OPEC Annual Report 2011

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Foreword

Abdalla Salem El-Badri
Secretary General

The year 2011 was a memorable one for the Staff of the OPEC Secretariat, albeit in a quiet and reassuring manner. It completed a trio of years in which the character of the Vienna-based headquarters would change for ever.

The year 2009 had witnessed what was, without any doubt, the biggest upheaval in the history of the Secretariat, with its vacation of the premises it had occupied for more than three decades and its move into its purpose-built new building in Vienna's historic first district on 30 November. The following year, 2010, had been dominated by the 50th-anniversary celebrations and the chance to reflect upon the remarkable development and achievements of this Organization of 12 oil-producing, developing countries.

Hence, 2011 provided the first real opportunity for the Staff to experience a 'normal' year in the new premises, away from the distractions of the move and the celebrations, and to focus as resolutely as ever on the challenges facing OPEC and its Member Countries in the oil industry and beyond.

Some of these challenges were long familiar ones, either addressing issues that first saw the light of day at OPEC's inaugural meeting in September 1960 — such as stable oil prices and secure supply — or handling topics that had since emerged on the international agenda, notably the environment and sustainable development.

However, other challenges saw us responding to a series of unexpected developments that would make a big impact on the global economic landscape during the course of the year, with diverse, increasingly apparent repercussions for the energy sector. Three developments stood out: the political events in parts of North Africa and the Middle East; the triple disaster in Japan and the re-emergence of the debate on nuclear energy; and the Euro-zone sovereign debt crisis, intermingled, more generally, with persistently high unemployment in the advanced economies and inflation risk in the emerging ones. Indeed, there were frequent downward revisions to growth estimates for both the world economy and oil demand.

The obvious uncertainty for the international oil market resulting from this was exacerbated by the high level of price volatility witnessed during the year. This was closely linked to increased levels of speculation in the oil sector and commodity markets generally. The average annual price of OPEC's Reference Basket rose by well over a third during the year, from US $77.45 a barrel to $107.46/b, as a reflection of the pressures on the oil market. To get a taste of the volatility, one could merely observe that the average price of the Basket changed direction every month during the second half of the year. On a daily basis, price swings of as much as $8.40/b for the Basket were experienced. Throughout this period, however, fundamentals were sound and the market was always well-supplied with crude.

While these matters are dealt with in more detail inside this Annual Report, the significant point here is that the OPEC Secretariat, together with our Member Countries, was monitoring and reviewing the situation closely at all times, to determine appropriate actions to recommend to our Ministerial Conference, so as to help restore order and stability to the market. This was no easy matter in such a constantly changing, unpredictable environment.

This was the market outlook facing OPEC's Ministers at the 160th Meeting of the Conference in Vienna in December. As they began their meeting, the Ministers reaffirmed their commitment to a well-supplied market, at the same time as recognising that oil-producers were faced with the prospect of a world economy which could swing either way in the coming months, thus clouding the picture about the outlook for 2012 and beyond. In the light of all this, their decision "to maintain the current production level of 30 million barrels/day, including production from Libya, now and in the future" was an understandable one and sent a powerful message to the market about OPEC's continuing resolve to ensure order and stability in the market. What is more, the new production ceiling, the determination of which owed much to the perpetual, painstaking market analysis carried out by the Secretariat, was widely recognised as balancing the interests of producers and consumers.

No one will pretend that the challenges facing the industry will become any easier in the future. However, we shall continue to do our best to improve the prospects for this key sector of the global economy whenever we can. We have demonstrated this time and time again through our decisions and actions in the market, our ongoing, extensive research into future behavioural patterns, our encouragement to our Member Countries to follow up on them, our promotion of meaningful dialogue among producers, consumers, companies, investors and other influential parties, and generally our expressed optimism and commitment with regard to the future direction of the industry.

OPEC has been supported at every stage of this by our loyal, devoted, hardworking Staff at the Secretariat, and I am confident that they will continue to excel in the congenial new surroundings which have quickly become a familiar part of our daily lives.

Abdalla Salem El-Badri
Secretary General

The world economy

The year 2011 was a turbulent one and affected by many largely unexpected events and circumstances, which, in the end, did not play out as negatively as they could have. Nevertheless, the world economy is estimated to have expanded by 3.6 per cent, which compares with the stimulus-induced expansion of 4.9 per cent in 2010 (**table 1**). While the level of growth in 2011 was below its potential, particularly in the developed economies, it was still above its 25-year annual average of 3.1 per cent. Furthermore, fiscal stimuli and other government-led support were at much lower levels, due also to the budgetary constraints in many economies. But it turned out that economic support from private household consumption improved, compared with government spending, and, therefore, growth was considered healthier than in 2010.

The pattern of relatively uneven growth levels continued in 2011, with export-driven economies enjoying much higher growth levels, while importing countries expanded less. While the wealthier economies of the Organization for Economic Cooperation and Development (OECD) grew at 1.7 per cent, the major emerging economies of China and India expanded at 9.2 and 7.0 per cent respectively. Developing economies as a whole, excluding India and China, grew at 3.8 per cent. The geopolitical events in the Middle East/North Africa region (MENA) had a major impact on growth in this region in 2011, and this decreased to 2.1 per cent, after registering 4.2 per cent in 2010.

The main contributions to growth in the OECD came from the United States of America, which expanded by 1.7 per cent, and the Euro-zone (despite its many difficulties) with 1.4 per cent; indeed, the latter grew significantly in the first half of the year (1H11), before the sovereign debt issues pushed down the growth rate to much lower levels in the second half. Japan was the weakest performer in the OECD, accommodating the triple disaster of earthquake, tsunami and nuclear accident from 1H11 with an economy that declined by 0.7 per cent. The major contribution to the global growth rate of 3.6 per cent, therefore, came again from developing Asia. While the OECD portion of global growth amounted to 0.9 percentage points, China's contribution stood at 1.3 percentage points and India's contribution at 0.4 percentage points.

While the first half of 2011 still saw support from some fiscal and monetary stimulus measures, the triple disaster in Japan and the continued uncertainty created by the European debt crisis — and the consequent challenging economic environment in the Euro-zone — had a decelerating effect on the world economy. Both sets of developments had a retarding impact in mainly 1H11, and this helped accelerate the already materializing slowdown in the USA at that time. These developments also weighed in on the major emerging markets, which themselves had started to witness a slowing of their disturbingly fast rates of growth at the end of 2010. The second half of 2011 was marked by a catch-up effect, via reconstruction in Japan, better-than-expected growth in the US economy and a

Table 1
World economic growth rates, 2010–11 *(% change over previous period)*

	2010	2011
OECD	3.0	1.7
Other Europe	–0.1	1.7
Developing countries	6.5	4.4
Africa	4.9	1.5
Latin America and Caribbean	5.9	4.0
Asia and Oceania	7.1	5.3
Asia-Pacific	8.3	4.4
OPEC	3.8	3.2
China	10.3	9.2
FSU	4.6	4.5
World	**4.9**	**3.6**

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

continued solid level of expansion in the developing countries, in spite of the fact that their economies were slowing down. Growth, therefore, in 2H11 was at a higher level than in 1H11, although the continuing problems in the Euro-zone still had a dampening effect on expansion.

On the foreign exchange markets, a major development was the relatively high volatility of the US dollar against the euro. While, on a yearly basis, there was almost no change to this exchange rate, the fluctuations were of much more significance. The dollar gained 0.3 per cent, compared with the euro, to average $1.3176 per euro in December 2011, compared with $1.3219/€ in the same month of the previous year. These almost equal levels masked the fact that the two currencies fluctuated significantly against each other during 2011. From the beginning of the year to April, the dollar lost almost ten per cent, moving to an exchange rate of almost $1.45/€. This was due mainly to the very weak momentum in the US economy in the first quarter (1Q11) and the apparent progress that had been made at that time to solve the European debt crisis and that had, in turn, restored confidence in the single currency. After remaining at these levels up to August, the dollar gained significantly against the euro from then on. Doubts emerged about the Euro-zone's ability to manage the sovereign debt challenges sufficiently, in combination with the onset of a stronger momentum in the US economy. And so the dollar gained ten per cent and, up to the year's end, reversed all its earlier downward movements. The situation with the equally important relationship between the dollar and the yen was different. Across the 12 months, the dollar lost 6.7 per cent against the yen to stand at ¥77.86/$ at the end of the year, compared with ¥83.43/$ in December 2010.

North America, Japan and the Euro-zone

While the economies of the USA and the Euro-zone expanded at the solid yearly levels of 1.7 per cent and 1.4 per cent respectively in 2011, that of Japan declined by 0.7 per cent, suffering from the impact of the earthquake and tsunami in March, accompanied by major upheavals in the affected regions, including the nuclear accident in its power plant infrastructure.

US economic growth was skewed towards the second half of the year. In the first half, it was at a meagre 0.4 per cent in 1Q11 — below even the population growth rate of around one per cent — and at 1.3 per cent in 2Q11. This was due mainly to still sluggish private household consumption in 1H11, while, at the same time, the government cut spending significantly. In 2H11, however, the momentum improved and 3Q11 growth stood at 1.8 per cent, followed by 3.0 per cent in 4Q11. Private consumption was a major factor driving this improvement, which was helped to some extent by positive developments in the labour market. Over the year, the unemployment rate fell from 9.4 per cent in December 2010 to 8.5 per cent in December 2011. After the sluggish 1H11, these developments were accompanied by protracted negotiations in Congress to increase the debt ceiling, which was finalized only days before many observers believed it would have been technically necessary to declare a default for the USA. This came at the same time as the credit-rating agency, Standard and Poor's, cut its rating for US debt from 'triple A' and after the US Bureau of Economic Analysis had revised down the GDP figure retroactively, declaring that the recession had started already in 2008 at –0.3 per cent. After that, the outlook improved and the economy had a much better footing in 2H11, after digesting much negative news. The Institute of Supply Management's manufacturing index recorded its lowest level in July at 51.4, before increasing to 53.1 in December.

Japan's economy had already experienced a low level of momentum in 4Q10, and, while there were slight improvements in January and February, it nevertheless witnessed a deceleration in domestic consumption – after the major stimulus measures had ended in 2010 – and somewhat lower export activity. However, the dramatic triple disaster that hit the country in March pushed the economy into a technical recession. Due to its impact on some of the country's nuclear power-plants – a vital source of energy for the country – the supply of electricity in major industrial hubs, including Tokyo, had to be cut back. Both the domestic side of the economy and exports felt a major impact that lasted until 3Q11, when restructuring efforts, in combination with a once-again improving global economy, lifted growth into positive territory to 7.1 per cent for the quarter, after declines of 6.9 per cent in 1Q11 and 1.2 per cent in 2Q11. A major stimulus effort by the government, totalling 16.1 trillion yen, supported economic growth and was also expected to have a positive impact in 2012.

While the Euro-zone posted growth of 1.4 per cent in 2011, it is important to note two things. First, most of the contribution to this yearly expansion came in the first half of the year. And secondly, most of the growth occurred in the major Euro-zone economies of Germany and, to some extent, France – while the weaker peripheral economies, plus Spain and Italy, were coping mainly with the sovereign debt crisis and the necessary austerity measures. After experiencing 3.0 per cent growth in 1Q11, expansion in 2Q11 and 3Q11 was at the much lower rates of 0.6 per cent in both quarters and of –1.3 per cent in 4Q11, pushing the Euro-zone into mild recession. While it seemed that, on numerous occasions throughout 2011, the major crisis of excessive public debt levels had been solved, it transpired that, in reality, the crisis could not be contained, and it went on to spread from Greece, Portugal and Ireland to Spain and Italy. Major austerity programmes were introduced during the year, causing the Euro-zone's unemployment rate to rise to 10.4 per cent in December, the highest level since the introduction of the euro in 2001. Moreover, the economic disparity within the Euro-zone was significant, with Greece's economy declining by 6.8 per cent and Portugal's by 1.6 per cent, while those of Germany and France grew by 3.0 and 1.7 per cent respectively. The unemployment rate in Spain stood at 22.9 per cent in December 2011, while, in France, 9.9 per cent was recorded and in Germany only 5.5 per cent. 750 billion euros were set aside as an emergency facility of the EU and the International Monetary Fund (IMF) in 2011, to support highly indebted economies, but it remained to be seen whether this would be enough to tackle the challenges that lay ahead.

Emerging markets

Although events, such as the Thai floods in late autumn and the inventory correction at the end of the year, affected GDP growth in the emerging markets in the second half of the year, expansion in the major developing economies across 2011 was influenced mainly by two important factors: first, tightening monetary and fiscal policies adopted by governments in the emerging markets to avoid the overheating that would threaten economic and social stability in these fast-growing economies; and secondly, weaker-than-expected external demand for emerging market exports, stemming from the economic slowdown in the OECD.

Looking at the first factor, tightening monetary and fiscal policy began in many emerging markets in early-2011, before intensifying around mid-year, as inflation became a major concern. In many such markets in South-East Asia and Latin America, economic policy became exceedingly tight in mid-2011, when policy-inspired interest rates in these countries reached their highest levels since before the financial crisis in 2008, following several increases in these rates by the monetary authorities. Tighter monetary policy was intended to curb accelerating inflationary pressures that, in certain countries, such as India, threatened economic and social stability. Data on emerging market domestic bank credit pointed to a substantial slowdown in bank-lending in 2011. The IMF has estimated that an approximate seven percentage-point tightening in the balance for US bank-lending standards is associated with a 0.25 percentage-point fall in GDP. Based on this, the 29 percentage-point swing in the emerging markets' balance towards tightening over the past year would be associated with a one percentage-point fall in these markets' GDP growth. The withdrawal of fiscal stimuli and the reduction of public sector expenditure, on the other hand, were necessary to restore the balance in public sector borrowing requirements, particularly in those developing countries that, in 2009 and 2010, had extended their budget deficits beyond prudent levels, thus reducing market confidence in the governments' fiscal stances.

Turning now to the second factor, the slowing rate of economic growth in OECD countries in 2011 was due to the tardy recovery in the US economy, the natural disasters and nuclear accident in Japan that put the country's economic growth into negative territory, and the sovereign debt crisis in Europe. Of the major OECD regions, the Euro-zone's economic crisis had a particular impact on external demand for emerging market products, considering the importance of the Euro-zone to foreign trade in developing countries. Many fast-growing developing countries, notably the emerging economies of south-east Asia, are essentially export-driven economies. It has been estimated that, in the case of China, for example, the falling rate of export growth to the OECD was associated with a 0.5 per cent decrease in economic growth in 2011. Compared with China, where private sector consumption was growing fast, substituting for external demand, the impact of lower export growth on the expansion rate of GDP in the other emerging markets should have been even higher. China's exports to advanced economies, particularly in the Euro-zone, put mounting pressure on its currency, the renminbi. In Brazil, with the onset of the Euro-zone crisis and the slower growth in China and other key markets for Brazilian commodities, a decline in factory output broadened out into a general slowdown in Latin America's largest economy. India faced a similar problem of weakening aggregate demand, and the impact of the Euro-zone problem was reflected in the depreciation of its currency, the rupee. Therefore, growth in China, Brazil and India, the three largest emerging economies, slowed after mid-year. Only Russia witnessed firm aggregate demand across 2011, thanks to the solid energy, oil and gas prices and its low unemployment rate.

Although economic growth in the emerging markets decelerated throughout 2011, there was evidence of a rebound in manufacturing output in most of these economies in the final months of the year. A common feature of economic activity in the developing countries (except for China) in those last months was a stronger performance in the manufacturing sector, compared with other sectors. Apart from the rebound effect of Thailand's supply chain recovery from its devastating floods in November, with a 38 per cent month-on-month leap in manufacturing production in December, the continued rise in global demand for final products was behind this higher-than-expected expansion in the manufacturing sector. Final product demand increased in the fourth quarter across the globe. This rebound facilitated inventory adjustments. Business inventories contracted in late-2011, and this was a sign of demand growth for manufacturing products. Also, with subsiding inflationary pressures in the fourth quarter and with the overheating threat already behind them, monetary authorities in the major developing countries appeared ready to consider more appropriate monetary policies to boost economic activity and prevent a further deterioration in economic growth. Some emerging countries started to take such measures, like reducing policy interest rates, as in Brazil, or lowering bank reserve requirement ratios, as in China and India.

In **table 2**, our latest estimates of the macroeconomic performance in the BRIC countries (Brazil, Russia, India and China) in 2011 are given.

Brazil

Brazil achieved an economic growth rate of 2.9 per cent in 2011. However, it experienced

Table 2
Summary of macroeconomic performance of the 'BRIC' countries in 2011

	GDP growth rates	**Consumer price index** *y-o-y change*	**Current account balance** *US $ bn*	**Government fiscal balance** *% of GDP*
Brazil	2.9	6.5	–54.4	3.1
Russia	4.2	7.1	88.6	0.8
India	7.0	8.4	–58.9	–5.9
China	9.2	5.4	305.0	–1.1

Notes
Figures for India are from the fiscal year 2011–12.
Brazil's fiscal balance figures relate to the public sector primary balance.

