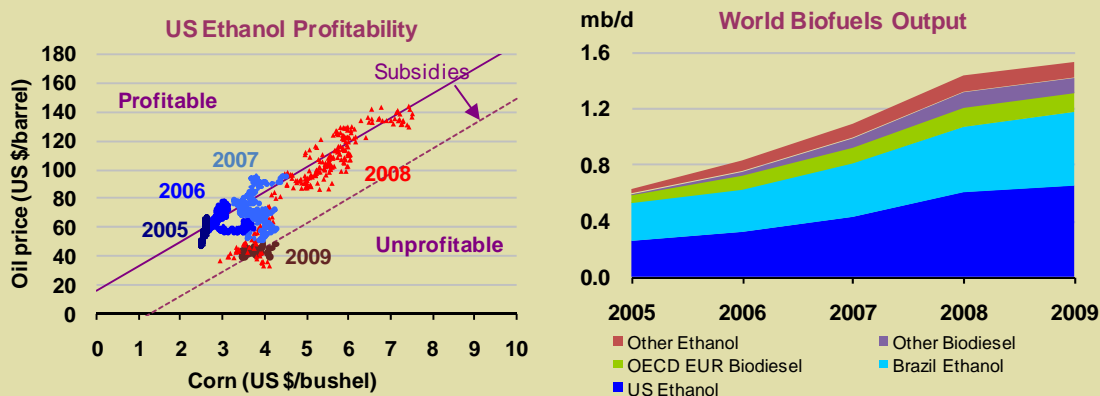
Biofuels Production Growth to Slow in 2009

After several years of rapid increases, world biofuels production growth should dramatically slow in 2009. Lower oil prices, credit constraints, increasingly divergent government support and downward revisions to transport fuel demand have all conspired to undermine production economics and the industry's viability. Stronger growth should resume in the medium term, with the potential for oil markets to retighten and rising government mandates among the largest producing countries. Our 2009 *MTOMR* will feature a more detailed production forecast through to 2014.

In the meantime, we have revised down expected 2009 production growth by 220 kb/d, which leaves global biofuels growth at 95 kb/d (6.6%) year-on-year versus estimated growth of 345 kb/d (31.5%) for 2008. Much of this revision comes from the OECD, as US and European production economics have soured, and the media has reported idled plants and bankruptcies. While those features apply also to non-OECD countries to an extent, higher-than-expected 2008 production from Brazil and expectations of continued growth there should leave Latin America production prospects relatively stable.

In the US, 15-20% of about 800 kb/d total ethanol capacity has been shut-in or idled, and remaining capacity is likely operating below potential. Ethanol crush spreads have continued to fall and the industry's profitability has weakened. Stronger-than-expected 2008 growth and a 100 kb/d increase in 2009's blending mandate to 685 kb/d (10.5 bn gal or 39.7 bn litres) should support a production floor.

Yet, the US may just meet or undershoot the 2009 Renewable Fuel Standard (RFS) rather than exceed it—with imports or renewable credits carried from 2008 making up the difference. 2008 production averaged 600 kb/d and January ethanol data from the EIA shows production at 630 kb/d, but this is down almost 40 kb/d from November. Blending economics have since improved though, with rising gasoline prices and falling Brazilian supply prices. While gasoline blended with ethanol dropped to near 55% of the conventional pool in January, the latest weekly readings put it at 70%, on par with September 2008 levels. The degree to which a US summer driving season emerges remains a key variable for blending economics going forward.



In Europe, biodiesel production should stagnate, despite a recent decision by the European Union to impose duties on imported biodiesel from the US for an initial six-month period. Weak government support and overcapacity in the region's largest producer, Germany, should reduce its production this year. Exemptions on excise taxes for biodiesel were reduced in January, yet 2009 quotas remain uncertain as a mandatory 5.25% biofuels blending target in fossil fuels awaits approval. Other countries, such as France, Italy, Spain and the UK, have increasing targets for 2009 and should see production continue to grow, albeit weakly. The introduction of import duties on US biodiesel would also likely aid European output. In 2008, about 25 kb/d arrived from the US. Yet, imports from lower-cost producers in Latin America and Asia will more likely replace those volumes rather than domestic production.

Expectations for biofuels growth from Latin America continue, with regional production forecast to increase in 2009 by almost 60 kb/d versus 85 kb/d in 2008. Most of this growth comes from Brazilian ethanol, which averaged about 460 kb/d last year. Yet, the industry there faces increased economic hurdles that have curtailed its expansion. Sugarcane industry association Unica announced in March that only 15-20 of an initially expected 35 new mills may come online in 2009. Additionally, the group noted an increasing amount of the cane crop this year might go to sugar rather than ethanol production as producers look to capture higher margins.

