OPEC bulletin

3–4/06

Daukoru in Washington: Promoting stability through dialogue

International Road Transport Union on the road to sustainable development

Commentary

Energy supply security: inclusive approach needed

Recently, ministers of energy of the Group of Eight (G8) industrialized nations met in Moscow to discuss oil market issues and challenges — especially as they relate to energy supply and security. The forum was used to take stock of the situation and to appraise measures and mechanisms currently in place for ensuring steady and ample supplies of energy.

The hosting of such a meeting in the Russian capital underscored the relevance of the issue of energy security. It especially pointed to the need for adopting a much broader perspective to address supply concerns, given Russia's importance as a key energy player (it is ranked second in both global oil reserves and production).

Indeed, the coming together of key players — producers, consumers and investors — could not have come at a better time, particularly since oil prices continue to be influenced by a variety of factors, some of which are not governed by market fundamentals, such as geopolitics, natural disasters and refinery constraints. But while consumers are concerned about security of supply, producers are themselves worried about the future of demand uncertainty and the underlying risk of making investment capital available without having a clear picture of the extent of the world's future energy needs.

Oil producers are also concerned about the role of speculative buying in the market which has tended to push prices to levels not justified by supply and demand fundamentals. This has ultimately led consumers to look at energy alternatives, even though fossil fuels today continue to be the cheapest and most readily available energy resource, and will remain so for the foreseeable future.

Energy security is viewed differently by different people, depending on where one stands. OPEC Member Countries, in holding two-thirds of global proven oil reserves, believe there is sufficient oil to meet the world's needs in the years ahead. OECD countries will continue to account for the lion's share of forecast demand. However, nearly 80 per cent of future demand growth will come from the developing countries. OPEC has consistently shown its willingness and capability to meet any rise in global oil demand by putting extra barrels onto the market, as and when required. It has also been making additional investment to ensure that the necessary increase in production capacity takes place.

The Organization equally recognises that concern over security of supply stretches well beyond the upstream sector to incorporate the entire oil supply chain, including refining. But while OPEC is committed to ensuring adequate crude oil supply, it feels the responsibility for providing consumers with the refined products they need falls primarily with the consuming countries. A definite correlation now exists between crude and petroleum product prices to the extent that refinery bottlenecks have been instrumental in driving up crude prices. This recognition clearly demonstrates that the task of ensuring energy security is the responsibility of all market players.

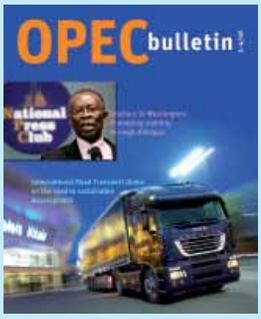
The G8 energy ministers' meeting also underscored the fact that crude oil will continue to play a central role in fuelling world economic growth for decades to come. There is simply no current alternative to its availability, accessibility and ease of transportation.

However, we still need to gain a better understanding of the challenges and obstacles facing the industry both now and in the future. Co-operation and dialogue among producers, consumers and investors is the key to realizing that goal. In the changing world of today, increasing interdependence of nations reinforces the issue of energy security. Undoubtedly, this subject and the role fossil fuels play in the global energy mix will continue to dominate discourse on energy and development in the future.

As for OPEC, it will continue to seek equitable means of harmonizing global energy needs to serve the interests of the producers, consumers and investors alike, with respective returns that are reasonable and fair to all parties.

Contents

OPEC bulletin



Cover
Road transport and crude oil remain interdependent *(see Feature on pp20–25)*. Inset: OPEC Conference President, Dr Daukoru, on his visit to the US in March 2006 *(see story on pp12–19)*.
Main photo: IRU; inset: Reuters.

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Membership and aims
OPEC is a permanent, intergovernmental Organization, established in Baghdad, September 10–14, 1960, by IR Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. Its objective is to co-ordinate and unify petroleum policies among Member Countries, in order to secure fair and stable prices for petroleum producers; an efficient, economic and regular supply of petroleum to consuming nations; and a fair return on capital to those investing in the industry.
The Organization now comprises 11 Members: Qatar joined in 1961; Indonesia and SP Libyan AJ (1962); United Arab Emirates (Abu Dhabi, 1967); Algeria (1969); and Nigeria (1971). Ecuador joined the Organization in 1973 and left in 1992; Gabon joined in 1975 and left in 1995.

Contributions
The OPEC Bulletin welcomes original contributions on the technical, financial and environmental aspects of all stages of the energy industry, including letters for publication, research reports and project descriptions with supporting illustrations and photographs.

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OPEC sees market well supplied;

OPEC Conference President and Secretary General, Nigerian Minister of State for Petroleum Resources, HE Dr Edmund Daukoru.

Dr Daukoru (r) with Acting for the Secretary General, Mohammed Sanussi Barkindo, during the closed session of the 140th Meeting of the OPEC Conference.

The OPEC Conference, which convened in Vienna on March 8, 2006, decided to maintain the current oil production ceiling of 28 million barrels per day into the second quarter, in its continuing efforts to instil calm in global energy markets and keep prices at reasonable levels. The Organization's Oil and Energy Ministers also called for increased investment in refining to help relieve constraints responsible for creating petroleum product shortages. In this account of the Meeting, the Bulletin looks at some of the reasons that informed the Ministers' decisions.

calls for more investment in refining

Over the years, OPEC's spring-time meetings have proven to be the subject of much deliberation among the Organization's respective Member Country delegations. It is the one period in OPEC's busy annual ministerial schedule that has the potential to give the most headaches. It is the time when the Ministers' decision-making is beset most by what has perhaps become OPEC's greatest adversary — uncertainty. Every year the Conference faces the same dilemma — what to do about the production ceiling during this potentially precarious few months of the year. The customary high-demand period of winter has ended and a new season is beginning — but a very different season that can see demand for OPEC's crude oil plummet by as much as two million barrels per day (m b/d). Anxiety and concern over the extent of the demand drop grows and speculation in the market heightens as more and more scenarios emerge as to what could happen over the spring and summer months if certain action is not taken. And even though this data is seemingly sound, no one really knows what will happen with the onset of the warmer weather — and the scourge of uncertainty prevails, even snowballs.

Accurate projections

During this topsy-turvy period, it has always been crucial for the Organization's Ministers to get their supply and demand sums right. It is equally as important that the forecasts and projections they receive, on which they base their decisions, are both informed and accurate. In the past, this did not always prove to be the case — as OPEC learned to its cost. However, years of experience have taught the Organization and its Member Countries one important fact — that forewarned is forearmed. In-depth studies and sound analysis and projections are the answer to making the right decisions — at least in most cases. Normally, at this time of year, OPEC would agree to some level of production cut ahead of the lower-demand months, just to ensure that prices did not suddenly fall.

However, over the last few years the hard and fast rules that were applied in determining price direction and levels — supply and demand fundamentals — have seemingly changed. Whether this metamorphosis is permanent, experts say it is still too early to determine, but at least for the time being that norm is not the case. Today, supply and demand does not dictate what the price of oil will be, at least not solely. A combination of other factors now has a considerable influence on price movement, and several have little or nothing to do with the fundamentals of the market. Ahead of the 140th Meeting of the OPEC Conference, there was considerable talk among OPEC delegations, as well as industry experts and seasoned observers, that the Organization would have to cut its production ceiling for the second quarter if it wanted to avoid a glut in the market and ensure that prices remained buoyant. But after deliberating extensively on

Head of the Libyan Delegation to the 140th OPEC Conference, HE Abdalla Salem El Badri (l), with Qatar's Second Deputy Prime Minister and Minister of Energy and Industry, HE Abdullah bin Hamad Al Attiyah (r).

a whole range of data and recommendations from the OPEC Secretariat concerning the current and short-term oil market situation, the Conference decided that the best course of action was to maintain the current output ceiling of 28m b/d "for the time being". This move proved to be somewhat of a surprise, especially in view of the fact that the Conference was told in the reports submitted that there were ample supplies of oil on the international market and that OECD stocks were more than comfortable. However, the Ministers were also informed that economic growth was forecast to remain strong throughout the ensuing months, meaning that oil demand would also be underpinned and no marked slump in the call on OPEC oil would occur. As for oil prices, which continue to remain stubbornly high, any fears of an immediate crash as a consequence of excess market supplies were dispelled with the prognosis that the influence of non-fundamentals, primarily geopolitical concerns, but also downstream bottlenecks, and persistent speculation in futures trading, would continue to strongly support prices, just as they have been doing for a few years now. But the deciding factor for retaining the current ceiling was that, after intense discussion, the Ministers felt that any immediate cut in production, even if warranted by the supply and demand data, would send the wrong signal to the market at a time when prices were still verging on the uncomfortable for many in the consuming world. Any cut in output would probably have pushed prices even higher, bringing with it the likelihood of more volatility in the market and potential harm to the world economy. As it was, the Ministers felt their decision to retain the current ceiling would contribute to enhancing oil market stability, as well as support global economic growth, and keep prices at a reasonable level for both producers and consumers.

Above left: The Indonesian delegation headed by the Minister of Energy and Mineral Resources, Dr Purnomo Yusgiantoro (c); from the Ministry, Dr Sukhyar (r); and Minister Counsellor at the Indonesian Embassy in Vienna, Dr Sujatmiko (l).

Above right: Dr Daukoru (r) with the Chairman of the OPEC Board of Governors, Indonesian Governor, Dr Maizar Rahman.

Angola's Minister of Petroleum, HE Eng Desidério da Graça Verissimo e Costa.

A communiqué released at the end of the Conference stated: "In taking this decision, the Conference again confirmed the Organization's commitment to continuing to play its role in maintaining stability and ensuring that global markets remain adequately supplied at all times."

However, the Ministers conceded that their decision to leave output unchanged at this time of year was not

without risk and that close monitoring of the oil market was essential. Stressed the communiqué: "Given the possible risks and uncertainties ... the Conference further agreed to continue to closely monitor market developments and to take appropriate and swift action as and when the need arises." In support of this stance, the OPEC Conference President — Nigerian Minister of State for Petroleum Resources, Dr Edmund Maduabebe Daukoru — was asked by the Conference to consult closely on the market situation with other Heads of Delegation up until the next OPEC Conference, due to be held in Venezuela in early June.

Left: Iran's Minister of Petroleum, Sayed Kazem Vaziri Hamaneh (c), speaking to the press, with the Iranian OPEC Governor, Hossein Kazempour Ardebili (r).

Right: Sayed Kazem Vaziri Hamaneh (l) with Iran's OPEC National Representative, Dr Javad Yarjani.

Director-General of the OPEC Fund for International Development, Suleiman J Al-Herbish.

Speaking after the Meeting, Dr Daukoru explained that a number of factors had informed the Ministers' decision not to cut output, including positive supply and demand indicators for the coming months. "We took the decision to maintain production at its current level knowing that we are also taking a risk," he affirmed. "We've taken a decision knowing that the long-term concerns transcend the quarterly concerns. If you project long term, then demand is rising — but by how much is still up for debate. However, there are issues that are clouding the horizon (for example, interest rates are high, and many countries are removing subsidies) that are definitely going to affect consumption."

Dr Daukoru said that, in taking the decision, the Conference had once again reaffirmed that the Organization was fully committed to continuing to support and maintain market stability. He reiterated the importance of closely monitoring the oil market, especially in the light of the inherent risks and uncertainties, including expected stock-builds, that were likely to bring changes to the market outlook.

United Arab Emirates Energy Minister and Alternate Conference President, Mohamed Bin Dhaen Al Hamli.

Top row:
Left: Kuwait's Minister of Energy, Sheikh Ahmad Fahad Al-Ahmad Al-Sabah.

Right: The Iraqi delegation with the Iraqi Ambassador to Austria, Tariq Aqrawi (c); the Iraqi Deputy Minister of Oil, Muatasim A Hassan; and the Director General for Economics and Marketing Affairs of the Oil Ministry, Shamkhi H Faraj (r).

Bottom row:
Left: Nigeria's OPEC Governor, Ammuna Lawan Ali (r), with Algeria's Minister of Energy and Mines, Dr Chakib Khelil.

Right: The Kuwaiti delegation with HE Sheikh Ahmad Fahad Al-Ahmad Al-Sabah (c); Kuwaiti Governor for OPEC, Siham Abdulrazzak Razzouqi (r); and the Assistant Undersecretary, Economic Affairs at the Ministry of Energy, Abbas Naqi (l).

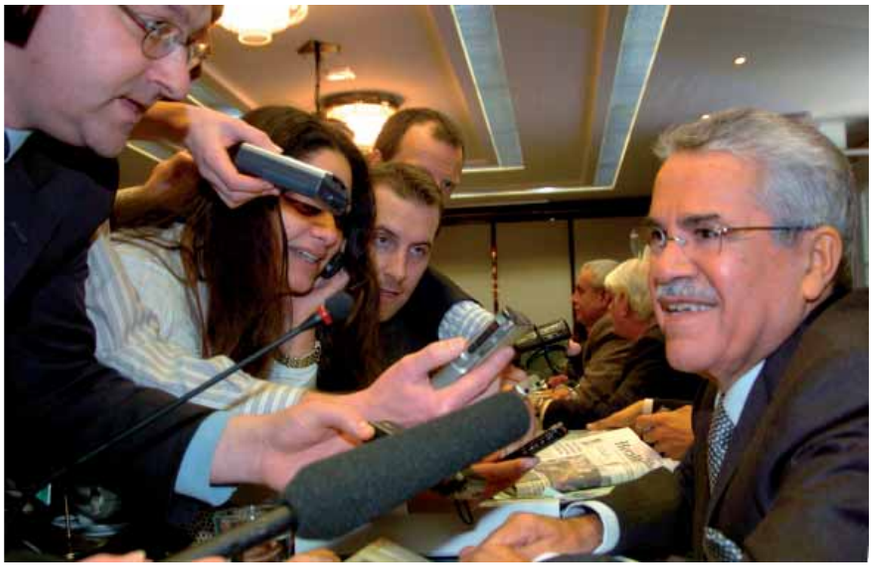
While explaining the current market conditions in relation to oil prices, Dr Daukoru said: "In terms of the price of oil, there are issues that relate to fundamentals, and there are issues that relate to the simple ebb and flow of market forces."

Speaking at a press conference at the end of the Ministerial talks, he declared: "What OPEC tries to do is maintain market stability. We have proved this time and time again. This is why we have called on the consuming nations to share demand information with us. The more we share information, the more we can understand what the demand patterns will be. Through this, we can accomplish our commitment to stabilize markets."

In the communiqué, the Conference also renewed its call on all parties, including non-OPEC producers and oil consumers, to undertake joint efforts to address the challenges facing the oil industry, including the bottlenecks affecting the downstream oil industry.

"Consumers and producers cannot afford not to talk to each other, that's unthinkable," said Dr Daukoru. "Even though talking for the sake of it is not very productive, talk we must."

He said that whilst in Washington DC [a reference to his recent four-day trip to the US capital, detailed in a separate article in this Bulletin] he "tried to get the message across that we need investment" in his numerous talks with officials there.



Egypt's Minister of Petroleum, Sameh Fahmy, a Conference observer, also highlighted the need for increased investment in the oil sector, stating: "Investment in both the upstream and downstream is vitally important, mainly because we have a refining problem worldwide — and this leads to a transportation fuel problem. We are talking about jet fuel and diesel — this is where the problem lies. We need more sophisticated refineries to be put into operation as soon as possible." He said that with regard to making the industry as attractive as possible to investors and consumers, OPEC and non-OPEC countries, as well as the consumers, had to shoulder and meet this responsibility. "I believe this requires a comprehensive strategy adopted at the highest levels worldwide, taking into consideration that every country would benefit from a stable and orderly market."

Also attending the Conference, John Hall, Managing Director of John Hall Associates, a UK-based analyst, maintained that recent moves made by OPEC Member Countries in helping to expand refining capacity were something to be applauded. "Previously, OPEC offered 2m b/d extra, which nobody took, simply because nobody could refine it," he observed. "I think that if the consuming nations are unwilling to invest heavily in new refinery capacity, why shouldn't OPEC do it — produce the refined products and sell them directly to the customers? I think it is a logical move for OPEC Member Countries."

Hall pointed out that, in the US, the driving season was

Left: Mexican Undersecretary of Hydrocarbons, HE Dr Héctor Moreira.

Above: Saudi Minister of Petroleum and Mineral Resources, Ali I Naimi, answering questions from the press before the Opening Session of the 140th Conference.

The Qatari Delegation headed by HE Abdullah bin Hamad Al Attiyah (c); Qatar's OPEC Governor, Abdulla H Salatt (l); and OPEC National Representative, Jassim Nama.

The Libyan delegation headed by HE Abdalla Salem El Badri (c), with Libyan Governor for OPEC, Hammouda M El-Aswad (r), and Chargé d'Affairs at the Libyan Embassy in Austria, Mrs Soad A Shelli.

Venezuelan Minister of Energy & Petroleum, Rafael Ramirez.

Dr Purnomo Yusgiantoro (c); with the outgoing Director of the OPEC Research Division, Dr Adnan Shihab-Eldin; and the incoming Director of the OPEC Research Division, Hasan Qabazard.

coming, as was the hurricane season, which was totally unpredictable. "It's not a question of producing more crude, as we have a refining capacity shortage worldwide, particularly in the US. In Asia, now is the time when they want to get up their stocks of refined products in anticipation of a later increase in demand this year when there could be pressure on supplies," he said.

Other analysts in attendance at the Conference expressed concern that the oil market was most likely going to be influenced by a number of economic and financial uncertainties that would change the outlook in the coming period.

However, Jason Schenker, an economist with the Wachovia Corporation, said the relatively high oil prices of today did not seem to be having that much of an impact on the global economy. "For 2006, the European Union and Japanese economies are working to try and grow more than they did in 2005 (when prices were lower), and the US economy is looking to expand between 3 per cent and 3.5 per cent," he said. "None of this is really indicative of any form of energy-induced economic slowdown."

He added: "One thing we feel is that the market is very well supplied. But in terms of what's holding up prices, it has a lot to do with the geopolitical concerns. There are a number of different things we have seen over the last couple of weeks, such as incidents in Iraq, Nigeria and Saudi Arabia, that are of concern."

In stressing the importance of OPEC as a global institution, Suleiman J Al-Herbish, Director-General of the OPEC Fund for International Development, who was also attending the Conference as an observer, praised the Organization for its unrelenting commitment to overcoming the challenge of securing oil market stability. A former long-time OPEC Governor for Saudi Arabia, Al-Herbish also noted the significant role of OPEC Member Countries in their efforts towards tackling poverty, as exemplified by the work of the OPEC Fund.

The future challenges

In looking to the years ahead, Dr Daukoru stated: "The future challenges are immense. OPEC is in business to support long-term objectives. Oil, in our view, is still the world's preferred fuel. We need technology and we need the investment to recover more oil from the reserves already located and to find more. But we need to know more about demand as capacity overhangs lead to a crash — and a crash does not serve anybody."

His views were echoed by Desidério da Graça Veríssimo e Costa, Minister of Petroleum of Angola, also a Conference observer, who said: "The world's appetite for oil products continues to increase and investment in oil exploration, production and refining must continue. Oil production in some countries has now peaked, or is falling, so the responsibility for future supplies falls on those that still have reserves to develop."

Omani Minister of Oil and Gas, HE Mohammed bin Hamed Al Rumhy (l); Egypt's Minister of Petroleum, HE Eng Sameh Fahmy (c), with Omani Ambassador to Vienna, Salim M Al-Riyami.

Dr Daukoru speaking to the press before the official opening of the Conference.

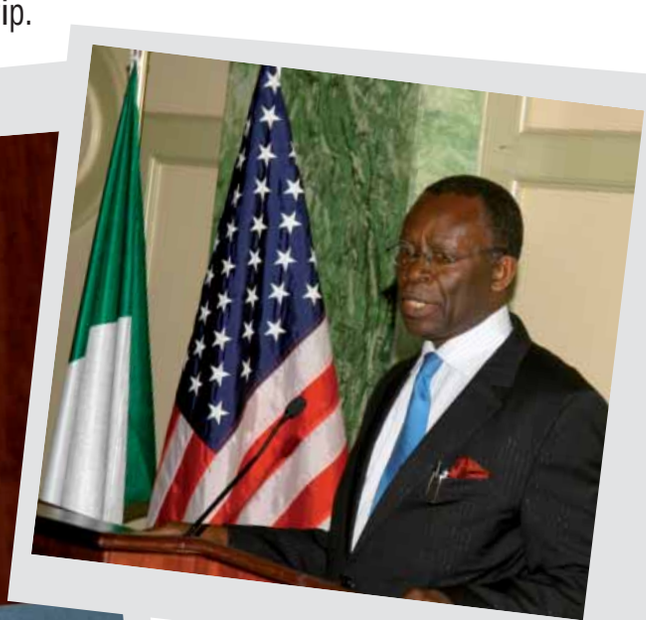
OPEC's LTS appears in print

Meanwhile, the Conference also marked the launch of the 'OPEC Long-Term Strategy', a booklet containing an overview of the key issues addressed in the Organization's comprehensive long-term strategy review, which was adopted by the Conference at the 137th Meeting in September 2005. The strategy provides a coherent and consistent vision and framework for OPEC's future, defining specific objectives and identifying the key challenges facing the Organization.

Pictured below are delegates attending the 140th Meeting of the OPEC Conference (l–r):
Head of the Libyan Delegation to the 140th OPEC Conference, Abdalla Salem El Badri;
Kuwait's Minister of Energy, Sheikh Ahmad Fahad Al-Ahmad Al-Sabah;
Iraqi Ambassador to Austria, Tariq Aqrawi;
Conference President and Nigeria's Minister of State for Petroleum Resources, Dr Edmund Maduabebe Daukoru;
Algeria's Minister of Energy and Mines, Dr Chakib Khelil;
Saudi Arabia's Minister of Petroleum & Mineral Resources, Ali I Naimi;
Indonesian Minister of Energy and Mineral Resources, Dr Purnomo Yusgiantoro;
Qatar's Second Deputy Prime Minister and Minister of Energy and Industry, Abdullah bin Hamad Al Attiyah;
United Arab Emirates Minister of Energy, Mohamed Bin Dhaen Al Hamli;
Iran's Minister of Petroleum, Sayed Kazem Vaziri Hamaneh;
Venezuela's Minister of Energy & Petroleum, Rafael Ramirez;
Chairman of the OPEC Board of Governors, Indonesian Governor, Dr Maizar Rahman.

OPEC President's visit to Washington allays US energy concerns

OPEC Conference President and Secretary General, Dr Edmund Maduabebe Daukoru (pictured below), recently visited Washington DC to hold a series of talks on important energy issues with high-ranking government officials and oil and gas executives. This is a dairy of his engagements and activities, as reported by Umar Gbobe Aminu, Senior Editorial Co-ordinator at the OPEC Secretariat, who accompanied Dr Daukoru on the trip.



The day-by-day log highlights the significance of the visit for OPEC, and the prospect for continuing such high-level visits by senior OPEC officials, in order to create a better understanding of the oil market and the role OPEC plays in enhancing producer-consumer dialogue.

Day One: Tuesday, February 28, 2006

Dr Edmund Maduabebe Daukoru's arrival in Washington DC marked the start of a busy four days of engagements with key US government officials, Congressional members, oil and gas business executives, and representatives of the media.

Given the importance of the United States as the world's biggest oil consumer, and the concerns being expressed by the US Administration over security of supply, the visit by the OPEC Conference President could not have come at a better time.

