

## **Organization of the Petroleum Exporting Countries**





## Organization of the Petroleum Exporting Countries Public Relations and Information Department

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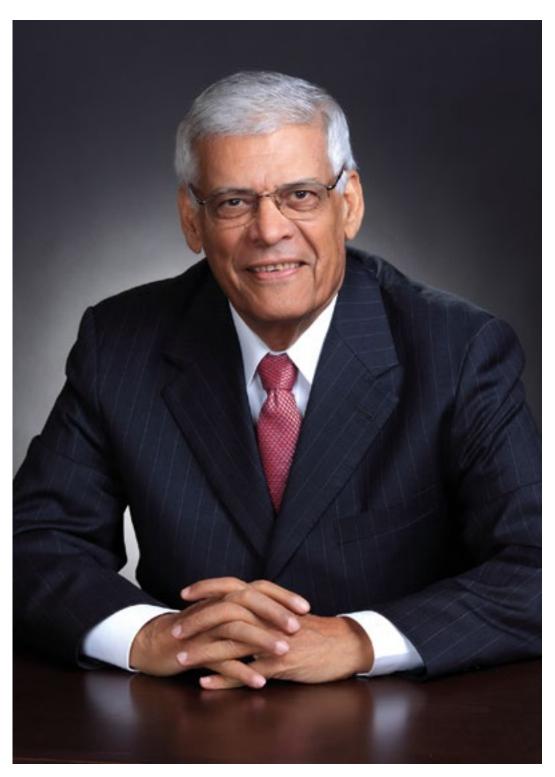
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Abdalla Salem El-Badri, Secretary General

## **Foreword**

Despite some dragging effects from the financial crisis and various uncertainties, the world's economy proved relatively robust in 2014, experiencing positive growth of 3.3 per cent, the same as in the previous two years. It appears that this trend will hold in 2015, when growth is expected to be at 3.4 per cent.

The first quarter of 2014 was weak due to a cold snap in the US which paralyzed the country's economy and had a knock-on effect on trading partners. However, the picture brightened for the remaining three quarters of the year.

Certain patterns became apparent during the year, significantly the fact that OECD countries — particularly the Euro-zone and the US — experienced ongoing recovery, growing by 1.8 per cent, while the emerging and developing economies were facing a slowdown. Japan was an exception within the OECD, with a declining economy due to an April sales tax increase. The EU finally experienced tender growth of 0.9 per cent after two years of recession, while the US had the highest growth rate in the OECD at 2.4 per cent, supported by strong domestic demand and falling unemployment.

Among the four major emerging economies, China, Brazil and Russia continued to slow in 2014; only India experienced a recovery, with a new government supporting investment. But while India's pace of growth increased, China's GDP softened to 7.4 per cent from 7.7 per cent in 2013, the slowest pace of growth in the country for 25 years. Brazil's growth ground down to barely 0.2 per cent, its slowest rate since the 2009 recession, while Russia only grew by 0.6 per cent over 2013, also its most lethargic rate since 2009, hit by the triple blow of lower oil prices, sanctions and a dramatic slide in the ruble, topped by a doubling of inflation.

Effects of the earlier financial crisis continued to trickle down and hinder global growth, seen in still high and in some cases rising government debt levels in some economies, labour markets that improved more-or-less uniformly slow in the EU, the ongoing impact of monetary policies in nearly all major economies and huge imbalances in the global economic system from trade channels to capital flows.

Although the year 2014 will likely be remembered for the plunge in oil prices that started midyear, in reality the average price of Brent was close to \$100/b for the year.

The first half saw stable prices maintained at over \$100/b, continuing the pattern of the previous four years, when it nearly always stayed above this mark.

The second half of the year was marked by volatility and OPEC called for calm on the market. At mid-June Brent was at a high for the year of \$115/b, a number which started to decline in August, falling below \$100/b in September and down to the sixties per barrel by the time the OPEC Conference met at the end of November. Excess supply — particularly coming from non-OPEC producers — as well as generally weaker demand in the first half of the year seemed to be behind the fall, although the extent of the fall in price did not match market fundamentals.

In November, OPEC held its 166<sup>th</sup> Ordinary Conference. After being briefed with supply, demand and world economy figures, the OPEC Ministers unanimously decided to keep OPEC's output unchanged at 30 mb/d; the Organization's Members have maintained a stable production figure for the past nine years, averaging 30 mb/d. With so many complex factors in the market — along with the refusal by non-OPEC producers to join in any cuts — the Ministers decided to let the market find its own legs.

Geopolitical factors impacted the market over the year, often in terms of what did not happen. Fears about supply disruptions in Iraq failed to be as severe as predicted, and Libya continued to produce more than anticipated, despite outages. Russia's

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involvement in the Ukraine around mid-year led to subsequent sanctions and anxiety, but this did not yet bite into the country's output in 2014.

At the same time, US crude oil production rose to a record high of 9.32 mb/d by the end of the year, the highest number since October 1970. US crude stockpiles were reaching a high of close to 400 mb, as the country remained bound by laws banning the selling of oil outside its borders.

Despite fears in the market in the second half of 2014, OPEC encouraged the industry not to panic, and instead to have a long-term view and continue to invest in production capacity which will be needed in the future in order to avoid a reactive swing to higher prices down the road. Investment is needed for the long-term sustainability of the industry, to create and maintain jobs and to support economies; the oil business has always required a future-looking perspective.

As pointed out in the OPEC World Oil Outlook 2014, long-term trends for 2040 show a very positive picture for oil, with fossil fuels remaining the dominant energy form at 80 per cent, split between coal, gas and oil, with demand continuing to rise.

To that end, many OPEC countries expressed their dedication to stability in global oil supplies through action over 2014 by continuing with ambitious investment plans throughout the year, despite the large fall in income they experienced as a result of lower oil prices later in the year.

Many challenges remain ahead for 2015, with oil prices fluctuating heading into the year and geopolitical issues heating up in many parts of the globe.

Member Countries will have to be particularly vigilant

in 2015 and ready to react to market changes. As always, OPEC will be there to support its commitment to act in the best interest of both consumers and producers, doing its part to create a stable market environment, working with other producers and consumers through ongoing dialogue, and ensuring the smooth supply of oil to world markets.

There are important dates on the 2015 horizon worth calling attention to, including the 6<sup>th</sup> OPEC International Seminar, under the theme of "Petroleum — An Engine for Global Development", to be held in Vienna from 3–4 June. The last, very successful event was held in 2012. This highlight of the international energy calendar will bring together high-level speakers from government, industry, academia and the media.

The world's focus on multilateral environmental matters will take on sharper focus over the year and reach a peak with the United Nations Climate Change Conference in Le Bourget, France starting at the end of November. OPEC has been very much involved in climate change discussions and is also preparing for the universal climate agreement which should culminate at this important meeting.

I would like, finally, to point out that 2015 will mark 55 years since the founding of OPEC, 50 of which have been spent in Vienna. These are both significant milestones for the Organization, showing both its longevity and its maturity. Although OPEC has changed and evolved over time, OPEC's commitment to its central principles continues to make it one of the most respected inter-governmental institutions in the world today.

Abdalla Salem El-Badri Secretary General



World economic growth continued recovering in 2014 to reach 3.3 per cent, the same level as in the previous two years. While the start of the year was relatively weak and first quarter growth was the lowest of the year, global economic growth recovered during the remainder of the year. Weakness in global growth in the first quarter was significantly impacted by a decline in GDP growth in the US due to an exceptional cold snap that rendered the economy considerably inactive. However, the negative impact of this inactivity was not reflected in oil demand, partially due to compensatory demand for heating oil.

While the OECD economies continued recovering throughout the year, emerging and developing econ-

omies were slowing on average. China — as the most important of the major emerging economies — was slowing, and Russia and Brazil were facing considerable headwinds in 2014. India, however, managed to recover from very low growth in 2013 — the only exception. The trend of OECD recovery *versus* slowing emerging and developing economies became even more accentuated over the year as oil prices started declining around the middle of the year, which significantly impacted oil-producing nations. In addition to these oil-market related developments, the geopolitical situation between Western economies and Russia worsened throughout the year, which limited growth in the Russian economy. Positively, some challenges

Note: Figures based on March 2015 Monthly Oil Market Report.

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were successfully managed throughout the year. The threat of an Ebola epidemic was contained and the outbreak had only very limited impact on global growth. Moreover, various geopolitical issues did not impact global economic growth significantly, with the exception of the Russia–Ukraine situation, which had a negative effect in both Russia and the EU.

Thus, the main general topics that shaped 2014 economic performance on a regional level in greater detail include:

- A cold snap was related to GDP decline in the US in the first quarter, as it not only impacted US domestic markets, but also important trading partners — like China and the Eurozone — via exports;
- Ongoing recovery in the OECD, compared with a slowdown in emerging and developing economies;
- The continued significant influence of monetary policies on real economic growth;
- The Euro-zone's continued recovery, particularly in the second half of the year;
- Japan's April sales tax increase, which not only caused volatility in domestic growth, but pushed the economy to decline again in 2014;
- China's continued slowdown, though large negative effects were balanced out via various support measures;
- India's recovery after the newly elected government continued a policy of supporting investments;
- Brazil's slowing growth amid capacity constraints, drought and lack of investment;
- The worsening situation between Western economies and Russia leading to sanctions, which in combination with declining oil prices pushed economic growth significantly lower in the country;
- The sharp decline in oil price during the second half of the year, which significantly impacted growth in oil-exporting economies.

Moreover, legacies of the global financial crisis remained apparent in 2014, also negatively impacting

global growth levels and keeping them below their potential. The most important of these factors were:

- Still high and in some economies rising government debt levels;
- Labour markets which improved only slowly in almost all the EU economies, with only a few exceptions;
- The continued impact of monetary policies in almost all major economies;
- Major imbalances in the global economic system remained, ranging from trade channels

   surplus versus deficit countries to capital flows to and from emerging economies, driven by low interest rates in major OECD economies.

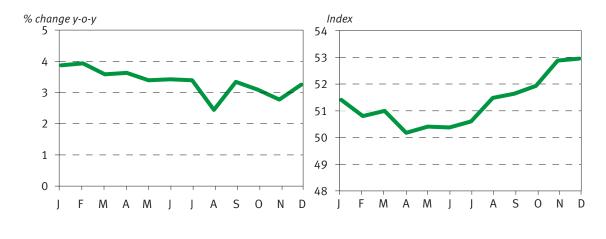
The year had a relatively slow start. Quarterly global growth for the G7 economies stood at only around 0.4 per cent quarter-on-quarter (q-o-q) seasonally adjusted and annualised rate (saar) in 1Q14, while it picked up considerably during the remainder of the year, reaching 1.5 per cent in 2Q14, 2.4 per cent in 3Q14 and 1.9 per cent in 4Q14. Despite the slow start and due to the strong recovery over the rest of the year, OECD economies managed to grow by 1.8 per cent in 2014. Furthermore, the four major emerging economies — China, India, Brazil and Russia — had a relatively slow start to the year as well. Growth in 1Q14 reached an average of 5.3 per cent q-o-q saar, the same level as in 2Q14, before growing by 6.5 per cent q-o-q in 3Q14, but then slowing considerably to 4.8 per cent q-o-q in 4Q14, the lowest growth level since 2011.

Currency markets were moved by the various monetary policies set by key central banks. The main development in currency markets was the strong appreciation of the US dollar *versus* all major currencies, but particularly compared with the euro and the yen. This was largely influenced by tightening US monetary policy, while both the European Central Bank (ECB) and the Bank of Japan (BoJ) continued their accommodative monetary policies.

On a yearly average, the US dollar rose by ten per cent year-on-year (y-o-y) versus the euro and

Figure 1 Global industrial production

Figure 2 Global manufacturing PMI

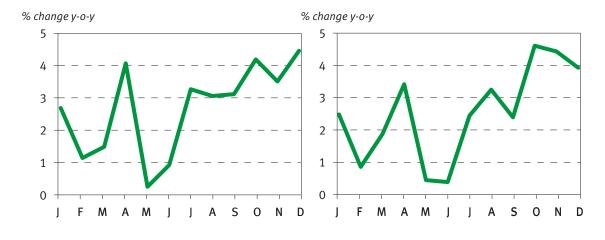


**Source**Netherlands Bureau for Economic Policy and Haver Analytics.

**Source**JP Morgan, Markit and Haver Analytics.

Figure 3 World trade

Figure 4
World exports



**Source**Netherlands Bureau for Economic Policy and Haver Analytics.

Netherlands Bureau for Economic Policy and Haver Analytics.

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increased by more than 15 per cent y-o-y compared with the yen. Moreover, it rose by more than four per cent *versus* the pound sterling and by more than nine per cent compared with the Swiss franc. Among emerging market currencies, developments around the Russian rouble were most significant; the rouble lost more than two-thirds of its value compared with the US dollar. The Brazilian real also posted a significant drop of more than 12 per cent.

#### North America, Japan and the Euro-zone

Developments in 2014 again showed differing growth patterns within the three major OECD economic regions due to various factors. While the US showed a decline in the first quarter and a strong recovery in the second and third quarters before slowing at the end of the year, the Japanese economy had the absolute opposite growth trend. The Euro-zone also had a strong start to the year, slowing down in the middle of the year, but recovering significantly in the last quarter of 2014. The US showed the highest yearly growth rate in 2014 of 2.4 per cent, while the Euro-zone managed to expand by 0.9 per cent after two years of recession. Japan's sales tax increase had a surprisingly large negative impact, and declining domestic demand pushed GDP growth into negative territory in 2014; it stood at -0.1 per cent.

The US started the year with a negative growth rate, impacted by exceptionally cold weather. However, consumer activity was only delayed until the second and third quarters. While GDP growth declined by 2.1 per cent q-o-q saar in 1Q14, it moved to 4.6 per cent q-o-q saar and five per cent q-o-q saar in the second and the third quarters. Only at the end of the year did economic activity slow down, and then only to 2.2 per cent. This was to some extent also impacted by the strong rise in the US dollar, which hurt exports, while domestic demand from private households remained strong. Solid domestic demand was also significantly supported by an improving labour market in 2014; 3.1

million non-farm payroll jobs were added in 2014 and the unemployment rate fell from 7.4 per cent on average in 2013 to a yearly average of 6.1 per cent and even reached an impressive 5.6 per cent in December 2014. This lifted consumer confidence to new highs in 2014 and supported economic growth in general. However some slack became apparent at the end of the year.

Japan's economy experienced phenomenal 1Q14 growth of 5.1 per cent q-o-q saar. This came, however, in anticipation of the April sales tax increase, which lifted sales tax from five per cent to eight per cent. This significantly impacted GDP growth in the second and third quarters, with GDP falling by 6.4 per cent q-o-q saar and 2.6 per cent q-o-q saar, respectively. Moreover, it lifted inflation significantly, to levels above three per cent. Though the government and the Bank of Japan were aiming at an inflation rate of around two per cent in addition to the sales tax increase, inflation was sometimes rising significantly more than earnings in the labour market. As a consequence, real income retail sales turned considerably negative in the second quarter and grew only very tenderly in the second half. The BoJ continued its monetary stimulus measures throughout the year and the government also initiated structural reforms. However, all support attempts were not able to lift growth into positive territory.

The Euro-zone continued recovering in 2014. After a relatively strong start to the year, growth rates in the second and third quarters decelerated before recovering at the end of the year, leading to yearly GDP growth of 0.9 per cent in 2014. The recovery was relatively uneven; while Germany was quite strong it also showed signs of soft growth during some points in 2014, particularly towards the end of the year. France also faced various challenges, while some of the peripheral economies managed to recover, particularly Spain, which showed healthy GDP growth of 1.5 per cent in 2014, the same level as Germany. France grew by only 0.4 per cent and Italy — the third largest economy — declined by 0.4 per cent. The aftereffects

of the global financial crisis were still not digested in the Euro-zone, where high sovereign debt levels lingered and unemployment rates improved very slowly, only falling from 11.8 per cent in January to 11.4 per cent in December. Moreover, inflation remained a major issue as it turned negative at the end of the year and forced the ECB to embark on new monetary policy measures.

### **Emerging and Developing Economies**

With the exception of India, the major emerging economies displayed downward trends in GDP growth for 2014 compared with a number of years ago. While India's pace of growth increased from 6.9 per cent in 2013 to 7.2 per cent, growth in China's GDP softened to 7.4 per cent from 7.7 per cent a year

Table 1
World economic growth rates, 2013–14 (% change)

Grouping/country	2013	2014
OECD	1.4	1.8
Other Europe	1.8	1.5
Developing countries	4.1	3.7
Africa	3.2	3.3
Latin America and Caribbean	3.2	0.7
Asia and Oceania	4.7	4.9
Asia Pacific	4.5	3.9
OPEC	2.2	2.6
China	7.7	7.4
FSU	2.2	1.0
Total world	3.3	3.3

#### Sources

Secretariat estimates; OECD, Main Economic Indicators; OECD, Economic Outlook; International Monetary Fund (IMF), World Economic Outlook; IMF, International Financial Statistics.

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earlier. Although this is still considered to be a comparatively high figure, it marks the slowest pace of growth in China since 1990. The slowing momentum was more obvious in Brazil and Russia. The economy of Brazil barely grew 0.2 per cent compared with 2.5 per cent in 2013. It is the slowest growth rate since the 2009 recession. Likewise was the case in Russia, where GDP was 0.6 per cent y-o-y higher, down from 1.3 per cent in 2013, highlighting the fourth consecutive year of declining growth rates.

Developing countries generally saw slower momentum in their economies, growing an overall 3.7 per cent in 2014, down from 4.1 per cent in 2013, again the lowest figure since 2009. While growth in Africa slightly improved to 3.3 per cent from 3.2 per cent in 2013, GDP growth in Latin America was impacted by economic contraction in Argentina and disappointing performance in Brazil's economy. Latin

America and the Caribbean's GDP grew by 0.7 per cent in 2014, compared to 3.2 per cent in 2013. The Middle East and North Africa saw an improvement in economic performance to 2.7 per cent from 1.5 per cent in 2013.

#### Brazil, Russia, India and China

In Brazil, GDP growth in 2014 slowed to 0.2 per cent y-o-y, its most lethargic rate since the 2009 recession. The economy grew in 1Q14 at almost the same rate as in 1Q13, but started to contract in 2Q14 and 3Q14 in yearly comparisons. In the first three quarters of 2014, gross fixed capital formation declined, whereas growth in private consumption stayed positive, though on a downward path. The services sector, which accounts for nearly 65 per cent of total

Table 2
Summary of macroeconomic performance of the 'BRIC' countries in 2014

	GDP growth rates	Consumer price index	Current account balance	Governmental fiscal balance	Net public debt
		% y-o-y change	US \$ bn	% of GDP	% of GDP
Brazil	0.2	6.3	-91.3	-6.7	63.2
Russia	0.6	7.8	51.9	-0.5	8.3
India	7.2	7.2	-27.4	-4.1	49.7
China	7.4	2.1	214.0	-1.8	15.6

#### Sources

Source: OPEC Secretariat, Consensus, Economist Intelligence Unit.

GDP, was in contraction for the last three months of 2014, as well as in two other months of the year. The manufacturing sector also shrank over the last seven months of 2014. Inflation was increasing almost throughout the entire year, starting at 5.3 per cent in January and registering 6.2 per cent in December. The benchmark interest rate increased from 10.5 per cent at the beginning of 2014 to 11.75 per cent in December. The economy of Brazil contracted 0.2 per cent yo-y in 4Q14. Private consumption increased 1.3 per cent y-o-y in 4Q14, the lowest 4Q growth since 2003. Gross Fixed Capital Formation declined 5.8 per cent and government consumption decelerated 0.2 per cent in the same period. Trade balance was another trigger for GDP slowdown in 4Q14, with exports falling 10.7 per cent y-o-y, while imports were 4.4 per cent lower.

