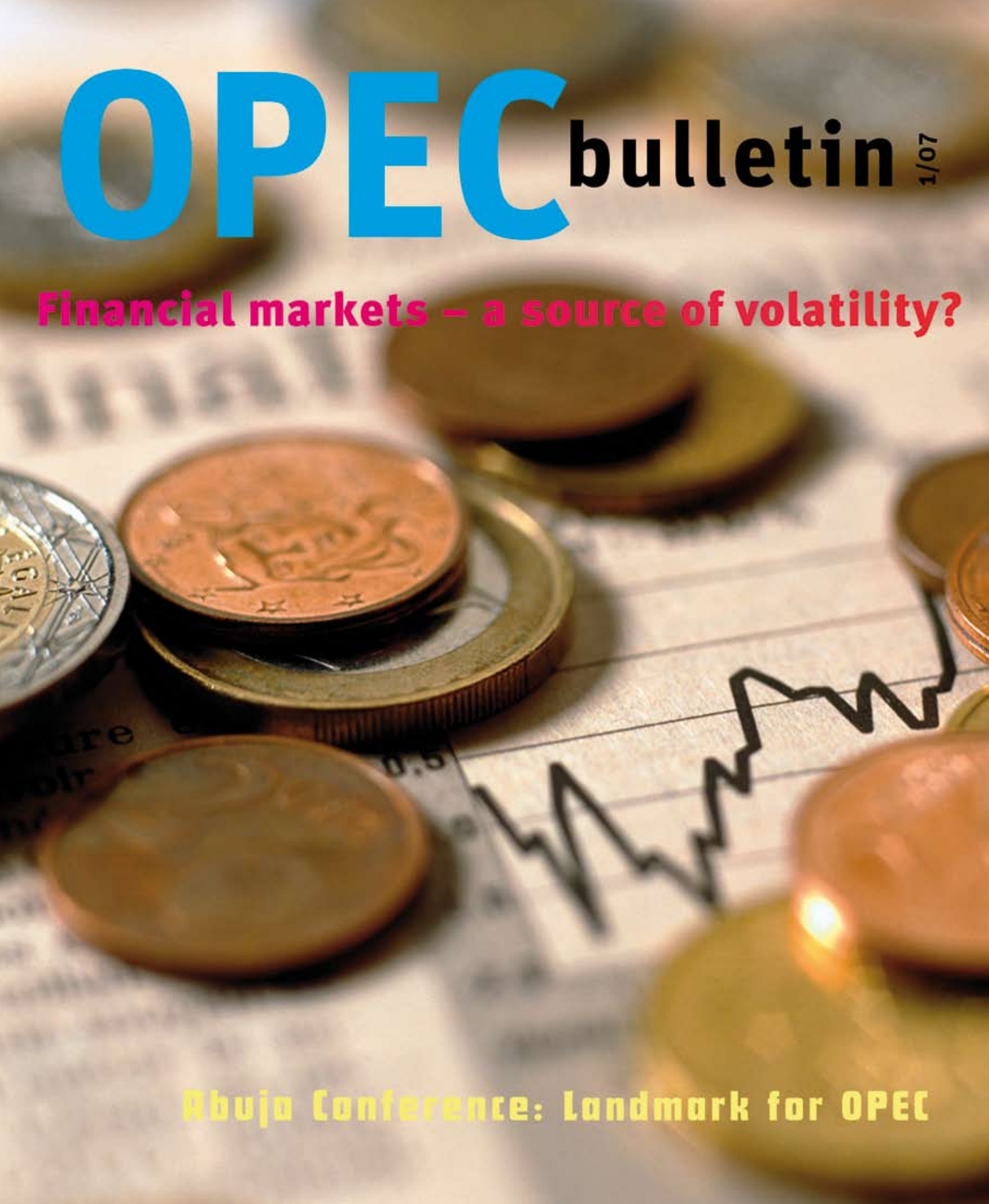
OPEC bulletin

1/07

Financial markets – a source of volatility?



Abuja Conference: Landmark for OPEC

Abuja – landmark Conference

Welcome to OPEC – the Government and citizens of the Republic of Angola!

Welcome back to Vienna, Abdalla Salem El-Badri, as OPEC Secretary General!

And welcome to the future, as we begin the build-up to the Third Summit of OPEC Heads of State and Government, to be held in Saudi Arabia later this year!

These expressions of welcome are the product of decisions reached at the 143rd (Extraordinary) Meeting of the Conference in Abuja, Nigeria, on December 14. They constitute, in turn, the culmination of extensive discussions at the highest levels during the course of the year under the direction of the Conference President, Dr Edmund Maduabebe Daukoru, Nigeria's Minister of State for Petroleum Resources.

Angola is the first new Member of our Organization in more than three decades. It extends OPEC's reach to a more southerly latitude than ever before, embracing a south-central African state of rapidly rising oil production and prodigious economic transformation. Indeed, Angola has one of the fastest-growing economies in the world. It is thus well-suited to joining our existing Members in meeting the myriad challenges facing the industry in the years ahead.

And for El-Badri, who is the first formally appointed Secretary General for three years, he is already well-known to the Secretariat in Vienna. He was Head of Delegation of the Socialist People's Libyan Arab Jamahiriya from 1990 to 2000, when he served in a Ministerial capacity as Secretary of, first, the People's Committee for Petroleum and, secondly, the General People's Committee for Energy. During the first of his two spells as Conference President, he assumed the responsibilities of Secretary General and so already has direct experience of this key post.

The importance of filling the post is underlined by the enhanced nature of the Secretary General's responsibilities in an increasingly globalized, high-tech world where the challenges facing the oil industry are ever more complex and demanding. This, in turn, reflects the heightened role of OPEC on the world energy stage.

Such a role commands OPEC's awareness of the need to keep moving with the times — hence the decision to hold the Summit of Heads of State and Government this year. As just the third summit in OPEC's 47-year history, this will be an event of paramount importance. It will reaffirm OPEC's commitment to its longstanding objectives and ensure that these are well-aligned to meet the unfolding challenges of the future, to the benefit of our esteemed Member Countries — they are, after all, the body and soul of our Organization! — and the world energy community at large.

In addition, the Conference undertook its latest round of market-stabilization measures.

'Abuja 2006' will thus be remembered as a landmark for the Organization.

It has given us plenty to build upon in 2007 and beyond. As ever, we maintain our unswerving resolve to do this.

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Financial markets — just what is their impact on the price of crude oil *(see story on the EU-OPEC workshop on pp26–45).*

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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 12 Members: Qatar joined in 1961; Indonesia and SP Libyan AJ (1962); United Arab Emirates (Abu Dhabi, 1967); Algeria (1969); Nigeria (1971); and Angola (2007). 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.

Editorial policy

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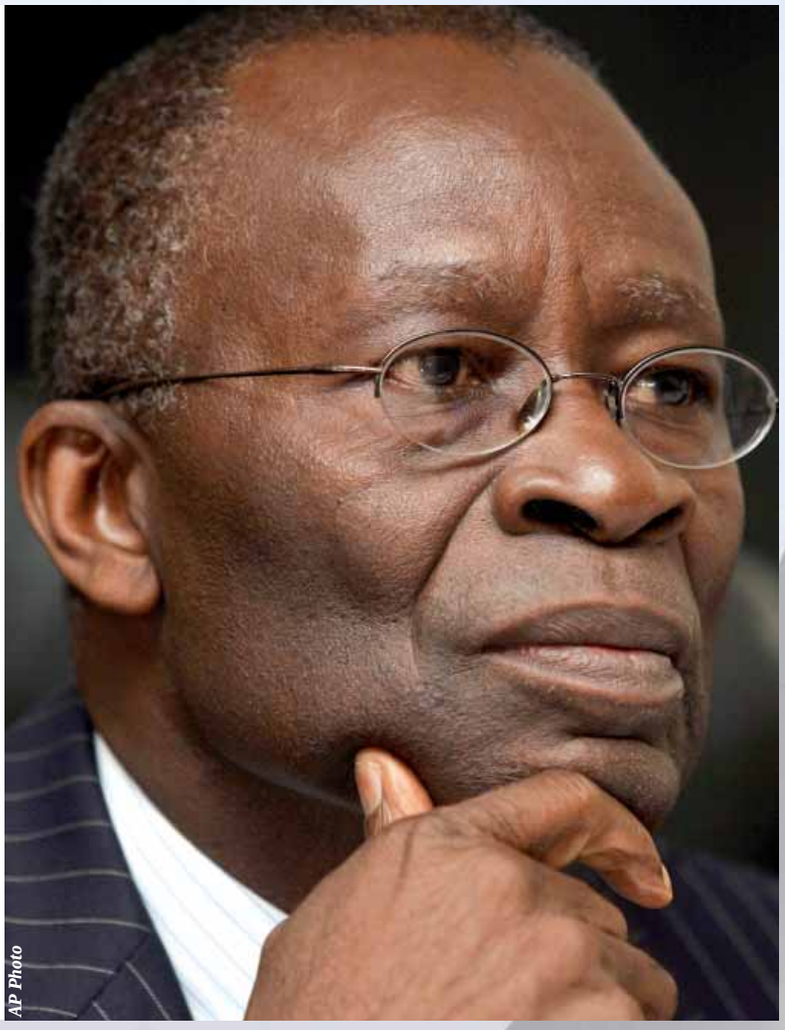


Dr Edmund Maduabebe Daukoru, Nigeria's Minister of State for Petroleum Resources, and OPEC Conference President in 2006, who was instrumental in helping to make the 143rd (Extraordinary) OPEC Conference a resounding success.

Main picture on this page shows the Abuja City Gate, a landmark of the federal capital.

- New Secretary General appointed
- Venue for Third OPEC Summit chosen
- Angola accepted as Organization's 12th Member
- Crude oil production cut further

QUITE UNIQUE!

Abuja OPEC Conference resolves some longstanding issues

Omar Farouk Ibrahim, OPEC Bulletin Editor-in-Chief, reports from the Nigerian capital on the outcome of the 143rd (Extraordinary) Meeting of the OPEC Conference. It was only the second time in the country's 35 years of Membership in the Organization that it had the privilege of hosting such a high-level OPEC gathering. Fittingly, the Ministerial talks proved to be truly extraordinary — in fact, a landmark occasion for both the country and the Organization.

The 143rd (Extraordinary) Meeting of the OPEC Conference, which was held in Abuja, Nigeria's federal capital, on December 13–14, 2006, has rightly been described as one of the most successful in the history of the 46-year-old inter-governmental Organization going by the number of very important lingering issues that it resolved.

Traditionally, OPEC Extraordinary Conferences are one-item agenda meetings, focusing on the current oil market situation. Policy and administrative issues, including the Secretariat's budget, are reserved for the bi-annual Regular Meetings of the Conference.

However, for over three years until the Abuja Conference, some issues, which had become so contentious, had kept recurring on the agendas of both the Ordinary and Extraordinary Meetings without a solution being found and thus having them deferred from one Meeting to the next.


Reuters

Substantive Secretary General

Top among these was the position of the OPEC Secretary General, which was first tabled before the Conference during its September 2003 Meeting. That Meeting could not agree on whom, among the three contenders for the position — from the Islamic Republic of Iran, the State of Kuwait and the Bolivarian Republic of Venezuela — to appoint as the substantive Secretary General of the Organization. As a result, the Meeting had directed the incoming President of the Conference to also take on the additional responsibility of Secretary General, while suggesting that he could make whatever arrangements he deemed fit for the day-to-day running of the Secretariat in Vienna.

Thus, when on January 1, 2004, Dr Purnomo Yusgiantoro, Indonesia's Minister of Energy and Mineral Resources, assumed the Presidency of the OPEC Conference, he combined it with the Secretary Generalship. Yusgiantoro decided to appoint the Indonesian Governor for OPEC, Dr Maizar Rahman, as Acting for the Secretary General. It was hoped that, within the year, the Conference could reach some consensus on the appointment, but 2004 passed without that consensus, even though Venezuela had decided to withdraw its candidature.

Hence, when the then Kuwaiti Energy Minister, Sheikh Ahmad Fahad Al-Ahmad Al-Sabah, became Conference President and Secretary General for 2005, he appointed

Left: Mohammed Barkindo, Acting for the OPEC Secretary General, talking to Eng Desiderio da Graça Verissimo e Costa (seated), the Angolan Minister of Petroleum.

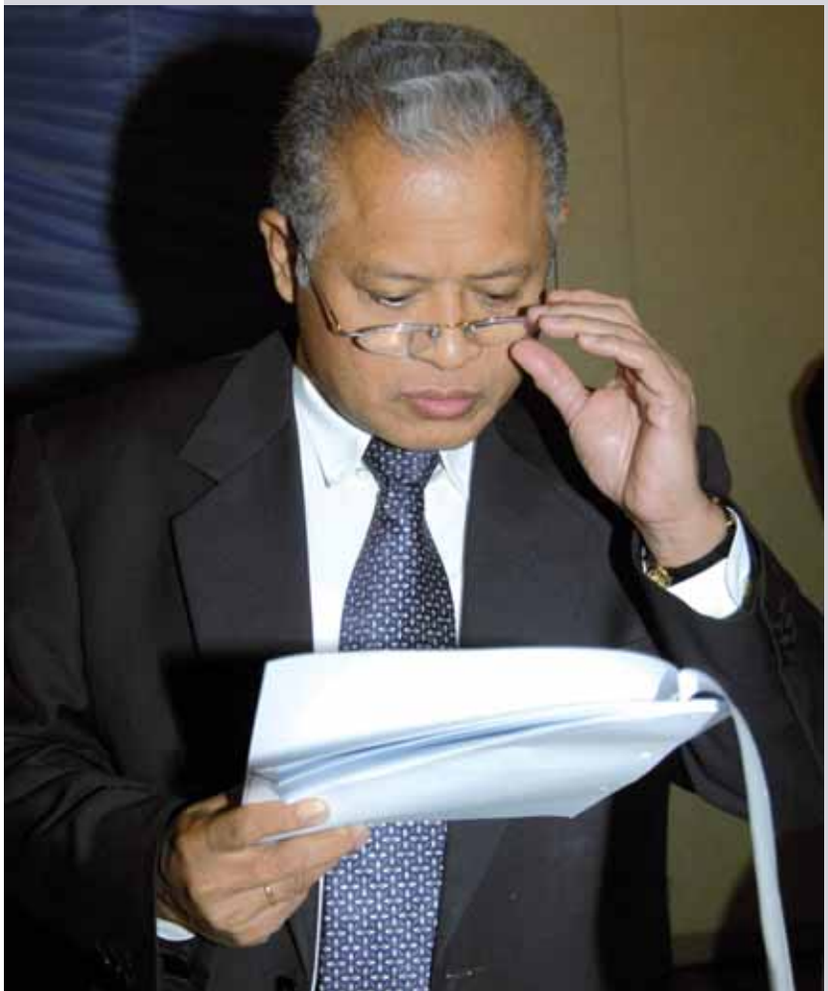
Below (l–r): Angola's Eng Desiderio da Graça Verissimo e Costa; Dr Chakib Khelil, Algerian Minister of Energy and Mines; Dr Edmund Maduabebe Daukoru (standing); and Dr Purnomo Yusgiantoro, Indonesia's Minister of Energy and Mineral Resources.

Left: Nigeria's President, General Olusegun Obasanjo, and Dr Edmund Maduabebe Daukoru (far left), Minister of State for Petroleum Resources, and then OPEC Conference President, opening the 143rd (Extraordinary) OPEC Conference.

Below: The Libyan Delegation headed by Dr Shokri M Ghanem (c), Chairman of the People's Committee, The National Oil Corporation (NOC); with Tarek M Hassan Beck (l), Governor for OPEC; and Ahmed B El Geroushi, the National Representative to OPEC.

Above: The Saudi Arabian Delegation to the Conference headed by Ali I Naimi (r), Minister of Petroleum and Mineral Resources; with (l–r) Dr Ibrahim H Al-Muhanna, Advisor to the Saudi Minister of Petroleum and Mineral Resources; HRH Prince Abdulaziz Bin Salman, Assistant Minister of Petroleum and Mineral Resources; Dr Majid A Al-Moneef, Governor for OPEC; and Yasser M Mufti, OPEC National Representative.

Below: Dr Purnomo Yusgiantoro, Indonesia's Minister of Energy and Mineral Resources.



Dr Adnan Shihab-Eldin, then Director of the Research Division at the OPEC Secretariat, and Kuwait's nominee for the position of OPEC Secretary General, as Acting for the Secretary General. Again, Shihab-Eldin served the whole term of Sheikh Al-Sabah's one-year Presidency without the Conference reaching a consensus on a substantive Secretary General.

The year 2006 saw Dr Edmund Maduabebe Daukoru, Nigeria's Minister of State for Petroleum Resources and Alternate Conference President for 2005, assuming the Presidency and Secretary Generalship. In line with what was fast becoming a tradition, Daukoru appointed an Acting for the Secretary General to oversee the day-to-day affairs of the Secretariat on his behalf. Daukoru's appointee was Mohammed Sanusi Barkindo, Nigeria's National Representative for OPEC and Deputy Managing Director of the Nigeria Liquefied Gas (NLG) Company. He was also the longest-serving member of the OPEC Economic Commission Board (ECB). The Conference expressed concern about the lack of continuity in the office of the Secretary General and called on Daukoru to do all he could to resolve the matter.

Seated at the table (l–r): Siham Abdulrazzak Razzouqi, Kuwaiti Governor for OPEC; Sayed Kazem Vaziri Hamaneh, Iranian Minister of Petroleum; and Javad Yarjani, Iranian OPEC National Representative.

Hossein Kazempour Ardebili, Iranian Governor for OPEC and Chairman of the OPEC Board of Governors for 2007.

The Third OPEC Summit

Another issue that had been lingering and which Daukoru was also called upon to find a solution to, was the convention of the Third Summit of OPEC Member Countries' Heads of State and Government.

The background to this issue was that for the first 15 years of the existence of OPEC, the highest-level meeting for Member Countries was the OPEC Conference, where heads of delegation of OPEC Members, usually the ministers of energy, oil or petroleum, represented their countries.

However, following the increasing significance that oil revenue came to acquire in Member Countries' national development efforts from the early 1970s, and given the impact of rising oil prices in the international oil market on poorer developing states, OPEC decided to hold a Summit of their Heads of State and Government, with a view to examining their position in the global economic system, as well as finding ways to assist other less-developed countries who were not endowed with oil resources.

Dr Hussain Al-Shahristani, Iraqi Minister of Oil.

Daukoru assumed the Presidency of the Conference, he was given the Herculean task of finding a solution to this problem too.

To find some formulae that were acceptable to all parties, Daukoru announced that he would embark on a shuttle diplomacy to the capitals of the four countries who were literally waving their veto cards: the Islamic Republic of Iran and the State of Kuwait, for the position of Secretary General, and Libya and Saudi Arabia for the hosting rights of the Third Summit.

Although Daukoru did not eventually make it to the State of Kuwait, he was able to meet with the Kuwaiti Energy Minister at a different venue where both ministers tried hard to find a solution to the lingering issue of the appointment of a substantive Secretary General for the Organization.

Daukoru admits that even though he was unable to get all that he set out to achieve on those missions, he was satisfied that all parties were ready to make some concessions, move away from their earlier rigid positions, and agree to discuss issues in a more dispassionate way.

The first such meeting was held in Algiers, Algeria in 1975. Among the remarkable decisions of that Meeting was the creation of the OPEC Fund for International Development (OFID), which began operations in 1976. It is also based in Vienna.

For another 25 years, no other Summit was held until Hugo Chávez Frías, the then newly elected President of the Bolivarian Republic of Venezuela, set the ball rolling with his tour of OPEC Member Countries, drumming up support for another Summit.

The Second Summit thus came to be held in Caracas in 2000. Among the decisions of the Caracas Summit was that the OPEC Summit of Heads of State and Government was to be institutionalized, and held at five-year intervals. The OPEC Conference of Ministers was saddled with the responsibility of determining the venue and dates.

As the Summit year approached, two Member Countries indicated their interest to host the meeting — the Socialist People's Libyan Arab Jamahiriya and the Kingdom of Saudi Arabia. Once again, there was no unanimity. So, a resolution could not be passed, thus seeing 2005 come and go without the Summit.

It was the same experience in 2006. Thus, when

Dr Falah J Alamri, Iraq's OPEC Governor and Alternate Chairman of the Board of Governors for 2007.

Above: Nigerian Delegates (l–r) Joe Ibeh, OPEC National Representative; Ammuna Lawan Ali; Governor for OPEC; Eng Mustapha Bukar, Director of Planning, Research and Statistics, at the Ministry of Petroleum Resources; M A Musawa, from the Nigerian Embassy, Vienna.

Left (l–r): Rafael Ramirez, Venezuelan Minister of Energy and Petroleum; Iván A Orellana, Venezuelan Governor for OPEC; and Raul Cardoso Maycotte, Managing Director of Pemex PMI, Madrid, who headed the Mexican Observer Delegation.

AP Photo

Above: The Angolan Delegation, headed by Eng Desiderio da Graça Verissimo e Costa (c), seen consulting here with (standing) José Paiva, Director of Sonangol, the national oil company.

Above: Heading the Delegation of Observer country Oman, Dr Mohammed bin Hamad Al-Rumhy (r), Minister of Oil and Gas, with Salah bin Salim Al Harthy.

He had perceived some willingness on the part of each of those Member Countries to make the necessary sacrifice for the good of all. He was convinced that if he embarked on another round of shuttle diplomacy, the differences between the contending countries would be narrowed substantially, thus leading to the emergence of a consensus on the issues at hand.

However, Daukoru could not go on the second mission, due to the exigencies of his work in Nigeria. That notwithstanding, he was convinced that enough progress had been recorded to warrant including those issues on the agenda of the Abuja (Extraordinary) Meeting of the OPEC Conference.

The limits and attractions of consensus

It is noteworthy that decisions on both the issue of the Secretary Generalship and the Summit required Conference resolutions and, statutorily, OPEC Conference resolutions require, at least, the endorsement, if not outright support, of all full Members. Thus, any one Member Country could literally hold the Organization to ransom, by refusing to endorse a majority decision.

While this statutory arrangement may have its weaknesses, as seen, for example, in the delay in appointing a substantive Secretary General, and agreeing on the venue of the Third OPEC Summit, it has its advantages too.

In the first place, that provision of the OPEC Statute was, to a large extent, responsible for the growth in the number of countries that make up OPEC from the initial five founders to the current 12. For most of the countries that came to join OPEC after 1960, they needed guarantees that their sovereignty was not going to be compromised by belonging to the Organization.

This stand was informed by the fact that, at the time of the founding of OPEC, a number of colonies were becoming independent nations and their sovereign right to take decisions they considered to be in their national interest was jealously guarded.

Indeed, for at least two countries that came to join OPEC, that statutory provision made the difference between joining and not joining. But so much has transpired on the international political scene since the 1960s.

The oil market outlook

The third issue on which a decision was taken without much ado was the recommendation of the OPEC

Right: Eng Hany Soliman, Egypt's Ambassador to Nigeria, and Head of his country's Observer Delegation to the Conference.

Left: Sudanese Observer, Dr Awad Ahmed Al Jazz, Minister of Energy and Mineral Resources.

Ministerial Monitoring Sub-Committee (MMSC), which had met on the eve of the Conference under the Chairmanship of Sayed Kazem Vaziri Hamaneh, Iranian Minister of Petroleum, and Head of its Delegation.

The Conference, having noted the observations and reviewed the recommendations of the Sub-committee, decided to endorse the recommendations. In its official statement on the decision, the Conference noted that it "reviewed the oil market outlook, including the overall demand/supply expectations for the year 2007, in particular the first and second quarters, as well as the outlook for the oil market in the medium term" and concluded that "there is more than ample crude supply, high stock levels and increasing spare capacity."

It also noted that "although the global economy is forecast to continue to grow, economic growth is expected to slow down in 2007."

The Conference observed that while world oil demand was estimated to increase by 1.3 million barrels per day in 2007, this was likely to be more than offset by a

Above left: Dr Chakib Khelil, Algerian Minister of Energy and Mines, seen during an interview for the OPEC live streaming.

Left: The Kuwaiti Delegation headed by Sheikh Ali Al-Jarrah Al-Sabah (c), Minister of Energy; Siham Abdulrazzak Razzouqi (r), OPEC Governor; and Abbas Naqi (l), Assistant Undersecretary, Economic Affairs, Ministry of Energy.

Above: From Qatar, Abdullah bin Hamad Al Attiyah (c), Second Deputy Prime Minister, Minister of Energy and Industry, with Kuwait's Sheikh Al-Sabah (r); and Dr Mohammed bin Hamad Al-Rumhy (l), Oman's Minister of Oil and Gas.

Right: Mohamed Bin Dhaen Al Hamli, United Arab Emirates Minister of Energy, and OPEC Conference President for 2007.

Accepting Angola's application for Membership is the then OPEC Conference President, Dr Edmund Maduabebe Daukoru (l), from Eng Desiderio da Graça Verissimo e Costa (r) Angolan Minister of Petroleum. Mohammed Barkindo (c), Acting for the OPEC Secretary General, applauds the move.

projected increase of 1.8m b/d in non-OPEC supply, its highest rise since 1984.

Taking all factors into consideration, the Conference decided to reduce current OPEC production by 500,000 b/d, with effect from February 1, 2007, in order to balance supply and demand *(see page 20 for full text of the communiqué).*

Angola becomes full Member

The fourth issue on which the Conference deliberated and took a decision was not one of the lingering issues. It was a fresh agenda item, presented to the Conference for the very first time in Abuja.

The issue was the consideration of the formal application of the Republic of Angola for full Membership of the Organization. The last time the OPEC Conference deliberated on an application for full Membership was in 1975 when Gabon's application was considered and endorsed in July of that year. Gabon, which was actually an Associate Member since December 1973, left the Organization in December 1994.

Article 7 of the OPEC Statute provides for the admission of new Members into the Organization and the requirements for Membership. It may be recalled that Angola, along with a number of other oil-producing countries, has had observer status at the OPEC Conference for several years.

As observers, they were not part of the OPEC decision-making process, even though they were given the privilege of addressing the plenary sessions of the Conferences. Because they were not full Members, they were not bound by the decisions of the OPEC Conference. That notwithstanding, it was expected that, as stakeholders in the industry, they would support OPEC decisions, which are meant to bring or maintain stability to the oil market.

The question of whether a bigger OPEC controlling a larger share of the international oil market, or a smaller OPEC with just a sizeable supply, is better placed to perform its needed stabilizing role in the international oil market has been a recurring one: is oil market stability best maintained by having all or a majority of oil-producing countries joining OPEC, thus ensuring that the Organization effectively controls the majority of world oil supply?

Or is the market better maintained by having a smaller cohesive Organization controlling enough supply to be able to make a difference in the market? Also, how easy will it be to reach consensus on some critical issues if the Membership is so large and from different backgrounds?