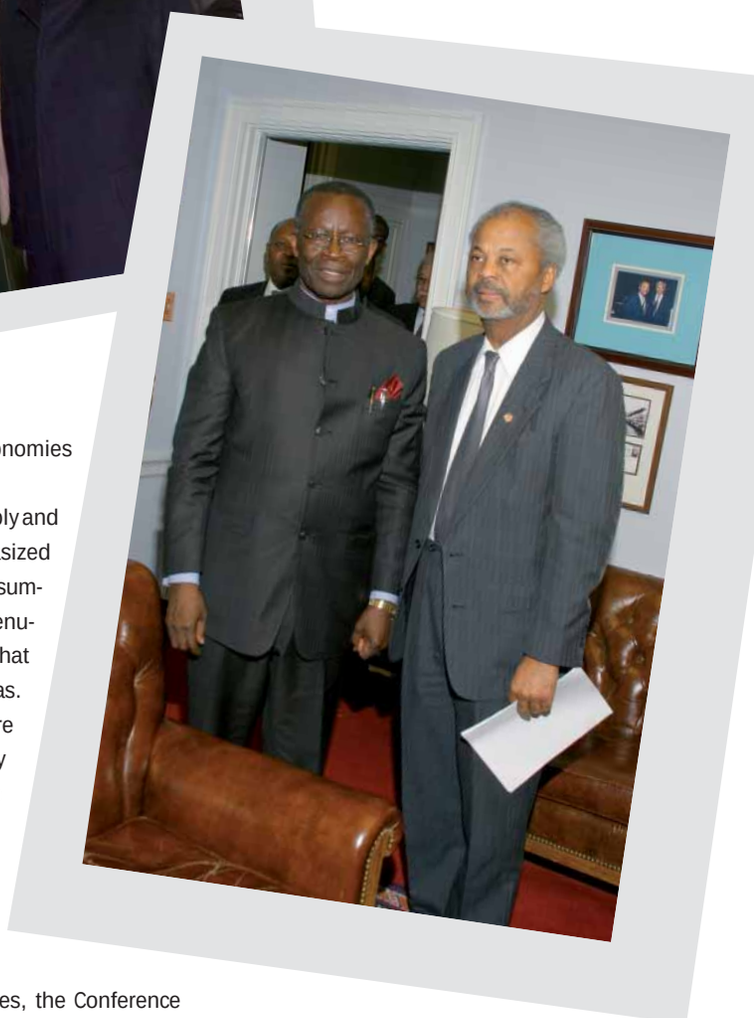
Dr Daukoru's first major engagement was an early private meeting with US Energy Secretary Samuel Bodman at the US State Department of Energy. During the talks, the Conference President reaffirmed OPEC's commitment to its market stabilization initiatives. He also outlined issues of mutual interest between OPEC and the consuming countries.

Dr Daukoru underscored the importance of dialogue as an essential ingredient for gaining a better understanding of the workings of the oil market and helping to deal with future challenges. He was particularly keen to solicit the US administration's involvement in bringing about a more structured producer-consumer dialogue — similar to the OPEC/EU energy co-operation initiative — which has assisted in promoting greater transparency and creating a wider awareness of the different elements that drive the oil market.

While commending Secretary Bodman for the contribution the US had made in supporting the aims and objectives of the International Energy Forum (IEF) in Riyadh, Saudi Arabia, Dr Daukoru said that assisting the operations and activities of the IEF as an institution that brought producers and consumers together was an encouraging development that undoubtedly created another window of opportunity for gleaning a clearer understanding of the global energy industry and the factors that dictated its successful development.

The Conference President noted the commitment made by OPEC Member States towards increasing investment to enhance their upstream production capacity to meet present and future growth in demand. He pointed to OPEC's continuing efforts at supporting the world economy, stating that both the Organization and the US had important roles to play in ensuring sustainability of global economic growth. For OPEC's part, it was essential that Member Countries had the necessary production capacity in place, considering that fossil fuels would continue to be the main source of energy for fuelling the world's expanding economies in the foreseeable future.

Left: Dr Daukoru (r) being welcomed by former US Energy Secretary, Spencer Abraham.



Above: Dr Daukoru with Congressman, the Honourable Donald M Payne (r), Ranking Minority Member House Committee on Africa, Global Human Rights and International Operations.

Commenting on oil supply and demand, Dr Daukoru emphasized that both producers and consumers had cause to express genuine interest in the factors that impacted on these two areas. He said while consumers were concerned about security of supply, producers were worried about security of demand.

Downstream sector

On product supply measures, the Conference President reiterated OPEC's position that investing in and promoting the development of the downstream sector was primarily the responsibility of the consuming countries and the international oil companies. Nonetheless, to help relieve the persistent refinery bottlenecks and address the effects of product shortages, which had been

Above: Dr Daukoru with his delegation meeting with former US Energy Secretary, Spencer Abraham.

brought about by a lack of sufficient investment in refining operations, OPEC Member States' national oil companies had already undertaken investments to expand and upgrade domestic plants.

Dr Daukoru also spoke about OPEC's efforts at promoting cleaner fossil fuel technology and carbon sequestration. "We believe carbon sequestration and storage is a promising technology that is cost-effective and can enhance the continued use of fossil fuels," he stressed.

Secretary Bodman, in commending OPEC's responsible role in promoting market stability, said he was encouraged by the visit of the Conference President. He said the US looked forward to promoting a better understanding of the oil market between key producers and consumers. He particularly welcomed the establishment of the Joint Oil Data Initiative (JODI), conducted under the auspices of the International Energy Forum. He said such data-sharing programmes would encourage transparency and predictability concerning the behavior of the oil market. This would assist the planning of future investments in the oil and gas sector.

Day Two: Wednesday, March 1, 2006

The Conference President's second day began with a meeting with US House of Representatives Congressman, the Honourable Donald M Payne, Ranking Minority Member House Committee on Africa, Global Human Rights and International Operations. Dr Daukoru briefed the Congressman on Nigeria's domestic operations and the government's efforts to promote international investment in the oil and gas sector, as well as other sectors of the country's economy.

He explained that the situation in the Niger Delta region, where continuing threats from militants had affected the country's oil production and export capability, was being addressed. He stressed the government's optimism at resolving the security concerns. Dr Daukoru also spoke about the role of OPEC in the global economy and its objectives in promoting sustainable development.

In stressing the Organization's broader role as it related to market stability, the Conference President was particularly keen to clarify areas of misperception held within US Congress about OPEC's aims and objectives, which, he said, had always been for the good of all associated with the oil industry, producers and consumers alike.

Dr Daukoru also pointed to the development efforts of OPEC Member Countries in helping the fight against

Samuel W Bodman, US Secretary of Energy.

global poverty. In this context, he highlighted the work of the OPEC Fund for International Development, which, he said, through its various humanitarian and development assistance programmes, was continuing to help ease suffering in some of the world's least developed countries. Congressman Payne said it was extremely gratifying to learn that OPEC was doing more than just promote oil market stability - it was actually touching the lives of many of the world's poorest people.

In completing Wednesday's programme, the Conference President was a special guest at a forum to discuss "Africa and International Energy Security" organized by the Leon H Sullivan Foundation, a non-governmental organization based in the US. At this gathering, Dr Daukoru again restated OPEC's market stabilization initiatives and elaborated on Nigeria's contribution to enhancing regional energy supply and security. Other panelists at the forum included Paulo Gomes, Executive Director for Africa, World Bank; Peter Robertson, Vice President, Chevron Corporation; and J Stephen Morrison, Director, Africa Programme, Centre for Strategic and International Studies.

Day Three: Thursday, March 2, 2006

Beginning day three, the Conference President held a breakfast meeting with former US Energy Secretary Spencer Abraham at 601 Pennsylvania Avenue. Dr Daukoru outlined OPEC's commitment to ensuring that sufficient oil production capacity was in place to cover any eventuality in rising oil demand. He also spoke of Member Countries' interest in investing in the downstream sector, stating that Nigeria was very much open to any serious concern wishing to invest in the country's expanding oil and gas sector.

Former Secretary Abraham highlighted the importance of promoting dialogue among all stakeholders in the energy industry, including key players such as OPEC. He extended an invitation to the Conference President to attend a meeting of producers and consumers of natural gas to discuss the role of gas in the US energy mix.

Meeting with Bush Administration officials

Next on the agenda was a visit to the White House. Dr Daukoru's team was received at the State House, which is located a few metres away from the main building housing the US President's office. Here, Dr Daukoru met with the Honourable Cindy Courville, US President George W Bush's Special Assistant for African Affairs.

From l-r: Executive Vice President of GWI Consulting, Howard F Jeter; Vice President of GWI Consulting, Austin R Cooper, Jr; from OPEC, Umar Aminu; Congressman, the Honourable Donald M Payne; seated in the front is Dr Daukoru.

Above: Dr Daukoru's (r) meeting in the office of Congressman, the Honourable Donald M Payne (l); back row from l-r: PA of Dr Daukoru, Timpire Sylva; Austin R Cooper, Jr; Umar Aminu.

Below: Tony Chukwueke (l), Director, Nigeria's Department of Petroleum Resources, and World Bank President, Paul Wolfowitz.

Paul Wolfowitz (r) and Dr Daukoru (c) sharing views with other CEOs.

Again, he discussed the situation in the Niger Delta, stressing the Nigerian Government's resolve to address the problems there, especially the threat to life and property, and to bring normalcy back to the region. He also spoke of the steps Nigeria was taking to intensify the development of its oil and gas resources, for which enormous investment was required.

In addition, Dr Daukoru noted that Nigeria had put in place a conducive investment climate that should encourage and attract any genuine party wishing to invest in the country, especially in the high-potential areas of oil and gas exploration. Ms Courville said she was worried by the threat to lives and oil installations in the Niger Delta, but expressed confidence that the Nigerian Government was more than capable of alleviating the situation.

The OPEC Conference President then met with the Honourable Jendayi Frazer at the US State Department, where he briefed Bush Administration officials on OPEC's policy initiatives, which were aimed at ensuring a stable oil market and guaranteeing security of oil supply.

Later, Dr Daukoru made a presentation at the US Chamber of Commerce. This was attended by oil company executives and government officials. The Conference President dispelled some of the misperceptions about OPEC, while outlining its market development strategy.

He said much as OPEC tried to do the best it could to satisfy the needs of the market, at times the driving

Nigerian Ambassador to Washington, Professor George A Obiozor (l) with the Chairman, GWI Consulting, Andrew Young at a reception for Dr Daukoru.

Above: Executive Vice President of GWI Consulting and former US Ambassador to Nigeria, Howard F Jeter, introducing and welcoming Dr Daukoru.

Above, left and below: CEO's and government officials attending the gathering hosted by the US Energy Association on the occasion of the visit of OPEC President, Dr Daukoru.

Right: Honourable Pete V Domenici, Member, US Senate, and Chairman, Senate Committee on Energy and Natural Resources.

forces that influenced prices and affected stability were unfortunately beyond OPEC's control. He cited geopolitics, speculation and natural disasters as just three of these influencing factors. Dr Daukoru told the gathering about OPEC's long-term strategy and its future production plans, which were aimed at meeting the forecast rise in global oil demand.

Later, the Conference President attended a private dinner at the Willard International Hotel, hosted by the US Energy Association. In attendance were high-level dignitaries, including World Bank President, Paul Wolfowitz, and members of the diplomatic community.

Day Four: Friday, March 3, 2006

On the final day of his visit, the Conference President was a guest at the Senate Building, where he met with the Honourable Pete V Domenici, Member, US Senate, and Chairman, Senate Committee on Energy and Natural Resources. The Senator was keen to further his understanding of the driving forces that lay behind recent oil market developments, a request that allowed the Conference President to outline some of the challenges and obstacles facing the industry and to elaborate on the initiatives OPEC had taken in its continuing efforts to promote price stability and ensure the well-being of the international oil market.

Dr Daukoru also briefed the Senator on the situation in the Niger Delta region, stating that the difficulties of the terrain called for concerted efforts to support the area's overall development. Senator Dominici was appreciative of the visit by the Conference President and said US energy policy was aimed at promoting the efficient use of the country's energy resources. He noted that the US would continue to diversify its sources of energy supply. He said he recognized the essential role played by oil producers in times of difficulty and, like other stakeholders in the oil industry, he was concerned about the role non-fundamental factors were having in driving the market.

International attention

The OPEC Conference President's visit to the US understandably attracted considerable media interest. His presentation at the National Press Club was extensively covered by the media and oil business executives. US Administration officials, who were keen to hear his views, were also in attendance. In addition,

over the four days, Dr Daukoru took the time out to give many exclusive interviews. He also took part in some lively roundtable discussions with members of the international news media.

Of particular interest was Dr Daukoru's live interview with CNN's Charles Hudson which attracted wide international attention. Overall, the visit by the Conference President was well received by all. And in terms of promoting OPEC's objectives and addressing misgivings about the Organization, his trip was a resounding success.

Summary

In summing up the impact of his visit to Washington DC, the OPEC Conference President made the following remarks:

"*This visit, and the resulting feedback, indicates the need to have such high-level visits to Washington. This is already being done by some Members of the Conference. I am aware for example of the Saudi Arabian Minister of Petroleum and Mineral Resources, His Excellency Ali I Naimi's, yearly visit to the US.*

There is a need to develop a good working relationship between OPEC and the US, in the mutual interest of both sides.

There is also the need to ensure that the OPEC Strategic Communications Programme makes specific recommendations on the direction in which the US/OPEC relationship may be developed for the mutual benefit of all.

These visits, and a constant presence in the country, are an important demonstration of producer-consumer dialogue, especially with one of our largest consumers — the US."

Left, right and above: CEO's and government officials attending the gathering.

All photographs courtesy OPEC/GWI/The Leon H Sullivan Foundation.

Driving towards sustainable development


IRU

The road transport industry is fundamental in driving the economies of all nations. Whether it is developed or developing nations, its role is paramount for future growth. The OPEC Bulletin reports from the 30th International Road Transport Union (IRU) World Congress, held in Dubai from March 14–16, 2006, where over 1,500 delegates gathered to discuss the prospects for the international road transport industry.

Transportation and society

In the 1800s, the most popular mode of transport may have been a horse-drawn cart, but by the turn of the century the world was on the brink of technological changes that would eventually lead to huge growth in transport and transport provision. The birth of the motorised vehicle started a revolution that would provide a relatively cheap, efficient and effective means of transporting goods over long distances and opened up the possibilities of road transport to the masses.

The growth of this sector has been staggering. Take for instance the US: by 1910 the number of motor vehicles had reached approximately 450,000, but by 1918 it was 6.2 million, and by 1999 it was almost 134m.

The direct and indirect contribution of the road transport industry and the motorised vehicle to the global economy is immeasurable. It has transformed the way we live, possibly more than any other innovation. Today every society relies on a transport infrastructure in order to function, and as the International Road Transport Union (IRU) stresses, these networks are also the "essential production tool in all economies".

When transport systems are efficient, they provide economic and social benefits that impact throughout an entire economy. "Over and above its high quality door-to-door transport services," said Paul Laeremans, President, IRU, "road transport is the only mode of transport that permits and ensures the high added value of person-to-person relations."

Moves towards sustainable development

Yet the road transport industry today faces many challenges. One of the most pressing is the development and implementation of policies that push for the most cost-effective way to reduce the impact of road transport on the environment, whilst factoring in both economic and social considerations. The goal remains however sustainable development.

So, with this in mind, alongside the Congress's theme, "Road Transport, the Vital Link to Progress!", the IRU called on world governments to put in place policies that "facilitate rather than hinder road transport operations" if they are to meet their agreed upon economic, social and environmental goals, essentially those relating to sustainable development as defined by the United Nations.

According to the IRU, to date, the road transport industry is the only transport mode that has committed itself to the goal of sustainable development. It has, in fact, taken the lead in the transport sector, and made working towards sustainable development a constitutional obligation.

Given that the IRU highlights the fact that road transport carries more than 70 per cent of goods by volume and 90 per cent by value, it is essential that all potential future scenarios are considered. "Sustainable development requires integrating environmental, social, and economic considerations," said Kenneth G Ruffing, former chief economist, OECD Environment Programme. "Companies cannot do this all by themselves without damaging profitability." Ruffing highlights the promotion of the efficient use of fuels, vehicles, and infrastructure up to certain limits where they will simultaneously reduce costs and improve environmental outcomes.

No alternative to oil

There is certainly talk of conventional internal combustion engines continuing to achieve significant fuel economy improvements and hybrid vehicles may witness a significant growth, but oil is expected to remain the main source of transportation fuel for at least the next two decades. Today, no true economically viable substitute has been found and the overall share of substitute fuels remains marginal.

In fact, recent research at the OPEC Secretariat has shown that the transportation sector is expected to be the single highest source of demand increase for oil to 2025. Take China and India as examples: currently there are up to 20 vehicles per 1,000 inhabitants, compared with more that 500 vehicles per 1,000 inhabitants in the OECD region.

The potential for vehicle growth given the relative populations of the two countries is significant, even though by 2025 the OECD region is still expected to be consuming more oil than developing countries.

Structural growth of oil

Pierre Latrille, Counsellor, World Trade Organisation, highlights a number of other reasons behind the potential future growth in road transport. "For structural reasons, an increasingly large part of trade in goods will be carried by trucks. These reasons include the continued erosion of rail intermodal share, investment in road infrastructure in countries such as India (translating into a higher demand for trucking), demand for urban transport by buses, and demand for coach tourism services in developing countries."

The inter-linkage between road transport, oil and economic growth is widely recognised, but it is also important to stress that the environmental impact of the products used in transportation has been improved dramatically over the past few years, and this trend is expected to continue in the future.

Achieving sustainable development

The focus for the IRU and its members, in accordance with the organization's three 'i' strategy – innovation, incentives and infrastructure – for achieving sustainable development, is for all stakeholders, including policymakers and the road transport industry, to work closely together to develop road transport's full potential. According to the IRU, sustainable development can be achieved by:

- **Recognizing** that a modern society requires efficient logistics and that road transport plays a fundamental role in efficient supply chains, passenger transport and intermodal transport systems;
- **Acknowledging** and complementing the road transport sector's own initiatives. Real business incentives should be provided to accelerate road transport operators' contribution to environmental protection through innovative, at source measures;
- **Accepting** that growing demand for road transport services is a consequence of economic growth and cannot be decoupled from it. At the same time, growth in road transport can be decoupled from its environmental impact;
- **Establishing** a sustainable energy policy that takes into account that transport is totally dependent on oil and currently has no economically viable alternative source of energy;
- **Enhancing** road safety by targeting the main causes of accidents involving commercial vehicles based on scientific fact;
- **Applying** solutions of a sustainable and integrated transport system, thus paving the way for the further development of road transport and providing a sound foundation for economic prosperity and social progress.

Enhanced mobility

The Congress also focused on the issue of mobility and how this can be enhanced internationally. Building on its mandate to "to ensure the mobility of people and goods", the IRU called for the establishment of a "sound legal framework" governing the facilitation of cross-border and transit transport by road. It added that this should be accompanied by the removal of non-physical barriers in road transport caused by artificial and bureaucratic formalities blocking road transport in and between countries.

Laeremans said: "To facilitate trade and the mobility of citizens, both of which foster greater understanding and peace, we must work together with governments to eliminate paper walls, while, at the same time, minimising bureaucratic barriers to the free movement and transit of people, goods, and the road vehicles that carry them, according to the principle of freedom of movement already stipulated in numerous multilateral and bilateral agreements and conventions."

He added that the importance of security requirements should not be overlooked, but a "balance needs to be found, between facilitation and security considerations, as proposed by the World Customs Organisation and by the IRU Guidelines."

Road tolls and links

The issue of road tolls as a restriction on mobility is also a concern of the IRU. However, preliminary results from a study being conducted by TransCare, a consulting group specialising in rail goods transport, on the economic impact higher road tolls in Europe will have on road and rail show that a €1 per km road toll increase will only lead to a less than 1.22 per cent shift of road transport volume to rail. In fact, the study finds that only increased quality service will foster a potential increase in rail transport.

The opening up of road transport routes is also high on the agenda. The US Chamber of Commerce is currently working with the IRU to revitalise the land bridge between China and Europe, the historic 'Silk Road'. The IRU has shown, with its Beijing to Brussels caravan last September, that creating this link is logistically possible. Now, the Chamber is studying whether it is commercially feasible to bring goods from China to Europe over land.

The way forward

"Governments, and in particular the Transport Ministers gathered here, should know that the IRU and its members have always been willing and committed to work in a true spirit of public-private partnership to provide – through road transport – the vital link to progress in all nations," said Laeremans. "In today's increasingly competitive and globalised economy, road transport has become a vital production tool and hence not only the vital link to progress but also the engine of economic development."

Laeremans' comments reinforce the role that road transport industry plays in local, national and international economic growth and the importance of strengthening mutual co-operation in road infrastructure and road transport development. Without this, the main themes coming out of the Congress, namely sustainable development and enhanced mobility, will be difficult to achieve.

The world has come a long way since the horse and cart, and the latest IRU declaration 'Road Transport, the Vital Link to Progress!' underlines the importance that should be attached to developing a way forward through co-operation, dialogue and action that links environmental, social, and economic considerations.

OPEC urges the world to face the challenges of mass transportation

OPEC's Acting for the Secretary General, Mohammed Barkindo, outlines the Organization's plans for global transportation.

Keynote address byl ***Mohammed S Barkindo,*** *to the opening ceremony of the 30th World Congress of the International Road Transport Union, Dubai, March 14–16, 2006.*

The press conference, from left to right: IRU Secretary General, Martin Marmy; President and CEO, Tralliance Corporation, Ron Andruff; President and CEO, TransCare, Ralf Jahnke; Ministry of Development for Government Sector, UAE, HE Salem Ali Al Zaabi; Acting for the OPEC Secretary General, Mohammed Barkindo; IRU President, Paul Laeremans.

Let me begin by thanking the organisers of the 30th World Congress of the International Road Transport Union (IRU) for inviting me to deliver this keynote address on the highly topical subject of 'Oil and the fuel price — the link to market stability'.

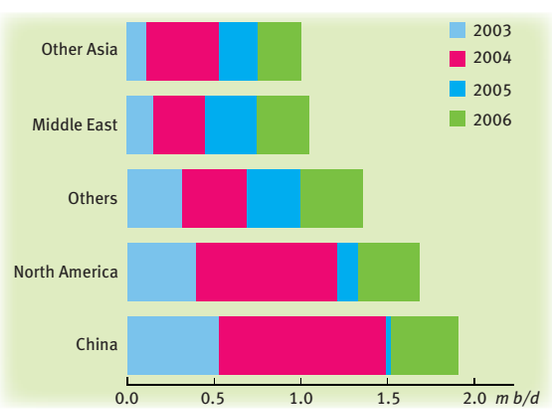
As representatives of a major consumer and end-user of oil products, I am sure that the IRU is keenly aware of the challenges facing the oil market over the last two years.

The first challenge has been meeting exceptionally high levels of growth in oil demand from large emerging economies, especially China and India, as well as from some developed economies, such as the USA. High oil demand by itself is good news: it is a reflection of a healthy world economy, better social progress in many parts of the world, and, maybe, some success in poverty eradication, as this inevitably translates into higher energy consumption.

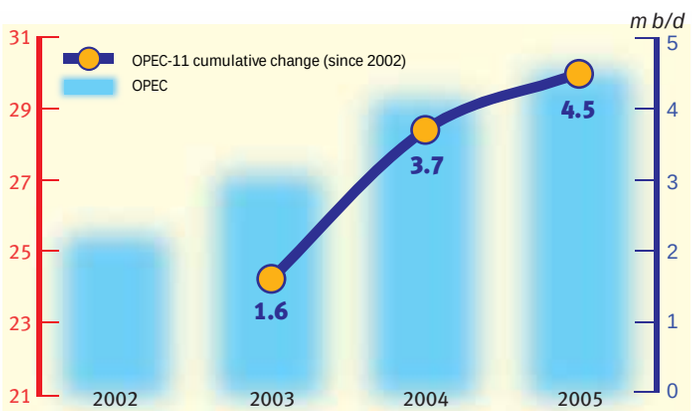
Nevertheless, this sudden surge in demand placed great stress along the entire supply chain of the oil market, especially those areas such as the downstream that over the years had been allowed to become bottlenecks.

This brings the second challenge: ensuring that there is sufficient supply in the market to match or exceed the increase in consumption. The surge in demand that took

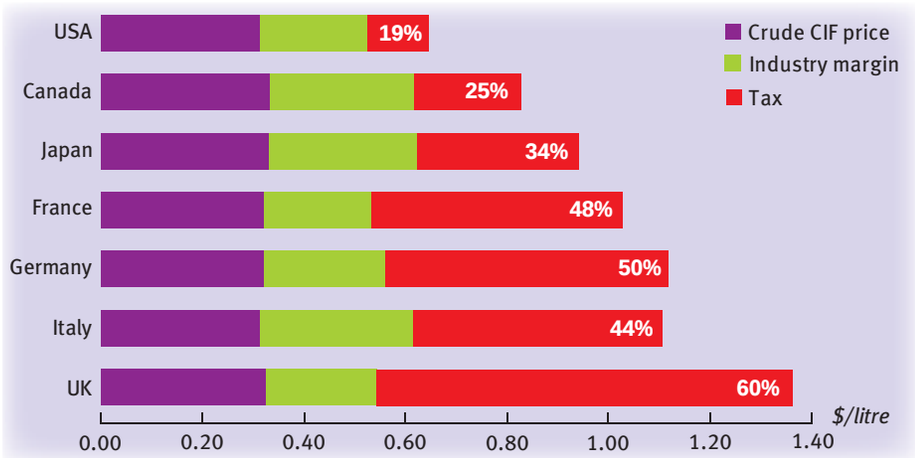
Graph 1: Main contributors to world oil demand growth by region



Graph 2: OPEC crude oil production: response to strong demand growth



Graph 3: Taxation of oil products, December 2005



place over 2004 was adequately met thanks to the existence of OPEC spare capacity.