In 2014, Russia's GDP growth stood at 0.6 per cent, higher than most estimates. However, it is the lowest rate of economic growth since the 2009 recession. The economy slowed for the fourth straight year, mainly due to a fall in investment and slower growth in household consumption, according to revised data from the Federal Statistics Office. The economy of Russia grew in the first three quarters at its slowest rate since 2009, though it was better than expected due to significantly lower imports and higher agricultural production. The economic situation notably deteriorated in 2014 on the back of geopolitical tensions, which prompted huge capital outflows from the country amounting to more than \$85 billion. The ruble slid by nearly 51 per cent during 2H14 on increasing tensions and a worsening trade balance. Inflation, in turn, nearly doubled, increasing from 6.5 per cent at the beginning of the year to 11.3 per cent in December. The central bank raised its benchmark interest rate five times in 2014, from 5.5 per cent in January to 17 per cent in December, in a vain attempt to limit currency depreciation and reduce the risk of hyperinflation. As a result, growth in retail sales declined notably to less than two per cent in 2H14. The manufacturing sector, despite having temporarily benefited from import-substitution policies between July and November, was back in contraction territory in December for the seventh consecutive month. Likewise, the services sector showed signs of deceleration in eight months of 2014. GDP growth posted 0.4 per cent y-o-y in 4Q14, the lowest since 4Q09. Household consumption increased nearly one per cent, while government consumption declined 0.2 per cent over the same period. Gross Fixed Capital Formation declined 1.2 per cent *versus* 4Q13. Growth was also supported by a drop in imports of 7.7 per cent, which was greater than the 2.3 per cent deceleration in exports.

In 2014, India's GDP growth rate — according to the new style of GDP calculations based on the market price method instead of the cost-based method - stood at 7.2 per cent. Despite the growth upgrade, India continued to struggle with serious underlying problems in 2014 such as high inflation and relatively tight monetary policy, which dampened domestic demand, while private and government investment were further hindered by high corporate indebtedness and a wide fiscal deficit. In 4Q14, India's retail inflation continued to be moderate, which can largely be attributed to the high base effect of the previous year, weaker oil prices and contained food inflation. New government policies, anticipated growth in demand and the prospect of greater market stability drove business optimism. Business confidence regarding output, new business and employment was led by service providers. However, price pressures are set to accelerate faster for goods producers, suggesting tighter market conditions in the manufacturing sector. Operating conditions in the Indian manufacturing sector improved for the eleventh month in succession in September 2014, although the pace of growth weakened to its slowest since December 2013. This was matched by slowdowns in output and new order growth, while cost pressures eased during the latest survey period.

China's GDP growth of 7.4 per cent in 2014 was the slowest for the past quarter century, but the slowdown still has some way to go. China's official 4Q14 GDP figures show that on a y-o-y basis, growth was 7.3 per cent, the same as in the previous quarter. As

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Table 3
Comparison: OPEC and non-OPEC developing countries

	2	2013	20	)14*
	OPEC	Non-OPEC	OPEC	Non-OPEC
Real GDP growth rate (%)	2.2	4.1	2.6	3.8
Petroleum export value (US \$ bn)	1,112.1	401.7	993.3	391.2
Value of non-petroleum exports (US \$ bn)	469.4	3,138.0	487.4	3,228.7
Oil exports as percentage of total exports (%)	70.3	11.3	67.1	10.8
Value of imports (US \$ bn)	880.0	3,985.2	914.8	4,008.2
Current account balance (US \$ bn)	417.7	-218.4	273.6	-135.0
Crude oil production (mb/d)	30.2	9.9	30.1	10.1
Reserves, excluding gold (US \$ bn)	1,446.0	2,774.8	1,442.3	2,805.6

<sup>\*2014</sup> data are preliminary estimates.

#### Note

Figures are partly estimated. Non-OPEC DCs do not include China, the FSU and Russia, in line with ECB country groupings.

#### Sources

IMF, International Financial Statistics; IMF, World Economic Outlook; EIU, country reports; World Bank Development Indicators; OPEC Annual Statistical Bulletin; OPEC database; OPEC Secretariat estimates.

a result, full year 2014 growth was at 7.4 per cent y-o-y, compared with 7.7 per cent in 2013. A variety of macroeconomic indicators and cycle analysis results confirmed that the economy may have slowed significantly over recent months and that at the end of 2014 Chinese economic activity was continuing to lose momentum. In terms of GDP revisions, the National Bureau of Statistics of China (NBS) announced a revised GDP for 2013 on 19 December

2014 following the third economic census. After this revision, the size of China's economy in 2013 increased about 3.4 per cent from the previously reported amount of CN¥56.9 trillion to CN¥58.8 trillion (\$9.4 trillion). The latest revision is a much smaller increment than earlier upward revisions of 16.8 per cent and 4.4 per cent following the past two censuses of 2004 and 2008, respectively. The NBS also announced that this revision could affect

2014's GDP. China's 3Q14 foreign exchange reserve numbers came in below expectations. Reserve levels actually fell from \$3.99 trillion in 2Q14 to \$3.89 trillion in 3Q14. A strong dollar was the main reason behind China's foreign reserves decline. In 3Q14, the US dollar index appreciated by 7.7 per cent, thus the value of non-US dollar assets in foreign reserves depreciated when exchanged to US dollars. The People's Bank of China (PBoC) reduced its benchmark

interest rates for the first time since June 2012, indicating that weakening growth had tipped decision-making towards an accommodative stance from a strongly prudent one earlier in the year. On 21 November 2014, the PBoC announced that benchmark interest rates for one-year loans would be lowered the next day by 40 basis points to 5.6 per cent, and that benchmark one-year deposit rates would be lowered 25 basis points to 2.75 per cent.

Table 4

OPEC Member Countries' real GDP growth rates, 2013–14 (% change)

Member Country	2013	2014
Algeria	2.7	2.9
Angola	4.1	4.1
Ecuador	4.2	3.6
IR Iran	-2.6	1.7
Iraq	4.2	1.5
Kuwait	2.0	1.9
Libya	-9.0	-5.0
Nigeria	7.0	6.0
Qatar	6.1	5.6
Saudi Arabia	3.8	3.6
United Arab Emirates	4.8	4.5
Venezuela	1.3	-3.0
Average OPEC	2.2	2.6

#### Sources

IMF, International Financial Statistics; IMF, World Economic Outlook; Economist Intelligence Unit (EIU), country reports; official OPEC Member Countries' statistics; Secretariat's estimates.

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#### World oil demand

World oil demand grew by around 1.0 million barrels per day (mb/d) in 2014, in line with initial projections back in July 2013. Lower oil prices and improvements in economic activity in major demand centres such as the US and India resulted in better-than-expected acceleration in oil demand in 4Q14.

OECD demand continued on its descending trend in 2014. OECD America is the only region with positive growth at 0.09 mb/d while OECD Europe and Asia Pacific declined by 0.18 mb/d each. Non-OECD regions, on the other hand, grew by 1.23 mb/d in 2014, with China accounting for the majority of

growth, rising by 0.40 mb/d. The Middle East, Other Asia and Latin America grew by 0.25 mb/d, 0.21 mb/d and 0.20 mb/d, respectively.

#### **OECD** demand

#### **OECD Americas**

In OECD Americas, 2H14 improvements in macroeconomic indicators, supported by lower oil prices, boosted transportation fuel consumption in the US. However, growth levels in other countries in the region — Mexico and Canada — modestly increased or declined. In the US, 2014 ended with positive oil

demand growth for the second consecutive year, rising by around 0.5 per cent y-o-y. This is primarily the result of a rise in 2H14 affecting the overall figure for 2014, influenced by lower prices for transportation fuels gasoline, diesel oil and jet fuel. US oil demand in 1H14 shrank by around 20 trillion barrels per day (tb/d) y-o-y, despite additional requirements for heating purposes, as weather conditions were colder than initially anticipated in 1Q14. However, the poor performance of natural gas liquids (NGLs), residual fuels and gasoline in 2Q14 dragged overall average consumption growth lower, to its lowest point on a quarterly basis since 4Q12.

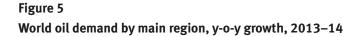
#### **OECD** Europe

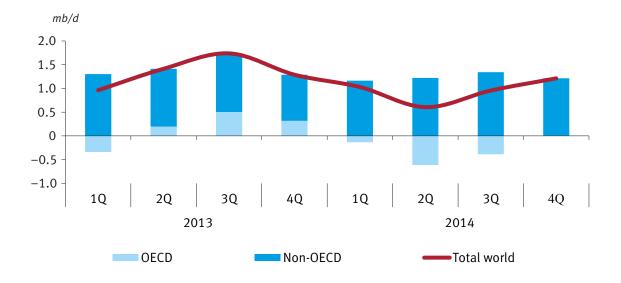
In OECD Europe, 2014 oil demand generally contracted by around 0.2 mb/d, with the bulk of losses in 1H14 and some signs of improvement thereafter, as lower oil prices propelled oil consumption. Overall oil demand in all of the four big con-

sumers — Germany, UK, France and Italy — declined in 2014. Looking at the product mix, diesel demand remained weak, mainly as temperatures recorded warmer readings from one year earlier, promoting lower consumption for heating purposes. Gasoline was flat y-o-y, despite steady vehicle sales growth figures for the last 18 consecutive months. The major reasons for this stagnation in gasoline growth included continued progress in efficiency standards, the use of alternative fuels in the transportation sector, high taxation polices in major European consumer countries and slower economic momentum than initially anticipated.

#### **OECD Asia Pacific**

In OECD Asia Pacific, oil demand declined in 2014, mainly as a result of less Japanese direct crude/ fuel oil burning for electricity generation and a weakening economy in that country. The year saw a drop in oil consumption in Japan of around 0.26 mb/d.





Negative growth was apparent nearly every month in 2014 with the exception of March, which preceded the implementation of the new sales tax programme. Products used for power generation, which have been steadily declining over the past months, in addition to transportation fuels and industrial fuels, showed negative progress compared with the same period one year earlier. A slowdown in macroeconomic indicators — supported by a sales tax hike in April 2014, as well as an increase in inflation levels — all reduced oil requirements.

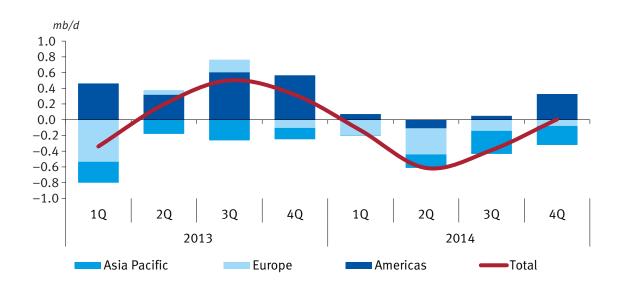
#### Non-OECD demand

#### Other Asia

Oil demand in the highest-consuming nation in the region — India — grew compared with 2013, showing a yearly increase of around 88 tb/d or two per cent. Indian oil demand growth was dominated

by gains in oil usage for the road transportation and residential sectors. For the transportation sector, gasoline usage grew sharply; similarly, liquefied petroleum gas (LPG) usage increased in the residential sector. Sharp gains in the sale of vehicles particularly two-wheelers — in combination with a growing economy, coexisted with strong increases in gasoline demand. Strong LPG usage in the residential sector has, in fact, a long tradition in India and is additionally supported by subsidized LPG cylinders. Fuel oil requirements in the agricultural sector suffered from fuel substitution with natural gas and fell by almost eight per cent compared with the same period in 2014. Rising construction activities in the country implied additional demand for bitumen; in the same vein, naphtha usage for the petrochemical industry marked solid improvements. Oil demand was flat to declining in other parts of the region such as Indonesia, Malaysia, Vietnam and Taiwan.

Figure 6
OECD oil consumption by quarter and region, y-o-y growth, 2013–14



#### Latin America

Oil demand in the largest consuming nation — Brazil — increased by more than three per cent in 2014 y-o-y. Growth mainly stemmed from drought conditions in Brazil in 2H14, despite the unstable overall economic sentiment seen during some periods of the year. All product requirements rose, with gasoline, alcohol, diesel and fuel oil marking the strongest increases in the transportation, manufacturing and industrial sectors.

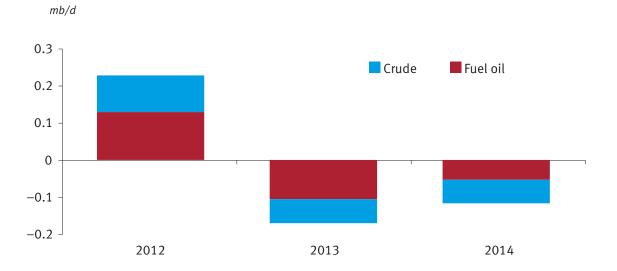
In Argentina, year-to-date 2014 oil demand growth levels were almost flat, falling marginally by a mere 0.1 per cent y-o-y. All product categories were more or less neutral, to some extent slightly increasing or decreasing. While LPG and jet/kerosene were positive, gasoline was flat, and diesel oil and other products were negative, inferring no significant developments in the country compared with 2013.

#### Middle East

In the Middle East, oil demand saw opposing trends in 2014. In Saudi Arabia, oil demand rose strongly again, growing by more than nine per cent yo-y, while geopolitical turbulence in some parts of the region implied sharp declines, for example in Iraqi and Syrian oil demand.

Transportation, industrial fuels and direct crude burning were the contributing elements in rising Saudi Arabian oil demand. In Iraq, oil requirements have been on a sharply declining path since July 2014, with all product category requirements falling, particularly transportation and industrial fuels. Iraqi direct crude oil burning for electricity generation, however, remained flat compared with the same period in 2013. Oil demand grew in Qatar, Kuwait and the UAE. Transportation fuels, notably gasoline, dominated this increase.

Figure 7
Japanese direct crude and residual fuel burning, y-o-y growth, 2012–14



#### China

In China, demand was better than initially expected, as progressing petrochemical and transportation sectors lent support to oil consumption despite concerns over weakening in the overall economy.

LPG and gasoline demand increased by about 18 per cent and 11 per cent y-o-y, respectively, while jet/kerosene grew by about seven per cent compared with 2013. Diesel oil slightly increased by one per cent while fuel oil fell by 12 per cent compared with the same period in 2013.

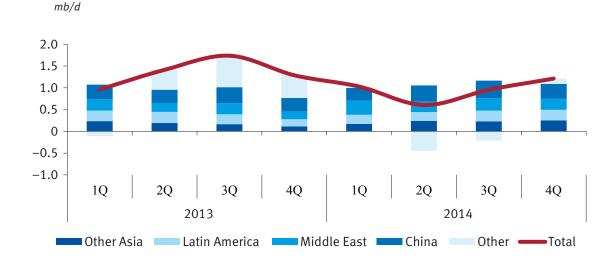
The structure of Chinese oil demand growth continued to be characterized first by rising gasoline usage in the road transportation sector, with increasing car sales providing support; second by higher LPG and naphtha demand for the petrochemical sector; and third by increasing jet fuel demand for the air transportation sector. On the other hand,

the consumption of residual fuel oil and diesel oil declined mainly as a result of fuel substitution by natural gas and coal, particularly in the industrial sector.

#### World oil supply

The world's petroleum liquids supply — boosted by a tight oil, condensate and NGL output surge from US unconventional sources — was higher in 2014, with total growth of 2.20 mb/d compared with 0.58 mb/d in 2013. Non-OPEC oil producers from all OECD regions saw good growth in 2014 for the first time in recent years, which led to a rise of 1.87 mb/d to average 24.12 mb/d. Moreover, the oil supply from developing countries, the former Soviet Union and China increased by 0.21 mb/d, 0.02 mb/d and 0.03 mb/d,

Figure 8
Non-OECD oil consumption by region and quarter, y-o-y growth, 2013–14



respectively. The non-OPEC liquids supply increased by 2.17 mb/d, followed by OPEC NGLs at 0.18 mb/d to total an average of 62.32 mb/d. OPEC crude production averaged 30.07 mb/d in 2014. The total world oil supply averaged 92.4 mb/d, with OPEC's crude share standing at 32.6 per cent compared with 33.5 per cent one year earlier.

### **Non-OPEC supply**

Non-OPEC supply averaged 56.49 mb/d in 2014, an increase of 2.17 mb/d over the previous year. Growth was driven by a rise from OECD Americas — with the US being the main contributor, followed by Canada — and other regions, including Brazil, Russia, Norway,

Table 5

OPEC crude oil production based on secondary sources, 2010–14 (1,000 b/d)

										Average change
	2010	2011	2012	2013	1Q14	2Q14	3Q14	4Q14	2014	2014/13
Algeria	1,250	1,240	1,210	1,159	1,128	1,158	1,167	1,152	1,151	-7
Angola	1,786	1,667	1,738	1,738	1,600	1,646	1,705	1,688	1,660	-78
Ecuador	475	490	499	516	537	541	543	546	542	26
IR Iran	3,706	3,628	2,977	2,673	2,774	2,768	2,759	2,763	2,766	93
Iraq	2,401	2,665	2,979	3,037	3,217	3,266	3,153	3,424	3,265	228
Kuwait	2,297	2,538	2,793	2,822	2,797	2,786	2,794	2,719	2,774	-48
Libya	1,559	462	1,393	928	371	222	614	679	473	-455
Nigeria	2,061	2,111	2,073	1,912	1,901	1,892	1,949	1,904	1,911	0
Qatar	791	794	753	732	733	725	724	682	716	-15
Saudi Arabia	8,254	9,296	9,737	9,586	9,702	9,675	9,747	9,608	9,683	97
UAE	2,304	2,516	2,624	2,741	2,745	2,749	2,791	2,757	2,761	19
Venezuela	2,370	2,413	2,392	2,389	2,381	2,377	2,369	2,364	2,373	-16
Total OPEC	29,255	29,821	31,168	30,231	29,885	29,805	30,316	30,286	30,075	-157

#### Note

Totals may not add up due to independent rounding.

#### Source

OPEC Secretariat assessment of selected secondary sources.

the Sudans, Australia, Malaysia and China. Declines from Mexico, Indonesia, Syria, Kazakhstan and Azerbaijan partially offset growth.

On a regional basis, OECD's oil supply increased by 1.87 mb/d in 2014 over the previous year to average 24.12 mb/d. Much of the OECD's growth in supply came from OECD Americas, which experienced the greatest growth among all non-OPEC regions in 2014 at 1.82 mb/d. OECD Asia Pacific and OECD Europe experienced relatively good growth in 2014 at 0.03 mb/d and 0.02 mb/d, respectively. The US experienced the highest growth in oil supply among all non-OPEC countries in 2014, up by 1.64 mb/d, supported by a surge in tight oil production from shale development areas. Additionally, Canada's oil supply saw strong growth of 0.27 mb/d in 2014, while Mexico encountered a minor decline of 0.09 mb/d compared with the previous year. Oil production in the North Sea increased mainly in Norway and the UK, where it was boosted by 140 tb/d and 70 tb/d, respectively, compared with one year earlier. Australia's oil supply also experienced an increase of 30 tb/d in 2014; indeed it was up by 100 tb/d over the previous year's decline of 70 tb/d.

Oil production in developing countries (DCs) grew by 0.21 mb/d in 2014, mainly in Latin America, to average 12.69 mb/d compared with one year earlier. The Other Asia and Middle East regions experienced supply declines in 2014, while Africa and Latin America registered production growth. Relative growth by Colombia and Brazil in Latin America compared with initial forecasts impacted total DC growth in 2014. The Sudans oil supply was up by 0.05 mb/d, showing the largest increase among all African countries, reaching 0.29 mb/d. OECD growth was approximately equal to the declines experienced in other countries such as Syria and Yemen in the Middle East, Indonesia, Brunei, India and Malaysia in Other Asia, Argentina in Latin America and minor declines in Congo, Gabon and South Africa on the African continent.