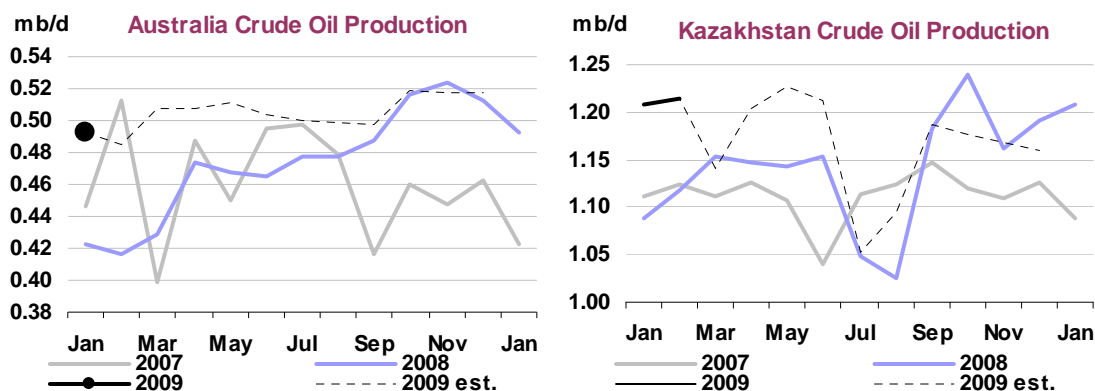
Canada – January actual: Canadian production in January was in line with forecasts, albeit Newfoundland offshore field data was not available at the time of writing. Syncrude and bitumen production were assessed lower than forecast, but offset by slightly higher Saskatchewan crude output and national NGL production. Suncor mining and upgrading operations were reported lower than forecast, perhaps still suffering from a fire in late November last year. Albertan bitumen production fell by around 50 kb/d from December to 650 kb/d, though no problems were reported. Our current 2009 forecast sees total Canadian production dipping slightly, from last year's 3.23 mb/d to 3.21 mb/d, as growing oil sands production fails to offset weaker crude output.

North Sea

Norway – January actual; UK December actual, January provisional: Latest actual data showed only small revisions to Norwegian and UK production data. In the **UK**, the January forecast was revised up by nearly 100 kb/d in order to match preliminary data, with other, smaller revisions, lifting the total 2009 forecast by 40 kb/d. In **Norway**, revisions to the Haltenbanken stream and others dragged down the 2009 forecast by around 25 kb/d. Total Norwegian oil supply is now forecast to fall from 2.46 mb/d in 2008 to 2.19 mb/d in 2009.

Pacific

Australia – January actual: Australian oil production in January was revised down by 70 kb/d on lower NGL and Carnarvon Basin crude production. In the latter, slower ramp-up at the Woodside-operated Angel field is assumed to be a cause, as well as slightly slower recovery following Cyclone Billy, which hit in December and caused brief regional shut-ins. Looking ahead, 3Q09 will see both a three-month partial shut-in at the Woollybutt FPSO, for a workover and the start-up of the Van Gogh field, initially at an assumed 5 kb/d and rising to 20 kb/d from the beginning of 2010.



Former Soviet Union (FSU)

Russia – February actual, March provisional: Russian oil production for both February and March was revised up by 70 kb/d and 150 kb/d respectively. In February, production data for Novatek and Sakhalin 2 were higher than expected. The latter's output in particular is picking up gradually after the start to year-round production from last December. More recently, additional volumes from the Piltun Astokhskeye platform have been added to the complex, boosting output. In March, higher-than-expected output was likely due to faster-than-anticipated ramp-up at Lukoil's new Uzhno-Khylchuyuskoye field and TNK-BP's expansion of the Uvat complex. Looking ahead, this report now assumes that Rosneft's large Vankor field in Eastern Siberia will start producing small initial volumes in mid-2009. In early April, the Russian government approved spending plans for the ExxonMobil-led Sakhalin 1 project for 2009 after repeated delays, which should unfreeze later development stages.

Overall, March production figures indicate an increase from February and a return to November volumes of just over 10 mb/d. But our forecast nonetheless anticipates a gradual decline for the rest of the year. Year-on-year, we forecast a fall from 10 mb/d total oil production in 2008 to 9.75 mb/d in 2009, or a dip of -2.5%.