Since then, OPEC has maintained a high level of output to ensure that market needs are met, even in times of large weather-related supply disruptions, as were witnessed last year in the USA. Additionally, OPEC Member Countries have accelerated their plans to bring on-stream new production capacity to meet continued demand growth and to ensure a comfortable level of spare capacity.

The downstream, however, has been less responsive, and it is now widely accepted that much of the price volatility over the past two years has been driven more by downstream constraints in consuming countries than by shortages in the upstream.

These challenges have only been compounded by the increased speculative activity in the financial markets, which can greatly exaggerate the impact of external events on the market — such as geopolitical and related concerns about future supply disruptions — to the detriment of producers and consumers alike and with likely repercussions further afield in the global economy.

In the face of these challenges, OPEC has demonstrated time and again its commitment to market stability, with secure supplies and reasonable prices that are consistent with healthy economic growth, especially in the developing countries. Indeed, this commitment lies at the heart of OPEC's very existence.

Our Organization's first resolution, adopted at our formative meeting in Baghdad in September 1960, refers to the assurance of "an efficient, economic and regular supply" of petroleum to consumers. This principle is enshrined in the OPEC Statute, adopted in 1961, and has remained a guiding light for our Organization ever since.

OPEC's LTS

These founding principles have also served as the basis for the development of OPEC's Long-Term Strategy, which was adopted last September to provide a coherent, consistent vision as well as framework for OPEC's future efforts. The OPEC LTS recognises the important role of oil in meeting expected global energy demand, as well as providing for the socio-economic development of OPEC Member Countries.

The core objectives of the Strategy are to ensure the long-term petroleum revenues of Member Countries, the stability of the world oil market with reasonable prices, and the security of regular supply to consumers, as well as the security of world oil demand.

However, these objectives face a number of key challenges. A major hurdle relates to the uncertainties surrounding future demand for oil in general and OPEC oil in particular, stemming from future world economic growth, consuming countries' policies, technology development as well as from future non-OPEC production levels.

In an effort to deal with these uncertainties, OPEC's LTS considers three possible scenarios regarding the future developments in the global energy scene. The first is Dynamics-as-Usual, where global economic growth is robust but no different to average growth rates observed over the past 15 years. In this scenario, oil demand increases by an average of 1.5 million barrels/day annually, with around three-quarters of the increase to 2020 coming from developing countries.

The transportation sector is the single most important source of this increase and represents close to half of future oil demand. Within the freight component of this sector, road transport has the largest contribution of around 70 per cent.

Two further scenarios deal with a rise or fall in oil production. So, depending on developments in the world economy, global oil demand growth could turn out to be considerably different, rising 5m b/d more than the base case in a persistent tight market scenario or falling 7m b/d lower if the market remains soft for an extended period. Thus, these scenarios show a considerable range of uncertainty around 12m b/d, although it should be stressed that the risks are predominately on the downside.

In addition to economic growth, the energy policies of consuming countries are another factor greatly affecting oil demand. Taxation of energy products is often seen as a means of raising revenue and generally demonstrates a significant discrimination against oil.

For example, in the four major European Union economies of France, Germany, Italy and the United Kingdom, around two-thirds of the price of a litre of unleaded gasoline goes to the governments in taxes. It should be noted that the substantial sums generated by such taxes are not spent on improving the transportation infrastructure, despite the pressing need to ease traffic bottlenecks, which themselves cause a substantial waste of fuel and unnecessary pollution.

I know that members of the IRU like to say that the

very last drop of oil in the world will be used for transportation. While this may be true, I am happy to inform you that such a day won't be coming any time soon. Oil resources are large and sufficient, and will be able to meet the needs of consumers for many decades to come.

Over the longer-term, OPEC will be relied upon to supply most of the incremental barrel demanded. However, the uncertainties over future oil demand and non-OPEC supply translate into a broad range of levels of demand for OPEC oil of as much as 10m b/d or more. This complicates the planning for appropriate and timely investments in OPEC countries and, consequently, increases the risks associated with under- as well as over-investment.

Downstream tightness

The need for appropriate investments is not just confined to the upstream but instead extends along the entire supply-chain, particularly the downstream. Given current trends, tightness in the downstream sector could be expected to remain a potential source of volatility, especially if the necessary investment in the refining sector is not undertaken in a timely manner. Of course, it is important to remember that the primary responsibility for downstream investments remains with major consuming countries and international oil companies.

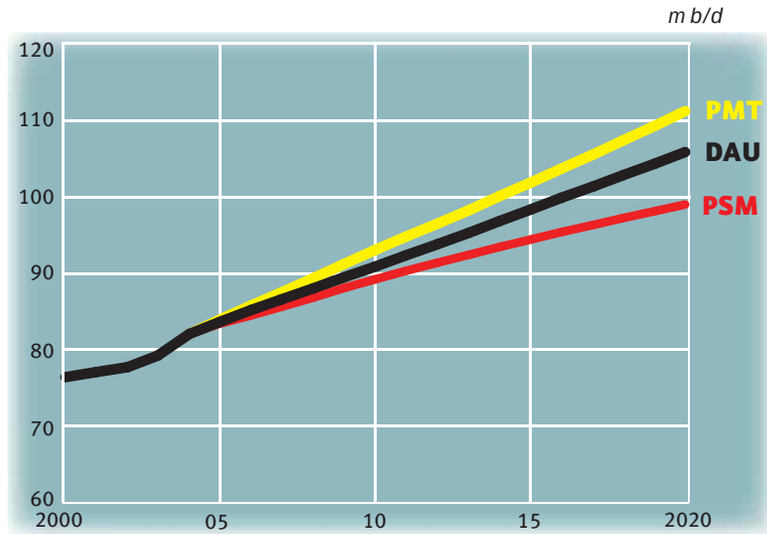
Given the central role played by transportation in expected oil demand growth, OPEC has worked hard to enhance its capabilities in analysing and forecasting fuel consumption in the transportation sector. A recent workshop organized by the Secretariat highlighted a number of important issues concerning the transportation sector, which is expected to remain a major source of demand growth for the foreseeable future.

Vehicle ownership is set to rise throughout the world, but particularly in developing countries, where the potential for increase is obviously very large. For example, Chinese ownership alone is expected to rise to 110 per 1,000 inhabitants in 2030 from just 20 in 2002.

Efforts by governments in consuming countries to reduce oil's share of primary energy consumption through fuel substitution have had less impact in transportation than in the two other principal sectors — power generation and the residential/commercial/agricultural sector. This is because no true viable economic substitute has been found for transportation in the abundant — and relentlessly growing — quantities that are required.

This has not been for want of trying, as far as consuming countries are concerned. Indeed, over the past two decades, many government programmes around the world have encouraged the use of substitute fuels in the transportation sector. While these programmes have resulted in annual growth rates for substitute fuels that are much higher than for oil in the transportation sector, the overall share of substitute fuels in road transportation remains marginal, at around two per cent. As a result, gasoline and diesel are expected to continue to dominate the transportation sector.

Graph 4: Oil demand outlook to 2020



In the meantime, it should be noted that the environmental impact of the products used in transportation have been improved dramatically over the past, and this trend is set to continue in the future, with developing countries expected to approach the standards set elsewhere.

Although increases in demand in the transportation sector have given rise to calls for reductions in CO_2 emissions, the fact remains that the major source for CO_2 emissions is from stationary sources, such as power stations. As a result, rather than taxes on road transport, governments should focus efforts on promoting carbon dioxide capture and storage technology which could be used to dramatically reduce emissions from where it is most needed and most practical — at power plants and other stationary sources.

The ongoing dialogue

While the workshop taught us many things regarding the transportation sector, it also made us keenly aware of how much more there is to know. This brings me to the ongoing dialogue between OPEC and the IRU. Over the past two years, OPEC has met with top officials from the IRU on several occasions to share information and exchange views on many issues of mutual interest. This has been at several venues, including the visit to the OPEC Secretariat by a delegation led by the IRU Secretary General.

These exchanges provide an excellent example of one crucial element of OPEC's LTS, which is dialogue — dialogue among producers and between producers and consumers such as the IRU. It is through dialogue that we are able to share our concerns, as well as identify areas of common ground.

For this reason, OPEC seeks to widened and deepen its dialogue with other players in the market to cover more issues of mutual concern and to further understanding of the positive role that OPEC plays in the world at large.

Horizons of Dialogue

International Energy Forum Secretary General, **Ambassador Arne Walther**, speaks on the evolution of the dialogue between energy producers and consumers, and the challenges and opportunities faced by the industry.

Energy security is at the top of the international political agenda. Dialogue between energy producers and consumers has emerged as the order of the day, and Riyadh is a focal point of that global dialogue endeavour. A few months ago, on November 19, 2005, the Custodian of the Two Holy Mosques, King Abdullah ibn Abdulaziz Al Saud, inaugurated the new headquarter premises of the Secretariat of the International Energy Forum (IEF) generously provided by the Kingdom of Saudi Arabia here in Riyadh.

Royal vision

The inauguration of our new headquarters took place exactly five years to the week that the then Crown Prince, Abdullah ibn Abdulaziz Al Saud, at the 7th IEF Ministerial Meeting in Riyadh, proposed the establishment of, and offered to host, a permanent Secretariat. Its mission would be to strengthen and provide continuity to the dialogue among ministers in the IEF. Ministers endorsed the proposal at the following IEF in Osaka, Japan, in 2002. The Secretariat started its work from temporary headquarters in Riyadh in December 2003. Royal vision had been translated to reality.

The location of this new international secretariat to Riyadh also testifies to the importance that the international community attaches to Saudi Arabia as the world's largest exporter of oil. It testifies to international appreciation of the record of reliability of Saudi supplies to consumers, as well as confidence in Saudi policy. As host country, Saudi Arabia has a permanent seat on the Secretariat's Executive Board, whose members include 12 other producing and consuming countries along with the IEA and OPEC Secretariats.

The inaugural event in November last year gathered more than 600 well-wishers. In addition to Saudi dignitaries and foreign ambassadors, ministers of 17 key energy producing and consuming countries, heads of international energy organizations, and presidents of leading oil companies came from abroad.

At a meeting convened by the Minister of Petroleum and Mineral Resources of Saudi Arabia, Ali I Naimi, this prominent gathering of ministers underlined the importance of the dialogue in the IEF for their efforts to promote energy security and a sustainable energy future. And they re-confirmed their support of the Secretariat.

Also, on that occasion, the Custodian of the Two Holy Mosques, King Abdullah ibn Abdulaziz Al Saud, released to the public the Joint Oil Data Initiative world database. More than 90 countries are submitting data on oil production, demand and stocks to this unique database, managed by the IEF Secretariat. Ministers underscored the importance of this Secretariat flagship activity for

IEF

Secretariat of the International Energy Forum, Riyadh, Saudi Arabia.

IEF

Lecture delivered by the Secretary General of the IEF, Ambassador Arne Walthers, to the King Faisal Centre for Research and Islamic Studies, Riyadh, Saudi Arabia, on March 6, 2006.

their ambition of reduced market volatility, a more stable investment climate, and energy security.

On April 22–24, 2006, ministers will meet in Doha, Qatar, for the 10th IEF. Ministers of some 60 countries are expected. They will meet at a time of heightened global energy consciousness, at a time when the producer-consumer dialogue can play a greater role in global energy affairs.

Unique forum

The IEF is increasingly recognized for its importance as a unique vehicle for global dialogue on energy across traditional political, economic and energy policy dividing lines in an ever-more interdependent world. It brings energy producing and consuming countries together under one global umbrella, not only ministers of the industrialized energy-importing countries in the IEA and ministers of the petroleum-exporting countries of OPEC, but also ministers of the important energy producing and consuming countries outside these two organizations. Countries such as Russia, China, India, Brazil and South Africa will have an increasing impact on the global energy scenario.

Co-operative commitment

While the process of global energy dialogue at the level of ministers in the IEF is celebrating its 15th anniversary this year, the IEF Secretariat is a new player in terms of international organizations. It is a concrete manifestation of international co-operative commitment to energy dialogue at a political level. Not only governments, but also oil companies and the broader energy industry, financial institutions, international organizations and other stakeholders play their role in the global co-operative network.

Energy goes to the very core of political, economic and environmental interests of individual countries, as well as of the global community. The political level dialogue in the IEF has ushered international energy affairs out of an era of mistrust and confrontation to one of greater understanding, better awareness of long-term common interests and dedicated co-operative effort.

The case for dialogue

For many years, it was politically simply not acceptable for energy ministers of consuming and producing countries to meet in a multilateral context. It is an achievement of the 15 years of political level dialogue that earlier taboos have been broken and that global energy dialogue is now being actively pursued.

This dialogue has struck firm roots because energy is crucial for economic and social development in each and every country. Energy is also important for commercial and political relations between countries. It fuels the world economy. Production and consumption of energy

impacts the global environment. Energy influences, and is influenced by, international politics. It is, indeed, difficult to imagine an area where nations are more interdependent than in the confluence of energy, environment and economic development.

The past has shown how energy issues, especially the strategic commodity coupled with oil market volatility, can create conflict or exacerbate political tensions between countries or groups of countries. An image of confrontation had developed between producers and consumers of petroleum. The oil crisis of 1973–74 in the wake of Middle East war, and the use of oil as a political weapon, had pitted petroleum producing and consuming countries antagonistically against each other. OPEC, established in 1960, and the IEA, established in 1974, had emerged as the bi-polar and multilateral expression of conflicting producer-consumer interests.

The IEA expects that fossil fuels would meet 85 per cent of the total increase in global energy demand by 2030.

Co-operative relations could develop on a bilateral basis between most oil producing and consuming countries. But multilateral approaches to build bridges and establish a structured producer-consumer dialogue and co-operation foundered in the Conference on International Economic Co-operation in Paris and again in UNCTAD in second half of the 1970s. It became, however, increasingly clear, that sharply fluctuating oil prices were detrimental to both producers and consumers and that there could be no long-term winners in troubled energy markets. Less volatility in energy markets and stable prices at a reasonable level for consumers and producers emerged as a shared ambition and new co-operative mantra.

The World Commission on Environment and Development acknowledged in its report *'Our Common Future'* in 1987 the importance of energy for sustainable economic and social development. It highlighted the importance of oil prices on international energy policy. It recommended that new mechanisms for encouraging dialogue between consumers and producers be explored.

On that note the Chairperson of the Commission and Prime Minister of Norway, Dr Brundtland, called for an informal 'Workshop of Ministers' of energy producing and consuming countries to discuss the resource and market situation and outlook as well as the links between energy and environment. Many were ready to try, but important countries regarded the very idea of a dialogue on these matters at political level as a non-starter, even as outright dangerous.

Some seemed to regard the differences and conflicts between producers and consumers as permanent facts of life, a divide that no political level dialogue could bridge, or should even attempt to bridge. One just had to live with sharply fluctuating oil prices, instability and mutual insecurity, and the adverse wider economic and political impact.

The deepening dialogue

The Gulf War in 1990–91 highlighted again the geopolitical and economic importance of oil. It proved a turning point for the idea of dialogue at political level. A more co-operative atmosphere between producers and consumers ensued in its wake. At the initiative of Presidents Mitterand of France and Perez of Venezuela, a 'Ministerial Seminar' of Producers and Consumers was held in Paris in 1991.

While the OPEC Countries attended at the level of ministers, of the IEA countries only France, the Netherlands and Norway participated at that level. Other IEA members were represented at officials' level. Their discussions included the oil market, economic and industrial co-operation and the environment. The Paris Ministerial Seminar broke the political ice. It demonstrated that there were issues to be talked about and that it would in the mutual interest of producers and consumers, considering their interdependence, to remove earlier mistrust and seek co-operative approaches through continued dialogue.

It was followed by an informal 'Ministerial Workshop' in Norway in 1992, co-hosted by Egypt and Italy, this time with equal ministerial level participation of IEA and OPEC countries. This second meeting also broadened the dialogue from the traditional bi-polar IEA–OPEC configuration to focus also the energy powerhouse Russia. Countries were represented by both Ministers of Foreign Affairs and Energy Ministers, highlighting also the wider economic and geo-political importance of energy co-operation. The fledgling ministerial level producer-consumer dialogue moved to Spain for a third meeting in 1994 co-hosted by Algeria and Mexico. Natural gas was a key topic. And, ministers recognized more explicitly the importance of price stability for energy security.

The venue of the political level dialogue crossed the Atlantic to Venezuela for a fourth meeting in 1995 co-hosted by Russia and the European Commission. Major topics were investment and reintegration of oil and gas industries. Ministers recognized that security of demand was as important for producers as security of supply was for consumers. Gathering momentum, the producer-

consumer dialogue then moved eastwards, outside IEA and OPEC territorial domain, to India for the 5th Ministerial in 1996, co-hosted by Brazil and Norway. It acknowledged the importance of Asia and growing energy needs of the emerging economies as an integral dimension of the global energy dialogue.

South Africa hosted the 6th Meeting of Ministers in 1998, with Qatar and the United Kingdom as co-hosts, bringing the African dimension of the global producer-consumer dialogue centre-stage and widening the scope of dialogue even further.

The 7th meeting, now referred to as the IEF, was hosted by Saudi Arabia in 2000. Japan and the Netherlands were co-hosts. Ministers emphasized the links between energy, technology and sustainable development and the role of industry. This was when the Custodian of the Two Holy Mosques, King Abdullah ibn Abdulaziz Al Saud, proposed the establishment of a permanent Secretariat in Riyadh.

Japan hosted the 8th IEF in 2002, with Italy and the United Arab Emirates as co-hosts. Ministers focused on investments, energy security and environmental issues. They underlined the importance of greater stability in the international oil market for economic growth. They endorsed the establishment of a permanent Secretariat in Riyadh and its supportive mission.

At the 9th IEF, hosted by the Netherlands and co-hosted by Iran and Norway in 2004, ministers put special focus on the crucial issue of investments in the energy sector. They welcomed the new Riyadh Secretariat established six months earlier. The Amsterdam IEF also brought a new dimension to the biennial Ministerial. The 1st International Energy Business Forum was convened for direct interaction between CEOs of leading energy companies and IEF ministers.

A unique process

The scope of the on-going dialogue in the IEF has been broadened, and confidence increasingly built, from meeting to meeting, each Ministerial providing a political stimulus for the next. An ever-increasing number of ministers have come to take part in what developed from a Ministerial Seminar and Workshop to become the largest recurring global gathering of energy ministers — the IEF. In addition to informal plenary discussions, the IEF provides an important venue for informal bilateral and other contacts between ministers.

The IEF is unique not only in its global perspective and scope, but also in approach. It is not a decision-making organization or a forum for negotiation of legally binding settlements and collective action. Nor is the IEF a body for multilateral fixing of prices and production levels. The informality of this framework has encouraged a degree of frank exchanges, which cannot be replicated in traditional and more formal international settings.

Ministers meet to discuss common concerns seeking consensus-oriented approaches to energy challenges ahead. The producer-consumer dialogue in the IEF has contributed to a convergence of views and a growing awareness of common interests. The knowledge basis for national decision-making and for purposeful co-ordination of policies within other international fora has improved.

The mutual sense of interdependency, vulnerability and win-win opportunity fosters a more conducive atmosphere for long-term co-operation. And difficult short-term issues are being addressed in a more co-operative way than before, when the atmosphere was confrontational.

The results of dialogue are evident in concrete measures taken by both consumer and producer countries individually and by their organizations. The results of dialogue are also evident in statements of policy intent that in times of geopolitical and other uncertainty have sent calming signals to nervous energy markets. Statements made and measures implemented by producers and consumers alike do have impact, not least for developments in relation to the level of oil prices and market stability.

Energy is also important for commercial and political relations between countries. It fuels the world economy.

Shared perspectives

Host country the Netherlands, and co-hosts Iran and Norway summed up discussions at the 9th IEF in Amsterdam two years ago expressing the prevailing state of shared perspectives. These perspectives included the shared concern of the day — the high level of oil prices. Ministers agreed that producers and consumers, as well as economic recovery worldwide, especially in developing countries, would benefit from greater stability in the international oil market and prices at a reasonable level. Both producer and consumer countries should take action to ensure sustainable price levels.

Ministers considered present oil and gas reserves sufficient to meet the world's increasing energy needs, provided that necessary investments are made in time. Unhindered access to capital, energy technology and markets would promote the development of production,

transit and transport capacity. The sovereign rights of States over their natural resources were reaffirmed. The commercial objectives of oil and gas companies were also recognized.

Ministers echoed the strong message from CEOs of leading energy companies in the preceding International Energy Business Forum that stable and transparent economic, fiscal and legal frameworks need to be in place to attract sufficient foreign direct investment and other resources. Transparency also with respect to oil production and stocks was seen as important to that end.

Ministers urged investments in cleaner fossil fuels to reduce the detrimental environmental effects of growing energy use. The importance of developing alternative energy sources was stressed. Their vision was a smooth transition to a new energy era for the longer term, facilitated by the presence of still ample oil and gas reserves. The importance of energy for sustainable development and follow-up of the World Summit on Sustainable Development in Johannesburg was also emphasized, especially bearing in mind the energy needs of a growing world population.

If the shorter-term perspective is challenging, the longer-term scenario is even more daunting. The increase in global energy demand foreseen in the years ahead is substantial.

Data and transparency

IEF ministers have on repeated occasions expressed their firm commitment to improving transparency of oil data through the Joint Oil Data Initiative (JODI). They underscore that accurate and timely data are important for reducing energy market volatility. The IEF Secretariat took on the co-ordination of the JODI in January 2005 with the full and active support of OPEC and the IEA, APEC, Eurostat, OLADE and the UNSD, the six international organizations that pioneered the initiative.

G8 Heads of Government underscored at their Gleneagles's Summit in July last year the importance of the dialogue in the IEF and the Secretariat's co-ordination of JODI for efforts to increase the transparency needed to reduce oil market volatility. They urged all countries to contribute to the success of the Joint Oil Data Initiative. This G8 support is being echoed also by other regional and international organizations and by individual countries.

JODI is international ambition translated into action. A concrete outcome and achievement of the producer-consumer dialogue. A permanent mechanism with the objective of improving the quality and transparency of international oil statistics. More than 90 countries, representing 95 per cent of global supply and demand, are submitting data on production, demand and stocks of seven product categories: crude oil, LPG, gasoline, kerosene, diesel oil, fuel oil and total oil.

The Joint Oil Data Initiative is a promising work in progress. The OPEC Secretariat will play an increasingly active role in co-ordinating and further developing this unique inter-organizational endeavour. The submission of timely and accurate data by participating countries is crucial for its success.

A defining issue

'Fuelling the future — energy security, a shared responsibility' is the timely theme of the Doha Ministerial next month. Energy Security is also the priority theme of the Russian Federation's current presidency of the G8 group of nations. Energy is the focal issue for the United Nation's Commission on Sustainable Development this year and next. Some now call 'energy' the missing Millennium Development Goal.

Oil prices remain high and volatile amid energy security concerns. Price levels have risen by around 50 per cent since the Amsterdam Ministerial two years ago. This is in part attributed to increasing energy demand resulting from economic growth, in particular the surge in energy demand in developing Asia and the USA. Also bottlenecks in the supply chain, geo-political uncertainties and destructive forces of nature impact price levels and exacerbate perceptions of energy insecurity. Recent international energy developments have induced some importing countries to regard energy dependence on others with increased caution.

Oil-importing, industrialized countries warn of the detrimental impact that high oil prices have on their individual economies and on the world economy. Oil-importing developing countries suffer even more than before from increasing oil import bills. Oil-exporting countries are producing what they can to help ensure that markets are adequately supplied.

If the shorter-term perspective is challenging, the longer-term scenario is even more daunting. The increase in global energy demand foreseen in the years ahead is substantial. The resources are there, but timely investments in infrastructure of some $17 trillion, half of this in developing countries, have to be made to meet projected demand over the next 25 years.

An energy scenario

Experts expect that by 2030 energy demand will increase by more than half over today's level. Fossil fuels will remain

the primary sources of energy and account for four-fifths of total demand. According to IEA projections, oil would account for 34 per cent, natural gas for 24 per cent and coal for 23 per cent of the energy mix. These fossil fuels will dwarf the five per cent share of nuclear, the four per cent share of hydro and other renewables as well as the ten per cent share of biomass and waste.