The Former Soviet Union (FSU)'s oil supply experienced growth of only 0.02 mb/d in 2014, to average 13.43 mb/d. Most of Russia's growth was offset by

annual declines in Kazakhstan and Azerbaijan. Chinese oil production increased by 30 tb/d in 2014 to average 4.32 mb/d.

### **OPEC crude oil production**

According to secondary sources, OPEC crude oil production averaged 30.07 mb/d in 2014, a decrease of 0.16 mb/d over the previous year. It was higher in 2H14 by 0.45 mb/d to average 30.30 mb/d compared with 1H14. OPEC's share of the global crude oil supply in 2014 dropped to 32.6 per cent (-0.16 mb/d) from 33.5 per cent the previous year. The main reduction came from Libya, while the greatest increase was seen in Iraq, according to secondary sources. Moreover, OPEC crude oil production was seen lower by 0.91 mb/d to average 30.68 mb/d in 2014, compared with a year earlier, based on direct communication.

#### **Transportation**

Following multiple drops in freight rates reported in previous years, 2014 brought enhanced rates for dirty tankers of different classes. Spot freight rates on all reported routes reflected notable gains from the previous year. The gains were registered in all quarters of the year, with the highest improvement seen in the first quarter, when rates improved in a contrary pattern to the usual seasonal drop.

On average, spot freight rates rose for dirty vessels very large crude carriers (VLCC), Suezmax and Aframax by 18 per cent, 26 per cent and 26 per cent, respectively, from one year earlier. Contrarily, clean tanker market average spot freight rates declined slightly as a result of lower freight requirements in the East of Suez, though there was a slight improvement in requirements for the West. In total, rates held at a level similar to that of the previous year.

In conjunction with higher dirty tanker freight rates registered in 2014, bunker fuel prices dropped

Table 6 World oil demand and supply balance, 2011-14

	2011	2012	2013	1Q14	2Q14	3Q14	4Q14	2014
World demand (mb/d)								
OECD (ms/ a)	46.4	45.9	46.1	45.7	45.0	46.0	46.6	45.8
OECD Americas	24.0	23.6	24.1	23.9	23.8	24.4	24.7	24.2
OECD Europe	14.3	13.8	13.7	13.0	13.6	13.9	13.5	13.5
OECD Asia Pacific	8.2	8.5	8.3	8.9	7.7	7.7	8.4	8.1
DCs	27.3	28.3	29.0	29.4	29.8	30.4	29.7	29.8
FSU	4.3	4.4	4.5	4.4	4.2	4.6	4.9	4.5
Other Europe	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
China	9.4	9.7	10.1	10.1	10.6	10.3	10.9	10.5
(a) Total world demand	88.1	89.0	90.3	90.2	90.2	92.0	92.8	91.3
Non-OPEC supply (mb/d)								
OECD (ms/a)	20.2	21.1	22.2	23.5	23.9	24.1	25.0	24.1
OECD Americas	15.5	16.7	18.2	19.2	19.9	20.2	20.7	20.0
OECD Europe	4.1	3.8	3.6	3.8	3.5	3.4	3.7	3.6
OECD Asia Pacific	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
DCs	12.6	12.1	12.1	12.2	12.2	12.4	12.6	12.4
FSU	13.2	13.3	13.4	13.5	13.4	13.4	13.5	13.4
Other Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	4.1	4.2	4.2	4.3	4.3	4.2	4.4	4.3
	2.1	2.1	2.1	2.2	2.2			2.2
Processing gains  Total non-OPEC supply						2.2	2.2	
OPEC NGLs + NCOs	52.4	52.9	54.3	55.8	56.1	56.4	57.7	56.5
OPEC NGLS + NCOS	5.4	5.6	5.6	5.7	5.8	5.9	5.9	5.8
(b) Total non-OPEC supply	57.8	58.5	60.0	61.5	61.9	62.2	63.7	62.3
and OPEC NGLs + NCOs (mb/d)								
OPEC crude oil production <sup>1</sup>	29.8	31.2	30.2	29.9	29.8	30.3	30.3	30.1
Total supply (mb/d)	87.6	89.6	90.2	91.4	91.7	92.5	94.0	92.4
Balance (stock change and misc.)	-0.5	0.6	-0.1	1.2	1.5	0.6	1.2	1.1
OECD closing stock level (outside I	FCPFs) (m	h)						
Commercial	2,605	2,664	2,566	2,584	2,652	2,719	2,710	2,710
SPR	1,536	1,547	1,584	1,586	1,581	1,579	1,581	1,581
Total	-	4,211						4,291
Oil-on-water	825	879	909	954	914	952	924	924
Days of forward consumption in OI	CD.							
Commercial onland stocks		ΕO	E Z	E 7	ΕO	EO	EO	EO
SPR	57 33	58 34	56 35	57 35	58 34	58 34	59	59
Total	90	91	91	35 <b>93</b>	34 <b>92</b>	34 <b>92</b>	35 <b>94</b>	34 <b>94</b>
Mama itama (mb/d)								
Memo items (mb/d)	0.0	0.0	0.0	0.1	0.1	0.0	0 (	0.0
FSU net exports	8.9	8.8	8.9	9.1	9.1	8.8	8.6	8.9
Difference (a — b)	30.3	30.5	30.4	28.7	28.3	29.7	29.1	29.0

**Note**Totals may not add up due to independent rounding.

¹OPEC Secretariat assessment of selected secondary sources.



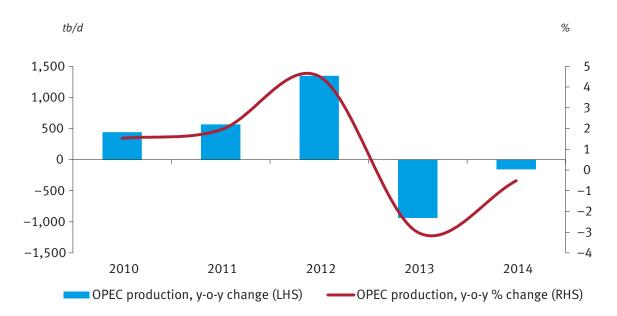
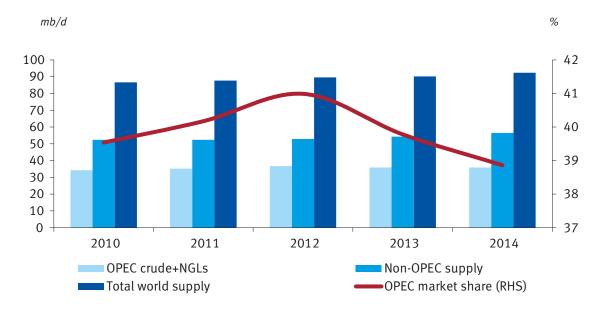


Figure 10
OPEC¹, non-OPEC² and total world supply, as well as OPEC market share, 2010–14



#### Notes

- 1. Including OPEC NGLs + non-conventional oils.
- 2. Including processing gains.

further from 2013 in all major bunkering ports, mainly following the crude oil price drop. On average, bunker fuel prices were ten per cent lower than those registered in the same period one year earlier, adding further enhancement to ship owners' margins and increasing voyage profitability through reduction of main operating costs.

Despite experiencing volatility during the year, VLCC average spot freight rates increased by 18 per cent in 2014 from one year earlier, with rates rising on all reported routes with no exception. Rates for VL-CCs operating on the Middle East-to-East and Middle East-to-West routes increased by 18 per cent and 15 per cent, respectively, while those for VLCCs operating on the West Africa-to-East route saw the largest gain among routes, rising by 21 per cent from one year earlier. Several factors contributed to enhanced freight rates including tonnage demand from the East, an active market in West Africa, port delays in several regions and an increase in floating storage.

Suezmax and Aframax spot freight rates followed a similar trend to VLCC rates in 2014. Averaged annually, Suezmax and Aframax spot freight rates increased by 26 per cent each in 2013 compared with the previous year. This increase was seen in smaller dirty vessels on the back of an improved West African tonnage market, higher numbers of prompt replacements, increased lighterage tonnage demand and a spillover effect from VLCC tanker demand.

Clean tanker spot freight rates had a different development dynamic in 2014 from those of dirty tankers. On an annual basis, clean tanker average spot freight rates remained almost flat in 2014 compared with one year before. The unchanged state of average rates was the result of a slight drop in freight rates for tankers trading on the East of Suez, which fell by three per cent, but which was balanced by a 1.5 per cent enhancement seen in the West of Suez. The highest decline was seen on the Singapore-to-East route, which dropped by 11 per cent from one year earlier, while an eight per cent improvement in freight rates on the Middle East-to-East route was insufficient in reversing the annual average drop. Thus clean ton-

nage demand varied during the course of the year, as clean tanker market activity fluctuated, though remaining low. There was often no significant improvement effected by tonnage oversupply and demand remained basically stable.

#### **Refinery industry**

Product markets displayed mixed performance in 2014, showing a recovery during the driving season in the Atlantic Basin supported by stronger US gasoline demand, thus allowing US and European refinery margins to become healthy in 3Q14, though margins weakened again at the end of the year.

In contrast, Asian product markets turned bearish at the end of 2Q14 on weakening demand amid higher distillate supplies. However, during 4Q14, strong regional demand for gasoline and middle distillates allowed for a sharp recovery in refinery margins in Asia.

Starting in 2Q14, Atlantic Basin product markets saw some improvement, driven by developments at the top of the barrel on the back of stronger gasoline demand in the US ahead of the driving season. This allowed margins to recover by almost \$4/b from March to average around \$11/b for April in the US. However, gasoline market fundamentals softened in July, with inventories rising on the back of higher refinery run rates.

Product markets strengthened in August with gasoline market fundamentals supported by tight supply, triggered by outages of fluid catalytic cracking (FCC) units at a time of falling product inventories and strong seasonal demand. The refinery margin for West Texas Intermediate (WTI) crude on the US Gulf Coast (USGC) increased, peaking at around \$16/b in September.

However, margins suffered a sharp drop in 4Q14, losing more than \$4/b due to an oversupply of products in the region because of higher refinery runs. The refinery margin for WTI crude on the USGC averaged around \$10/b in 2014, exhibiting a sharp drop of

more than \$5/b versus the previous year, while the margin for Light Louisiana Sweet (LLS) crude on the USGC showed a slight uptick of 70 cents versus the previous year to stand at an average of above \$12/b. The margin was supported by relative weakness in the LLS price versus WTI crude.

US refiners continued with higher refinery runs, supported by a recovery in domestic demand amid increasing export opportunities, mainly to Latin America. Refinery runs reached 92.2 per cent of capacity during the peak driving season in 3Q14 to average 89 per cent of capacity during the year, 1 ppt higher than in 2013.

In Europe, product markets showed some recovery in February, reversing the declining trend seen at the end of 2013, when margins were impacted by low domestic demand and a lack of export opportunities.

Product markets in Europe strengthened in 3Q14 on the back of higher export opportunities and bullish sentiment over the driving season in the US, while middle distillates were stable amid a balanced market. This positive performance allowed the refinery margin for Brent crude in Northwest Europe to see a sharp gain of more than \$2/b versus the previous quarter, which allowed margins to average \$3.20/b in 2014, gaining 40 cents vs the average for 2013.

European refiners were operating at moderated throughput levels in response to deteriorating margins. However, an improvement in margins starting in the second quarter amid a decline in Brent prices encouraged an increase in refinery runs, which led to more than 10 mb/d of throughput during 3Q14 — the highest level seen in more than a year, and an average of around 80 per cent for 2014.

Asian refining margins experienced mixed performance in 2014; the product market weakened during 2Q14, falling by \$1/b in the middle of the year. However, it saw robust recovery during 4Q12 to reach almost \$5/b, thus averaging around \$2/b in 2014, similar to the previous year.

The Asian market came under pressure starting in May due to new online capacity within the region after spring maintenance ended. Heavy losses were recorded at the middle and even more at the bottom of the barrel due to continued weakness in fuel oil; demand for the product declined in the region because of lower bunker and power generation demand, as well as fuel substitution by natural gas and coal.

However, the downward trend reversed at the end of 3Q14 as increasing gasoline and fuel oil demand along with falling crude prices allowed for a crack spread recovery. The Asian market strengthened in 4Q14, supported by strong seasonal winter demand in the region along with positive performance seen at the top and bottom of the barrel. This encouraged a strong recovery in refinery margins, which reached almost \$4/b in the final quarter.

In Asia, Chinese refinery runs averaged around 85 per cent during 2014, falling 5 percentage points (ppt) *versus* the previous year due to new online capacity added since the beginning of the year, which provided more flexibility to the sector.

In Singapore and Japan, refinery runs for the year averaged around 94 per cent, and 79 per cent of capacity, respectively. A similar level was seen in 2013. In Japan, capacity was cut in 2014 due to new regulations in the refinery sector regarding minimum conversion capacity.

#### **Stock movements**

Total OECD inventories — including commercial and government stocks — rose by 141 mb or 0.4 mb/d at the end of 2014 from the same time the previous year to stand at 4,291 mb. During the year, they reached their highest level in September, rising to 4,299 mb. This sharp build was attributed mainly to an increase in commercial oil inventories of 144 mb — ending the year at 2,710 mb — while the Strategic Petroleum Reserve (SPR) fell slightly by 3.0 mb to 1,581 mb.

On a regional basis, the bulk of the build in total OECD inventories came from the Americas, which increased by 123 mb, while OECD Europe and Asia Pacific rose slightly by 11 mb and 7 mb, respectively. On a quarterly basis, total OECD inventories experienced a

contra-seasonal stock build of 19 mb in the first quarter, followed by a build of 63 mb and 66 mb in the second and third quarters, respectively. The fourth quarter saw a seasonal stock draw of 7 mb.

The first three quarters of 2014 saw a build in total commercial stocks of 153 mb before declining seasonally by 9 mb in the fourth quarter. This led to a total stock build of 144 mb for the whole year. The build in OECD commercial stocks is mainly concentrated in OECD Americas, reflecting higher US domestic crude production. Contango in major benchmarks also contributed to the build in crude oil commercial stocks.

OECD commercial stocks finished the year 75 mb above the five-year average. However, the picture within the OECD region was mixed. Indeed, America experienced a surplus of 123 mb above the latest five-year average, while OECD Europe saw a deficit of 48 mb. OECD Asia Pacific remained in line with the seasonal norm.

The build in total OECD commercial inventories during 2014 from the previous year was divided between crude and products, which increased by 81 mb and 63 mb, respectively. Within the components of OECD commercial inventories, crude stood at 80 mb above the five-year average, while product stocks indicated a deficit of 5 mb below the seasonal norm. Middle distillates indicated a large deficit of 59 mb below the seasonal norm, while gasoline stocks started to improve, showing a slight surplus of 2.0 mb compared with the five-year average.

In terms of days of forward cover, OECD commercial stocks stood at 59.2 days at the end of 2014, 3.1 days higher than was observed 12 months before and 4.4 days higher than the latest five-year average. OECD Americas was 2.3 days above the historical average with nearly 60 days at the end of 2014 and OECD Europe stood 0.7 days above the seasonal average to finish the year at 68.1 days. Meanwhile, OECD Asia Pacific indicated a slight surplus of 0.2 days, averaging 44.3 days.

Total SPR in the OECD at the end of 2014 fell by 3.0 mb from the previous year to stand at 1,581 mb.

This fall was concentrated in OECD Americas, which dropped by 5.0 mb, while Europe rose by 2.0 mb. Asia Pacific remained at almost the same level. OECD Americas SPR stood at 692 mb, followed by OECD Europe with 472 mb, while OECD Asia Pacific finished 2014 at 417 mb.

Estimated total non-OECD stocks — including commercial and SPR — stood at 2,020 mb at the end of 2014, up by 110 mb from the end of 2013. The bulk of this build came from China, where inventories increased by nearly 83 mb. Low crude oil prices provided an opportunity for the country to accelerate the filling of its SPR.

#### Balance of supply and demand

World oil demand grew by around 1.0 mb/d in 2014, in line with initial projections averaging total demand of 91.3 mb/d. Lower oil prices - which started dropping mid-year - and improvements in economic activities in major demand centres — especially in the US and India - resulted in better-thanexpected acceleration for oil demand in 4Q14. Total growth came from non-OECD countries, while OECD oil demand saw a contraction, although less than in 2013. Meanwhile, the forecast for non-OPEC supply growth in 2014 experienced an upward revision from initial projections. Non-OPEC supply rose sharply by 2.2 mb/d in 2014 to stand at 56.5 mb/d. Much of this growth was due to better-than-expected tight oil output in the US, as well as from the Canadian oil sands and pre-salt reservoirs in Brazil, while an oil production decline from Mexico was greater than expected. North America remains the main driver for non-OPEC supply growth in 2014. The growth of OPEC NGLs and non-conventional oils in 2014 remained almost unchanged from the initial forecast, indicating growth of 0.2 mb/d to stand at 5.8 mb/d.

Based on these revisions, the forecast demand for OPEC crude in 2014 was revised down from the initial forecast by 0.7 mb/d to stand at 29.0 mb/d. Compared with the previous year, the expected re-

duction in demand for OPEC crude has widened from an initial contraction of 0.3 mb/d to a negative growth of 1.4 mb/d. This downward revision mainly reflects strong performance by non-OPEC supply, as world oil demand growth remained almost unchanged. On a quarterly basis, required OPEC crude stood at 28.7 mb/d and 28.3 mb/d in the first and second quarters, respectively, while it was higher in the second half of the year, averaging 29.7 mb/d in the third quarter and 29.1 mb/d in the fourth quarter.

In comparison, OPEC production for 2014 averaged 30.1 mb/d based on secondary sources, indicating an implied stock build of 1.1 mb/d. The first and second quarter saw a stock build of 1.2 mb/d and 1.5 mb/d, respectively. The third and fourth quarters experienced an implied stock build of 0.6 mb/d and 1.2 mb/d, respectively.

#### **Crude oil price movements**

The OPEC Reference Basket (ORB) shed about \$9.60 yo-y or nine per cent in 2014 to average \$96.30/b amid a six-month-long sell off that began in June on concerns of oversupply and lower demand growth. Global production has been rising more rapidly than refiners can absorb it. North American output was 1.3 mb/d higher than the previous year, more than enough to meet expected growth in demand. In addition, a 600,000 b/d surge in Libyan production over the summer left reported crude stocks at five-and-a-half year highs at the end of October, as extra crude cargoes reached refineries in the middle of the maintenance season. Meanwhile, weak economic data from Europe and China — as well as a strong US dollar, seasonal refinery maintenance and intense speculative liquidation — were also to blame for the oil market's sluggish performance. This flurry of bearish factors during the second half of the year pushed the ORB value, along with global crude oil prices, to more than five-year lows; it lost nearly half of its value over the course of six months starting in June 2014 — when it was at 107.90/b — falling to \$59.50/b in December.

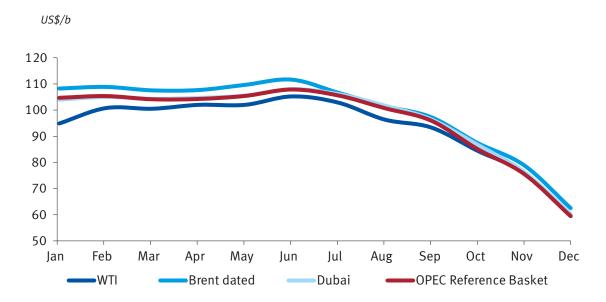
In contrast, during the first half of 2014, particularly towards the end of the half, the ORB was at its highest value, settling year-to-date at \$105.30/b, uplifted by a surge in outright crude oil prices. For most of the first half of the year, the global crude oil market was strained by supply concerns due to crises in Libya and the Ukraine, while geopolitical tension in Iraq fueled fears of export disruptions from the Middle East region, despite the fact that crude oil markets were adequately supplied during the period. In fact, some markets were oversupplied amid poor refining economics, which caused physical crude oil markets in many regions to weaken significantly. Moreover, supply-related headlines and agitation in Iraq and the Ukraine kept speculators on the long side of the market, supporting a rise in prices.