Upon the assumption of Daukoru as OPEC Conference President, Chief Olusegun Obasanjo, Nigeria's President, had written to the leaders of the two countries from Africa that have been observers at OPEC Conferences, inviting them to consider applying for full Membership of the Organization. These were Angola and Sudan.

Just before the June 1, 2006 OPEC Conference in Caracas, there was speculation in the media that Sudan was going to formally apply for Membership at the Caracas Meeting. But that did not happen. Then, in late November 2006, the government of Angola announced its decision to join OPEC. By that time, the agenda of the Abuja Meeting of the Conference had been prepared and dispatched to Ministers.

Moreover, since there was no formal communication received from Angola, the Secretariat could not act on the media reports. Furthermore, the reports had quoted a top government official as saying that Angola would join OPEC by March 2007. But things moved faster than the media had speculated. Angola, in fact, came to the Abuja Conference prepared to make a formal submission of its application for full Membership.

In appreciation of the Angolan gesture, the Conference arranged for a special ceremony for the presentation of the application, just before the closed session of the Meeting began. The Meeting also agreed to have the application on its agenda item.

The Kingdom Tower in Riyadh, Saudi Arabia will be host to the Third Summit of OPEC Heads of State and Government in 2007.

Mohammed Barkindo (l); with Dr Hasan M Qabazard (r), Director of OPEC's Research Division; and Nadir Gürer, Senior Research Analyst at the Organization's Secretariat.

Having cooperated with OPEC for several years, it was not difficult getting a unanimous decision to admit Angola as the 12th Member of the Organization, with effect from January 1, 2007.

Conference decisions

The Conference was able to resolve the stalemate on the position of a substantive OPEC Secretary General, when both the Islamic Republic of Iran and the State of Kuwait conceded to the proposal to have a consensus candidate from a Member Country that had not earlier indicated an interest in the position, namely the Socialist People's Libyan Arab Jamahiriya, in the person of Abdalla Salem El-Badri. El-Badri was at one time a Member of the OPEC Conference, having led his country's delegation to the OPEC Meetings for a decade between 1990 and 2000 *(see page 25 for full biography).*

On the Summit, the noble decision of Libya to concede to the Kingdom of Saudi Arabia also ensured a geographical spread in the venues of hosting the OPEC Summits — first in Africa in 1975, then South America in 2000 and now the Middle East in 2007.

Another important decision taken by the Conference was the approval of the recommendation of the Board of Governors for the strengthening of the OPEC Secretariat, in line with the recommendations of the OPEC Long-Term Strategy, to enable the Organization meet the future challenges of the industry, and its Member Countries. And finally, the Conference approved the 2007 Secretariat budget, which is funded from equal contributions from each of the Member Countries. That brought to six the very important decisions taken unanimously in just one meeting, making the Abuja Conference truly unique.

Obasanjo calls for more intra-OPEC cooperation

Earlier, in an address at the opening ceremony, Nigeria's President, Chief Olusegun Obasanjo, had diplomatically challenged the Conference to find solutions to the lingering issues of the appointment of the substantive Secretary General, as well as fix a date and venue for the Third Summit, noting that he and his colleagues took the decision to have the Summit institutionalized.

Above: OPEC Secretariat officials (r–l): Tareq Amin, PR Coordinator; Abdullah Al-Shameri, Head, Office of the Secretary General; Alejandro Rodriguez, Head, Administration and Human Resources Department; Fuad Al-Zayer, Head, Data Services Department; Mohammad Alipour-Jeddi, Head, Petroleum Market Analysis Department; Dr Hasan M Qabazard, Director, Research Division.

The President had also commended OPEC for reaching out to other stakeholders in the oil industry, with the establishment of such high-profile dialogues as the EU-OPEC Energy Dialogue, and the OPEC-Russia and the OPEC-China dialogues. He noted that these dialogues had tremendously improved understanding and harmony between major oil-consuming countries, non-OPEC producing states and OPEC Members and this, he stressed, was a good development that should be encouraged.

But President Obasanjo was not happy with the level of existing intra-OPEC cooperation. He noted that "intra-OPEC cooperation in fields other than oil, such as agriculture, banking, economics, education, finance, medicine, trade, tourism, sports, culture and a host of others, was virtually non-existent.

Even within the oil industry, the cooperation that existed among Member Country national oil companies "leaves a lot to be desired", he maintained.

Chief Obasanjo further noted that "in these challenging times, OPEC's statutory objective of stabilizing the international oil market is made more difficult by extraneous factors like the cost of services, which have witnessed dramatic increases in recent times.

"It appears that what our Countries have gained from controlling our God-endowed natural resources is now being lost through the near total domination of the services sector of the industry by a few foreign companies. Admittedly, the oil industry has always been a capital-intensive and high-technology industry, thus giving advantage to the industrialized nations. However, it must be admitted that our individual Member Countries have varying experiences in the oil industry, some dating back to nearly a century.

"A few are able to fabricate most of the parts needed for their industrial plants. If we pool this expertise, share experiences, research findings and technologies, you will be surprised at the speed with which we will come to effectively control, not only our resources, but also the technology for exploiting them," he added.

Press Release

143rd (Extraordinary) OPEC Conference

The 143rd (Extraordinary) Meeting of the Conference of the Organization of the Petroleum Exporting Countries (OPEC) convened in Abuja, the Federal Republic of Nigeria, on December 14, 2006, under the Chairmanship of its President, Dr Edmund Daukoru, Minister of State for Petroleum of Nigeria and Head of its Delegation, and its Alternate President, Mohamed Bin Dhaen Al Hamli, Minister of Energy of the United Arab Emirates and Head of its Delegation.

The Conference welcomed the presence of the Minister of Petroleum of the Republic of Angola, the Minister of Oil and Gas of the Sultanate of Oman, and the Minister of Energy and Mining of the Republic of Sudan, as well as high-level representatives from the Arab Republic of Egypt and Mexico, attending the Meeting as Observers.

The Conference considered the report of the Ministerial Monitoring Sub-Committee, whose Members the Conference again thanked for their untiring efforts on behalf of the Organization, as well as other presentations.

Having reviewed the oil market outlook, including the overall demand/supply expectations for the year 2007, in particular the first and second quarters, as well as the outlook for the oil market in the medium term, the Conference observed that market fundamentals clearly indicate that there is more than ample crude supply, high stock levels and increasing spare capacity. The Conference noted that, although the global economy is forecast to continue to grow, economic growth is expected to slow down in 2007. Moreover, while world oil demand is estimated to increase by 1.3m b/d in 2007, the Conference observed that this is likely to be more than offset by a projected increase of 1.8m b/d in non-OPEC supply, its highest rise since 1984.

The Conference also noted, with satisfaction, that the decision it had taken in Doha to reduce production by 1.2m b/d, as of November 1, 2006 had succeeded in stabilizing the market and bringing it into balance, although prices remain volatile, reflecting the continuing supply overhang in the market.

In view of the above, the Conference decided to reduce current OPEC production by 500,000 b/d, with effect from February 1, 2007, in order to balance supply and demand. The Conference further reiterated the Organization's determination to take all measures deemed necessary to keep market stability through the maintenance of supply and demand in balance, for the benefit of producers and consumers alike. Concurring on the need, more than ever, for extreme vigilance in assessing the market during the coming months, the Conference also confirmed that its next Ordinary Meeting will be held on March 15, 2007, in Vienna, Austria.

In accordance with the provisions of Article 7 of the OPEC Statute, the Conference unanimously admitted the Republic of Angola as the 12th Full Member of the Organization, with effect from January 1, 2007.

The Conference approved the Budget of the Organization for the year 2007.

The Conference decided to appoint Abdalla Salem El Badri, from the Socialist Peoples Libyan Arab Jamahiriya, as Secretary General of the Organization for a period of three years, with effect from January 1, 2007.

The Conference agreed that the Third Summit of OPEC Heads of State and Government will take place in the Kingdom of Saudi Arabia in 2007.

The Conference paid glowing tribute to the excellent performance of its outgoing President, Dr Edmund Daukoru, Minister of State for Petroleum Resources of Nigeria and Head of its Delegation, expressing particular appreciation of his also shouldering the responsibilities of Secretary General of the Organization during another challenging year, 2006, and praised his successful endeavours in the advancement of the aims of OPEC and its Members. The Conference equally commended Mohammed S Barkindo, Nigeria's National Representative to the Economic Commission Board, for his excellent conduct of the day-to-day affairs of the Secretariat, as Acting for the Secretary General, during the same period.

The Conference expressed its sincere gratitude to General Olusegun Obasanjo, Head of State of the Federal Republic of Nigeria, as well as the Government and people of Nigeria, for having hosted the Meeting and for the friendly welcome extended to the Conference and all Delegates. In addition, the Conference recorded its special thanks to Dr Edmund Daukoru, Nigerian Minister of State for Petroleum Resources, and his Staff for their warm hospitality and the excellent arrangements made for the Meeting.

The Conference passed Resolutions that will be published on January 14, 2007, after ratification by Member Countries.

Above: Conducting the final press conference of the 143rd (Extraordinary) OPEC Meeting are Dr Edmund Maduabebe Daukoru (second r), then Conference President and Nigerian Minister of State for Petroleum Resources; Mohammed Barkindo (second l), Acting for the OPEC Secretary General; Dr Hasan M Qabazard (r), Director, OPEC Research Division; and Dr Omar Farouk Ibrahim, Head of OPEC's PR & Information Department.

Below: Mohammed Barkindo, answering questions posed by members of the international media.

Abuja party mood brings out the best in OPEC delegates

by Ulunma Angela Agoawike

During a State Dinner at the Banquet Hall of the State House, Nigeria's President, Chief Olusegun Obasanjo, presented gifts to all Ministers attending the Conference just as he received a gift from OPEC (picture below).

It was not a case of all work and no play at the Abuja Conference. Even though some hard decisions had to be made, decisions that required some serious reflection, the human mind and body, like the market, needed some balancing.

That balancing act was first provided by the OPEC Secretariat, which hosted the Secretariat's delegation to a dinner and cultural performances on December 12 along the poolside of Le Meridien Hotel, in Abuja.

It was a night that saw some Secretariat top shots display their 'hidden' talents as they conjured up some acrobatic displays on the dance floor. Unfortunately, some of the OPEC Governors present at the dinner kept their hidden talents just that way — hidden!

December 13 (one day ahead of the Conference) was set aside for sightseeing as delegates were driven around the city of Abuja. The tour was part of the 30th anniversary package put together by the authorities of the country's Federal Capital Territory, FCT.

Other activities of the anniversary celebrations included a spectacular Gala Dinner, hosted by the Minister of the FCT, Mallam Nasir el Rufai, on December 14, at the Africa Hall of the Abuja International Conference Centre. The highlight of the night was the conferment of the Honorary Citizenship of Abuja on all OPEC Heads of Delegation by the Minister, as well as a fashion show and a display of the dance routines of the country's many ethnic groups.

Before that Gala Dinner, however, a State Dinner was hosted on the night of December 13 by the country's President, Chief Olusegun Obasanjo, at the Banquet Hall of the State House. In attendance were all Heads of Delegation, other delegates and top government officials.

At this splendid dinner, the rich cultural heritage of the people of Nigeria, manifesting in their huge variety of food, dance groups and clothes, as well as the unity that has resulted from such diversity, were all on display, much to the admiration of the delegates. President Obasanjo also used the opportunity to present gifts to

Below: Colour and splendour, OPEC Secretariat team members adorned in traditional Nigerian attire at the gala dinner.

Pictured on this page are examples of the rich cultural heritage of the people of Nigeria that were on display at the OPEC Conference.

the Ministers, just as the OPEC Secretariat reciprocated with its own gift to the President.

Also, the OPEC Secretariat team members did not disappoint as they adorned themselves in traditional Nigerian clothing, thereby drawing admiring glances from all.

In fact, even before the dinner, Secretariat staff had already immersed themselves in traditional Nigerian attire, thanks to tardy arrangements by British Airways, which led to all the luggage of the delegates not arriving in Abuja with their flights. This included materials for the Conference, as well as all personal effects. And so, on arrival at the Transcorp Hilton, the venue for the Conference, the delegates had trooped to the nearby Wuse Market to shop for a change of suitable clothing.

Abuja, like all parts of Nigeria, has a very hot and humid climate. Therefore, in shopping for alternative clothing, the Secretariat delegates took care of that too, by having clothes most suited for the weather conditions of the host city.

OPEC Heads of Delegation were invited to plant trees at the newly set up Abuja @ 30 Tree Park. Cultural groups welcomed the Ministers. Seen right is Eng Desiderio da Graça Verissimo e Costa, Angola's Minister of Petroleum.

Some members of the delegation also traveled beyond Abuja, in fact all the way to Kaduna and Zaria in Northern Nigeria, a journey of more that three hours by road, while others took a flight to Lagos, to visit the oil rigs of ExxonMobil. These trips made up for the much-anticipated leisure visit to the Obudu Cattle Ranch Resort in Calabar, Cross River State, but which was cancelled at the last minute due to inclement weather conditions around the resort, which were not conducive for landing aircraft at the time of the planned trip.

El-Badri
unanimously elected new OPEC SG

Oil technocrat **Abdalla Salem El-Badri** of the Socialist People's Libyan Arab Jamahiriya, who is well known and respected in international oil circles, took over as Secretary General of OPEC for a three-year term from January 1, 2007. He is based at the Organization's Secretariat in Vienna, Austria.

El-Badri, who is 66, is the first substantive Secretary General of OPEC since 2003, ending years of impasse over the issue. He actually held the position for six months in 1994, when he was also President of the OPEC Conference. He was appointed OPEC President again in 1996.

The following is a detailed biography of El-Badri, who was born in Ghamminis, Libya in May 1940 and is married with four daughters and one son.

Education

BS degree in Accounting and Business Administration, Florida Southern, United States; advanced courses in Finance and Management, US and Libya.

Posts held

1965–77

Worked with Esso Standard (now ExxonMobil) as Assistant Accountant; Coordinator Management Information Systems (MIS); and Assistant Controller.

1977–80

Member of the Board of Directors, Umm Al Jawabi Oil Company (ex American Amoseas).

1980–83

Chairman, Waha Oil Company, a joint-venture company between the National Oil Corporation (NOC) of Libya, Conoco (now ConocoPhilips), Amerada Hess, and Marathon Oil.

1983–90

Chairman, National Oil Corporation (NOC) of Libya.

1990–92

Secretary of the People's Committee for Petroleum — *(Minister of Petroleum)*.

1993–2000

Secretary of the General People's Committee for Energy — *(Minister of Energy, later Petroleum & Electricity).*

2000

Chairman, National Oil Corporation (NOC) of Libya.

2000–02

Deputy Secretary of the General People's Committee of Libya for Services (Education, Health, Electricity, Transportation, Research) — *(Deputy Prime Minister for Services).*

2002–04

Deputy Secretary of the General People's Committee of Libya — *(Deputy Prime Minister).*

2004–06

Chairman, National Oil Corporation (NOC) of Libya.

Additional positions held

President of the OPEC Conference — 1994 (six months).
Secretary General of OPEC — 1994 (six months).
President of the OPEC Conference — 1996–97 (six months).
President of the Organization of Arab Petroleum Exporting Countries (OAPEC) — 1998.
Chairman of the Board of Directors of the Arab Petroleum Services Company (a firm affiliated to OAPEC) — 1987–90.
Member of the Board of Libya Oil Invest (Tamoil).
Chairman of the Board of Libya Oil Invest (Tamoil) — 2005–06.

Other activities

Joined and headed various committees established by OPEC.
Joined and headed various committees related to the reorganization of the Libyan oil industry.
Undertook several studies concerning oil, gas and electricity in Libya.
Joined and headed various committees concerning the activities of the Libyan state.
Attended numerous international conferences as participant and/or speaker.

Volatility

Workshop takes in-depth look at ...

The impact of financial markets on crude oil prices

How well does the current spot and future market structure perform the functions of price discovery, price transparency and risk transfer?
And has greater financial participation in oil significantly influenced oil prices and price volatility?
These were two questions that a joint EU-OPEC workshop set out to answer in Vienna recently.

The OPEC Bulletin's ***Edward Pearcey*** *reports from the Hofburg Palace in the Austrian capital, venue of the latest initiative held under the umbrella of the EU-OPEC Energy Dialogue.*

The latest chapter in OPEC's growing energy dialogue with the European Union (EU) was marked in Vienna, Austria in early December 2006 when the two sides held a joint workshop to study the impact of the financial markets on the price of crude oil.

The workshop was co-chaired by OPEC's then Acting for the Secretary General, **Mohammed Barkindo,** and the EU's Director for Conventional Energy Sources, **Heinz Hilbrecht.**

The gathering looked at two important questions — how well the current spot and future market structure performs the functions of price discovery, price transparency and risk transfer; and whether greater financial participation in oil has significantly influenced oil prices and price volatility.

Discussions over the two days encompassed a wide range of differing views and perspectives from a diverse selection of speakers, ranging from oil companies, investment banks, stock exchanges, and regulators, to research institutions, hedge funds, pension funds, producers and inter-governmental agencies.

The workshop highlighted the increasing integration of the physical and financial oil markets, as well as the considerable potential for even greater interaction. Delegates heard how, over the last few years, financial market instruments had diversified with the market continuing to evolve.

"The positive impact of financial markets, through liquidity and greater transparency in price discovery, was recognized, as well as the possible adverse effects, such as higher price volatility if investors periodically exaggerate price trends," commented a joint press release issued at the end of the workshop.

Additionally, concern was expressed that futures and futures options were based on a very narrow volume of physical trading in major benchmark crudes, which pointed to the need for, among other things, the introduction of more representative physical benchmark contracts.

Participants also emphasized the need for good regulation and the release of more frequent and high-quality market data, which would benefit all market participants. It was agreed that there was a need to expand initial research on "this complex and important issue".

The workshop represented the latest thrust in the EU-OPEC Energy Dialogue, which was established by the two sides at a ministerial meeting in Brussels, Belgium, in June 2005.

Since that time, two further ministerial meetings have been held — in December 2005 and June 2006 — with

OPEC's Acting for the Secretary General, Mohammed Barkindo (r), and the EU's Director for Conventional Energy Sources, Heinz Hilbrecht (l).

a fourth round of talks scheduled for June this year. The initiative has also seen a joint roundtable on oil market developments and future prospects, held in November 2005, and a joint conference on carbon capture and storage, which was convened in September 2006. The next event planned is a workshop on energy policies, to be held in the first half of 2007.

Also planned as part of the energy cooperation programme is a joint study on the refining sector, as well as the establishment of an EU-OPEC energy technology centre, to serve as a focal point for launching joint cooperation and research on such issues as market stability, investment, workforce management and the environment. A meeting of experts is to take place in early 2007 to further consider this proposal, for a report to be presented to the next annual ministerial meeting.

All these developments have already underlined the value of the Energy Dialogue for improving communications and understanding between the two sides. Both the EU and OPEC face common challenges in the years ahead, stemming mainly from the need to ensure a more complete approach to energy security, including both supply and demand.

The Dialogue has provided the EU and OPEC with the opportunity to set priorities on issues of mutual concern, particularly supply and demand patterns. It has allowed the two sides to learn more about each other's needs and aspirations and the way their respective operations are conducted, an approach that is considered of paramount importance when establishing a long-term meaningful relationship.

Much work is being carried out behind the scenes in both Brussels and Vienna to ensure that the initiative not only lives up to expectations, but also moves forward in a structured, timely and effective manner, in accordance with decisions reached at the respective ministerial meetings.

The overall aim is to formulate and nurture a dialogue that addresses all the practical issues affecting the two sides' operations and to arrive at workable, realistic solutions that can effectively make the path of oil's future less bumpy and more effective.

Jorge Montepeque, Global Director, Market Reporting, Platts.

Yasser M Mufti, National Representative for OPEC, Saudi Arabia.

Philip Verleger, of PKVerleger LLC.

OPEC remains committed to engaging in any fruitful dialogue with consuming nations, in order to acquire a greater overall understanding of the challenges facing the different parties involved and to determine the best means of meeting such challenges in a constructive and harmonious manner.

The Organization has always believed that, through such dialogue, measures can be adopted that will lead to an open, transparent and stable market, beneficial to all participants, producers and consumers alike.

Joan MacNaughton, UK Department of Trade and Industry.

The enthusiasm and hard work of both the EU and OPEC towards enhancing this process is already clear and this will serve the interests of both groups, as well as those of the oil market itself and the global economy in general.

Given the considerable uncertainties surrounding the international oil market today, it is fitting that such promising ties between producers and consumers are being developed. This is especially so concerning the EU and OPEC, considering that the Union is the second-largest energy-consuming region in the world, while OPEC, in possessing some 80 per cent of global oil reserves, will be increasingly called upon to supply the extra oil the world will need in the future.

The workshop was divided into seven busy sessions. These, in turn, looked at: The rise and significance of the financial oil markets; Oil trading and the interaction between the physical and paper markets; The structure of the future markets, exchanges and regulators; New players in the market, hedge funds and institutional investors; Financial markets — identifying and measuring price impact; Recent developments in the financial oil markets — the view from consumers; and The multiple role of financial institutions in the oil market.

After opening remarks by both Barkindo and Hilbrecht *(see pages 34–38),* the keynote address was delivered by **Hiroshi Watanabe,** Vice Minister at the Minister of Finance, Japan *(see p39).* Altogether, there were well over 30 guest speakers, who covered numerous subjects, many of which were highly technical and complex.

Discussions were set against a background of the rise in oil prices seen over the last few years, which, although lower in real terms than the levels seen in the mid 1970s, still represent an issue that touches, in some way, most everyone connected with the global oil industry today.

"Some people think prices will go up, some think prices will go down. Some people think speculation is bad, some think it is good." That was the conflicting view put forward by **Jorge Montepeque,** Global Director, Market Reporting, Platts, which perhaps summed up perfectly one's perception of the complex and unpredictable nature of the international oil market.

He told delegates that, in his everyday dealings with the market, he had formed the opinion that the best cure for a high price is — a high price. "If the price is high enough, investment will be attracted and eventually prices will fall."

Montepeque argued that the market drivers over the past five years had been rampant oil demand growth, particularly in Asia; strong global economic growth; limited spare production capacity outside the Middle East; a constrained refining environment; and, last but not least, speculative investments in energy markets.

"Markets tend to operate in cycles of two to five years," he said. "The market is also expert at making products that will sell and has also enabled the building of inventories for several years."

The market, he argued, was now grappling, not only with tight refining capacity, but also declining refining margins. Yet, Montepeque argued that commodities were sometimes not seen as a good investment as companies

Tim Bullock, Regional Business Leader, Europe Africa Oil, BP.

Dr Hasan M Qabazard (l), Head of OPEC's Research Division, and the EU's Heinz Hilbrecht (r).

Edward Krapels, Director, Financial Energy Market Services, ESAI.

must pay for the storage of products, often meaning that the yield was low. "As such," he said, "there may be a movement away from investing as buyers are now bloated with high inventories."

Concerning global petroleum stocks, **Yasser M Mufti,** National Representative for OPEC, Saudi Arabia, maintained that the role of inventories had changed. "They are now often used in the hedging process to moderate supplies. People now want to hold fewer and fewer inventories, as they cost money," he stated

Also speaking on stocks, **Philip Verleger,** of PKVerleger LLC, said OPEC had brought order to a chaotic market in 1999 with its focus on stocks.

Continued success for the Organization would mean that investors would be enticed to purchase commodity indices by offering high returns. Guaranteed returns led to inventory accumulation, yet future OPEC cuts in production would be balanced by price-induced conservation, not lower stocks, he maintained.

"Ultimately, rising inventories, combined with falling consumption, must drive crude oil prices down," he stated.

Verleger pointed out that billions of dollars had been invested in commodity futures with oil (particularly the NYMEX crude contract) benefiting from much of the cash flow. This influx of capital into energy was being balanced by inventory accumulation, which, unfortunately, created a potential source of market instability.

On a practical note, **Tim Bullock,** Regional Business Leader, Europe Africa Oil, BP, argued that OPEC had mainly sour crude at its disposal, but the market needed sweet blends, so the call on OPEC oil was likely to decline over the years.

But he stressed that there was no shortage of physical energy resources. "Our estimates show that the world has enough oil for around 40 years at current consumption rates and proved gas reserves equivalent to 65 years."

Bullock said the participation of hedge funds and others in the market provided extra liquidity which helped to facilitate price risk management, such as hedging by producers and management of price exposures by LDCs. "This can help the industry and consumers as a whole, not just the market," he maintained.

He stressed that today's oil market was resilient and robust. It had worked well through wars, terrorist attacks, hurricanes, strikes and political upheaval. "As a major participant in all aspects of the market, we believe it is working. It sets prices according to fundamentals and judgements. It moves product. It aids decision-making

for investors. If something breaks in one part of it, other parts quickly move to compensate," he added.

Separately, **Edward Krapels,** Director, Financial Energy Market Services, ESAI, stated that investment funds were moving more towards commodities. "Markets are precious, are not easy to set up, and a well-regulated market (with well understood rules and regulations) is vitally important," he said.

"We live in a time of relatively free trade and movement of capital and we should appreciate this more." He stated that the value of oil still in the ground had doubled in recent years as investors had relied on high, long-dated value.

Hedge fund and speculator interest in the oil and gas markets would remain in the future, but the situation was "as likely to go short, as to go long", he affirmed.

Speaking on the development of the Chinese oil market, **Chu Juehai,** Executive Vice President of the Shanghai Futures Exchange, told delegates that the reform and opening up of China's oil industry would present a better opportunity for the development of an oil futures market in the country.

Looking at the regulation of the Chinese oil market, he said, for crude oil, state-owned companies were authorized to enter the areas of production, imports and refining. For gasoline and the diesel market, the price was administrated by the government, while retail operations had been made accessible to foreign companies.

Concerning fuel oil, an import quota for the product had been removed since January 2004 and the price had been deregulated since October 2001. "So the fuel oil market in China is a relatively liberalized market," he said.

"With the experience in fuel oil futures, the Shanghai Futures Exchange will launch more and more oil futures contracts, on products including crude oil, gasoline, and diesel," he added.

Looking at the role of pension funds in energy activities, **Jelle Beenen,** Head of Alternative Beta, PGGM Investments, a large Netherlands-based pension fund, said the company preferred to be involved with energy activities, which had the strongest link to the global economy, rather than non-energy dealings.

He said commodities markets provided great potential for active investment management. Unlike other investor markets, many market participants were not investors, but consumers or producers.

Addressing the workshop on the role of market speculators, **Lawrence Eagles,** Head, Oil Industry and

Chu Juehai, Executive Vice President of the Shanghai Futures Exchange

Jelle Beenen, Head of Alternative Beta, PGGM Investments.

Lawrence Eagles, Head, Oil Industry and Markets Division, at the International Energy Agency (IEA),

Ahmad Jalali-Naini, Consultant to the Petroleum Market Analysis Department at the OPEC Secretariat.

Robert A Levin, Senior Vice President, Research, Nymex.

Hossein Samiei, Head, Energy and Commodities, Surveillance Unit, International Monetary Fund.