The IEA expects that fossil fuels, in a business as usual scenario, would meet 85 per cent of the total increase in global energy demand by 2030, most of which will come in the developing countries as they industrialize and their economies grow. Global energy related CO_2 emissions would grow correspondingly. Emissions would increase by more than half (52 per cent) from today's level. Three quarters (73 per cent) of this increase would come from developing countries.

Today, a quarter of the world's population (1.6 billion of 6.2bn people) lacks access to electricity and two-fifths rely mainly on traditional biomass for their basic energy needs. Experts estimate that 1.4bn people, out of an expected world population of 8.1bn people, will still lack access to electricity in 2030.

In a word, the world will need more and cleaner energy used in a more efficient way, accessible and affordable to a larger share of the world's population. In this longer-term perspective, production and consumption patterns, the energy mix as well as investment requirements, will evolve in a changing geopolitical environment. And these energy developments will influence that changing geopolitical climate. Energy is, indeed, a defining global issue.

Energy security

Looking at the immediate horizons of dialogue, I would see ministers not only deepening shared perspectives on energy security, but also looking at issues where they do not necessarily agree and where new understandings may be developed and where national policy actions may be taken to promote common global interests. The confidence built over fifteen years of dialogue enables ministers to do this in a frank and co-operative spirit.

The ministerial-level dialogue will take a closer look not only at the longer-term challenges, but also at present day constraints in the market and bottlenecks throughout the energy chain. Ministers may through dialogue identify potential policy frameworks that would enhance efficient market operation and what governments and the business sector can do to meet increasing energy demand and deal with excessive volatility in the market.

Indeed, Minister Al-Naimi made a very important proposal at the World Petroleum Congress in Johannesburg in September last year, when he urged the international community, under the auspices of the IEF, to undertake a study of the global oil supply system, identifying bottlenecks and proposing possible solutions. This would give important input to discussions of strategies to address constraints to the deliverability of petroleum at reasonable prices to the world.

Let me also mention that, when meeting in Secretariat headquarters last November, ministers of oil consuming countries requested a 'road map' from oil producing countries on future supply. Ministers of oil producing countries requested in turn a 'road map' on future oil demand from the consuming countries. Such road maps would also indicate the need there would be to increase and adjust refining capacity as demand shifts to lighter oil products and the crude oil extracted becomes heavier.

Energy trade, almost entirely in fossil fuels, will expand rapidly and increase the interdependence between producers and consumers. However, the geographical mismatch between where the bulk of the world's petroleum resources are extracted and where they are finally used does not make things easier. Vulnerability to disruptions of energy supply due to technical mishap or terrorist action can increase. Maintaining the security of sea-lanes and pipelines will assume increasing importance for energy security.

The challenge of global energy security is truly multi-dimensional. It goes to the core of national interests. There is no quick and lasting fix. The cluster of issues involved in energy security must be addressed in on-going dialogue not only between nations at political level, regionally and globally, but also in dialogue and partnerships between governments and industry.

Involvement of industry itself and attention to the hurdles companies face are key to the efforts of ministers to address energy policy challenges successfully and efficiently. Not least considering the substantial investments that industry will be required to make, and the new and more efficient technology that industry will develop,

Production and consumption of energy impacts the global environment. Energy influences, and is influenced by, international politics.

if we are to meet the energy demands of the future in a sustainable way.

Multi-polar energy world

In Doha in April, IEF ministers will put global focus on issues of energy security. At the same time regional and inter-regional energy co-operation is also being strengthened, giving impetus to and supplementing the global energy dialogue. Parallel processes of global and regional co-operation are important to energy security in a multi-polar energy world. Regional and inter-regional co-operation can provide stepping-stones to global approaches and co-operation.

The biennial IEF provides a global meeting point for the mosaic of regional and interregional energy ambition, with the Secretariat serving as a catalyst link. With the recognition of increasing interdependence between producers and consumers, and contributing to a more co-operative atmosphere, the IEA and OPEC Secretariats have now established direct ties. Last year, the EU and OPEC started a bilateral dialogue at political level. We also see a new Asian energy identity emerging. Regional economic and political developments in Asia will increasingly impact global developments.

Emissions would increase by more than half from today's level. Three quarters of this increase would come from developing countries.

A 'Roundtable of Asian Ministers on Regional Co-operation in the Oil and Gas Economy' was convened by India in January last year in association with the IEF Secretariat and with Kuwait as co-host. It gathered ministers of the principal Asian importers, China, India, Japan and Korea, and ministers of Saudi Arabia and other West Asian (Gulf) producers.

There were ministers representing half of the World's population, the bulk of the World's remaining proven oil and gas reserves and, very importantly, the greater part of the surging global energy demand expected in the decades ahead. It was the first time that they discussed energy security, stability and sustainability on a regional Asian basis. This Roundtable was supplemented by an additional Roundtable of Ministers of the same principal Asian consumers, this time with North and Central Asian producers, in November last year.

Ministers at both Roundtables recognized that the Asian oil economy is integral with, and inseparable from, the global oil economy. Both will be followed up next year with meetings planned in Saudi Arabia with Japan as co-host, and in Turkey with Azerbaijan as the co-hosting country. The Secretariat will facilitate the commissioning by participating countries of studies of global dialogue interest on Asian oil markets, criss-cross investments and regional oil and gas interconnections.

The Secretariat has likewise interacted with other regional and inter-regional co-operative endeavours. Let me mention the EU-GCC Eurogulf Project, the Conference of African, Latin American and Caribbean Energy Ministers (AFROLAC), the African Petroleum Congress processes as well Eurasian dialogues promoted by Russia and the UNECE. We have conveyed our global IEF perspectives and have taken back to the global dialogue the important regional perspectives that we receive.

Three pillars

The Secretariat's mission focuses on the three pillars of activity endorsed by ministers. These are: i) to support host country and co-hosting countries in preparing for and implementing the biennial Ministerials and to follow up the ministerial deliberations; ii) to provide platforms for exchange of views on relevant energy issues and to contribute to the continuity and deepening of the ministerial level dialogue; iii) and to facilitate and enhance the exchange of energy data and information, especially by co-ordinating the Joint Oil Data Initiative. Preparations for the IEF Ministerial in Doha next month and its follow-up are the focal point for activity this year.

After the Ministerial, and in light of further political guidance given by ministers, the Secretariat intends to host or otherwise facilitate workshops or network meetings and co-ordinate studies on issues such as: bottlenecks in the energy supply chain and investments, petroleum reserves and spare capacity, development of regional-to-global natural gas markets, transit issues and other matters crucial to the Doha main theme of 'Energy Security'.

This will include activity at both political and other levels, on global as well as regional basis. And this activity will be an important part of our efforts to assist Host Country Italy in developing agenda and themes for the next full IEF Ministerial that will take place in Rome, Italy in 2008.

On the May 24, 2006, the Secretariat will host a joint workshop here in Riyadh with the World Energy Council on long- term energy scenarios up to 2050. The President of the Intergovernmental Panel on Climate Change, India's Dr Pachauri, will join us and provide interesting perspectives on energy security and environment as well. Recognizing the global impact of energy developments in Asia, the Secretariat will, as already mentioned, fol-

low up its association with the process of Roundtables of Asian Ministers on Regional Co-operation initiated and by facilitating studies relevant to the global dialogue.

The Secretariat will likewise serve as a catalyst link between the global dialogue endeavour in the IEF and also other selected regional and inter-regional endeavours such as the Conference of Energy Ministers of African Latin-America and Caribbean countries (AFROLAC) to take place in 2006. We will bring IEF perspectives to the 8th Arab Energy Conference in May. The Secretariat will continue to dedicate priority effort to the further development of the Joint Oil Data Initiative in co-operation with our partner organizations. Our Action Plan for JODI includes training sessions in Africa and Latin America later this year in co-operation with host countries and regional organizations.

The Secretariat will further develop its contact network and seek joint activity with energy industry, international organizations and research institutes recognizing the importance of their expert input to enhancing the political level dialogue in the IEF.

Seven political 'C's

To sum up, let me share the seven political 'C's of Energy that I see on the horizon for dialogue between producers and consumers — concern, competition, conflict, co-operation, consensus, conservation and confluence.

The first 'C' is energy concern. We simply cannot do without energy. We need it for survival. It fuels economic and social development. Political leaders and individuals are, and should be, concerned about their energy security and the energy challenges ahead.

As energy demand grows, so will competition, the second 'C', namely competition for energy resources and between energy resources. Competition is good when it makes everyone try a little harder. But it should be transparent and fair.

Competition has failed when it leads to the third 'C' — conflict. We have seen how conflict in energy can have negative economic and political consequences. The objective of dialogue is to reduce the scope for conflict and to foster the fourth 'C' — win-win co-operation. Co-operation between some stakeholders should, however, not be lethal to others.

We are aiming for the fifth 'C' — a global consensus on energy based on the awareness of long-term common interests. An element of this consensus is the sixth 'C' — Conservation. We will need more energy and must improve energy efficiency, for many reasons.

Seven political 'C's:

- The first 'C' is energy **concern**. We simply cannot do without energy. We need it for survival.
- The second 'C' is **competition**. We have competition for energy resources and between energy resources.
- The third 'C' is **conflict**. We have seen how conflict in energy can have negative economic and political consequences.
- The fourth 'C' is **co-operation**. Co-operation and dialogue are necessary for all stakeholders.
- The fifth 'C' is **consensus**. This is required to build an awareness of long-term common interests.
- The sixth 'C' is **conservation**. We will need more energy but must also improve energy efficiency.
- The seventh 'C' is **confluence**. Confluence of the streams of energy, environment and economic development into a sustainable and equitable future.

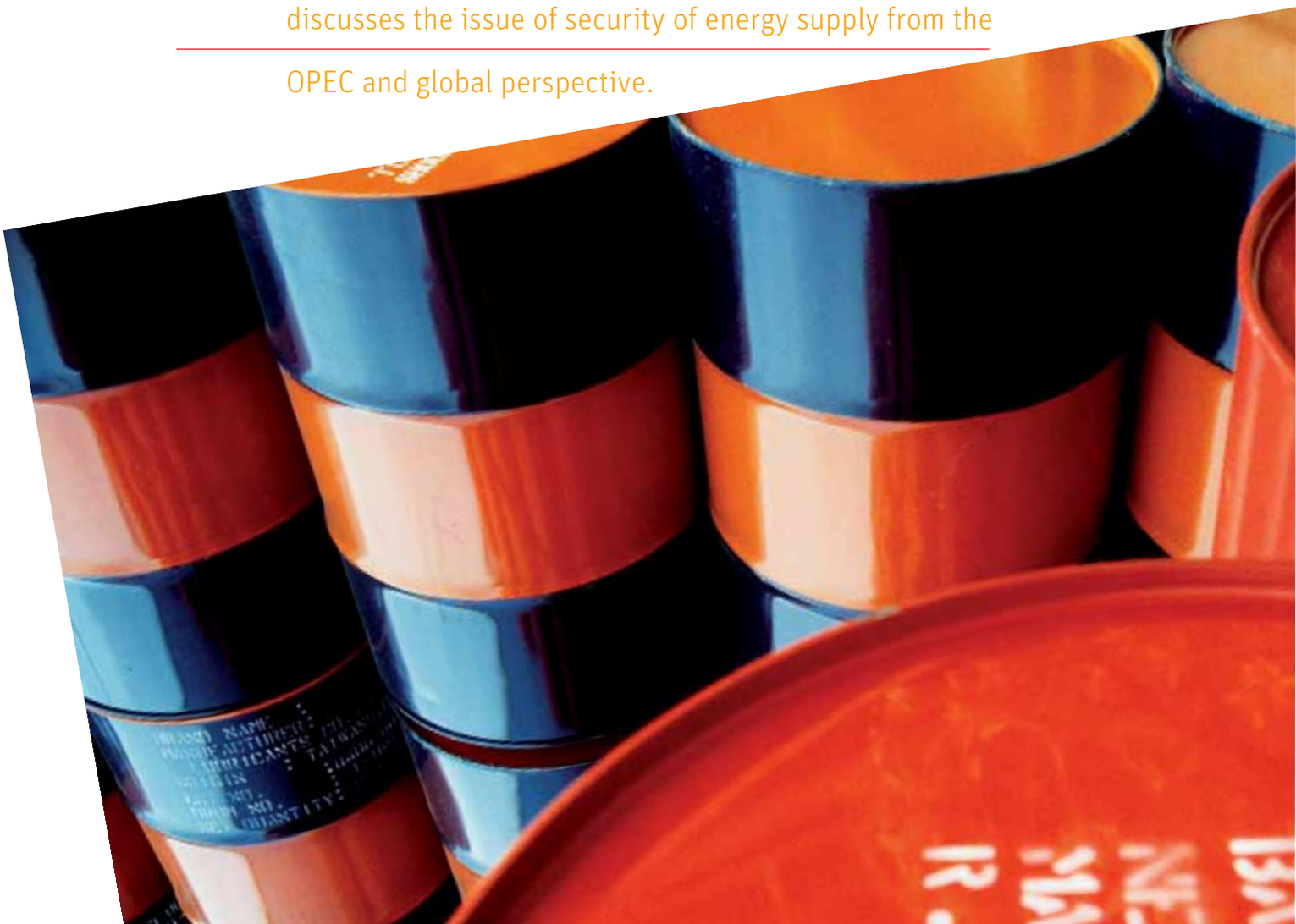
You cannot isolate energy from everything else. That brings us to the important seventh 'C' — confluence. Confluence of the streams of energy, environment and economic development into a sustainable and equitable common future.

The producer-consumer dialogue in IEF is above all a confidence-building process — a truly global dialogue among ministers of energy producing and consuming countries, industrialized and developing countries, across traditional political, economic and energy policy dividing lines. This is a dialogue in which ministers focus on energy security and address the links between energy, environment and economic development. This is a dialogue through which ministers can promote their national interests in the wider context of promoting common global objectives as well.

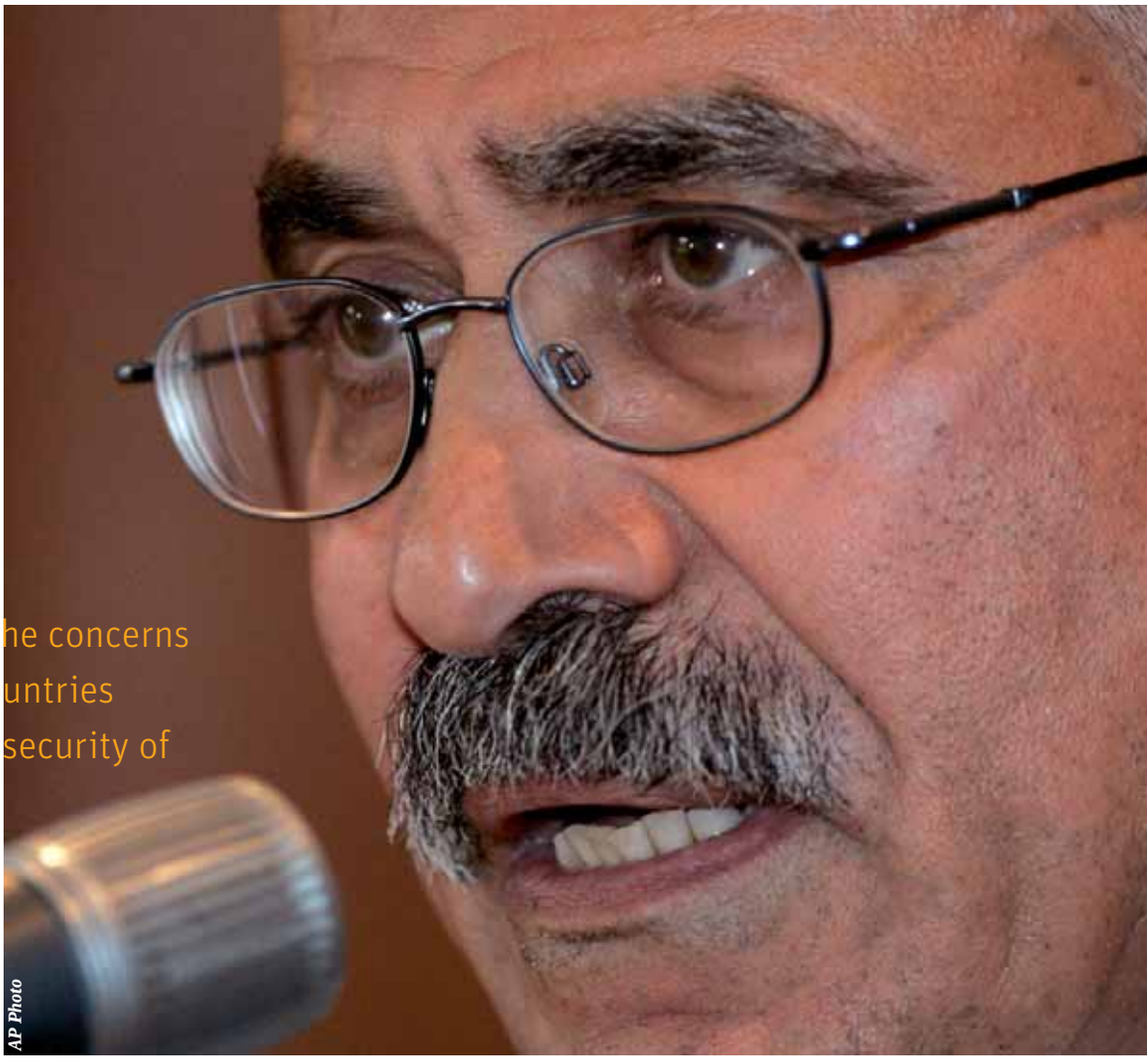
There is no final destination; there will always be new horizons for a purposeful producer-consumer dialogue in an evolving energy world. It is ultimately the ambition of participating governments, and the sum of their policy measures, that will determine the achievements and success of the producer-consumer dialogue. The IEF Secretariat headquartered here in Riyadh will do its utmost to serve this on-going and forward-looking co-operative global endeavour.

OPEC's integrated approach to ensuring security of energy supply

With Russia assuming leadership of the G8 nations, and with its energy sector growing, Russian President Vladimir Putin welcomed visitors to Moscow, the capital of the Russian Federation. In an address to the Summit, Director of OPEC's Research Division, **Dr Adnan Shihab-Eldin**, discusses the issue of security of energy supply from the OPEC and global perspective.



OPEC takes very seriously the concerns expressed by consuming countries with regard to the need for security of energy supply.



AP Photo

OPEC welcomes the opportunity to participate in the G8 Energy Ministerial Meeting in Moscow and to provide our Organization's perspective on global energy security. It is, in many ways, appropriate that this meeting is taking place here in Moscow, given Russia's important role on the global energy stage.

In this increasingly interdependent world, it is necessary to have a clear understanding of a wide range of interrelated factors as they affect the energy scene, and that are of common concern. It is, therefore, highly commendable that Russia is using its period as Chair of the G8 to bring major energy issues to the fore.

In many people's minds, the most topical issue at the present time is global energy security. This is perhaps unsurprising given recent price behaviour which has seen energy and non-energy commodity prices rise to unexpectedly high levels. But what do we mean by 'global energy security'?

Recently, it has become such a heavily used term that it has almost become a *cliché*, meaning different things to different people, depending on which side of the fence they happen to be sitting.

However, the concept of 'global energy security' is so fundamental to life in the 21st century that every effort must be made to clarify its meaning, to gain a consensus on this, and to ensure that its true principles are embodied in decision-making processes across the energy sector by at least the major players.

'Global energy security' has many dimensions, including the following:

- It should be universal, applying to rich and poor nations alike. In particular, it should seek to honour the spirit of Johannesburg 2002, the UN World Summit on Sustainable Development.
- It should be reciprocal. Security of demand is as important to producers as security of supply is to consumers.
- It should apply to all energy sources in a manner that is free from prejudicial regulatory and legislative measures, such as the very high levels of taxation imposed on oil products in many consuming countries, in contrast with low taxation, no taxation or subsidies in other energy sectors.
- It should apply to the entire supply chain. Downstream is as crucial as upstream, as we have seen recently, and refinery bottlenecks can have a major impact on steady, secure supplies to the consumer.
- It should cover all foreseeable time-horizons. Security tomorrow is as important as security today, and provision must be made for this at all times through sound investment strategies. In recent years, we have seen how concern over security of future supply can significantly impact today's prices.
- It should focus on providing all consumers with the most modern energy products, meeting the highest environmental standards and benefiting from the application of the latest technology.
- And it should be openly receptive to dialogue and co-operation among the leading players in the market, to facilitate the market's sound evolution in a balanced and equitable manner both now and in the future.

OPEC takes very seriously the concerns expressed by consuming countries with regard to the need for security of energy supply. I am convinced that OPEC's role in this respect is becoming better understood and appreciated. Recent responses by OPEC to maintain high output and keep the market well supplied, even in the face of very high OECD stocks and weak product demand in Q2, demonstrate clearly this commitment.

It is aimed to contribute to price stability and moderation for the benefit of global economy. We have used spare capacity to increase production to meet rising demand, and accelerated upstream investment to meet expected future demand. However, as I have said, we may not forget that supply security is something that is relevant for the entire supply chain.

Oil market stability therefore also requires adequate investment in the downstream sector, something that has become increasingly apparent as a lack of effective refining capacity has put pressure on prices. Clearly, this is a sector that requires close attention in order to explore ways for further supporting supply security. In so doing, we may have to recognise collectively the inherent limitations of pure market forces.

Fossil fuels reliance

OPEC shares the view of most energy analysts that energy supply will continue to rely primarily on fossil fuels until at least the middle of the century, underpinning socio-economic development throughout the world. While OECD countries will continue to account for the biggest proportion of world oil demand, 80 per cent of the increase in demand will come from developing countries, whose consumption will almost double.

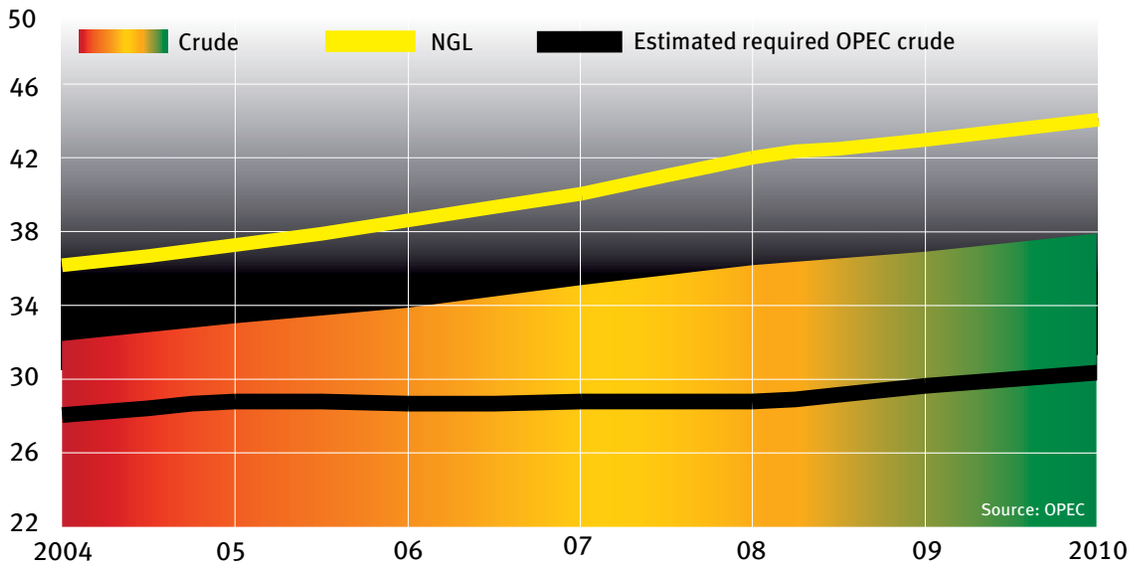
Moreover, as is widely recognised by knowledgeable and reputable organisations, the global resource base is sufficient to deal with these increases in demand.

The challenge is deliverability not availability, and technology will no doubt be a key to the equitable delivery of assured, environmentally sound supply to the global community in the future.

Over the long term, OPEC will be relied upon to supply most of the incremental barrel demanded. OPEC has repeatedly demonstrated its longstanding commitment to oil market stability and security of supply in both the short and the long terms. Therefore, OPEC will continue to expand its production capacity, both to meet the

OPEC accelerated upstream expansion plans with investments (<$100bn)

Estimated non-OPEC supply and demand growth, to keep OPEC crude requirements in the 31–33m b/d range in 2010; capacity expected 38m b/d



increased demand for its oil and to maintain an adequate level of spare capacity for the benefit of the world at large.