Global sweet/sour differentials were notably wide in all regions by the end of the first half of 2014, affected by the performance of refined product markets. The Tapis premium over Dubai in Asia was around \$7/b. Weakness in the middle distillate complex and abundant supplies helped put pressure on crudes with high gasoil yields, such as Middle Eastern light sour grades. The Middle Eastern crude market was also weak as inbound cargoes from the Atlantic Basin kept the Asia Pacific market well supplied, while Asia Pacific sweet crudes were troubled by arbitrage cargoes arriving in the region from the Atlantic Basin. In Europe, the discount of Russian medium sour Urals in the Mediterranean to North Sea Dated Brent widened solely due to weak Urals markets. Despite the tight availability of Urals, extraordinarily lackluster demand on the back of poor refining margins and the strong presence of alternative sour grades — particularly Iraqi Basrah Light — weighed on Urals differentials. Given the ongoing shortage of Iranian crude and the complete standstill of Kirkuk flows, a tight Russian schedule would under normal circumstances have been expected to add some support to the market. On average, the Dated Brent/Urals spread was at \$2.20/b. In the US, the Light Louisiana Sweet (LLS) premium over medium sour Mars was at \$4.75/b, with some support coming from the product market. Gasoline cracks on the USGC strengthened while fuel oil cracks weakened, pressuring Mars. Additional stress on Mars came from the Strategic Petroleum Reserve (SPR)'s release of medium-sour crude.

By the end of 2014, global sweet/sour differentials were mixed. In Asia, the Tapis/Dubai spread widened further, supported by relatively firm refining margins in the Asia Pacific, particularly for jet kerosene and diesel. Colder weather boosted Japanese demand for kerosene as a heating fuel, supporting margins. Refiners benefited from falling oil prices, with losses in product markets lagging crude falls. Higher freight rates limited arbitrage sales from West of Suez. Meanwhile, a relatively low official selling prices and excess supply weighed on Mideast Gulf marker Dubai. Tapis premium over Dubai increased to \$6.25/b. In Europe, Russian medium sour Urals crude weakened to a more than \$1/b dis-

count to North Sea Dated, as demand waned for the grade and refiners were running down crude stocks towards the end of the year. Moreover, the resumption of Iraqi Kirkuk crude exports from the north through Turkey also pressured the medium sour crude market in the Mediterranean. On the US Gulf Coast (USGC), the LLS premium over medium sour Mars narrowed to around \$3.75/b. Both US deepwater grades LLS and Mars came under selloff pressure as some traders offloaded crude ahead of refinery maintenance season, while others geared down inventory before year-end taxes. Meanwhile, US demand for heavy Latin American crudes retreated as domestic medium sour grade Mars became more heavily discounted against ICE Brent. On average, the Brent premium over Urals moved from 60¢/b in 2013 to \$1/b in 2014. Meanwhile, the premium of Tapis over Dubai and LLS over Mars narrowed

Figure 11
Monthly oil price movements, 2014



in 2014 to \$6.40/b and \$4/b, from \$8.95/b and \$5.10/b in 2013, respectively.

In 2014, the two main crude oil futures markets ended lower. ICE Brent was down \$9.25 or 8.5 per cent from 2013, while Nymex WTI lost \$4.97 or 5.1 per cent at \$93/b. By year end, the selloff in global oil markets amid a burst of bearish factors pushed crude oil futures to more than five-year lows. ICE Brent and Nymex WTI lost nearly half their value from their monthly average peak in June at around \$112/b and \$105/b to \$63/b and \$59/b, respectively. The bearish sentiment in the oil market persisted as it faced an overhang of at least 1 mb/d. OPEC's decision to abstain from reducing output, followed by a sell-off across other asset classes triggered by the oil price decline, weighed on oil. An increase in production from the US, Russia, Iraq and elsewhere added to the bearish tone in the global market. The dollar also

strengthened, contributing to the downward pressure on crude futures, after the euro hit a low against the dollar not seen since 2006. Negative economic news from Europe and China affected the market as well.

Oil futures losses in 3Q14 were almost six per cent of both ICE Brent and Nymex WTI prices, the biggest quarterly retreat in two years. Oil prices plummeted starting at the end of June as output from the United States, Middle East, and Africa swamped the market and outweighed fears of supply disruptions from turmoil in oil-producing regions. Output improved substantially in Libya, with production levels reaching around 900,000 b/d. In addition to ongoing poor market fundamentals expressed by low demand and high supply, the crude market was pressured by weak economic data from the world's biggest energy consumers, further pointing to lackluster demand growth at a time of strong supply. Growing supply

Figure 12 Nymex WTI price *versus* speculative activity, 2014

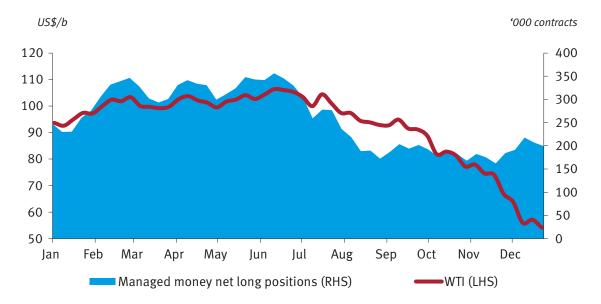


Table 7
Average quarterly and yearly spot prices for selected crudes, 2013–14

		2013	1Q14	2Q14	3Q14	4Q14	2014	% Change 2014/13
OPEC R	Reference Basket	105.87	104.73	105.86	100.86	73.69	96.29	-9.0
	Arab Light	106.53	105.60	106.42	102.28	74.38	97.18	-8.8
	Basrah Light	103.60	102.72	103.68	99.25	72.15	94.45	-8.8
	Bonny Light	111.36	110.17	112.25	103.28	77.77	100.85	-9.4
OPEC Basket crudes	Es Sider	108.51	107.81	109.37	101.07	75.86	98.51	-9.2
tcru	Girassol	109.14	108.70	110.08	101.98	76.06	99.19	-9.1
ske	Iran Heavy	105.73	104.62	105.72	101.33	73.03	96.18	-9.0
C Ba	Kuwait Export	105.04	103.67	104.63	100.53	72.43	95.32	-9.3
OPE	Marine	105.32	104.29	105.93	101.26	74.05	96.39	-8.5
	Merey	96.66	93.65	96.25	92.04	65.54	86.88	-10.1
	Murban	108.21	107.97	108.94	104.11	76.78	99.45	-8.1
	Oriente	97.74	95.22	96.31	90.73	67.01	87.31	-10.7
	Saharan Blend	109.38	109.80	110.37	101.66	77.01	99.68	-8.9
Š	Arab Heavy	103.89	102.05	102.94	98.92	70.77	93.68	-9.8
rude	Dubai	105.45	104.44	106.08	101.51	74.79	96.71	-8.3
Other OPEC crudes	Dukhan	107.05	107.11	107.98	103.02	75.44	98.44	-8.0
0 P	Forcados	111.95	110.35	112.36	104.28	79.03	101.35	-9.5
the	Iran Light	107.19	105.79	107.94	101.21	74.66	97.26	-9.3
0	Zueitina	109.15	108.36	109.92	101.32	76.32	98.97	-9.3
	Brent Dated	108.62	108.21	109.67	101.91	76.58	99.08	-8.8
	Isthmus	105.16	98.49	103.43	97.64	74.99	93.65	-10.9
des	Minas	107.41	110.92	110.11	100.10	73.75	98.68	-8.1
Other Non-OPEC crudes	Oman	105.51	104.44	106.22	101.89	75.57	97.04	-8.0
)PE(	Suez Mix	105.35	103.88	105.38	98.80	73.04	95.13	-9.7
ou-(	Tapis	114.39	112.58	112.86	107.07	80.11	103.15	-9.8
e N	Urals	108.00	106.81	108.06	101.51	75.98	98.08	-9.2
Oth	W T Intermediate	97.96	98.64	103.08	97.63	73.63	93.26	-4.8
	W Texas Sour	95.29	93.13	95.92	88.86	71.49	87.34	-8.3
	B. Light – A. Heavy	7.47	8.12	9.31	4.36	7.00	7.17	
tials	B. Light – S. Blend	1.98	0.37	1.88	1.62	0.76	1.17	
rent	Brent – WTI	10.66	9.57	6.59	4.28	2.95	5.82	
Differentials	Brent – Dubai	3.17	3.77	3.59	0.40	1.79	2.37	

#### Notes

Quarterly and yearly averages based on daily quotations.

#### Source

 ${\it Platts~and~direct~communication,~OPEC~Secretariat~assessments.}$ 

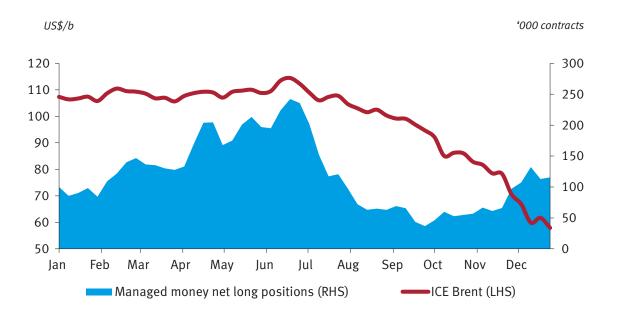
from Libya coincided with weaker-than-expected economic data from China and the United States. China's August factory output grew at its slowest pace in nearly six years, while US manufacturing data was also negative, with output falling for the first time in seven months. Additional pressure came from the currency side, with the US dollar appreciating by 3.7 per cent, and from a sharp drop in US gasoline prices and quarter-end position squaring.

In contrast, crude oil futures were sharply higher early in 2014, particularly towards the end of the first half of 2014, amid fears of a supply disruption due to crises in Iraq and the Ukraine, in addition to ongoing turmoil in Libya. Oil prices jumped to nine-month highs in June, as concerns mounted that escalating violence in Iraq could disrupt oil supplies from a significant OPEC producer. Crude oil prices were also

supported by positive economic data from the United States and China. Nymex WTI front-month averaged \$105.15/b in June and ICE Brent front-month was at \$111.97/b.

The transatlantic spread (ICE Brent *versus* Nymex WTI) narrowed further from \$10.80/b in 2013 to an average of \$5.82/b in 2014. It shrunk as the global glut weighed more heavily on ICE Brent than Nymex, particularly during the second half of the year. The ICE Brent-Nymex WTI crude spread moved into a new phase that saw the differential swing between positive and negative, but within a tight range. This new normal stood apart from the previous few years in which ICE Brent traded at a consistent premium over Nymex crude, reaching as high as \$28/b, when physical constraints limited the movement of crude from the US midcontinent and Canada to the Gulf Coast.

Figure 13 ICE Brent price *versus* speculative activity, 2014



Significant capacity expansion since then has allowed flows to move from major producing regions in the US and Canada to the refining centres on the Gulf Coast. Greater capacity to the Gulf shut out imports, pushing these crudes back into the international market and putting downward pressure on Brent prices. In a similar vein, US crude exports climbed higher, providing an outlet for additional production that would otherwise have added to the country's stockpiles. US crude exports soared to 487,000 b/d by year end, the highest point since the 1950s.

As for speculative activities in 2014, year-end data shows that money managers' bets on a rebound in oil prices rose sharply over the final month of the year, particularly for ICE Brent, as crude oil prices reached a five-year low. Investors poured the most money in more than four years into funds that track crude oil on speculation that prices will rebound from a five-year low. ICE Brent net length positions increased a hefty 75 per cent to 115,571 contracts, according to figures from the ICE Futures Europe exchange. This combined an uplift of 27,058 long positions and a reduction of 22,540 short positions. Hedge funds and money managers were

also bullish on the rising US crude oil market, increasing net length by almost 25 per cent over the month. Net long US crude futures and options positions during the month increased to 199,388 lots, US Commodity Futures Trading Commission data show. Long speculative positions in Nymex WTI increased 5.2 per cent to 259,613 lots, while short positions decreased by 29 per cent to 60,225 lots. Moreover, total futures and options open interest volume in the two markets increased by 499,177 contracts to 4.6 million contracts.

Moreover, the average daily trading volumes of ICE Brent in 2014 have been constantly above those of Nymex WTI at an average of about 620,000 *versus* 575,000 contracts. ICE Brent daily trade was 44,746 lots or eight per cent above Nymex WTI. In 2014, Nymex WTI total traded volumes were at less at 145 million contracts, compared with 149 million in 2013, about 2.3 per cent lower y-o-y. ICE Brent traded volumes remained at about 160 million lots, increasing by a marginal 382,305 lots from 2013. For the third year in a row, ICE Brent trading volumes overtook those of Nymex WTI by more than 15 million contracts.



The issue: 1.3 billion people in the world are without electricity.

The reality: 2.6 billion people in developing countries rely on traditional biomass for cooking and heating.

The battle plan: 1 January 2014 launched the United Nations far-reaching 'Decade of Sustainable Energy for All', which underscored the importance of energy issues for sustainable development.

The UN slogan behind the decade of action is 'Energy enables'. It maintains that from job creation to economic development, from security concerns to full empowerment of women, energy lies at the heart of all countries' interests.

The plan urges stakeholders in government, the private sector and civil society to take action to realize the UN's ambitious plan, adopted by the UN General Assembly, to make sustainable energy a reality for everyone and a priority for all UN Member States.

The project stresses the need to improve access to reliable, affordable, economically viable, socially acceptable and environmentally sound energy services and resources for sustainable development. It also highlights the importance of improving energy efficiency and increasing the share of renewable energy and cleaner and energy-efficient technologies.

Significantly, the resolution recognizes the importance of giving appropriate consideration to

energy issues in the elaboration of the post-2015 development agenda.

Governments, international and regional organizations and other relevant stakeholders are being called on to meet the increasing need for energy services through new and renewable energy resources, more efficient use of energy, greater reliance on advanced energy technologies, including cleaner fossil fuel technologies and sustainable use of traditional energy resources.

Money plays a key role in meeting these ambitious targets. Estimates show that \$600-800 billion is needed each year up to 2030 to realize the three intertwined objectives of providing universal energy access, doubling the rate of global energy efficiency improvement and doubling the share of renewable energy in the global energy mix. The project will require more than just money: close cooperation among all stakeholders will be essential in reaching these goals.

Ban Ki-moon, UN Secretary General and Jim Yong Kim from the World Bank, Co-Chairs of the initiatives Advisory Board, are certain it can be achieved.

Ban Ki-moon stressed that the world faces two urgent and interconnected challenges related to energy.

One is connected to energy access. "Nearly one person in five on the planet still lacks access to electricity. More than twice that number — almost three billion people — rely on wood, coal, charcoal or animal waste for cooking and heating. This is a major barrier to eradicating poverty and building shared prosperity.

"Energy is the golden thread that connects economic growth, increasing social equity and an environment that allows the world to thrive," he professed. "Children can study after dark. Clinics can store lifesaving vaccines...with sustainable energy, countries can leapfrog over the limits of the energy systems of the past and build the clean energy economies of the future.

"Sustainable energy for all is an idea whose time has come."

In September of 2013, Ban Ki-moon announced that Kandeh Yumkella, Director-General of the UN Industrial Development Organization (UNIDO) and

Chair of UN Energy, will serve as Special Representative for Sustainable Energy for All and Chief Executive of the initiative, also called SE4ALL.

In accepting the role, Yumkella stressed that Sustainable Energy for All is essential for achieving the Millennium Development Goals and for opening up new opportunities for growth and prosperity in every country in the world.

"It is also central to discussions on the post-2015 development agenda and proposed new sustainable development goals. We warmly welcome the General Assembly's declaration of the Decade and stand ready to support Member States and all stakeholders in making sustainable energy for all a reality on the ground."

### The oil industry takes an active interest

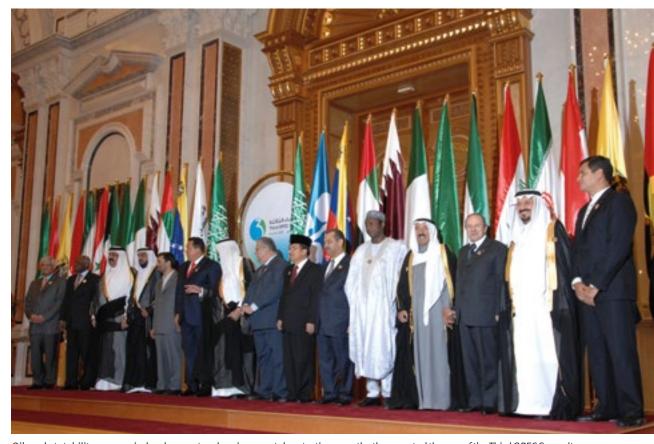
To that end, the first International Development Symposium on Petroleum Industry Support for Universal Energy Access — organized by OPEC's sister organization, the OPEC Fund for Interna-



Secretary-General Ban Ki-moon (right) joins hands with Kandeh K Yumkella (centre), Special Representative of the Secretary-General and Chief Executive Officer of the Sustainable Energy for All Initiative (SE4ALL), and Peter Launsky-Tieffenthal (left), General Director for Development Cooperation of Austria, at the official opening of the SE4ALL Offices in Vienna.

tional Development (OFID), in cooperation with the World Petroleum Council — was held on 3–4 November 2014 at the OFID headquarters in Vienna.

The goal of eradicating energy poverty was strongly called for by the leaders of OPEC Member Countries at their Third Summit in November 2007, in a document called the "Riyadh Declaration", which called upon OFID to "continue to align the programmes of our aid institutions, including those of OFID, with the objective of achieving sustainable development and the eradication of energy poverty in developing countries, and study ways and means of enhancing this endeavor, in association with the energy industry and financial institutions."



Oil market stability, economic development and environmental protection were the three central themes of the Third OPEC Summit, hosted by Saudi Arabia on 17–18 November 2007. The landmark event, held in Riyadh, concluded with the signing of the Riyadh Declaration by the gathered Heads of State and Government of the 13 Member Countries at that time. The Declaration constituted the first time OPEC formally addressed the issue of sustainable development and eradication of energy poverty; it called on OFID to aid in this endeavour. In the photo are the Heads of State who were in attendance, including His Majesty King Abdullah Bin Abdulaziz Al-Saud, Custodian of the Two Holy Mosques and King of the Kingdom of Saudi Arabia (seventh from the left) and (r to I): HE Rafael Correa Delgado, President of the Republic of Ecuador; Saudi Arabian Crown Prince and Second Deputy Prime Minister and Minister of Defense and Aviation and Inspector General Sultan Bin Abdul Aziz; HE Abdelaziz Bouteflika, President of the Republic of Algeria; HH Sheikh Sabah Al-Ahmad Al-Sabah, Emir of Kuwait; Nigerian President, Umaru Musa Yar'Adua, GCFR; Chairman of the People's Committee, the National Oil Corporation of Libya Dr Shokri Ghanem (representing Leader of the Revolution Colonel Moammer El Qaddafi); Indonesian Vice President, Jusuf Kalla (representing President Dr Susilo Bambang Yudhoyono); HE Jalal Talabani, President of Iraq; HE Hugo Rafael Chávez Frías, President of Venezuela; HE Mahmoud Ahmadinejad, President of the Islamic Republic of Iran; HH Sheikh Khalifa Bin Zayed Al-Nahyan, President of the United Arab Emirates; HH Sheikh Hamad Bin Khalifa Al Thani, Emir of Qatar; HE Dr José Eduardo dos Santos, President of the Republic of Angola and HE Abdalla Salem El-Badri, OPEC Secretary General.

In OFID's opening speech, the Fund's Director General Suleiman Al-Herbish stated: "OFID takes great satisfaction in the fact that its actions, combined with those of partners, including the United Nations (UN) and the World Petroleum Council (WPC), have helped thrust energy poverty into the global spotlight. Our reward will be to see universal access to energy services included in the post-2015 Sustainable Development Goals.

"We are glad to host this pioneering event to emphasize the petroleum industry's corporate social responsibility (CSR) towards the billions of people who lack access to modern energy services."