Sources
Data Services Department, OPEC Secretariat, for GDP growth rates; Consensus Forecast, March 2012, for prices and current account; and Economist Intelligence Unit (EIU), March and April 2012, for government fiscal balance.

a contraction in GDP in the third quarter, in a slowing global economic environment. Considering the deceleration in inflation, this saw policy-makers start to reverse the tight monetary policies they had adopted in the early days of the year. The Central Bank of Brazil (Banco Central do Brasil) was among the first such institutions in the emerging markets to ease monetary policy, when the signs of a slowdown in the global economy appeared. It reversed its monetary policy after late-August, when the interest rate had reached 12.5 per cent, by cutting rates four times, by 50 basis points on each occasion, in meetings in August, October and November, so as to ultimately reduce the rate by a total of 200 basis points. This series of actions was supported by the country's solid fiscal stance, bearing in mind its primary budget surplus of around 3.1 per cent in 2011. Brazil's robust fiscal stance and its large international reserve, estimated at $355.5 billion at the end of the year, would allow the country to mitigate the impact of a possible full-blown recession in the OECD or, at least, in some regions of it, such as the Euro-zone. The government is expected to have comfortably achieved its overall primary surplus for 2011 of $73 bn, or 3.1 per cent of GDP.

Russia

When considering its oil and gas revenue, Russia's budget deficit narrowed in 2011. But, in fact, its reliance on oil revenue increased, compared with 2010, and its non-oil budget deficit was probably around 13 per cent. In December, Russia's Central Bank (RCB) cut the key refinancing rate from 8.25 per cent to eight per cent, while the repo rate (the repurchase rate), the key to providing liquidity to the banking system, remained unchanged. As inflation moderated in 2011, it seemed that the authority's concern had shifted towards economic growth. However, Russia's economic growth during the year was modest, compared with other high-growth economies, such as China and India. It is estimated that the economy expanded by 4.2 per cent in 2011, due mainly to favourable energy and commodity prices. As inflation decelerated during the year, Russia's currency, the rouble, effectively strengthened against other major currencies as a result of the surging oil prices. According to preliminary data released by the RCB, the current account surplus reached $73.6 bn in the first nine months of 2011, compared with $57.6 bn a year earlier. High oil prices were the main reason for the growing surplus. The RCB estimated that inflows of foreign direct investment (FDI) recovered to $28.3 bn in January–September.

India

In 2011, India's most immediate economic problem was the elevated level of inflation. Wholesale price inflation was around 7.5 per cent on an annual basis in December. Average wholesale inflation across 2011 was 9.4 per cent. In the fourth quarter, the Central Bank of India, in a statement, blamed the high global oil prices and domestic structural imbalances in food supply for the inflationary pressures. High inflation, together with decelerating economic growth, caused the depreciation of the rupee, India's currency, which became one of Asia's worst performing currencies during the year. The current account deficit widened in 2011, reaching 2.5 per cent of GDP, due to subdued global demand and the country's rising imports. It is estimated that imports grew by about 24.5 per cent during the year. GDP growth witnessed a significant slowdown in 2011 and averaged 7.0 per cent, down from 8.8 per cent in 2010. The services sector remained the main driver of India's economic growth during the year. Private consumption growth was 6.2 per cent, compared with 7.7 per cent growth in gross fixed investment. To improve the public sector's fiscal stance, the government indicated its determination to reduce its budget deficit from the current 5.3 per cent of GDP (at the end of 2011) to 3.7 per cent by 2016. However, in 2011, the government failed to reduce the deficit to its target of 4.6 per cent of GDP. To curb accelerating inflation, there were 13 increases in the interest rate (i.e. 'repo', the repurchase rate) since January 2010. The rate at the end of 2011 stood at 8.50 per cent. It is expected that it will be kept unchanged for the near future, since recent figures show a slowdown in industrial production, and this is believed to be sensitive to interest rates.

China

China had a policy of preventing overheating and managing a soft landing in 2011, and it was able to cool the economy and bring the overall economic growth rate for the year to 9.2 per cent. One important measure adopted by the Chinese decision-makers was a tightening of credit policy. Consumer price inflation averaged around 5.4 per cent in 2011, well above the government's target of four per cent. This relatively high rate of inflation was reached, despite the government tightening monetary policy. In December, according to the Economist Intelligence Unit (in February 2012), the government maintained its 'prudent' monetary policy stance, in spite of concern about weakening economic growth. China's Central Bank (the People's Bank of China) raised its policy rate several times after 2010, most recently in July, when it lifted the policy one-year rate from 6.31 to 6.56 per cent. The monetary authority, however, lowered bank reserve requirement ratios in December to reduce the dampening impact of liquidity constraints on economic activity, as growth appeared to falter in the second half of the year. A further easing of monetary policy is unlikely, as inflation remains above its official target. In 2011, China still recorded a budget deficit of 1.6 per cent of GDP, although this was lower than a year before. Off-budget expenditure is not included in this figure, and there are reports that, when considering local governments' expansionary fiscal policies in the post-crisis era, 2009–12, the central government's consolidated budget deficit should be significantly higher. In 2011, the government initiated its 'harmonious society programme', prioritizing education, national health care, housing for lower-income groups and pensions in public expenditure. However, investment to encourage economic growth remained a main objective of stimulus-spending. China's trade surplus fell in 2011 and was equivalent to 3.2 per cent of GDP, well below the peak of 10.1 per cent in 2007. In 2011, the country came under pressure from its trading partners, particularly the USA, to revalue its currency and allow the renminbi to appreciate faster. The Chinese currency appreciated by 4.7 per cent against the dollar during the year.

OPEC Member Countries

OPEC's real GDP growth rate in 2011 (excluding Libya) amounted to 4.8 per cent, which constituted a significant increase on the 3.8 per cent for all OPEC in 2010 (**table 3**), even if Libya had been included. The increase in the oil price of nearly 28 per cent and in OPEC's crude oil production of almost two per cent contributed to the rise in economic growth in 2011. This was led mainly by expansion in Iraq and Saudi Arabia. The robust progress with Iraqi oil production and economic growth and the massive infrastructure and industrial development in Saudi Arabia were the main features of 2011, and these are expected to continue in 2012. However, in Libya, oil production, which normally constitutes the major component of the country's economy, stopped from March to October 2011 during the political upheavals, bringing down the economic growth rate there to negative levels.

The current account surplus for the Organization as a whole rose in 2011, in contrast

Table 3
OPEC Member Countries' real GDP growth rates, 2010–11
(% change over previous period)

	2010	2011
Algeria	3.3	3.0
Angola	3.4	5.1
Ecuador	3.6	4.9
IR Iran	3.2	2.2
Iraq	0.8	8.5
Kuwait	3.4	5.1
Libya	4.2	–*
Nigeria	8.7	6.5
Qatar	14.0	15.0
Saudi Arabia	4.2	6.5
United Arab Emirates	3.2	3.4
Venezuela	–1.3	3.5
Average OPEC	**3.8**	**4.8****

Notes
* *Not available.*
** *Excluding Libya.*

Sources
OPEC Secretariat estimates; official OPEC Member Countries' statistics; IMF, International Financial Statistics; IMF, World Economic Outlook; EIU, country reports.

with the general negative trend for the other non-OPEC developing countries (**table 4**). Also, a 15 per cent increase in OPEC's reserves (excluding gold) exceeded the ten per cent for the other developing countries and was another indicator of the Organization's rising oil revenue. The resulting healthy fiscal and monetary base in 2011 should allow most Member Countries to sustain growth in 2012, by increasing public spending; however, they may need to tackle the problem of inflation with tighter monetary policies. Higher investment in infrastructure and production capacity in Member Countries in the MENA region would sustain robust growth rates in that area.

Table 4
Comparison: OPEC and non-OPEC developing countries, 2010–11

	2010		2011	
	OPEC	**Non-OPEC**	**OPEC**	**Non-OPEC**
Real GDP growth rate *(%)*	3.8	6.5	3.2	4.4
Petroleum export value *($ bn)*	745.1	184.4	1,038.9	251.7
Value of non-petroleum exports *($ bn)*	269.6	2,646.6	289.2	3,074.4
Oil exports as percentage of total exports *(%)*	73.4	6.5	78.2	7.6
Value of imports *($ bn)*	619.6	3,046.3	724.0	3,565.4
Current account balance *($ bn)*	205.6	–2.5	398.9	–66.4
Average Reference Basket price *($/b)*	77.5	–	107.5	–
Crude oil production *(mb/d)*	29.2	10.6	29.8	10.5
Reserves *($ bn*, excluding gold)	996.1	2,397.0	1,148.3	2,634.8

Notes
Figures are partly estimated. Non-OPEC DCs do not include China, the FSU and Russia, in line with the ECB country groupings. Data for 2011 consists of preliminary estimates.

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

Oil market developments

Demand and supply

World demand

The international financial crisis hit the world economy hard in 2011 and was no longer confined to the OECD region. The slowdown in economic growth across the globe led to weaker world oil demand during the year (**figure 1**). The negative economic impact on oil demand could be seen in both the OECD and 'non-OECD' regions. Although the downward revision to demand growth took place mainly in the OECD, some upward revision also occurred in the non-OECD, which was currently showing the strongest growth, primarily in China and 'Other Asia'. The 2011 demand forecast growth of 0.8 mb/d was not as uncertain as the one for 2010, with the downward revision being only 0.2 mb/d away from the initial forecast.

Oil demand declined in the OECD in 2011, wiping out 0.4 mb/d from the region's total demand pool. Although China's third-quarter demand was surprisingly weak, the non-OECD

Figure 1
Oil consumption by quarter and region, y-o-y growth, 2010–11

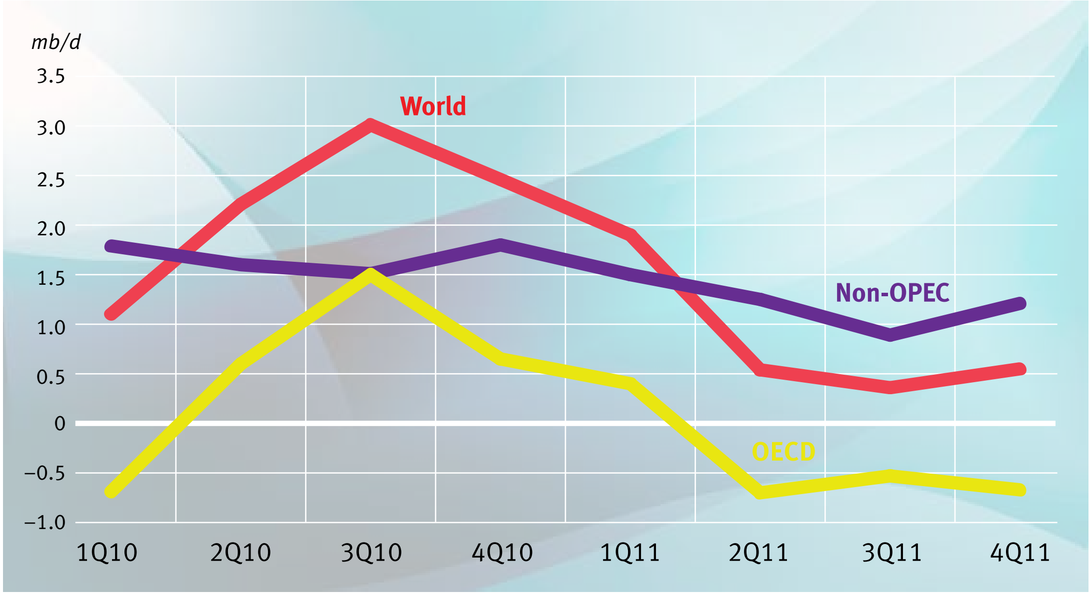
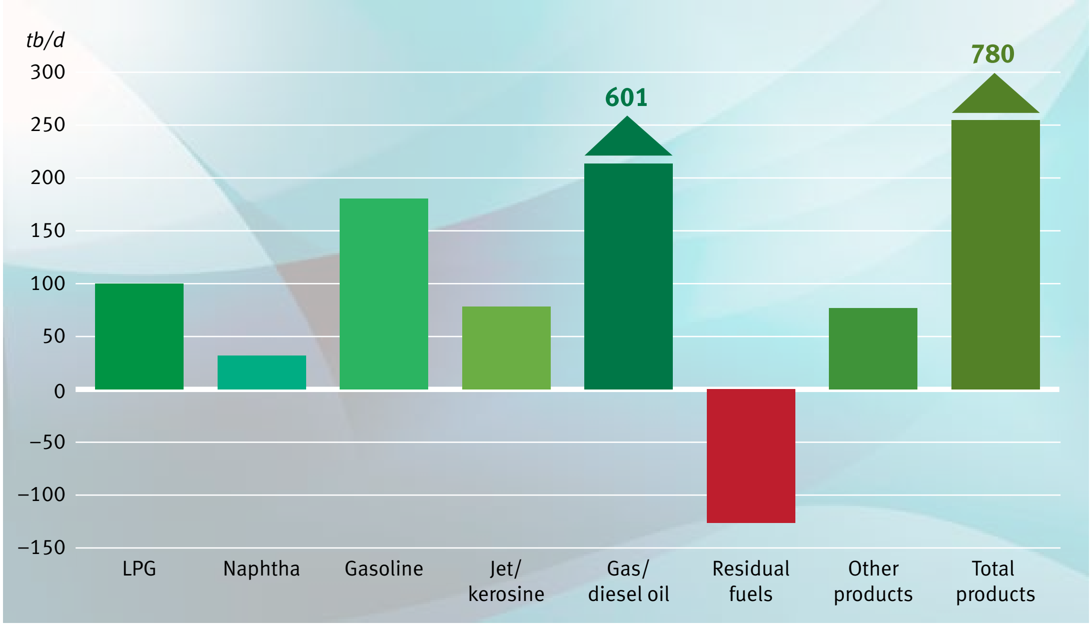


Figure 2
World oil demand by main product, y-o-y growth, 2011



region's demand grew by 1.2 mb/d year-on-year (y-o-y) in 2011, after an upward revision of 0.2 mb/d. As a result of a cold winter and low baseline, first-quarter world oil demand grew the most, by 1.9 mb/d. Second-quarter demand (with low seasonality, by nature) rose by 1.2 mb/d; however, the substantial decline in OECD demand reduced this level of global growth to less than half. Due to the weakness in China's demand during the peak summer season, the world's third-quarter demand growth was, unusually, lower than that of the second quarter, by 0.4 mb/d. In the fourth quarter, the weather was not as cold as in the previous year and the world economy experienced further turbulence; therefore, world oil demand growth reached only 0.5 mb/d y-o-y.

Product-wise, transportation fuel consumption was dominant, with around 50 per cent of the total oil used (**figure 2**). Diesel demand (transport and industrial) grew by 0.6 mb/d in 2011 y-o-y, averaging 26 mb/d worldwide. Gasoline demand, on the other hand, declined by 0.6 per cent during the year, averaging 21.8 mb/d. The main reasons for this decline were lower US demand, increased taxes in some OECD countries, higher retail prices and the removal of price subsidies in some non-OECD countries. Japan's triple disaster saw the country's oil demand plunge by 0.1 mb/d y-o-y in the second quarter; however, the use of direct crude-burning reduced the loss in the third quarter, to end up with a flat level. The Japanese disaster affected the auto industry worldwide. Japan's new car registrations declined by 35 per cent in the second quarter, pulling down with it European and Chinese auto industry sales to negative levels. However, Japanese auto sales rose by a strong 25 per cent in the fourth quarter, as a result of government subsidies to replace cars that were older than 13 years.

China's oil demand increased sharply in the first quarter, by more than nine per cent y-o-y; but this growth rate weakened to only 3.3 per cent in the third quarter. Several factors interfered with China's demand, such as lower exports, increased petroleum product prices and the removal of new car registration incentives. Despite the weakness in oil demand growth in the middle of the year, China's total growth for the year was four per cent. China adopted a new pricing mechanism, which reduced the gap between domestic prices and international crude prices, and this move passed the extra increase to end-users.

Industrial (including petrochemicals) and transport fuels showed the largest increases during the year, as a result of the improving economic outlook and increased industrial activity. The petrochemical industry, especially in Asia (China), witnessed substantial increases during the first half of the year. In China, as was the case in many countries, a significant amount of oil (crude and products) was used to fill the country's strategic petroleum reserve (SPR) during the course of the year.