Helmut Fredrich (r), Vice President, Corporate Fuel Management, Lufthansa, with Heinz Hilbrecht (l), of the European Union.

Katherine Spector, Head, Global Energy Strategy, JPMorgan Chase Bank.

Michael S Haigh, Associate Chief Economist, CFTC.

Markets Division, at the International Energy Agency (IEA), said more data concerning oil market developments would be ideal, but any additional information would be of little use unless it was "all-encompassing".

He stated: "More data may not lead to more clarity. Markets are in a constant state of evolution, whereby by the time the work is done, it may already be irrelevant."

Meanwhile, **Ahmad Jalali-Naini,** Consultant to the Petroleum Market Analysis Department (PMAD) at the OPEC Secretariat, said speculative activity did not determine price levels, but could contribute to price volatility. Published research indicated that speculative positions responded to price changes and provided liquidity.

He noted that oil derivative markets had grown over the years and had become diversified, with pricing having more transparency.

"The markets are also more liquid at both the short and the long end. The availability and liquidity of oil derivatives can stimulate investment and production through risk control," he maintained.

Jalali-Naini added that short-term price spreads and financial flows were inducing inventory accumulation. "Price signals at the long-end of the curve signal large capacity creation in oil and alternative sources," he said.

Speaking on the important role of the energy sector in the global economy, **Helmut Fredrich,** Vice President, Corporate Fuel Management, Lufthansa, said that since

2004 there had been an upward trend in commodities markets, in general, and crude and oil products, in particular.

The increase seen in crude and product prices had been triggered by demand growth, especially in China and the United States, coupled with a lack of refining capacity and crude production, as well as political instability in some oil-producing countries.

He said price volatility in the marketplace had been magnified by paper trades absent of the physical demand-supply relation, the introduction of new instruments into an immature market structure, and what was referred to as the common "herding" phenomenon in the financial community.

In regulating financial commodity markets, Fredrich said it was important to bear in mind the overwhelming importance of the energy sector for the global economy. Unfortunately, any market regulation had always had a negative impact, since it had never covered all the aspects of market mechanics and had always attracted additional non-market participant free-riders, he added.

Looking at participation in the financial energy markets, **Katherine Spector,** Head, Global Energy Strategy, JPMorgan Chase Bank, pointed out that the increase in the number of would-be buyers of energy over the past few years — including energy consumers, fundamentally-inspired speculators, and passive investors — had coincided with a marked decline in hedging by producers, the market's natural sellers.

"The result is a sharp increase in competition for forward price that has changed the way the market responds to bullish fundamentals," she maintained.

Corporates, macro hedge funds and CTAs, and institutional investors all traded commodities in very different ways, she noted. "It is important to consider the behaviour of each type of market participant collectively, since no one participant gives a complete picture of market activity and no one participant determines price." However, she stressed that, together, market participants did influence the market's path.

Ms Spector said supply/demand determined the price in the long run, but increased participation in the financial energy markets increasingly "influences the path we take to get there."

She said the mix of participants in the financial market had changed. Increased participation had boosted liquidity, but had also changed the way the market responded to bullish fundamentals.

"In the short-term, we see dislocations and exaggerations as a new mix of players competes for a deferred price. One result is that certain market paradigms are no longer applicable to energy markets. One is the idea that oil prices are seen reverting to a long-term average of about $20 a barrel. Futures prices today no longer approach that level," she affirmed.

Another speaker, **Thierry Groell,** Executive Director, Morgan Stanley, said, in his opinion, financial institutions were "here to stay".

He stated: "Our flows with the financial world represent 40 per cent of our activity. Diversification will also grow with new players appearing." However, he maintained that the dividing line between the industrialized world and the financial world would be increasingly blurred in the years ahead.

Speaking on futures market activity, **Neil McMahon,** Senior Research Analyst, Global Integrated Oils and Refiners, Sanford C Bernstein Ltd, said the marginal cost of developing and producing oil was an average of around $50 a barrel.

However, the industry did not need oil prices at this level to create an incentive for investment and, for the first time, futures were pricing in "super normal" returns.

"Today's market implies that super normal upstream returns are sustainable. Financial theory would dictate that the forward curve for oil and gas should always price in an environment where upstream operators earn normal returns," he contended.

He said, more recently, crude prices had come closer to reflecting supply and demand fundamentals, but were still at a $15/b premium. Yet investment in commodity funds still continued, despite the negative returns and the "dire outlook for performance in a contango environment."

McMahon said activity in the futures market had changed significantly over the last few years. The financial influence on the crude market could now be seen right along the length of the futures curve, which had led to increased demand for storage.

"Commercial independent storage capacity is effectively full today at over 97 per cent, which may lead to tankers becoming widely used for storage in future," he professed.

Thierry Groell, Executive Director, Morgan Stanley.

Neil McMahon, Senior Research Analyst, Global Integrated Oils and Refiners, Sanford C Bernstein Ltd.

The following articles comprise opening remarks by, first, **Mohammed Barkindo**, Acting for the OPEC Secretary General, and, then, **Heinz Hilbrecht**, Director for Conventional Energies, Directorate General for Transport and Energy, Commission of the European Union, to the EU-OPEC workshop on the impact of financial markets on the price of oil.

Mohammed Barkindo, Acting for the OPEC Secretary General.

This is the second high-level expert meeting to be held within the framework of the EU-OPEC Energy Dialogue, following a roundtable on oil market developments held in Vienna last year.

During last year's roundtable, two areas warranting further study were identified, namely the refining sector and the impact of financial markets. The first of these issues will be addressed in a study being prepared for next year, while the second serves as the subject of today's discussions, with the possibility of a follow-up joint study in 2007.

Initially, we began planning a workshop with broad participation that would be held at the Secretariat, lasting for about a day. However, pursuing this objective created its own momentum, which has led to this much more expanded event. This momentum — which has been furthered by the strong interest and active support received from distinguished experts, policymakers, academics, regulators, stock exchanges,

regulators, investment banks, pension and hedge funds, oil companies, traders and many others — has enabled us to put together what has become a rich, comprehensive and authoritative workshop on this very timely and important subject.

Specifically, this workshop will discuss several related issues organized in seven sessions. However, focus will be on two key questions:

- How well the current spot and future market structure performs the functions of price discovery, price transparency and risk transfer;
- Whether greater financial participation in oil has significantly influenced oil prices and price volatility.

As our discussions will surely show, there are diverging views on the impact of speculation on crude oil prices and volatility. However, there can be no doubt that since 2000, the magnitude of the financials' exposure to oil—particularly by investment banks, pension funds, index and hedge funds — has risen significantly. In a relatively short space of time, oil derivatives have expanded from being primarily a hedging instrument to a combination of hedging and investment.

Moreover, the growth in the inflow of capital into the oil derivative markets has roughly coincided with the strong and persistent rise in oil prices since the second quarter of 2003, raising the issue of whether speculation has become a significant driver of oil prices.

Indeed, between January 2003 and October this year, the volume of futures and option open interest on the New York Mercantile Exchange (NYMEX) for the West Texas Intermediate (WTI) contract has more than doubled, reaching 2,039,785 contracts. On the Intercontinental Exchange (ICE), the Brent futures contract hit a record high of 280,152 on 30 November 2006, with ICE WTI futures contracts standing at 214,462 on that same date.

Over the last few years, a great deal of discussion has centred on the role financial markets and speculation has played in recent price developments and, more importantly, the implications this has had for the world economy. In line with the Organization's ongoing efforts to closely monitor market developments, OPEC has spent time researching these issues and hosted a workshop last year that served as a precursor to today's event.

The study on *The impact of financial markets on the price of oil and volatility,* which has been undertaken by the OPEC Secretariat and distributed today, reviews the research that has been carried out so far in this area and provides some perspective on the issues related to this workshop.

I believe the main challenges for today's workshop are as follows:

- To gain a better understanding of the interaction between physical oil, financial markets and oil prices.
- To discuss the possible way of enhancing transparency in the financial oil markets.
- To evaluate the merit and feasibility of calls by some policymakers for enhanced regulatory supervision of the financial oil markets, particularly on OTC and exchanges operating outside the United States.

These key issues should serve as a guide for the discussions over the next two days. At the conclusion of the workshop, we hope to take stock of what we know and what needs to be studied further, as well as to narrow down the differences in views and move toward a more common understanding of this complex issue.

As OPEC has the privilege to host this event, I would like to say a few words about the structure of the workshop and how we will proceed. After the opening remarks and the keynote speech, we will begin the sessions. Each session will consist of a moderator and four speakers. Once the presentations have been delivered, the moderator will preside over a 30-minute discussion period. We encourage questions from around the table and have done our best within this large and rather noble setting to allow for an active and fruitful exchange of views.

Additionally, I should also mention that some companies and good friends have sponsored events during the workshop. Today's luncheon is being hosted by the Austria-based oil company, OMV, while the Dubai Mercantile Exchange has kindly agreed to host tomorrow's luncheon. Delegates and speakers should have also received an invitation to this evening's official dinner, which has kindly been co-hosted by the OPEC Fund for International Development. We are very grateful for their participation and support. Last, but certainty not least, our host country has been kind enough to generously provide this outstanding venue for this event.

With this, I would like to conclude by expressing my sincere appreciation to the organizers for their considerable efforts, and give my special thanks to the distinguished participants from EU and OPEC Member States and to the honourable moderators and speakers for making this high-level forum possible. I wish everyone an enjoyable and productive workshop and look forward to our discussions.

Heinz Hilbrecht, Director for Conventional Energy Sources, at the Commission of the European Union.

This is a workshop jointly organized by the EU and OPEC in the framework of their dialogue established in late 2004. In my turn, I would like to thank all the speakers and participants for their active participation in this workshop. This event takes place at a very particular moment for the energy policy developments in the European Union.

At their Spring Summit 2006, the European Council welcomed the Green Paper on a European Strategy for Sustainable, Competitive and Secure Energy. Last June, they re-stated their intention of adopting an Action Plan on energy policy in the spring 2007. This is the strongest indication yet from heads of state and government that they would welcome, sooner rather than later, a common energy policy for Europe. This new policy must have three objectives: sustainability, competitiveness, and security of supply. The Commission, European Council and European Parliament all agree on this.

The blueprint for a new energy policy for Europe, following up the Green Paper, will be the Commission's Strategic European Energy Review. The Commission will adopt this early next year. This will set out where Europe is heading under current policies and where we need to make changes to achieve our policy goals.

It will be the first step towards finding common answers to the challenges we face, and finding a way for Europe to pursue them collectively. The new policy will be built around coherent measures for the internal and external aspects of energy policy. As a major customer in a growing global market, Europe and our partners have much to gain from speaking with a single voice in pursuit of consistent policy objectives. For this reason, the new Strategic Review will define clearly the EU's goals and aspirations, both for its internal policies and regarding its international energy partners.

The key goals and instruments of such a coherent external energy policy must be:

- A clear policy on securing and diversifying energy supplies: in this context, the Strategic EU Energy Review could identify priorities for the upgrading and construction of new infrastructure necessary for security of energy supplies.
- Developing a pan-European Energy Community by building on the Energy Community Treaty with partners in south-east Europe.
- Reacting effectively to external crises. Recent events have demonstrated the need for the EU to react quickly and in a fully coordinated manner to such events.
- Integrating energy into other policies with an external dimension. This means increasing the focus in relations with global partners facing similar energy and environmental challenges — such as the US, Canada, China, Japan and India.
- Partnership with producers, transit countries and other international actors. Interdependence between the EU and its partners is reflected in a number of bilateral and regional energy dialogues, including OPEC. These dialogues must benefit both sides and offer security and predictability, thus paving the way for the necessary long-term investments. The EU is having structured dialogues with OPEC, the Gulf Cooperation Council (GCC), the Caspian region — the Baku initiative — Russia, Norway and other countries.
- Our dialogue with OPEC is developing towards several directions. In an annual meeting between the EU Troika (Presidency of the Energy Council — next

Presidency and the Commission — Commissioner Andris Piebalgs) and OPEC (the President and next President of the OPEC Conference, as well as the Secretary General of OPEC), a thorough exchange of views on international energy and in particular oil matters takes place. In addition, cooperation on a number of issues is reviewed. Currently, the first of these issues relates to the energy policies adopted by both sides and their impact on oil markets — demand and supply. The second concerns investments in the refining sector and their impact on crude and product prices and volatility. A third issue is climate change and carbon capture and storage technologies. We have jointly organised a successful seminar in Riyadh, in September 2006. Lastly, is the question of the impact of the financial speculative markets — related to oil — on the price of oil and its volatile change over short periods of time. This is the theme of today's workshop.

Relationship between futures and underlying markets

The jointly drafted background note by OPEC and the EU concerning today's workshop on the *Impact of financial markets on prices and volatility,* indicates that attention will be focused on two broad questions:

1. Do the prices of futures influence the prices of the underlying markets?

2. Does the futures-based pricing system create too much price volatility?

Finding answers to these questions poses a formidable challenge. However, these and related questions are not new and have already been posed in other contexts. A brief overview of the scientific debate up to date shows that, sometimes, it is very difficult to find clear and conclusive answers on these matters.

Relationship between derivatives and underlying markets

Many studies have been carried out on the relationship between derivatives and their underlying markets. Most of these studies have focused on purely financial markets and, in particular, on equities. As you know, due to a number of theoretical problems, it is difficult to demonstrate causal links in statistical analysis. However, a lot of the empirical evidence we have indicates the existence of causal bi-directionality, ie the movement of underlying price will cause a movement in the price of the derivative and vice-versa. Indeed, it seems almost intuitive that when both the underlying and the derivatives markets are extremely liquid, transparent and informatively efficient, the question of which market determines the price becomes irrelevant as the price can be said to be determined simultaneously in both markets.

The nature and role of futures markets

In the commodities sector, futures markets are the most important derivatives markets. First, it is worth examining to see what happens if, to a market in the underlying commodity or a financial instrument, you add a derivatives market which allows for futures or options trading. How does this affect the price movements in the underlying markets themselves?

Again, it may be tricky to find an answer, but a number of studies have tried to estimate the effect the introduction of a futures market has on the volatility of commodity prices. On the whole, it seems that the majority of those studies find that the introduction of futures markets either has no effect on volatility, or that the markets actually tend to stabilise prices of the physical commodities, or lower volatility.

Futures markets in general provide a useful mechanism for price discovery and for gauging market sentiment. They are the quintessential markets for exchange of information as they reveal the participants' current expectations about future spot prices. It is an entirely different question as to whether such expectations, which are reflected in today's futures prices, provide the best indicator of what future spot prices may be. The hypothesis of whether today's futures price is an unbiased estimator of a future spot price has been tested statistically and most tests tend to reject it.

This is fairly unsurprising, first because the arrival of unexpected news will have an impact on future spot prices, which will not have been reflected when past expectations were formed. Second, even with respect to expected events, forecasting and, more importantly, pricing their actual impact is difficult, especially when factors such as weather or geopolitical events play an important role in the supply and demand equation.

However, the fact that the arrival of news related to oil inventories or reserves is indeed one of the significant sources of volatility of futures prices has been confirmed in the literature and is testimony to the efficient functioning of commodity futures markets. In summary,

the forward-looking nature of the futures markets is an important source of volatility which cannot be mitigated, due to uncertainty and ambiguity.

But the origins of volatility spikes in the oil markets have become more numerous since, besides the fundamental factors such as inventory, production rates and reserves, volatility may be generated by the trading activity of commodity-related funds, or other financial market players taking speculative positions. Indeed, it is reported that recent times have seen the biggest net long paper positions held by non-commercial traders. Commodities and their derivatives are becoming an increasingly popular investment class. Because the fluctuation in their prices is generally uncorrelated, or negatively correlated, with the fluctuation of prices of purely financial assets, they provide an important diversification opportunity and contribute to a more optimal portfolio design. Thus, greater investor access to commodity price exposure should be seen as a positive development.

So the question is, which factors — financial or the traditional ones, such as the record demand growth and the absence of spare capacity — can be seen as dominant and, above all, persistent drivers of world oil prices?

Other features of the energy and energy derivatives markets

Finally, I believe it is worth mentioning one empirical fact relevant to the debate. Oil, as well as other energy commodity prices, seems to exhibit what is called an inverse leverage effect. The leverage effect was first observed in equity prices where volatility of those prices was found to increase as prices decrease. With energy prices, numerous studies have shown that the opposite holds. When prices are higher, volatility of those prices is also higher, indicating a greater risk-aversion of market participants to high energy prices. This effect is assumed to be due to the negative impact of high commodity prices on the world economy. Therefore, it is not out of the ordinary to see increasing price volatility today when both nominal and real price levels are at historic highs.

What the Commission is doing in this field

In the area of financial services markets, the new Markets in Financial Instruments Directive, or MiFID as it is widely known, due to be implemented on November 1, 2007, will introduce, for the first time, a single European market for the provision of investment services in relation to commodity derivatives. This means that banks and brokers will be able to buy and sell commodity derivatives on the basis of a single licence obtained from their home regulator.

Commodity derivative exchanges will become 'regulated markets' or 'multilateral trading facilities' for the purposes of MiFID. This will make them freely accessible to authorised investment service providers from all member states and should have a positive impact on liquidity and the depth of those markets.

Furthermore, MiFID and the Capital Adequacy Directive provide for a review of the regime that has been established in relation to commodity derivatives trading. This review will answer two important questions:

- Which relevant entities, activities and instruments should be covered by the scope of EU financial market regulation in the area of commodity derivatives.
- Whether current regulation needs be adapted to take into account the specificities of the commodities and commodity derivatives markets.

The review is due in October 2008, but work is already underway. The Commission will be shortly publishing a call for evidence presentations and seeks feedback on its preliminary orientation towards the review. I strongly urge you to read it and respond to it.

What we would expect as an outcome of this workshop — next steps

Today and tomorrow, I think that after listening to all the high-level presentations of the programme, we may expect to know more about these complex issues and be in a position to isolate some among them of prime importance for the oil markets for further examination in the framework of our EU-OPEC dialogue. In addition, from this workshop I would expect some solid conclusions and recommendations for presenting to the forthcoming EU-OPEC ministerial meeting at the end of June 2007. These conclusions and recommendations will also help us to better prepare and define the external aspects of our new energy policy.

Furthermore, as the oil market is a truly global one, any progress on this issue will have a positive impact on our bilateral dialogue with OPEC, but equally the global producer-consumer dialogue. I am sure that the conclusions of this workshop will be taken over by other forums.

Thank you all for attending the conference and assisting both of us — the EU and OPEC — to better understand the issue of the speculative financial markets impact on the price and volatility of oil.

Japanese Finance Vice Minister gives workshop's keynote address

Lauds Asia's efforts to mitigate long-term effects of sustained higher oil prices

Horoshi Watanabe, Vice Minister at the Japanese Finance Ministry.

The good collaboration and the dialogue seen of late between the producing countries and the consuming countries is needed as "we have to think about what is going to happen in the future," according to Horoshi Watanabe, Vice Minister at the Japanese Finance Ministry.

In a keynote address to the EU-OPEC workshop on the impact of financial markets on the price of oil, he said the income transfer from the consuming countries to the producing countries should be utilized in an efficient way.

"That is quite important. If there is some kind of disruption to capital growth, it could have an impact on the world economy," he told delegates assembled at the Hofburg in Vienna.

He pointed out that, today, even though the high oil price had remained for more than three years, the world economy was in a very good position. Even the industrialized countries were enjoying more than two per cent growth, while the emerging countries were seeing five per cent, six per cent, and even seven per cent growth.

"China can even enjoy ten per cent growth. This shows the good resilience of the global economy to the high oil prices," he explained.

No room for complacency

However, Watanabe said one could not afford to be complacent about the current situation. It could be that there was just a delay in the reaction to the higher prices.

"High oil prices might not have had a bad effect on the economy just yet, but sometime in the future they could have a negative impact on the economy. So we have to prepare and we have to mitigate the effects of such an impact," he maintained.

Watanabe explained that this was exactly what countries in Asia were doing right now — carefully studying the

situation and preparing for a possible delayed reaction on the economy from high oil prices. "That is our biggest concern in Asia."

Also, he said, there was concern regarding countries' balance of payments. Each nation in the Asian region was having to pay more for its purchases of oil, which meant that their trade balances would deteriorate.

He noted that in 2003 and 2004, most Asian countries enjoyed balance of payments in surplus, but in 2006 the number of countries with a surplus had diminished.

"Maybe in 2007, it will only be China and Japan that will enjoy surpluses. All the other countries will have deficits," he affirmed.

Watanabe said that in order to overcome such a negative impact, "we have to make more efforts at efficiency, technology transfer and diversification of energy supply and resources. We have already carried out regional co-operation in every field, not only in technology, but also in the financial sector."

He said that looking at the supply side, they, as consumers, had to be wary of the geopolitical situation. "We should never allow a country to use oil as a political threat or a weapon. We should also have a much better supply chain, especially in the enhancement of refinery capacity. This is very important.

Price stabilization

"These days, when we talk about the supply situation, we have to listen even to the weather forecasts, to hear how many hurricanes are coming that will affect countries — these can have a big impact on the supply chain and also price stabilization," he said.

Concerning Asia, Watanabe said oil consumption in the region was growing at a fast pace. Starting in 1990 through to 2005, these 15 years had seen Asia's share of global oil consumption rise from 20.8 per cent to 29.1 per cent, a near 50 per cent increase.

"Furthermore, the IEA says that in the coming 25 years — up to 2030 — of the global incremental increase in energy demand, half will come from Asian states, especially India and China. Both these countries will double their consumption if there is no change to the current forecast conditions," he said.

Watanabe pointed out that the increasing levels of supply needed to meet this growing demand would change the characteristics of the foreign exchange market. More money would be recycled in the capital markets following the income transfer from the consuming to the producing countries. And this trend would be accelerated in the future.

In response, he said, Asian countries had been making efforts to mitigate the effects of the negative impact of such a situation. Countries had been looking for better and more efficient ways of enhancing domestic energy use, and had been taking steps to do this through ASEAN cooperation.

Japan and Korea were helping neighbouring countries with technology transfer to enable them to be more energy efficient.

Watanabe stressed that with the oil price increases, it was important that the economies of Asia remained resilient through the diversification of energy resources and supplies, as well as looking to their joint strategic reserves. Japan had more than 150 days of reserves, while Korea had a similar level.

"We will have a more resilient structure to cope with the changes in the oil market," said the Japanese official. In addition, he said, and with the so-called 'financialization' of the oil market, it was important for the countries to look more into the financial aspects of the situation.

China, Japan, Taiwan and Korea had more than 2.4 trillion dollars in foreign reserves and if one country in the region faced some difficulty over their liquidity or balance of payments, these countries could help by providing the necessary financial resources.

Watanabe said that energy, and especially oil, was of great concern to the world economy.

"It is of great relief to us that oil prices have somewhat stabilized of late. Yet market volatility remains high and is still growing. Some people want to attribute this high volatility to the new force in the oil market — money. But I think this is wrong. This is not a new phenomenon. This started decades ago and up until 2003, when oil prices began their increase, people paid less attention to it."

He said that some people regarded the financial forces as being stabilizers in the market, as in the actions of market operations in the futures markets. But other people blamed the monetary forces for being a non-stabilizer of the market, due to the massive influence of the speculative element.

"I believe that, in some senses, both are true, but in other senses, not. That is why I appreciate highly the organizing of this workshop. This enables us to grasp and understand the reality of this, the financial oil market," he added.

Lukman outlines merits of research into alternatives to current oil pricing regime

Dr Rilwanu Lukman, former Petroleum Resources Minister of Nigeria, and OPEC's longest-serving Secretary General and Conference President, was moderator of the workshop's first session on 'The rise and significance of the financial oil markets'. Standing in for leading analyst, Professor Robert Mabro, who could not attend, Lukman shared Professor Mabro's views on the current oil pricing regime and the need for developing potential alternatives.

The current oil pricing regime in international trade involves price formulae, which consists generally of a reference marker price and an adjustment factor that takes into account differences in quality and other characteristics between the marker and the traded crude.

Today, in most cases for exports west of the Suez, benchmark prices are taken from the futures exchanges, namely WTI on the NYMEX, and Brent on the ICE. This, of course, has not always been the case. Initially the reference prices were taken from the spot market. This was gradually abandoned because of the limited liquidity of Alaskan North Slope and the manipulation of the Brent spot, forward and physical markets, as well as the fact that WTI pipeline crude is a pipeline crude and not a seaborne crude.

The advantage of the futures market is that liquidity is high and prices are immediately transparent. The use of futures prices for pricing oil in international trade raises, however, a number of questions that are rarely, if indeed at all, taken into account and addressed.

The first of these is that the futures price, as it arises on the NYMEX and the ICE, is the price of a financial instrument denominated in oil terms, but not of a physical barrel of oil. In principle, the financial instrument involves a commitment to buy, or sell, as the case may be, physical oil on the expiry of a contract in the case of the NYMEX, but not in the case of the ICE. Traders who buy or sell such futures contracts rarely intend at the outset to seek physical transactions.

The futures contract, as a financial instrument, belongs to a wide set of such instruments and this is playing the predominance of financial institutions in the oil futures market and the leading role they play in influencing the direction of price movements.

The statistical exercises that show a correlation between the net position of non-commercial traders and the direction of price movements are well-documented. Is it not odd that non-commercials, meaning, in this case, very broadly speaking, non-oil entities, should lead in the commercial, in this case, oil or

oil-related entities, following what is supposed to be an oil market?

Of course, the price of the futures contract responds to many oil data, or more precisely to traders' views about the future impact of possible events, including geopolitical, climatic, economic, etc and the future supply and demand conditions.

But the price will also respond to relative opportunities in other financial markets and funds will flow in or out of the oil futures markets, depending on whether expected returns are higher or lower elsewhere.

The question that arises is whether it is right to have the price of oil in international trade determined by the price of an item — that of the futures oil contract, which is not 100 per cent in itself oil.

There are fundamental problems with the pricing of oil. The first one is that the flat price does not result from the huge liquidity that characterizes the futures market. A very large proportion of the trade about price breadth and the liquidity involved in the determination of the flat price is much smaller than catches the eye.

Secondly, there are no economic anchors in the oil price, whether in the flow or the ceiling levels, which are sustainable. The cost flow is very low and cannot be sustained because of the dire consequences on the economies of the exporting countries. The ceiling might be very high in the short run because the world economy, as recent developments have shown, has not seemed to react to prices of $70 or even $80/b.

This gives traders very wide room, perhaps from $50-90/b, to move the oil price without apparent or immediate economic penalty. Given the importance of oil, such potential room for volatility, or indeed instability, can be very damaging.

Finally, the very structure of prices on the futures market causes problems that are difficult to manage. This is the case of contangos, which induce the build-up of inventories and cause price flows because the market reads any inventory build-up as a bearish factor.

All this suggests that we should not take the current pricing regime as an appropriate one for the purpose it is intended to serve. It may not be possible to change it because the vested interests in maintaining it are both powerful and quasi-universal.

There is no reason why we should not encourage research into the merits and advantages of alternatives, or at least in possible remedial measures that could improve the current system.