Although the industry's activities in this area have until now been quite limited, Al-Herbish stated that "the industry's vast pool of resources and expertise puts it in an ideal position to contribute to achieving this worthwhile goal."

He called it a 'win-win' CSR opportunity for the petroleum industry, as it will not only improve the environment, but support the health and livelihood of local communities, in turn strengthening the relationships between local communities and operators.

"OFID is in a good position to serve as the facilitator for industry efforts to contribute to universal energy access, since the share of energy projects in our total operations reached a high of 30 per cent," he said.

Yumkella was present at the event, and focused his opening remarks on one of the poorest regions: sub-Saharan Africa. Currently 34 per cent of health facilities there lack electricity, while the population of the region was up to 1 billion in 2013, with 420 million in absolute poverty, he said. The population of the area is set to grow to 2.2 billion by 2050, while the economy is expected to quadruple by 2040 and energy demand to increase by 75 per cent to that time. Currently, 70–80 per cent of the population relies on biomass for cooking.

"We need an integrated multi-stakeholder and cross-sector approach to energy poverty to achieve energy transitions in these countries," he said, adding that institutional barriers and a lack of coordinated effort and a long-term vision for sustainable investment and development have been critical in hindering progress.

The meeting ended with a Memorandum of Understanding between OFID and the Alliance for Rural Electrification (ARE) to finance mitigation projects in the mini-grid area, which estimates predict could solve 40 per cent of energy poverty, according to Symposium participants.

In the wrap-up session Yumkella stated: "I am happy this concludes in action...I think we can create projects. This partnership today begins to breach the gap in projects and financing."

OFID considers the Symposium a success, adding the most important thing is to keep the ball rolling; to this end there will be two or three similar meetings held before the next WPC congress in 2017.

With the UN Decade for Sustainable Energy 2014–2023 strong in the media and the adoption in September 2014 by the UN General Assembly of a proposal prepared by the Open Working Group on 17 Sustainable Development Goals (intended to replace the Millennium Development Goals in 2015) energy has been effectively launched into the public eye. Matters related to energy are incorporated in the proposed list of SDGs, including SDG7 "Ensure access to affordable, reliable, sustainable and modern energy for all". The intent is to integrate these goals into the post-2015 agenda; further work on identifying quantitative indicators will be ongoing in 2015.

Symposium participants, which included the Shell Foundation, Eni, ExxonMobil, OMV, Schlumberger, Total, Saudi Aramco, Qatar Petroleum, World Petroleum Council, Petroamazonas EP, International Gas Union, ARE, Global LPG Partnership, UN Foundation SE4ALL, Accenture, Royal Dutch Shell and the Saudi Fund for Development, used the event to join together and seriously and openly discuss the issue of energy poverty under Chatham House rules.

"The Symposium participants recognize that the widespread absence of modern energy access continues to hamper socio-economic progress in developing countries worldwide," states an OFID communique.

The proposal goes on to say that there is wide recognition that the oil and gas industry must play an important role in bringing modern energy to the poorest. In addition, participants discussed embedding energy poverty alleviation as a main element in many ongoing social responsibility programmes, which would make a "significant and visible contribution to creating an environment for replication and scaling up investments in sustainable energy."

Petroleum companies at the Symposium discussed working together to develop a high impact opportunity (HIO) for the petroleum industry and welcomed other petroleum companies to join in the initiative. "The HIO will provide a platform for the oil and gas companies to work together on specific actions that advance universal energy access within the framework of the larger global initiative," states the communique.

Together with the SE4ALL initiative, the WPC will provide opportunities for ongoing engagement with global representatives from the oil and gas industry, it said. "We call upon all oil and gas companies to review their Social Responsibility programmes and develop projects that are replicable, scalable and sustainable to address universal energy access for all by 2030."

After the communique is agreed upon by all participants, a more detailed approach will be developed, said an OFID representative, adding that perhaps by the meeting in 2015 the position will be

more advanced and some projects will already be on the ground.

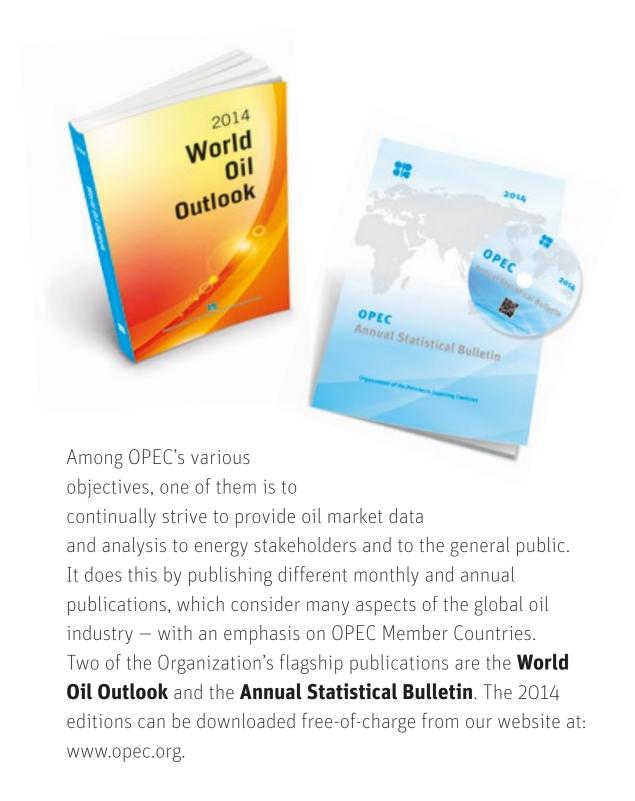
One participant commented during the wrap-up session that the Symposium brought quality presentations, deep insight and lively discussion, "I am pleased to see how much this issue is captivating the audience. I hope that this is not just a small part of the industry, but throughout the industry."

He added the challenge can also be seen as a business opportunity to be innovative and cutting edge. Energy poverty and economic growth are in a vicious cycle, "because if you don't have money you can't invest," said the representative. "We have to think about how we can create a supply chain....one needs to help local infrastructure." He added these actions do not only have to come from government institutions. "Take a supply-chain perspective."

Another speaker said: "We are running behind the wave. The population is growing...we take some out of energy poverty and others move in. In order to get ahead of the wave we need a new and comprehensive approach.

"The oil industry is known for being creative, having money, and people with special skills and abilities pertinent for a huge task like this. The oil industry should be deeply concerned. We are talking basically about their business. Demand is growing and so is the need to deliver oil and gas...therefore it is important that they play a key role, given that many reserves are in areas with the most poor."

# Other OPEC flagship publications





Accurate and timely statistics are the basis of much of the OPEC Secretariat's work in relation to reports and analysis, and provide crucial input to the Organization's decision-making processes. For this reason, OPEC Member Countries are dedicated to supporting data transparency.

To that end, the Joint Organizations Data Initiative (JODI) is a success story in facilitating cooperation and collaboration between relevant institutions as well as producing and consuming countries to promote data transparency in the oil and gas markets. OPEC is a strong JODI partner, others being the Asia Pacific Economic Cooperation (APEC), the Statistical Office of the European Communities (EUROSTAT), the

International Energy Agency (IEA), the International Energy Forum (IEF), the Gas Exporting Countries Forum (GECF), the Latin American Energy Organization (OLADE), and the United Nations Statistics Division (UNSD).

The JODI partners hold regular Inter-Secretariat Meetings to move the initiative forward and improve the quality of its deliveries. The OPEC Secretariat usually hosts one meeting annually. As one of the founding institutions, OPEC participates in both JODI-Oil and JODI-Gas, making valuable contributions to the development of the initiatives. JODI is also a part of regular discussions at OPEC's Annual Statistical Meetings (ASM). The ASM, held every year at the

Data transparency 37

OPEC Secretariat in Vienna, is OPEC's most important technical meeting regarding Member Country data flow. The main aim of the two-day meeting is to exchange information on OPEC Member Country data flows related to oil, gas and other energy-relevant information, which are directly communicated through various questionnaires.

Undoubtedly, the development, improvement and regular availability of the JODI-Oil database contribute substantially to a transparent oil market. The data provided is used by several market reporting agencies, including OPEC, as an input into their assessment of fundamental data flows. Among the most important advantages of the JODI-Oil database are the official character of the data, the frequency of reporting and the coverage of fundamental data flows by main product categories. The initiative's information is already considered a major source of reference, not only in the oil industry, but also in other energy-related research institutions.

A two-day technical, inter-Secretariat JODI meeting was held at the OPEC Secretariat on 20–21 October 2014. Organized by the Secretariats of OPEC and the Riyadh-based International Energy Forum (IEF), the main goal of the meeting was to evaluate the performance of the initiative and strategize on how to further improve it. Delegates from all of JODI partner organizations attended the meeting.

Interactive discussions were used to elaborate and clarify various details of the initiatives while providing insight into current data gathering practices and assessing some of the challenges involved.

# **History of JODI**

The history of JODI (www.jodidata.org) goes back to the late 1990s, when Energy Ministers identified the lack of transparent and reliable oil statistics as a key contributor to oil price volatility. An outcome of producer–consumer dialogue, JODI was initiated as a response to a call by Energy Ministers — many among



them OPEC Ministers — at the 7th International Energy Forum meeting in 2000 in Riyadh, urging a global response to the challenge of greater transparency.

Six organizations (APEC, EUROSTAT, IEA, OLADE, OPEC and UNSD) established the Joint Oil Data Exercise in 2001. Progress was immediate: within a year, over 70 countries were participating, representing 90 per cent of global oil supply and demand.

The Joint Oil Data Initiative was born at the 8th International Energy Forum in Osaka in 2002, when Ministers reaffirmed their political support. With that mandate, the six organizations obtained agreements from their Member Countries to make the exercise a permanent reporting mechanism.

As the process gained momentum and grew, and as the quality, timeliness and completeness of data submissions improved, it was clear that the information had to be made available in a compatible form. This led to the creation of the JODI-Oil World Database. Participants at the 5th JODI Conference in October 2004 strongly recommended that this joint global database be made freely accessible to all — organizations, countries, industry, analysts and journalists.

The IEF Secretariat took over the coordination of JODI in January 2005, and the JODI-oil database, though plagued by many limitations, had already achieved reasonable levels of timeliness, coverage and reliability. The challenge for the organizations to-

day is to increase the coverage, reduce delays in data submissions and further enhance data quality.

The next logical step was JODI-Gas. In 2008, at the 11th International Energy Forum (IEF) Ministerial Meeting and at the Jeddah and London Energy Meetings, Ministers called for greater energy data transparency, including the extension of the JODI platform to cover natural gas. The following year, JODI partners launched the JODI-Gas exercise, collecting production, demand, trade and storage data.

With a precedent already in place, JODI partners organized the Second Gas Data Transparency Conference in Doha in May 2012, when they agreed to seek support in converting JODI-Gas from an exercise into a permanent initiative. In October 2012, JODI-Gas became a permanent initiative. By the following month, 52 countries were participating in JODI-Gas, representing around two-thirds of global supply and demand.

In January 2013, a beta version of JODI-Gas was made available to all countries submitting gas data to obtain feedback and promote participation. Just three months later, the number of participating countries had risen to 69, representing around 80 per cent of global supply and demand of gas. In June 2014, the JODI World Gas database was launched publicly.

Looking ahead, OPEC is in support of JODI expanding in the future to cover coal. This would provide an even more complete picture of the dynamic energy market and enhance energy market stability.

Indeed, transparency and reliability of data have made leaps and bounds in recent years to the clear benefit of OPEC and its fellow JODI members and stakeholders. Building on this progress, OPEC will continue to support JODI-Oil and JODI-Gas in its ongoing efforts to further enhance the quality and timeliness of oil and gas data in the years to come.

Dr Adedapo Odulaja, Head of OPEC's Data Services Department (middle) and Fuad Al-Zayer, Chairman of the Meeting (second from right) from the IEF, together with delegates attending the JODI meeting.





# Call for papers

The OPEC Energy Review is a quarterly energy research journal published by the OPEC Secretariat in Vienna. Each issue consists of a selection of original well-researched papers on the global energy industry and related topics, such as sustainable development and the environment. The principal aim of the OPEC Energy Review is to provide an important forum that will contribute to the broadening of awareness of these issues through an intellectual exchange of ideas. Its scope is international.

The three main objectives of the publication are to:

- 1. Offer a top-quality original research platform for publishing energy issues in general and petroleum related matters in particular.
- 2. Contribute to the producer-consumer dialogue through informed robust analyses and objectively justified perspectives.
- 3. Promote the consideration of innovative or academic ideas which may enrich the methodologies and tools used by stakeholders.

Recognizing the diversity of topics related to energy in general and petroleum in particular which might be of interest to its readership, articles covering relevant economics, policies and laws, supply and demand, modelling, technology and environmental matters will be considered.

The OPEC Energy Review welcomes submissions from academics and other energy experts. Prospective authors wishing to submit papers should send them to: Executive Editor, OPEC Energy Review, OPEC Secretariat, Helferstorferstrasse 17, 1010 Vienna, Austria; tel: +43 1 21112-0; e-mail: prid@opec.org.

All correspondence about subscriptions should be sent to John Wiley & Sons, which publishes and distributes the quarterly journal on behalf of OPEC (see inside back cover).



OPEC Energy Review
Chairman, Editorial Board: Dr Omar S Abdul-Hamid
General Academic Editor: Professor Sadek Boussena
Executive Editor: Hasan Hafidh



# Office of the Secretary General

The year 2014 marked the — unprecedented — eighth year of leadership under Secretary General HE Abdalla Salem El-Badri. Over the course of the year, the activities of the Office of the Secretary General were, once again, concerned with meeting the requirements of the Secretary General in the execution of his duties. As in the past, time, energy and resources were devoted to preparing documentation for and servicing Meetings of the Conference and the Board of Governors (BoG), as well as a variety of other high-level meetings, amongst these the Advisory Panels charged with selecting recipients of the 2015 OPEC Award for Research

and the 2015 OPEC Award for Journalism, which will be presented during the OPEC Seminar in June 2015.

During the year, in addition to coordinating the preparation of reports and documentation for submission to various ministerial and gubernatorial gatherings, Office of the Secretary General staff were occupied with minuting these meetings, writing *précis* of the discussions that took place and preparing summaries of the decisions taken, as well as preparing formal, edited minutes of the deliberations for distribution to Ministers, Governors and Management, as appropriate.

The Office of the Secretary General also coordinated the Secretariat's protocol and organized the

many missions conducted by the Secretary General during the course of the year.

### The Legal Office

In line with its objectives and responsibilities, the Legal Office (LO) contributed to the conduct of the Organization's affairs by promoting the rule of law within the Organization and in its relations with governments, organizations, enterprises and individuals. It provided legal advice to the Secretary General, supervised the Secretariat's legal and contractual affairs, and evaluated legal issues of concern to the Organization, reporting its findings to the Secretary General.

It monitored, reported, maintained and defended the legal claims and interests of the Organization in international and internal legal matters.

On an international level, the LO monitored and — with the assistance of outside counsel and in close liaison with the Secretariat's legal defense team — defended in court cases filed against the Organization in the USA, and kept the Board of Governors and the OPEC Conference abreast of case proceedings.

On internal legal issues, the LO, through the Secretary General, delivered legal opinions to the Secretariat's governing bodies on issues relating to and arising from the OPEC Conference and the BoG, and provided *ad hoc* reports to the Secretary General and governing bodies as and when required.

The LO also analyzed, advised on, recorded and followed up the legal aspects of documents prepared for, and decisions taken by, Organization governing bodies related to rules and procedures. It provided legal advice and expertise to the Secretary General and Management on issues which included:

- Legal support and proposition of amendments in relation to Organization staff regulations;
- Interpretation of the host agreement between OPEC and the Republic of Austria regarding privileges and immunities afforded and contained therein;

- Monitoring of relevant legal developments pertaining to the energy sector in international fora and nationally;
- Monitoring of international legal issues on which it reverted, as relevant, to the Secretary General and through him to the governing bodies, thus protecting and advancing the interests of the Organization and its Member Countries (MCs) in international fora;
- Drafting and reviewing contracts and agreements with external entities and individuals;
- Drafting and reviewing internal guidelines, manuals and procedures.

The LO also undertook missions and training on international legal and industry-related issues of significance to OPEC, and attended events when appointed by and on behalf of the Secretary General, submitting reports to the Secretary General about the implications of international legal, industry-related and socioeconomic developments to the Organization and its MCs. These included:

- 2<sup>nd</sup> Vienna Forum on European Energy Law;
- ASIL-ILA Joint Conference;
- Communications & Competition Law Conference;
- EU Competition Law Summer School;
- World Women Lawyer's Conference;
- Production Sharing Contracts and Implementation Agreements;
- Balkan Legal Forum;
- 3<sup>rd</sup> New Libya Oil and Gas Forum;
- 58<sup>th</sup> IAEA General Conference;
- ESIL Conference.

In addition, the LO participated in the Secretariat's 14<sup>th</sup> Multi-Disciplinary Training Course (MDTC), delivered a presentation to a group of Saudi lawyers visiting the Secretariat and another at the Lunch-Time Lectures of the Vienna Law University.

Furthermore, the LO contributed to the general work of the Secretariat through its membership in important Committees and Task Forces including:

- Personnel Committee;
- Academic Committee Alternate

Chairperson and MDTC Task Force Chair;

- Contracts Committee;
- Missions Committee;
- Editorial Board of the OPEC Energy Review;
- Website Publication Task Force.

### **Research Division**

The Research Division (RD), which consists of the Petroleum Studies Department, the Energy Studies Department, the Data Services Department (including the Information Centre), and the Environmental Matters Unit, performed its yearly activities in line with the second Long-Term Strategy (LTS), the Secretariat's Medium-Term Programme (MTPIII) covering the years 2013–2017, and the annual Work Programme 2014, providing not only clear guidance, but also a sound framework for the Secretariat's services to the Organization and its Member Countries.

In this context, the RD performed the following core activities:

- Providing reliable, up-to-date information and analysis to the Ministerial Conference, the Board of Governors (BoG), the Economic Commission Board (ECB) and similar bodies as a basis for energy policy-related decisionmaking (including identification of key driving forces behind global, regional and national oil and energy markets) through the Secretary General;
- Gathering, compiling and dispensing of pertinent, up-to-date statistical data and information as a reliable basis for the analysis of relevant energy developments, as well as the development of corresponding information technology (IT) applications;
- Conducting comprehensive, short-term petroleum market analyses and forecasts, with emphasis on medium-term demand and supply in the oil market outlook, developing long-term oil market scenarios, and updat-

- ing the models required for performing such analyses;
- Monitoring of energy policies, important technological developments, and dynamic structures in the international petroleum industry;
- Following relevant policy developments and contributing to debates in international fora, in multilateral discussions and in multidisciplinary task forces in order to assist Member Countries in formulating their positions on important issues;
- Collecting, analyzing and disseminating relevant oil-related data for research at the Secretariat, and functioning as the data support centre for Member Countries.

Ongoing research into energy studies, as well as into modelling efforts and market-oriented studies, continued in 2014. Projects further focused on developing medium- and long-term analyses pertaining to supply and demand, with emphasis placed on demand in the transportation, upstream and refining sectors, as well as technological developments related to both supply and demand.

### Market environment in 2014

After a soft start to the year, global GDP growth recovered to 3.3 per cent in 2014 with particularly strong improvements in the US in the second and third quarters, leading to annual growth of 2.4 per cent. Japan faced a larger-than-previously-anticipated negative impact from its April sales tax increase and a challenging environment for its exports, leading to growth of only -0.1 per cent. Output data from the Euro-zone confirmed slow economic growth at only 0.9 per cent. In the developing and emerging economies, deceleration continued, with China, Brazil and Russia all estimated to grow at a lower rate compared with one year earlier. Only India, which recorded lower growth the previous year, had a GDP growth reaching 7.2 per cent in 2014. Russia and Brazil, in particular, experienced limited growth. China came from very high GDP growth levels in past years to 7.4 per cent.