OECD demand

The developments in the US economy were most important for oil consumption worldwide. US oil demand has been the wild card in global oil consumption over the past few years. Following a rather strong first quarter of 2011, US oil consumption went into decline for the rest of the year. Product-wise, the country's distillate fuel oil consumption constituted the only growth seen during the year. In contrast, gasoline

Figure 3
Japanese oil demand growth, 2010–11

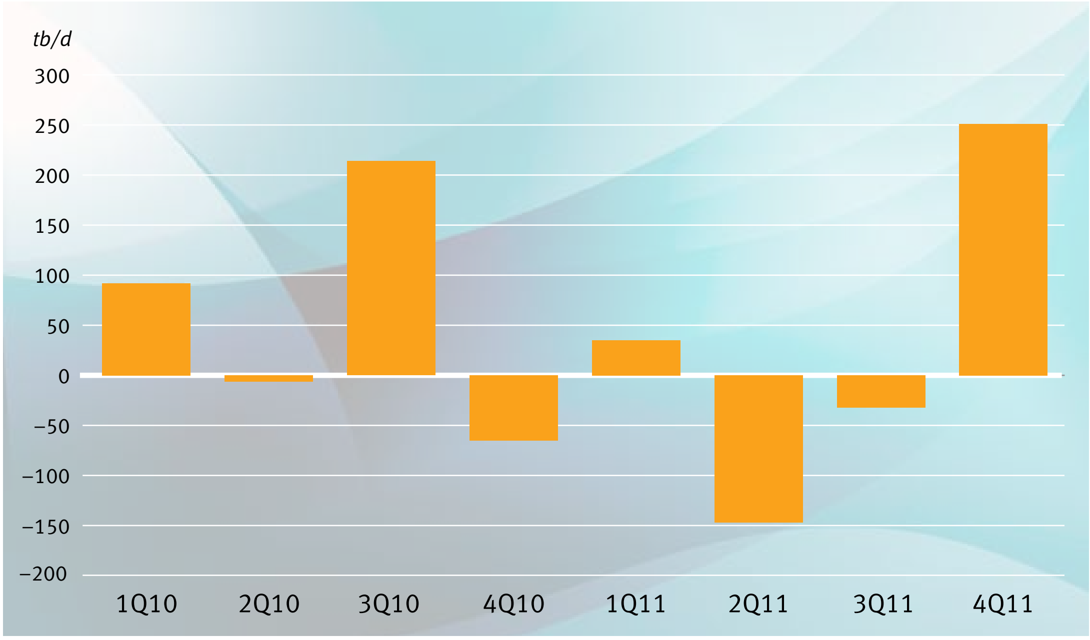
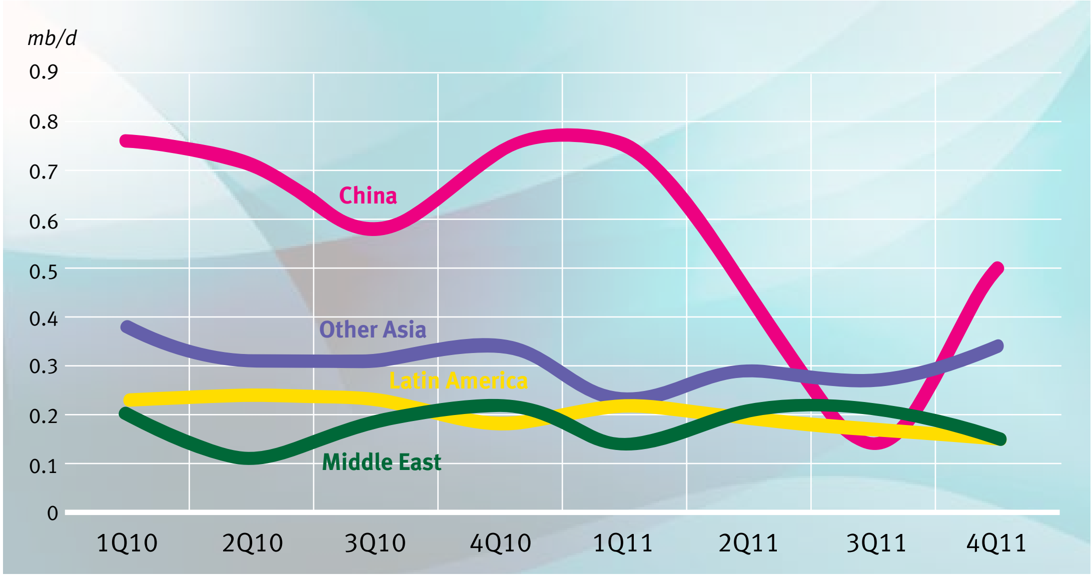


Figure 4
Non-OECD oil consumption by region and quarter, y-o-y growth, 2010–11



usage declined the most, as a result of the economic turbulence and hikes in retail prices. The gasoline demand pool lost more than 0.25 mb/d during the year, equating to a decline of around 2.8 per cent.

The 'Big Four' European countries (Germany, France, Italy and the United Kingdom) have exhibited a weak oil consumption pattern over the past eight years. The Euro-zone's debt problem had a big impact on OECD Europe's economy in 2011, reducing its GDP growth to only 2.0 per cent and its oil demand growth to –1.6 per cent during the year. In all the OECD Europe countries, the transport and industrial sectors were hit the most, resulting in lower consumption of distillates and gasoline. Despite Germany's strong economy, the country's oil demand fell by 3.1 per cent y-o-y. This was especially significant, with Germany being the largest oil-consuming country in Europe and with its energy policies having a major effect on the region's oil demand.

Japan's triple disaster affected all aspects of its economy. However, despite the decline in its manufacturing activity, the extra use of crude-burning pushed up its oil demand by 0.6 per cent y-o-y (**figure 3**). This came about as a result of shutting down almost all its nuclear power plants and replacing them with natural gas, crude and fuel oil burning facilities.

Non-OECD demand

China's oil demand experienced its weakest quarterly growth in the third quarter of 2011 since the first quarter of 2009 (**figure 4)**. Many factors led to this weak performance, such as the slowdown in economic activity, high retail prices and the government's energy-savings programme. However, the fourth quarter's oil-usage rose by 5.5 per cent, so that the year ended with 5.1 per cent growth. Despite the substantial weakening in the months after the summer and the expiry of sales incentives in the form of tax-breaks for small-engined vehicles, Chinese auto sales rose, adding 18 million units, or 2.5 per cent, during the year. As one would expect, the Japanese earthquake had a negative effect on the auto industry in China (and the USA).

Indian oil consumption in the transportation (which had a boom in new car registrations) and industrial sectors displayed solid growth during the year, but was offset slightly by fuel substitution to gas in the petrochemical and power plant industries. Furthermore, shortages in electricity supply led to a push for independent diesel-operated generators, and this resulted in more diesel consumption during the year. As a result of India's oil demand, 'Other Asia's' oil demand grew by 0.3 mb/d for the year. The Indian auto market experienced negative growth in December. But, for the whole of 2011, Indians bought three million more cars, due to the government's new car sales incentives.

Energy-intensive projects in the Middle East, especially Saudi Arabia, saw a hike in the region's oil demand of 2.4 per cent in 2011. The region's demand has been growing steadily in the past few years. The product that was consumed the most in 2011 was diesel, which was used by both the transport and industrial sectors. Due to the weakness in Iranian demand, growth in the region's consumption lagged behind that of Latin America.

The non-OECD region's demand accounted for all the global demand growth in 2011, totalling 1.2 mb/d y-o-y. The strongest growth was seen in China, followed by Other Asia, Latin America and, finally, the Middle East.

OPEC crude oil production

According to secondary sources, OPEC's crude oil production averaged 29.77 mb/d in 2011, a rise of 520 thousand b/d (tb/d) from the previous year (**table 5**). The two per cent annual increase came from growth in the third and fourth quarters, while second-quarter crude output was the lowest for the year. The share of OPEC crude in global oil supply remained steady at 34 per cent in 2011, slightly higher than the year before. The increase in OPEC crude oil production in the second half of the year, coupled with a reasonably steady level of non-OPEC supply, supported OPEC crude's share of the global supply mix in 2011.

The development of global oil supply components is illustrated in **figure 5**, with the growth of both OPEC crude and OPEC natural gas liquids (NGLs) in 2011 supporting total world supply, as opposed to only a minor change in non-OPEC supply. The annual development of OPEC production, in terms of annual percentage change, is shown in **figure 6**, indicating, among other things, the two per cent increase in 2011 over 2010.

Table 5
OPEC crude oil production, according to selected secondary sources, 2007–11
(1,000 b/d)

	2007	2008	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	Average change 11/10
Algeria	1,358	1,377	1,268	1,250	1,246	1,244	1,241	1,230	1,240	–10
Angola	1,660	1,871	1,780	1,783	1,665	1,548	1,675	1,763	1,663	–120
Ecuador	507	503	477	475	490	490	486	494	490	15
IR Iran	3,855	3,892	3,725	3,706	3,656	3,658	3,607	3,563	3,621	–85
Iraq	2,089	2,341	2,422	2,401	2,652	2,665	2,682	2,669	2,667	266
Kuwait	2,464	2,554	2,263	2,297	2,374	2,483	2,597	2,690	2,537	240
Libya	1,710	1,718	1,557	1,559	1,096	153	47	562	462	–1,098
Nigeria	2,125	1,947	1,812	2,061	2,087	2,144	2,183	2,026	2,110	49
Qatar	807	839	781	801	807	807	808	810	808	7
Saudi Arabia	8,654	9,113	8,051	8,271	8,707	9,081	9,629	9,653	9,271	1,000
UAE	2,504	2,557	2,256	2,304	2,441	2,519	2,551	2,557	2,517	213
Venezuela	2,495	2,557	2,394	2,338	2,383	2,375	2,391	2,371	2,380	42
Total OPEC	**30,228**	**31,270**	**28,785**	**29,246**	**29,606**	**29,165**	**29,897**	**30,387**	**29,766**	**520**

Note
Totals may not add up due to independent rounding.

Source
OPEC Secretariat assessment of selected secondary sources.

Figure 5
OPEC[1], non-OPEC[2] and total world supply, as well as OPEC market share, 2007–11

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

Non-OPEC supply

Non-OPEC supply averaged 52.39 mb/d in 2011 (**table 6**), a minor increase of 0.1 mb/d over the previous year. This was supported by non-conventional oil and NGL increases that more than offset a decline in crude oil output. The USA, Canada, Colombia and Russia were the main contributors to the growth in non-OPEC supply, whereas declines from the UK, Norway, Azerbaijan, Yemen, Australia, Malaysia, Indonesia and Syria offset most of this growth.

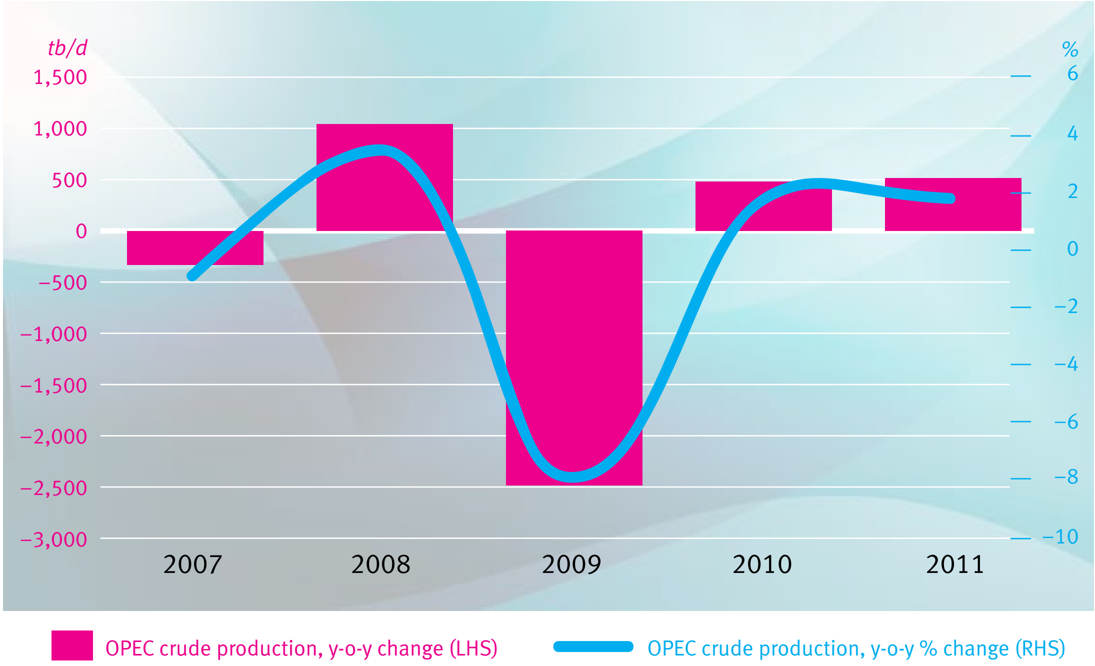
On a regional basis, OECD oil supply increased by 90 thousand b/d in 2011 to average 20.08 mb/d. North America contributed the most to this growth from all the non-OPEC regions, while OECD Western Europe and Pacific experienced relatively large declines. US supply

Table 6
World supply and demand balance, 2008–11

	2008	2009	2010	1Q11	2Q11	3Q11	4Q11	2011
World demand *(mb/d)*								
OECD	47.6	45.6	46.2	46.4	44.6	46.1	46.1	45.8
North America	24.2	23.3	23.8	23.8	23.4	23.6	23.4	23.6
Western Europe	15.4	14.7	14.6	14.2	14.1	14.8	14.3	14.3
Pacific	8.0	7.7	7.8	8.3	7.1	7.7	8.4	7.9
DCs	25.6	26.2	27.0	27.2	27.6	27.8	27.9	27.7
FSU	4.1	4.0	4.1	4.1	4.0	4.4	4.5	4.2
Other Europe	0.8	0.7	0.7	0.7	0.6	0.7	0.8	0.7
China	8.0	8.3	9.0	9.1	9.5	9.4	9.6	9.4
(a) Total world demand	**86.1**	**84.7**	**86.9**	**87.5**	**86.4**	**88.4**	**88.8**	**87.8**
Non-OPEC supply *(mb/d)*								
OECD	19.5	19.7	20.0	20.1	19.8	19.9	20.6	20.1
North America	13.9	14.4	15.0	15.3	15.2	15.5	16.0	15.5
Western Europe	4.9	4.7	4.4	4.3	4.1	3.8	4.1	4.1
Pacific	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5
DCs	12.2	12.4	12.7	12.8	12.5	12.7	12.6	12.7
FSU	12.6	13.0	13.2	13.3	13.3	13.2	13.2	13.3
Other Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	3.8	4.1	4.2	4.2	4.1	4.0	4.1
Processing gains	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1
Total non-OPEC supply	**50.3**	**51.1**	**52.3**	**52.7**	**52.0**	**52.1**	**52.7**	**52.4**
OPEC NGLs + NCOs	4.1	4.3	4.9	5.1	5.3	5.4	5.4	5.3
(b) Total non-OPEC supply and OPEC NGLs + NCOs *(mb/d)*	**54.4**	**55.4**	**57.2**	**57.9**	**57.3**	**57.5**	**58.1**	**57.7**
OPEC crude oil production[1]	**31.3**	**28.8**	**29.2**	**29.6**	**29.2**	**29.9**	**30.4**	**29.8**
Total supply *(mb/d)*	**85.7**	**84.2**	**86.5**	**87.5**	**86.4**	**87.4**	**88.5**	**87.5**
Balance (stock change and misc.)	**–0.4**	**–0.5**	**–0.5**	**–0.1**	**0.1**	**–1.0**	**–0.3**	**–0.3**
OECD closing stock level (outside FCPEs) *(mb)*								
Commercial	2,679	2,641	2,670	2,631	2,676	2,665	2,601	2,601
SPR	1,527	1,564	1,561	1,558	1,561	1,526	1,532	1,532
Total	4,206	4,205	4,230	4,188	4,237	4,190	4,133	4,133
Oil-on-water	969	919	871	891	853	835	807	807
Days of forward consumption in OECD								
Commercial onland stocks	59	57	58	59	58	58	57	57
SPR	33	34	34	35	34	33	33	33
Total	**92**	**91**	**92**	**94**	**92**	**91**	**90**	**90**
Memo items *(mb/d)*								
FSU net exports	8.5	9.0	9.1	9.2	9.3	8.8	8.8	9.0
Difference (a – b)	**31.6**	**29.3**	**29.7**	**29.7**	**29.1**	**30.9**	**30.7**	**30.1**

Notes
1. Secondary sources.
NCO: non-conventional oil.
FCPEs: former centrally planned economies.
Totals may not add up due to independent rounding.