But large and inherent uncertainties concerning the scale of future required OPEC oil production signify a heavy burden of risk in making the appropriate investments. Investment requirements are very large and are subject to long lead-times and pay-back periods. Heavy over-investment or under-investment will have severe downsides for the industry, affecting future stability and security.

The oil 'road-map'

Uncertainties over future oil demand growth stem from a number of factors, including economic, energy and environmental policies in consuming countries. More transparency and predictability are, therefore, essential in the evolution and implementation of policies and how they will affect future demand growth.

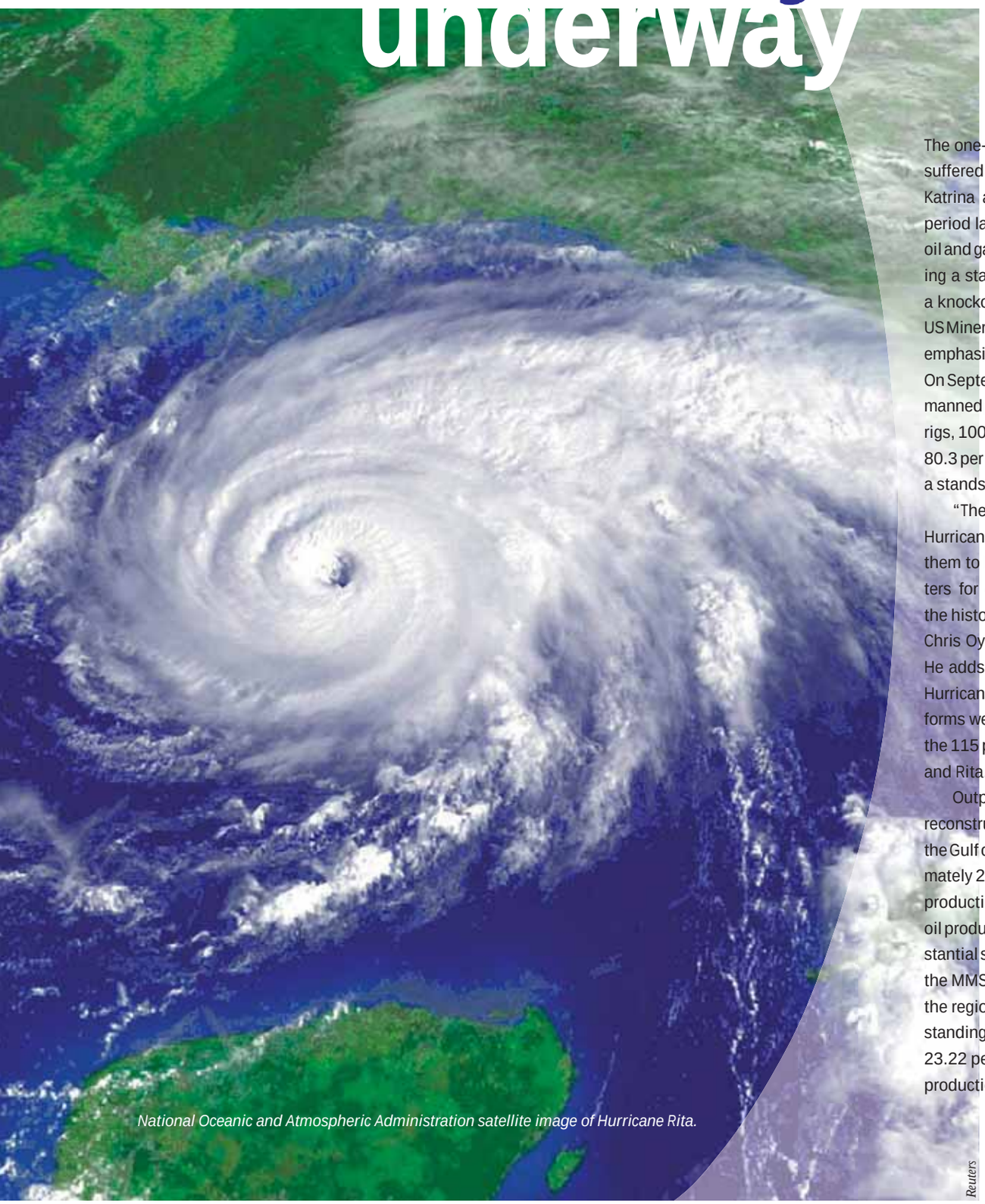
This is why we have been calling for a 'road-map' for oil demand, to reflect the need for security of demand as a legitimate concern for producers, as I mentioned earlier: Security of supply and security of demand must go hand in hand — they are the two faces of the energy security coin!

Security of supply and security of demand must go hand in hand — they are the two faces of the energy security coin!

Finally, let me reiterate the serious commitment of OPEC to continued support of energy security. It is also committed to serious, positive, constructive, pragmatic dialogue, with all parties, in the spirit of acknowledging and addressing issues of mutual concern, turning future challenges into opportunities, as we move forward together in the 21st century in our common quest for market stability, and in our progress towards the goal of poverty eradication and sustainable development for all.

And, I think we would do well to mark very closely the words of President Putin, when he recently said that in talking about energy security, "we are talking about the needs of the entire world".

Gulf of Mexico: Recovery well underway



National Oceanic and Atmospheric Administration satellite image of Hurricane Rita.

Reuters

The one-two punch the Gulf of Mexico suffered at the hands of hurricanes Katrina and Rita during a four week period last August and September left oil and gas production in the region facing a standing eight count. It was not a knockout blow, but figures from the US Mineral Management Service (MMS) emphasise the beating the region took. On September 28, 72.4 per cent of 819 manned platforms, 47.8 per cent of 134 rigs, 100 per cent of oil production and 80.3 per cent of gas production were at a standstill.

"The overall damage caused by Hurricanes Katrina and Rita has shown them to be the greatest natural disasters for oil and gas development in the history of the Gulf of Mexico," said Chris Oynes, Regional Director, MMS. He adds as a comparison that during Hurricane Ivan in 2004, seven platforms were destroyed, compared with the 115 platforms destroyed in Katrina and Rita.

Output has started to recover and reconstruction is underway, but given the Gulf of Mexico accounts for approximately 29 per cent of total US crude oil production, both the daily and yearly oil production figures are showing substantial shortfalls. On March 8 this year the MMS released its latest update on the region, with shut-in oil production standing at 348,253 b/d, equivalent to 23.22 per cent of the region's daily oil production. The shut-in gas production

is equivalent to 14.03 per cent of the daily gas production. The cumulative shut-in oil production for the period September 26, 2005 to February 22, 2006 was approximately 134.52 million b/d, equivalent to 24.57 per cent of the region's yearly oil production.

The wider impact

The figures may paint a somewhat gloomy image, but to more accurately assess the impact of the hurricanes a much broader perspective is required. As with any large-scale natural disaster affecting oil production, the market experiences an initial increase in prices. Nymex crude briefly reached $70.85/b on August 30 last year, but in the months following — except for a peak of $68.38/b at the end of January — oil prices declined and stabilised around the $60/b level. This followed the release of oil from US strategic reserves, which was then sold to the market, and OPEC's offer of an additional 2m b/d if the market needed it.

Thomas O'Connor, fuels expert at ICF Consulting, highlights that the hurricanes had "a sudden and severe impact on US gasoline prices, as well as distillates and jet fuel." The price of US gasoline rose by about 40 per cent during the first couple of days of September to levels exceeding $3 a gallon, but prices since have dropped back to around $2.30.

O'Connor said the price impact "eventually waned as supply was re-established, imports arrived, and demand fell due to seasonality, as well as in response to price." In fact, according to Jason Schenker, Petroleum Analyst, Wachovia Corporation, due to the mild winter and strong imports, US petroleum levels are currently at their highest level since 1999.

An even more interesting picture is offered by figures for US gross domestic product (GDP), which grew 4.1 per cent in the third quarter of 2005, and slowed significantly


Reuters

Oil storage tanks show the damage caused by Hurricane Rita in Cameron.

"The overall damage caused by Hurricanes Katrina and Rita has shown them to be the greatest natural disasters to oil and gas development in the history of the Gulf of Mexico."

US Mineral Management Service Regional Director, Chris Oyne


Reuters

Neighbourhoods are flooded with oil and water two weeks after Hurricane Katrina hit New Orleans.

An oil rig that broke apart in drydock during Hurricane Katrina and stuck on the Cochrane-Africatown USA Bridge over the Mobile River.

"The concern would be if global oil demands continue to grow ... and refiners overseas have less and less capability to meet US specifications."

Fuels expert at ICF Consulting, Thomas O'Connor

to 1.6 per cent in the fourth quarter according to preliminary data released by the US Bureau of Economic Analysis on February 28. Senior Energy Analyst, IFR Markets, Tim Evans, said: "The entire drop may not have been entirely due to the hurricanes, but the storms were a major component."

Though this drop in US GDP should not be glossed over, evidence shows that neither the stock markets nor the growth of the global economy have been noticeably affected. In the US too, there is generally a bullish mood about the future of the US economy with GDP widely predicted to be above three per cent for 2006, much higher than the Euro-zone.

The next Hurricane season

Though recovery is underway and indicators suggest the market is relatively stable, the MMS claims that for a long-term projection approximately 255,000 b/d of oil and 400 million cubic feet/day of gas will probably not be restored to production prior to the start of the 2006 hurricane season. Evans adds that from his understanding it may take until August for production at Shell's big Mars platform to be back on-line, and the timing highlights "the larger difficulty of the operating environment."

He adds, however, that "there is no good alternative, since that is where the oil is, but we have to hope the storms miss these platforms this time around or that the engineering can be bolstered to a level that can withstand a major storm." Though the 2005 hurricanes are, albeit slowly, becoming an historical date, further hurricanes of a similar nature in 2006 have the potential to extend the consequences of hurricanes Katrina and Rita into the longer-term.

Refining capacity

The impact of the 2005 hurricanes also led to much debate surrounding long-term production and supply from the Gulf of Mexico. Speaking at a White House press conference on October 4, 2005, US President George W Bush talked about the need for more refining capacity. He said: "It ought to be clear to everybody that this country needs to build more refining capacity to be able to deal with the issues of tight supply. We have not built a new refinery since the 1970s."

Schenker states the issue of tight supply is much in evidence today. "The real supply constraints are with refined products made from crude," he said. Many ana-

Left: View of damage at Port Arthur refinery in Texas caused by Hurricane Rita.

Shut-in oil and gas production in the Gulf of Mexico
(March 8, 2006)

Districts	Oil shut-in *b/d*	Gas shut-in *m cu ft/d*
Lake Jackson	0	12.9
Lake Charles	31,083	358.85
Lafayette	30,138	326.06
Houma	40,254	199.01
New Orleans	246,778	506.61
Total	**348,253**	**1,403.44**

These statistics reflect the remaining shut-in production (from 47 companies) from Hurricanes Katrina and Rita.
Source: US MMS.

lysts suggest this lack of refining capacity, rather than a shortage of crude oil, is putting pressure on oil prices. With the US a net importer of refined oil products and about 47 per cent of US refining capacity located in the Gulf of Mexico it is easy to see how any shutdown of US oil refineries, particularly those in the Gulf, could potentially lead to an increase in crude oil prices.

Evans, however, stresses that the Gulf of Mexico region is in fact a "net exporter of products to the rest of the US, so expansion of capacity in that particular region is less of a necessity than it is a convenience." Nonetheless, he added that he would be surprised "if BP does not raise capacity at its 460,000 b/d Texas City refinery during its current long-term shutdown, and Shell and partners also have plans to double the size of their Port Arthur, Texas refinery too."

For the week ending March 3, US refining utilisation dropped to 83 per cent, down 391,000 b/d from the previous week's average, according to the US Energy Information Administration. At present it appears the US is coping with its shortfall in refinery capacity and drop-off in refinery utilisation as oil inventories are high, but O'Connor highlights a future worry: "The concern would be if global oil demands continue to grow ... and refiners overseas have less and less capability to meet US specifications."

It underlines the importance of the new refinery capacity President Bush stressed back in October: "I look forward to working with Congress to pass reasonable law that will allow current refiners to expand and to encourage the construction of new refineries."

The legacy of Katrina and Rita

Whether new policies are passed remains to be seen, but O'Connor claims Katrina and Rita have certainly had an impact on US legislative activity. Evans agrees and believes the mood of the country has shifted, but "so far I think we have experienced far more talk than action."

As well as President Bush's talk of policies aimed to help the expansion of refining capacity, a blueprint for oil exploration from 2007–2012 from the US Department of Interior was announced at the beginning of February. The proposal would open another 2m acres in the Gulf of Mexico to oil and gas drilling and would allow drilling in the Gulf as close as 170 km from Florida's coast. The proposal is expected to spark more debate in Congress between those who favor the expansion of drilling and those who fear its impact on tourism and the environment.

The hurricanes certainly had a short-term effect on production, prices and the economy, and led to more in-depth debate about US energy policy, but the region is recovering and the much broader economic impact has been much less than initially anticipated.

Oil from US strategic reserves and OPEC's offer of additional oil to the market provided the initial stability and since then the market has remained on a relatively even keel. The unknowns, however, such as the 2006 hurricane season, short- and long-term refinery capacity, as well as future energy legislation, could all impact upon the ongoing recovery and long-term oil production from the Gulf of Mexico and the US as a whole.

"It ought to be clear to everybody that this country needs to build more refining capacity to be able to deal with the issues of tight supply. We have not built a new refinery since the 1970s."

US President George W Bush

President Bush tours the rebuilding of the Industrial Canal levee in New Orleans and Biloxi-Gulfport area of Mississippi to view reconstruction progress after the devastation caused by Hurricane Katrina last August.

European Commissioner, José Manuel Barroso (l), and European Energy Commissioner, Andris Piebalgs, gave a press conference to present the basis for a European Energy Policy set out in a major new Green Paper.

European Commission

The EU reveals its vision of a future of energy integration

The European Commission has set out its plan for Europe to develop a common approach for the delivery of sustainable and secure energy for the continent's citizens.

"The energy challenges of the 21st century require a common EU response," the President of the European Commission, José Manuel Barroso, said. "The EU is an essential element in delivering sustainable, competitive and secure energy for European citizens. A common approach, articulated with a common voice, will enable Europe to lead the search for energy solutions."

The basis for a European energy policy has been set out in *Fuelling our Future: A green paper for a European strategy for sustainable, competitive and secure energy*, which invites comments on six specific priority areas, containing over 20 concrete suggestions for possible new action.

"The completion of the internal market, the fight against climate change, and security of supply, are common energy challenges that call for common solutions," the European Energy Commissioner, Andris Piebalgs, said. "It is time for a new European energy policy."

Gas and oil prices have nearly doubled in the last two years, and Europe's import dependency is forecast to rise to 70 per cent by 2030, as demand rises. According to an EU statement, the European Community's infrastructure must improve, with €1 trillion needed over the next 20 years to meet expected energy demand and replace ageing infrastructure.

The document outlines how an integrated European energy initiative could meet the three core objectives of energy policy: sustainable development, competitiveness, and security of supply.

"The EU is well placed to act," said a joint statement from Barroso and Piebalgs. "We have the buying power that comes from

Key EU energy challenges:

There is an urgent need for investment. In Europe alone, to meet expected energy demand and to replace ageing infrastructure, investments of around one trillion euros will be needed over the next 20 years.

Our import dependency is rising. Unless we can make domestic energy more competitive, in the next 20 to 30 years around 70 per cent of the Union's energy requirements, compared to 50 per cent today, will be met by imported products.

Reserves are concentrated in a few countries. Today, roughly half of the EU's gas consumption comes from only three countries (Russia, Norway, and Algeria). On current trends, gas imports would increase to 80 per cent over the next 25 years.

Global demand for energy is increasing. World energy demand is expected to rise by some 60 per cent by 2030. Global oil consumption has increased by 20 per cent since 1994, and global oil demand is projected to grow by 1.6 per cent per year.

Europe has not yet developed fully competitive internal energy markets. Only when such markets exist will EU citizens and businesses enjoy all the benefits of security of supply and lower prices.

being the world's second largest consumer of energy. We are one of the most energy efficient continents. We are global leaders in new and renewable forms of energy, the development of low carbon technologies, and demand management." However, they continued, Europe's approach to energy in the past has been disjointed, failing to connect different policies and different countries.

This will be a long term challenge. As a foundation for this process the European Commission proposed that a Strategic EU Energy Review be presented to the Council and Parliament on a regular basis, covering all energy policy issues. Moreover, in order to move forward, six priority areas have been identified.

Firstly, in order to complete the internal energy market the document considers new measures such as: a European energy grid code, a priority European interconnection plan, a European Energy Regulator, and new initiatives to ensure a level playing field, particularly regarding the unbundling of networks from competitive activities. Concrete proposals will be tabled by the end of the year.

The second priority area concerns security of supply in the internal energy market, ensuring solidarity among European Community member states. Among the possible measures proposed is the establishment of a European Energy Supply Observatory and a revision of the existing Community legislation on oil and gas stocks to ensure they can deal with potential supply disruptions.

A more sustainable, efficient and diverse energy mix is identified as the third priority area. The choice of a member states energy mix is and will remain a question of subsidiarity; however, choices made by one member state inevitably have an impact on the energy security of its neighbours and of the European Community as a whole.

This could be achieved through the Strategic EU Energy Review, covering all aspects of energy policy, analysing all the advantages and drawbacks of different sources of energy, from renewable to coal and nuclear. This in turn may eventually lead to objectives being established at Community level regarding the EU's overall energy mix to ensure security of supply, whilst respecting the right of member states to make their own energy choices.

Fourthly, the Commission suggests a series of measures to address the challenges of global warming. In particular, it puts forward possible contents for an Action Plan on energy efficiency to be adopted by the Commission later this year. This Action Plan will identify the measures necessary for the EU to save 20 per cent of the energy that it would otherwise consume by 2020. In addition, it proposes that the EU prepares a new road map for renewable energy sources in the EU, with possible targets to 2020 and beyond in order to provide a stable investment climate to generate more competitive renewable energy in Europe.

Energy efficient and low carbon technologies constitute a rapidly growing international market that will be worth billions of Euros in the coming years. A strategic energy technology plan, as proposed in the fifth action area of the Green Paper, will ensure that European industries are world leaders in this new generation of technologies and processes.

Finally, the Green Paper stresses the need for a common external energy policy. In order to react to the challenges of growing demand, high and volatile energy prices, increasing import dependency and climate change, Europe needs to speak with a single voice in the international arena.

To this end the Commission proposes that its Strategic Energy Policy Review should: a) identify infrastructure priorities for the EU's security of supply (including pipelines and LNG terminals) and agree concrete action to ensure that they are realised; b) provide a road-map for the creation of a pan-European Energy Community with a common regulatory space; c) identify a renewed approach with regard to Europe's partners, including Russia, reflecting our inter-dependence, and d) finally propose a new community mechanism to enable rapid and coordinated reactions to emergency external energy supply situations.

in brief

OPEC exports fall 320,000 b/d as stocks brim

Reuters — OPEC oil to be shipped in the four weeks to April 1 dropped 320,000 b/d, in a continuing seasonal downturn exacerbated by high stocks in the Atlantic basin, said an oil shipping analyst. Roy Mason of consultancy Oil Movements said OPEC's seaborne exports fell to 24.76m b/d versus 25.08m b/d to March 4. "The fall is entirely westbound because the Atlantic basin is full of crude," he told Reuters. Crude oil stocks in the US are at a seven year high, according to US government data. He said refinery maintenance turnarounds and loss of production in Nigeria had added to the slippage.

US to remain strong energy import market

Reuters — The US will remain a strong market for oil and gas imports in the near term, said Sam Bodman, US Energy Secretary, adding that demand reduction measures were planned with a 20-year horizon. "There is no doubt our country will be a very good market for oil and natural gas (imports)," said Bodman. "It should not be a concern for producers." He also said he would encourage Russian companies, such as gas monopoly Gazprom, to own liquefied natural gas terminals in the US as part of their plan to increase transatlantic deliveries of the product.

Two major China oil pipelines ready for use in 2006

Reuters — China National Petroleum Corporation (CNPC) will complete two major oil pipelines costing almost $2 billion in north-west China this year, part of the state giant's plan to boost energy security, said a company official. A 1,858 km (1,155-mile) oil product line from Urumqi in the remote Xinjiang Uighur Autonomous Region to Lanzhou city in Gansu province will be ready for operation by end-May, with a designed capacity of 200,000 b/d. A 1,500-km (930-mile) pipeline, with a capacity to channel 400,000 b/d of crude oil, will be built along the same route and will be completed by end-October, said the official from Beijing.

Lukoil reserves reached 20.3bn boe on January 1

Reuters — Russia's largest oil producer Lukoil, part-owned by US oil major ConocoPhillips, had proven reserves of 20.3bn boe as of January 1, the company reported. "Lukoil had 4.8 per cent of proven reserves growth in 2005 taking into account hydrocarbons production," the company said in a statement. "Discounting production, the company's annual proven reserves growth was 1.3 per cent."

Algeria set to invest $8.6bn in its hydrocarbons sector

Algeria's Minister of Energy and Mines, Dr Chakib Khelil.

Algeria's energy industry is set to receive a boost in 2006 following a nearly 300 per cent investment increase in the hydrocarbons sector.

In order to increase oil and gas production capacity, Algeria's national energy company Sonatrach has said investment will rise from the $3.3 billion last year to $8.6bn this year, with a little over 70 per cent of the financing ($6.02bn) coming from Sonatrach.

The company's partners are contributing over $2.5bn, highlighting the attractiveness of Algeria as an investment target. Sonatrach's revenues reached $45.6bn in 2005, up from $31.6bn in 2004.

According to reports, investments will be made to complete several projects, most notably developing the Gassi Touil gas field by building several hundred more wells, and rebuilding the Skikda LNG plant.

All this comes as Sonatrach revealed that it has made its first oil find of 2006 after drilling to a depth of over 4,000 metres in the Amguide-Messaoud area, with a flow of 4.5 cubic metres an hour of oil expected. Nine wells were discovered in 2005, and 13 in 2004.

The Algerian energy sector continues to grow year-on-year, with Algeria's Minister of Energy and Mines, Dr Chakib Khelil, announcing that last year was one of the best ever, with gas production having risen by nine per cent, and the country's oil production having grown by almost seven per cent to reach 1.4 million barrels/day. By 2010, the country is aiming to produce 2m b/d, with LNG production expected to increase to 85bn cubic metres, and to 100bn cu m by 2015.

Over 20 per cent of Algeria's GDP, and some 95 per cent of its export earnings, are based on hydrocarbons, and the country has the fifth-largest reserves of natural gas in the world. Back in 2000, natural gas, including natural gas liquids, accounted for about 60 per cent of Algeria's total hydrocarbons production, a year in which Algeria was the second largest exporter of LNG.

In order to further develop its hydrocarbons industry, Dr Khelil has publicly stated that he wants to see a restructuring of the industry, and see a massive increase in the number of companies operating in the sector.

Previously, Royal Dutch Shell and Sonatrach signed a Memorandum of Understanding covering business initiatives in Algeria, including setting up upstream and LNG development projects in the country. Shell has also revealed that it was looking into building upon current activities.

An overall increase in hydrocarbon exports in 2005 helped fund an increase in electricity production and consumption, the creation of new jobs, the development of the Adrar refinery, and more desalination plants.

Last year also saw the establishment of the National Agency of Mining Inheritance, the National Geologic and Mining and Control Agency, and the Hydrocarbon Regulation Agency.

In other news, South Korea, the world's seventh-largest oil consumer, has signed an energy co-operation accord with Algeria. The agreement covers crude oil storage, LPG exports and renewable energy and was sealed during an official visit by South Korean President Roh Moo-Hyun to the North African country.

Finally, Sonatrach has signed a joint venture with Spain's Repsol YPF and Gas Natural to build a plant producing four million tonnes of LNG per year. The new company, called Sociedad de Licuefaccion, will build and operate the natural gas liquefaction terminal as part of the Gassi Touil project in the region of Arzew, west of the capital Algiers. The cost of the new installation is estimated at between $2–3bn and output is due to begin in November 2009.

$5.8bn facility brings 'King Abdullah Economic City' a step nearer reality

An artist's view of the King Abdullah Economic City in Jeddah.

The future of a giant refining and petrochemical complex in Saudi Arabia, which will complement the development of a new economic city currently being planned by the Kingdom, has been secured thanks to a multi-billion dollar financial facility established by Saudi Aramco and several Japanese institutions.