In such an environment, world oil demand growth was seen to be higher than one year earlier to stand at 0.96 mb/d in 2014. In OECD Americas, the US witnessed solid growth, despite slower-thananticipated oil demand growth in the second and third quarters of the year. Transportation fuels were strongly impacted by lower oil prices, pushing US oil demand for the year in total higher than initially anticipated. Additionally, an overall improvement in US economic activities lent extra support to demand growth in 4Q14. Elsewhere, slower economic activity, a sales tax hike, as well as reduced consumption of fuel oil and direct crude for power generation, resulted in a greater contraction in oil consumption in OECD Europe and OECD Asia Pacific. In non-OECD countries, oil demand growth was lower than expected in Other Asia, Latin America and the Middle East, mainly due to economic and geopolitical concerns. On the other hand, China and Africa performed better than foreseen, due to strong transportation and petrochemical fuel requirements and an uptick in economic activities.

On the supply side, non-OPEC supply in 2014 experienced an upward revision since the initial forecast, following an upward adjustment from one year earlier and higher-than-expected growth at the end of the year to average around 2.2 mb/d. Much of this upward revision came from non-conventional sources. On a regional basis, OECD Americas' oil supply saw the highest increase among all non-OPEC regions in 2014 at 1.82 mb/d, attributed entirely to the US and Canada. Thus on a country basis, the US, Brazil, Canada, Russia, the Sudans, Norway and Australia saw the most growth, while Mexico, Indonesia, the UK, Syria, and Azerbaijan witnessed the biggest declines. OPEC natural gas liquids (NGLs) were estimated to average 5.83 mb/d in 2014, representing growth of 0.18 mb/d over the previous year. In contrast, OPEC crude production fell by 0.16 mb/d in 2014 averaging 30.07 mb/d.

During the first half of 2014, crude oil prices were quite high, pushed up mainly by the fear of potential supply disruptions due to geopolitical tension in the Middle East, North Africa, and the Ukraine, despite the fact that oil supplies were ample. Oil prices peaked in June with the OPEC Reference Basket (ORB) averaging near \$108/b. From July onward, oil prices deteriorated sharply amid a growing imbalance in oil fundamentals, with supply outpacing demand significantly, by more than 1.5 mb. This was attributed mainly to substantial growth in US shale oil production at a time when oil demand growth slowed in major consuming areas. By year end, prices fell by more than 60 per cent with the ORB averaging around \$59.50/b in December. Over the year, the transatlantic spread narrowed and speculative activities shrank to record lows by the end of 2014. By this time, all major crude oil market time spreads had flipped into contango, as requirements for prompt crude oil had weakened.

### Energy dialogue and cooperation

The OPEC Secretariat continued its close cooperation with other international organizations through its participation in several initiatives.

In this context, the Secretariat participated, for example, in the 4<sup>th</sup> IEA/IEF/OPEC Symposium on Energy Outlooks, which took place at the IEF Headquarters in Riyadh (January 2014), and which covered short, medium- and long-term global energy outlooks. A technical meeting for experts of the International Energy Agency (IEA), International Energy Forum (IEF) and OPEC was also held.

The Secretariat held the joint 4<sup>th</sup> OPEC-IEA-IEF Workshop on the Interactions between Physical and Financial Energy Markets in Vienna on 31 March 2014. In keeping with the format of the previous three workshops, the event once again brought together speakers and participants from a wide variety of backgrounds to take part in roundtable discussions, including experts from industry, governments, and the financial and regulatory sectors of both developed and emerging economies.

The second IEA/IEF/OPEC Symposium on Gas and Coal Market Outlooks took place in Paris (October 2014) at the IEA headquarters, with discussions

focusing on the interactions and new dynamics between gas and coal around the world. This included the outlook for the gas and coal markets and a look at how competition plays out between these two fuels in the power market.

Energy has been an important focus of G20 deliberations since 2009, when G20 leaders agreed to promote energy market transparency and market stability as part of a broader effort to address excessive volatility. OPEC has been involved since 2009, working collaboratively with other international organizations involved in G20 issues, including the International Monetary Fund (IMF), the World Bank, the Financial Stability Board (FSB), the Organization for Economic Cooperation and Development (OECD), the International Organization of Securities Commissions (IOSCO), as well as the IEA and IEF.

Under the 2014 Australian Presidency, the G20 Energy Sustainability Working Group (ESWG) worked on five main initiatives, called the G20 principles of energy collaboration. There was also ongoing work covering oil price reporting agencies; an action plan for voluntary collaboration on energy efficiency; efforts to strengthen gas markets; and transitional policies to assist the poor while phasing out inefficient fossil fuel subsidies that encourage wasteful consumption. Throughout 2014, OPEC worked closely with the G20 ESWG and other international organizations on these initiatives.

The Secretariat also actively participated at the 14<sup>th</sup> IEF Ministerial Meeting, which was held in Moscow, Russia, from 15–16 May, and which focussed on "The new geography of energy and the future of global energy security".

The Secretariat continued its active stance in promoting data transparency through JODI by significantly contributing to the activities of both JODI-Oil and JODI-Gas. In line with the spirit of international dialogue and cooperation, OPEC attended the last three JODI inter-secretariat meetings in Tokyo (March 2014), Moscow (May 2014) and Paris (July 2014), and also hosted a meeting in Vienna (October 2014).

Additionally, the Secretariat participated in the official launching of the JODI-Gas database during the 14<sup>th</sup> IEF Ministerial Meeting in Moscow (May 2014).

The main activities of JODI-Oil relate to the improvement of overall data quality and focus on specific fundamental data points, as well as general technical issues, such as the harmonization of conversion factors and metadata.

Furthermore, the RD was present at the regular spring meetings of the IMF and World Bank in Washington, DC. In both cases, OPEC representatives submitted a statement on oil market developments and near-term prospects. The Organization's ongoing commitment to oil market stability was reiterated at the event, which provided a valuable opportunity for direct interaction in an influential platform.

Representatives from the RD participated in the Vienna Energy Club's spring and autumn meetings, thus continuing with the Organization's active participation. The club is an informal platform for information exchange among nine Vienna-based international organizations.

A number of high-level visits were made to the Secretariat under the policy of promoting technical exchange and dialogue. These included, among others, delegations from the European Union, Russia, the Institute of Energy Economics Japan (IEEJ), the University of Vienna, the Oil And Natural Gas Corporation of India (ONGC), and the Chinese Academy of Social Sciences.

The RD continued with its contribution to the ongoing energy dialogue between producers and consumers. In this regard, it contributed to organizing the 11th Ministerial Meeting of the EU-OPEC Energy Dialogue, which was held in Brussels in June. The parties discussed the latest oil market developments and the market's long-term outlook, and in addition provided an overview of the status of the EU-OPEC Energy Dialogue; in particular, the development of a joint study entitled "Petrochemical outlook and challenges". In December 2014, an EU-OPEC roundtable on the study was held in Vienna.

Within the established OPEC-Russia Energy Dialogue, the Third High-Level Meeting took place

in Vienna in September. Both parties provided their views on current oil market developments and prospects, and also underscored the importance of stable and predictable markets for the health of the industry and investment, in addition to the well-being of the global economy. Furthermore, they reviewed the summary discussions of the technical meeting that took place between experts from both parties in Vienna in March on tight oil and shale gas, as well as global refinery developments.

Another important part of dialogue with consuming countries is the Secretariat's participation in the IEAGHG Programme. This collaborative programme was established under an IEA implementing agreement in 1991. Its key mission is to be an objective source of information on technologies capable of making deep reductions in greenhouse gas emissions. Since its inception, the programme has focused mainly on carbon capture and storage (CCS). Its primary role with respect to CCS is to review and report on technologies being developed by others, facilitate technology R&D and look for gaps in R&D efforts.

In April, the 45<sup>th</sup> Meeting of the Executive Committee of the IEAGHG was hosted by the OPEC Secretariat in Vienna for the first time. This regular meeting gives IEAGHG an opportunity to provide members and sponsors with programme progress, an update of recently completed and ongoing activities and to approve any future work to be undertaken. The meeting was preceded by a workshop on CCS in industry organized by the Austrian Ministry for Transport, Innovation and Technology.

The OPEC Lecture Series sets the proper stage for discussion and knowledge exchange with internationally recognized experts. In 2014, the lecture series covered the *IEEJ Energy Outlook* 2040, the specifics of natural gas markets, and a summary of findings from the *World Energy China Outlook*.

The Secretariat also continued its dialogue with high-level representatives from non-OPEC countries such as Australia, France and Japan, as well as with representatives from industry such as Bosch, BASF, Statoil and the Oil and Natural Gas Cooperation of India.

### Environmental debate

Energy is an important element in sustainable development and an important area of focus in ongoing multilateral processes on the post-2015 development agenda and in climate change negotiations. Understanding the challenges to the energy sector that arise at the interface of development and environment constitute the core of environment-related activities in the RD work programme for 2014.

Several reports/studies were prepared by the RD in 2014 on this issue. Apart from the reports, two coordination meetings for Member Countries were also organized at the Secretariat. For both meetings respective reports were produced; the first in May 2014, entitled "Report of the OPEC Member Countries' Coordination Meeting on Climate Change", provided an analysis of the major issues of importance to the collective interest of Member Countries. The "Report of OPEC Member Countries Coordination Meeting in the Run-up to COP20/CMP 10" analysed key issues of importance for Member Countries in negotiations.

In addition, the Secretariat organized two online coordination meetings through WebEx as part of ongoing support to Member Countries.

### **Publications**

The eighth edition of the *World Oil Outlook* (*WOO*) was developed throughout the course of the year and released in November 2014 at a press conference held at the OPEC Secretariat. The *WOO* benefits from studies that have been prepared by the Secretariat, as well as consultancy projects that have been undertaken.

As with all previous editions of the *WOO*, the core of the report comes from work on in-house reports based upon the two OPEC Secretariat models, OWEM and WORLD. The *WOO* 2014 considered, in detail, the prospects for medium-term and long-term oil demand and supply, with projection horizons to 2019 and 2040, respectively. Scenarios explored alternative paths for the future energy scene, relating to alternative economic growth assumptions and the possibility of a higher and lower liquids supply than

is represented in the Reference Case, thereby emphasizing the uncertainties over the future call on OPEC oil. The *WOO* calls for continuous monitoring of future developments in the energy scene and to remain alert to various possible outcomes.

As indicated in *WOO* 2014, fossil fuels' share of the energy pie according to the Reference Case is expected to remain at a level of 79 per cent of the global total in 2040. However, the Reference Case scenario also assumes the share of oil will gradually decrease to 24.3 per cent due to the rising share of gas in the global primary energy mix by 2040.

Reference Case oil demand for the medium-term period of 2013–2019 increases by an average of 1 mb/d annually, reaching 96 mb/d by 2019. Over this period, demand in OECD America is stable, but falls in other OECD regions, so that OECD aggregate demand falls gradually, having peaked in 2005. Demand in Russia and Other Eurasia increases only very slowly. As in previous *WOO* projections, the main increases in demand are found in developing countries. It is expected that, by 2019, oil demand in developing countries will be greater than that of the OECD.

Long-term oil demand in the Reference Case increased by 21 mb/d over the period 2013–2040, reaching 111 mb/d. Of the demand increase, developing Asia accounts for more than 70 per cent. Comparing the numbers with the 2013 WOO, an upward revision for the use of oil in the petrochemical and aviation sectors is seen. It is worth highlighting that transportation, especially in developing countries, is key to the increase in demand. The number of cars globally more than doubles over the forecast period, reaching 2.1 billion by 2040.

On the supply side, the rise in tight oil supply (referred to as the combination of tight crude and unconventional NGLs) in OECD America will dominate medium-term non-OPEC volume increases. Most of the increases will be in the US, where tight crude is expected to rise from 2.7 mb/d in 2013 to 4.0 mb/d in 2019. In the longer term, tight crude and unconventional NGLs production is expected to face inherent constraints and challenges, including rising

costs, environmental concerns, steep decline rates, a transition away from 'sweet spots' and even limits to the availability of equipment and skilled labour. It is therefore expected that the tight crude and unconventional NGLs supply will peak at some point after the medium term and then start to decline gradually.

The main long-term non-OPEC increases in conventional crude oil supply are expected to come from Latin America and the Caspian region. This — combined with all NGLs, oil sands and biofuels — will be the key to non-OPEC long-term supply growth. Overall, total non-OPEC supply rises from 54 mb/d in 2013 to the range of 62 to 63 mb/d over the period 2020-2040. Declines are expected in mature regions, in particular OECD Europe and Mexico, but also in Asia. Combining projections for demand, non-OPEC supply and OPEC NGLs, the conclusion is reached that the amount of OPEC crude in the Reference Case is expected to reach almost 40 mb/d in 2040, more than 9 mb/d higher than in 2013. The share of OPEC crude in the world liquids supply in 2040 is 36 per cent, higher than the share in 2013.

In terms of uncertainty, there is potential for a bigger rise in tight crude supply, as well as unconventional NGLs. The WOO suggests that this could amount to over 3 mb/d of higher volumes by 2040, compared to the Reference Case. While most of this addition would be in the US and Canada, almost 1 mb/d of additional tight crude in Russia can be assumed. This upside scenario also involves extra liquids supply from other sources, such as crude oil and NGLs from Brazil and Russia, as well as biofuels. The outlook also considers downside risks to non-OPEC supply over the medium and long term. The downside supply scenario thereby sees total non-OPEC liquids supply at 3 mb/d below Reference Case levels by 2025 and close to 5 mb/d lower by 2040.

The WOO also looked closely at expected developments in the downstream sector over both the medium and long term. A review of existing projects indicates that more than 9 mb/d of new distillation capacity will be added globally in the period 2014–2019. Out of this, 8.3 mb/d will be realized through

new grassroots refineries and expansion projects in existing plants that were assessed as viable in the period 2014–2019. Potential incremental crude runs, resulting from additional refining capacity, are expected to average 1.3 mb/d annually through to 2019, leading to cumulative potential incremental crude runs of 8.1 mb/d, thus creating an excess of 3 mb/d *versus* the 5.1 mb/d that refineries are projected as required to produce. Therefore, the outlook highlights the need for continued capacity rationalization. It is estimated that a total of 5 mb/d of closures are required by 2020; this is based on capacity that would have to be removed in all regions in order to maintain a minimum refinery utilization of 80 per cent.

Driven by regional demand growth, Asia Pacific comprises the largest share (52 per cent) of total additional crude distillation capacity required by 2040. Asia Pacific crude oil imports are set to increase by 11 mb/d between 2013 and 2040, reaching a level of almost 30 mb/d by 2040. At the same time, the Middle East will supply almost 20 mb/d of Asia Pacific's crude oil by 2040, with exports increasing by 7 mb/d from 2013–2040. The second-largest contribution to Asia Pacific crude imports will come from Russia and the Caspian region.

The Annual Statistical Bulletin (ASB) is one of OPEC's most important publications; it is a very useful and frequently cited reference tool in the energy industry. The overall aim of the ASB is to make reliable and timely historical data on the global oil and gas industry readily available to the general public. The ASB contains data dating back several years, on several aspects of upstream and downstream activities in both the oil and gas industries. Furthermore, in 2014 the Secretariat launched a pocket version of the ASB, which represents an abridgement of OPEC's latest edition.

The OPEC Monthly Oil Market Report, one of the flagship publications of the Organization, offers not only in-depth coverage of developments affecting the various sectors of the oil industry, but also focuses on timely issues, as is reflected in its feature articles.

Topics covered in 2014 included: monetary stimulus and its impact on global economy; review of global oil demand trends; review of non-OPEC oil supply; the oil market outlook for 2015; and developments in crude price spreads.

The *OPEC Energy Review* publishes original, peer-reviewed analytical papers on energy economics and related issues, such as economic development and the environment. The journal provides a forum for information exchange among academics worldwide and for the general enhancement of research, with a broad-based readership in industry and among scholars, consultants and policymakers.

### Reports and studies

Ongoing research into energy studies, as well as into modelling efforts and market-oriented studies, continued in 2014. Projects further focused on developing medium- and long-term analyses pertaining to supply and demand, with emphasis placed on demand in the transportation, upstream and refining sectors, as well as technological developments.

In the semi-annual *World Oil Market Report* for the Economic Commission Board, the RD provided pertinent and reliable information and analysis in support of decision-making. Topics of special interest that were elaborated upon in 2014, among others, included North American supply developments; developments in LNG markets; Africa: the rising potential for future oil development; new refineries and changes in global trade patterns; oil demand prospects and comparison: China vs. India; biofuel market developments and agricultural prices.

During 2014, the RD also produced reports and studies with a focus on specific subjects, such as an updated "Tight Oil Production Forecast". The 2014 update focused on supply forecasts for all the currently active plays in the US: Bakken, Eagle Ford, Permian, Marcellus, Niobrara, Panhandle, Mississippi Lime, Utica, Woodford and Barnett, as well as for the Canadian plays Cardium, Montney, Alberta Bakken and Duvernay. Supply from Russia and Argentina was also considered in this year's Reference Case.

"Tight oil economics" is the title of a related study with the objective of quantitatively addressing current economics and key issues of well-developed US tight oil plays. It also provided some indicative economic analysis for emerging US plays and Argentinian Vaca Muerta shale. In addition, the Australian, European and Chinese potentials were qualitatively discussed.

A study on "Tight oil technologies for potential improvements in conventional oil recovery" aimed to assess the extent to which recent drilling, completion, stimulation, and production technologies and practices could be adapted or applied to conventional oil resources around the world. The majority of impact characterizations reviewed focused on increases in initial production from wells benefitting from the application of either horizontal drilling or hydraulic fracturing, and in a few cases both.

Another update was provided in the study "Updated analysis on crude oil production decline rates", which concluded that regional trends in decline rates show that mature conventional oil producing areas in OECD countries tend to exhibit the highest decline rates compared with other non-OPEC regions.

A study entitled "Biofuels supply: breakthrough versus constraints" provided a quantitative analysis of biofuels prospects and explored options for breakthroughs in related technology. Although progress has been made to address the technical and economic challenges of second- and third-generation biofuels production, they continue to face major constraints to full commercial deployment.

"New developments in oil refining technologies" is the title of a study that examined developments in main conversion technologies and how these are being deployed by oil refiners in converting crude oil into desirable quality light products and in meeting evolving regulatory and market challenges.

A study on the "Impact of natural gas technologies on oil demand" examined the technological prospects for natural gas, the fastest-growing fuel, in the transportation, power-generation and petrochemical sectors and compared its competitiveness with other technologies.

"Petroleum industry developments in Africa" mainly focused on East Africa's natural gas potential, specifically Mozambique and Tanzania, but also reflected on the African region's historical growth in reserves and production. In addition, the study provided a forward-looking analysis and envisioned projections for Africa's future.

In constructing the Secretariat's road transport model, a study was undertaken to understand how global oil consumption in road transportation is likely to change through 2040 due to the impact of its primary determinants: size and composition of the vehicle fleet and oil use per vehicle, which are determined by fuel economy and average distance driven per vehicle.

The Secretariat was also heavily involved in organizing the Workshop on Road Transportation Modelling and other Modelling Applications with OPEC Member Countries, seeking Member Countries experts' views on, and contribution to, the Secretariat's modelling tools and capabilities.

The RD also investigated policies in a study entitled "Energy policies of BRIC countries: emerging energy options", including likely changes in the future policy trends of Brazil, Russia, India and China and analysing the probability and feasibility of the implementation of those energy strategies, as well as an analysis of possible trends in the medium to long term. Special attention was further given to Russia in a report entitled "The new fiscal policy and ensuing implications on long-term supply", which investigated the nexus between upstream fiscal conditions in Russia and supply.

### Database and communications

Data services (such as expanding, updating and validating databases) and application systems development and maintenance intensified during 2014. The needs of the Secretariat and Member Countries were adequately satisfied in these areas during the year.