Top (l–r): Workshop coordinators Ioannis Samouilidis from the European Commission and Mohammad Alipour-Jeddi from OPEC, speaking with the EU's Hilbrecht, and Horoshi Watanabe. Mohammed Barkindo and former IEF Executive Board Chairman, Ramzi Salman.
Bottom (l–r): Fredrik Voss of ICE Futures, Phillip Verleger, Hossein Samiei and Ahmad Jalali-Naini. Peter Odell (r) in discussion with a delegate.

Workshop addresses key questions of market performance and financial participation

The following text is the joint press release issued by OPEC and the European Union (EU) at the end of their workshop on the impact of financial markets on the oil price, held in Vienna, Austria, on December 4–5, 2006.

The Organization of the Petroleum Exporting Countries (OPEC) and the European Union (EU) today concluded a two-day joint workshop on the impact of financial markets on the price of oil. The event was co-chaired by the OPEC Acting for the Secretary General, Mohammed Barkindo, and EU Director for Conventional Energy Sources, Heinz Hilbrecht.

The workshop encompassed a wide range of differing views and perspectives, including those from oil companies, investment banks, stock exchanges, regulators, research institutions, hedge funds, pension funds, producers and inter-governmental agencies. While a broad array of related issues were discussed, the workshop focused on two key questions, namely:

- How well the current spot and future market structure performs the functions of price discovery, price transparency and risk transfer;
- Whether greater financial participation in oil has significantly influenced oil prices and price volatility.

Overall, the workshop highlighted the increasing integration of the physical and financial oil markets, as well as the considerable potential for even greater interaction.

Moreover, it was noted that, over the last few years, financial market instruments have diversified and the market is continuing to evolve. The positive impact of financial markets, through liquidity and greater transparency in price discovery, was recognized, as well as the possible adverse effects such as higher price volatility if investors periodically exaggerate price trends.

Additionally, concern was expressed that the futures and futures option are based on a very narrow volume of physical trading in major benchmark crudes, pointing to the need for, among other things, the introduction of more representative physical benchmark contracts. Finally, the workshop emphasized the need for good regulation and the release of more frequent and high-quality market data, which would benefit all market participants.

At the close of the workshop, OPEC and the EU noted that the successful outcome of the workshop, as well as the positive constructive nature of the dialogue, point to the need to expand initial research on this complex and important subject. As a result, OPEC and the EU agreed to pursue further research on this subject.

The next event to be held under the two sides' Energy Dialogue will be a workshop on energy policies, to be held in Brussels in the first half of 2007.

Financial markets under the microscope

Pictured here are many of the delegates who attended the two-day EU-OPEC Workshop.

Energy Dialogue — JODI

J O D I

A global producer-consumer initiative

With energy security topping political agendas across the world there is an ever pressing need to understand the position and needs of each stakeholder. One critical component in this is the transparency of oil market data and information flows between producers and consumers, the essence of the Joint Oil Data Initiative (JODI).

The OPEC Bulletin's James Griffin reports on the progress of JODI following the initiative's 6th Annual Conference and examines the potential future development of this unique global oil market project.

www.jodidata.org

Taking place almost a year after the public release of the JODI World Database by King Abdullah of Saudi Arabia, the 6th JODI Conference convened in Riyadh, Saudi Arabia on November 25, 2006. The two-day event brought together over 100 high-level participants, representing around 30 countries, including ten international organizations, numerous international and national oil companies, as well as consultants and academics.

The importance of JODI was underscored by Ali I Naimi, Saudi Arabia's Minister of Petroleum and Mineral Resources, in his keynote address. He stressed that the lack of transparent and reliable oil data had consistently been identified as an aggravating factor in the high volatility of oil prices, along with such factors as geopolitics and market speculation. Describing JODI as a "monumental effort", Naimi said the initiative had progressed very rapidly, and had increasingly become a key topic at all energy forums. This development, he said, emphasized just what the producer-consumer dialogue could accomplish.

Ambassador Arne Walther, Secretary General of the International Energy Forum (IEF), also drew attention to these points and said that the conference came at a time of heightened energy consciousness around the world, a time of uncertainties and increasing interdependencies among nations. He added that "the policy tuning of one country to meet new challenges and to reduce its particular energy uncertainties can in itself exacerbate or create new uncertainties for others."

With this in mind, the fundamental goal is having the best possible data and information at hand when policy and investment decisions are made. If the data is not reliable, it can have broad implications, with Naimi highlighting that it can distort economic decision-making, with damaging effects on global economic activities. With oil expected to be the predominant source of the world's energy and the most traded for many years to come, it is easy to view the significance of JODI on a much broader economic and social development footprint.

Below (l–r):
Susumu Kuramoto, President of the Asia Pacific Energy Research Centre;
Bernard Savage, European Union;
Ambassador Arne Walther, Secretary General of IEFS;
Ali I Naimi, Saudi Arabian Minister of Petroleum & Mineral Resources;
Jean-Yves Garnier, Head of IEA's Statistics Division;
Fuad Al Zayer, Head of OPEC's Data Services Department;
Said Nachet, Director of the IEFS Energy Division;
Alvaro Rios-Roca, Executive Secretary of OLADE.

Photographs on pages 47–51 courtesy of IEFS.

Ambassador Arne Walther (l), the Secretary General of the International Energy Forum, with Said Nachet from the IEF Secretariat.

JODI's development

To fully appreciate the scope of the initiative, it is important to trace its origins. The JODI World Database, as a permanent reporting mechanism, was borne out of the 8th IEF Meeting in Osaka in 2002. This eventually led to the seven international organizations behind the initiative — the Asia-Pacific Economic Cooperation (APEC), Eurostat, the International Energy Agency (IEA), the IEF Secretariat, the Latin American Energy Organization (OLADE), OPEC and the United Nations Statistics Division (UNSD) — opening the JODI Database on the occasion of the inauguration of the IEF Secretariat in Riyadh in November 2005.

Ambassador Walther said the coordination of this inter-organizational initiative was a "flagship" IEF Secretariat activity and "together, we cover the world". The term 'world' is not something used frivolously, as this cooperation of international bodies focused on advancing the transparency and flows of global oil market data is most definitely becoming a 'world' affair.

This is witnessed in the strong backing the initiative has received from various international bodies. Ministers of energy-producing countries reaffirmed their strong endorsement of JODI at the 10th IEF in Doha, Qatar, in April last year. Some Ministers have also called for JODI to be expanded in due course. "We support the Joint Oil Data Initiative and see value in it being extended to other energy sectors, like gas, and incorporating a common definition of energy reserves," read a statement from the G20 Meeting of Ministers and Central Bank Governors in Melbourne in November 2006.

Backing was also given by G8 Heads of Government in the St Petersburg Plan of Action on Global Energy Security adopted in July 2006, as well as by chief executive officers of the leading international and national energy companies, when interacting with Ministers at the 2nd International Energy Business Forum last year.

Elsewhere, the global scope of the initiative was underlined by the first regional JODI training session and oil statistics for Latin American countries which took place in Venezuela in August 2006. In September last year, OPEC hosted an Inter-Secretariat JODI meeting at its headquarters in Vienna and in October, APEC, on the occasion of its annual workshop on energy statistics in Tokyo, dedicated one day to JODI.

The IEF Secretariat will, in co-operation with host countries and JODI partners, also organize a regional training session for Sub-Saharan African countries in South Africa

JODI World Database

The JODI World Database consists of the following:

Seven product categories: crude oil, liquefied petroleum gas, gasoline, kerosene, diesel oil, fuel oil and total oil;

Five flows: production, demand, closing stock levels and changes, refinery intake/output;

Data is available in three different units: barrels, tons and litres;

The Database has more than 90 participating countries; and

Monthly data is available from January 2002 to the past month.

this month, followed later in the year by additional sessions envisaged for the Caspian region, as well as Middle East and North African countries in response to requests from participating countries.

Achievements and further expansion

In an address to the inaugural session of the conference, Fuad Al-Zayer, Head of OPEC's Data Services Department, stated that the achievements of JODI in a relatively short period of time were remarkable. "For anyone coming new to the industry, it might be presumed that JODI has been in existence for much longer than it has," he added.

There is certainly much evidence to support this statement, with JODI playing an important role in raising political awareness of the difficulties encountered in improving data reliability and timeliness. The JODI website points out that statistical systems have been improved in many countries, attitudes towards confidentiality and reliability have evolved and contacts between oil companies, countries and organizations have multiplied. "All these elements have led to a better understanding of others' problems and to a worldwide network of statisticians paving the way for the global harmonisation of energy statistics," it adds.

JODI's expansion was supplemented at the conference with the launch of the JODI Manual, a training tool designed to disseminate the data transparency message and clarify the definitions and methodologies utilized in the submission of JODI data. It was also announced that, with effect from its November 2006 update, the JODI World Database has been expanded to include the data for refinery intake and refinery output.

The number of participating countries in JODI also continues to grow, with Dr Said Nachet, Energy Director of the IEF Secretariat, highlighting that recent additions include Azerbaijan, Croatia, Malta and Bahrain. Full global coverage is the obvious goal, as well as an understanding that each and every country has a role to play.

This viewpoint was a key theme of the presentation by Jim Hart, Senior Oil Market Advisor, Office of Policy and International Affairs at the United States Department of Energy. He stressed that "the economics and energy security of every nation hinge on the smooth functioning of an efficient, transparent oil market" and that both governments and oil companies have significant responsibilities. The key, he outlined, was that this needed to be viewed as a "shared responsibility".

Ali I Naimi, Saudi Arabian Minister of Petroleum and Mineral Resources.

Fuad Al Zayer, Head of OPEC's Data Services Department.

Ambassador Arne Walther, Secretary General of the International Energy Forum.

Jean-Yves Garnier, IEA.

Members of the seven organizations participating in the JODI.

Dr Majid A Al-Moneef, Governor for OPEC, Saudi Arabian Ministry of Petroleum and Mineral Resources.

Challenges ahead

There is an understanding that this shared responsibility will not happen overnight as any initiative on this scale is evolutionary, with continual improvements and updates part and parcel of the process. However, the conference witnessed numerous calls for improvements in various areas. Naimi said: "Our hope is that all participating countries, whether producers of oil or consumers, ensure complete, timely, reliable and sustained submissions, and allocate the resources to do so ... after all, transparency can be achieved only if all parties involved in the oil markets fully participate."

The JODI website underlines that the database is still a work in progress, but already for many countries, especially the top 30 producers and consumers, timeliness, coverage and reliability are of reasonable levels. In fact, the most recent feedback from JODI dealing with the issues of submission, timeliness and completeness is viewed as "encouraging". This covers the period from January to June 2006 and depicts the actual participation of countries. Compared with the previous results from July to December 2005, the number of positives increased from 52 to 57 per cent of the total. Sustainability of submissions was rated as good for two-thirds of the participating countries and in terms of completeness the figure was more than 50 per cent. However, timeliness of submissions remained a concern for half of the participants and 36 countries were rated as poor in this area.

To meet some of the challenges ahead, conference participants, with OPEC delegates playing a crucial role, identified a list of prioritized actions to be taken to further improve data quality and extend the initiative. These actions are:

- To continue to improve completeness, timeliness and reliability of the data;
- To work more closely with a wider range of both data providers and users, in order to improve the usefulness of the initiative and the entire database; and
- To extend the JODI questionnaire by disaggregating the existing flows and products.

In the next few months, the JODI partner organizations will submit to the participating countries and economies, an expanded JODI questionnaire with additional flows and products. An exercise will be launched for a trial period to assess how many participating countries and economies are in a position to fill in the expanded questionnaire, with the aim of evaluating this exercise at the next JODI conference.

A producer-consumer commitment

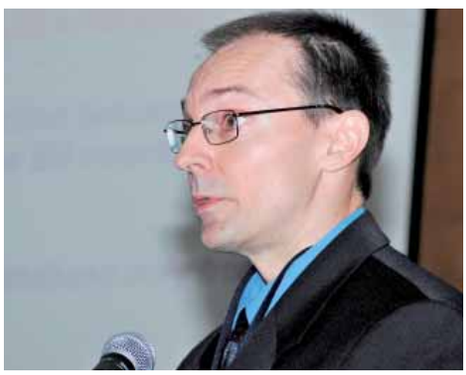
Though challenges remain, there was widespread recognition that much had been achieved to date. This has included six JODI Conferences, more than 15 Inter-Secretariat meetings, improved and advanced correspondence between organizations, a database updated every month covering four flows, seven products, 90 countries, over 60 months and a comprehensive manual on definitions and methodologies.

What has been done underlines what is possible in the future with enhanced dialogue and cooperation between all parties. "The JODI community is demonstrating that global challenges can be met head-on and has shown that the producer-consumer dialogue is not just about talk, it is about direct action," said Al-Zayer. He added that OPEC would continue to offer its full support and expressed his hope that the IEF and JODI would continue to go from strength-to-strength.

Walther concluded that JODI was a co-ordinated, inter-organizational response to the political call for better data and increasing transparency that were important for investment decisions and energy security.

The overall market goal is a secure, stable and orderly market; a market where supply and demand are balanced and the necessary levels of investment, as well as prices, are acceptable to producers and consumers alike. The focus must be on understanding the needs of each stakeholder and viewing the entire energy market holistically as it needs to be recognized that neither the public, the private sector, nor any one country, region or organization, can act alone. Global challenges require a global commitment and this is JODI's focus.

Mauricio Garron, OLADE.



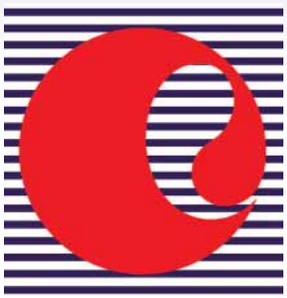
Pekka Loesoenen, Eurostat.

Karoly Kovacs from UNSD.

Shigeru Kimura, APEC.

Said Nachaet, IEF Secretariat.

Iranian energy conference looks at new global oil and gas developments



The International Institute for Energy Studies (IIES) held its **11th Oil and Gas Forum** in the Iranian capital, Tehran, towards the end of November last year. With the theme *'New developments in world oil and gas: challenges and opportunities',* topics discussed during the two-day conference included geopolitics, especially in connection with Middle East oil and gas, the general economic picture, technological innovations, and investment opportunities in Iran's oil, gas and petrochemical industries.

The event provided oil and gas industry experts and officials the opportunity to exchange views on a number of matters of interest. Among the guest speakers were Iran's Governor for OPEC, **Hossein Kazempour Ardebili**, and OPEC's then Acting for the Secretary General, **Mohammed S Barkindo**. Ardebili gave an address on *'Energy security challenges and the role of OPEC',* while Barkindo looked at *'World oil market developments: challenges and opportunities'*. Their presentations are reproduced here.

Energy security challenges and the role of OPEC

Hossein Kazempour Ardebili, Iran's Governor for OPEC.

In a world of increasing interdependency, the manner of ensuring energy security will be highly dependent on how countries manage their relations, bilaterally, or in a multilateral framework. This phenomenon, in particular, will define the relations of the developed consuming countries with countries holding energy resources. The manner of ensuring energy security will still remain as one of the major challenges of the developed countries in the future.

There is no doubt about the inter-relationship of global security and energy security. However, energy security challenges at an international level cannot be overcome through a military approach. But the adoption of practices based on economic logic and international law, ensuring security of investment, mitigation of their risks, facilitating the free flow of technology to oil and gas-producing countries, and paving the way for their unhindered access to global markets, will certainly lead to international achievements within energy security challenges.

Some energy policies are of general nature, and are implemented to ensure energy security, the observation of environmental considerations, increasing efficiency, or promoting the use of substitute energy-carriers to reduce dependency on non-renewable resources. Of course, those policies are not exclusive to the industrialized countries. They are the legitimate rights of all countries and, in OPEC, we are not against them, although developed countries are denying OPEC Member Countries' rights to produce and use nuclear energy. The cooperation of technology sources in energy conservation and efficiency enhancement areas with producing countries will ensure energy supply security. By implementing those policies, producers and consumers should have more cooperation towards this end.

In the short term, the consuming countries' energy policies should also address challenges such as the removal of political and economic restrictions in the development of upstream activities and investment in downstream operations, as well as finding solutions to reducing energy taxes and controlling the impact of

speculation in oil price direction. The latter is a point which is currently regarded as a new dimension of energy security globally. OPEC, in cooperation with the European Union (EU), arranged a workshop in Vienna called 'The impact of financial markets on the price of oil'.

Depoliticizing energy

But the question that should attract wider attention is whether we should not all pay more attention to three decades of political tension and sanctions imposed on certain producing countries that have aggravated global energy problems. It seems that governments should make an utmost endeavour to depoliticize the energy sector and, by observing international regulations and laws, allow market forces to play their actual roles.

Military and political involvement, security problems, particularly in the Middle East, which is the main region supplying the oil requirements of most consuming countries, the presence of the American armed forces in the region and their dominance over a major part of the offshore oil transportation routes, have complicated the problems of Europe and Japan, as well as China and India, in the energy field, intensifying concern with respect to their dependency on energy and the security of the Middle East. These countries are willing to individually sign long-term contracts with countries in the region within the context of their national interests and in order to supply their needs. On the other hand, the presence, dominance and influence of the United States in the region have caused them to be concerned about the future of their energy supplies and have forced them to wait for future developments. The continuation of instability in the region can widen the supply-demand gap in the future. It has also caused the financial resources of the world to be channelled towards low-reserve and high-production cost regions.

The rising oil prices seen in recent years may have created concerns that world oil reserves are depleting. But since the 1970s, the last time global oil supplies were supposed to be depleting, world oil production has actually increased by nearly 60 per cent. A reduction in even non-OPEC oil production is not expected to happen until 2012. Moreover, production capacity-building projects in OPEC Member Countries have also been planned for the next five years. In some oil-producing countries, different strategies and plans are being pursued to remove structural barriers and modify existing fiscal and legal regimes which are among basic measures to expedite the implementation of oil projects.

According to OPEC forecasts, concerning capacity-building projects and upstream oil sector plans in Member States, OPEC crude oil production capacity will amount to 37.5 million barrels per day in 2010, compared with 32.4m b/d in 2005. This figure indicates an average capacity-building growth rate of three per cent per year in OPEC Member Countries.

Although production capacity during the last five years has increased annually by 300,000 b/d, due to political crises and economic sanctions, OPEC's oil production capacity is predicted to increase, on average, by 1m b/d annually. In other words, within the next five years, the rate of OPEC oil production capacity-building will be three times as much as in the last five years. This capacity expansion is being made in circumstances when, according to existing estimates, demand for OPEC crude oil, which was at around 29m b/d in 2005, will be fluctuating between 28.1m b/d and 29.2m b/d in 2010. Thus, if all production capacity-building projects in OPEC Member Countries come onstream, OPEC's excess production capacity in 2010 is estimated at more than 8m b/d. It can be stated that in the medium-term, and up to the year 2010, OPEC's oil production capacity will continue to exceed demand for the Organization's crude oil supply.

In the downstream sector, OPEC Member Countries, with about 9m b/d, hold about ten per cent of the world's refining capacity, part of which is being exported to other countries. This is, of course, aimed at maintaining security of demand and ensuring export markets. Having realized that current instability in the oil market is partly due to refining bottlenecks, some projects and plans are being implemented in OPEC Member Countries independently, or within the framework of joint ventures, to increase refining capacity. If these new projects come onstream, OPEC's refining capacity will increase annually by 1.4m b/d on average and will amount to 17.7m b/d by 2011.

It is unanimously agreed that there are sufficient oil reserves and financial resources in the world to develop the oil and gas industry's upstream and downstream sectors. Therefore, there are no concerns about the shortage of oil reserves, or a lack of capital. However, concerns are partly instigated by impediments to foreign direct investment in some oil-producing countries and partly by politically motivated economic sanctions imposed on countries holding resources. Therefore, to ensure energy security, on the one hand, suitable grounds, including the required legal and contractual frameworks for the encouragement of investment in oil and gas projects of the producing countries should be provided, and, on the

other hand, due attention should be paid to the removal of bottlenecks and sanctions in areas of investment and access to technology and markets.

Interestingly, the oil producers have always been accused of manipulating oil as a political instrument, whereas, in different periods of time, they have been victimized through the political instruments of some consumers. In their inclination to cooperate, these producing countries have even victimized the other sectors of their national economies for the sake of developing the energy sector. The social, political and economic consequences of the imbalanced development of various sections of the economy of these countries can now be witnessed in the form of rebellion and riots in some oil-producing countries, even among some OPEC Member States.

The International Energy Agency (IEA), in its latest assessment of the World Energy Outlook of 2006, is pushing for a strong policy response from governments to achieve improved efficiency and increased use of alternative fuels and nuclear energy, in a bid to reduce fossil fuel demand and carbon dioxide (CO_2) emissions. The IEA believes that the world is heading towards a "dirty, insecure and expensive" future if it follows current trends, as revealed in its reference scenario. This leads to a 38 per cent rise in oil demand to 116m b/d by 2030 from 84m b/d in 2005 and a 55 per cent increase in CO_2 emissions. The IEA sees the reference scenario as unsustainable, both from an environmental and energy security point of view and also from the point of view of investment. In fact, the IEA backs the argument that increased investment in recent years is seen to be "illusory" and, in real terms, investment was not higher in 2005 than in 2000. The IEA does not believe that enough investment will be made to meet rising energy demand (an amount estimated at $20 trillion in real terms between 2005 and 2030 and needed for energy-supply infrastructure, half of which will be in developing countries). According to the IEA's alternative policy scenario, a clean, clever and competitive future is possible if investments are made in energy efficiency, biofuels and nuclear. They believe that since 2004, the relative competitive position of fuels has changed: coal is now cheaper than natural gas for electricity production and nuclear power is, in some cases, seen to be even cheaper than both oil and gas.

Energy competition

However, regarding the IEA assessment of the World Energy Outlook of 2006, a few comments should be made. First, the relative competitive position of fuels is temporary in nature and is due to rising oil prices over the last three years. Second, despite a ten per cent decline for oil demand, as compared with previous forecasts, the IEA recommends the need for strong government policies to steer the world in the direction of changing energy consumption patterns from oil and fossil fuels to other energy resources. This approach will intensify OPEC concern regarding security of oil demand. On the other hand, suppliers' concerns about demand security can be aggravated by the IEA's doubtful message concerning underinvestment in oil and gas capacity expansion in the next two decades. It seems that the assumption of dual and sometimes conflicting assessments of the future of the oil market will not lead to a sustainable energy security and the politically motivated modification of analyses will affect the efficiency of the petroleum industry's main players.

In the medium-term, and up to the year 2010, OPEC's oil production capacity will continue to exceed demand for the Organization's crude oil supply.

In OPEC Member Countries, there are arguments by some people that OPEC commitments with respect to quotas and a production ceiling are restricting Member Countries' attempts of increasing their production and making more profits at times of higher oil prices. They even recommend withdrawal from OPEC. But OPEC oil production in the last ten years has increased by more than 6m b/d, whereas non-OPEC oil production has only increased by 4.2m b/d. Therefore, OPEC commitments do not impede the enhancement of oil production capacity-building projects in Member Countries. The lack of oil production and export increases in some OPEC Member Countries is rooted in some other issues. It should be borne in mind that within the last ten years, those OPEC Member Countries that were not exposed to political pressures and sanctions were able to increase their production.

Long-term forecasts indicate that OPEC oil production capacity (including natural gas liquids) will increase by 21.2m b/d by 2025 (from 33.1m b/d in 2005 to 54.3m b/d by 2025), whereas total capacity expansion of non-OPEC oil production has only been forecast at 8.8m b/d by 2025. Therefore, on the basis of the oil supply trend over the last ten years and the perspective illustrated for the composition of oil supply sources in the market, I daresay that the periodic cuts in the OPEC production ceiling which were made by the Organization to balance the oil market

and stabilize prices, were not at all impediments to the production-enhancement projects of Member Countries.

In the context of energy supply security, there should not be even a hint of doubt concerning the attitude and constructive behaviour of OPEC Member Countries. They are not even attempting to disrupt market security, because such efforts will directly influence their single-commodity based economies.

OPEC, through its production management and setting of production ceilings, has tried to prevent oil price fluctuations and secure a minimum income for its Members. Meanwhile, by creating excess production capacity, OPEC has always been active towards ensuring energy supply security and by its implementation in the shortest time available could compensate for market shortages. Since the net effect of this OPEC policy has been substituting the consuming countries' need to resort to their strategic and commercial reserves, few consuming countries have been forced to use those reserves at critical oil supply junctures.

As an OPEC Member, we ask non-OPEC producers to be more responsible with respect to oil price fluctuations that influence their revenues as well.

On the other hand, when prices are declining, in consuming countries' policies and strategies, no efforts can be witnessed with respect to retrieving oil price stability and under those conditions they keep calling for the so-called non-intervention policies of governments.

As confirmed by all consumers, the relevant organizations and research institutes of global commercial and strategic energy reserves, OPEC has supplied the oil required by the market at all times during the so-called rising oil prices. OPEC Member Countries, including Iran, are committed to maintaining security of oil supply.

Despite their limited access to the downstream markets of many consuming countries, oil producers have launched independent investments and huge joint-venture projects. Naturally, when OPEC as a marginal supplier produces the differential of world oil demand and non-OPEC supply, regardless of the volume of production, it is playing a decisive role with respect to market stability, prices and guaranteeing revenues for its Member States.

The OPEC production system has also created a safe atmosphere in the market for even non-OPEC producers so that, assured of price stability, they can expand production capacities and make investments in their oilfields with favourable rates of capital return. If OPEC's role was only limited to this function, its positive impact would be quite sufficient for the consumers. One of the challenges of OPEC is attracting cooperation and coordination with non-OPEC producers. Dialogue with non-OPEC countries has always been an OPEC policy. However, regardless of dialogue, they continue to produce to the extent they are able of and this trend will put pressure on prices and OPEC's market share in the long run. But this trend cannot last for ever. As an OPEC Member, we ask non-OPEC producers to be more responsible with respect to oil price fluctuations that influence their revenues as well. OPEC and non-OPEC countries should exchange information concerning production plans and policies and enter into more cooperation initiatives in the area of market management.

Ensuring energy security

The manner of ensuring energy security in the future will depend on development and interaction of international relations, based on respecting countries' rights within accepted international logic and frameworks. In the meantime, aggressive approaches and unilateralism seriously threaten sustainable security of energy in a general sense. Military and political tensions and economic sanctions against Gulf regional countries, which produce about 70 per cent of OPEC's total oil production, should come to an end.

OPEC, as one of the parties of the energy security equation, has proved to be a reliable player in this field. Having realized their role in global markets and within the framework of the long-term strategy of OPEC, Member Countries are moving towards transparency in their measures and, to this end, production capacity enhancement plans and projects are being implemented in both downstream and upstream sectors of their oil industries.

The biggest problems for OPEC are instability in consumers' policies and their rent-seeking through discriminating with tax systems against energy carriers.

