

CLARIFYING THE CALL ON OPEC

Analysts love detail and there is no shortage of it in this report. We build our models and forecasts from the most detailed data, whether it be product-level supply and demand, oil production from individual fields or specific unit maintenance at refineries. These estimates are fed by data-flow from a homogenised 250-point questionnaire from OECD countries, non-OECD data from both the *Joint Oil Data Initiative (JODI)* and just plain hard digging among myriad oil company, tanker tracking, financial, consulting and trade press sources.

Still there are gaps. There is little stock data from non-OECD countries, and supply, demand, stock and trade data never perfectly add up. The resulting difference goes into our *miscellaneous-to-balance*. Any of these factors can cause this gap and while we may have suspicions on the underlying cause, we do not try to force the balance with such assumptions. For the sake of transparency, we feel it is better not to subjectively allocate the balancing factor to supply and demand in one country or another. When better information becomes available, it is then a simple accounting proposition to move data from the *miscellaneous-to-balance* category into another as appropriate.

We also have, in bold letters in each supply section, a warning that there has been an historical tendency for non-OPEC supply to be revised down on average by 350 kb/d in a year. That figure is not constant, nor is it typically steady over the course of a year and can be caused by weather, strikes, faster-than-expected decline and accidents (among others). Again, when the underlying analysis is done at field level, it would be misleading to allocate risk arbitrarily to specific fields or countries.

Those who know our data well appreciate the clarity that this methodology brings, but for those who do not, this can create some misunderstanding. As much as we flag trends in the *miscellaneous-to-balance* or supply-side uncertainties, it will inevitably translate into comments that the IEA underestimates demand or overstates supply - after all, it makes a juicier sound bite than 'adjusting for the known trends in supply and *miscellaneous-to-balance*'. It is a simple fact of life that no one reads the 'small print'

Without adjusting the data on the back of 'hunches', some clarity can be added via the *call on OPEC + stock change (call)*. The *call* is simply an arithmetical balance between non-OPEC supply, OPEC NGLs and global demand - and without an adjustment for trends in the *miscellaneous-to-balance* or risk adjustments to non-OPEC supply, it will not truly reflect the supply gap. So, to add some clarity, we have for some time been running graphics, articles and tables in the *Oil Market Report (OMR)* and *Medium-Term Oil Market Report (MTOMR)* looking at both the *call on OPEC + stock change (call)* and an *adjusted call*.

The adjusted call takes into account trends in the *miscellaneous-to-balance* (an eight-quarter moving average) and also a 350 kb/d adjustment for downside risks to non-OPEC supply (for historical data, this range only includes the actual quarterly *miscellaneous-to-balance*). The adjusted call has now been permanently added as a line item in Table 1 at the back of this report.

Balances from Table 1
(million barrels per day)

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Global Demand	79.3	82.4	84.7	82.5	83.4	84.2	83.7	85.0	83.3	84.1	85.5	84.5	85.9	84.6	85.9	87.7	86.0
Total Non-OPEC	49.1	50.1	50.4	50.6	49.8	50.2	50.2	50.7	50.5	50.9	51.3	50.8	50.5	50.3	50.3	50.9	50.5
OPEC Crude	27.1	28.9	29.3	29.7	30.0	29.9	29.7	29.9	29.8	30.0	29.2	29.7					
OPEC NGLs	3.7	4.2	4.4	4.4	4.5	4.5	4.5	4.6	4.7	4.7	4.7	4.7	4.8	4.8	4.9	5.0	4.9
Global Supply	79.8	83.2	84.1	84.8	84.2	84.7	84.5	85.2	85.0	85.6	85.3	85.3					
Miscellaneous to balance	0.1	0.6	-0.2	1.0	0.8	0.8	0.6	0.0	1.0	0.0	1.3	0.6					
Call on OPEC crude + Stock ch.*	26.5	28.1	29.8	27.4	29.1	29.5	29.0	29.7	28.1	28.6	29.4	29.0	30.6	29.5	30.7	31.8	30.7
Adjusted Call on OPEC + Stock ch.	26.7	28.7	29.6	28.4	29.9	30.4	29.6	29.7	29.2	28.5	30.7	29.5	31.6	30.4	31.6	32.8	31.6

* including Angola from 2007

So which call is most accurate? The answer is that this will depend upon the issues that are causing the *miscellaneous-to-balance*. In recent years there appears to have been an understatement of demand. If so, then the adjusted call will provide the best indicator (a glance at Table 1 shows that on a yearly average basis actual OPEC production is closer to the adjusted call). However, in recent months, issues such as the anecdotal reports of a 25 mb build in Chinese strategic reserves could mean that the adjusted call is perhaps an overstatement - leaving the true call somewhere between the *arithmetical call* and the *adjusted call*.