Data provided for *Online Statistical Reports* on the OPEC Intranet were further improved during the year to better address end-user requirements.

The 13<sup>th</sup> OPEC Annual Statistical Meeting was held at the OPEC Secretariat from 2–3 June 2014. The main aim of this meeting was to further improve the flow of regular oil and energy statistics from Member Countries, allow Member Countries to share experiences in relation to energy data management, and review the *ASB*.

The Secretariat was involved in organizing the Workshop on Capacity and Investment, held in September 2014. Member Countries' performance in providing capacity data was reviewed and the quality and accuracy of provided information were evaluated during the workshop.

The Data Services Department (DSD) continued developing on-demand IT software applications in response the Secretariat's needs.

In 2014, the DSD introduced new automation software packages. These improvements targeted process execution time and operational cost reductions as well as employee comfort in pursuing activities. The database models were refined to adjust for the right granularity, thus eliminating redundancy and minimizing retrieval time.

The OPEC Information Centre continued during 2014 to extend its services to the Secretariat through increased subscriptions to electronic and non-electronic publications, newspapers and the purchase of books and reports. The Help Desk in the Centre continued to assist users with their queries and research on a timely basis, using all available resources, including print, electronic and online sources. Visitors from Member Countries, researchers from academic institutions, international organizations and students continued to use the Information Centre's resources and facilities.

### Training and knowledge transfer

The Academic Committee, under the Director, Research Division, places high importance not only on knowledge infusion into the Secretariat, but also on consolidation of all its academic-related activities. This is supported in action through the provision of training opportunities for young professionals from

Member Countries as part of an effort to support human capacity building. Responsibility for the Multi-Disciplinary Training Course (MDTC) and Summer Fellowship Programme (SFP) is attributed to the Academic Committee.

The 14<sup>th</sup> OPEC MDTC was held on 17–21 February 2014 at the Secretariat, with 45 participants from ten Member Countries. Participants gained insight into the Organization's activities and its role in the energy demand and supply balance, and received information on the latest developments in the short-term petroleum market, energy modelling, and long-term and multilateral issues related to the oil market.

The OPEC Summer Fellowship Programme accommodated 15 participants from eight Member Countries in 2014. Young professionals from OPEC Member Countries improved their technical skills and increased their professional knowledge of energy-related research themes through the programme. The Fellows worked on a broad array of research subject areas, including tight oil production, dynamics of refining, assessment of the natural gas market, examination of historical oil demand data, fuel subsidy removal, the role of inventories in setting oil prices, the marginal cost of liquids supply, renewable energy policies, modelling and forecasting, and legal challenges and implications for OPEC. Research topics included, inter alia, the linkage between natural gas and oil prices; the marginal cost of liquids supply; the penetration of liquefied petroleum gas vehicles in India; and natural gas policies in Germany.

### **PR and Information Department**

In 2014, the Public Relations and Information Department (PRID)'s priorities and specific areas of focus and output were reflected in manifold activities related to the enhancement of OPEC's image.

Improving and enriching the image of the Organization is one of the key challenges identified in the Long-Term Strategy. It has thus been the focus of PRID

in carrying out the section's many different tasks — from public relations, outreach programmes, editorial and speechwriting, to the design and production of materials and publications. In all key activities, PRID ensured that the Organization was presented to the public in a positive and desirable manner.

In the course of working towards the achievement of its priorities and in the pursuit of specific areas of focus and in handling the ongoing task of generating high-quality output, PRID contributed to the development and fine-tuning of the Secretariat's message. It has done this by helping to ensure that in its documents and publications, as well as in presentations made to visitors and other groups, and in the speeches, statements and interventions delivered by the Secretary General and others, the themes of 'openness and transparency', 'dialogue and cooperation', and 'stability and security' are included. These various but interrelated themes, which make up a great part of the Secretariat's overall message, were widely disseminated through different media and formats throughout 2014.

There is especially close cooperation between PRID and the Research Division in the area of publications. PRID was primarily responsible for editing, designing, producing, printing and distributing disseminated material, with content input varying greatly, depending on the publication type. The work of PRID also requires close cooperation with other departments and offices, which benefitted from the expertise of the department's three sub-sections — editorial, public relations (including audio-visual) and design and production — in 2014.

### **Editorial Section**

### **Publications**

A great deal of time and effort was spent in 2014 by the editorial section editing, revising and proofreading approximately 60 research documents and reports. These included the regularly produced *Monthly Oil Market Report*, which is carefully followed by the oil industry, as well as many other internal and external documents. Editorial staff also attended various meet-

ings and assisted in internal write-ups and reports, as well as articles when required for OPEC's monthly magazine, the *OPEC Bulletin* from such meetings. In addition, staff wrote blurbs for the OPEC website, as well as press releases and aided in editorial content of various types for all departments upon request throughout the year. Editorial staff also travelled to various events, contributing articles and coverage of such events for both the webpage and the *Bulletin*.

Following its earlier publication, the children's book 'I need to know; an introduction to the oil industry and OPEC' was translated into German, Spanish and Arabic. The book continues to be popular, and 1,000 copies of the English version were reprinted in 2014. The annual OPEC diary has become a regular feature of the PRID Annual Work programme. The editorial content for this item is generated, edited and approved by the Secretariat. Publication of the OPEC World Oil Outlook (WOO) commenced in 2007. With time, PRID has become more involved with drafting some of the contents of the WOO, in addition to the regular editing of the publication. The Annual Statistical Bulletin (ASB) once again provided accurate, reliable and timely historical data on various aspects of the global oil and gas industry. The WOO and ASB publications were launched together on 6 November. The ASB — which now includes a CD version — has become a useful reference tool for people in the industry. The Annual Report chronicles the activities of the Secretariat in the previous year. This tradition continued in 2014, with contributions from all departments and offices. PRID edited, designed and printed both the ASB and the Annual Report. In 2014, the OPEC Energy Review (OER) saw 25 articles received, seven articles rejected and 11 approved. Five of the approved articles were submitted in 2013, when the OER had its best year, with around 55 submissions.

The *OPEC Bulletin* continues to highlight the activities of the Secretariat and Member Countries, including interesting articles on topical issues, as well as engaging analytical features. In 2014, approximately 50 articles and features were drafted by

editorial staff for publication in the *OPEC Bulletin*, as well as for other outside publications.

Special features in the Bulletin over the year included articles marking the death of and honoring former elder statesman Dr Rilwanu Lukman of Nigeria in July and a tribute to Total CEO Christophe de Margerie after his untimely death in October. The 165th and 166th Meetings of the Conference received extensive coverage in the Bulletin in the June and November/December issues. Major milestones were written about, such as Nigeria's centenary in April and 100 years of oil activity in Venezuela in August/September. Some dialogues received extensive coverage, such as the 2014 MENA Conference in London (January), 15th International Oil Summit in Paris (April), 14th International Energy Forum in Moscow (May), 19th International Oil, Gas, Refining and Petrochemical Exhibition in Tehran (May), 11th Ministerial Meeting of the EU-OPEC Energy Dialogue in Brussels (June), and the 2014 Oil and Money Conference in London (October). In addition, special feature articles on Member Countries discussed Libya's first international soccer win at the African Nations Championship (February), the Venezuelan Institute for Scientific Research (April), Angola's deepwater oil and gas activities (May), Nigeria's deepwater oil operations (October) and Saudi Arabia's energy diversification plans (November/December) to name a few.

### Speeches and statements

In 2014, around 80 speeches were written for the Secretary General, the Director of the Research Division and other OPEC officials.

The Secretary General was in attendance at numerous major events over the year and delivered speeches, statements and interventions at, *inter alia*, the 4<sup>th</sup> IEF/OPEC/IEA Symposium on Energy Outlooks (Riyadh), Chatham House Conference: Middle East and North Africa Energy 2014 (London), 2014 Abdullah Bin Hamad Al-Attiyah International Energy Awards (Doha), 15<sup>th</sup> International Oil Summit (Paris), 14<sup>th</sup> International Energy Forum and Meeting of the heads of JODI Partner Organizations (Moscow), 21<sup>st</sup> World Pe-

troleum Congress (Russia), 11<sup>th</sup> EU-OPEC Ministerial Meeting (Brussels), 2014 Annual Meetings of the IMF and World Bank Group and G-24 Group Meeting of Ministers and Governors (Washington), 2014 Oil and Money Conference (London), Abu Dhabi International Petroleum Conference and Exhibition (Abu Dhabi), Arab Strategy Forum (Dubai), 10<sup>th</sup> Arab Energy Conference (Abu Dhabi). Speeches, statements and interventions delivered at these events were always well received by participants and the media, given how much they were reported, analyzed and quoted. The subsequent publication of many of these on the OPEC website continues to be very useful in attracting traffic and in disseminating the Secretariat's message.

The Organization's media exposure continues to increase globally through the Secretary General's appearances and interventions at major events and conferences, as well as through the Secretariat's ongoing research and public relations activities.

PRID also worked together extensively with RD to produce speeches for various conferences, seminars, workshops and meetings, often on tight deadlines. These messages were delivered by senior OPEC officials to top-level participants from Member Countries, all sectors of the energy industry, government, academia and media.

### Media relations and news monitoring

Another tool used to help improve and enhance the image of the Organization was coordination of media coverage through speeches and statements, press conferences and briefings, as well as proactively seeking to further networking opportunities among media outlets and energy journalists. This approach to media attention and coverage has helped to ensure that journalists have better and more timely information about — as well as a fuller understanding of — the Organization's activities, which has served to improve the overall coverage of OPEC.

Media briefings were provided for many international press at various events throughout the year, and exclusive interviews were conducted. These included briefings and interviews with many mem-

bers of the press from such renowned organizations as: Bloomberg TV, CNN, CNBC, the BBC, Al Arabiya, Rossiya 24, RIA Novosti, PRESS TV, Reuters, Platts, the Wall Street Journal, the Financial Times, Energy Intelligence, the Middle East Economic Survey, Argus, the Petroleum Economist, Der Spiegel, Deutsche Welle and Handelsblatt, to name a few.

Staff were also asked to produce articles and question and answer material for various media and industry-related publications. This included publications for the 21<sup>st</sup> World Petroleum Congress, the G7 Summit in Brussels, the G20 Brisbane Summit, the official IEF Ministerial Meeting 2014 in Moscow, and the IEA's 40<sup>th</sup> Anniversary publication, as well as for 'The Global Sustain Yearbook', the Oxford Business Group report on Algeria, 'The Business Year: Saudi Arabia 2014', 'The Oil & Gas year Abu Dhabi 2014', Bloomberg's 'Oil Buyer's Guide', 'Energia', Schlumberger's 'Energy Perspectives' and 'The Banker'.

The media advisor also provided background information upon request to many journalists from various media outlets, as well as background for the Secretary General for various interviews and bilateral meetings.

In order to keep abreast of what is happening in the industry and other energy-related fields, and to stay informed about news and commentary relating to Member Countries and the Organization, the editorial section continued throughout 2014 to produce the Daily News Summary (DNS), as well as maintaining subscriptions to various industry-related publications.

### **Public Relations Unit**

### Website

In 2014, PRID continued to maintain and update the content of the website in a timely and accurate manner with press releases, speeches, statements, data and graphs, videos on demand, MC information, employment opportunities etc.

New modules and applications were introduced to enhance the reachability, functionality, look and feel of the content and make website browsing more user-friendly overall. A new structure for videos on demand was implemented, with enhanced design and advanced functionality. Some advantages of the new structure are the possibility to email and download individual video links, easier scrolling, annual classification and the availability of videos on demand using ipads, iphones and other mobile devices.

PRID continued monitoring the number of views to website pages and prepared monthly reports on the data. These reports are critical to website operations as the Department continues to ensure that visitors find the information they require in an easy and practical manner and works on enhancements as needed. In general, the website attracted higher numbers of views in 2014 over 2013, with the number of views to all website pages reaching 4,802,630. PRID continued to maintain and update its email lists, which consist mainly of journalists, news agencies, investment banks, analysts etc. The lists include around 550 recipients and were used to forward press releases, publications, website update alerts, daily and weekly basket price data, announcements and general press info, etc. and proved to be a timely and effective tool in informing the public about OPEC and its activities.

Regular monitoring was undertaken of messages received through the website email box and various public requests on website content. These emails provided positive feedback to PRID on various issues and were attended to by the Organization.

#### Audio-visual/multimedia

PRID's audio-visual (AV) service was in demand in 2014, and all requests were met.

These included the following productions: 'Who Gets What', the 'Year-in-Review', staff awards, highlights of the OPEC Seminar and updating of the film 'Wheel of Time'. OPEC documentaries were also converted/formatted for YouTube and uploaded to OPEC's YouTube account.

There was full video and photo coverage of the 14<sup>th</sup> International Energy Forum (IEF) in Moscow and the 19<sup>th</sup> Oil and Gas Exhibition/Conference in Tehran,

IR Iran, both in May. Live coverage in Moscow included the opening ceremony, and speeches by the Russian Prime Minister and OPEC's Secretary General, as well as production of 30 on-demand interviews with high-level officials for both the OPEC and IEF websites. Around 15 interviews were conducted and recorded during the Tehran mission for OPEC publications. For both the Moscow and Tehran meetings, OPEC staffed an exhibition stand.

The WOO-ASB Press Conference — including interviews — was live streamed in the OPEC multimedia section of the website. The audio-visual team also covered the OPEC—Russia Energy Dialogue in Vienna, including interviews with the Russian Minister of Energy and the OPEC Secretary General. Updating and uploading of archive videos covering key OPEC events to the OPEC server was ongoing.

The 165<sup>th</sup> and 166<sup>th</sup> Meetings of the OPEC Conference were live-streamed on the multimedia section of the OPEC website and immediately made available as on-demand videos. The now-regular 'Oil Market Insight' sessions before the two ministerial Conferences were filmed and videos-on-demand were produced for the OPEC website. The opening session and the press conferences of both ministerial meetings were broadcast live to international media and broadcasters.

Photo and video coverage was undertaken for archival purposes of all official visitors to the Secretary General, student visits, Board of Governors (BoG) and Economic Commission Board (ECB) meetings, the Multi-Disciplinary Training Course, workshops and roundtables, while the audio-visual team distributed photographs to the international media and editors for publication purposes. It also assisted with, and provided video and photo coverage for, special historical stories as requested by international broadcasters and Member Country media outlets.

Video graphic design of in-house screens for Meetings of the Conference and other events were part of preproduction and postproduction. In addition, DVDs and CDs of documentaries and photos were produced and distributed to Governors, Officers leaving the Secretariat and Member Country embassies requesting coverage of their activities.

Over the year, 76 exclusive live interviews with OPEC officials and other international figures were filmed, while further interviews with analysts and journalists were conducted during live-streaming and published in the website's multimedia section.

The PR Department arranged for AV facilities and accreditation for meetings, workshops, conferences, training courses and seminars.

### Special audio-visual projects

Audio-visual technical planning started for the upcoming OPEC Seminar in 2015. A short film highlighting the OPEC Seminar 2012 was produced for the Seminar 2015 website. A short documentary was also produced about the Minister of Nigeria, President of the Conference for 2015.

PRID continued daily to update and caption the 'Cumulus Photo Archive' and website 'Photo Gallery', including AV inventory. Many technical upgrades and maintenance were performed throughout the year and the Multimedia Specialist's term was extended to 30 June 2015.

### Outreach programme

As part of achieving OPEC's strategy, aims and objectives, and as part of PRID's work programme, the PR unit has conducted many activities under the umbrella of the outreach programme to reach a wider and more varied audience, raising awareness about OPEC, enhancing image and perspectives, and addressing any misconceptions about the Organization.

During 2014, more than 100 requests for group visits were received, out of which 80 visits took place (including those with other departments). Cancelled briefings mainly occurred due to the Secretariat's heavy schedule, when it was not possible to accommodate a requested briefing date.

### **Briefing programme**

The briefing programme normally lasts between  $1\frac{1}{2}$  to 2 hours, starting with an introduction and

brainstorming session, followed by a general presentation about OPEC, screening of a short film entitled "Instrument of Change", and concluding with a question and answer session. A group picture is usually taken during such visits and a guided tour through the main conference room is offered, depending on availability and time.

Briefings are important for the following reasons: establishing two-way communication with the public, uncovering how the public perceives OPEC and addressing false perceptions. They also raise awareness about the objectives and goals of the Organization and promote the Organization's publications.

In 2014, a total number of 2,257 visitors were received, compared with 1,610 in 2013, including joint presentations with other departments (mainly the Research Division and Human Resources Section).

The visitors were from both the public and private sector, mainly from universities, schools and research institutes, as well as the German navy, embassies and other organizations and Member Countries' national oil companies. Individuals were also received. The age of visitors ranged from 18–68, and they stemmed from a variety of backgrounds.

The facing graph illustrates the geographical distribution of groups (based on the number of visits and not the percentage).

During 2014, over a dozen schools and universities were contacted for a briefing/visit. Due to a heavy schedule at the Secretariat, it was only possible to arrange one visit with the Saudi School, based in Vienna, on 10 April 2014, when 14–16 years old were provided with more insight into the oil industry and the history of OPEC. The presentation was, exceptionally, presented in Arabic and was very well received. It was the first visit to an Arabic School based in Vienna.

As part of the PR outreach programme, OPEC entered the Science and Engineering Fair as an exhibitor. In an attempt to raise awareness and enhance knowledge about the Organization in general and the oil industry in particular, students were invited to participate in a short quiz. OPEC's stand was well attended

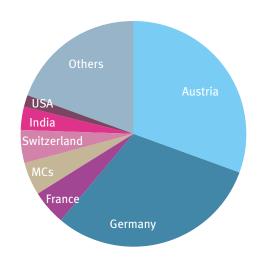
and visited by students, teachers, parents, judges and staff members from the International Atomic Energy Agency (IAEA).

The fair, held for international middle and high schools students in Austria, Bratislava, and Prague, took place on 15 March at the Vienna International School and was organized by the Vienna Chapter of the Institute of Nuclear Materials Management (INMM), with the aim of promoting science and engineering subjects in schools and encouraging the younger generation to pursue careers in different scientific and engineering fields. Almost 110 participants participated in junior and senior divisions, covering various topics.

The event was very successful and it was a good opportunity to raise awareness about the Organization, its aims and objectives and to enhance the Organization's image, as well as to reflect the Organization's interest in supporting the advancement of younger generations in science and engineering.

Potential targets to aid in achieving OPEC's objectives were identified for 2014. Taking into consideration limited resources and budget, the following events/publications were sponsored in 2014:

The Expat Guide: produced under the auspices of the Expat Centre, the guide offers help to more than 2,500 expats coming from 95 different countries. The purpose of sponsoring the guide was to raise awareness and public perception about OPEC



within the local and international community in Vienna, highlighting the successful role of OPEC, its international background, and existence in Vienna for half a century. The Organization was advertised in the guide; 5,000 copies were published each in English and in German.

The United Nations Women's Guild Bazaar (UNWG): To promote the Organization's aims and objectives, a charity event was chosen that is attended by many embassies and diplomatic bodies in Austria, including OPEC Member Countries' embassies. This event attracts more than 25,000 visitors, from both the international and national communities in Austria. Since the UN organizes the event, participation was a very good marketing tool. By sponsoring/donating to this charity event, the Organization contributed to a good cause and reflected a positive image, while gaining direct contact to the public under the umbrella of the United Nations.

The OPEC diary: This is an annual publication targeted at between 3,000–4,000 recipients from oild producing countries (including OPEC Member Countries), consuming countries, embassies, research institutes, academia, national oil companies, international oil companies, international oil companies, international organizations (including the OPEC Fund for International Development and OPEC employees), and others. The Diary includes some useful information about OPEC, such as background information, lists of Heads of Delegation, Governors, National Representatives, as well as embassies and international organizations based in Vienna.