Uncertainty in the long-term assessment of oil demand is raising the alarm about the possibility that investments by OPEC Member Countries in production capacity-building are being wasted, which is a serious threat to the producers' interests and should be removed via cooperation and dialogue between both producers and with consumers. We in OPEC will always be ready for dialogue and cooperation.

World oil market developments: challenges and opportunities

Mohammed Barkindo,
Acting for the OPEC Secretary General.

Although the purpose of this two-day meeting is to look at developments in world oil and gas, I shall focus on the oil sector, since OPEC is essentially an oil Organization. However, in doing this, I am not overlooking the fact that many OPEC Member Countries — and especially the Islamic Republic of Iran — have a strong base in the gas industry, as well as that of oil, and collectively account for around half the world's proven natural gas reserves. This compares with nearly four-fifths of global proven crude oil reserves.

It is always very special to be in Iran, because this is a very interesting Member of OPEC in a number of ways. First of all, it has a heritage closely linked with the birth of civilisation as we know it today in the wider world. Its history has been traced back more than five millennia and has witnessed many remarkable advances which continue to shape our fundamental perceptions of life, even in the present digital era. And yet, just 27 years ago, Iran bravely embarked upon a new path of socio-economic revolution which is visionary, principled and progressive, and has provided a compelling, viable alternative to the way modern societies can be run in the best interests of their peoples. In just one generation, there have been major advances in such important areas as health and education. It is no surprise that, in conformity with this progressive stance, the Islamic Republic is asserting its sovereign right to choose how it powers its national domestic, commercial and industrial infrastructure, in peaceful coexistence with other nations.

Secondly, Iran is an OPEC Member with heavy involvement in both the oil and gas sectors. There is a neat symmetry about this, since the country possesses the world's second-largest proven reserves of both crude oil and natural gas and is also ranked number four in terms of production of both — "marketed production" in the case of gas. Therefore, the Islamic Republic has a formidable presence in the international energy community and the potential to expand upon this in a big way in the future. In particular, the development of its gas export sector has huge implications for both the established consumer societies, such as those of the European Union, and the emerging economies, such as those of the neighbouring Indian sub-continent.

A founding member

And thirdly, Iran is more than just an important, committed and very active Member of OPEC. It is also one of the five Founders of the Organization, playing a major role in its establishment in Baghdad nearly half a century ago. Indeed, it was only last year that the Islamic Republic hosted the 135th Meeting of the OPEC Conference in the historic city of Isfahan and treated us to the warm hospitality for which this country is famed. It was at that meeting that a major change was made in the way we assess world oil prices, when the Conference agreed to change the composition of the OPEC Reference Basket of crudes, which had been in operation for nearly two decades, to one which better reflects modern-day realities.

Indeed, that was not the first time that a Conference held in Iran had had a special historic significance. The 22nd (Extraordinary) Conference in early 1971 — held in this very city of Tehran — occurred in the midst of protracted negotiations between six OPEC Member Countries and many leading international oil companies. Ten days

later, this resulted in the signing of what became known as the 'Tehran Agreement'. That accord marked a major breakthrough for our Organization, when developing country oil producers for the first time acquired a major influence in the pricing of oil on world markets — oil that was extracted from within these countries' sovereign territories.

Therefore, speaking to you in Tehran today, I feel that I am in a land that epitomises everything that is good about our cherished Organization!

It is, indeed, very important to have the total commitment of all our Members to handling the challenges and opportunities that face us in the international oil market as we seek to ensure that it functions in a stable and orderly manner at all times, in the interests of producers and consumers alike. It is a constantly shifting landscape, requiring continuous monitoring and the readiness and capability to take timely remedial actions, as and when necessary.

Iran has huge potential to expand its presence within the global hydrocarbons sector for decades to come.

If we look at the present situation, for example, we see that the past three months have witnessed a significant reversal of the trend of protracted upward pressure on prices that has been a dominant feature since spring 2004, and this is indicative of an over-supplied market. Indeed, the scale and speed of the decline in crude oil prices has caught the market by surprise. The OPEC Reference Basket has fallen by around $18–19 a barrel from a peak of $72.7/b on August 8, the sharpest drop since 1991, as a result of changing fundamentals and easing geopolitical tensions.

Additionally, very much as a result of OPEC's production increases in recent years, commercial crude oil inventories in the OECD have risen to comfortable levels, well above the five-year average. Also, with the approach of the winter, seasonally-important middle distillate stocks in the United States, including heating oil, are also at high levels and once again well above the five-year average as reported by recent weekly stocks data.

Demand growth

The demand picture for the remainder of 2006 and for 2007 appears far from robust. The strong demand growth seen in 2004 declined sharply in 2005, and this deceleration has continued into 2006. This has happened, despite the strong momentum in the global economy. Demand growth in 2006 is now expected to remain moderate, at around 1.0 million barrels a day, and to reach 1.3m b/d in 2007, although this requires a rebound from current trends.

On the supply side, the outlook for non-OPEC has changed dramatically, after non-OPEC supply growth had fallen behind world demand growth over the past few years — which had led to OPEC unexpectedly meeting the bulk of rising demand, to the tune of around 4.5m b/d since 2002, while also accelerating plans to expand production capacity. Non-OPEC supply has already picked up by 900,000 b/d in 2006 and is expected to grow next year at 1.8m b/d, the highest rate since 1984, pointing to a clear imbalance between supply and demand. Growth in non-OPEC supply is expected to exceed growth in world demand by around 700,000 b/d in 2007, indicating the need for measures to rebalance a market already flush with stocks. As a result, demand for OPEC oil will be 28.1m b/d, around 1.6m b/d lower than total OPEC production in September.

Long-term interest

Overall, the recent developments have triggered a strong bearish sentiment in the market, leading to concern that the downward momentum might persist and take prices lower than might otherwise be expected. Past experience has shown that it is in the long-term interest of both producers and consumers to maintain prices at levels that both support healthy economic growth, as well as encourage investment in capacity to meet current and future demand, particularly in an industry with long lead-times and high financial risks and in an environment of rising costs. In fact, this matter was discussed at length at the Informal Meeting of High-Level Experts from OPEC and non-OPEC producing countries in Mexico a fortnight ago.

It also constituted the sentiment that prevailed at a special Consultative Meeting of the Conference OPEC held in Doha, Qatar, on October 20. After reflecting on the outlook for the rest of this year and all of 2007, the Conference decided to realign its production by 1.2m b/d to 26.3m b/d, with effect from the beginning of this month, so as to help stabilise the market. A further review of the situation will take place at the (Extraordinary) Meeting of the Conference in Nigeria on December 14.

The Doha Conference effectively marked a turning-point for OPEC, in line with the changing market outlook. After a two-year period in which it had focused its efforts on increasing production levels and accelerating

capacity-expansion plans, in order to counter the exceptional, volatile upward pressure on prices at that time, the Organization responded to the evolving new need to resist, at its early stages, a possible heavy downward price spiral, which was as potentially damaging to the market at large as the upward trend. Such flexibility in its actions is typical of OPEC, as it seeks to achieve lasting order and stability in the market, at prices acceptable to producers and consumers alike.

This policy extends across all time-horizons, as was made clear at the Third OPEC International Seminar in Vienna two months ago, which attracted participants from the highest levels of government, industry and academia in both the richer and poorer nations. An overriding message that emerged from that event was that fossil fuels will continue to dominate the global energy mix for decades to come and will remain vital for supporting the forecast expansion in global economic growth. This ties in very much with our own forecasts.

OPEC's reference case scenario puts average annual oil demand growth at 1.6 per cent for the period up to 2025; this is a sizeable 36 per cent taken across the entire 20-year period. The transportation sector will be the main source of future oil demand growth, due to its heavy reliance on liquid fuels and the absence of viable alternatives on a large commercial scale. Developing countries, especially from Asia, are set to account for four-fifths of the rise in demand, with consumption almost doubling to 53m b/d. However, in 2025, OECD countries will remain the dominant oil consumer and will continue to use, on average, five times more oil per person than developing countries. Similar conclusions appear in the International Energy Agency (IEA) recently-released World Energy Outlook 2006, although there are variations in the actual figures.

The global resource base is sufficient to deal with the forecast increases in world oil demand well into the future. Estimates of global ultimately recoverable resources for conventional oil have been increasing, due to such factors as technology, successful exploration and enhanced recovery from existing fields. Technological pro-gress should also allow the development of large amounts of unconventional oil at a lower cost, such as gas-to-liquids, coal-to-liquids, tar sands and heavy oil. With specific regard to biofuels, these are still expensive to produce and generally require government support to make them competitive.

Indeed, when you think about it, it is rather ironic that many influential interests in the developed world are all too ready to criticise the governments of oil-producing developing countries for subsidising domestic fuel supplies, and, yet, at the same time, these same interests condone the use of subsidies for the development of their own biofuels and other renewable forms of energy! And they are very often the same people who keep reminding us of the virtues of a free market!

Incremental barrel

Non-OPEC supply has the potential to rise substantially in the medium term, but this is forecast to reach a plateau after 2015, at 58–59m b/d. Thus, in the longer term, it is expected that OPEC, with nearly four-fifths of the world's proven crude oil reserves, will be relied upon to supply most of the incremental barrel of demand, to ensure that the market remains well-supplied with crude, at reasonable prices that are compatible with robust growth in the world economy. We are also seeking to produce oil in a cleaner and more efficient way than ever before, so as to meet the increasingly stringent demands of the modern consumer in rich and poor countries alike. Our projections show that OPEC production levels, including natural gas liquids, will rise to 54m b/d by 2025, which will be slightly below that of non-OPEC.

Moreover, if we look at the major inter-regional flows of crude oil from the perspective of exporters, as expected by 2015, we can see the major role of the Gulf region as a whole and, notably, the heavy concentration of its exports to Asia. With 18 per cent of the region's proven crude oil reserves — as well as more than double this proportion of its natural gas, at 38 per cent — clearly Iran will remain a major player in this hydrocarbon-rich area.

The figures are equally impressive in global terms, with Iran possessing 12 per cent of the world's proven crude oil reserves and 15 per cent of its natural gas. Indeed, if we return to the reserve strength and production level discrepancy, to which I referred at the start of this address, we see that Iran accounts for just 5.7 per cent of world crude oil production — in other words, in percentage terms, less than half the figure for reserves. The discrepancy is even greater for natural gas, where marketed production is just 3.3 per cent of the world figure — in percentage terms, just over a fifth of its global reserve share.

Global outreach

The underlying message of all this is the huge potential the Islamic Republic has to expand its presence

within the global hydrocarbons sector for decades to come, and the Iranian Government's recognition of this and plans to invest heavily in further developing this vital industry right along the supply chain and increasing its global outreach are crucial to the future of the country. On top of this is the fact that the relatively low costs of production make upstream investment highly conducive to its profitability.

The challenges and opportunities facing Iran are recognized by OPEC at large and are mirrored across the Organization, in accordance with individual resource endowments, domestic policies and other national attributes. Significantly, they demonstrate the willingness and ability of OPEC and its Member Countries to supply the incremental barrel and the seriousness they attach to the future of the oil industry.

But it is not all plain sailing and, when the wind picks up, many practical difficulties can manifest themselves. Among them are the problems for effective investment strategies created by uncertainties over such key factors as world economic growth levels, advances in technology and policy measures in consuming countries. OPEC scenarios have illustrated how, even over the medium term to 2010, there is an estimated range of uncertainty of $50 billion for required investment, and this increases to as much as $240bn by 2020. Thus, there is a heavy burden of risk for producer countries, with the huge amounts of capital that must be committed up front and the long lead times. Similarly, the IEA's World Energy Outlook expresses concern about the impact of uncertainties.

This is why OPEC repeatedly calls for more transparency in the evolution and implementation of policies among consuming countries, so that better assessments can be made to undertake the appropriate capacity expansions and prevent a waste of precious financial resources. Perhaps the international oil companies with substantive investment portfolios in oil-producing developing countries should do everything they can to impress this fact upon their host governments in consuming countries.

Another aspect is the cost of infrastructure, such as rigs and tankers, as well as the cost and availability of human resources. For example, drilling costs have increased by 50 per cent since 2003, with steel prices rising by 40 per cent since 2004. In 2005 alone, wages in the industry increased by about 15 per cent. We believe that better cooperation between the international and national oil companies could lead to significant cost reductions in such areas. Furthermore, the number of students enrolling in petroleum-related courses has also shown a significant decline since the mid-1980s, and we need to make the industry attractive to prospective graduates and employees the world over.

Notably, enhancing cohesion among OPEC Member Countries is of crucial importance here. As the OPEC Long-Term Strategy puts it: "The Organization should expand intra-OPEC interactions, networking and dialogue at the level of Ministers of Petroleum/Energy and national oil companies. Cooperation should also be pursued in the technological and scientific areas of higher education in Member Countries."

In addition, downstream tightness, in the form of inadequate refining capacity in some leading industrialized countries, has been putting a lot of pressure on oil price levels and differentials over the past couple of years. Despite the number of major refining projects worldwide, the long construction lead times, combined with typical delays and project terminations, will most likely mean that the existing refining tightness will not ease until at least 2009 or 2010.

Downstream investment

It is estimated that $160bn in downstream capacity investment will be required by 2015, with another $150bn needed for maintenance and replacement of lost capacity. However, present commitments leave a shortfall of around $100bn. Our Member Countries are very concerned about this part of the international supply chain and have a growing amount of investment downstream, including joint ventures in refining and petrochemicals in key markets. However, there is only so much OPEC can do downstream, since this is essentially and traditionally the domain of consuming countries, which have the primary responsibility for investment in this sector.

OPEC is also very committed to efforts to protect the environment, as one of the three pillars of sustainable development, as defined at the world summit on this crucial human issue in Johannesburg in 2002. Both collectively and at individual Member Country level, with mutual encouragement and collaboration all round, the Organization has participated actively and with resolution in all the major meetings of the United Nations Framework Convention on Climate Change (UNFCCC), as well as the Kyoto Protocol. Indeed, we were well represented at the 12th Conference of the Parties to the Convention which has just been held in Nairobi, Kenya.

This topic is, of course, a familiar one to our friends in the Islamic Republic of Iran, which ratified the convention in 1996 and the protocol in 2005.

However, we are quite clear in OPEC about the nature of our commitment, since it must be centred around the principles of 'common, but differentiated responsibilities' and 'respective capabilities'. Developing countries, including Members of our Organization, have not been responsible for the historic emissions that are having such an impact on the world environment today.

Their root causes can be found in the industrialized societies that emerged in Europe in the 18th century and subsequently proliferated among what are now considered to be the richer nations of the world. Furthermore, developing countries are neither technologically or financially capable of adapting to the negative impacts on the environment. Indeed, policy measures adopted by major industrialized countries to combat climate change can easily have a negative impact on the economic

well-being of our Member Countries. Therefore, we fervently believe that any 'post-Kyoto' agreement must adequately and comprehensively address these concerns, so as to ensure a fair and balanced global approach to handling these very serious issues.

The other two pillars of sustainable development are social and economic development, and OPEC is deeply aware of the needs of other developing countries as they seek access to modern energy services to transform their domestic infrastructures, sometimes from a state of extreme poverty. Without outside assistance, many appear to have no means of escape from the poverty trap. As developing countries ourselves, we are constantly mindful of the fact that poverty eradication is the first UN Millennium Development Goal.

The theme of this forum encompasses a wide range of global energy issues and, even though I have confined my comments to the oil sector, I feel that time constraints have prevented me from doing full justice to some important subject-matter.

Nevertheless, I hope I have managed to convey to you the true extent of the challenges facing oil-producing developing countries such as the Islamic Republic of Iran and my own Federal Republic of Nigeria. In a nutshell, these are to provide regular supplies of crude to consumers at reasonable prices, both now and in the future, and to use the resulting revenue for several distinct purposes beyond the normal commercial ones: first, to help develop our domestic economies and provide better lifestyles for our citizens; secondly, to plough funds back into the industry to ensure that future consumer needs are well-catered for the world over; and thirdly, to provide assistance to other impoverished nations in the true spirit of sustainable development, as encapsulated at the World Summit in Johannesburg four years ago.

To address such challenges, there is widespread agreement on the need for a constructive, sustained process of dialogue at a global level, involving all the interested parties and prepared to tackle all the major topical issues affecting the industry. In today's globalized environment, inter-connected through trade, no individual country or group of countries can comprehensively carry out this formidable task alone.

Energy dialogue

Such awareness led to OPEC's pioneering collaborative efforts to initiate producer-consumer dialogue 15 years ago and this has since been transformed into the International Energy Forum (IEF), which has its headquarters in another OPEC Member Country, Saudi Arabia. The Islamic Republic of Iran has been an active participant in the forum since its inception, and, indeed, an official from this country has served with distinction on the forum's Executive Board.

This, in fact, is just one example of many forms of dialogue and cooperation our Organization and its Member Countries have been involved in over the years. Another form worthy of mention here relates to the formal energy dialogues OPEC set up with the European Union, China and Russia last year, and these have enormous potential for enhancing the already good relations between the respective groups. The EU-OPEC energy dialogue has led to a series of concrete proposals to jointly examine, in depth, topical matters of mutual interest, as well as embracing a proposal to establish an EU-OPEC technology centre.

It is estimated that $160bn in downstream capacity investment will be required by 2015, with another $150bn needed for maintenance and replacement of lost capacity.

Let me state here that full, meaningful dialogue is always preferable to other more direct and less constructive means of handling issues, and here I refer back to what I said at the start of this address — that every country has a sovereign right to decide how it powers its national domestic, commercial and industrial infrastructure, in peaceful coexistence with other nations. The choice of an optimal energy mix is the inalienable right of every country.

I should also like to point out that one of the difficulties facing oil producers from this part of the world especially is that their rich endowment of heavily demanded natural resources means that the international spotlight will always be focused on them, and — as we know too well — very often in a negative manner. In today's world, this is unavoidable and something we must live with, unfortunately.

However, we should never allow this to distract us from the central task of meeting the growing energy needs of the global community and, most especially, those of the world's poorest nations in their long-overdue quest for sustainable development.

It is, therefore, up to all of us to rise to these challenges, and OPEC — including its esteemed Founder Member, the Islamic Republic of Iran — maintains its long-standing resolve to do this, to the benefit of producers and consumers alike and in support of sound, sustained growth across the global economy.

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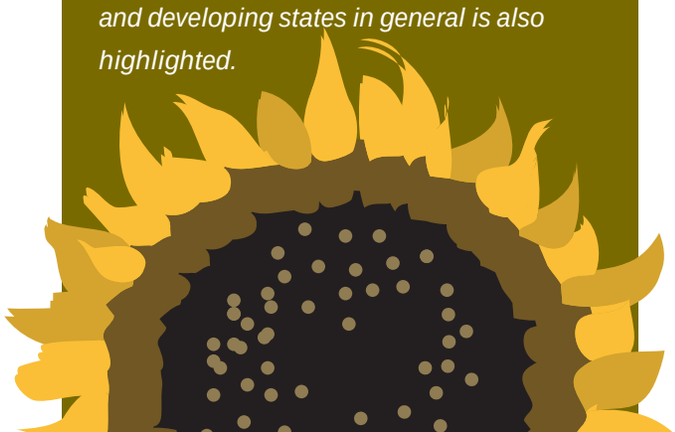
Around 6,000 delegates and 100 ministers gathered in Kenya for two weeks of intensive negotiation on climate change, but was ...

Nairobi meeting yet another missed opportunity?

Over two weeks in November 2006, some 6,000 participants from 200 countries, including 100 government ministers, met in the Kenyan capital, Nairobi, for the latest round of talks on the environment. The 12th Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) sought to formulate a long-term and meaningful response to global warming — one that would supersede the present Kyoto Protocol, the first term of which ends in 2012. In this feature, Jerry Haylins reports on the outcome of the meeting. The position put forward by OPEC in its continuing efforts to safeguard the interests of Member Countries in particular and developing states in general is also highlighted.



Much was expected from the latest round of United Nations climate change talks in Nairobi on November 6–17, 2006, but after two weeks of extensive and wide-ranging discussion, environment ministers from some 200 countries found themselves leaving the Kenyan capital mostly empty-handed.

Their attempt to find a definitive approach to widening the reach and scope of the Kyoto Protocol, the planet-saving initiative that so many people hoped would be the answer to controlling the emission of harmful gases into the atmosphere, produced considerable rhetoric, yet little meaningful action.

The Protocol, which came into operation in 1998, six years after the landmark Rio Declaration on the environment and development was reached in Brazil, will see its first term end in 2012. And with no effective substitute

Above: Kenyan President, Mwai Kibaki, who opened the climate talks.

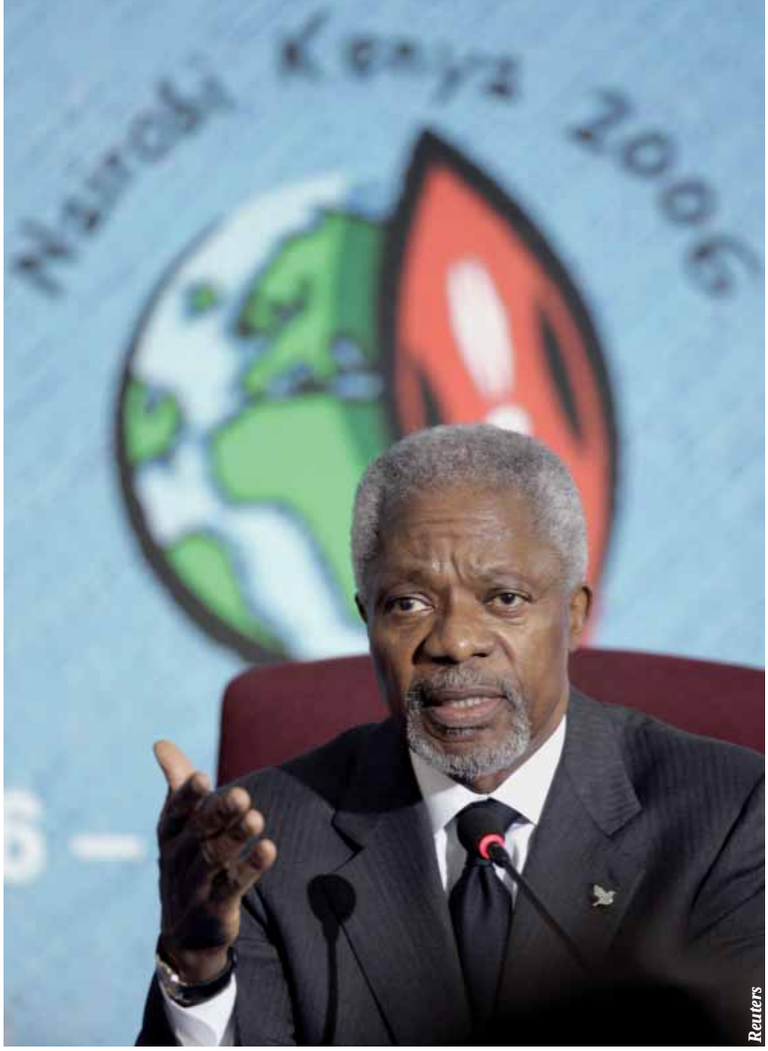
Top right: The venue of the United Nations Climate Change Conference in Gigiri, Nairobi.

Top left: A typical coal-burning power generation plant in China, where poor air quality is now forcing the government to seriously look at controlling such emissions.

programme on the horizon, the latest meeting on one of the most important subjects to grace the global agenda in modern times, again showed just how difficult finding an agreeable solution to caring for the planet for future generations is proving to be.

Undoubtedly, it is a big issue, and one that affects all countries — big or small, developed or developing. Yet, governments remain reluctant to act, knowing full well the huge costs involved and the risks a meaningful solution would bring to their future industrial competitiveness.

And with the world's leading polluters, the US and China, still not willing to make any serious contribution to the cause, other governments are wary of committing their countries to far-reaching emission reduction programmes.



Above: Outgoing UN Secretary-General, Kofi Annan, takes a question during a news conference at the Climate Change Conference.

Below: Yvo de Boer, Executive Secretary of the UN UNFCCC, addresses the media at a news conference in Nairobi.

For more than a decade, significant uncertainty existed as to whether global warming was actually occurring at all.

Today, as that scientific evidence has mounted, debate has now shifted to the next consideration — economics — and just who should pay for cleaning up the environment.

However, there was some light at the end of a seemingly very long tunnel in Nairobi. The conference, which was attended by around 6,000 delegates, including 100 ministers, did agree to implement a wide-ranging review of the issue of global warming and its effects on the environment by 2008.

The idea is that, once all the facts and positions have been digested, it should pave the way for some form of broader action to be taken, post 2012. This is seen as vital for the future success of the 'green' initiative since today's Kyoto signatories are only responsible for some 35 per cent of current greenhouse gas emissions.

Kyoto Protocol signatories

As numerous delegates reiterated in Nairobi, it is essential that any future serious and lasting initiative has the US and China on board. So far, the world's largest economy has refused to join the other 160 or so signatories of the Kyoto Protocol, which obliges the industrialized nations to cut emissions to five per cent below 1990 levels by 2012.

And the case with China is not really any better since, though a party to the Protocol, at the time of signing, it was categorized as a developing country and therefore was not allocated any emission reduction targets.

The hard, cold truth that came to light in Nairobi was that for any real difference to be made in halting global warming, some 50 per cent of current harmful emissions would have to be removed from the earth's atmosphere by 2050 — a tall order indeed and one that may not now be seriously addressed for at least another couple of years.

Some progress was made in Nairobi concerning the case of the world's poorer states — the developing countries — who have consistently and justifiably maintained that it is the industrialized nations that must take the lead in any future serious agreement on the environment, an argument that is solidly backed by OPEC.

The fact is that no continent is as vulnerable to the potential effects of climate change as Africa. The experts say that global warming has already caused changes in weather patterns that have disrupted livelihoods across

A sharp increase in transportation in Asia will form the basis of a rise in oil demand in the future. This will ultimately lead to more emissions. Pictured here is a typical traffic jam during the rush hour in Beijing, China.

the continent. The same experts say that declining crop yields will lead to more famine and droughts and increasing desertification, which will mean smaller areas of farmland and an increase in forced migration to more densely populated areas. It is a situation that will inevitably heighten poverty levels, exacerbate resource scarcity and even fuel conflict and war, they state.

To press this point home at the UNFCCC talks, Kenyan children led a march by hundreds of people through Nairobi, calling on the rich nations to do more to fight global warming and help Africa deal with the problem.

But it is a fact that the effects of global warming are not fairly shared. Some 14 per cent of the world's population live on the African continent, where Africans are contributing only three per cent of the world's greenhouse gas emissions. Compare that with just the United States, which has only five per cent of the world's population, yet is responsible for nearly 25 per cent of global greenhouse gas pollution.

Admittedly, there have been some incentives to promote clean energy, such as solar and wind power, under a scheme that could channel $100 billion to poor nations by 2012, but it is generally felt that not nearly enough is being done to cater to the interests of the world's least-privileged countries. The Nairobi talks also looked at a set of principles for a fund meant to help developing states adapt to climate change, but delegates delayed until next year a decision on who should run such a facility.