Saudi Aramco and Sumitomo Chemical, via their joint venture, PETRORabigh, have signed financing agreements with Japan Bank for International Co-operation (JBIC), Public Investment Fund of Saudi Arabia (PIF), and 17 financial institutions in respect of facilities totaling $5.8 billion to help in the development of 'King Abdullah Economic City', said to be the single largest private sector investment in Saudi Arabia.

Economic diversification

This forms part of wider programme to build a $26.6bn residential and industrial metropolis in the western city of Rabegh, near Jeddah, and is part of the Kingdom's attempt to develop economic diversification, as well as strengthen relations between Saudi Arabia and Japan.

The development of the Rabigh Refinery and Petrochemical Project on the western coast of Saudi Arabia is a project which entails the construction of an integrated refinery and petrochemicals complex at the site of the existing Rabigh refinery, at an approximate capital cost of $9.8bn.

JBIC provided a loan of $2.5bn; PIF provided a loan of $1.0bn; and a loan of $1.7bn (the 'Commercial Facility') was provided by a group of commercial banks acting as Mandated Lead Arrangers, including Arab Petroleum Investments Corporation (APICORP), The Bank of Tokyo-Mitsubishi UFJ, BNP Paribas, and HSBC.

According to Saudi Aramco sources, the completed Rabigh complex will be one of the world's largest export-oriented refinery and petrochemical complexes, and will produce 18.4 million tons per annum of high value petroleum products and 2.4m t/annum of ethylene- and propylene-based petrochemical derivatives. Saudi Arabia's oil revenues are expected to surpass $163bn this year.

in brief

Mexico's Pemex to invest $37.5bn in Chicontepec

Reuters — Mexican state oil monopoly Pemex has said it would invest around $37.5 billion over the next 20 years to develop the massive Chicontepec onshore oil field. President Vicente Fox said investments in the oil field should mean Chicontepec will boost production to 1 million barrels/day. "If we make the responsible investments that need to be made, within six years we will pass from 26,000 barrels to 1m b extracted per day from these fields," said Fox. He said it was vital for Mexico's future as an oil producer that private companies are allowed to invest in the sector alongside Pemex.

Nigeria evaluating fresh bids for oil refinery sale

Reuters — Nigeria is evaluating fresh bids for its 210,000 b/d oil refinery, said the privatisation agency, three months after it rejected earlier technical bids from the four consortiums. The Bureau for Public Enterprises (BPE), which is trying to sell a 51 per cent equity stake in the Port Harcourt refinery, said the four bidders are: Taiwan's state-owned Chinese Petroleum, partnered by Nigerian firm Chrome and India's Essar Oil; Nigeria's leading gasoline marketer, Oando; Transnational, a conglomerate of several top Nigerian businesses; and Refinee Petroplus Consortium, a little known group.

Norway's oil exports at five year low

Reuters — Norway's February oil exports fell 16 per cent to the lowest level in more than five years, confirming a downward trend for the world's number three exporter, said analysts. Oil exports dropped to 58.9 million barrels, or 2.1m b/d, from 70.4m b in February a year ago, Statistics Norway said. It said exports had not been below 60m b for the past five years. Analysts said the fall confirmed a gradual decline from Norway's maturing fields.

Kuwait oil earnings pass $40bn as fiscal year nears close

Platts — Kuwait has earned 11.78 billion dinars ($40.5bn) in oil revenues and is poised to finish the year with record oil income of more than 13bn dinars ($44.6bn), economists reported. The independent al-Shall Economic Consultants, citing Ministry of Finance data, said in a report that Kuwait earned $40.5bn in oil income by end-February, or some $26.8bn above budget projections for the 11 months, mainly because of high oil prices.

Honeywell and SABIC in $12m deal to improve plant efficiency

Diversified technology company Honeywell has signed a $12 million agreement with petrochemical company Saudi Basic Industries Corporation (SABIC) to provide advanced process control and implementation services to SABIC sites throughout the Kingdom of Saudi Arabia.

"We've worked with Honeywell in the past on the fundamental operation of our facilities, so we're confident in its ability to help us optimize plant performance," said the Vice Chairman and CEO, SABIC, Mohamed H Al-Mady. "We are also impressed by Honeywell's extensive resources, which will enhance our ability to compete in the global market."

The deal will see Honeywell providing optimization applications based on its *Profit Suite* technology, including core applications *Profit Controller* and *Profit Optimizer*. It's claimed that by using these applications within a scalable architecture, Honeywell will be able to increase plant efficiency and improve performance.

"It makes financial sense for companies such as SABIC to optimize the performance of their existing facilities," said Jack Bolick, President, Honeywell Process Solutions. "Honeywell is in a good position to help because we have offerings specifically geared toward that purpose, and we can provide local expertise to deliver these services and solutions."

Previous to this deal, Honeywell and Albemarle Corporation announced an agreement to form a hydroprocessing alliance to help the petroleum refining industry produce clean fuels. The alliance, in which Albemarle's joint venture Nippon Ketjen will also participate, will offer a wide range of hydroprocessing technologies, catalysts and services to assist refiners in meeting the projected increased demand for refined products and ultra-low-sulfur fuels.

SABIC profile

SABIC is the largest publicly traded company in the Middle East, and the seventh largest petrochemical company in the world (in annual revenues). The company has assets of $34 billion, a market capitalization of more than $175bn, annual production of more than 43 million metric tons, and product exports to more than 100 countries. SABIC is 70 per cent owned by the Saudi Government, with the remaining stake privately owned by enterprises in Saudi Arabian and the Gulf Co-operation Council.

Founded in 1885, Honeywell now employs more than 100,000 people in 95 countries, and has a market capitalisation of $30bn.

OMV seeks Norwegian opportunities

In an attempt to gain a foothold into the burgeoning Norwegian energy market, OMV Aktiengesellschaft will open an office in Norway to evaluate E&P opportunities. OMV Exploration and Production, a 100 per cent subsidiary of OMV, was informed by the Norwegian Ministry of Petroleum and Energy on February 28, 2006, that it had pre-qualified as an Operator on the Norwegian Continental Shelf.

Helmut Langanger, OMV Executive Board member responsible for Exploration and Production, said: "We are delighted having received the green light from the Norwegian Ministry to explore for oil and gas on the Norwegian Continental Shelf. As we have a wide portfolio in neighboring UK North Sea, expanding our activities to Norway makes a lot of sense."

OMV will open a branch office in Norway later this month and participate in the upcoming 2006 Awards in Predefined Areas (APA) announced by the Norwegian Energy Minister on February 21, 2006. The release contains 192 blocks in the North Sea, Norwegian Sea and Barents Sea.

With the acquisition of a majority stake in Petrom, Romania's biggest oil and gas company in 2004, OMV has become the largest oil and gas group in Central Europe, with oil and gas reserves of over 1.4 billion barrels of oil equivalent (boe), daily production of around 340,000 boe and an annual refining capacity of 26.4 million metric tons.

OMV now has over 2,536 gas stations in 13 countries. The market share of the group in the R&M business segment in the Danube Region is now approximately 18 per cent.

The move into Norway is part of an expansion of OMV's E&P portfolio in context with OMV's 2010 growth strategy to increase its daily oil and gas production from 340,000 to 500,000 boe. OMV E&P is now engaged in 18 countries worldwide and organized in five core regions.

In 2004, OMV had Group sales of €9.88bn and a workforce of 6,475 employees, as well as market capitalization of approximately €16bn, thus making it Austria's largest listed industrial company. The company is active in refining and marketing in 13 countries and has set the goal to increase its market share to 20 per cent by 2010.

in brief

Venezuela notifies Colombian company of back tax charge

Platts — Venezuela's tax authority has told Hocol Venezuela, the local subsidiary of a Colombian-based oil company, it owes $7.8 million in unpaid income taxes, said the authority. Hocol Venezuela operates the B2X-68/79 and B2X-70/80 blocks in the Maracaibo Lake area of western Venezuela, producing a total of 6,500 b/d. The bill is for income taxes dating back to 2001 that Seniat says should have been paid at a rate of 50 per cent instead of the 34 per cent rate that was originally calculated.

Kuwait invites bids for 165,000 b/d oil hub in the north

Platts — Kuwait Oil Company has invited 17 international companies to bid on a project to build a new 165,000 b/d oil gathering center in northern Kuwait. KOC floated the tender February 26 inviting the 17 companies for a March 19 meeting in Kuwait to receive technical and financial information about the project. Last May KOC chairman Farouk al-Zenki announced the project to rebuild the gathering centre (GC-24) at an energy conference in Kuwait.

Brazil biodiesel output to reach 1bn litres

Reuters — Brazilian biodiesel production capacity should reach 1.1 billion litres in 2007 and this will be sufficient for the two per cent compulsory blend with regular diesel coming into force in 2008, said a government official. Brazil has five biodiesel mills with a total production capacity of 49 million litres per year and another five mills with 61m l/yr capacity which are near start up. In addition, 24 mills with 1bn l capacity are planned or being built. Output was about 400m l in 2005.

US sees oil helping Libyan economy grow 6.7 per cent

Reuters — Libya's economy is expected to grow 6.7 per cent this year, slightly better than last year's 6.5 per cent, due in large part to the country's higher oil export revenues, said the US government. With proven crude oil reserves of 39 billion barrels, Libya was forecast to earn $31.2bn in oil exports this year, up from $28.3bn last year and $5.9bn in 1998, the Energy Information Administration said in its annual review of Libya's energy sector and economy. "Libya's economy is heavily reliant on oil exports, but it is attempting to diversify," said the Energy Department's analytical arm.

Investing in agricultural research

The OPEC Fund and the Consultative Group on International Agricultural Research (CGIAR):

A partnership for alleviating poverty

Agriculture is a key sector in the vast majority of developing countries, not only because it provides food, but also because it is the largest employer and the biggest export earner. Yet, for many poor nations, the sector's potential is hindered by a raft of obstacles, including harsh climates, scarce water resources, depleted soils and animal and crop pests.

Farmers at an ICARDA research facility in Syria select barley lines suitable for growing in difficult agro-ecological conditions. ICARDA specializes in developing crop varieties and agro-management techniques for countries with limited water resources.

ICARDA

What is the CGIAR?

For many years, the OPEC Fund has supported research aimed at finding solutions to the problems faced by farmers in resource-poor conditions. One of its main partners in this endeavor is the Consultative Group on International Agricultural Research (CGIAR), an umbrella body dedicated to increasing the quantity and quality of food production in developing countries through research, training and technical assistance to national agricultural research systems.

The CGIAR sponsors 15 agricultural research centres whose projects and activities are spread over some 60 developing countries. Since 1979, the OPEC Fund has supported cutting-edge research at 13 of these centres through grant assistance in excess of $16.4 million.

Three of the latest Fund-sponsored projects involve research at the International Centre for Agricultural Research in the Dry Areas (ICARDA), the International Centre for Potato Research (CIP) and the International Crops Research Institute for Semi-arid Tropics (ICRISAT). Recently, the Fund welcomed the Directors-General of all three centres to its headquarters in Vienna for signature of the grant agreements.

Optimizing water use in arid countries

As its name suggests, ICARDA specializes in agricultural research for the benefit of countries with limited water resources. On average, the availability of water per person per year in the dry areas is less than 1,000 cubic metres, compared to a world average of 7,000 cu m, a situation that presents farmers with serious challenges.

"ICARDA's mission is to optimize water use by developing more efficient crop varieties, different agro-management techniques and alternative water harvesting and irrigation systems," said ICARDA Director-General, Prof Dr Adel El-Beltagy. "A focal area of our research is the development of genetically modified crops that are tolerant to drought."

"A classic example of such a crop is the Lathyrus or grasspea, which is a staple food in many parts of Africa and Asia. It is often described as a 'miracle plant' because of its ability to withstand even the most severe drought, but it also has a less desirable quality — a neurotoxin that can cause paralysis of the legs when consumed in large quantities.

"Thanks to advances in biotechnology, ICARDA scientists have successfully developed a low toxin variety of the pulse, which is safe for human consumption. It was introduced this year and has the potential to alleviate suffering for millions of people," said Dr El-Beltagy.

Another example is the cotton ballworm, a deadly insect that severely affects cotton production in India. "Using biotechnology, ICARDA has developed at least 12 resistant varieties of Bacillus thuringiensis cotton. These are now being cultivated with minimal use of pesticides and are producing higher yields," said Dr El-Beltagy.

The latest Fund grant to ICARDA will support a participatory barley breeding project in Jordan, Morocco, Egypt and Syria, where $4.8 billion worth of livestock depend on barley as their primary feed. The objective is to develop improved barley varieties which will tolerate the harsh regional conditions better than the existing cultivars. The livelihoods of thousands of families are expected to be positively affected through these improvements.

B Babajide

Director-General of ICARDA, ***Prof Dr Adel El-Beltagy*** *(left), and OPEC Fund Director-General,* ***Suleiman J Al-Herbish.***

Participatory research for improving crop yields

Another CGIAR centre that mobilizes science to benefit the poor is ICRISAT. With a focus on the semi-arid tropics, ICRISAT conducts research on sorghum, pearl millet, chickpea, pigeonpea and groundnut crops. Its mission is to increase agricultural productivity and food security and to protect the environment through science and partnership-based research.

The OPEC Fund has been working with ICRISAT for many years on an ongoing groundnut project in Asia, where 68 per cent of all groundnut is produced. Genetically improved varieties of this important oilseed crop are being developed to increase the quality and quantity of yields.

ICRISAT Director-General,
Dr William D Dar.
The OPEC Fund has been giving regular support to an ongoing ICRISAT groundnut project in Asia for many years.

A key aspect of the project is the active involvement of beneficiaries, an approach favoured strongly by ICRISAT Director-General, Dr William Dar: "If small and marginal farmers are to derive the full benefits of improved technologies, they must be integrated into the partnership equation so that they have a say in technology selection and development. Ultimately, the participation of farmers in on-farm research and development leads to knowledge empowerment and paves the way for rural societies to undergo substantial transformation."

Dr Dar argues that poor countries are indifferent to the 'top down' approach to development. "What they require is persuasion, motivation and education to participate in any development," he said. "Without their direct involvement, the gains are unlikely to be sustainable."

It is such participation that has yielded positive results in the Fund-sponsored Asia groundnut project, claims Dr Dar. "The input of poor farmers has proved invaluable in helping us fine tune and adapt technologies to suit requirements, socio-economic conditions and market demand," he said. "When improved varieties of seed are supported by improved production technologies, we can achieve gains of up to 50 per cent. This means not only higher incomes but also increased consumption and better health for poor farmers and their families."

ICARDA

Promoting potato production in Africa

Like ICRISAT and ICARDA, CIP has been a partner of the OPEC Fund for many years. Based in Lima, Peru, the Centre's area of expertise is potato and sweet potato crops which, according to Director-General Dr Pamela Anderson, "have strong potential as development vehicles."

CIP's latest project with the Fund involves transferring some of the activities it has been working on together from Latin America to Africa. "In Africa, potato is expanding more than any other cultivated crop on the continent, but there are some real production constraints," said Dr Anderson. "To overcome them you have to be able to identify the problems, design research to deal with them, develop solutions together with the farmers and then deliver the solutions more broadly."

Among the challenges facing potato farmers, said Dr Anderson, are pests and disease, most notably late blight, which is so destructive it can wipe out entire crops. "The most effective weapon against late blight is

the breeding of resistant varieties. However, late blight pathogen is constantly evolving and over time this resistance breaks down. So the challenge is to stay one step ahead and develop new and more resistant material. This is why national research teams — and their work with on-farm producers — are so important," she said.

The latest project focuses on strengthening the capacities of national agricultural research systems in Africa to improve integrated potato crop management. A key component of the project is the establishment of a Researchers' Field Training School, which Dr Anderson said "will use an innovative, adult learning approach to help researchers identify problems and then work with farmers to look for specific solutions. It is the first time such an approach has been applied in the research community."

Dr Anderson is confident that CIP's work in Africa will help contribute to the realization of some of the continent's Millennium Development Goals. "We have prioritized several targets," she said. "These include the reduction of poverty and hunger, the reduction of child and maternal mortality, sustainable development, improved livelihoods among slum dwellers, and the accessibility of new technology to the poor."

Article courtesy of the OPEC Fund Newsletter.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Right: CIP Director-General, ***Dr Pamela Anderson,*** *believes the humble potato has strong potential as a development vehicle. In Africa, this South American tuber is expanding faster than any other cultivated crop.*

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CIP


ICRISAT

Left: ***Dr Dar and fellow scientists*** *in a contained field trial site for transgenic groundnut. When improved seed varieties are combined with better production technologies, crop yields can increase by as much as 50 per cent.*

March

This section includes highlights from the OPEC Monthly Oil Market Report (MOMR) for March published by the Research Division of the Secretariat, containing up-to-date analysis, additional information, graphs and tables. The publication may be downloaded in PDF format from our Web site (www.opec.org), provided OPEC is credited as the source for any usage.

Crude oil price movements

OPEC Reference Basket[1]

The market weakened at the start of February following the OPEC decision to keep output unchanged at the January Meeting of the Conference. Easing geopolitical tensions in the Mideast eroded some price support. The Basket slipped in the first two days of the week on average by 1.5 per cent. Healthy supply from the Middle East amid falling refining margins underlined market bearishness.

Heavy maintenance in the USA expected in the second quarter amid a healthy rise in gasoline stocks exerted further downward pressure on the petroleum complex. In the second week, the Basket lost on average 3.5 per cent, slipping $2.11 to settle at $58.14/barrel. In the third week, the price slide continued on calming tensions in the Middle East amid ample supply as the arbitrage opportunities opened for the western crude to flow into Asia.

Moreover, an IEA report showing global supply growth outpacing incremental demand this year added further to the downtrend. Healthy builds in US crude oil and gasoline supplies amid a widened sweet/sour spread kept the pressure on Middle East crude. In the third week, the Basket's average fell more than five per cent or nearly $3 to average $55.18/b, the lowest level this year.

Bullish sentiment revived in the fourth week on rising geopolitical tensions in the Middle East at a time of supply disruptions from West Africa and an increasing market appetite for light sweet grades. The start of the refinery maintenance season helped to offset some of the uptrend. Hence, the Basket inched 18¢ or 0.3 per cent higher to settle at $55.36/b. Prices soared even higher in the final week, following an attempt to disrupt operations at a key oil processing center in Saudi Arabia. As a result, the Basket gained two per cent to close week at $56.77/b. On a monthly basis, the Basket averaged $56.62/b in February, down $1.85 or more than three per cent lower from the previous month.

In the first week of March, concern that heavy maintenance might deplete refined product stocks revived supply concerns, escalating the fear premium. However, the rise was capped by OPEC's decision at its 140th Meeting of the Conference to keep current output unchanged. The Basket closed $2.29/b or over four per cent higher at $58.30/b on March 15 from end of February, with the month-to-date average at $57.34/b (see **Table A**).

US market

The US crude oil market remained aloft on geopolitical concerns while the sweet/sour spread reached record levels. West Texas Intermediate's (WTI) first weekly average was nearly unchanged at $66.95/b. Nevertheless, increased imports of sour foreign crude amid a build in inventories widened the sweet/sour spread. The WTI/WTS (West Texas Sour) spread expanded $1.75 to $8.15/b. In the second week, although outright prices slipped nearly five per cent to $63.70/b, the sweet/sour differential widened slightly with the WTI/WTS spread at $8.29/b on ample supply of foreign crude, especially from Canada.

WTI continued to fall, dropping over six per cent to $59.76/b on slowing demand ahead of an expected heavy maintenance schedule, due to delays caused by the hurricanes last year. Nevertheless, concern over tight sweet crudes continued to widen the sweet/sour spread further into record territory to reach $9.55/b before peaking at $10.90/b in the third week.

1. An average of Saharan Blend (Algeria), Minas (Indonesia), Iran Heavy (IR Iran), Basra Light (Iraq), Es Sider (SP Libyan AJ), Bonny Light (Nigeria), Qatar Marine (Qatar), Arab Light (Saudi Arabia), Murban (United Arab Emirates) and BCF-17 (Bachaquero, Venezuela).

The spread narrowed by 91¢ in the final week despite continued supply disruptions from Nigeria to stand at a still considerable $8.64/b. WTI's weekly average edged 41¢ lower to $59.35/b. The monthly average for WTI was $61.21/b, representing a drop of six per cent or $4, while the WTI/WTS monthly spread averaged $8.58/b, the widest on record.

European market

The North Sea differentials firmed in the first few days of February on a buying spree by a major seeking to cover short positions amid an unexpected shut-down of some 45,000 b/d in the Oseberg South platform. However, poor refining margins slowed refinery demand and kept some February barrels unsold. In the second week, the new March loading programmes revealed more volume, furthering the bearish trend into the third week. A combination of poor refining margins as the maintenance season emerges pushed North Sea differentials to their lowest levels in months. Tight Nigerian supply helped differentials to firm in the fourth week, although slow demand strengthened the bearish trend at month-end.

Ample supplies and low refining margins kept Urals under pressure prompting some refiners to resell cargoes. However, some barrels were cleared preventing Urals differentials from declining further with the reopening of the Lithuanian Butinge port in the second week.

In the third week, refinery margins improved on the fuel oil crack spread in the Mediterranean amid declining supplies. Moreover, the opening of outbound arbitrage barrels supported the Urals differential. Nevertheless, sentiment weakened again on large exports from Russia for March programmes.

Far East market

The Middle Eastern crude was discussed steadily in early February, with April Oman discussed at a 1–8¢/b premium to the MOG. However, an overhang of March programmes set a bearish tone amid record high official selling price (OSP) and weak refining margins. As a result, April Oman fell to a double-digit discount. The heavy maintenance schedule in Asia only enhanced the market's bearish sentiment. Furthermore, Abu Dhabi's Murban for March loading fell from a 14¢ discount to ADNOC's OSP to a discount of 30–45¢/b, the lowest level transacted in almost three months amid opening Western arbitrage.

Nevertheless, the improving fuel oil crack spread in the third week amid low Japanese crude oil stocks lent some firmness to the market. Chinese reselling of Oman barrels amid lower demand for distillate-rich crude pushed differentials lower. April Murban was assessed at a 15–30¢/b discount, yet disrupted supply from Nigeria kept some firmness in place. A continued resell of some Oman April barrels from an Asia major amid open arbitrage kept Mideast crude under pressure.

Asian market

The Asian market was bullish amid tight prompt supplies from Australia, which pushed premiums to two-year highs. However, declining refinery margins hindered any further bullish momentum. A cold snap in Japan revived demand for sweet crude by thermal power generation plants, helping premiums to remain firm. Indonesia's March Minas was assessed at a $2.50/b premium to the Indonesian Crude Pricing (ICP) with Malaysia's Luban assessed at a $3/b premium to Tapis APPI.

Low crude inventories in Japan added to the bullish momentum amid tight supply and higher demand. Yet, high outright prices pressured the differentials lower with Indonesia's Duri heard traded at a $2/b premium to the ICP amid a narrowing Brent Dubai EFS, attracting more West African crude to flow eastward. Furthermore, the increased Australian loading programme for April set the premium lower. However, concern over lingering outages from West Africa encouraged refiners to concentrate on regional grades.

Table A: Monthly average spot quotations for OPEC's Reference Basket and selected crudes including differentials *$/b*

	Jan 06	Feb 06	2004	2005
OPEC Reference Basket	**58.47**	**56.62**	**41.34**	**57.57**
Arab Light[1]	58.42	56.54	39.43	57.50
Basrah Light	55.59	52.32	37.86	54.00
BCF-17	47.90	45.90	na	46.92
Bonny Light[1]	64.04	62.12	45.08	63.11
Es Sider	61.77	59.13	42.21	60.48
Iran Heavy	57.07	55.39	37.29	56.25
Kuwait Export	56.51	55.01	37.02	55.78
Marine	59.85	59.06	39.57	59.46
Minas[1]	63.35	61.35	43.91	62.38
Murban	62.71	61.77	43.06	62.25
Saharan Blend[1]	64.07	61.59	45.26	62.86
Other crudes				
Dubai[1]	58.56	57.61	38.78	58.10
Isthmus[1]	58.54	53.87	40.11	56.27
Tia Juana Light[1]	54.61	49.98	36.81	52.35
Brent	63.05	60.12	44.79	61.62
West Texas Intermediate	65.39	61.49	47.43	63.49
Differentials				
WTI/Brent	2.35	1.37	2.64	1.87
Brent/Dubai	4.49	2.51	6.01	3.52

Note: As of the third week of June 2005, the price is calculated according to the current Basket methodology that came into effect as of June 16, 2005. BCF-17 data available as of March 1, 2005.
1. Old Basket components: Arab Light, Bonny Light, Dubai, Isthmus, Minas, Saharan Blend and T J Light.
na not available
Source: Platt's, direct communication and Secretariat's assessments.