Figure 6
Year-on-year percentage change in OPEC crude production, 2007–11



contributed the highest level of growth among all the non-OPEC countries during the year, supported by a surge in oil production from the shale development areas, which led the growth in North America as a whole. In addition, Canada's supply experienced strong growth in 2011, while Mexico encountered a minor decline. Across the Atlantic, maintenance and unplanned shutdowns, as well as natural declines in mature producing areas, had a big impact on UK supply, which experienced the largest decline among all the non-OPEC countries. With similar factors influencing Norway's supply, there was a sharp drop of 0.33 mb/d in OECD Western Europe supply in 2011. Moving south, severe weather conditions during the first half of the year strongly affected Australia's supply and led to a decline of 0.10 mb/d in OECD Pacific production, to average 0.50 mb/d.

Developing country (DC) oil production decreased by 80 thousand b/d to 12.65 mb/d in 2011. Limited growth from Latin America, compared with the initial forecast, affected the overall DC figure, even though its increase could not offset the decline in other DC regions. The steady state of Brazil's production, on the back of a decline in biofuel output due to weather conditions, as well as maintenance that limited conventional supply growth, left only Colombia to drive the region's growth. The heavy decline in the Middle East put pressure on DC supply during the year, with the output drop coming mainly from the political tensions that heavily influenced production in Yemen and Syria. Political issues also influenced Africa's oil supply, mainly from Sudan, and this offset the albeit lower-than-expected growth in Ghana. Thus, the region's production remained steady in 2011, averaging 2.59 mb/d. Natural declines in mature producing areas and limited new developments drove the drop of 90 thousand b/d in Other Asia's oil supply, which averaged 3.63 mb/d. On a country basis, Colombia, Ghana, India, Brazil and Oman showed the only growth among the DCs in 2011, while Yemen, Indonesia, Malaysia, Sudan and Syria all displayed declines.

Oil supply in the transitional economies grew by a slight 30 thousand b/d to average 13.26 mb/d, supported heavily by Russia. Growth in the group in 2011 was the lowest since 1998. It was affected by a heavy decline from Azerbaijan, on the back of maintenance and unplanned shutdowns, coupled with limited new developments. Moreover, Kazakhstan's oil supply remained steady, and so did not help offset the decline from the Caspian. Russia's oil supply, however, increased by 0.12 mb/d in 2011, to average 10.27 mb/d.

China's oil production remained reasonably steady in 2011 and averaged 4.13 mb/d. Despite a healthy supply increase during the first half of the year, the technical problems that led to the shutdown of the Peng Lai field in the second half absorbed all the established growth.

Transportation

In 2011, the tanker market was weak across its various sectors. On an annual average, spot freight rates on reported routes, especially the dirty ones, decreased drastically. Tonnage oversupply, reductions in floating storage, lower long-haul demand and pipeline expansions were the main factors behind the declines. On the other hand, however, delays, weather conditions and open arbitrage were among the factors that supported rates during the year. Furthermore, while average spot freight rates declined in 2011, the price of bunker fuel increased, leading to negative margins for many ship-owners.

On average, very large crude-carrier (VLCC), Suezmax and Aframax spot freight rates declined by 26, 23 and 15 per cent respectively from the previous year. In the clean market, spot freight rates both East and West of Suez remained reasonably flat in 2011, compared with the previous year. Balanced tonnage supply and demand supported clean rates, to close the year largely unchanged, despite experiencing fluctuations due to seasonal demand.

VLCC average spot freight rates fell by 26 per cent in 2011 from the previous year, with decreasing rates seen on all reported routes. Rates for VLCCs operating on the Middle East-to-East, Middle East-to-West and West Africa-to-East routes declined by 27, 24 and 28 per cent respectively from the previous year. Deliveries of new VLCCs, lower scrapping and the decline in floating storage were the main factors behind the falls.

Suezmax and Aframax spot freight rates followed the same trend as VLCC rates in 2011. On an annual average, they decreased by 23 and 15 per cent respectively from the previous year. Spillover effects from VLCC activity, expanding Suezmax and Aframax fleets and the decline in floating storage put pressure on these rates. However, weather conditions, delays and open arbitrage provided some support, but this was not enough to offset the declines.

Clean tanker spot freight rates followed a different dynamic to dirty rates. On an annual basis, average reported routes for clean tanker spot freight remained flat in 2011 from the year before. Balanced clean tonnage supply and demand from different regions lay behind these unchanged rates. Clean spot freight rates for tankers operating on the Caribbean-to-US and Singapore-to-Far East routes supported average clean rates on increased Latin American product demand. Mediterranean rates had a negative impact on clean tanker average rates.

Refinery industry

Product market sentiment was mixed in 2011. Middle distillates and fuel oil experienced recoveries on the back of strong demand and tighter markets. This bullish sentiment was also fuelled by a continuous draw on product inventories from the high levels seen in the previous year, as well as the political unrest in the MENA region, allowing refinery margins to increase. On the other hand, light distillates were bearish, due not only to lacklustre gasoline consumption in the Atlantic Basin, but also to the drop in naphtha demand from the petrochemical industry across the globe. This affected the European refinery system, as a result of the structural gasoline surplus in the region.

The US refining industry's performance was reasonably healthy during 2011, on the back of light and middle distillate cracks and relatively cheap crude. The margin for West Texas Intermediate (WTI) crude on the US Gulf Coast jumped to over $20/b, the highest level for years. However, such high margins were artificially inflated by the relatively low WTI benchmark price, which became disconnected from other benchmark crudes.

The margin for Arab Heavy crude on the US Gulf Coast was around $9/b, increasing by a sharp $4 from the previous year.

In Europe, product market sentiment was especially mixed, with light distillates continuing to lose ground, due to weak demand in the region and poor export opportunities. The middle distillate market was supported partially by tight supply, since refineries had been running at lower levels and reduced inflows to the region, despite a temporary setback due to the International Energy Agency's (IEA's) decision to release oil from strategic petroleum reserves and its short impact on margins.

The refinery margin for Brent crude in Rotterdam showed a loss of $1 during this period, to average around $2.5/b.

Asian refining margins managed to increase on the back of strong middle distillate and fuel oil demand in a tighter market, and this could offset the loss at the top of the barrel brought about by disappointing demand from the petrochemical sector. Refinery margins rose by $2.8 over this period to average $3.8/b during the year.

Refinery utilization rates in the USA continued to rise, having surged during the driving season to 90 per cent in July, despite weak domestic gasoline demand. They were supported by export opportunities, mainly to Latin America, and the relatively cheap WTI contributing to keeping refining margins reasonably healthy and maintaining high runs, averaging 86 per cent of capacity for the year. Nevertheless, some refineries suffered, as a result of higher operational costs, stronger competition and a lack of flexibility to process cheaper crudes.

European refiners kept lower utilization rates in an effort to protect margins. However, the refining industry failed to achieve this, because product cracks were unable to compensate for the increase in the price of Brent, thus exerting pressure on refinery margins in the region.

European refiners reduced throughputs to 81 per cent, the lowest level for several years, driven by low refinery margins. In addition, a few small refineries, with insufficient hydro-treating/conversion capacity, were hit by a shortage of sweet Libyan crude and a reduction in export opportunities for gasoline to the USA.

In Asia, the natural disaster in Japan damaged some refineries. As a result, throughputs fell below 70 per cent in March. Since then, most have come back on line and Japan saw a recovery in refinery throughput to over 75 per cent by the end of the year.

Chinese and Indian refineries ran at high throughput levels, encouraged by stronger demand in the region.

Stock movements

The OECD's total inventories, including commercial and government stocks, saw a drop of 95 mb, or 0.3 mb/d, at the end of 2011 from the previous year. During the year, they reached their highest level of 4,281 mb in January, before declining to 4,133 mb at the end of December. This drop was attributed to both commercial inventories falling by 67 mb, to end the year at 2,601 mb, and the Strategic Petroleum Reserve (SPR) going down by 30 mb to 1,532 mb.

On a regional basis, the bulk of the drop in OECD commercial inventories came from those in Europe falling by 47 mb, while North America and the Pacific saw slight declines of 19 mb and 1 mb respectively. On a quarterly basis, OECD commercial inventories experienced a seasonal stock-draw of 40 mb in the first quarter, followed by a seasonal build of 47 mb in the second, while the third and the fourth quarters saw falls of 12 mb and 62 mb respectively.

The considerable fall in OECD commercial stocks reflected the weak performance of non-OPEC supply, the cumulative effect of the outage of production in the MENA region and the backwardated structure of the Brent market limiting any rise in crude oil inventories. This happened despite the lack of growth in demand, which was down by 0.33 mb/d during the year in the OECD countries.

OECD commercial stocks finished the year 36 mb below the five-year average. However, the picture within the OECD region was mixed. Indeed, Europe and the Pacific saw deficits of 61 mb and 13 mb, while stocks in North America stood 37 mb above the latest five-year average. It should be noted that the overhang observed over the previous two years diminished, even switching to a deficit from July. The bulk of this reduction came mainly from Europe, reflecting a weak performance in North Sea production, combined with lower crude imports, and affected by the outage in Libya's production.

The drop in OECD commercial inventories was divided between crude and products, which fell by 53 mb and 14 mb respectively. Crude and product stocks showed deficits of around 29 mb and 8 mb respectively with the latest five-year average. At the end of the year, commercial crude inventories saw a drop of 40 mb in Europe, while there were declines of 11 mb in North America and of a minor nature in OECD Pacific. The 20 mb drop in OECD commercial products in 2011 was attributed mainly to Europe, where they decreased by 7 mb, followed by a decline of 8 mb in North America, while Pacific commercial product stocks rose slightly, by 1.0 mb.

In terms of days of forward cover, OECD commercial stocks stood at around 57.0 days at the end of 2011, 0.7 days less than was observed 12 months before. This reflected mainly the downward trend in the absolute level of commercial stocks, rather than an increase in the level of OECD demand. OECD commercial stocks, in terms of days of cover, finished the year 1.3 days above the five-year average. This level was not expected to fall further, since demand in the OECD was considered likely to continue to decline in 2012.

The total SPR in the OECD, at the end of 2011, declined by almost 30 mb from the previous year to stand at 1,532 mb. This fall was concentrated on the third quarter, following the IEA-coordinated release of strategic reserves, as decided on 23 June. The bulk of the release came from the USA, where there was a fall of 32 mb to 697 mb. Europe's SPR saw a slight decrease of 1.6 mb, ending 2011 at 421 mb, while that of the Pacific rose by 4.0 mb to 414 mb, driven by a build in the Japanese Strategic Reserve.

Balance of supply and demand

During the course of 2011, the market shifted from supply fears, amid a recovery in demand, to a more bearish sentiment, due to the disappointing economic picture and ongoing demand revisions. Indeed, the initial forecast for world oil demand growth of 1.0 mb/d was revised up, reaching a peak of 1.4 mb/d in the middle of the year, before experiencing a downward revision to stand at 0.8 mb/d. Earlier upward revisions to demand growth were a reflection of the initial optimism about the global economic recovery, which gradually dissipated on continuing concern about the fragility of some OECD economies and the impact this would have on other countries, resulting in demand growth being adjusted down. The triple catastrophe in Japan, high retail petroleum prices and efforts in China to reduce energy use from the previous year also contributed to the downward revision. The absolute level of world oil demand also saw some adjustments in both directions, to stand at 87.8 mb/d.

On the supply side, the initial forecast for non-OPEC supply growth for 2011 was also pushed higher, before being revised down to stand at 0.1 mb/d. The main reasons behind the downward revision were delays in project start-ups and ramp-ups, unfavourable weather conditions (lower biofuel output during the harvest season), larger decline rates, political turmoil (in Syria and Yemen), extended maintenance and outages (e.g. UK production showed the largest decrease since 2004, driven by extended maintenance, as well as developments in the Buzzard field, an outage in the Azeri-Chirag-Gunashli field and so on). Non-OPEC supply witnessed the weakest annual growth since 2008, when it dropped by around 130,000 b/d during the onset of the recession in that year. The latest figures put non-OPEC supply at 52.4 mb/d. OPEC NGLs in 2011 showed a steady gain of 0.4 mb/d over the previous year to stand at 5.3 mb/d. This was supported mainly by projects in Iran, Nigeria, Qatar, Saudi Arabia and the UAE. It highlighted the important part played by OPEC NGLs in the total supply picture and increased the role of the Organization's Member Countries in the oil market.

Based on these revisions, demand for OPEC crude in 2011 was somewhat volatile, with the initial projection at 28.8 mb/d viewed against the current estimate of 30.1 mb/d. Compared with 2010, the estimated growth in demand for OPEC crude in 2011 fell from 500,000 b/d in March to around 100,000 b/d in September, before increasing again to the current figure of 400,000 b/d. On a quarterly basis, required OPEC crude stood at 29.7 mb/d and 29.1 mb/d in the first and second quarters respectively, while the second half of the year saw much higher levels, averaging 30.9 mb/d in the third quarter and 30.7 mb/d in the fourth.

OPEC crude oil production, averaging 29.8 mb/d in 2011, was 0.5 mb/d lower than demand for OPEC crude, which resulted in a drop in inventories, as could be seen in the OECD's commercial stocks. On a quarterly basis, the market witnessed a drop of 0.1 mb/d in the first quarter, before experiencing a build of 0.1 mb/d in the second. However, after that, the balance underwent a contra-seasonal stock-draw of 1.0 mb/d in the third quarter, followed by a further fall of 0.3 mb/d in the fourth, due mainly to the weak performance of non-OPEC supply as OPEC crude oil production experienced a steady improvement in the second half of the year.

Price

Crude oil price movements

The OPEC Reference Basket moved within a wide range of $89.81–120.91/b in 2011, and its annual average exceeded the key $100/b mark for the first time, at $107.46/b (**figure 7, table 7**). This represented an increase of around $30/b, or 39 per cent, over the year before. Moreover, it was almost 14 per cent higher than the previous record of $94.45/b of 2008. This exceptional increase in the price, even with an uncertain economy, was attributed mainly to the turbulence in the MENA area disrupting exports, mostly in Libya, coupled with a supply deficit from other regions, including the North Sea and West Africa.

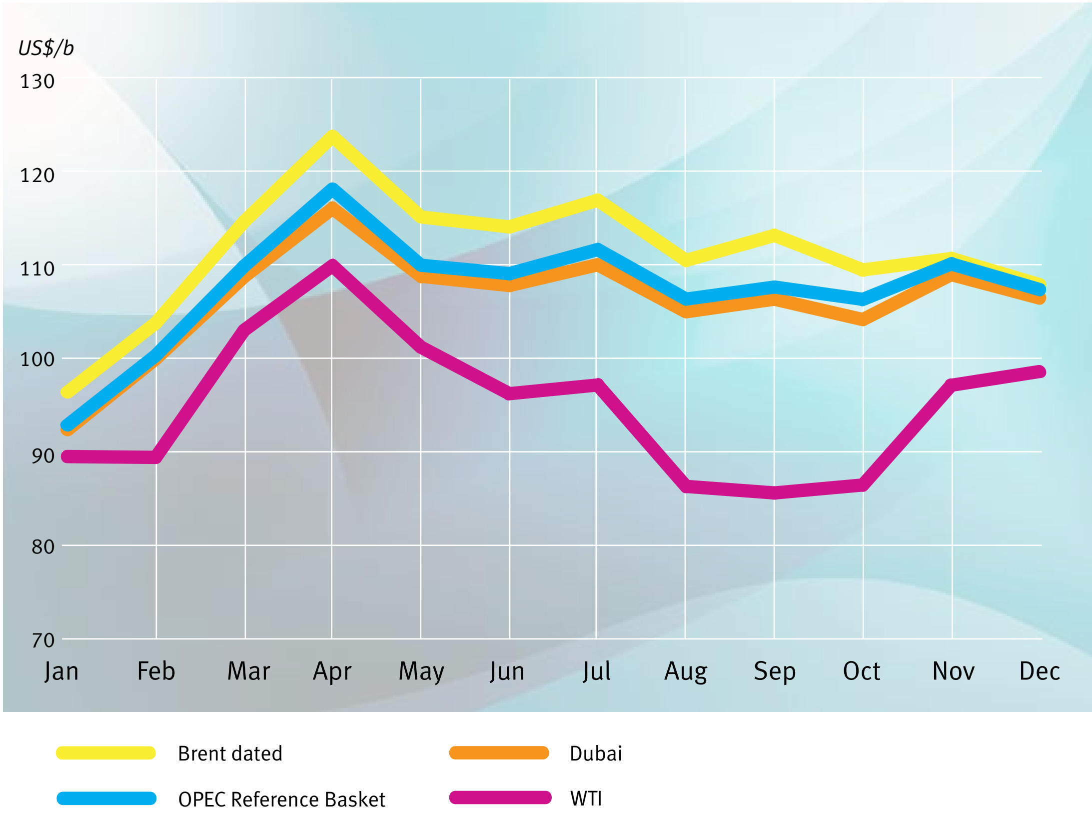
The Basket price strengthened significantly in the first half of 2011, before dipping in the third quarter. The strong upward momentum in the price was first witnessed at the start of the year. Then, for April, the Basket reached $118.09/b, the highest monthly average for the entire year and, indeed, since the extraordinary month of July 2008. This was driven mainly by the turmoil in the Middle East and North Africa and the supply shocks caused by the temporary declines in crude output from Libya, Syria, Yemen, Sudan, Nigeria, the North Sea and elsewhere.