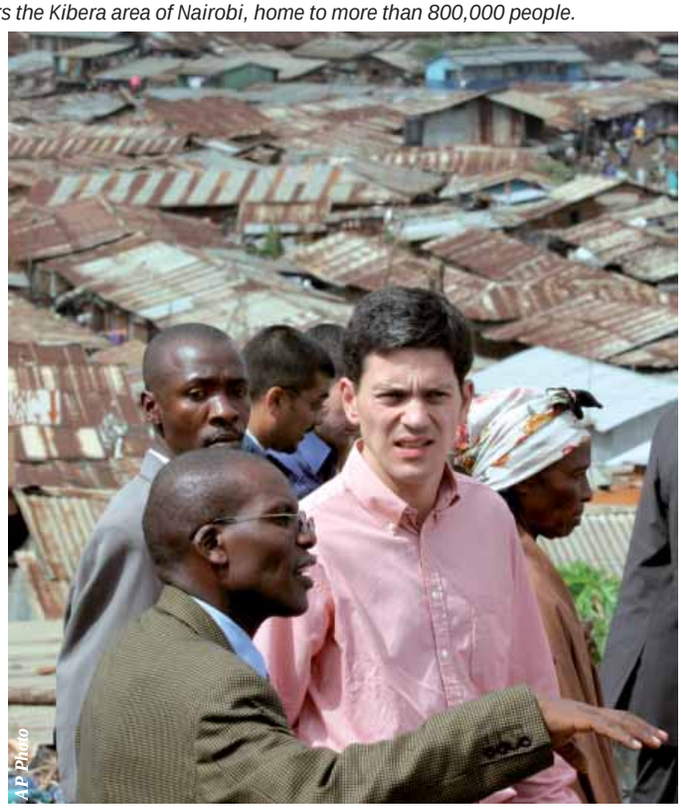
Limited success

It did become apparent over the two weeks in Kenya that there are many ways, means and forms of action that could be adopted to help deal with the effects of climate change. But without the majority of the world's leading nations agreeing to serious reductions in greenhouse gas emissions, along with the conviction that a great deal more direct mitigation aid must go to places like Africa, only limited success in halting global warming can ever be achieved.

In opening the Nairobi talks, Kenyan President Mwai Kibaki warned that in the light of new findings by the scientific community on rising greenhouse gas emissions, all Africans were "in danger of missing out

Above: New Zealand's Prime Minister, Helen Clark, who called for urgent action against global warning.

Below: Britain's Secretary of State for the Environment, David Miliband, talks with a village elder as he tours the Kibera area of Nairobi, home to more than 800,000 people.



on opportunities for sustainable development of their individual countries."

He stated: "Climate change is threatening to frustrate poverty eradication efforts and making the prospect of meeting the Millennium Development Goals less certain."

Also at the opening ceremony, then United Nations Secretary-General, Kofi Annan, referred to climate change as "a threat to peace and security".

He said: "Global climate change must take its place alongside the threats of conflict, poverty and the proliferation of deadly weapons that have traditionally monopolized first-order political attention."

Clean Development Mechanism

Annan, who completed his second five-year term as UN head on December 31, 2006, said the UN "offers the tools the world needs to respond", announcing that six UN agencies had launched an initiative — the 'Nairobi Framework' — to help developing countries, especially in Africa, participate in the Kyoto Protocol's Clean Development Mechanism (CDM).

This mechanism permits industrialized countries that have emission targets under the Protocol, to invest in sustainable development projects in developing states that reduce greenhouse gas emissions and thereby generate tradable emission credits.

"The CDM is an outstanding example of a UN-led partnership linking government action to the private sector in the developing world," Annan pointed out.

The agencies involved in the partnership are the UN Development Programme (UNDP), the UN Environment Programme (UNEP), the World Bank Group, the African Development Bank, and the UNFCCC.

These organizations will combine efforts to try to win more carbon credit projects for Africa under the Kyoto Protocol. More than 300 such schemes have been approved worldwide under the CDM. Deals totalled $4 billion in the first half of 2006. But only a few projects are located in sub-Saharan Africa, and all are in South Africa.

Yvo de Boer, UNFCCC Executive Secretary, said carbon financial flows to the developing world could grow to $100bn a year. But this, he added, depended on three things happening — industrialized countries committing to reducing emissions by 60–80 per cent by 2050, buying carbon credits from the developing states for half this amount, and keeping the price of carbon at a minimum of $10 a tonne.

However, representatives of African non-governmental organizations (NGOs) at the Nairobi conference

were skeptical about the success of this scheme for the developing world. They have called for a special 'Africa fund' to be set up and are appealing for governments to give climate change the same priority as HIV/AIDS.

Also, climate change and its threat to Asia-Pacific economies, was top of the agenda at a regional trade summit in Hanoi, Vietnam, just days after the Nairobi meeting, where some leaders pressed for urgent action against greenhouse gas emissions.

According to a communiqué issued by the 21-nation Asia Pacific Economic Cooperation (APEC) group, member countries agreed to accelerate the development of new technologies and alternative energy sources.

The statement echoed a call from leaders such as New Zealand Prime Minister, Helen Clark, who said climate change should be a top priority for the trade-focused group.

"The dire economic effects of unchecked climate change should be addressed by APEC because of the organization's primary concern for growth and development," she told an audience of business leaders. "Without a commitment to sustainability, we will likely get neither in future."

APEC members account for nearly half of the world's global trade. In the statement, the group "encouraged member countries to transition to low-carbon energy systems and called for rapid transfer of low-carbon technologies to lower-income economies."

Since the Nairobi meeting, there have been more calls for the US to take serious action on the environment, while China, mostly spurred by its deteriorating air and water quality, is already taking steps to reduce its emissions from coal-burning power stations. It is also seriously looking at projects to encourage the use of renewables, including wind-power generation.

The state of climate change

Meanwhile, in February, a group of 2,000 UN scientists will issue the first detailed update on the state of climate change in six years. It is expected to offer more conclusive proof that the planet is indeed warming. Such findings will surely be the subject of intense discussion at the 2007 annual UN climate conference, which will be held in Bali, Indonesia, in December.

But then, whether any real progress is made in the coming months will be gauged at the next round of climate change negotiations under the Kyoto Protocol and UNFCCC, to be held in Bonn, Germany, in May this year.

AP Photo

AP Photo

Above: Environmentalists and schoolchildren on a protest march in Nairobi during the Conference.

AP Photo

OPEC urges industrialized countries to take lead in combating effects of global warming

Developing states must receive help in dealing with GHG emissions — Barkindo

The Organization of the Petroleum Exporting Countries (OPEC) has called on the major industrialized countries to take a decisive lead in combating the effects of climate change, both today and in the future.

The Organization's Acting for the Secretary General in 2006, Mohammed Barkindo, said these nations, which formed part of the Annex-I group of countries under the Kyoto Protocol, should abide by their commitments to reduce harmful emissions into the atmosphere.

Addressing the 12th session of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) in Nairobi, he pointed out that 15 years had passed since the Rio Convention, drawn up in Brazil, laid the foundation for addressing climate change, yet the industrialized nations were still far from contributing significantly to reducing their overall emission levels.

"These nations are also not fulfilling their many obligations vis-à-vis developing countries in general, and in particular to those whose economies are highly dependent on the export of fossil fuels, as enshrined in Article 4.8 of the Convention and Articles 2.3, and 3.14 of the Kyoto Protocol," he told delegates.

"OPEC therefore reiterates the importance of the UN Convention on Climate Change and its Kyoto Protocol and calls for strict adherence to their fundamental principles, and in particular to common but differentiated responsibilities and respective capabilities," he added.

Barkindo began his address by reminding those assembled that in meeting on African soil and on a continent that "is the cradle of humanity", it elevated the responsibility put on everyone to deliver and achieve successful outcomes.

"It also reminds us that for developing countries, poverty alleviation, economic development and social progress are the overriding priorities. Climate change is adding more challenges and creating additional vulnerabilities for these countries, although they are not responsible for the current state of our planet," he affirmed.

Barkindo stressed that energy was fundamental for economic development and social progress. While the use of all forms of energy was welcome, it was clear that

Above and left: Views of the Conference chamber in Nairobi.

fossil fuels would continue to satisfy the lion's share of the world's growing energy needs for decades to come.

Consequently, he said, OPEC considered it extremely important to promote cleaner fossil fuel technologies, including carbon capture and storage (CCS), a promising technology that had the potential to contribute significantly to emissions reduction by the middle of the century.

"Industrialized countries should take the lead in the funding and execution of large CCS demonstration projects. It is also vital to make this technology eligible to the clean development mechanism (CDM), sooner rather than later. OPEC has recently organized, in Riyadh, Saudi Arabia, and jointly with the European Union, a roundtable on CCS."

Barkindo continued: "More generally, while we have taken note, with interest, of the increasing role of the CDM, OPEC considers that this mechanism has to be reformed to overcome its limitations, posed by *inter alia* unequal regional and sectoral distribution of projects, financing barriers, operational efficiency and additionality requirements."

He stated that OPEC considered that efforts should not be limited to mitigation, but should increasingly encompass adaptation to climate change, in particular for developing countries, and as such welcomed the recent advances regarding the Adaptation Fund.

"OPEC calls for increased financial contributions to all the funds that have been established in the context of the Convention and its Kyoto Protocol and stresses that further progress needs to be made in the essential CDM components of capacity-building and technology transfer," he said.

In praising the convening of the latest climate change talks, Barkindo said that everyone recognized the importance of the meeting.

"It is a critical juncture in the further development and strengthening of a truly global and multilateral climate change regime — one where we build a future that not only recognises disparities between the North and the South, but actively works to address them.

"Thus, we need to work together, not against each other. This is the spirit that originally brought us together under the Convention and the Kyoto Protocol and it is the spirit we need in order to crystallise a successful second commitment period.

"I will therefore press upon industrialized country parties to steer clear of insisting on calls to discuss further commitments for developing countries at this stage. This will not solve the climate change problem we are facing today and it is certainly not conducive to a productive and convivial atmosphere.

"Rather, I would call on you to demonstrate to developing countries, in a transparent manner, your willingness to fulfil current commitments under the Convention and the Kyoto Protocol," he said.

Barkindo added that the aim should be to assist developing countries in the advancement of their capabilities and to tackle the dichotomy posed by economic growth and rising greenhouse gas emissions.

"If this is the aim, I feel we can work together constructively in meeting the climate change challenge."

A selection of news stories on OPEC Member Countries taken from international media services

Rahman appointed to Pertamina Board of Commissioners

Jakarta — Dr Maizar Rahman *(pictured),* OPEC Governor for Indonesia and former Acting for the OPEC Secretary General, has been appointed to the Board of Commissioners of the Indonesian national oil company, Pertamina. Rahman, 58, who has been his country's OPEC Governor since February 2004, spent one year at the OPEC Secretariat when Indonesian Minister of Energy and Mineral Resources, Dr Purnomo Yusgiantoro, was both OPEC Secretary General and President of the OPEC Conference in 2004. Rahman is Chairman of the National Committee of OPEC for Indonesia and President Commissioner of the Chandra Asri Petrochemical Centre in Indonesia.

Rahman, who attained a PhD in Chemical Engineering from the Institut Français du Pétrole (IFP) in Paris in 1983, was Director of the Division of Research for Refining and Petrochemicals at the National Research and Development Centre for Oil and Gas Technology (LEMIGAS), Indonesia between 1992 and 1998. He was then appointed President Director/CEO, LEMIGAS, Indonesia, where he stayed for three years. *Tempo Interactive*

Angola's investments in oil exploration rise

Luanda — Investments in the field of oil exploration in Angola during 2006 reached $10 million, representing an increase of about 37 per cent compared with 2005, according to the country's Petroleum Minister, Eng Desiderio da Graça Verissimo e Costa. Speaking at a New Year's ceremony with representatives of oil companies and services operating in Angola, he stated that national production last year expanded to an average of about 1.4 million b/d. With the start of production in the Dalia Field (Block 17) in December, and other projects to be implemented this year, the Minister forecast that crude oil production in the country in 2007 will reach 2m b/d. He explained that Angola, through its national concessionaire Sonangol, up until the end of the third quarter of 2006 exported about 129 million barrels of crude oil, at the average price of $63/b. Thus, stressed the Minister, the move by Angola to join OPEC, responded to the increasing performance of the country in the world oil market. *AngolaPress*

Indonesia's inflation falls to 6.6 per cent in 2006

Jakarta — Indonesia's inflation rate in 2006 plunged to 6.6 per cent from 17.11 per cent a year earlier, according to the Central Bureau of Statistics (BPS). Inflation in December 2006 reached 1.21 per cent with the foodstuff group contributing the highest data of 3.12 per cent to the monthly figure, BPS chief Rusman Heriawan was quoted as saying. *Antara News/Asia Pulse*

Free trade must not threaten farmers' interests — Yudhoyono

Cilegon, West Java — Indonesian President, Susilo Bambang Yudhoyono, has said that the interests of domestic farmers should not be endangered by the implementation of regulations set by the World Trade Organization (WTO), even though Indonesia must comply with the principle of global trade arrangements. "Although we must abide by international trade regulations made by the WTO, if we do not get special privileges, we will suffer losses," he stated when inaugurating a sugar factory of PT Permata Dunia Sukses Utama. The President said that the government was therefore pleased that Indonesia had received privileges for its four products — rice, sugar, soybean and maize. He pointed out that without special protection, Indonesia would not have strong competitiveness. *Antara News*

West cannot accept Iranian progress — minister

Orumiyeh, West Azarbaijan Province — Iranian Minister of Cooperatives Mohammad Abbasi has said here that the West could not accept the fact that the Islamic Republic of Iran had progressed and was on the way to greatness and therefore opposed its nuclear capabilities. "All nuclear activities of Iran are peaceful. Despite all their exceptional efforts, the United States and Western states have not found any evidence to prove Iran's nuclear programme is non-peaceful," he said. Abbasi said that Iran's peaceful nuclear activities and scientific progress gave hope to oppressed peoples of the Islamic world. "The Iranian nation will continue its resistance and scientific progress. US threats will not diminish the Iranian people's determination," the minister stressed. *IRNA*

India's Essar plans $2 billion oil refinery in Iran

New Delhi — The Essar Group, a multi-billion dollar steel-to-telecom conglomerate, is in talks with Iran to set up a $2bn refinery in the OPEC Country's southern region. "Essar is in talks with the state-run National Iranian Oil Refining and Distribution Company (NIORDC) to set up a 300,000 b/d refinery at Bandar Abbas," an industry source said. Iran has embarked on an $18bn expansion of its oil refining capability to help meet its rapidly growing domestic fuel requirements. *Antara News/Asia Pulse*

Kuwait has most moderate inflation rate in GCC region

Kuwait — Kuwait has the most moderate inflation rate among the six Gulf Cooperation Council (GCC) Member States, according to a report from the National Bank of Kuwait (NBK). In its latest economic brief, it revealed that the inflation rate in Kuwait in 2006 remained in the vicinity of the four per cent registered in 2005. However, the upward trend in the inflation rate seen in the Council accelerated in 2006, despite the efforts of governments to contain inflationary pressures through generous subsidies to several essential goods and services. The inflation rates in Qatar and the United Arab Emirates (UAE) approached ten per cent, while the rate doubled in Saudi Arabia, albeit to a much lower 1.8 per cent, according to preliminary estimates for 2006. Inflation hit two per cent in Oman and five per cent in Bahrain. *KUNA*

Nigeria pays $1.4 billion in London Club debt

Abuja — Nigerian President Olusegun Obasanjo has said that $1.4 billion of London Club debt had already been paid, with the final balance of $900 million to be paid by March this year. Speaking at State House, when the National Economic Intelligence Committee (NEIC) presented its Third Quarter, 2006 Report, he said: "We have paid off $1.4bn of the amount we owe to the London Club, and the balance of about $900 million will be paid by March, this year, effectively wiping clean, the debts we owe." Commenting on parts of the report which expressed concern at high interest rates and inflation, the President agreed that interest rates were still high compared with other economies, though he acknowledged that progress had been made in the last seven years. *Nigeria Direct*

Oil responsible for neglect of solid minerals — Obasanjo

Abuja — Nigerian President Olusegun Obasanjo has said that the country's overdependence on oil revenues was responsible for the neglect of solid minerals. He lamented that previous administrations abandoned solid minerals, which could be found in all parts of the country, in the face of oil money. Agriculture did not fare any better, said the President, citing Nigeria's self-sufficiency in poultry, grain and maize in 1979, only to become a major importer of these commodities a few years down the line. In acknowledging that the reforms in the solid minerals sector "started a little bit late because the foundation for take-off was basically not there," he stated that "we are getting things right now." However, the President stressed that the government's reform agenda in the sector would take some time to begin to produce results. *Nigeria Direct*

ADNOC Distribution enters Saudi market

Abu Dhabi — ADNOC Distribution has signed a Memorandum of Understanding (MoU) with the Saudi Arabian Al Alaibi Corporation, a major supplier of petroleum products, to build a network of its model fuelling stations in the Kingdom. "The agreement is in line with the company's ambitious plans to expand and develop its operations to include local and regional markets," commented ADNOC Distribution General Manager Jamal Al Dharif. Under the MoU, he added, ADNOC Distribution would build these stations with its Saudi partners at major cities and on highways linking Saudi Arabia and the Gulf region with European and Middle Eastern countries. *WAM*

Saudi cement company profit jumps

Dammam — The Saudi Arabian cement company in the Eastern Region of the Kingdom has announced that its profit for 2006 amounted to 446 million Saudi rials, up from the 299m rial profit recorded in 2005. An official statement released by the company attributed the rise in profit to a higher volume of sales. *SPA*

Chavez storms to re-election victory

Caracas — Venezuelan President, Hugo Chávez Frías, has stormed to re-election victory. The National Electoral Council said Chávez won 61 per cent of the vote, while rival, Manuel Rosales, a governor of an oil-producing province, who managed to unite the fractured opposition, won 38 per cent after nearly 80 per cent of the vote had been counted. Having already taken on multinational oil giants to demand they hand more control to the state, Chávez will likely press for more share of Venezuela's vast oil and mineral resources and increase land distribution for the rural poor. Chávez, 52, and in office since 1999, said in an interview broadcast on state television: "We are going to accelerate everything, everything." *Reuters*

PDVSA, Petroecuador to negotiate energy cooperation

Caracas — Venezuelan-state oil company, PDVSA, and Ecuadorian oil firm Petroecuador, will negotiate an agreement covering energy cooperation, according to Ecuadorian industry president, Galo Chiriboga. According to the website www.estadao.com.br, through the agreement, Ecuador will obtain oil derivatives, mainly gasoline, which will mean a saving of $60 million a year. Through talks with PDVSA authorities, both countries had strengthened industrial and technical cooperation between the two companies, especially in the area of Ecuadorian oil refining in Venezuela, said Chiriboga. Last year, the two national oil firms signed a strategic alliance to refine 100,000 b/d of Ecuadorian crude in Venezuela. The agreement was suspended due to differences between the two sides over prices. However, the talks were restarted in December last year. *ABN*

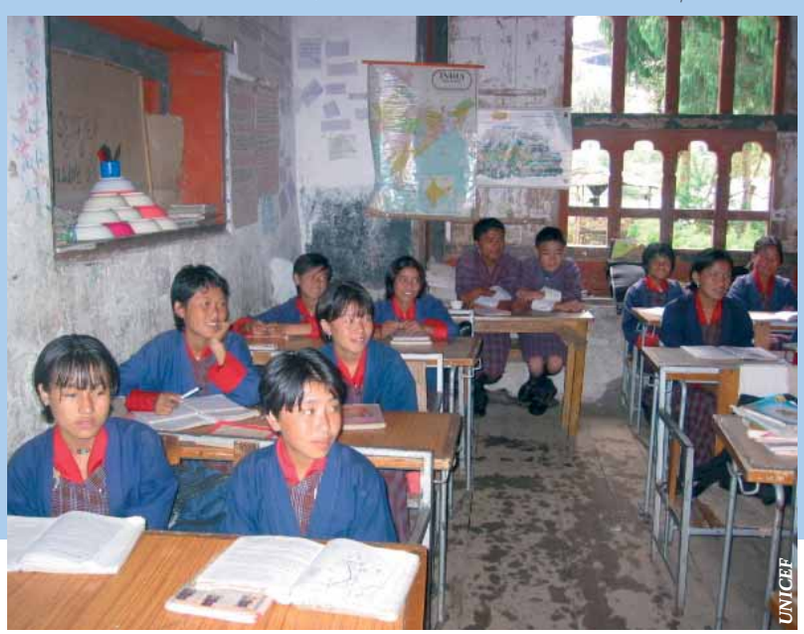
OPEC Fund cements relations with UN

Secures observer status in General Assembly

Schoolchildren in Bhutan, one of the world's smallest and least-developed countries.

The OPEC Fund for International Development (OFID) has been granted observer status in the United Nations General Assembly. The decision, which was announced following ratification of a UN resolution towards the end of October last year, will allow the Vienna-based institution to attend all meetings held under the auspices of the UN. In conducting its lending and grant aid operations, the OPEC Fund often works very closely with various UN agencies. So it is appropriate that these ties have now been strengthened.

In this feature article, the Bulletin looks at two worthy educational projects backed by the Fund and UN agencies that have benefited the authorities and people of **Bhutan** and **Bolivia.**



BHUTAN: helping children get to school


UNICEF

A long time ago, so Bhutanese legend goes, a Buddhist saint called Guru Rinpoche flew across the Himalayas on a tiger. As a fierce thunderstorm raged in the rugged valleys below, he paused to declare that this was Bhutan — Land of the Thunder Dragon.

Just as extreme as the climate is Bhutan's landscape, with snow-laden peaks towering over steep valleys and icy, rushing rivers. In this remote Himalayan kingdom children sometimes have to walk for half a day across rugged mountain terrain just to reach the nearest school. It is therefore not surprising that many youngsters, especially from poor families, do not get an education at all.

One of the world's smallest and least developed countries, Bhutan faces many challenges particular to its situation. It is isolated and so mountainous that there is little land suitable for agriculture. There are few roads and other transport links, and the small population of just over two million is very scattered.

Providing social services is problematic, but in recent years, the Bhutanese government has made enormous efforts to improve the quality of life of its people by advancing health and education. The educational system, in particular, has made impressive strides, with dramatic increases in the numbers of schools and qualified teachers, together with information campaigns about the importance of schooling, which have led to improved enrolment rates.

Like many developing countries, however, Bhutan has a discrepancy between the numbers of boys and girls in schools, with fewer girls than boys enrolled. This is due, in many cases, to parents keeping their daughters at home to assist with household chores and to help bring up younger siblings. People are also fearful of allowing their young daughters to walk long distances to and from school. The result is that literacy among women was estimated to be as low as 18 per cent in 2002.

That same year, Bhutan's government launched an action plan to establish 137 new primary community schools in Bhutan's poorest areas. The new schools greatly alleviated the problems in primary education, but there was still a large difference in the numbers of boys and girls registered.

The United Nations Children's Fund (UNICEF), therefore, undertook to establish the extra schools needed to provide equal access to education by 2007. In support of UNICEF's initiative, the OPEC Fund approved a technical assistance grant of $200,000 in June 2004.

The results have been impressive. In 2004, 54 primary schools were built, each provided with furniture and reading materials. Beneficiary communities willingly contributed to the scheme by supplying unskilled labour during construction, knowing that the new schools would also serve as premises for informal literacy classes and community functions, and a community library.

The initiative will also create eight School Resource Centres in target districts where girls' enrolment is the lowest. These centres will offer seminars and workshops for teachers for improving teaching methods, and encourage schools to work together and share resources and common experiences.

In addition to building new schools, the project includes a programme of advocacy and social mobilization to promote the concept of education among girls and the value of completing primary education. For this purpose, UNICEF Bhutan has sent out 1,000 'scouts' and 200 local authority members to boost educational awareness in the country's 20 districts.

The project recognizes that it is not enough just to build schools — they must also be of good quality and must have 'girl-friendly' environments, such as better sanitation and water supply, including separate latrines for boys and girls. They must also be equipped with sturdy, comfortable furniture, unlike many of the schools in the past where children had to sit on cold concrete floors.

The money provided by OPEC Fund has enabled some 5,000 school-age children in six districts to access basic primary education. In addition, around 90 school caretakers from eight districts have been trained in school furniture maintenance. This is important because many of the schools are so isolated that it is extremely difficult to bring in outsiders to provide services.

All in all, it has been a major success story. There is still a long way to go, but with the gender disparity in school enrollment falling from 11 per cent in 2002, to four per cent in 2005, it is clear that progress is being made.

BOLIVIA: combating drug abuse through education




Educating the youth of Bolivia against drug abuse, which has been on the rise in the country in recent years.
Photos: UNICEF

The South American country of Bolivia is fighting the war on drugs on many fronts. To many, this vast nation straddling the Andes mountain range is almost synonymous with illicit coca growing for cocaine production. In recent years, the Bolivian government has carried out a vigorous campaign to destroy the illegal coca fields and dismantle the drug-processing equipment that fuels the cocaine trade.

However, it is not just drug production that is the problem. In recent years, drug abuse has also been on the rise in Bolivia. The main drugs are coca derivatives, particularly coca paste, which is smoked, as well as marijuana and inhalants, such as gasoline. There is also considerable abuse of alcohol. The problem is acute among adolescents, many of whom are street children or youngsters living in violent and neglectful circumstances.

As the country has a very young demographic profile and a high birth rate, the rise in drug-taking among the young is a particular cause for concern. Apart from the appalling social effects of drug abuse, it hampers Bolivia's development efforts.

The OPEC Fund is helping to fund an ongoing programme to educate young Bolivians about drugs and warn them off future drug abuse.

In 1999, the United Nations Office on Drugs and Crime (UNODC), in conjunction with the Bolivian government, launched an initiative to help disadvantaged groups avoid high-risk behaviour and settings that give rise to drug and alcohol problems. As education is widely recognized as the most effective strategy to achieve such an aim, it was decided to incorporate prevention curricula into the country's formal and alternative education systems.

Alternative education, or 'educación diferenciada', makes schooling available to working children and adolescents who would not otherwise be able to attend school. They learn out of hours, and have a different curriculum from the regular schools.

The project is associated with an existing UN Population Fund educational programme on 'Sexual and Reproductive Health Issues', which is being integrated into the curriculum in the broader context of the country's educational reform. The overall aim is to provide holistic healthcare information so Bolivia's young people are empowered to make sensible choices when it comes to looking after themselves.

Developing materials

The project had an initial intended duration of four years. The main goal was to develop effective material to help teachers pass on the message about drug abuse, and to incorporate this training material into the curricula of eight teachers' colleges.

The teaching materials, which included teachers' manuals and didactic cards, as well as books and audio-visual programmes for school libraries, were subsequently tested and validated in the classroom.

The project is aimed at both primary and secondary school children, so it demands a flexible and varied approach to appeal to young people of different ages and social backgrounds.