The tanker market

Preliminary data shows that OPEC spot fixtures declined by 2.3 million b/d or 15 per cent to 12.9m b/d in February, offsetting to some extent the significant growth of 3.6m b/d observed in the previous month. With this sharp decline, which was the highest since December 2004, OPEC spot fixtures were almost 3m b/d lower than a year earlier.

The drop in spot fixtures was driven by disruptions in Nigeria's production and lower activity from the Western hemisphere countries due to seasonal trends. OPEC spot fixtures accounted for 66 per cent of total spot fixtures against 70 per cent in the previous month and 62 per cent a year earlier. Middle East/eastbound and westbound spot fixtures lost 1.1m b/d or 13 per cent to average 7.3m b/d with westbound losing 22 per cent to settle at 1.8m b/d since some countries have cut purchases in anticipation of refining maintenance, especially in Europe.

Despite the overall decline in spot fixtures, the Middle East/eastbound share in total spot fixtures remained stable at 28 per cent and even higher than last year's 25 per cent, meaning that purchases from Asian countries remained strong compared to other regions, while the westbound share fell from 11 to 9 per cent.

In contrast, non-OPEC spot fixtures increased slightly to 6.6m b/d, resulting in an increase of their share in total spot fixtures from 30 per cent to 34 per cent in February. However, similarly to OPEC, non-OPEC spot fixtures have declined by 3m b/d compared to a year earlier.

Oil demand in the OECD rose by 140,000 b/d or 0.3 per cent to average 49.6m b/d during 2005.

Preliminary data for sailings shows that OPEC's sailings jumped by 1.8m b/d to hit 25.7m b/d, reflecting the strong increase in OPEC's fixtures of the previous month.

Sailings from Middle Eastern countries surged by 1.4m b/d to average 18.8m b/d, reversing the continuous decline observed during the previous three months. Arrivals increased in all the main consuming regions except in North-West Europe with US Gulf/East Coasts and the Caribbean continuing their upward trend for the second consecutive month to average 11.1m b/d, an increase of 700,000 b/d or seven per cent over the previous month and 100,000 b/d more than a year earlier.

Arrivals in Japan reversed the downward trend displayed during the previous two months, increasing by 400,000 b/d to reach 4.5m b/d, a 24-month high, while arrivals at the Euro-Mediterranean region rose by almost 1m b/d or 23 per cent to 5.1m b/d. In contrast, arrivals at North-West Europe dropped by 700,000 b/d or nine per cent to average 7.51m b/d, the lowest level since December 2004.

World oil demand

Estimate for 2005

With preliminary data for OECD countries as well as many developing countries and China available for the entire 2005, global oil demand appears to have grown by 960,000 b/d or 1.1 per cent to average 83.0m b/d. The estimated growth is slightly lower than the previous figure and the difference can be traced back to the revised lower growth in the last quarter of 2005. According to the latest figures, demand in the North American region during the last three months of 2005 was lower than previously estimated. Total product deliveries in the USA were 1.1 per cent lower in October on a y-o-y basis, while demand in Mexico and Canada contracted by 0.8 per cent and 1.9 per cent, respectively.

In November, US petroleum product supplies recovered rising by one per cent y-o-y, but a sizable ten per cent drop in Canada's demand resulted in a marginal 0.3 per cent rise for the region. US product demand rose in December but Canada's consumption posted another contraction of around six per cent. Chinese apparent demand for the last quarter of 2005 was also revised down with growth for 2005 estimated at around 20,000 b/d or 0.4 per cent.

OECD

Oil demand in the OECD rose by 140,000 b/d or 0.3 per cent to average 49.6m b/d during 2005. Gasoil/diesel was the product that posted the biggest volumetric gain with demand rising by 200,000 b/d y-o-y to average 12.7m b/d. Gasoil/diesel consumption rose a substantial two per cent in Western Europe but also increased in the North American region by 1.8 per cent. In relative terms, kerosene showed the largest y-o-y gain rising by 2.7 per cent to average 4.2m b/d.

Kerosene demand was particularly strong in Western Europe with a nearly six per cent y-o-y rise followed by a 3.5 per cent increase in the OECD Pacific region. In contrast, LPG demand fell considerably during 2005 under pressure by record prices for natural gas. OECD's LPG consumption fell by nearly 200,000 b/d or four per cent with respect to 2004 to average 4.7m b/d.

Demand for LPG dropped considerably in both the North American and Western Europe regions falling by 5.5 per cent and 3.7 per cent y-o-y but rose 1.2 per cent in the OECD Pacific region. Naphtha demand increased a marginal 0.2 per cent as the huge 14 per cent drop in the North American region was arrested by a 2.8 per cent and three per cent rise in Western Europe and OECD Pacific. Gasoline's slight 0.6 per cent y-o-y rise was not sufficient to overcome the 4.2 per cent drop in Western Europe's consumption, resulting in a 0.4 per cent fall in demand for the entire OECD.

Developing countries

Developing countries remained the engine of growth accounting for more than three-fifths of total global demand growth, despite only accounting for less than one quarter of the total world's demand last year. Following a strong performance during the first half of 2005 when

demand rose by 900,000 b/d or 4.3 per cent during the first quarter and by 800,000 b/d or 3.7 per cent in the second quarter, preliminary figures for the last two quarters of the year indicate a deceleration in the pace of growth.

Thus, demand seems to have grown by 700,000 b/d or 3.1 per cent during the third quarter of last year and by less than 600,000 b/d or 2.6 per cent during the last three months of 2005. The slow-down in demand is especially noticeable in non-OECD Asian countries where demand growth of 400,000 b/d and 300,000 b/d in the first and second quarters of 2005 was followed by a mere 100,000 b/d and 30,000 b/d during the last two quarters. Since the middle of last year, governments have implemented a series of measures to diminish the impact of high international oil prices on their current accounts and national budgets.

In a move to phase out subsidies, several Asian countries increased domestic retail petroleum product prices in the second half of last year, which had an immediate negative impact on demand. This was the case in Indonesia, where petroleum product prices increased some 126 per cent in October resulting in a dramatic drop in consumption. Thailand ended diesel and gasoline subsidies in July and October of last year while the Philippines government introduced a four-day working week for government workers in June in an attempt to reduce its fuel bill.

Other regions

According to the latest production and trade data for the whole of 2005, Chinese apparent demand growth has seen almost a dozen consecutive downward revisions to now stand at 20,000 b/d with a yearly average of 6.5m b/d. The new lower estimate can be traced back to the decrease in Chinese net imports which declined by 3.6 per cent during 2005. On the other hand, oil production – which accounts for the remaining component of the apparent demand equation – showed a growth of 3.8 per cent, rising by 100,000 b/d to 3.6m b/d. Thus, apparent demand would have shown a larger drop if higher domestic oil production had not offset the sizeable fall in net imports. In the FSU, apparent demand is estimated to have risen a marginal 30,000 b/d or 0.7 per cent to average 3.9m b/d.

Forecast for 2006

Global oil demand growth for the current year has been revised down by approximately 100,000 b/d to account for the persistent y-o-y contraction in US demand during January and February, as well as a more pessimistic view for growth in non-OECD Asia growth. Thus, world oil demand is forecast to rise by 1.5m b/d or 1.8 per cent to average 84.5m b/d, which is higher than the nearly 1m b/d seen in 2005 but only half of the growth observed in 2004.

According to the latest EIA Weekly Status Report figures – which remains subject to further revisions – total US petroleum supplies fell by 1.2 per cent y-o-y during January of this year followed by a negligible rise 0.3 per cent in February with a year- to-date drop of nearly 100,000 b/d or 0.5 per cent. It seems that, except for the brief rise in December and following several months of contractions in product supplies, petroleum product demand remains weak.

Demand growth in non-OECD Asia was largely revised down from the previous forecast. Growth is forecast at 150,000 b/d or 1.8 per cent for a yearly average of 8.7m b/d – less than half the estimate presented in the previous report. Despite evidence of a considerable slow-down in demand growth in several of the region's major economies towards the second half of last year as a result of the phasing out of product price subsidies, the healthy economic outlook for the region for the rest of the year of 5.8 per cent should support some growth in oil demand.

On a more positive note, China seems to have started 2006 with a sizeable rise in apparent demand following a year of disappointing growth in 2005. According to the latest trade and production figures, demand in January grew by more than 1m b/d or 18 per cent.

The strong performance can be entirely attributed to a considerable 3.5m b/d of net imports, a level not seen since November 2004. The forecast for OECD Pacific oil demand growth has also been revised up to 70,000 b/d or 0.8 per cent following higher January and February demand figures – especially from Japan where cold weather has boosted kerosene consumption. Finally, Middle Eastern demand growth was also revised up to 240,000 b/d or 4.2 per cent in line with forecast GDP growth of nearly five per cent for the region this year as well as to take into account demographic and income effects.

World oil supply

Non-OPEC

Estimate for 2005

Non-OPEC supply in 2005 is expected to average 50.1m b/d, representing an increase of 200,000 b/d over 2004. Baseline revisions to the 2004 and 2005 estimates have resulted in a slight downward adjustment to the overall level, but not to growth.

China seems to have started 2006 with a sizeable rise in apparent demand following a year of disappointing growth in 2005.

Revisions to the 2004–05 estimate

The full year estimate for 2004 has been revised down by 11,000 b/d as historical data for Peru and Bolivia indicates that the baseline for these countries was slightly lower than previously assessed. For 2005, the level of non-OPEC supply has also been revised down 32,000 b/d due to the impact of historical revisions as well as the inclusion of actual data for some countries for 2Q05, 3Q05 and 4Q05.

Forecast for 2006

Non-OPEC oil supply in 2006 is expected

Table B: FSU net oil exports *m b/d*

	1Q	2Q	3Q	4Q	Year	Growth y-o-y
2002	5.14	5.84	5.85	5.49	5.58	0.99
2003	5.87	6.75	6.72	6.61	6.49	0.91
2004	7.17	7.30	7.38	7.37	7.31	0.82
2005	**7.49**	**7.73**	**7.81**	**7.89**	**7.73**	**0.42**
2006[1]	**7.70**	**8.24**	**8.21**	**8.05**	**8.05**	**0.32**

1. *Forecast.*

Table C: OPEC NGL production, 2002–06

m b/d

2002	**2003**	**2004**	**04/03**
3.62	3.71	4.09	0.38
1Q05	**2Q05**	**3Q05**	**4Q05**
4.22	4.27	4.32	4.37
2005	**05/04**	**2006**	**06/05**
4.30	0.20	4.62	0.33

to average 51.5m b/d, an increase of 1.4m b/d over 2005, slightly lower that the last assessment. The impact of historical revisions, recent performance, unplanned shutdowns as well as minor adjustments to the outlook for Mexico, Norway, Australia, Brazil, Egypt and Sudan have resulted in some revisions on a quarterly basis and a downward adjustment of 60,000 b/d to the full year growth forecast.

OECD

OECD oil supply is expected to average 20.5m b/d, representing an increase of 140,000 b/d versus the previous year and slightly lower than last month's report. The outlook for Mexico and Australia has been revised up, whilst unplanned shutdowns have led to downward revisions in Canada and Norway.

USA

US oil supply is expected to average 7.4m b/d in 2006, an increase of 150,000 b/d versus 2005. GoM losses during February averaged 360,000 b/d a slight improvement from January; at the time of writing shut-in production was 340,000 b/d. However, additional hurricane-related losses in onshore Louisiana took total losses higher.

Mexico and Canada

Mexican oil supply is expected to average 3.8m b/d in 2006, flat from last year. The last data available (January) indicates that total oil supply averaged 3.82m b/d; we are now assuming that a similar level is expected to be maintained through March and, as a result, the estimate for Mexican oil supply in 2006 has been revised up slightly to reflect a better than expected near-term performance.

Western Europe

Total oil supply in Western Europe is now expected to average 5.4m b/d in 2006, a drop of 290,000 b/d versus 2005. The three largest producers in the North Sea are expected to see their production drop this year. Norwegian oil supply has been revised down 55,000 b/d and is expected to average 2.8 to 2.9m b/d in 2006, a drop of 120,000 b/d versus last year. Meanwhile, UK oil supply is expected to average 1.7m b/d, which represents a drop of 160,000 b/d versus 2005, while Danish oil supply should average 360,000 b/d, a slight drop of 20,000 b/d from last year.

A number of fields in Norway have been shut down for three to four days to make repairs, the impact of which is likely to curve output in the months ahead, and reduce the maintenance level later in the year. The latest repair will take place at the Ekofisk area, where the operator plans a four to five day shutdown of around 400,000 b/d of oil and gas production.

Asia Pacific

Oil supply in the Asia Pacific region is expected to average 600,000 b/d in 2006 or 22,000 b/d higher than previously thought. Australian oil supply is expected to average 540,000 b/d, an upward revision of 21,000 b/d versus last month. Australia's Enfield project (100,000 b/d) is now expected to start in 3Q06 instead of 4Q06. The project is one of the largest to enter into production in the last few years.

Developing countries

Oil supply in the developing countries is expected to average 13.3m b/d, an increase of 700,000 b/d over 2005. The outlook for Brazil, Egypt, and Sudan, has been revised to reflect recent changes in the start up schedule of some projects.

In Brazil, recent announcements by Petrobras indicate a change in the start up of the Jubarte field (60,000 b/d) from February to September. The start of Albacora Leste P 50 (180,000 b/d) was already delayed last month from February to April/May. The Golfinho field (100,000 b/d) is still expected to start in June/July, but test production of 20,000 b/d has already begun.

Egyptian oil production is now expected to average 680,000 b/d in 2006, broadly flat from 2005. The 4Q06 estimate has been adjusted upward primarily to reflect a new start date for the Saqqara project (50,000 b/d).

In Sudan, total oil supply is expected to average 490,000 b/d, representing an increase of 150,000 b/d from 2005 but a downward revision of 15,000 b/d. This revision (and previous ones) reflects a lack of information and moving targets for the Adar Yale, Palogue, and Thar Jath projects. The ramp up of the Adar Yale project has been affected by ongoing delays in the completion of Petrodar's export infrastructure. Sudan's oil production is expected to average 380,000 b/d in 1Q06, 460,000 b/d in 2Q06, 560,000 b/d in 3Q06 and 570,000 b/d in 4Q06.

FSU, other regions

FSU oil supply is expected to average 12m b/d, an increase of 400,000 b/d versus 2005, broadly unchanged from last month. The forecast for Other regions (Other Europe and China) has been revised down slightly, with total oil supply expected at 3.7m b/d in 2005 representing an increase of 40,000 b/d from 2005, but 21,000 b/d lower than the last assessment (see **Table B**).

Russia

The outlook for Russia remains unchanged. Oil supply is expected to average 9.6m b/d in

Table D: OPEC crude oil production, based on secondary sources									1,000 b/d
	2004	2005	2Q05	3Q05	4Q05	Dec 05	Jan 06	Feb 06	Feb/Jan
Algeria	1,228	1,349	1,344	1,366	1,374	1,374	1,377	1,377	0.3
Indonesia	968	942	945	937	935	932	921	922	0.7
IR Iran	3,920	3,924	3,946	3,937	3,911	3,902	3,828	3,802	-25.5
Iraq	2,015	1,829	1,841	1,968	1,675	1,561	1,551	1,773	222.3
Kuwait	2,344	2,504	2,505	2,524	2,548	2,544	2,544	2,541	-3.8
SP Libyan AJ	1,537	1,642	1,634	1,654	1,665	1,668	1,668	1,678	9.7
Nigeria	2,352	2,413	2,423	2,423	2,471	2,463	2,384	2,319	-65.0
Qatar	777	795	794	796	806	810	811	807	-3.5
Saudi Arabia	8,982	9,404	9,456	9,498	9,439	9,426	9,398	9,394	-4.8
UAE	2,360	2,447	2,398	2,478	2,518	2,533	2,496	2,497	1.2
Venezuela	2,582	2,637	2,640	2,618	2,593	2,595	2,576	2,605	28.8
OPEC-10	**27,049**	**28,057**	**28,084**	**28,232**	**28,259**	**28,247**	**28,002**	**27,940**	**–61.9**
Total OPEC	**29,064**	**29,887**	**29,925**	**30,199**	**29,934**	**29,808**	**29,553**	**29,713**	**160.4**

Totals may not add, due to independent rounding.

2006, an increase of 180,000 b/d versus 2005. Cold weather unexpectedly curbed Russian output in January-February to 9.45m b/d from a historical high in December. As a result, the 1Q06 forecast has been revised down slightly, but positive adjustments of a similar magnitude to the 3Q06 and 4Q06 forecast keep full-year growth unchanged.

Recent developments include an increase in crude export duties to a record level of $25.5/b effective April 1.

The increase is unlikely to impact the current forecast as it is part of the operating environment and its impact has already been factored in the assessment. Rising crude export duties combined with all other operating costs, particularly rail exports, have been responsible for a large portion in the slowdown of Russian growth over the last several months.

OPEC NGLs and non-conventional oils

The estimate for 2005 and the forecast for 2006 remain unchanged. In 2005, OPEC NGLs averaged 4.3m b/d, an increase of 200,000 b/d over the previous year. In 2006, the forecast sees OPEC NGLs gaining 300,000 b/d versus 2005 (see **Table C**).

OPEC crude oil production

Total crude oil production averaged 29.7m b/d in February, according to secondary sources, an increase of 160,000 b/d from last month. Iraq's oil production recovered to 1.8m b/d as loading and weather conditions improved. Nigerian oil production was affected by community disturbances in western parts of the Delta, but losses were partly offset by increases elsewhere (see **Table D**).

FSU net oil exports (crude and products)

The forecast for 2006 shows FSU net oil exports averaging 8.1m b/d, which represents an increase of 300,000 b/d over 2005. In 2005, FSU net oil exports averaged 7.7m b/d, or 400,000 b/d higher than the previous year.

Balance of supply/demand

Estimate for 2005

The estimate for demand for OPEC crude in 2005 (a–b) remains unchanged at 28.6 m/d, representing an increase of 500,000 b/d from last year. In the same year, OPEC crude production averaged 29.9m b/d, and this contributed to the build in OECD inventories.

Forecast for 2006

In 2006, the demand for OPEC crude is expected to average 28.4 to 28.5m b/d, representing a downward revision of 100,000 b/d versus last month. On a quarterly basis, the new forecast shows that demand for OPEC crude is expected at 30m b/d in the first, 27.4m b/d in the second, 28.1m b/d in the third and 28.3m b/d in the fourth quarters, representing a downward revision of 200,000 b/d in the first and second quarters, a positive revision of 200,000 b/d in the third, and a downward revision of 100,000 b/d in the fourth.

Total crude oil production averaged 29.7m b/d in February, according to secondary sources, an increase of 160,000 b/d from last month.

Table E: World crude oil demand/supply balance *m b/d*

World demand	2001	2002	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006
OECD	48.0	48.0	48.6	49.5	50.6	48.7	49.3	50.0	49.6	50.6	49.0	49.7	50.7	50.0
North America	24.0	24.1	24.5	25.3	25.5	25.3	25.5	25.4	25.4	25.6	25.5	25.8	25.9	25.7
Western Europe	15.3	15.3	15.4	15.6	15.6	15.3	15.7	15.7	15.6	15.6	15.3	15.8	15.9	15.6
Pacific	8.6	8.6	8.7	8.5	9.5	8.1	8.1	8.8	8.6	9.5	8.2	8.2	9.0	8.7
Developing countries	19.7	20.2	20.4	21.4	21.8	22.2	22.2	22.3	22.1	22.4	22.7	22.8	23.0	22.7
FSU	3.9	3.7	3.8	3.8	3.9	3.7	3.8	4.0	3.9	4.0	3.7	3.9	4.1	3.9
Other Europe	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
China	4.7	5.0	5.6	6.5	6.5	6.6	6.4	6.6	6.5	7.0	7.0	6.8	6.9	6.9
(a) Total world demand	**77.1**	**77.7**	**79.2**	**82.1**	**83.7**	**82.1**	**82.6**	**83.8**	**83.0**	**85.0**	**83.3**	**84.1**	**85.6**	**84.5**
Non-OPEC supply														
OECD	21.8	21.9	21.6	21.3	20.9	20.9	19.8	19.6	20.3	20.3	20.5	20.1	20.9	20.5
North America	14.3	14.5	14.6	14.6	14.4	14.6	13.7	13.5	14.1	14.2	14.4	14.4	14.9	14.5
Western Europe	6.7	6.6	6.4	6.1	6.0	5.7	5.5	5.5	5.7	5.6	5.6	5.0	5.4	5.4
Pacific	0.8	0.8	0.7	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.6	0.7	0.7	0.6
Developing countries	11.0	11.4	11.5	12.0	12.3	12.6	12.6	12.8	12.6	12.9	13.1	13.5	13.7	13.3
FSU	8.5	9.3	10.3	11.2	11.4	11.5	11.6	11.9	11.6	11.7	11.9	12.1	12.2	12.0
Other Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
China	3.3	3.4	3.4	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.7
Processing gains	1.7	1.7	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Total non-OPEC supply	**46.5**	**47.9**	**48.8**	**49.9**	**50.3**	**50.6**	**49.7**	**49.9**	**50.1**	**50.6**	**51.3**	**51.3**	**52.6**	**51.5**
OPEC NGLS and non-conventionals	3.6	3.6	3.7	4.1	4.2	4.3	4.3	4.4	4.3	4.5	4.6	4.7	4.8	4.6
(b) Total non-OPEC supply and OPEC NGLS	**50.1**	**51.5**	**52.5**	**54.0**	**54.6**	**54.8**	**54.0**	**54.3**	**54.4**	**55.1**	**55.9**	**56.0**	**57.4**	**56.1**
OPEC crude supply and balance														
OPEC crude oil production[1]	27.2	25.4	27.0	29.1	29.5	29.9	30.2	29.9	29.9					
Total supply	77.3	76.9	79.5	83.1	84.0	84.8	84.2	84.2	84.3					
Balance[2]	**0.2**	**–0.8**	**0.2**	**1.0**	**0.3**	**2.7**	**1.5**	**0.4**	**1.2**					
Stocks														
OECD closing stock level *m b*														
Commercial	2630	2476	2517	2558	2546	2625	2646	2589	2589					
SPR	1288	1347	1411	1450	1462	1494	1494	1484	1484					
Total	3918	3823	3928	4008	4009	4120	4141	4074	4074					
Oil-on-water	830	816	883	904	927	928	925	965	965					
Days of forward consumption in OECD														
Commercial onland stocks	55	51	51	52	52	53	53	51	52					
SPR	27	28	29	29	30	30	30	29	30					
Total	**82**	**79**	**79**	**81**	**82**	**84**	**83**	**80**	**81**					
Memo items														
FSU net exports	4.6	5.6	6.5	7.3	7.5	7.7	7.8	7.9	7.7	7.7	8.2	8.2	8.0	8.1
[(a) – (b)]	**27.0**	**26.2**	**26.8**	**28.1**	**29.2**	**27.2**	**28.7**	**29.5**	**28.6**	**29.9**	**27.4**	**28.1**	**28.3**	**28.4**

1. *Secondary sources.*
2. *Stock change and miscellaneous.*

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

Table E *above, prepared by the Secretariat's Energy Studies Department, shows OPEC's current forecast of world supply and demand for oil and natural gas liquids.*

The monthly evolution of spot prices for selected OPEC and non-OPEC crudes is presented in ***Tables One and Two*** *on page 59, while* ***Graphs One and Two*** *(on page 60) show the evolution on a weekly basis.* ***Tables Three to Eight****, and the corresponding graphs on pages 61–62, show the evolution of monthly average spot prices for important products in six major markets. (Data for Tables 1–8 is provided by courtesy of Platt's Energy Services).*