The sharp upward trend for the Basket stalled in the middle of the third quarter, at $106.32/b in August, as the risk-premium, which had resulted from the MENA region's unrest, started to fade. This was aided by weakening market sentiment that was triggered by bearish expectations about US economic growth, following disappointing macroeconomic data. Market sentiment was also affected by economic uncertainty around the globe, particularly in Europe, due to Greece's debt problems and the fears of contagion to other countries.

Thereafter, the Basket picked up momentum and rallied well to average $107.85/b in the last four months of the year. This followed developments in the equity markets, supported by tangible steps to address the European economic and political crises, supportive US and Chinese economic data and sharp draw-downs on US crude inventories.

All Basket components strengthened sharply in 2011, particularly lighter grades. Brent-related African crudes, namely Algeria's Saharan Blend, Libya's Es Sider and Nigeria's

Figure 7
Monthly oil price movements, 2011



Bonny Light, rose by around 41 per cent, or more than $32.80/b. Middle Eastern sour crudes, among them Kuwait's Export, the UAE's Murban, Qatar's Marine and Iraq's Basrah Light, experienced lower increases of 38 per cent, or $29.20/b. Venezuela's Merey grade also rose by 41 per cent, or $28.2/b, supported by a sizable improvement in fuel oil, an element in the grade's pricing formula. The stronger gains in the Basket's Brent-related crudes, compared with other components, resulted from a significant improvement in Brent prices, particularly since the beginning of the first quarter. This came on the back of the supply shock during the temporary loss of crude from Libya, Syria, Yemen, Sudan, Nigeria, the North Sea and elsewhere. Meanwhile, the weaker performance of the heavy crudes, particularly in the first half of the year, was attributed to the increase in mostly heavy/sour grades from Middle Eastern countries to replace the Libyan crude whose production was halted during this period.

At a time of turmoil in the Middle East and North Africa and concern about the global economy in general and the Euro-zone in particular, oil futures reached their highest annual average

Figure 8
Nymex WTI price *versus* speculative activity, 2011

since 2008 in 2011. Compared with the previous year, the 2011 front-month WTI average was almost 20 per cent up at $95.12/b, while Brent on the Intercontinental Exchange (ICE) was a substantial 38 per cent higher, at $110.91/b.

In the futures market, data from the US Commodity Futures Trading Commission (CFTC) showed that, on average, speculators increased their net long positions in US crude oil futures and options positions sharply in 2011. On average, hedge funds and other large investors increased their net long positions on the New York Mercantile Exchange (Nymex) by 68,766 contracts to 206,573, a rise of almost 50 per cent (**figure 8**). Outright longs were up by a hefty 44,785, while shorts were cut by more than 23,980, suggesting that, as prices rose, bullish traders were heavily backing the move. Furthermore, the open interest volume for 2011 increased significantly, by 69,370 contracts to 2.7 million contracts, supporting earlier arguments.

Also, the daily average traded volume during 2011 for WTI Nymex contracts increased by 25,370 lots to average 694,566 contracts, or almost 670 mb/d. For ICE Brent, the volume increased sharply, by almost 30 per cent to 511,460 contracts, supported by plans by the world's two largest commodity indices to change their component weights to reflect growing trade in Brent crude, at the expense of WTI.

Table 7
Average monthly spot prices for selected crudes, 2011 *($/b)*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2011
OPEC Basket	**92.83**	**100.29**	**109.84**	**118.09**	**109.94**	**109.04**	**111.62**	**106.32**	**107.61**	**106.29**	**110.08**	**107.34**	**107.46**
Arab Light	93.59	101.21	110.37	118.27	110.08	109.37	111.61	106.43	107.72	106.40	110.59	107.96	107.82
Basrah Light	92.33	99.52	109.16	117.05	107.93	106.65	109.87	105.07	106.68	105.00	108.47	106.06	106.17
Bonny Light	98.10	105.66	116.75	127.12	118.88	117.27	119.69	112.41	115.63	113.09	114.21	110.71	114.15
Es Sider	96.10	103.51	114.35	124.52	115.90	114.84	117.69	111.26	113.93	110.24	111.46	108.66	111.90
Girassol	96.18	104.42	115.35	123.74	114.91	114.07	116.63	110.60	111.59	110.26	111.73	109.07	111.57
Iran Heavy	92.22	99.29	108.05	116.27	108.28	107.39	110.34	104.90	105.54	104.83	109.20	106.83	106.11
Kuwait Export	91.45	98.75	107.66	115.64	107.59	106.65	109.33	104.51	105.16	104.09	109.46	107.06	105.63
Marine	92.69	100.18	108.87	116.41	109.10	107.83	110.34	105.14	106.46	104.68	109.14	107.36	106.53
Merey	80.09	87.51	96.22	104.44	98.44	99.92	103.26	99.81	99.12	99.24	105.05	101.44	97.94
Murban	95.04	102.75	111.93	119.95	113.37	112.06	114.33	108.92	109.57	107.51	111.92	109.49	109.77
Oriente	84.80	90.14	105.04	112.82	104.63	98.87	103.46	97.91	103.82	103.69	105.75	100.99	101.03
Saharan Blend	97.50	105.01	115.95	126.57	116.80	115.74	117.29	111.16	115.03	112.74	112.41	108.56	112.92
Other OPEC crudes													
Arab Heavy	90.26	97.20	105.80	113.74	105.56	104.34	107.55	103.23	103.18	102.40	108.67	106.61	104.06
Dubai	92.33	99.93	108.71	116.01	108.76	107.77	109.99	104.96	106.31	104.13	108.94	106.43	106.21
Dukhan	94.55	102.34	110.92	118.98	111.66	110.83	113.36	107.87	108.62	106.45	110.73	108.66	108.86
Forcados	97.68	106.27	118.42	126.68	117.11	116.13	118.30	113.36	114.84	112.09	112.93	110.17	113.65
Iran Light	94.90	100.91	111.44	118.93	109.86	110.45	113.78	107.28	108.47	107.12	109.42	107.06	108.29
Tia Juana Light	88.37	92.85	105.60	115.31	107.97	104.28	106.66	99.24	102.17	103.40	109.64	108.28	103.66
Zueitina	96.75	104.16	115.00	125.62	117.00	115.94	118.79	112.36	115.03	111.34	112.56	109.76	112.89
Selected non–OPEC crudes													
Brent, dated	96.35	103.76	114.60	123.72	115.10	114.04	116.89	110.46	113.13	109.44	110.66	107.86	111.36
Isthmus	90.46	94.56	107.97	117.90	109.62	106.30	108.62	101.06	104.05	105.18	111.54	110.27	105.64
Minas	99.74	105.29	114.62	127.19	119.69	116.28	121.71	117.03	113.32	110.01	117.85	114.35	114.79
Oman	92.49	100.27	109.00	116.56	109.25	107.90	110.41	105.30	106.65	104.96	109.30	107.28	106.63
Suez Mix	90.87	98.64	108.40	116.50	108.06	108.81	112.08	106.33	107.56	104.96	107.73	104.15	106.18
Tapis	100.20	107.47	120.50	130.29	121.86	119.32	120.87	116.27	119.73	115.71	117.27	115.82	117.15
Urals	93.56	101.49	111.50	119.60	111.50	111.68	114.90	109.25	110.39	108.10	110.54	107.31	109.19
WTI	89.49	89.40	102.99	109.89	101.19	96.21	97.14	86.30	85.60	86.45	97.11	98.58	94.99
WTS	86.22	83.90	99.34	106.61	98.54	94.56	96.25	85.51	84.81	85.67	96.35	97.61	92.93
Differentials													
Bonny L–Arab H	7.84	8.46	10.95	13.38	13.32	12.93	12.14	9.18	12.45	10.69	5.54	4.10	10.09
Bonny L–Saharan B	0.60	0.65	0.80	0.55	2.08	1.53	2.40	1.25	0.60	0.35	1.80	2.15	1.23
Brent–WTI	6.86	14.36	11.61	13.83	13.91	17.83	19.75	24.16	27.53	22.99	13.55	9.28	16.37
Brent–Dubai	4.02	3.83	5.89	7.71	6.34	6.27	6.90	5.50	6.82	5.31	1.72	1.43	5.15

Notes
Monthly average based on daily quotations.
WTI: West Texas Intermediate.
WTS: West Texas Sour.

Sources
Secretariat assessments; direct communications; Platts.

Reaching out to the next generation — MDTC

(left to right) Dr Taher Najah, Downstream Oil Industry Analyst and Chairman of the MDTC Academic Committee, Fuad Al-Zayer, Head, Data Services Department, and Alejandro Rodriguez Rivas, Head, Finance and Human Resources Department, on the panel at the 11th MDTC in April 2011.

Slowly, but surely, the Multi-Disciplinary Training Course (MDTC) has insinuated itself into the established activities of the OPEC Secretariat. Indeed, for Staff Members who have been around for a long time, it seems hard to believe that the year 2011 witnessed the 11th in this productive series of annual events.

The first MDTC was held on 4–8 October 1999 at the Secretariat's previous premises in Vienna's Second District. It was then entitled 'Multi-Disciplinary Course for Trainees from Member Countries'.

The *1999 OPEC Annual Report* wrote: "The Research Division, in liaison with other Departments, also accommodated trainees from Member Countries during a one-week inter-disciplinary training course held at the Secretariat. This event having proved a success, both from the point of view of content and organization, it is planned to hold such training courses on an annual basis in future."

From small acorns, great oaks grow, they say, and the 2011 event, held at the new premises in the First District on 18–21 April, attracted over 40 participants — around ten more than in the previous year — from OPEC's 12 Member Countries.

Providing substance to these events at the highest levels are the concluding Solemn

Declarations from the Second and Third Summits of OPEC Heads of State and Government in 2000 and 2007. Each addressed the issue of enhancing professional skills and capabilities through cooperation and exchanges among Member Countries. The Second Solemn Declaration, issued in Caracas, stated that the Heads of State and Government resolved to "continuously seek new ways and means for timely and effective coordination among OPEC Member Countries, so as to achieve their medium- and long-term objectives."

Seven years later, the Third Solemn Declaration, emanating from Riyadh, elaborated upon this, namely to "encourage cooperation and exchanges in the fields of technology and human resource development, among petroleum industries in OPEC Member Countries and with other stakeholders, to promote efficiency, innovation, governance and international best practices."

The MDTC should also be viewed in the context of a broader challenge facing the industry at large since the turn of the century, namely the shortage of skilled labour. What is more, this situation has been exacerbated by the widespread knock-on effects of the past few years' financial crisis and economic downturn, which have manifested themselves in terms of job losses and a lack of job creation.

Important too, as indeed the 2011 issue of the *OPEC World Oil Outlook (WOO 2011)* observed, is local content, a matter of much relevance to many oil- and gas-producing developing countries. Local content has a crucial role to play in providing a strong platform for a country's economic and social development. In this regard, it is useful to have a well-defined, coherent, effectively managed and well-administered local content framework that positively engages and mobilizes all the relevant stakeholders — local communities, local industries, service companies, national oil companies, governments and international oil companies — and in a manner that enables economic growth and social progress.

Participants at the 11th MDTC.

Furthermore, as Secretary General Abdalla Salem El-Badri told the Seventh Ministerial-level Meeting of the EU-OPEC Energy Dialogue in Brussels in June 2010, the industry should make itself more attractive to young, skilled people setting out on their careers, and, once such people were in the industry, their careers should be developed with wisdom and care.

WOO 2011 expanded on this: "The human resource plays a strategically important role in the oil and gas business. The ability to innovate, explore, plan and execute large-scale, complex development projects in a cost-effective and environmentally-friendly manner requires a highly qualified and experienced workforce. However, the future availability of qualified technical talent remains a major challenge facing the oil industry."

In recent years, it continued, there had been "fierce competition for talent" across industry and commerce generally, particularly from the service and emerging knowledge economies. Another factor was that a sizeable section of the industry's workforce, particularly the large numbers that had entered the oil industry in the 1970s, was now approaching retirement: "It is clear, however, that the industry will need more qualified people in the years ahead. It begs the question: how can the industry find, hire, train and keep talented people?"

Such considerations as these clearly underline the importance of the MDTC.

Five candidates from each of the Organization's Member Countries are invited to attend each yearly event. The idea is to bring together a diverse mix of cultures, knowledge and experience, to help improve the richness of the Organization's work and development going forward.

Over the four days of the MDTC, participants hear about the activities of the Secretariat's various departments, especially the work of the Research Division. In addition, officials give presentations on numerous topical oil market subjects, including prices, oil supply and demand, stock movements, national and international oil companies, oil data, legal and human resources and the world economic outlook.

A regular feature of the MDTC is a visit to the Headquarters of the OPEC Fund for International Development, so that participants can attain a better understanding of the work carried out by OPEC's sister organization, which is based on the opposite side of Vienna's central First District to the Secretariat.

The Chairman of the MDTC Academic Committee, Dr Taher Najah, described the objective of the MDTC: "The MDTC has developed over the years to become the main tool for knowledge-sharing and network-building among professionals from OPEC Member Countries. By participating in the course, the professionals develop a better understanding of how the Organization is contributing to the stability of energy markets and how research is being conducted by the Secretariat to continuously evaluate the energy markets, with particular focus on oil.

"Moreover, those attending the course can provide the Secretariat with useful comments and proposals and may develop an interest in joining the Secretariat team in a professional capacity in the future." Eventually, he added, they would develop a good network with participants from other Member Countries, as well as with members of the workforce at the Secretariat.

Press launch for key research journals

Secretary General Abdalla Salem El-Badri (fourth from the left) presides over the press conference.

The OPEC Secretariat is justifiably proud of its achievement of producing six regular publications. Indeed, two of them date from the 1960s and another two from the 1970s, while the newest is just five years old.

The publications complement each other, with some more technical than others, they cover topical, relevant issues, their frequency varies from monthly to yearly, and they are the product of a team effort from across the Secretariat, with additional input from Member Countries and other interested parties.

The purpose of these publications is to enhance knowledge and understanding to the world at large of OPEC, its Member Countries, the oil industry and related issues.

Significantly, the past few years have seen the introduction of a press conference at the Secretariat to launch the latest annual versions of the oldest title and the newest, the *OPEC Annual Statistical Bulletin (ASB)*, which first appeared in 1965, and the *OPEC World Oil Outlook (WOO)*, which dates from 2007. However, before looking a little closer at this, a brief mention of the other four titles would familiarise readers with the full nature and scope of OPEC's regular journals.

The *OPEC Annual Report* was also introduced in the mid-1960s and was originally known as the O*PEC Annual Review and Record*, before changing to its present name in 1977. At around the time of that change, two other journals appeared — the *OPEC Energy Review* and the *OPEC Bulletin*. The former started off as the *OPEC Review* in October 1976, before being relaunched in its present form in March 2008, and is a quarterly academic journal containing a selection of research papers. And the *OPEC Bulletin* is a monthly news magazine, containing articles, features, analysis and opinion on a wide range of issues from energy to culture. The sixth title on the list, the *OPEC Monthly Oil Market Report*, was first published in 1996 and consists of data and analysis on current market developments.

Clearly, when viewing the six publications together, we can witness continuity, consistency, evolution and a readiness to embrace the new in the way in which the Secretariat presents OPEC to the world at large.