To make the subject interesting and relevant to their lives, practical activities have been included, such as mural and poster-making, debating, and drama sessions in which students write and produce their own plays relating to drug abuse. Talks are also given by those involved personally in combating drugs.

Sports and other physical activities are also promoted, in recognition of the fact that sport can be a powerful tool for preventing drug abuse. In 2005, the project supported the 8th Andean Youth Contest in the city of Sucre. Some 3,000 Bolivian students from more than 120 educational establishments participated in the games, and there were also contestants from Chile and Peru.

In the same year, the project came up with a distance-learning drug abuse programme for teachers, which has already been used by nearly 2,000 teachers from remote rural areas. In 2006, drug abuse prevention material was also distributed to parents.

Efforts are also being made to involve municipalities and other local government bodies, encouraging them to run programmes on preventive actions themselves. An important component of the project was a new baseline study on the prevalence of illegal drug use that forms the basis for an impact assessment of project activities.

Success story

The first phase of the project reached 24,500 students in 450 schools, as well as 900 teachers, 100 teaching assistants, 450 directors and 350 parents' associations. The project was so successful that it was expanded in 2003, with the help of an OPEC Fund grant of $150,000.

Up until the end of 2005, the project had reached a total of 4,200 teachers undergoing training in 880 educational institutions throughout the country. Around 600,000 students, or about four per cent of all Bolivia's school-aged children, have been reached. By the time the project is wound up in 2007, it will have laid the foundations for effective drug abuse prevention activities throughout the Bolivian school system and beyond.

Although it is difficult to systematically measure the impact of such a project, studies indicate that drug abuse among adolescents and schoolchildren in Bolivia dropped between 2002 and 2004. This is an encouraging development, and now that the many teachers involved in this training programme are out in their schools passing on the message about substance abuse, there is no doubt that more young people will shun the temptation of drugs.

OPEC

Reuters

UN move provides framework for "even stronger" cooperation

— Al-Herbish

The Director-General of the OPEC Fund for International Development, Suleiman J Al-Herbish *(above left),* has welcomed the announcement by the United Nations to grant the institution observer status in the General Assembly.

He stressed that the move would cement the OPEC Fund's relations with the UN and set a framework for even stronger co-operation between the two sides.

Observer status, he said, would allow the Fund to participate in all meetings held under the auspices of the UN.

In announcing the decision, Anwarul K Chowdhury *(above right),* UN Under-Secretary-General and High Representative, said he was delighted that the OPEC Fund's application had been successful.

He said he now looked forward to "continued collaboration (with the Fund) in providing greater support for the least developed countries (LDCs)."

The OPEC Fund's request for observer status was sponsored by Fawzi A Shobokshi, Ambassador and Permanent Representative of Saudi Arabia to the UN. The application was also supported by the ambassadors of other OPEC Member Countries, together with ambassadors of several cooperating developing nations.

UN agencies are among the Fund's closest development partners, working together with the institution on a wide range of activities from AIDS initiatives to food aid and technical assistance programmes.

This section includes highlights from the OPEC Monthly Oil Market Report (MOMR) for December 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 petroleum market began November on an upward note before the resumption of supply from Nigeria pushed the weekly OPEC Reference Basket (ORB) lower by one per cent, or 60¢, to settle at $54.16/b. However, speculation regarding further OPEC production cuts was outweighed by the forecast of warmer weather against a background of healthy US crude oil stocks.

Nonetheless, demand for winter fuels amid petroleum stock-draws led to a strengthening of market sentiment. The second week saw the ORB rally by an average of nearly three per cent, or $1.58, to close at $55.74/b. Nevertheless, the market remained volatile as official data again reaffirmed the healthy crude oil stock levels in the OECD region. The forecast for warmer weather amid healthy winter fuel supply, along with a weaker economic outlook, prompted the weekly average for the ORB in the third week to retreat by 69¢ to close at $55.05/b. The downward trend eased in the fourth week as healthy fuel stocks outweighed a brief disruption in Alaska, causing the ORB to slip by a marginal 16¢. In the final week of the month, a bullish momentum gained strength on cold weather expectations, the weak US dollar and the prospect of a further OPEC output cut amid US petroleum stock-draws, especially for winter fuels. The ORB average in this final week was up by almost five per cent, or $2.70, to settle at $57.59/b. The upward trend continued into early December as OPEC further reined in output to balance market supply. However, forecasts for warmer weather in the western hemisphere kept a cap on prices. The ORB closed December 15 at $58.39/b.

On a monthly basis, the ORB's movement was volatile on speculative buying and winter fuel demand, yet healthy OECD crude oil stocks and initial forecasts for warmer weather in North America amid healthy supply of winter fuels balanced market sentiment. Nevertheless, the upward trend resumed on the pipeline outage in Alaska due to freezing weather, which supported the sour crude market, amid talk of OPEC cutting output further in December. The monthly average for November rose by a marginal 45¢ to close at $55.42/b.

US market

Cash crude in the US domestic market for light grades emerged on a stronger note. Tight supply of light crude at a time of refinery demand to produce winter fuels led to a firming of price differentials. The WTI/WTS spread narrowed by 70¢ to average $4.77/b in the first week of the month. Nevertheless, a rise in US crude oil inventories amid lackluster activities for sour grades widened the spread by 33¢ to $5.10/b in the second week.

In the third week, light sweet crude continued to improve, supported by high prices for alternative imported crude. The WTI/WTS spread gained 32¢ to average $5.42/b. A draw on distillate stocks ahead of the long Thanksgiving holiday weekend pushed sour grade discounts further down amid the return of production from Alaska with the WTI/WTS spread widening by 96¢ to $6.38/b.

Forecasts of a cold spell in the US northeastern region amid rising consumption for winter fuels and increasing demand for gasoline narrowed the sweet/sour spread. The WTI/WTS spread was $1.73 lower at $4.65/b, representing an eight-week low of $4.23/b. Demand for

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

light-end products widened the monthly WTI/WTS spread by 58¢ to $5.41/b.

North Sea market

The North Sea crude market began the month on a weak note with unsold November cargoes and the perception of soft December demand, although the threat of a North Sea drivers' strike kept volatility in place. Dated Brent's first weekly average closed 2.7 per cent, or $1.57, lower at $56.27/b. However, with the clearing of most prompt November barrels, the North Sea crude market strengthened. Despite a higher December loading programme, increased refinery demand and tight supply of light sweet crude kept price differentials firm. Hefty draws on European distillate stocks lent further support to market sentiment. The second weekly average for Brent was up 3.6 per cent, or $2, to settle at $58.28/b. However, a bearish sentiment resumed on ample prompt supply and higher OPEC barrels in Europe.

The average for Dated Brent in the third week slipped by a marginal 22¢ to $58.06/b. A buying spree in the first half of December lent support amid pre-winter supply disruption from North Sea oil fields. Yet, weak refining margins helped to cap prices. Brent's average for the fourth week was up by a healthy 2.5 per cent, or $1.45, to close at $59.51/b. In the final week, the North Sea crude market emerged on a continuation of weak refining margins. However, improving winter fuel demand capped any further downward movement. Although Dated Brent closed higher by well over five per cent, or $3.13, at $62.64/b, differentials were under pressure amid high absolute prices. The monthly average for Brent in November was 2.6 per cent, or $1.48, higher than the previous month to stand at $57.72/b.

Mediterranean market

The Mediterranean market suffered a weak start to the month amid poor refining margins for Urals crude with the weekly average spread under Brent widening by 29¢ to $2.37/b. Market sentiment improved in the second week as the OPEC output cut began to show in the market. Higher demand for winter fuels amid improved refinery margins supported Urals crude. The average discount under Brent in the second week narrowed by 48¢ to $1.89/b, as Urals averaged $56.39/b, up by $2.49/b from the previous week amid tight supply. In the third week, an announcement by Transneft that it intended expanding capacity in the Baltic pipeline system to 1.47 million barrels per day by the end of November kept market bearishness intact, although shipment delays through the Bosporus Strait revived the market's strength. In the third week, the Brent/Urals spread widened by 18¢ to $2.07/b, with the Urals average down to $55.99/b amid ample supply in December. Weak refining margins continued to pressure Russian sour crude in the Mediterranean. The Urals discount to Brent doubled to $4.14/b with the average in the fourth week 62¢ lower at $55.37/b. An abundant supply of Urals crude in December enhanced the market's already weak sentiment. The Brent/Urals spread widened by 32¢ to $4.46/b with the average for Urals in the final week seen at $58.18/b. The monthly average for Urals crude in November stood at $56.19/b, representing a gain of 60¢ over October with the spread under Brent some $3/b, or 88¢ wider compared with the previous month.

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

	Oct 06	Nov 06	Nov/Oct	2005	2006
OPEC Reference Basket	54.97	55.42	0.45	50.54	61.34
Arab Light[1]	55.64	55.53	–0.12	50.05	61.39
Basrah Light	51.53	52.31	0.78	48.39	58.20
BCF-17	46.99	46.86	–0.13	40.47	52.30
Bonny Light[1]	58.75	60.32	1.57	55.56	67.05
Es Sider	56.20	57.32	1.12	52.31	63.57
Iran Heavy	53.27	53.97	0.70	47.82	59.57
Kuwait Export	53.02	53.56	0.53	47.37	59.15
Marine	57.15	57.33	0.18	50.36	62.93
Minas[1]	54.87	56.93	2.06	54.05	65.45
Murban	61.04	60.94	–0.10	53.99	66.31
Saharan Blend[1]	58.55	59.77	1.22	54.45	66.26
Other crudes					
Dubai[1]	56.36	56.72	0.36	49.08	61.79
Isthmus[1]	52.46	53.34	0.88	50.29	60.13
Tia Juana Light[1]	48.05	51.63	3.58	46.09	55.09
Brent	57.80	58.92	1.12	54.30	65.40
West Texas Intermediate	58.82	58.94	0.12	56.32	66.38
Differentials					
WTI/Brent	1.03	0.02	–1.00	2.02	0.98
Brent/Dubai	1.44	2.20	0.76	5.22	6.25

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.
Source: Platt's, direct communication and Secretariat's assessments.

Middle Eastern market

The market in the Middle East saw increasing pressure from arbitrage of Western barrels amid a narrowing Brent/Dubai spread, which averaged 44¢ in the first week. Refiners refrained from further procurement while awaiting Mideast allocations, following the Doha announcement of an OPEC cut. December Oman was sold at an 80¢ discount to MOG. A cut in most retroactive prices and differentials supported market firmness in Asia. Oman crude improved with January on offer at parity, yet sold at a 15¢ discount to MOG. Abu Dhabi Murban was assessed at a 10¢ premium to ADNOC's OSP in the second week, with the Brent/Dubai spread

more than doubling to 98¢. High December allocations from the Middle East amid weak refining margins placed strong downward pressure on the benchmark crude.

Nevertheless, a wider Brent/Dubai spread of $1.29/b, limiting the flow of western crude to Asia, supported market sentiment. January Oman was on offer at a 12¢ discount to MOG, while Abu Dhabi Murban was assessed near parity. The expectation of higher refinery runs in China helped support the market with kerosene-rich Abu Dhabi Murban crude reaching a high premium of 15¢ to ADNOC's OSP, while Oman remained at a steep discount of 28¢.

In the fourth week, the Brent/Dubai spread averaged $3.62/b. In the final week, there was a draw on Japan's winter fuel stocks amid rising demand as the light sweet/heavy sour spread widened to $4.60/b. Dubai's monthly average stood at $56.77/b, an increase of 37¢ over the previous month, with the spread under Brent $1.11 narrower at $2.43/b.

Product markets and refinery operations

Unusually warm weather across the globe in November, along with higher crude costs, overshadowed the positive impact of product stock-draws and further undermined refinery margins across the board. The refinery margin for benchmark Dubai crude in Singapore dropped to its lowest level this year to reach $1.57/b from $2.21/b in October.

The same trend existed in the Atlantic Basin area. In Europe, refinery margins for benchmark Brent crude oil in Rotterdam slipped to $1.14/b from $1.16/b the previous month. In the US Gulf Coast, the refinery margin for benchmark WTI crude fell to $4.20/b from $4.39/b in October. These low margins may continue over the next few months as the slowing down of US economic growth and warm weather weigh on the market. This may not lend support to product prices and refinery margins. However, due to rising demand for middle and bottom of the barrel components over the next three months, refinery margins may improve slightly over this period and provide support for further crude demand.

Declining refinery margins over the last few months forced refiners to trim throughput levels in October, but the improving crack spread for clean products and draws on product stocks encouraged refiners to raise throughput levels in November.

Despite increasing refinery throughputs, refinery utilization rates in Asia and Europe are still lower than during the same period last year, although in the US the level was almost the same. The refinery utilization rate in Japan surged significantly in November to reach 85.6 per cent from 75.7 per cent in October, but was still almost four per cent below the same period last year.

In Europe, the utilization rate rose by two per cent, compared with the previous month, but was nearly 6.5 per cent below November 2005. In the US, rates fell by 1.5 per cent versus October to reach 87.6 per cent. Although similar to the November 2005 level, refining utilization rates were still much lower than the historical level of around 93 per cent.

US market

The combination of a short-term cold spell and refinery snags supported light product prices, but failed to switch product market sentiment significantly over the last few weeks. These developments, along with higher demand for gasoline, have pushed up gasoline prices and the crack spread against benchmark WTI crude since mid-November, but increasing refinery throughput and higher imports may erode the gains in the future.

Stock-draws over the last few weeks have helped middle distillate physical and futures markets to gain momentum, and the gasoil crack spread versus its corresponding benchmark WTI crude rose to about $16/b in late November from around $13.30/b in late October. Given the relatively comfortable stock levels and the return of refineries from maintenance, as well as further available refinery capacity, the distillate market is not expected to strengthen significantly over the next few months to take the lead in the physical and futures market.

With regard to the bottom of the barrel complex, US market sentiment has not shifted yet and the performance of both the low-sulphur and the high-sulphur fuel oil markets has remained poor. According to the Energy Information Administration (EIA), US fuel oil demand in November dropped by almost 360,000 b/d, compared with the same period last year, a fact that was attributed to higher gas substitution in utility plants.

European market

The European product market has lost ground significantly since mid-August, due to a lack of arbitrage opportunities for gasoline to the US. This has been exacerbated by poor export opportunities for fuel oil to Asia over the last two months. The gasoline crack spread versus benchmark Brent crude improved slightly in November, compared with October, following more exports to the US. However, given the rising refinery output and low seasonal demand, the gasoline market situation is not expected to improve significantly in the near future.

Distillate stocks fell in November, but the mild weather has outweighed any impact on the heating oil market in North West Europe and capped bullish developments in the distillate markets. However, market circumstances in the Mediterranean were slightly different, as stronger demand from East-Med helped the heating oil market. Meanwhile, it is worth noting that the arrival of Asian gasoil in Europe, along with higher regional output, suggests that the European market will be well-supplied throughout the high-demand season.

The European fuel oil market also remained weak, due to heavy exports from the Baltic area and a lack of export arbitrage opportunities to Asia. Cold weather in the coming months may lend some support to fuel oil prices, but fundamentally the European market is long on fuel and the existing heavy discount to Brent crude will remain over the short term.

Asian market

Upon completion of cracker unit maintenance, sentiment in the very light product

market has changed. The crack spread of naphtha versus benchmark Dubai crude has widened compared, with the previous month, and continuing strength in the naphtha market may continue for the next few months. Despite bullish developments in the naphtha market, the gasoline market remained muted due to seasonal factors and higher exports from China. The gasoline crack spread is not expected to rebound in the near future.

With regard to middle of the barrel components, jet/kero prices were lifted recently, following the draw on kerosene stocks in Japan and higher Chinese jet fuel demand. The jet/kero crack spread against Dubai crude surged to $19.14/b on December 8 from $15.77/b in early November. By increasing heating oil demand during winter, the present strength of the jet/kero spread may remain over the coming months. As far as the gasoil market is concerned, the Asian market still looks healthy, but compared with previous months has lost further ground. The gasoil crack spread slipped to $15.32/b from around $20/b two months ago.

Asian market sentiment for fuel oil has turned over the last few weeks as arbitrage cargoes from the west, together with sluggish regional demand, has exerted downward pressure on the performance of fuel oil. These developments have caused the crack spread of high-sulphur fuel oil in Singapore to plummet to about minus $18.30/b in early December from minus $13.82/b in late October.

The oil futures market

The oil futures market emerged on a weaker note amid the resumption of supply from Nigeria as Shell revamped 47,000 b/d of production at a time when winter fuel stocks far exceeded the previous year. Nonetheless, potential supply disruptions from Nigeria and a bomb threat at BP's 420,000 b/d refinery in Indiana triggered some bullish momentum.

In the first week, the CFTC reported that non-commercials increased long positions at a much faster rate than shorts, causing short positions to drop some 6,500 lots to 4,800 contracts.

Open interest volume saw a marginal increase of 2,200 lots to 1,160,800 contracts. With options included, open interest volume rose by some 5,000 contracts to 2,048,000. Although the weekly average was down, Nymex WTI crude closed the first week 20¢ higher at $58.93/b.

In the second week, forecasts of warmer weather amid healthy IEA stock levels triggered bearishness in the marketplace. The net non-commercial contract volume rose by a significant 22,150 lots amid a hefty drop in the short positions. Net positions flipped back into net longs at 17,300 lots after an absence of four weeks. Moreover, open interest peaked at a record-high of 1,220,500 contracts. In contrast, with options included, open interest fell by a significant 173,600 lots to 1,874,400. Nymex WTI crude closed the week down 65¢ at $58.28/b, while the weekly average was up 55¢ to 59.49/b.

In the third week, concern over the economic outlook amid continuing warm weather triggered fund liquidations. Although Nymex WTI closed the week $1.89 higher at $60.17/b, following the emergence of the new front-month contract and cold weather disrupting oil shipments in Alaska, the weekly average was down by over 2.5 per cent, or $1.53, to settle at $57.96/b. The CFTC reported that short positions were up by 4,600 lots, while the longs were down by a marginal 300 lots, implying a 4,900 lot drop in net positions to stand at 12,400 contracts net long. Open interest was down a considerable 67,600 lots to 1,152,900. However, when options were included, open interest was down by some 20,400 lots to 1,854,000.

In the fourth week, a sudden change in the forecast for below-normal temperatures in the US, coupled with the prospect of a further OPEC output cut amid a weakening of the US dollar against other major currencies, helped Nymex WTI to gain $2.22 to stand at $60.18/b for the week. Non-commercial volumes rose with the shorts outpacing the gain in longs, making the net change a drop of a marginal 600 lots to the net longs of 11,800 contracts. However, open interest was inflated by nearly 20,000 contracts to reach 1,172,500 lots and, with options included, rose by nearly 33,300 lots to 1,887,300.

In monthly terms, Nymex WTI averaged $63.13/b, representing a gain of 26¢. The CFTC non-commercial weekly average of net positions was 9,200 lots long, compared with the previous month of some 3,700 lots net short. Compared with last year, net positions increased by a significant 55,800 lots to average some 46,600 lots net short. Open interest averaged 7,500 lots higher at 1,176,700, or 348,600 contracts over the same period last year. Including options, the monthly average was almost 1,916,000 lots, down by nearly 124,000 contracts from October, but 433,000 lots higher than last year.

Despite bullish developments in the naphtha market, the gasoline market remained muted due to seasonal factors and higher exports from China.

The forward structure

The contango continued running into the second year this month with the average contango spread for the 1st/2nd month having more than doubled since last year at $1.78/b and 9¢ wider than the previous month.

The 1st/6th month spread in November was $5.37/b with 1st/12th and 18th at $7.75/b and $8.66/b, respectively, representing an expansion of 12¢, 20¢ and 26¢. US crude oil stocks averaged some 5m b higher for the month at 338m b, a gain of some 17m b over the same period last year.

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

	1Q	2Q	3Q	4Q	Year	Growth y-o-y
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	7.45	7.69	7.76	7.85	7.69	0.38
2006[1]	**7.98**	**8.41**	**8.31**	**8.21**	**8.23**	**0.54**
2007[1]	**8.52**	**9.04**	**8.93**	**8.77**	**8.82**	**0.59**

1. *Forecast.*

Table C: OPEC NGL production, 2004–07

m b/d

2004	**2005**	**05/04**	
4.02	4.08	0.06	
1Q06	**2Q06**	**3Q06**	**4Q06**
4.18	4.22	4.33	4.33
2006	**06/05**	**2007**	**07/06**
4.27	0.19	4.44	0.17

The tanker market

In November, global spot fixtures fell by an estimated six per cent, or 1.25m b/d. OPEC's share of the estimated decline stood at 650,000 b/d, bringing the Organization's spot fixtures to 11.88m b/d, the lowest level so far this year. Compared with a year earlier, OPEC spot fixtures showed a decline of 13 per cent, or 1.8m b/d, in November. The OPEC production cut, as well as weak demand, were the main factors behind the fall in spot fixtures. Non-OPEC spot fixtures shared almost half of the decline, falling by eight per cent, or around 600,000 b/d.

OPEC sailings dropped by 1.08m b/d to 22.92m b/d, the lowest level since August 2004, representing a year-on-year decline of around three per cent. Middle East sailings fell by 0.65m b/d to stand at 17.19m b/d, the lowest level since January. Preliminary data for November indicates that US Gulf and East Coast and Caribbean arrivals fell by 850,000 b/d to stand at 9.15m b/d, the lowest level since September 2005. Likewise, estimated arrivals for North West Europe and Euro-Mediterranean regions experienced a decline of 430,000 b/d and 270,000 b/d, respectively.

The crude oil tanker market weakened on almost all major routes in November at the time rates were expected to increase. Both the Suezmax and Aframax sectors came under pressure in the month, while the VLCC sector lost further ground, with declines ranging from 44 per cent to nine per cent of world scale rates. VLCCs trading on the Middle East/eastbound long-haul route fell by 12 points to average Worldscale 72, the second lowest rate after April. The decline of around 15 per cent for the Middle East/eastbound long-haul route is attributed to tanker oversupply, as well as the OPEC output cut and weak demand. VLCC trading rates on the Middle East/westbound route fell by ten points to average W68, a level not seen at this time of the year since 2002. The loss in the westbound route from the Middle East represents a 13 per cent drop, and was mainly due to high stock levels. Additionally, the impact of mild weather in the northeast, coupled with the OPEC cut and the decrease in oil-in-transit, all played a role in affecting freight rates. Compared with a year earlier, current rates for VLCCs were down by 115 points on the east and 74 points on the west.

The Suezmax sector showed a mixed pattern during the month, but averaged around 35 points lower on the world scale. Suezmax trading on the route to the US saw a gain at the beginning of November before coming under pressure in the middle of the month, and then finally picking up again at the end of November. The West Africa/US Gulf Coast route lost 34 points to average W122 and the North West Europe/US East-US Gulf Coast route fell 36 points to average W111. Different factors affected the Suezmax market in both upward and downward directions, among them tonnage availability and freight rates for other tanker categories which encouraged charters to either split or join lift volumes. Also, the factors impacting on the VLCC sector played a role in the 22 per cent and 24 per cent drop in rates in both West Africa and NW Europe to the US routes, respectively.

The Aframax tanker market showed a similar downward trend with rates for the Caribbean/US East Coast and inter-Mediterranean and to North West Europe all experiencing a decline throughout November, while Indonesia/US West Coast maintained a relatively steady level, averaging W163.

The biggest drop in the Aframax sector came for the inter-Mediterranean route, which saw a loss of 87 points to average W112. Aframax trading on the Mediterranean/North West Europe route fell by 84 points to average W110 with a surplus of tankers and weak shipping demand seen as the major factors behind the drop in activity. Similarly, a lack of activities, especially during the Thanksgiving holiday period, as well as tanker oversupply and other demand-related issues, brought led to Caribbean/US East Coast rates averaging W215, representing a decline of around ten per cent, or 25 points.

In the product markets, freight rates showed a mixed pattern with almost all routes continuing the downtrend, except for the Mediterranean routes which saw a slight increase. Freight rates for 30,000–35,000 dwt tankers moving from the Middle East to the East lost 35 points to average W156. Weak oil product demand, high stocks levels, the mild winter in North East Asia and increased naphtha exports from India contributed to the steady decline in freight rates to the East. The drop represents a y-o-y loss of 61 per cent. Rates for tankers of 30,000-35,000 dwt trading on the Singapore/east route fell by 24 per cent, or 52 points, to average W168.

In the West, North West Europe/US East Coast-US Gulf Coast freight rates fell 14 points to average W208. November saw a mixed movement for rates on this route with levels starting low but picking up at the end of the month, enticed by the opening of arbitrage opportunities. Caribbean/US Gulf Coast freight rates experienced a decline of 31 points to average W229, representing a y-o-y loss of 31 per cent.

The Mediterranean, the only region where freight rates saw some improvement, saw rates for 30,000–35,000 dwt tankers moving within the Mediterranean and between the Mediterranean/North West Europe averaging W221 and W231, respectively. Rates came under pressure at the end of the month, yet

Table D: OPEC crude oil production, based on secondary sources									1,000 b/d
	2004	2005	4Q05	1Q06	2Q06	Sep 06	Oct 06	Nov 06	Nov/Oct
Algeria	1,228	1,349	1,374	1,376	1,368	1,376	1,380	1,354	-26.0
Indonesia	968	942	935	922	914	876	870	873	2.7
IR Iran	3,920	3,924	3,911	3,849	3,800	3,892	3,837	3,772	-64.7
Iraq	2,015	1,830	1,675	1,711	2,001	2,073	2,026	1,985	-40.8
Kuwait	2,344	2,504	2,548	2,532	2,513	2,505	2,498	2,440	-57.9
SP Libyan AJ	1,537	1,642	1,665	1,680	1,699	1,728	1,728	1,692	-36.3
Nigeria	2,322	2,412	2,469	2,257	2,212	2,186	2,249	2,231	-18.7
Qatar	771	796	808	816	820	837	831	808	-23.2
Saudi Arabia	8,957	9,390	9,426	9,416	9,133	9,029	8,918	8,750	-167.9
UAE	2,360	2,447	2,518	2,528	2,535	2,578	2,578	2,493	-84.5
Venezuela	2,582	2,633	2,584	2,595	2,574	2,538	2,523	2,447	-75.7
OPEC-10	**26,988**	**28,038**	**28,237**	**27,972**	**27,569**	**27,543**	**27,412**	**26,860**	**–552.3**
Total OPEC	**29,004**	**29,868**	**29,912**	**29,683**	**29,571**	**29,617**	**29,438**	**28,845**	**–593.1**

Totals may not add, due to independent rounding.

the November average still managed a gain of around three per cent, or six points.

World oil demand

World oil demand in 2005

World oil demand in 2005 was expected to have averaged 83.3m b/d, representing growth of 1.0m b/d, unchanged from the last report.

World oil demand in 2006

World oil demand growth for 2006 is forecast to grow at a modest rate of 1.2 per cent, or 1.0m b/d, broadly unchanged from the last report. World oil demand is still following a normal fourth-quarter upward cycle and this should continue until year-end. Stable oil prices have helped oil demand worldwide. However, warm November weather is slowing normal world oil demand growth. November oil demand growth is mainly due to developing countries and to some degree the US.