Other FSU: Azerbaijan January actual, February preliminary; Kazakhstan February actual: January reported and February preliminary data for **Azerbaijan** confirm our assumption that shut-ins at the Azeri-Chirag-Guneshli (ACG) complex in the Caspian Sea are continuing and that therefore, despite a gradual ramp-up on prospective recovery towards the end of the year, total 2009 production, at just over 900 kb/d, will remain flat over 2008. Gas leaks in September 2008 had forced large shut-ins of parts of the offshore complex and full recovery is apparently taking longer than expected. In **Kazakhstan**, February data confirmed our forecast that around 25 kb/d were shut-in at the Tengiz field during that month due to a brief shutdown of the CPC pipeline. However, slight revisions to the ramp-up timing of the Karachaganak expansion due from mid-year have lifted our yearly total Kazakhstan figure by 23 kb/d. In **Turkmenistan** and **Uzbekistan**, reappraised 2008 production data prompted a combined downward revision for 2009 of 20 kb/d. In sum, total FSU oil production is forecast to fall from 12.75 mb/d in 2008 to 12.55 mb/d in 2009, almost wholly due to expected lower Russian output.

FSU net oil exports in February on average rose by 3.1% to 9.55 mb/d, supported by a rise in crude oil flows on all routes except Druzhba pipeline deliveries. Baltic shipments increased by 5.4% after a dip in volumes in January due to pipeline maintenance. Black Sea exports posted an increase despite a closure of the CPC pipeline for two days at the end of February following an oil leak. BTC volumes also rose sharply in February, but they are still below the 1 mb/d capacity of the pipeline. Ongoing commercial disputes between Russian producing companies and intermediary trading companies stood behind a decrease in Druzhba flows. Pipeline deliveries to Poland dropped by 7% due to a dispute between Tatneft and KD Petrotrade, an intermediary trading company in Poland. Flows to Germany were 3.5% below January levels; however TNK-BP continued to export higher volumes using Lukoil's allocations.

FSU Net Exports of Crude & Petroleum Products

(million barrels per day)

	2007	2008	1Q2008	2Q2008	3Q2008	4Q2008	Dec 08	Jan 09	Feb 09	Latest month vs. Jan 09 Feb 08	
Crude											
Black Sea	2.18	2.05	1.97	2.24	1.97	2.04	2.07	2.31	2.34	0.03	0.51
Baltic	1.59	1.46	1.41	1.57	1.40	1.47	1.66	1.49	1.57	0.08	0.29
Arctic/FarEast	0.32	0.30	0.27	0.26	0.29	0.37	0.38	0.45	0.46	0.02	0.17
BTC	0.55	0.67	0.71	0.75	0.64	0.57	0.70	0.66	0.82	0.16	-0.01
Crude Seaborne	4.63	4.48	4.35	4.82	4.30	4.45	4.81	4.90	5.19	0.29	0.96
Druzhba Pipeline	1.13	1.09	1.14	1.07	1.05	1.12	1.19	1.20	1.16	-0.03	0.06
Other Routes	0.44	0.41	0.40	0.42	0.44	0.37	0.37	0.39	0.40	0.01	-0.02
Total Crude Exports	6.20	5.98	5.89	6.30	5.79	5.94	6.38	6.48	6.75	0.27	1.00
Of Which: Transneft	4.27	3.99	3.97	4.17	3.87	3.96	4.22	4.17	4.24	0.07	0.45
Products											
Fuel oil	1.10	1.09	1.16	1.13	1.04	1.04	1.07	0.94	0.90	-0.04	-0.36
Gasoil	0.95	0.94	1.06	1.01	0.79	0.92	1.03	1.17	1.16	-0.01	0.06
Other Products	0.60	0.59	0.64	0.60	0.55	0.56	0.56	0.70	0.76	0.06	0.09
Total Product	2.65	2.63	2.86	2.74	2.38	2.52	2.66	2.81	2.83	0.01	-0.21
Total Exports	8.85	8.61	8.75	9.05	8.17	8.46	9.03	9.30	9.58	0.28	0.80
Imports	0.04	0.04	0.05	0.03	0.05	0.03	0.04	0.03	0.03	0.00	-0.01
Net Exports	8.82	8.56	8.71	9.01	8.12	8.42	8.99	9.26	9.55	0.29	0.80

Sources: Petro-Logistics, IEA estimates

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

Product exports from FSU countries rose slightly to 2.83 mb/d in February as an increase in shipments of other products offset lower exports of fuel oil and gasoil. Fuel oil volumes continued their decrease as the restrictions on exports imposed by governments of Belarus and Ukraine remained in place. However, Ukraine reportedly lifted its ban on fuel oil sales abroad from 18 February so fuel oil exports in