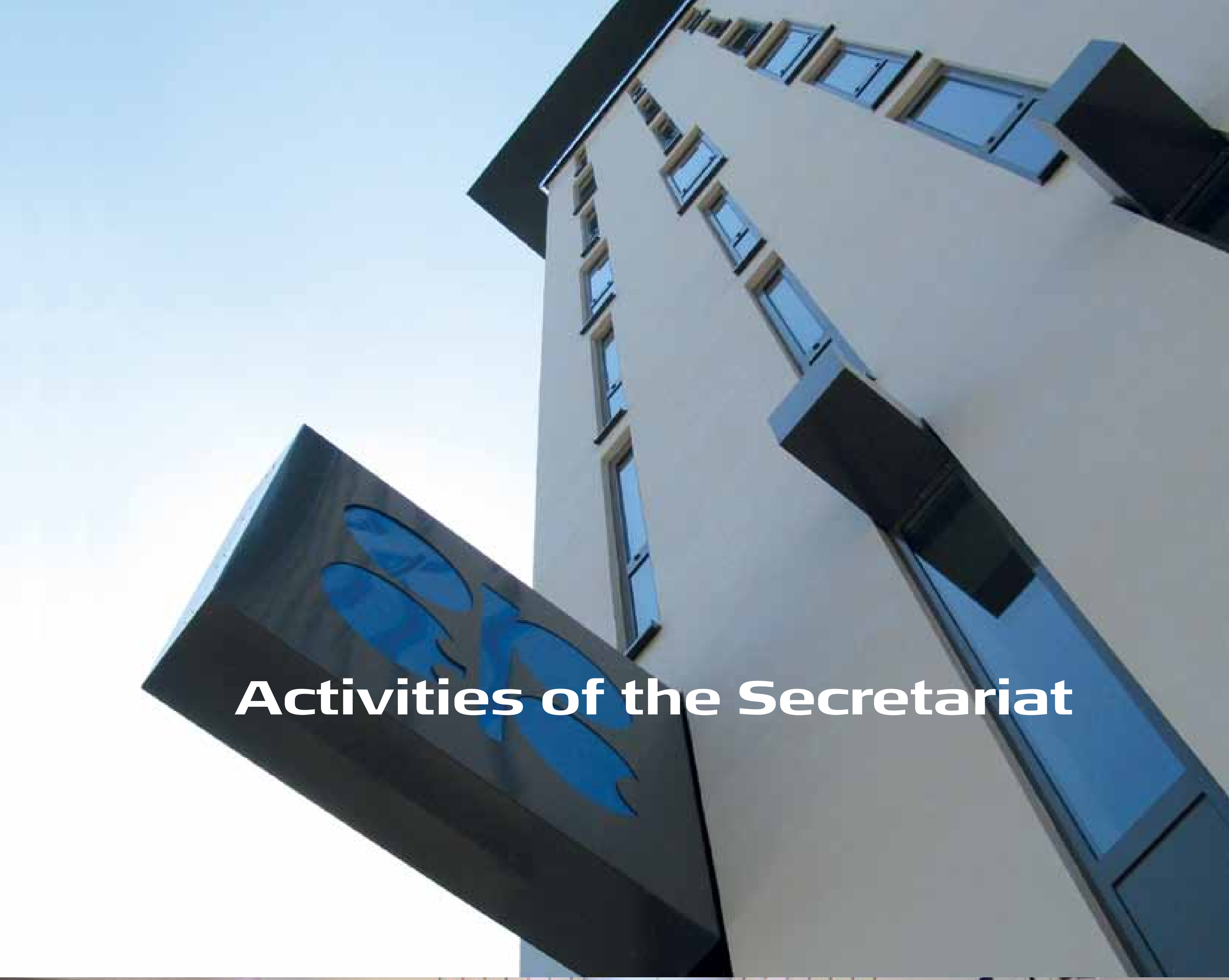
The idea of launching two of them at a press conference began in 2007, when the first issue of *WOO* was released on 26 June, followed by the latest issue of the *ASB* on 31 July. At the first launch, Secretary General Abdalla Salem El-Badri said: "With energy central to poverty alleviation, social progress, economic expansion and the enhancement of sustainable development for us all, it is helpful (that) we have platforms for discussion and exchanges of views about how the energy system might evolve." He added that the release of the *WOO* was an "essential element" in this process: "The publication's outlook for both oil supply and demand helps establish the features, extent and magnitude of the possible challenges and opportunities that may lie ahead of us." Five weeks later, Research Division Director Dr Hasan M Qabazard stated: "The *ASB* ... is the only publication of its kind that gathers in one place statistical information and data on every facet of the oil and gas industries. For the researcher, it is a very valuable and time-saving document, which has been made easy to use through the different formats it is presented in."

The holding of a joint press conference for the two journals began one year later and continues to the present day. This can mean that the *ASB*, which is normally prepared first each year, is initially released in an electronic interactive format on the OPEC website, www.opec.org, and this can happen some time before its formal launch at the joint conference, when the more familiar paper version appears.

In 2011, the press release announcing the joint press conference of 8 November said the WOO "has become an important reference tool, providing critical analysis of a range of issues, including supply and demand, investments, policies and environmental considerations. Making use of different scenarios, the WOO maps out some of the challenges and opportunities facing the industry. This year also sees an extension of the timeframe for the outlook to 2035, from 2030 last year."

Turning to the *ASB*, whose composition was revised comprehensively in 2009, the press release said that this publication, "now in its 46th year, provides detailed time-series data on many aspects of the global petroleum industry, including exports, imports, as well as exploration, production and transportation activities, focusing especially on OPEC's Member Countries." It added that an interactive version of the publication, which also incorporated a complete PDF file, had been available on-line since July.

El-Badri presided over the press conference, and he was joined by: Qabazard; Fuad Al-Zayer, Head of the Data Services Department; Oswaldo Tapia, Head of the Energy Studies Department; Mohamed Hamel, Senior Adviser; and Senior Research Analysts Garry Brennand and Dr Jan Ban. After Angela Agoawike, Head of OPEC's Public Relations and Information Department, had introduced the meeting, a series of presentations was given by these officials, elaborating upon the content and insights of the two publications. The press conference finished with a question-and-answer session.



Activities of the Secretariat

Office of the Secretary General

2011 saw the fifth year of the tenure of Abdalla Salem El-Badri as OPEC Secretary General.

Over the course of the year, the activities of the Office of the Secretary General (SGO) were, once again, concerned with satisfying the requirements of the Chief Executive in the execution of his duties. As in the past, considerable time, energy and resources were expended in preparing documentation for, and servicing meetings of, the Conference, the Ministerial Monitoring Sub-Committee and the Board of Governors (BoG), as well as a variety of other high-level events.

Also during the year, in addition to coordinating the preparation of reports and documentation for submission to the various Ministerial and gubernatorial gatherings, the SGO's 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 SGO was also concerned with coordinating the Secretariat's protocol, as well as organizing the many missions conducted by the Secretary General during the course of the year.

Legal Office

As the legal arm of the Secretariat, Legal Office (LO) contributed to the promotion of the rule of law within the Organization and in its relations with governments, organizations, enterprises and individuals.

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

On internal issues, the office provided legal advice to the Organization in matters pertaining to OPEC's governing bodies. It did this by providing legal opinions through the Secretary General on issues relating to, and arising from, the OPEC Conference and the BoG, and by providing *ad hoc* reports to the Secretary General and governing bodies, as and when required.

LO also analyzed, advised on, recorded and followed up legal aspects of documents prepared for — and decisions taken by — the governing bodies, relating to the Organization's rules and procedures.

It provided legal advice and expertise to the Secretary General and management on such issues as:

- the interpretation of Staff Regulations, as they affected Staff benefits and welfare;
- the drafting and review of contracts and agreements with external entities and individuals;
- international legal issues, on which it reverted to the Secretary General and, through him, to the governing bodies from time to time; and
- relations between OPEC and the Republic of Austria, regarding amendments to the Host Agreement.

LO also undertook missions which dealt with international legal issues of significance to OPEC, submitting mission reports to the Secretary General about the implications of such international legal developments on the Organization and its Member Countries. The missions included: Oil and Gas in the North Africa Region;

the 2nd IEF-OFID Symposium on Energy Poverty; the 15th Annual Competition Conference; the Contract Risk Management Conference; and the Annual Contract Law Conference.

Other tasks carried out by LO included: amendments to internal regulations; a study on Intellectual Property and Patent Agreements; the Internal Audit Activity Concept; the Corporate Identity Manual; copyright law and the use of OPEC's logo and name by third parties; Austrian data protection law; and antitrust law and related litigation and legislation in the USA.

LO also participated in programmes organized by the Secretariat, such as the 11th Multi-Disciplinary Training Course (MDTC), where it made a presentation entitled 'The Role of the Legal Office within the Organization'.

Research Division

Research Division (RD), made up of **Petroleum Studies Department, Energy Studies Department** and **Data Services Department** (which also includes the Information Centre), as well as the **Environmental Matters Unit,** implemented the first year of the Secretariat's second Long-Term Strategy (LTS) in 2011. RD conducted all its activities in line with the key priorities and areas of focus highlighted in this important document, which was adopted in 2010 and identifies the key challenges facing the Organization now and in the future.

Core activities

During 2011, RD carried out its regular activities, as follows.

- To provide, through the Secretary General, pertinent and reliable information and analysis to Ministerial Conferences, the BoG, the Economic Commission Board (ECB) and other such bodies, in support of decision-making related to energy policy (including the identification of the key driving forces underlying global, regional and national oil and energy markets).
- To conduct detailed short-term petroleum market analyses and forecasts and elaborate long-term oil market scenarios.
- To monitor energy policies, relevant technological developments and changing structures in the international petroleum industry.
- To gather, compile and provide up-to-date statistical data and information, and develop corresponding information technology (IT) programmes.
- To follow relevant debates and policy developments in international fora and multilateral negotiations, in order to assist Member Countries in drawing-up their positions on such issues.

Important events at which RD delivered an address or background paper included: the IEA-IEF-OPEC Symposium on Energy Market Outlooks, in Riyadh; the 33rd Oxford Energy Seminar, in Oxford; the 20th World Petroleum Congress, in Doha; the Sixth International Energy Week, in Moscow; the Energy Dialogue: Asian Energy Outlook up to 2030, in Kuwait; the Extraordinary International Energy Forum (IEF) Ministerial Meeting, in Riyadh; and the European Fossil Fuels Forum, in Berlin.

RD also attended the regular biannual meetings (spring and autumn) of the International Monetary Fund (IMF)/World Bank; both meetings not only offered direct insights into high-level deliberations, but also provided influential platforms for the Secretariat to express its views. The main discussion point was the multi-speed recovery of the global economy, with high unemployment and sluggish growth in the advanced economies, strong growth momentum in most developing regions and the pertaining downside risks to growth. The Euro-zone crisis, the increasing volatility of capital inflows, imbalances in current account deficits and political stability were also highlighted.

2011 witnessed a series of significant events that began early in the year with the geopolitical unrest in North Africa and the Middle East (MENA) region, and then were followed by the triple disaster which struck Japan in March and the debt crisis that severely affected the Euro-zone and its member countries. Their consequences were felt throughout the global economy and had a notable impact on oil markets during the year.

After enjoying a period of relative stability in 2010, crude oil prices were very volatile during 2011, first peaking to $120/b, due to fears of a supply shortage following the onset of the crisis in the MENA region, and then plunging on disappointing macroeconomic data, with volatility continuing throughout the year. The market was also characterized by a wide divergence between the two key benchmark crudes, West Texas Intermediate (WTI) and Brent, a divergence that went as high as $28/b. The global economy went through a phase of increasing uncertainty, due to the sovereign debt crisis in the Euro-zone, persistently high unemployment in the advanced economies and the risk of inflation in the emerging economies. As a result, world oil demand growth forecasts for the year were revised down to 0.8 mb/d, while there was hardly any growth in non-OPEC supply.

Events affecting markets and crude oil prices were closely monitored and analysed in the Secretariat's internal *Daily Oil Market Report* and *Weekly Highlights of the Market Report* and, with in-depth coverage, the published *OPEC Monthly Oil Market Report (MOMR)*, which also included feature articles on topical issues.

The analytical reports submitted to the Organization's governing bodies on short-term oil market developments served as a basis for timely and effective decision-making. They covered all the key aspects of the market, including oil demand and supply, economic and financial developments, the downstream sector, tanker market developments, storage, stock movements and the oil trade. In addition, the emphasis in 2011 was placed on the WTI-Brent differential, growing recognition of the impact of speculation, the outlook for Asia and the global economy after the tragic events in Japan, the Euro-zone debt crisis, oil production in Russia, the disruptions to Libyan supply and the International Energy Agency's (IEA's) call for a coordinated release of its member countries' strategic petroleum reserves onto the market.

A report analysing the recent changes to the seasonality of supply, demand and inventories was drawn up, showing that there had been changes to historical and seasonal world oil consumption patterns. A report on the transformation of the Chinese economy was also prepared, highlighting that country's aim to raise its living standards to the level of the developed world. A third report on the self-sustaining economic recovery examined whether the global economy was experiencing this, and concluded that this was not the case, although it noted that the economic recovery could become self-sustaining in the near future, depending on the actions taken today and in the years ahead.

Besides monitoring developments in the oil and product markets in the short term, the ongoing research in energy studies, in modelling efforts and in market-oriented and technology studies continued in 2011. This was accompanied by in-depth analyses and forecasts focusing on the development of shale oil, the refining industry and the potential for technological advances in the transportation sector.

The fifth issue of the annual publication, the *OPEC World Oil Outlook (WOO)*, was released in November. This contained an upward revision to the OPEC Reference Basket's price assumption. It also indicated that the global economy was expected to show below-average growth, with high unemployment rates and continuing global growth imbalances, while the Euro-zone crisis and high sovereign debt levels continued to be the most pressing issues.

For the period 2010–35, *WOO's* reference case sees demand reaching almost 110 mb/d, with fossil fuels accounting for 82 per cent of the global total, although demand for oil will have been overtaken by demand for coal by 2035. While the central driver for medium-term oil demand is the economy, in the long term other key drivers come into play, such as the impact of policies, technologies and, to a lesser extent, oil price developments. Fully 80 per cent of the increase in global demand is in developing Asia, where demand reaches almost 90 per cent of that of the OECD by 2035. Transportation in non-OECD countries is central to future global demand growth, accounting for close to 90 per cent of the increase over the period to 2035.

On the supply side, total non-OPEC supply is seen to rise by more than 11 mb/d over the years 2010–35, due to increases in conventional supply from the Caspian and Brazil, as well as steady increases in biofuels, oil sands and shale oil, which will more than compensate for expected decreases in the mature regions. In addition, total NGL supply, from OPEC and non-OPEC, increases by 6 mb/d over the same period, from 10.5 mb/d in 2010 to almost 17 mb/d by 2035.

Beyond the reference case, an 'Accelerated Transportation Technology and Policy Scenario' was developed. This assumes higher efficiency improvements to internal combustion engines, an accelerated shift to hybrids and electric vehicles, a more rapid penetration of natural gas in the transportation sector and an accelerated move to regulate efficiencies in commercial vehicles. Other scenarios examine further prospects for the global economy, expected developments in the downstream sector, growth in the road transport sector and developments in the global refining system.

Elsewhere in RD, a study on 'Modelling oil demand in road transportation: decomposing oil use per vehicle (OPV)' was undertaken to shed more light on the effects on the average OPV entering the fleet of fuel efficiency improvements, advanced technology vehicles and alternative fuel vehicles that consume ethanol, biodiesel, electricity and compressed natural gas. Technological advances in the road transport sector also affect future demand for oil products. Therefore, within the framework of the EU-OPEC Energy Dialogue, a study on 'Technology, markets and policies: potential of technological advances in the road transportation sector' was conducted. This concluded that, while, in the medium term, technologies will be centred on conventional powertrain improvements, with falling prices and mass production, the global new car sales market for passenger vehicles will have doubled to 127 million units by 2035.

In recognition of the growing importance of shale oil production, a study on 'Shale oil: resource base, development costs and challenges' assessed its potential and economic viability. Although it is not clear whether the availability of economically viable shale oil is as great as it appears to be for shale gas, given the size of deposits, it is nevertheless possible that, even if only a fraction of this contains viable liquids, this could translate into an enormous resource. Nevertheless, so far the limited results that are available are seen as insufficient to be used as reliable indicators of the long-term prospects.

Improvements were introduced into both the OPEC World Energy Model (OWEM) and the World Oil Refining, Logistics and Demand (WORLD) model. The latter's projections for future refining capacity requirements, trade and the adequacy of downstream investments were explored in detail in a study entitled 'Oil downstream outlook to 2035: the WORLD report'. Developments in the refining industry in Asia were addressed in a report entitled 'Oil refining capacity developments in Asia-Pacific', this region witnessing the highest expansion of refining capacity worldwide, with an estimated 1.5 mb/d of refining capacity believed to have been added in 2009 and a further 800,000 b/d in 2010, in contrast with the rationalization seen in the OECD.

A study entitled 'The evolving relations between NOCs and IOCs' explored how relationships between national oil companies (NOCs) and international oil companies (IOCs), the major players in the oil and gas industry, have changed over time, how they are expected to develop in future in a changing environment, the challenges and opportunities they face, and how NOC-IOC relationships can be optimised for mutual benefit.

Findings from a study on 'The current situation of energy policies in the BRIC, Europe and the USA' indicated that pre-salt discoveries in Brazil could boost oil production expectations to 5.11 mb/d by 2019, depending, however, on technological developments. Russian production is expected to remain at current levels, while, in the case of India, the European Union (EU) and the United States of America (USA), the viability of various targets and scenarios was assessed. A study on 'China's 12th Five Year Plan' looked at the implications on energy consumption in general and on oil demand in particular.