Ultimately, we would like to be able to estimate the *call* with pinpoint precision, but the reality is that a range provides a better perspective - one that will widen and contract as data uncertainties fluctuate. It will not eradicate the comments that we over or understate demand and supply in certain periods, but perhaps a few more knowing looks will be exchanged every time such comments are made.

DEMAND

Summary

- **Global oil product demand** has been kept virtually unchanged at 84.5 mb/d in 2006 and 86.0 mb/d in 2007. Downward revisions to 4Q06 OECD data were largely offset by upward changes in non-OECD figures. In percentage terms, world demand is estimated to have grown by 1.0% in 2006; in 2007, it is expected to increase by 1.8%.

Global Oil Demand (2005-2007)

	(million barrels per day)														
	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Africa	2.9	2.9	2.8	2.9	2.9	3.0	3.0	2.9	3.0	2.9	3.0	3.0	2.9	3.0	3.0
Americas*	30.6	30.4	30.8	30.6	30.6	30.2	30.3	30.7	30.6	30.5	30.8	30.6	31.3	31.3	31.0
Asia/Pacific**	25.0	23.4	23.4	24.4	24.0	25.1	24.1	23.8	25.0	24.5	25.3	24.6	24.5	25.7	25.0
Europe***	16.4	15.9	16.2	16.4	16.2	16.6	15.8	16.1	16.3	16.2	16.3	15.8	16.2	16.5	16.2
FSU	3.8	3.7	3.8	3.9	3.8	3.9	3.7	4.0	4.3	4.0	3.9	3.8	4.0	4.5	4.0
Middle East	6.0	6.1	6.4	6.0	6.1	6.3	6.4	6.7	6.4	6.5	6.6	6.7	7.0	6.7	6.8
World	84.7	82.5	83.4	84.2	83.7	85.0	83.3	84.1	85.5	84.5	85.9	84.6	85.9	87.7	86.0
Annual Chg (%)	2.8	1.6	1.7	0.2	1.6	0.4	1.0	0.9	1.5	1.0	1.0	1.6	2.1	2.6	1.8
Annual Chg (mb/d)	2.3	1.3	1.4	0.2	1.3	0.4	0.8	0.8	1.2	0.8	0.9	1.3	1.8	2.2	1.5
Changes from last month's report	-	-0.01	-0.02	-	-0.01	-	0.01	0.01	-0.04	-0.01	-0.35	0.03	-0.04	0.32	-0.01

* OECD North America & Latin America

** OECD Pacific, China & other Asia

*** OECD & non-OECD

- **OECD oil product demand** has been slightly lowered by 35 kb/d in 2006 and 56 kb/d in 2007. Data revisions and continuing mild temperatures, particularly in Europe and the Pacific, weighed down on heating and residual oil demand. Total OECD oil product demand is estimated to have declined by 0.9% in 2006, but is still expected to rebound by 0.8% in 2007 to 49.6 mb/d.
- **Non-OECD oil product demand** has been adjusted upwards slightly in 2006 and 2007, due to a rebasing of India's consumption and revisions to FSU and China apparent demand. Non-OECD oil product consumption is now estimated to have grown by 3.7% in 2006. This year, demand is expected to rise by 3.3% to 36.5 mb/d.

Worldwide Overview

Over the past few months, oil product demand has largely been driven by erratic weather conditions. After a mild start to the winter, North America endured severe cold snaps from late January, which bolstered demand. And despite the cold weather, transportation fuel demand remained robust in that region. Elsewhere, however, temperatures have been milder-than-normal, leading to significant reductions in demand in Europe and Asia Pacific, and to sharply higher exports from the FSU. We have therefore kept our global demand forecast for 2006 and 2007 virtually unchanged. In volumetric terms, we estimate that global oil product demand averaged 84.5 mb/d in 2006 (+1.0% year-on-year), and we foresee it will reach 86.0 mb/d in 2007 (+1.8%).

On the macroeconomic front, the stock exchange turmoil during the last week of February, seemingly prompted by sharp selling in China's Shanghai bourse and pessimistic comments by former Federal Reserve chairman Alan Greenspan, highlighted the downside risks to the global economy. While the capitalization of the Chinese stock market is small, the reaction highlights the importance of the country's economy – which is still racing ahead despite its dependence on exports – as a barometer of global growth. The turmoil has also reminded investors that any slowing of the US economy entails risks for global economic activity. Indeed, US 4Q06 GDP growth was sharply revised downwards, from an earlier 3.5% year-on-year to 2.2% – the second quarter in a row of below-trend growth. Moreover, there is growing evidence that the stalling housing market will eventually curb private consumption. On the one hand, the rate of default of 'sub-prime' (lowest-quality) mortgages has soared over the past months; on the other, bank lending (credit card) is growing, indicating that US consumers are increasingly unable to borrow from their housing wealth, as was the case during the real estate boom. As such, if the Federal Reserve concludes that the risks of a sharp slowdown are higher than inflationary pressures, it could well ease monetary policy by the second half of the year.