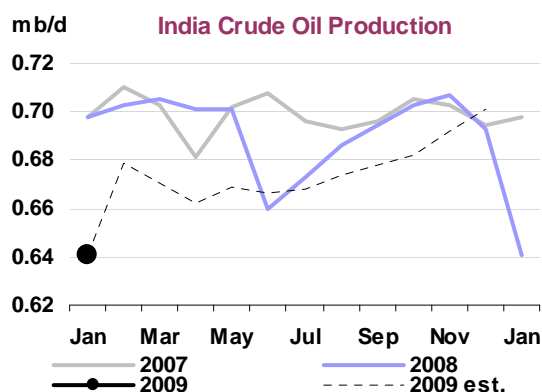
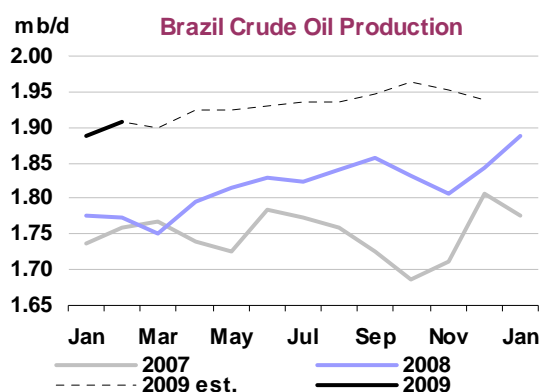
March are expected to rise. Russian product exports may be affected in March and April by planned maintenance at several Russian refineries.

According to preliminary data and loading schedules, crude oil exports in March should remain around February levels, although crude oil shipments from Black Sea ports were affected by stormy weather and a five-day closure of a pipeline leading to Novorossiysk after a leak and a fire at the beginning of March. Nonetheless, BTC flows reportedly increased further in March as well as flows through the Druzhba pipeline. Russian loading schedules for April are set to be higher than in March, though shipments through Novorossiysk should be affected by planned maintenance of the pipeline leading to the port. The rise in Russian loading schedules coincides with a fall in Russian crude export duties, which were set to \$110.0/mt (\$15/bbl) in April from \$115.3/mt (\$15.7/bbl) in March. Product export duties fell from \$90/mt in March to \$86.4/mt in April for light products and from \$48.5/mt to \$46.5/mt, respectively, for heavy products.

Russian pipeline operator Transneft announced that the first stage of the 600 kb/d East Siberia-Pacific Ocean (ESPO) pipeline will be completed in several weeks. This link will connect Taishet in East Siberia with Skovorodino in Russia's Far East, from where a leg will connect to Chinese oil infrastructure just across the border. Crude oil is expected to start flowing through the pipeline towards the end of 2009 and will be transported onwards to Russia's Pacific Coast by rail until the second stage is completed in late 2010.

Other Non-OPEC

Brazil – February actual: On a net basis, reported February data for Brazil only added 20 kb/d, but this hides substantial revisions to fuel ethanol and crude production. Ethanol production was revised up by just over 100 kb/d to 470 kb/d for 2008 and carried forward into 2009 as a higher baseline. But this was largely offset by an average monthly crude downward revision of 125 kb/d for December through March. Partly, this is due to revisions to reported data, but our January forecast had overestimated output on the basis of overoptimistic preliminary data. End-February saw the start-up of Petrobras's Jabuti field in the deepwater Campos Basin. Initial estimated volumes of 10 kb/d in March are expected to quickly ramp-up to 60 kb/d by end-year and to reach capacity of 100 kb/d in 2010. Start-up of the Pinauna field has been brought forward to September in our forecast. Meanwhile, a strike by Petrobras workers in March caused only the most minor of outages, according to Petrobras. Brazilian total oil production is due to rise from 2.37 mb/d in 2008 to 2.54 mb/d in 2009.



China – January and February actual: January and February China data (publication of which was delayed by the Lunar New Year holiday) were 200 kb/d and 150 kb/d lower than estimated, with a string of basins showing lower-than-estimated output. Production in Xinjiang, Tarim, Jilin and Turpan-Hami came in lower than expected, while the 'offshore' category confirmed what appears to be an unreported outage or maintenance from December. According to reported data, the 'offshore' production category

showed a dip of 130 kb/d in December and is only gradually picking up. February data was similarly lower, though indicated recovery in the 'offshore'. As regards new fields, the Bozhong 28-2S platform started offshore production in March and is forecast to reach capacity of nearly 25 kb/d later in the year. The Penglai-2 increment with a new FPSO is also assumed to be raising output and is set to rise from an assumed current 45 kb/d (February) to 75 kb/d by the end of the year (and to 150 kb/d by end-2010). Total Chinese oil production is pegged to rise from 3.8 mb/d in 2008 to 3.9 mb/d in 2009.

Other Asia: January data for **India**, also published with a delay, prompted a downward revision of 50 kb/d, with lower output spread over most fields and reasons unclear. On the border of **Malaysia** and **Vietnam**, the shared PM-3 CAA increment started up, which will eventually add 45 kboe/d of oil and gas, expected by 2010. Meanwhile, January data for **Thailand** was around 15 kb/d higher than expected. In sum, total Other Asia oil production will rise slightly from 3.66 mb/d in 2008 to 3.68 mb/d in 2009.