The most interesting conclusion of a study on 'Energy taxes and subsidies: the trends and implications' was that the level of tax on coal has been only a fraction of that levied on oil, totally contradicting the policy of introducing more environmentally-oriented policies.

Energy dialogue

Over the past year, OPEC was heavily involved in collaborative work related to the Group of 20's (G20's) Energy Agenda. Under the mandate of the 'G20 initiative', given in the Final Declaration of the G20 Leaders Summit in Cannes, the ongoing cooperation with other international organizations continued, focusing on the following workstreams: energy subsidies; the Fossil Fuel Price Volatility Initiative, covering the tasks of assessing the impact of price-reporting agencies; a study on coal and gas price volatility; the Joint Organizations Data Initiative (JODI) and extending its work on physical oil market transparency to coal and gas; the Global Marine

Environment Protection Initiative; and the Clean Energies and Energy Efficiency Initiative.

The Secretariat continued to work with the IEF and IEA in the context of the areas of cooperation agreed upon at the 12th IEF, held in Cancun in March 2010. 'The IEA-IEF-OPEC Symposium on Energy Outlooks' was held on 24 January 2011 in Riyadh. This provided an opportunity to discuss energy market trends and outlooks, as well as the associated uncertainties. Recognizing that energy markets had become increasingly complex and global, it underlined the point that sharing insights and analyses among the organizations and other experts would be mutually beneficial and reflect the diversity of views on oil and energy outlooks, so as to contribute to a better mutual understanding of the interests and concerns of every stakeholder.

The three organizations jointly hosted their second high-level technical workshop in Vienna on 29 November. This brought together experts from industry, academia, governments, price-reporting agencies and the financial and regulatory sectors to discuss the interactions between physical and financial energy markets. This made a further contribution to this field and was built upon the insights already gained on these issues at previous events.

RD continued to help strengthen the energy dialogue between producers and consumers, in particular by organizing the Eighth Ministerial Meeting of the EU-OPEC Energy Dialogue, which was held at the Secretariat on 27 June. Presentations were made by OPEC on recent oil market developments and prospects and by the EU on the impact of recent developments on the Union's energy supplies and policies, including offshore safety, and the effect of the unrest in some parts of the MENA region on energy prices, policies and security was underlined. The meeting also reviewed the conclusions of a study entitled 'Impact of the use of biofuels on oil refining and fuel specifications', a workshop on the 'Impact of the economic crisis on oil investment', initial findings of a study on 'Technological advances in the road transportation sector' and the issue of offshore safety. Joint activities for the year 2011/12 were agreed.

The Secretariat continued its participation in the IEA's Greenhouse Gas Research and Development Programme and the Global Carbon Capture and Storage (CCS) Institute. The first is an international collaborative programme, whose key mission is to provide an objective source of information on technologies capable of making deep reductions in greenhouse gas emissions, focused primarily on CCS. And the second was established by the Australian government, with the objective of sharing CCS technology and helping CCS projects succeed.

In a similar vein, RD followed up its work on enhancing collaboration among Member Countries in the field of research and development. The annual meeting was held and Member Countries agreed to host events in the field of CCS.

Environmental debate

Climate change continues to be a major environmental issue of significance to all countries. During 2011, the Secretariat was again actively engaged in the negotiations under the United Nations Framework Convention on Climate Change (UNFCCC), supporting Member Countries by providing them with technical analysis and offering them a coordination platform on which to exchange views. The internal *Quarterly Environmental Report* (QER) played an important role here.

The Secretariat produced technical analyses tailored to addressing the information needs of Member Countries and providing insights into the issues under negotiation at the climate change talks. Important reports that were prepared included the following: 'The Cancun Analysis — Substance, Process and the Future of Negotiations'; 'The Energy Industry and Financial Institutions in a Carbon Constrained World'; 'Report of the OPEC Member Countries' Coordination Meeting on Climate Change'; and 'The Run-up to COP17/CMP7 — Summary of Main Developments in Climate Change Negotiations in 2011'.

Database and communications

Data services (such as expanding, updating and validating statistical databases) and the development and maintenance of application systems were ongoing during 2011. Such activities aimed to accommodate the needs of the Secretariat and Member Countries. Emphasis was placed on system administration and support to facilitate the access of Member Country users to the intranet. This was enhanced through improving navigation and the introduction of a global search utility, download facility and user support features. All software systems developed in-house were maintained and expanded, as necessary.

An Application Portfolio Assessment Project was carried out and was viewed as a strategic instrument to steer and streamline future application development. In addition, work on an Electronic Document and Records Management System continued and was expanded, with, *inter alia*, an enhanced OPEC website photo-gallery and integrated system for administrative applications.

The quality and timeliness of data received from Member Countries were enhanced through an ongoing process of improving the flow of regular oil data and energy statistics. The expanded statistical data coverage proved beneficial in enhancing the Secretariat's reports and analyses.

The quality of data was assured through careful validation, consistency checking and analysis, while Member Countries' compliance with submitting data was also monitored through the use of 'report cards', in line with ongoing efforts to further improve the flow of regular oil and energy statistics from them. Efforts to increase the utilization of OPEC's statistical database continued.

The delivery of key up-to-date information to end-users was facilitated through the regular dissemination of electronic reports, such as the *Quarterly Energy and Oil Statistics* and the publications the *OPEC Annual Statistical Bulletin* and the *OPEC Annual Report*. Activities to expand data-exchange directly through electronic means and sources also increased.

The Secretariat continued its active stance in promoting oil data transparency and harmonizing oil data definitions through the Joint Organizations Data Initiative (JODI). In this context, the Secretariat continued to cooperate with the other five organizations and attended two inter-Secretariat Meetings and the Eighth International JODI Oil Conference in Beijing on 11–12 October, which primarily continued its work on the JODI Oil Data Quality Assessment.

The Summer Fellowship Programme was implemented again in the OPEC Secretariat in 2011. Research topics included: patterns of oil consumption; emissions-trading and the energy sector; testing for convergence of *per capita* demand for oil in developed and emerging economies; estimating income and price elasticities of demand for oil in the Group of Seven and 'BRICS' (Brazil, Russia, India, China and South Africa) countries; relationships between commodity futures markets and inventories; evaluating refining margins in the replacement value methodology model, compared with secondary sources; evolution in heavy duty vehicles and its impact on oil demand; the role of exploration and production technologies on global oil supply; and China's 12th Five-Year Plan — Direct Implications for OPEC Member Countries.

A number of high-level visits were made to the Secretariat under the policy of promoting technical exchanges and dialogue. These included delegations from the Japan External Trade Organization (JETRO), the Ministry of International Trade and Industry (MITI) Japan, the IMF's Institute-European Division, the Institute of Energy Economics Japan (IEEJ), Ecobasis AG, the African Petroleum Producers' Association (APPA), Trans-Peninsula Petroleum (TPP), AZTech UAE, the Japan Cooperation Centre — Petroleum (JCCP), SINOPEC, the Lloyds List Group, Statoil Hydro, GasTerra, Veolia Environment, Water Systems in Oil/Gas, the Special Envoy for the UNFCCC COP17/CMP7, and the Indian Institute of Management.

Also, high-level Member Country delegations from Ecuador, Iraqi, Kuwait and Venezuela were received and technical meetings held. And the 11th Multi-Disciplinary Training Course took place on 18–21 April.

PR and Information Department

The exceptional 50th Anniversary year of 2010 may have been over, but this did not mean that the Public Relations and Information Department (PRID) could relax in 2011. There were still plenty of regular activities to handle, as well as some challenging new assignments, such as the development of 'Wheel of Time' and 'Who is Who' information consoles and the launch of an outreach programme that focused on education and charity activities.

As had by now become the familiar pattern, PRID's activities were undertaken by the three sub-units of Design/Production, Editorial/Publications and Public Relations. The department used various means, including speeches, press releases, briefings, publications, audio-video presentations and its website, to present a clearer, more concise and more compassionate image of OPEC to the industry, the media and the public.

This required close cooperation with other departments and offices, in particular, through the provision of its editorial, audio-visual and design and production expertise, to enhance the output of the Secretariat. Also, PRID's work included selecting, commissioning and briefing printers and other service companies.

Publications

There was especially close cooperation between PRID and RD in the field of publications. While PRID was primarily responsible throughout for editing, design, production, printing and distribution, its input with regard to producing or sourcing the content varied greatly according to the publication. This was, for example, especially high for the *OPEC Bulletin*, among the regular journals. On the other hand, the overall direction and content of the specialist technical journals, notably the *OPEC World Oil Outlook* and the *OPEC Annual Statistical Bulletin*, was very much in RD's hands. The *OPEC Energy Review* was treated differently to the other publications.

OPEC Bulletin

Ten issues of the Secretariat's flagship publication, the *OPEC Bulletin*, appeared during the year.

While the focus was, understandably, on Member Countries, in both a business and cultural sense, the content broadened out to cover the industry at large, related areas such as the environment and sustainable development, other oil-producing countries, alternative energy, dialogue and the OPEC Fund for International Development (OFID).

The issues began with commentaries on topical issues and analytical features on current market developments, and ended with a more detailed look at the market. They also kept readers informed of the Secretary General's diary and other activities affecting the Secretariat, while there were articles on 'Arts and Life'.

Full coverage was given to the 159th and 160th Meetings of the Conference in June and December, together with articles about other important OPEC events, such as the Eighth Ministerial-level Meeting of the EU-OPEC Energy Dialogue in Vienna in June and the 20th World Petroleum Congress in Doha in December. The final issues of the year ran a feature called 'Focus on Africa'.

OPEC Energy Review

The *OPEC Energy Review* made further progress in establishing itself as the Organization's prized quarterly academic journal, after its relaunch in 2008, revitalising a lineage which began with the birth of its predecessor, the *OPEC Review,* in 1976. Altogether, OPEC has published an estimated 700+ analytical papers on the industry and related areas in this series of journals, underlining the importance it attaches to insightful research into such issues. In conjunction with the General Academic Editor, submitted articles were reviewed by RD and administered by PRID, before being sent to Oxford, England, where they were published and distributed by Wiley-Blackwell, on behalf of OPEC in a long-standing joint publishing arrangement.

OPEC World Oil Outlook

The fifth annual issue of the *World Oil Outlook (WOO)* appeared in 2011, underlining the new dimension and robustness it has brought to the dissemination of the Organization's research and analysis to a wider audience in the space of just five years. As Secretary General El-Badri said in the Foreword: "The *WOO 2011* illustrates OPEC's constantly-evolving analysis of the global oil market, over all timeframes, and further reinforces its commitment to market stability … We believe that the publication is an important reference tool, offering insights into trends and possible developments in the years ahead." For the first time in 2011, a separate booklet was produced of *WOO*'s executive summary.

As with the *ASB* below, after RD had provided the content, PRID steered the *WOO* through its editorial, production and distribution stages.

OPEC Annual Statistical Bulletin

For the second year in a row, the *Annual Statistical Bulletin (ASB)* appeared in its new briefer, more concise format, yet continued to provide much detailed statistical data on global oil and gas, with a particular emphasis on Member Countries. This accommodated the fact that so much more data can be found now on the accompanying CD or the interactive version that appears on the OPEC website. Also, the first step was taken in using the year of publication in its title, rather than principal data year, by designating it the '2010/2011' issue (previously, this issue would have been called the '2010' issue).

OPEC Annual Report

The *Annual Report 2010* chronicled the activities of the Secretariat during the year, as well as developments in the world economy and the oil market. With a structure similar to this 2011 issue, it highlighted OPEC's 50th anniversary celebrations of 2010. PRID handled input from all parts of the Secretariat, as it edited and prepared the *Annual Report* for publication.

Distribution

PRID maintained and updated its mailing lists, covering the media, press, analysts, news agencies, banks, investment companies, universities and so on. The lists were used on a daily basis to distribute alerts on website updates, as well as making other announcements about the Organization and its activities. In addition, in 2011, PRID started to develop a more comprehensive list categorized by user, to improve distribution.

Speechwriting and similar tasks

During the course of 2011, the demand for speeches for the Secretary General, the President of the Conference and other Ministers and key officials of the Secretariat was again high. Speeches prepared by PRID, in conjunction with RD and often to very tight deadlines, highlighted how OPEC pursued market stability and the security of demand and supply, among other key messages.

The messages were delivered by senior OPEC officials at conferences, seminars and workshops across the world. Such events attracted top-level participants from all sectors of the energy industry, as well as the associated areas of government, academia and media. They included meetings organized by OPEC — the two regular Ministerial Conferences at the Secretariat in Vienna — as well as those organized jointly with other groups — such as meetings of the EU-OPEC Energy Dialogue and with the IEF.

Many articles and interviews were also drafted for the Secretary General during the year. These were normally prepared on request from external publications and other media.

Press relations and monitoring

The department continued to provide support to members of the press, attending to their enquiries, facilitating interviews, assisting with accreditation and producing background publications for Conferences. Several media briefings were also organized for the Secretary General.

In addition, PRID delivered its usual extensive and expanding news monitoring activities, which covered international news, daily media commentary and analysis concerning OPEC and its Member Countries, the oil industry and more general energy-related fields. PRID maintained its subscription to Meltwater and Factiva, the news-aggregating instruments that cover the media of Member Countries and consuming countries.

The department also produced the internal 'Daily News Summary' and 'What the Papers Say', which helped the Secretariat and Member Countries keep up-to-date with what had been reported about the Organization, its Member Countries, the oil sector and the energy industry in general.

Audio-visual/multimedia

PRID provided audio-visual (AV) coverage for all official visitors to the Secretary General in the Secretariat in 2011. The Department distributed photographs to the international media and to its Editors for publication purposes. It also assisted in student visits to the Secretariat, as well providing video and photo coverage to support the newly launched outreach programme. DVDs covering training for Management, as well as loops for Meetings of the Conference and other events, were produced too. Also, documentaries on DVD and photographs on CD were produced and distributed.

After the successful installation of the new AV studio the year before, modifications and upgrades took place in 2011, such as the AVID editing system.

There were live-streaming, live-broadcasting and on-demand videos, through the OPEC website, of the 159th and 160th Meetings of the Conference in June and December and the 8th EU-OPEC Energy Dialogue in June, all of which were held in Vienna, as well as of the 50th Anniversary Symposium in April in Tehran (a '50th Anniversary Documentary' was produced for, and screened at, that event too). Coverage was provided for the press conference for the launch of the *2011 WOO* and the *2010/11 ASB* in November, while 'Oil Market Insight' sessions took place before the two Ministerial Conferences. Photo-coverage supplemented all the above events.

Overall, there were 45 exclusive live interviews with OPEC officials and other international figures, while further interviews with analysts and journalists were conducted during the live-streaming (30 of the 45 interviews were published in the website's Multimedia Section).

Video-coverage and photography accompanied other events too, such as meetings of the BoG and ECB, the MDTC, workshops and roundtables, for archival purposes, as well as the national days of Member Countries in Vienna.

Special projects

Completed projects in 2011 were: 'Who is Who' and 'Wheel of Time' stand-alone information consoles; the recovery of old videos for the new OPEC website, with 409 videos covering key OPEC events being digitalized, converted and uploaded; and 'OPEC Video Server', with all OPEC's video archive from 1960 being edited, digitalized and uploaded to this server.

Two other projects were nearly completed: 'Photo Gallery', for installation in the website's Multimedia Section; and 'Cumulus Photo Archive', with all the photographs covering OPEC's history from 1960 being copied to the new OPEC Server.

Website

PRID continued to maintain and regularly update the content of the OPEC website, following the launch of the new version in 2010, with OPEC Reference Basket price data, graphs, speeches, press releases, publications, reports, news items, Member Country facts and figures, vacancy news and other announcements about the Organization and its activities. The website continued to serve as a window for the live-streaming of OPEC events.

New design features were introduced to highlight its content and make it more user-friendly, and this provided more positive feedback and visitor satisfaction. The 'Content Management System' was enhanced and new features were planned for 2012, including a 'flip book application' for OPEC publications. Continued monitoring of the 'Web Trends Analysis Report' on the different sections of the website led to further revisions to the look and feel of the content.

During the period under review, the number of website pages rose to roughly 2,100. And there were nearly four million views of the website pages during the year.

Twelve podcasts of the *MOMR* were produced and aired during the year, highlighting OPEC's key messages about the oil market.

Briefings

During the year, 73 groups, totalling 1,632 students and established professionals from many different countries, visited the Secretariat for presentations on OPEC's background, structure, aims and activities. These were usually followed by lively question-and-answer sessions, and the participants were invited to take copies of the Organization's latest publications.

Outreach programme

During the last quarter of 2011, PRID started an outreach programme to strengthen communications with local institutions and promote constructive dialogue. The programme focused on education and humanitarian activities.