Table 1: OPEC Reference Basket crude oil prices, 2005–2006

$/b

Crude/Member Country	2005 Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	2006 Jan	February 1W	2W	3W	4W	4Wav
Arab Light – Saudi Arabia	46.85	48.68	47.09	52.47	53.46	58.24	57.63	54.65	51.55	52.84	58.42	58.10	55.10	55.18	56.79	56.54
Basrah Light – Iraq	46.21	45.74	44.57	50.59	52.24	57.10	55.68	51.39	48.07	49.15	55.59	54.06	50.64	50.83	52.83	52.32
BCF-17 – Venezuela	32.86	32.73	32.39	37.48	44.07	46.15	50.79	47.51	41.33	42.34	47.90	47.99	44.81	44.32	45.24	45.90
Bonny Light – Nigeria	53.15	53.18	50.23	55.93	58.40	65.49	65.60	60.74	57.18	57.91	64.04	63.54	60.52	61.25	62.30	62.12
Es Sider – SP Libyan AJ	49.71	49.67	47.90	53.15	55.71	60.27	60.39	58.25	54.92	57.14	61.77	59.78	57.60	58.55	59.94	59.13
Iran Heavy – IR Iran	46.50	46.06	43.25	49.60	51.07	55.69	55.10	51.73	49.28	50.88	57.07	56.75	53.98	54.22	55.54	55.39
Kuwait Export – Kuwait	46.42	47.89	46.36	51.15	51.31	55.18	54.60	51.76	49.19	50.83	56.51	56.39	53.64	53.80	55.13	55.01
Marine – Qatar	46.53	48.23	46.66	52.27	53.57	57.49	58.37	55.80	53.17	54.72	59.85	60.39	57.80	58.06	58.86	59.06
Minas – Indonesia	54.30	55.96	50.34	55.01	56.17	61.07	60.27	58.64	53.87	54.43	63.35	63.21	59.90	59.76	60.86	61.35
Murban – UAE	49.90	52.35	51.03	55.16	57.05	61.78	62.68	59.30	56.13	57.47	62.71	63.11	60.35	60.67	62.13	61.77
Saharan Blend – Algeria	52.59	51.98	48.69	54.41	57.30	63.67	63.30	59.48	56.15	57.65	64.07	63.11	59.89	60.38	61.99	61.59
OPEC Reference Basket	**49.07**	**49.63**	**46.96**	**52.04**	**53.13**	**57.82**	**57.88**	**54.63**	**51.29**	**52.65**	**58.47**	**58.14**	**55.18**	**55.36**	**56.77**	**56.62**

Table 2: Selected OPEC and non-OPEC spot crude oil prices, 2005–2006

$/b

Crude/Member Country	2005 Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	2006 Jan	February 1W	2W	3W	4W	4Wav
Arab Heavy – Saudi Arabia	41.81	43.33	42.21	48.34	48.83	52.02	51.57	49.03	47.40	49.16	54.91	54.71	52.19	52.45	53.50	53.52
Brent – North Sea	52.60	51.87	48.90	54.73	57.47	64.06	62.75	58.75	55.41	57.02	63.05	61.61	58.26	58.96	60.51	60.12
Dubai – UAE	45.60	47.24	45.68	51.37	52.78	56.55	56.41	54.20	51.63	53.22	58.56	58.83	56.38	56.62	57.61	57.61
Ekofisk – North Sea	52.34	51.68	48.85	55.03	57.59	63.92	62.55	59.22	55.76	57.54	63.34	61.62	58.33	59.39	61.20	60.36
Iran Light – IR Iran	48.50	48.42	45.53	52.37	53.86	60.41	58.74	54.38	51.31	53.20	58.99	58.21	55.27	56.17	57.62	57.00
Isthmus – Mexico	47.52	47.13	45.05	51.48	53.85	59.66	59.92	55.64	51.57	52.77	58.54	55.91	51.59	52.19	54.83	53.87
Oman –Oman	46.95	48.22	46.70	52.20	53.42	57.46	58.24	55.52	52.78	54.21	59.35	59.89	57.30	57.57	58.68	58.61
Suez Mix – Egypt	44.58	44.81	43.11	48.88	51.64	56.01	55.91	52.83	49.29	51.59	56.92	55.06	52.95	54.15	55.72	54.54
Tia Juana Light[1] – Venez.	43.50	43.27	41.67	48.19	49.10	54.22	53.87	51.48	48.77	49.23	54.61	52.90	48.82	49.38	51.88	49.98
Urals – Russia	47.92	47.89	46.27	51.87	54.95	58.64	58.23	55.80	52.38	54.63	59.58	57.65	55.50	56.56	58.03	57.06
WTI – North America	54.09	53.09	50.25	56.60	58.66	64.96	65.28	62.67	58.42	59.36	65.39	63.70	59.76	59.21	62.04	61.49

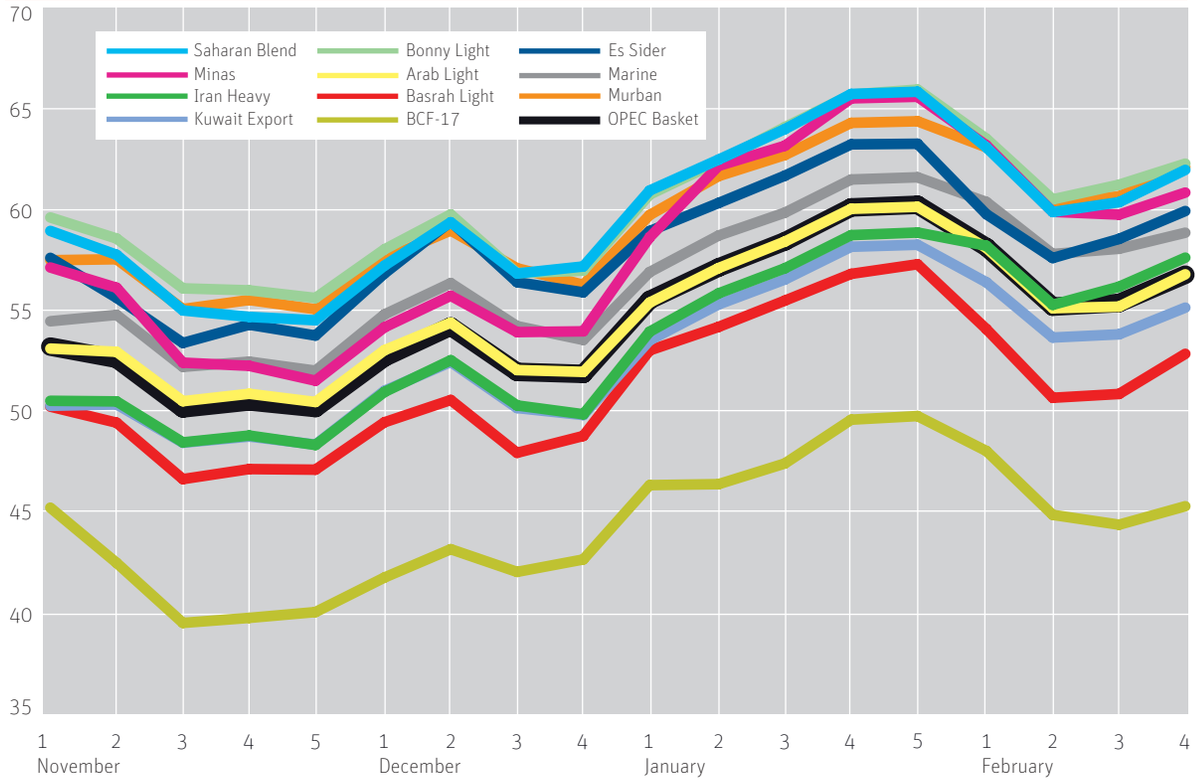
Note: As of January 2006, monthly averages are based on daily quotations (as approved by the 105th Meeting of the Economic Commission Board). As of June 16, 2005 (ie 3W June), the OPEC Reference Basket has been calculated according to the new methodology as agreed by the 136th (Extraordinary) Meeting of the Conference.

1. Tia Juana Light spot price = (TJL netback/Isthmus netback) x Isthmus spot price.

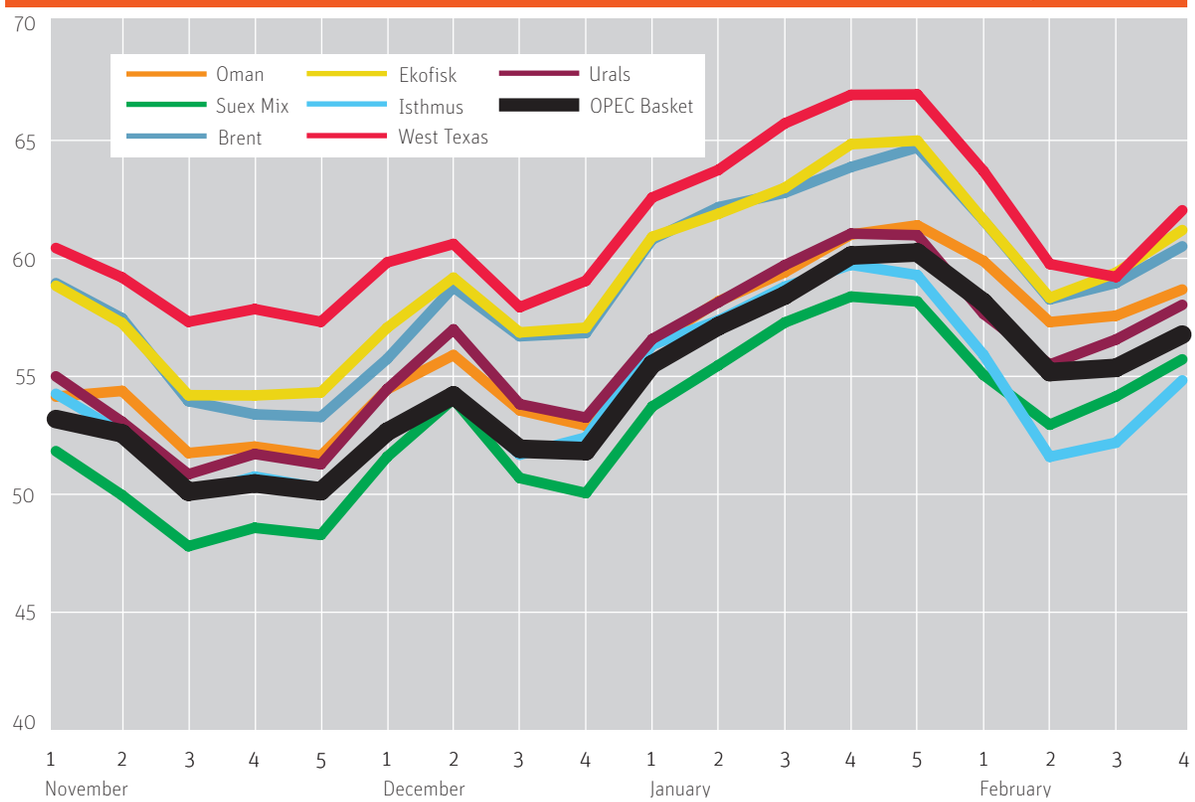
Kirkuk ex Ceyhan; Brent for dated cargoes; Urals cif Mediterranean. All others fob loading port.

Sources: The netback values for TJL price calculations are taken from RVM; Platt's Oilgram Price Report; Reuters; Secretariat's calculations.

Graph 1: Evolution of the OPEC Reference Basket crudes, November 2005 to February 2006 *$/b*



Graph 2: Evolution of spot prices for selected non-OPEC crudes, November 2005 to February 2006 *$/b*



Note: As of June 16, 2005 (ie 3W June), the OPEC Reference Basket has been calculated according to the new methodology as agreed by the 136th (Extraordinary) Meeting of the Conference.

Table and Graph 3: North European market — spot barges, fob Rotterdam

$/b

		naphtha	regular gasoline unleaded	premium gasoline 50ppm	diesel ultra light	jet kero	fuel oil 1%S	fuel oil 3.5%S
2005	February	54.49	49.69	55.53	58.33	58.05	27.78	25.48
	March	62.33	55.94	62.03	69.30	68.81	34.06	30.09
	April	61.62	61.29	68.55	70.38	71.67	35.59	34.53
	May	54.65	56.14	62.85	64.51	64.90	34.56	33.79
	June	57.23	61.88	69.54	73.02	72.32	35.01	34.86
	July	61.22	67.78	76.54	74.60	74.02	37.74	36.71
	August	69.12	75.37	84.28	80.15	79.78	41.70	39.25
	September	74.77	82.32	92.35	83.28	83.78	46.70	41.86
	October	71.56	68.81	77.64	81.54	81.27	46.94	39.98
	November	62.65	59.58	67.03	71.05	69.50	42.01	37.50
	December	65.20	60.82	68.24	69.25	70.00	41.75	37.54
2006	January	73.50	67.85	76.37	73.79	76.16	45.19	42.21
	February	68.79	62.43	70.12	72.76	74.31	47.04	44.03

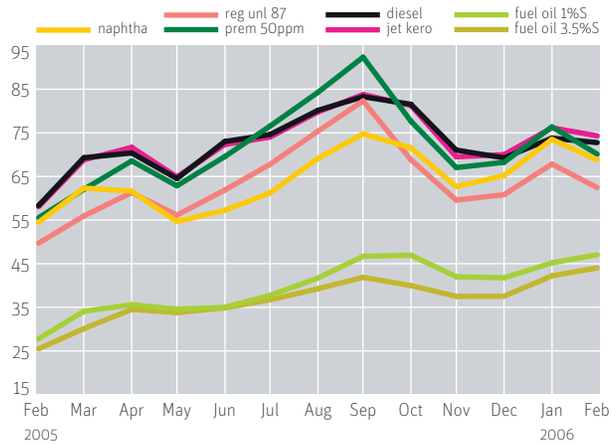


Table and Graph 4: South European market — spot cargoes, fob Italy

$/b

		naphtha	premium gasoline unl 95	premium gasoline 50ppm	diesel ultra light	fuel oil 1%S	fuel oil 3.5%S
2005	February	44.26	48.28	56.09	59.29	29.59	24.79
	March	51.34	54.23	62.87	73.26	35.31	29.07
	April	51.05	59.51	68.88	71.44	38.31	33.67
	May	44.97	53.58	61.99	64.90	35.99	32.20
	June	46.94	59.95	68.85	73.65	38.33	33.59
	July	50.79	na	72.99	74.14	41.03	35.08
	August	58.32	na	83.45	80.97	43.55	37.73
	September	62.01	na	88.35	84.73	48.43	41.43
	October	58.43	na	75.86	81.66	45.39	39.15
	November	51.20	na	64.69	69.80	41.91	35.57
	December	53.71	na	67.95	70.64	43.53	35.02
2006	January	59.23	na	75.71	74.58	47.98	39.62
	February	56.42	na	68.48	74.41	51.10	42.56

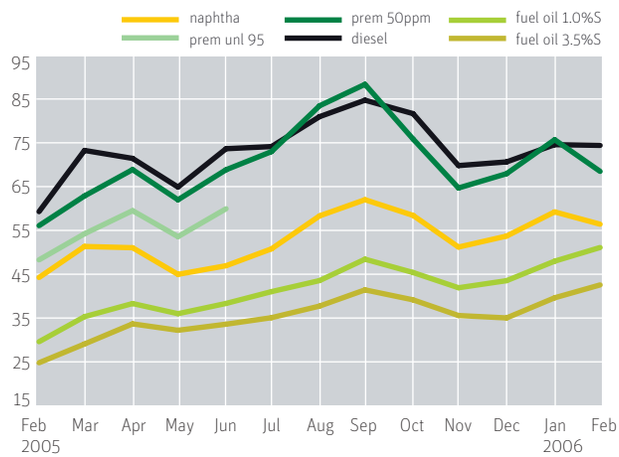
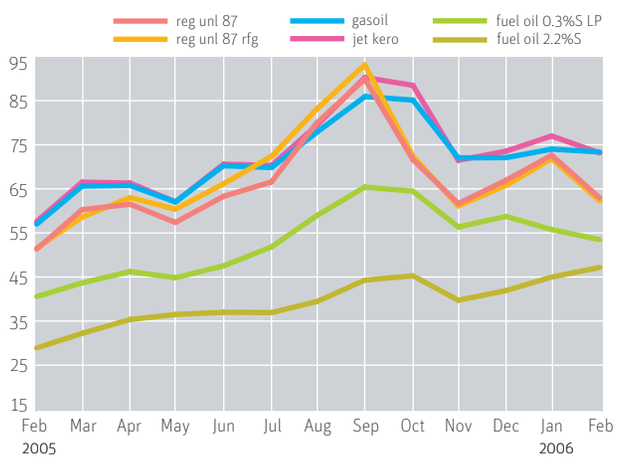


Table and Graph 5: US East Coast market — spot cargoes, New York

$/b, duties and fees included

		regular gasoline unleaded 87	regular gasoline unl 87rfg	gasoil	jet kero	fuel oil 0.3%S	fuel oil 2.2%S
2005	February	51.32	51.57	57.00	57.64	40.57	28.91
	March	60.28	58.57	65.62	66.52	43.66	32.22
	April	61.50	63.04	65.76	66.31	46.23	35.36
	May	57.38	60.37	62.04	62.05	44.83	36.50
	June	63.29	66.13	70.25	70.60	47.52	37.00
	July	66.58	72.37	69.84	70.32	51.82	36.92
	August	79.97	83.13	77.86	79.41	58.94	39.44
	September	89.92	93.13	85.92	90.26	65.40	44.29
	October	71.63	72.41	85.13	88.48	64.45	45.28
	November	61.67	61.14	72.03	71.47	56.36	39.73
	December	66.97	65.79	72.08	73.56	58.75	41.93
2006	January	72.61	71.85	74.01	77.00	55.77	44.99
	February	62.95	62.25	73.36	73.15	53.47	47.17



na not available.
Source: Platts. Prices are average of available days.

Table and Graph 6: Caribbean market — spot cargoes, fob

$/b

		naphtha	gasoil	jet kero	fuel oil 2%S	fuel oil 2.8%S
2005	February	47.01	55.09	56.83	24.91	24.25
	March	58.11	64.23	66.41	28.22	27.50
	April	59.86	63.31	66.87	31.36	31.07
	May	56.34	58.95	62.57	32.50	32.58
	June	57.06	67.54	70.32	33.00	32.58
	July	68.93	68.93	70.60	32.92	32.54
	August	74.08	76.21	79.54	35.44	33.76
	September	83.80	86.35	94.80	40.29	39.47
	October	65.85	87.54	101.92	41.28	39.37
	November	58.23	70.47	71.86	35.73	33.49
	December	62.83	71.27	73.56	37.93	37.15
2006	January	67.61	73.77	77.25	40.99	40.34
	February	60.19	69.56	74.65	43.17	42.44

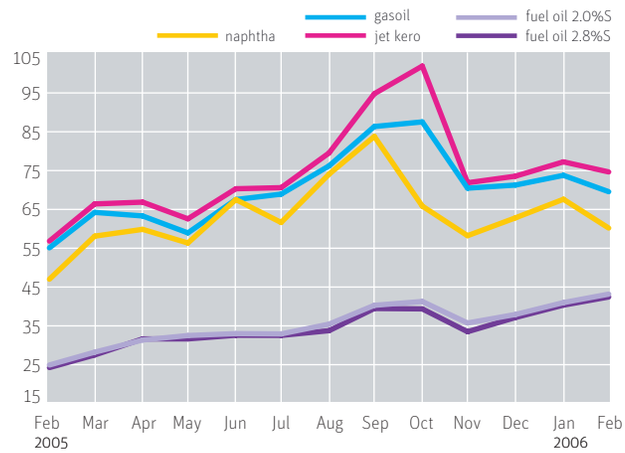


Table and Graph 7: Singapore market — spot cargoes, fob

$/b

		naphtha	premium gasoline unl 95	premium gasoline unl 92	diesel ultra light	jet kero	fuel oil 180 Cst	fuel oil 380 Cst
2005	February	44.61	54.27	53.70	56.72	54.54	30.35	29.28
	March	50.74	59.47	58.72	68.34	66.33	34.13	33.61
	April	49.85	61.50	60.23	69.39	71.40	38.30	37.75
	May	44.76	54.46	53.37	63.83	68.93	38.00	37.18
	June	45.71	59.65	58.38	72.42	68.93	39.34	38.11
	July	49.62	64.70	63.43	72.48	70.07	40.27	38.76
	August	58.17	73.19	72.52	74.92	75.84	42.39	41.35
	September	61.73	79.40	78.39	80.77	79.16	47.35	46.68
	October	57.80	69.10	67.91	77.28	75.71	45.42	45.78
	November	53.19	60.87	59.48	66.50	64.78	43.80	42.91
	December	53.77	61.01	59.89	69.10	70.37	43.68	42.48
2006	January	58.26	66.78	65.42	77.61	77.02	46.72	45.33
	February	56.65	65.02	64.20	79.36	74.96	49.18	47.95

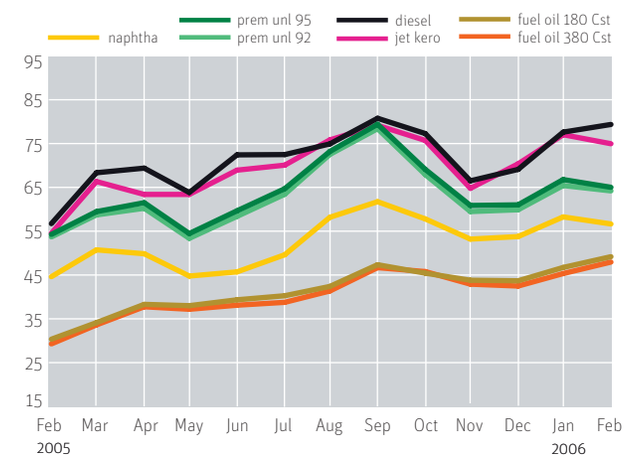
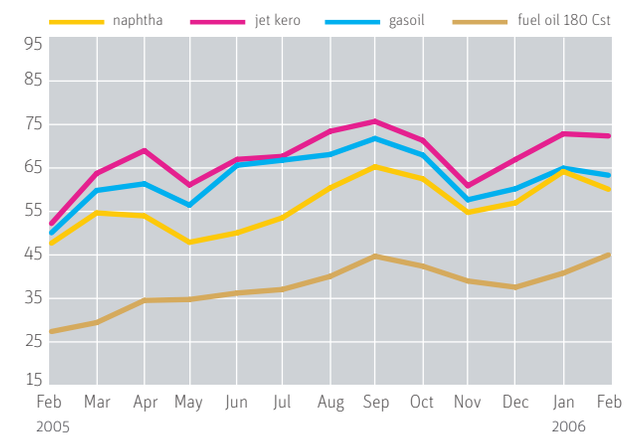


Table and Graph 8: Middle East Gulf market — spot cargoes, fob

$/b

		naphtha	gasoil	jet kero	fuel oil 180 Cst
2005	February	47.71	50.10	52.24	27.39
	March	54.66	59.83	63.74	29.44
	April	53.98	61.36	69.00	34.54
	May	47.91	56.45	61.09	34.75
	June	50.08	65.62	66.98	36.24
	July	53.53	66.78	67.66	37.05
	August	60.39	68.09	73.42	40.05
	September	65.28	71.78	75.70	44.71
	October	62.50	67.97	71.33	42.41
	November	54.78	57.69	60.91	39.00
	December	56.99	60.23	66.97	37.57
2006	January	64.19	64.95	72.85	40.82
	February	60.10	63.33	72.36	45.01



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Source: Platts. Prices are average of available days.

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Introduction to Canada's oil sands industry, April 6–7, 2006, Calgary, Canada; **April 12–13, 2006,** Fort McMurray, Canada. Details: Canadian Energy Research Institute, #150, 3512–33 Street, NW Calgary T2L 2A6, Canada. Tel: +1 403 282 1231; fax: +1 403 284 4181; e-mail: jstaple@ceri.ca; Web site: www.ceri.ca.

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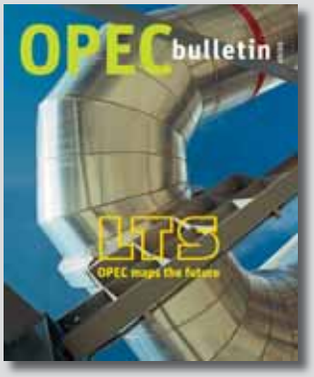

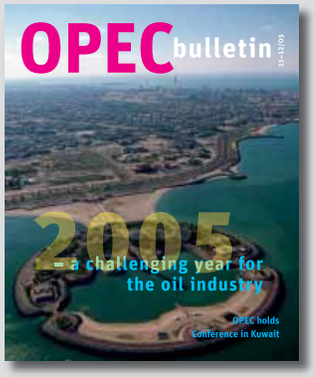

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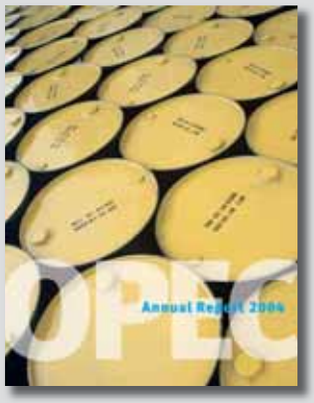

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