### *News monitoring and What the Papers Say*

Besides the Morning Report and the Afternoon Report received daily from news providers, news about energy in general, as well as petroleum, OPEC and its Member Countries in particular is monitored, and a selection of the most important and informative articles, called What the Papers Say, are gathered and presented to OPEC officials (Ministers, Governors and National Representatives) in addition to the Secretary General, Secretariat staff and some outside members from the industry upon request.

### **Press accreditation**

During OPEC Conferences and main events, the Organization's doors open to a large number of journalists, analysts and others from the industry who are eager to attend such events personally and witness the unfolding of history, in addition to meeting decision-makers within the Organization and its Member Countries. A special area on the OPEC webpage has been designed for such requests with an application form. After this is received, the details of each request are checked and separated into groups which are invited to be issued badges permitting them to enter the Secretariat in order to have the chance to cover events and talk to the OPEC Secretary General and Ministers.

### Distribution of publications

Distribution of printed materials plays a very important role in disseminating information about the Organization's activities. To this end, PRID continued to review and update mailing lists and distribution networks for key publications, with additional input and more rigorous review recommended in order to expand and strengthen these even more. Included on the mailing lists are the media, press analysts, news agencies, banks, investment companies, universities, government institutions and more. Along with the timely dispatch of publications, email alerts were sent out.

Distribution is undertaken in coordination with related departments, using a distribution company agreement. The company facilitates the distribution of the yearly *Annual Statistical Bulletin* and *World Oil Outlook* in addition to the *OPEC Bulletin* and the *Annual Report* according to an updated mailing list supplied by OPEC.

### Corporate gifts

Gifts are offered to visitors received in briefing sessions and general visitors to the department, as well as visitors from Member Countries, to promote hospitality and maintain the good image of the Organization. It has also become custom in all departments to offer corporate presents with the Organiza-

tion's logo and purchased by the PR unit to almost all visitors. Selection, negotiation, arranging for logo design, quality control, invoice approval and gift handling are done within the PR unit. The Production and Design unit helped with logo design.

### Workshops, seminars and exhibitions

Other activities in 2014 included various workshops and seminars. After a successful inaugural Public Relations Workshop for OPEC Member Country public relations managers and officers from national oil companies and oil ministries in 2012, planning was underway during 2014 for a second workshop to take place at the beginning of 2015. Looking ahead, PRID continued to work on the preparations and planning for the 6<sup>th</sup> OPEC International Seminar, to be held 3–4 June 2015.

A very important task performed by the PR unit is the representation of the Organization in different events, both inside and outside of Austria. Publications are displayed at such events, where opportunities present themselves to explain the role of OPEC in the oil industry and provide information about Member Countries and the work of the Organization. These events are attended by high-level delegations and elite groups of petroleum leaders.

To this end, the Secretariat had a booth organized and manned by PRID staff at the 19th International Oil, Gas, Refining and Petrochemical Exhibition, held in Tehran, IR Iran from 6–9 May. The OPEC stand was visited by many visitors on all days of the event; many were very happy to know about the organization, often showing a lack of knowledge about OPEC, but also a willingness and desire to learn more. The visitors were mainly Iranian, and mainly wanted to know about OPEC and the role of their country in the petroleum industry, while others were trying to establish contact to receive regular publications or possibly visit the organization.

Besides a visit by the Iranian Petroleum Minister to the OPEC stand and corresponding interview, the stand was also visited by many high-level people from the petroleum ministry, as well as the former Iranian Governor to OPEC.

PRID also had a stand at the 14<sup>th</sup> Meeting of the International Energy Forum (IEF), which took place in Moscow, Russia, from 15–16 May. The stand was well received and visited by many participants. Ministers from OPEC and non-OPEC Member Countries (ie. Kuwait, Oman, Sudan and Brunei) visited the stand, as well as the Governors of Iraq and Angola and representatives and delegation members from Algeria, IR Iran, Kuwait, Saudi Arabia, UAE, Oman, Sudan, Russia, Mexico, Brunei, China, Egypt, the Netherlands and others. Media representatives also came by, including Dow Jones and a Russian TV channel. Some IEF and IEA delegations and organizers visited, as well as colleagues from the OPEC Fund for International Development.

### **Design and Production**

Based on a complete redesign of the publication in 2013, the WOO was further improved with regard to layout and readability. In 2014, in addition to the printed version of the *WOO*, a website was created (woo.opec.org), providing a breakdown of the chapters and including downloadable excel files of graphs and tables. The CDs that were formerly distributed with the *WOO* were replaced by USB sticks that contain an offline version of the website woo.opec.org. The design and production team was responsible for designing, typesetting, producing and overseeing the printing process of the publication, along with the *ASB* and the *Annual Report*.

The design, layout and finishing of the ASB was reworked through enhancing the overall look and feel of the publication. In addition to the 'full' version, a pocket version was designed which displays the most important tables and graphs in a consolidated form. An interactive version, previously available on CD, has been replaced by USB sticks.

The design and layout of the *Annual Report* was adapted in 2014 and the size of the publication streamlined. The *OPEC Bulletin* is designed and typeset on a monthly basis. The design and production team is responsible for its layout, typesetting and production processes and oversees its printing with an outside company. Throughout the year, the

layout of the *Bulletin* was adapted to fit state-of-the art corporate publication trends in an international and multi-cultural environment in coordination with the editorial team.

The team produced an overview of corporate design-related matters in order to prepare corporate design guidelines for presentation to the management and to garner their input and approval. The section prepared numerous logo designs throughout the year for OPEC in-house meetings and events and produced nameplates, programmes, badges, notepads and giveaways, as well as corporate gifts. The team also designed the logo for the 2015 International Seminar and worked closely with and advised Seminar designers on how to set up and streamline their input within the Organization's corporate look. Roll-ups and an advertisement were designed and installed.

#### Exhibitions and advertorial material

Design and Production provided visuals for OPEC exhibition stands at the 14th Meeting of the IEF in Moscow and the 19th International Oil, Gas, Refining and Petrochemical Exhibition in Tehran, both held in May, in order to disseminate the Secretariat's key message. Posters and rollups for internal and external use were designed to display the Organization's message.

#### Other activities

PRID staff undertook many missions and training programmes throughout the year, accordingly producing reports on these activities, which were either published in the *OPEC Bulletin* or submitted to the Missions Committee.

### **Administration and IT Services Department**

The primary objective of the Administration Section's work is to ensure the provision of all necessary services in order to facilitate the smooth running of the Secretariat's day-to-day affairs and to allow the

various specialized areas of activity to meet their targets. These services include, but are not limited to: procurement and disposal; travel and transportation services arrangements for all meetings and entertainment functions in Vienna; implementation of the Headquarters Agreement regarding visas, ID cards, import declarations and license plates; upkeep of the premises and residence; and security and safety.

The Administration Section continued to achieve cost savings in many areas through negotiations with suppliers. New hotels in Vienna were visited, such as the Park Hyatt and the re-opened Plaza Hilton, and special rates negotiated.

Due to positions being held vacant and one new staff appointment requiring training and work re-organization efforts, it was necessary to maintain the Section's high quality of service with a reduced number of staff.

After a contract was signed with the Hofburg to be the venue for the 2015 OPEC Seminar and Seminar Consultant IBC Informa appointed, intensified preparations for this special event began, including budgetary planning, meetings with IBC Informa, and many site visits to the Hofburg, as well as to to prospective venues for entertainment functions and accommodation possibilities.

The IT Services Section is also responsible for printing/reproduction, telecommunications and mail/courier services at the Secretariat.

Apart from its routine activities, the Section carried out the following projects in 2014:

- Implementation of a Disaster Recovery System based on Site Recovery Manager and Storage replication;
- Enhancement of the switching infrastructure (implementation of a new core switching system);
- Implementation of a new Data Domain infrastructure to enhance the existing backup system;
- Implementation of a new storage system for the PRID archive;

- Implementation of new security measures to increase IT security at OPEC;
- Implementation of a new IPTV system.

# **Finance and Human Resources Department**

In addition to fulfilling the regular day-to-day activities of providing services related to managing the human and financial resources of the Organization, the Finance and Human Resources Department continued to focus on improving the efficiency of each process and quality of its services, as well as the accuracy of data by applying the latest technology whenever possible in 2014.

Regular financial services were once again supplied to the Secretariat. The Finance Office also prepared and presented the 2013 Financial Report, 2014 Provisional Financial Statements and 2015 Draft

Budget to the 143<sup>rd</sup> Meeting of the Board of Governors. Furthermore, the Finance Office continued to streamline its business processes in conjunction with external auditors for greater efficiency.

In addition to providing personnel-related services to the Secretariat, the Human Resources Section continued to monitor all human resources processes with a view to improving the efficiency of each process, as well as the quality of services and accuracy of data provided by the section, by applying modern technology whenever possible. The section also continued its efforts to utilize the Secretariat's available manpower to the maximum extent possible to ensure efficiency and proficiency. Furthermore, the section ensured the smooth implementation of a planned salary increase and increase in housing and family allowance entitlements, as well as the introduction of an end-of-service grant for all Category II Staff Members, as approved by the 141st Meeting of the Board in November 2013.

# **Heads of Delegation**

# **ALGERIA**



**HE Dr Youcef Yousfi** 

# **ANGOLA**



HE Eng José Maria Botelho de Vasconcelos

**ECUADOR** 



HE Eng Pedro Merizalde-Pavón

# IR IRAN



HE Eng Bijan Namdar Zangeneh

IRAQ



HE Adil Abd Al-Mahdi

**KUWAIT** 



HE Dr Ali Saleh Al-Omair

# LIBYA



HE Abdourhman A Al-Ahirish President of the Conference in 2014

# NIGERIA



HE Mrs Diezani Alison-Madueke Alternate President of the Conference in 2014

# **QATAR**



HE Dr Mohammed Bin Saleh Al-Sada

# SAUDI ARABIA



HE Ali I Naimi

# UAE



HE Suhail Mohamed Al Mazrouei

# **VENEZUELA**



**HE Rafael Ramirez** 

# Outgoing Heads of Delegation by country •

# **IRAQ**



HE Abdul-Kareem L Bahedh to September 2014

# **KUWAIT**



HE Mustafa Al-Shamali to January 2014

# LIBYA



HE Dr Abdel B A Al-Arousi to February 2014

# LIBYA



HE Omar A Elshakmak to November 2014

Heads of Delegation 61

# **Board of Governors**

Algeria

Ahmed Messili

Angola

Felix Manuel Ferreira

**Ecuador** 

Wilson Pástor-Morris

IR Iran

Hossein Kazempour Ardebili

Iraq

Dr Falah J Alamri

**Kuwait** 

Ms Nawal Al-Fezaia

Libya

Samir Salem Kamal

Nigeria

Danladi Kifasi (to October) Dr Jumila Shu'ara

**Qatar** 

Issa Shahim Al Ghanim

Saudi Arabia

Dr Mohammed S Al-Madi

**United Arab Emirates** 

Dr Ali Obaid Al-Yabhouni, Chairman of the Board in 2014

Venezuela

Dr Bernard Mommer

# **Economic Commission Board**

Algeria

Mrs Yamnia Hamdi *(to March)* Dr Achraf Benhassine

Angola

Luís Correa Neves

**Ecuador** 

Dr Andrés Miño Ron

IR Iran

Dr Saeid Serajmir (to September) Dr Mehdi Asali

Iraq

Ali Nazar Faeq Al-Shatari

**Kuwait** 

Mohammad Khuder Al-Shatti

Libya

Imad A Ben Rajab

Nigeria

None named

**Oatar** 

Sultan K Al-Binali

Saudi Arabia

Dr Nasser A Al-Dossary

**United Arab Emirates** 

Salem Hareb Al Mehairi

Venezuela

Ms Nélida Izarra

# Officials of the Secretariat

# **Secretary General**

Abdalla Salem El-Badri

### **Research Division**

Dr Omar S Abdul-Hamid

# **Data Services Department**

Dr Adedapo Odulaja Mohamed Mekerba (joined in January) Dr Hossein Hassani (joined in June)

# **Energy Studies Department**

Oswaldo Tapia
Dr Taher Massoud Najah
Julio Arboleda
Amal Alawami
Mehrzad Zamani
Dr Jorge Leon
Shayma Amin
Hend Lutfi (joined in May)
Erfan Vafaiefard (joined in July)
Moufid Benmerabet (joined in October)

### **Petroleum Studies Department**

Dr Hojatollah Ghanimi Fard Elio Rodriguez Medina Eissa Alzerma Anisah Almadhayyan Afshin Javan Imad Alam Al-Deen Hassan Balfakeih Mohammad Ali Danesh Hector Hurtado (joined in May)

#### **Environmental Matters Unit**

Dr Mohammad Taeb

# **Legal Office**

Asma Muttawa Dr Garba I Malumfashi (joined in March)

# **Finance & Human Resources Department**

Jose Luis Mora *(joined in August)* Kamal Al-Dihan Abiodun Ayeni

# **Administration & IT Services Department**

Badreddine Benzida

# **Public Relations & Information Department**

Hasan Hafid (joined in January) Zoreli Figueroa Tania de Vasconcelos Inacio (joined in November)

# **Secretary General's diary**

22–23 January	4 <sup>th</sup> IEF/OPEC/IEA Symposium on Energy Outlooks, Riyadh, Kingdom of Saudi Arabia
27–28 January	Annual Chatham House Conference on Middle East and North African Energy, London, UK
26 March	Investor event hosted by Liberum Capital Ltd, London, UK
8 April	The Abdullah Bin Hamad Al-Attiyah International Energy Awards Foundation, Doha, Qatar
11 April	15 <sup>th</sup> International Oil Summit, Paris, France
15–16 May	14 <sup>th</sup> International Energy Forum and Meeting of the Heads of JODI Partner Organizations, Moscow, Russia
15-19 June	21 <sup>st</sup> World Petroleum Congress, Moscow, Russia
24 June	11 <sup>th</sup> EU-OPEC Ministerial Meeting, Brussels, Belgium
9–12 October	2014 Annual Meetings of the IMF and World Bank Group and G-24 Group Meeting of Ministers and Governors
29–30 October	2014 Oil & Money Conference, London, UK
10-13 November	Abu Dhabi International Petroleum Conference and Exhibition, Abu Dhabi, UAE
14 December	Arab Strategy Forum, Dubai, UAE
21–23 December	10 <sup>th</sup> Arab Energy Conference, Abu Dhabi, UAE



Assembled delegates of the three organizations, International Energy Forum, OPEC and International Energy Agency, in Riyadh, Kingdom of Saudi Arabia in January 2014.

OPEC Secretary General greeting Hidetoshi Nishimura, Executive Director of the Economic Research Institute for ASEAN and East Asia (ERIA), at the OPEC stand at the 14<sup>th</sup> International Energy Forum and Meeting of the Heads of JODI Partner Organizations in Moscow, Russia in May 2014.





Abdalla Salem El-Badri, OPEC Secretary General (I) with Guenther Oettinger (r), European Energy Commissioner during the 11<sup>th</sup> Ministerial Meeting in Brussels, Belgium in June 2014.

Secretary General's diary

# Calendar 2014

22 January	4 <sup>th</sup> IEF/OPEC/IEA Symposium on Energy Outlooks, Riyadh, Kingdo	m of	Y					
Sun Mon	TiSaudi Arabia Thu Fri Sat Sun Mon Tue							
22 Ionusmi	1 2 3 4							
<b>23 January</b> 6	IEF/OPEC/IEA Technical Meeting, Riyadh, Kingdom of Saudi Arabia							
12 13 <b>17–21 February</b>	14 15 16 17 18 9 10 11 14 14 Multi-Disciplinary Training Course, Vienna, Austria							
26 27 27 <b>28 February</b>	28 30 31 23 24 25 Meeting of the Legal Defence Team, Vienna, Austria							
27–28 March	Technical Meeting of the OPEC-Russia Energy Dialogue, Vienna, Austria							
31 March	4 <sup>th</sup> IEF/OPEC/IEA Workshop on the Interactions between Physical and Financial Energy Markets, Vienna, Austria							
8 April	Member Countries' Workshop on Energy Efficiency, Vienna, Austri	a						
<b>29–30 April</b> <i>Mon</i>	45 <sup>th</sup> Meeting of the Executive Committee of the IEA GHG Programm	ne,ed						
	Vienna, Austria 1 2 3 1 2 3							
4 5 <b>7–8 May</b> <sub>12</sub>	First Member Countries' Coordination Meeting, Vienna, Austria							
18 19 <b>15–16 May</b> 26	20 21 22 23 24 22 23 24 14 <sup>th</sup> International Energy Forum, Moscow, Russia*							
20-21 May	142 <sup>nd</sup> Meeting of the Board of Governors, (BoG), Vienna, Austria							
2–3 June	13 <sup>th</sup> Annual Statistical Meeting, Vienna, Austria							
4 June	Member Country Workshop on Capacity and Investment, Vienna, Austria							
5–6 June	121st Meeting of the Economic Commission Board (ECB), Vienna, A	Austria						
<b>11 June</b>	165 <sup>th</sup> Meeting of the Conference, Vienna, Austria							
24 June	11 <sup>th</sup> EU-OPEC Ministerial Meeting, Brussels, Belgium							
7 8	9 10 11 12 13 5 6 7							
3 September 15	1st Meeting of the Advisory Panel of the OPEC Award for Journalism,							
	Vienna, Austria     26     27     19     20     21       30     26     27     28							
9–10 September	14 <sup>th</sup> Special Meeting of the ECB, Vienna, Austria							
10 September	1 <sup>st</sup> Meeting of the Advisory Panel for the 2015 OPEC Award for Res Vienna, Austria	earch,						

		C	11 September	,	Workshop on Road Transportation Modelling and other Applications,				
			Wed Thu F		Vienna, Austria Sun Mon Tue Wed Thu Fri Sat				
			15 September		2 <sup>nd</sup> OPEC Member Countries Webex Meeting, Vienna, Austria				
			12 13	14	15 13 14 15 16 17 18 19 20 High Level Maching of the ODEC Duccie Energy Diclorus Vienne Austri				
			16 September	28	3rd High-Level Meeting of the OPEC-Russia Energy Dialogue, Vienna, Austri				
			3 October		Meeting of the Legal Defence Team, Vienna, Austria				
			20 October		JODI Technical Meeting, Vienna, Austria				
			21 October		JODI Inter-Secretariat Meeting, Vienna, Austria				
			30 October		2 <sup>nd</sup> IEA/IEF/OPEC Annual Symposium on Gas and Coal Market Outlooks, Paris, France				
			2 November u	ri .	2 <sup>nd</sup> Meeting of the Advisory Panel for the 2015 OPEC Award for Journalisr				
				4	Vienna, Austria				
					12 3 4 5 6 7 8 9				
			3 November 7		2 <sup>nd</sup> Meeting of the Advisory Panel for the 2015 OPEC Award for Research,				
				25	Vienna, Austria     17     18     19     20     21     22     23       24     25     26     27     28     29     30				
27 28 29 <b>2</b>			30 31 <b>4–5 November</b>		143 <sup>rd</sup> Meeting of the BoG, Vienna, Austria				
			6 November		Press Conference on the Publication of 2014 WOO and 2014 ASB, Vienna, Austria				
			11–12 November		Coordination Meeting with Member Countries in the Run-up to COP-20/CMP-10, Vienna, Austria				
			20–21 November		122 <sup>nd</sup> Meeting of the ECB, Vienna, Austria				
			Wed Thu F  27 November	Fri.	166 <sup>th</sup> Meeting of the Conference, Vienna, Austria				
					1 2 3 4 5 6				
			1–2 December	14	COP-20/CMP-10, Lima, Peru* 9 10 11 12 13				
				21	14 15 16 17 18 19 20 22 23 23 23 23 23 23 23 23 23 23 23 23 2				
			2 December 7		EU-OPEC Roundtable on "Petrochemical Industry Outlook and Challenges" Study 29 30				

\* participation by OPEC

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