Working with educational institutions, PRID briefed a total of 155 students aged 13–17 about OPEC, its Member Countries and the vital role oil plays in our daily lives. The lectures and the new, specialist publication for young people, *I Need to Know: An Introduction to the Oil Industry and OPEC*, generated much interest and had a positive impact on the Austrian schools visited, both private and state. PRID plans to intensify its efforts with this programme nationwide in 2012.

In the humanitarian area, PRID worked with two houses for refugees from the charity, Caritas: the Caritas House Daria and Flüchtlingshilfe St Gabriel. To support this, donations from Secretariat Staff included hygiene products, towels, bedding, kitchen utensils, children's clothing and toys. Staff were also active with financial donations and social work.

Other areas

Activities here included contributing to meetings, workshops and training courses through the design and/or production of background information, badges, nameplates, notepads, logos, programmes, etc, as well as arranging the AV facilities and handling the accreditation. Away from meetings, there was also the production of certificates, business cards, complimentary cards, invitation cards, festive cards, gift designs, CD covers and flyers.

In addition, PRID was involved, to varying degrees with other parts of the Secretariat, in revising and updating numerous reports, booklets and pamphlets, such as: the *MOMR*, the *QER*; the *Annual Summary of Secretariat's Activities*; the *Staff Regulations*; the *11th MDTC* booklet; and *Who Gets What from Imported Oil?*.

Administration and IT Services Dept

The routine activities of the Administration Section consist of providing office and travel services, maintaining the premises and residence, making arrangements for all meetings in Vienna and implementing the Headquarters Agreement.

During 2011, special focus was placed on fine-tuning the installations and processes in the new premises, especially in the areas of security, safety, meetings and services. Some minor adjustments and additional purchases were effected, in order to optimize the working environment for Staff Members. The Secretariat's First Aid Team was trained, as well as its Departmental Fire Wardens. The fire prevention and evacuation concept was worked out in line with Austrian regulations. Much time was devoted to reviewing and updating procedures regarding visitors to the premises, the disposal of fixed assets and purchasing. Logistical preparations for the 2012 OPEC International Seminar started.

The IT Services Section provided the Secretariat with an effective, secure IT environment, as well as reproduction, telecommunications and mail/courier services. In addition to these routine activities, it carried out the following special projects in 2011:

- the replacement of the Windows XP operating system on the desktop platform with Windows 7, for performance improvements;
- the change of the desktop antivirus software from Trend Micro to Gdata for security enhancement, since the Secretariat also had Trend Micro on its servers;
- the implementation of Exchange Server 2010, for improved business continuity and resilience, as well as its support for virtualisation;
- the expansion of Enterprise Vault and the implementation of File Archiving System for archiving old mail and files;
- the change of the proxy server from software-based to Sophos Web Security Appliance, due to the lack of support for the old system and the emergence of new technology for enterprise security;
- the establishment of a dark fibre link from OPEC to OFID to enhance the disaster recovery system; and
- the replacement of old computers.

Finance and Human Resources Dept

In addition to its day-to-day activities of providing services related to managing the human and financial resources of the Organization, in 2011, the Finance and Human Resources Department was engaged in finalizing the project to update the Staff Regulations, Financial Regulations, and Financial Rules and Procedures, as envisaged in its annual Work Programme.

The Finance Section produced, among other tasks, the Financial Report for 2010, the Provisional Financial Statement for 2011 and the Draft Budget for 2012, all of which were presented to the BoG. The Section continued to update the Financial Regulations and the Financial Rules and Procedures to reflect amendments that arose mainly from the implementation of the 'Strengthening the Secretariat Project'. Its proposals were presented to, and approved by, the BoG, before the completed, updated documents were produced and distributed accordingly.

The Human Resources Section finalized the project to update the Staff Regulations in 2011, as well as providing its normal personnel-related services to the Secretariat. Most of the amendments resulted from the implementation of the Strengthening the Secretariat Project in 2008, where Staff benefits were improved and the current organizational structure was introduced. The Staff Regulations project, which started in 2009, required much time, since the last update was conducted in 2005, as well as intensive coordination and cooperation with LO and the Internal Audit, to ensure strict adherence to the relevant Board decisions and to maintain consistency within the Regulations. Thanks to the efforts of the inter-Departmental team, the Secretariat's Staff were finally provided with the updated Staff Regulations, presenting them with the guidelines to work and behave as international employees of a reputable Organization.

Heads of Delegation

Algeria

HE Dr Youcef Yousfi

Angola

HE Eng José Maria Botelho de Vasconcelos

Ecuador

HE Wilson Pástor-Morris

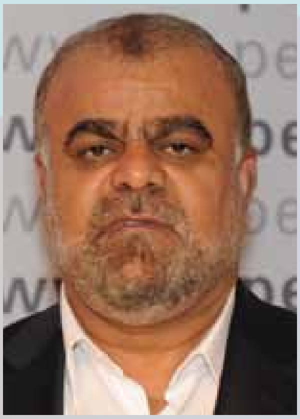
IR Iran

HE Dr Masoud Mir-Kazemi
To May 2011

IR Iran

HE Mohammad Aliabadi
To August 2011

IR Iran



HE Eng Rostam Ghasemi

Iraq

HE Abdul-Kareem Luaibi Bahedh

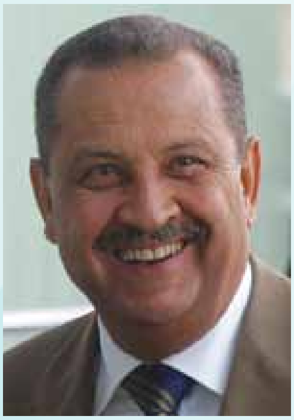
Kuwait

HE Sheikh Ahmad Al-Abdullah Al-Ahmad Al-Sabah
To May 2011

Kuwait

HE Dr Mohammad Al-Busairi

Libya



HE Dr Shokri M Ghanem
To June 2011

Libya

No Ministerial Conference was held during his designated term of office as Head of Delegation

HE Dr Nuri A Berruien
To November 2011

Libya

HE Eng Abdurahman Benyezza

Nigeria

HE Mrs Diezani Alison-Madueke

Qatar

HE Abdullah Bin Hamad Al Attiyah
To January 2011

Qatar

HE Dr Mohammed Bin Saleh Al-Sada

Saudi Arabia

HE Ali I Naimi

UAE

HE Mohamed Bin Dhaen Al Hamli

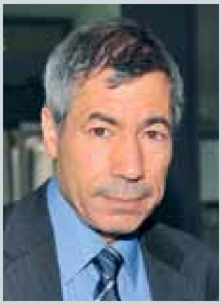
Venezuela

HE Rafael Ramirez

Board of Governors

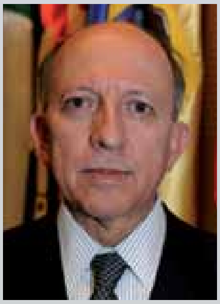
Members of the Board of Governors at the 137th Meeting, held in Vienna, Austria, in November 2011 (l-r): Seyed Mohammad Ali Khatibi Tabatabai, IR Iran; Ahmed A Taghdi, ad hoc Governor, Libya; Engr Goni Musa Sheikh, Chairman of the Board, Nigeria; Dr Bernard Mommer, Venezuela; Ahmed Messili, Algeria; Dr Falah J Alamri, Iraq; Ms Siham Abdulrazzak Razzouqi, Kuwait; Abdalla Salem El-Badri, Secretary General; Issa Shahin Al Ghanim, Qatar; Ali Obaid Al Yabhouni, United Arab Emirates; Félix Manuel Ferreira, Angola; and Dr Majid A Al-Moneef, Saudi Arabia.

Other Governors *(not pictured above)*

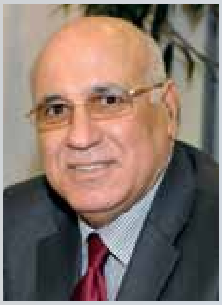


Hamid Dahmani
Algeria

To 11 September



Eng Diego Armijos-Hidalgo
Ecuador



Ahmed M Elghaber
Libya

Economic Commission Board

Abdalla Salem El-Badri, Secretary General, and Dr Hasan M Qabazard, Director, Research Division, among OPEC National Representatives at the 116th Meeting of the Economic Commission Board in December 2011.

National Representatives

ALGERIA
M Mustapha Hanifi *(to 11 September)*
Mrs Yamnia Hamdi

ANGOLA
Luis Neves

ECUADOR
Eng Diego Armijos-Hidalgo

ISLAMIC REPUBLIC OF IRAN
Safar Ali Keramati

IRAQ
Adel K M Al-Taee

KUWAIT
Ms Nawal Al-Fuzaia

LIBYA
Dr Mahmud Sadeg *(to 12 September)*
Imad A Ben Rajab

NIGERIA
Suleman Ademola Raji

QATAR
Sultan K Al-Binali

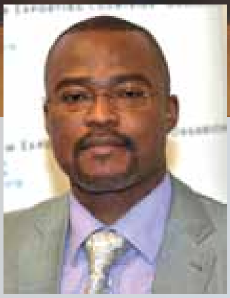
SAUDI ARABIA
Dr Ahmad M A Al-Ghamdi

UNITED ARAB EMIRATES
Hamdan Mubarak Al Akbari

VENEZUELA
Fadi Kabboul

Officials of the Secretariat

Pictured above are the Members of Management. Seated: Abdalla Salem El-Badri, Secretary General. Left-to-right: Dr Hojatollah Ghanimi Fard, Head, Petroleum Studies Department; Oswaldo Tapia, Head, Energy Studies Department; Abdullah Al-Shameri, Head, Office of the Secretary General; Ms Asma Muttawa, General Legal Counsel; Ms Angela Agoawike, Head, PR and Information Department; Fuad Al-Zayer, Head, Data Services Department; Alejandro Rodriguez Rivas, Head, Finance and Human Resources Department, and Officer in Charge, Administration and IT Services Department; and Dr Hasan M Qabazard, Director, Research Division.



Dr Ibibia L Worika
General Legal Counsel
(left in February)

Secretary General
Abdalla Salem El-Badri

Research Division
Dr Hasan M Qabazard — Director

Data Services Department
Fuad Al-Zayer — Head

Officers
Nabeel Almojil
Puguh Irawan
Ramadan Janan

Energy Studies Department
Oswaldo Tapia — Head

Officers
Mohammad Khesali
Dr Mohamed Mazraati
(left in October)
Benny Lubiantara
Dr Taher Najah
Julio Arboleda Larrea
Ms Amal Alawami

Petroleum Studies Department
Dr Hojatollah Ghanimi Fard — Head

Officers
Brahim Aklil
(left in October)
Dr Mohamed El-Shahati
(rejoined in July)
Dr Mehdi Asali
Dr Odalis Lopez Gonzalez
Esam Al-Khalifa
Haidar Khadadeh
Elio Rodriguez Medina
Eissa Alzerma
(joined in September)

Environmental Matters Unit
Dr Mohammad Taeb

Office of the Secretary General
Abdullah Al-Shameri — Head

Legal Office
Dr Ibibia L Worika — General Legal Counsel
(left in February)
Ms Asma Muttawa— General Legal Counsel
(joined in August)

Officer
Ali Nasir

Finance and Human Resources Department
Alejandro Rodriguez Rivas — Head

Officers
Ms Layla Abdul-Hadi
Endro Guritno
(left in July)
Abiodun Ayeni
(joined in May)

Administration and IT Services Department
Alejandro Rodriguez Rivas — Officer in Charge

Officer
Ayodeji Adeosun

Public Relations and Information Department
Ms Angela Agoawike — Head

Officer
Ms Zoreli Figueroa

Secretary General's diary

23–24 January IEA/IEF/OPEC Symposium on Energy Outlooks, Riyadh, Saudi Arabia

26–29 January World Economic Forum Annual Meeting 2011, Davos, Switzerland

OPEC Secretary General, Abdalla Salem El-Badri (c), in a roundtable session with journalists at the World Economic Forum.

31 January–1 February The Chatham House Conference, MENA, 2011, London, UK

22 February Extraordinary IEF Ministerial Meeting, Riyadh, Saudi Arabia

18 April 4th Asian Ministerial Energy Roundtable, Kuwait

19 April OPEC 50th Anniversary Ceremony, Tehran, IR Iran

OPEC Secretary General, Abdalla Salem El-Badri (l), and (then) Iranian Petroleum Minister, Dr Seyed Masoud Mir-Kazemi, unveil the Iranian 50th Anniversary commemorative stamp in Tehran.

9 June	World Economic Forum Meeting, Vienna, Austria
13–16 June	Reuters Energy Summit, London, UK
19 September	The Gulf Intelligence Energy Markets Forum, Dubai, UAE
13–14 October	Oil and Money Conference, London, UK

OPEC Secretary General, Abdalla Salem El-Badri (r), talks to moderator Nordine Ait-Laoussine, President, Nalcosa, at the Oil and Money Conference.

1–2 November	15th Institute for International Energy Studies Conference and Exhibition, Tehran, IR Iran
20–22 November	2011 Energy Dialogue of KAPSARC, Riyadh, Saudi Arabia
4–8 December	20th World Petroleum Congress, Doha, Qatar

Abdalla Salem El-Badri, OPEC Secretary General, John Defterios, Anchor, CNN, and Maria van der Hoeven, Executive Director, IEA, at the 20th World Petroleum Congress.

Calendar 2011

17–18 January	10th Annual Statistical Meeting, Vienna, Austria
24 January	IEA/IEF/OPEC Symposium on Energy Otlooks, Riyadh, Saudi Arabia
22 February	Extraordinary Meeting of IEF Energy Ministers to approve IEF Charter, Riyadh, Saudi Arabia
29 March	EU/OPEC Roundtable to discuss findings of Study on Biofuels, Brussels, Belgium
29 March	EU/OPEC Meeting to follow-up Preparations for 8th EU-OPEC Ministerial Meeting, Brussels, Belgium
12 April	1st Meeting of the Advisory Panel for the OPEC Award for Journalism, Vienna, Austria
14 April	Special Experts' Committee on Venezuelan Extra-Heavy Crude Production, Vienna, Austria
18–21 April	11th Multi-Disciplinary Training Course, Vienna, Austria
26–27 April	ECO/OPEC Workshop, Isfahan, IR Iran
3 May	5th Meeting of the R&D Steering Committee, Vienna, Austria
4–5 May	6th Annual Meeting of OPEC R&D Officials, Vienna, Austria
23–24 May	136th Meeting of the Board of Governors (BoG), Vienna, Austria
25 May	EU/OPEC Workshop on Impact of Economic Crisis on Oil Investments, Vienna, Austria
1 June	IEF Executive Board Meeting, Vienna, Austria
3 June	115th Meeting of the Economic Commission Board (ECB), Vienna, Austria
5 June	1st Brainstorming and Coordination Meeting on United Nations Framework Convention on Climate Change (UNFCCC) and Kyoto Protocol, Bonn, Germany
7 June	74th Meeting of the Ministerial Monitoring Sub-Committee (MMSC), Vienna, Austria
8 June	159th Meeting of the Conference, Vienna, Austria
9 June	1st Meeting of the 2012 OPEC Award Advisory Panel, Vienna, Austria

27 June	8th EU/OPEC Ministerial Meeting, Vienna, Austria
26 July	2nd Meeting of the Advisory Panel for the OPEC Award for Journalism, Vienna, Austria
14–15 September	11th Special Meeting of the ECB, Vienna, Austria
16 September (am)	EU/OPEC Roundtable on Transportation Technologies, Vienna, Austria
16 September (pm)	Brainstorming on Study on Potential of Technological Advances in the Road Transportation Section, Vienna, Austria
20 September	Experts' Meeting in Preparation for 2nd IEA/IEF/OPEC Symposium on Market Outlooks, London, UK
17 October	Preparatory Meeting of the IEA/OPEC Workshop on CCS for EOR, Vienna, Austria
20 October	3rd Meeting of the Advisory Panel for the OPEC Award for Journalism, Vienna, Austria
27–28 October	OPEC Member Countries' Coordination Meeting on the UNFCCC, Vienna, Austria
8 November	Press Conference on the Publication of the 2011 World Oil Outlook and 2010/11 Annual Statistical Bulletin, Vienna, Austria
15 November	2nd Meeting of the 2012 OPEC Award Advisory Panel, Vienna, Austria
17–18 November	137th Meeting of the BoG, Vienna, Austria
27 November	Coordination Meeting with Member Countries in the Run-up to COP-17/CMP-7, Durban, South Africa
29 November	2nd IEA/IEF/OPEC Workshop on the Impact of Financial Markets on Oil Prices, Vienna, Austria
12 December	116th Meeting of the ECB, Vienna, Austria
13 December	75th Meeting of the MMSC, Vienna, Austria
14 December	160th Meeting of the Conference, Vienna, Austria
15 December	Inter-Secretariat Meeting for International Organizations on JODI, Vienna, Austria

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