Estimated regional oil demand

OECD

North America's oil demand is maintaining its upward seasonal cycle. According to the EIA, US oil demand grew by 1.8 per cent, or 360,000 b/d, y-o-y in November, which was only one-third of October oil demand growth of 1.1m b/d. The late arrival of cold weather in the US has had a negative effect on oil consumption, especially fuel oil.

OECD Europe

The warm November weather has led to a weakening of oil demand in Europe, pushing demand growth into the negative. Germany's crude imports have been 1.8 per cent lower so far this year, compared with the same period in 2005, although current energy costs have been inflated by one-third. Furthermore, the high utilization of nuclear power plants, along with fuel switching, has also negatively affected oil demand in Europe. OECD Europe y-o-y third-quarter demand is estimated to decline by 160,000 b/d.

OECD Pacific

The normal fourth-quarter high-demand cycle for this region has increased South Korea's oil demand by seven per cent in October y-o-y. Although winter temperatures are above normal, the increase in oil demand is attributed to preparations ahead of winter. Contrary to South Korea's position, Japan's oil demand fell by 6.5 per cent y-o-y in October. The high utilization of Japanese nuclear power plants reduced sales of fuel oil by 16 per cent in October. Due to the unexpected low consumption of fuel oil and transport fuel, third-quarter y-o-y oil demand growth for OECD Pacific was revised down by 80,000 b/d. In total, OECD countries' y-o-y third-quarter oil demand growth was revised down by 100,000 b/d to show a decline of 380,000 b/d.

Developing countries

Other Asia's economic activity has turned out to be strong, as expected, with average GDP for 2006 put at an estimated 5.8 per cent. Lower oil prices are affecting some Asian countries' oil consumption; India lowered its retail petroleum product prices in late November. Gasoline and diesel prices have been slashed by 4.25 per cent and three per cent, respectively. India's October oil demand showed modest growth of 1.3 per cent y-o-y to average 2.5m b/d. India's ten-month y-o-y oil demand growth reached 2.3 per cent to average 2.6m b/d.

Strong oil demand growth in Middle Eastern countries has also materialized as expected. Third-quarter oil demand growth for this region is estimated at 300,000 b/d y-o-y to average 6.3m b/d.

For total developing countries, third-quarter demand came as expected, growing by 500,000 b/d y-o-y to average 23.1m b/d.

The year 2006: Review of oil demand

To some degree, the impact of high oil prices is contributing to a slowing in demand, mainly in the developed countries. The positive economic outlook was widespread among all regions in 2006. Gross Domestic Product (GDP) growth rates have been revised up in the OECD, as well as in non-OECD countries. China's economic growth for 2006 has been robust with the country enjoying an annual growth rate of 10.4 per cent. Developing countries' GDP is estimated at a healthy 5.9 per cent growth.

Due to the strong decline in OECD oil demand, world oil demand growth in 2006 has been revised down by 500,000 b/d from the initial forecast of 1.5m b/d. Non-OECD countries have accounted for 100 per cent of world oil growth this year.

OECD

A warm winter in the northern hemisphere has affected oil demand, especially in North America. US oil demand lost its momentum, mainly due to the warmer weather, while higher oil prices have further dented demand. The fact that higher prices for oil and moderate prices for natural gas encouraged power generation plants to substitute oil with gas is considered one of the main factors behind sluggish US oil demand in the first half of 2006. Because of the fuel switching, US fuel oil consumption is estimated to have declined by 25 per cent y-o-y. In addition, the summer driving season in the US was not strong, resulting in below average transport fuel demand. Motor gasoline, which represents the bulk of energy consumed in the US, is estimated to have only grown by one per cent this year, as opposed to normal annual growth of 1.6 per cent. Lower oil prices in the fourth quarter are expected to moderately help oil demand in North America. However, slowing economic activities in the US appear to be curbing oil usage in the fourth quarter. Nevertheless, oil demand is expected to follow the typical cyclical winter pattern to be somewhat stronger than in the first three quarters, reaching more than 1.0m b/d and 360,000 b/d growth in October and November, respectively. Expected oil demand growth in the fourth quarter will not be sufficient to offset the overall decline in demand. As a result, oil demand growth in North America was revised down in 2006.

In other OECD countries, economic indicators have shown strong growth with Europe experiencing colder weather, but oil demand figures remain disappointing, which is attributed to a certain degree to the high oil prices and the warm winter in the Pacific. Low economic activity and weaker automotive fuel consumption in the summer resulted in lower oil demand figures in the second and third quarters of 2006. In total, as a result of the large downward impact of North America, OECD oil demand in 2006 was revised down by 660,000 b/d.

Developing countries

Developing countries account for 100 per cent of the 2006 world oil demand growth, with the Middle East and China contributing the lion's share at 97 per cent. Higher oil prices and the removal of fuel subsidies depressed oil demand, especially in South East Asia. India's oil demand started the year with disappointing growth in the first quarter, but bounced back to reach more than 5.5 per cent growth in the second quarter. However, due to the increase in domestic petroleum product prices, substantial fuel switching to gas among power plants, subsidized rail transport for cargo, and subsidized electricity for farmers, Indian oil demand is expected to grow moderately to achieve only 2.4 per cent growth in 2006. Other Asia regional economic activity, showing GDP growth of 5.8 per cent, has had to some degree to a positive effect on oil demand this year. Affected by the moderate oil demand growth in India and the removal of price subsidies, other Asia y-o-y oil demand growth was revised down during the year by 200,000 b/d to average 8.8m b/d in 2006. In contrast, the Middle East economy has remained robust, leading to unexpected strong oil demand growth in 2006. As a result of the region's strong economies and automotive fuel subsidies, Middle East oil demand growth was revised up by 140,000 b/d to average 6.16m b/d in 2006. Led by the strong oil demand growth of the Middle East, total oil demand in the developing countries has accounted for 60 per cent of total world oil demand growth in 2006.

Other regions

China's healthy economy has been growing at a rate of 10.4 per cent in 2006, leading to higher oil consumption. All supporting energy drivers, such as industrial production, in-land cargo, agriculture, construction and passenger transportation, have shown healthy growth, pushing oil demand up further. The improvement seen in electricity-generating capacity moderated demand for small diesel-powered generators. Hence, the unusually strong demand for diesel seen in 2004 was not expected to be repeated in 2006. China raised its gasoline, gasoil and jet fuel prices twice this year. Unlike the first price hike of three to five per cent, the second increase exceeded ten per cent. The price rise came as a result of higher world oil prices. The hot summer put pressure on electricity demand, which strengthened fuel oil consumption, resulting in double-digit growth. The development of the rural areas, along with the agricultural season, further supported oil demand growth.

China's new strategic oil storage facility, with a capacity of 32.7m b, is officially ready. The filling process, which is based on the oil price level, commenced this year. The Chinese are utilizing lower oil prices as much as possible. The filling of the strategic oil storage has unexpectedly had a positive affect on China's apparent oil demand. New car sales in the country are estimated to have exceeded five million units this year. This large growth in vehicle numbers has led to stronger transport fuel demand. Hence, China's oil demand is exceeding expectations in the second half of 2006. The country's energy strategy emphasizes energy savings and efficiency. However, it has found that achieving its planned energy conservation goal of reducing energy consumption by four per cent in 2006 to be harder than expected. Furthermore, China is pushing its biofuels programme with ambitious plans to increase production by an average of 40 per cent annually. However, the country's development of coal-to-liquids (CTL) has not been advancing as predicted. The project faces large risks and depends on government subsidies. If oil prices remain at current levels, the CTL may replace a little more than one per cent of China's gasoline demand by 2010. As a result of the above factors, China's oil demand growth was revised up during the second half of the year by more than 220,000 b/d to average 7.16m b/d.

Other regions

The Chinese government's plans to curb oil consumption this year have had little or no effect on total oil demand. As a result of the booming domestic economy, oil demand growth for the third quarter exceeded expectations. Holiday travel and winter heating oil use have pushed oil demand even higher late this autumn.

Early in the year, strong economic activity, booming car sales, above-normal summer temperatures, massive agricultural activity, and government plans to develop rural areas, pushed oil demand to a record-high this year to reach 9.4 per cent growth. As a result of the preparation for winter heating oil and holiday travel, China's third-quarter demand was revised up by 200,000 b/d to show growth of 780,000 b/d y-o-y. As has been seen in the Western Hemisphere, China is gearing up to subsidize the biofuels industry via direct subsidies and tax breaks.

China's active economy kept oil demand growth on the rise. However, as far as apparent oil demand is concerned, the month of October showed negative growth in comparison with the same month last year. As for petroleum products, due to high travel activity, jet fuel demand rose to a record-high of 23 per cent in October.

Chinese hydropower plant output decreased by eight per cent last month, due to a drought, which affected some regions of the country. However, this energy deficiency is expected to be met by coal or natural gas rather than oil. Cumulatively, in the first ten months, apparent demand grew by ten per cent y-o-y. Furthermore, crude imports grew by more than 15 per cent in the same period, which is partly attributable to the late expansion of the refining business in China.

Forecast regional demand in 2006

OECD

Stable oil prices are expected to moderately help oil demand in North America. However, warm weather in the fourth quarter, along with the slowing economic activity, has curbed oil demand growth. Nevertheless, oil demand is still expected to follow the winter cyclical pattern to be somewhat stronger than in the first three quarters. Accordingly, y-o-y fourth quarter demand has been revised up by 100,000 b/d. However, the expected oil demand growth is not anticipated to offset the total year decline. North America's oil demand is forecast to decline by 50,000 b/d y-o-y to average 25.4m b/d in 2006.

Furthermore, as a result of the warmer-than-expected fourth-quarter weather in both the OECD Europe and Pacific regions, y-o-y oil demand changes have been moderately revised down for the fourth quarter. OECD countries' oil demand is estimated to decline by 200,000 b/d to average 49.4m b/d in 2006.

Developing countries

The Indian economy has maintained its robust growth of 8.2 per cent, although it is not expected that total oil demand growth will exceed 2.4 per cent for the whole of 2006. However, oil demand in the Middle East is expected to reach a high of 5.85 per cent in 2006. Demand growth in developing countries is expected to reach 600,000 b/d to average 23.0m b/d for the year.

Other regions

China's strong November oil imports saw growth of 25 per cent y-o-y. There is no seasonality that may drastically affect petroleum product demand in the fourth quarter. However, the filling of the newly-constructed strategic oil storage may play a major role in China's fourth-quarter oil demand fluctuation. The country's fourth-quarter oil demand growth is not expected to be as extreme as in the third quarter. Hence, it is estimated to grow by 350,000 b/d y-o-y to average 7.2m b/d.

Forecast for 2007 oil demand

World oil demand growth for 2007 is forecast to grow at a moderate rate of 1.57 per cent, or 1.3m b/d, unchanged from the last market report. Given a normal cold winter, especially in OECD countries, the first quarter is expected to show an upward cycle in oil consumption growth of 1.6 per cent. North America's first-quarter oil demand is forecast to account for 30 per cent of total world oil demand. Should the weather become warmer, then natural gas prices may become more attractive to power and petrochemical plants for gas to be used as a substitute fuel. Such a development would have a strong negative impact on world oil demand, as was the case this year.

China and the Middle East will lead total world oil demand growth in 2007 with figures of 450,000 b/d and 300,000 b/d, respectively.

The Chinese government's plans to curb oil consumption this year have had little or no effect on total oil demand.

Higher economic activity is the main factor behind the forecast robust oil demand in both regions. It must be noted that three new oil storage facilities in China are expected to be commissioned in 2007, which will have a positive impact on China's apparent demand.

World oil supply

Non-OPEC

Forecast for 2006

Non-OPEC oil supply is expected to average 51.1m b/d in 2006, representing an increase of 900,000 b/d over 2005 and a slight downward revision versus the last assessment. Downward adjustments to North Sea 3Q06 data, and the 4Q06 forecast for the US, Mexico and Azerbaijan account for the bulk of the revision. Upward revisions are limited to Kazakhstan.

October data shows that total non-OPEC supply averaged 51.5–51.6m b/d, slightly lower than the previous month's estimate. Preliminary data for the month of November puts non-OPEC supply at 52m b/d, representing a y-o-y change of 1.5m b/d.

OECD

Total OECD oil supply is expected to average 20.3m b/d, which is lower compared with the last assessment. On a quarterly basis, total oil supply is expected to average 20.8m b/d in 4Q06, which represents a downward revision of 200,000 b/d versus last month. Preliminary data for the month of November puts total oil supply in OECD countries at 20.6m b/d.

United States

Oil supply in the US is expected to average 7.4m b/d in 2006, representing an increase of 0.05m b/d versus last year. On a quarterly basis, US output is expected to average 7.56m b/d in 4Q06, a downward revision of 50,000 b/d versus last month. It is worth noting that US supply has largely recovered from the impact of hurricanes Katrina and Rita and the technical problems at Prudhoe Bay. Preliminary data for the month of November indicates that US oil supply averaged 7.52m b/d. No major shutdowns were reported during the month.

Oil supply in the developing countries is expected to average 13.1m b/d in 2006, representing a gain of 500,000 b/d over 2005.

Mexico and Canada

The outlook for Mexico has been revised down slightly, following lower-than-expected output in October and expectations that production will remain near current levels over the next few months. Total Mexican oil supply is still expected to average 3.7m b/d in 2006. October output is estimated at 3.6m b/d and November at 3.7m b/d. The 4Q06 estimate has been revised down by 60,000 b/d versus last month. Previous issues of the monthly report have noted the negative impact that high inventories and soft demand in the US have had on Mexico's oil supply.

Mexico's outlook will largely depend on these factors, as well as underlying decline rates and new projects. Canadian oil supply is expected to average 3.2m b/d in 2006, representing an increase of 160,000 b/d versus 2005, unchanged from last month's assessment. In November, Canada produced 3.37m b/d.

Western Europe

Oil supply in OECD Europe is expected to average 5.4m b/d in 2006, representing a drop of 380,000 b/d versus 2005 and a downward revision of 60,000 b/d from last month. On a quarterly basis, total oil supply is expected to average 5.5m b/d in the fourth quarter. Total oil supply in October is assessed at 5.2m b/d (down from preliminary estimates) and in November at 5.42m b/d. North Sea maintenance is now largely over.

The bulk of the downward revisions in Europe are centred around Norway and the United Kingdom, following a sharp revision to 3Q06 data and an adjustment to the 4Q06 estimate of both countries. Norwegian oil supply is expected to average 2.8m b/d in 2006, a drop of 180,000 b/d from last year and a downward revision of 38,000 b/d from last month. Preliminary data shows that production was 2.67m b/d in October and 2.8m b/d in November. Data for the month of October shows that production was lower than previously estimated.

UK oil supply is expected to average 1.7m b/d, a drop of 180,000 b/d versus last year and a downward revision of 23,000 b/d. Preliminary data for the month of October indicates that UK oil supply averaged 1.6m b/d, but total supply is expected to rebound in November and December to 1.7m b/d. The Buzzard field (200,000 b/d) is on track to come onstream at the end of December and to ramp up in 2007. Danish oil supply is expected to average 350,000 b/d, around 30,000 b/d lower than in 2005; October data shows a large rebound (plus 100,000 b/d) in Danish oil production, indicating that maintenance has been completed.

Asia Pacific

Oil supply in the OECD Asia Pacific region is expected to average 570,000m b/d in 2006, flat from last year and unchanged versus last month's assessment. On a quarterly basis, total oil supply is expected to average 670,000 b/d in the fourth quarter. Australian oil supply is forecast to average 510,000 b/d in 2006, or 10,000 b/d lower than last year. The forecast remains unchanged. Preliminary data for the months of October and November puts total Australian oil supply at 600,000 b/d. Reports of underperforming fields continue to plague Australian expectations, but it is worth mentioning that supply is now at its highest level since August 2003.

Developing countries

Oil supply in the developing countries is expected to average 13.1m b/d in 2006, representing a gain of 500,000 b/d over 2005, unchanged from last month's report. On a quarterly basis, total oil supply is expected to average 13.4m b/d in the fourth quarter. It should be emphasized that as the year draws to a close these countries as a group have performed well and in line with original expectations. The countries that stand out positively include Brazil, Colombia and Sudan, while those that stand out for negative reasons are Argentina, Ecuador and Egypt. At the time of writing, the contribution of several large projects has yet to be realized as some are still ramping up (P 50 – 180,000 b/d; Golfinho – 100,000 b/d; P 34 – 60,000 b/d; Dalia – 240,000 b/d). Total oil supply in November is estimated at 13.4m b/d.

FSU, other regions

Oil supply in the Former Soviet Union is

Revisions to the 2006 non-OPEC forecast

The OPEC Secretariat's first assessment in July 2005 expected 2006 non-OPEC supply to average 51.7m b/d, representing growth of 1.1m b/d over the previous year. This growth was distributed among all regions with only OECD Europe, OECD Pacific and the Middle East expected to show a drop. Russia was forecast to grow by only 100,000 b/d. More importantly, the forecast showed that most of the increase would be seen in the second half of the year.

Following the impact of hurricanes Katrina and Rita on US Gulf of Mexico production, there was a need to drastically adjust the forecast for 2005 and 2006 to capture the expected recovery of more than 1m b/d of shut-in production. In effect, large volumes had to be taken from the 2005 base and added to the 2006 base. Between August and December 2005, the forecast for 2005 was revised down by 400,000 b/d, whilst the forecast for 2006 was revised up by 300,000 b/d, based on the assumption that a full recovery in the US GoM would not take place until the third quarter of 2006.

In the last 12 months, the US GoM has mostly recovered and the usual four main types of revisions have been made – historical data, project changes, maintenance level, and unplanned shutdowns. However, it is worth noting that regarding project changes, there have been some delays, as well as some projects that started ahead of schedule. Some fields have performed below expectations (Enfield in Australia, Chinguetti in Mauritania), but others are above expectations (ACG in Azerbaijan). Maintenance levels have run deeper than originally expected in the North Sea, Brazil and Angola, while global unplanned shutdowns were particularly high in the first part of 2006. In contrast to market expectations, the US did not see any disruptions due to hurricane activity this year, but there were short-lived problems at the giant Prudhoe Bay field in Alaska. However, the hurricane season did affect production in Australia and China. Finally, Russia has grown at a higher level than expected, but weak underlying signs have persisted.

After taking all these factors into account, the current assessment for 2006 non-OPEC supply now stands at 51.1m b/d, representing growth of 900,000 b/d. Over 300 revisions are typically performed each year and these can extend for up to two years as new data is received. Experience shows that the quality of the historical data reported by primary sources could have a material effect on forecasts as these would impact on the forecasts of subsequent years. Additionally, revisions related to project changes, field performance and maintenance levels could result in two-way adjustments, while adjustments due to unplanned shutdowns and accidents are not predictable.

expected to average 12m b/d, representing an increase of 500,000 b/d versus 2005, broadly unchanged from last month. The estimate for other regions (China and other Europe) remains unchanged with total oil supply expected at 3.8m b/d in 2005, 70,000 b/d higher than in 2005. On a quarterly basis, total oil supply in the FSU is expected to average 12.25m b/d in the fourth quarter, which represents an upward revision of 62,000 b/d versus last month. November FSU oil supply is assessed at 12.2m b/d.

Russia

Russian oil supply is expected to average 9.6m b/d in 2006, an increase of 200,000 b/d over 2005 and broadly unchanged from last month's estimate. On a quarterly basis, Russia's oil supply is expected to average 9.72m b/d in the fourth quarter. The latest data shows that supply averaged 9.71m b/d in October and 9.75m b/d in November. Crude export tariffs are expected to drop significantly in the December–January period to $24.75/b from a record of $32.25/b, which should lead to a surge in seaborne exports over the next couple of months. This, however, coincides with winter which sees the closure of river transport systems, and strong demand for products in Russia. This report maintains a conservative outlook for Russia over the medium term and short-term fluctuations. Flat to a slight y-o-y decrease are within possibilities.

Caspian

Total Azeri oil supply is expected to average 640,000 b/d in 2006, representing an increase of 0.2m b/d versus last year, but the 4Q06 estimate has been revised down slightly. Total oil supply is expected to average 700,000 b/d in 4Q06, which represents a downward revision of 20,000 b/d from last month, following reports that 200,000 b/d will be shut in at the large ACG field for ten days during December, due to a power supply failure.

However, it should be noted that total output from the field was running at 620,000 b/d before the shutdown took place, which if combined with production of 170,000 b/d elsewhere in Azerbaijan suggests that the country's production reached 790,000 b/d in the first week of December.

It is possible that the repairs may not finish in time, resulting in more downward revisions, but this report takes a cautious view, given the nature of the problem and the fact that output is running well above expectations.

Kazakh oil production is expected to average 1.31m b/d in 2006, representing an increase of 80,000 b/d versus last year and an upward revision of 14,000 b/d from last month's estimate.

Data for the month of October puts Kazakh oil supply at 1.36m b/d and 1.38m b/d in November – a record-high for Kazakhstan. Ongoing maintenance at the Karachaganak condensate field is over.

China

Total oil supply is expected to average 3.7m b/d in 2006, representing an increase of 70,000 b/d over last year. October data and preliminary figures for the month of November indicate that supply averaged 3.65m b/d. This is lower than the previous estimate by around 40,000 b/d and as a result the 4Q06 outlook has been revised down. Domestic production has fallen back from the June record-high of 3.73m b/d. A number of non-upstream factors may also be responsible for this, such as higher imports of crude and products, lower refinery runs, and a desire to manage production at some of the largest fields.

Non-OPEC supply revisions to 2006 growth

Forecast for 2007

Non-OPEC oil supply is expected to average 53m b/d in 2007, representing an increase of 1.8m b/d versus 2006 to remain broadly unchanged from last month. On a quarterly basis, non-OPEC supply is expected to average 52.3m b/d, 52.4m b/d, 52.9m b/d, and 54m b/d in the first, second, third and fourth quarters, respectively. The growth forecast remains unchanged, but the base has been reduced following revisions to 2006 data.

Oil supply in the African region is forecast to grow by 0.5m b/d to 4.6m b/d; most of the increase is expected to come from Angola, Equatorial Guinea and Sudan.

The FSU region is expected to grow by 600,000 b/d to 12.6m b/d; Caspian countries together are expected to deliver more growth than Russia, particularly Azerbaijan. Oil supply in the African region is forecast to grow by 500,000 b/d to 4.6m b/d; most of the increase is expected to come from Angola, Equatorial Guinea and Sudan. Oil supply in the North American region is expected to grow by 300,000 b/d to 14.6m b/d. The increase is driven by the unwinding of losses in the US GoM and Alaska, and growth in the US GoM, ethanol and expansion of Canadian oil sands output. Oil supply in the Latin American region is expected to grow by 200,000 b/d to 4.7m b/d; regional growth is driven by Brazil. Elsewhere, OECD Europe is expected to show a modest increase of 100,000 b/d to 5.6m b/d, driven by the unwinding of production shut-ins in Norway, but also new projects; a normal maintenance schedule is assumed. OECD Asia is expected to increase 100,000 b/d to 700,000 b/d. Oil supply in other Asia and the Middle East is expected to remain broadly flat.

Risks

As usual, the forecast does not take into account the impact of extreme hurricane activity in the US and Asia, unplanned shutdowns, material project changes, demand trends, and political instability. Tightness in the oil services sector poses some risks. Rising underlying costs also pose a risk for small marginal projects, enhanced oil recovery, and stripper wells. Finally, but of equal importance, sharp downward fluctuations in energy prices could affect investment plans and – as a direct consequence – mature oil production, thereby reducing growth.

OPEC NGLs and non-conventional oils

In 2006, OPEC NGLs and non-conventional oils are expected to average 4.3m b/d, representing an increase of 200,000 b/d over the previous year. In 2007, the expected growth for OPEC NGLs remains unchanged at 200,000 b/d.

OPEC crude oil production

Total crude oil production averaged 28.84m b/d in November, representing a drop of 590,000 b/d from last month, according to secondary sources. Iraq's oil production stood at 2m b/d.

World oil supply

In November, world oil supply averaged around 85m b/d, slightly below the previous month. The estimate is based on preliminary data for non-OPEC supply, estimates for OPEC NGLs and OPEC crude production from secondary sources. This level is a new record for world oil supply. It is interesting to note that only four years ago world oil supply was at 75m b/d.

FSU net exports of crude and products

Total FSU net oil exports are now expected to average 8.2m b/d in 2006, an increase of 500,000 b/d over the previous year. In 2007, total FSU net oil exports are expected to average 8.7m b/d, 0.6m b/d higher versus 2006, driven by new sources of crude from the Caspian and Russian product exports.

Current trends

Actual figures for the month of October indicate that total crude exports from the FSU were 5.8m b/d. Including products, total net oil exports stood at 7.8m b/d in the month. Crude exports increased via the Black Sea, rail Far East, CPC, and Batumi. Exports via the Georgian port of Supsa have been shut since the end of October and are likely to remain so until the end of January 2007, according to some reports. This port has a capacity of around 150,000 b/d, with the rest of the exports going through the BTC pipeline (currently at 400,000 b/d, but it has a capacity of 1m b/d) to Ceyhan, rail to Batumi terminal (150,000 b/d), and pipeline to Novorossiysk (50,000 b/d). Exports will be diverted to other routes.

Oil trade

OECD

According to preliminary estimated data, OECD monthly crude oil imports continued their downward trend, decreasing by a further 200,000 b/d to average 31.0m b/d in October. However, this decline – corresponding to around one per cent, or 300,000 b/d, below a year earlier – was driven mainly by a

significant drop in both US and Japanese imports. Similarly, OECD product imports declined in October by 100,000 b/d to average 12.7m b/d with a loss of around three per cent y-o-y.

Regarding crude oil and product exports, estimates remained unchanged in October totalling 16.9m b/d, comprising around 7.0m b/d of crude oil and 9.9m b/d of products. Crude oil and product exports edged down by 7,000 b/d and 75,000 b/d, respectively. Accordingly, OECD net oil imports averaged 26.8m b/d, a decline of 600,000 b/d. Net crude oil imports reached 24.0m b/d and product imports averaged around 2.8m b/d in October. When compared with a year earlier, estimated OECD October net oil imports showed a y-o-y decline of five per cent.

No major change took place in the sources of imports, as Saudi Arabia and the FSU remained the biggest suppliers of OECD crude oil with shares of around 17 per cent and 15.9 per cent, respectively. Norway and Mexico followed with nine per cent and eight per cent shares. The Netherlands, the FSU and Venezuela continued to be the top suppliers of products to the OECD with a share of around five per cent each.

United States

US crude oil and product imports declined moderately in November, compared with the significant drop experienced in the past two months. According to preliminary data, US crude oil imports continued to decrease, averaging 9.9m b/d in November, the lowest level since April. This decrease of around 157,000 b/d over the previous month represents a y-o-y drop of 3.5 per cent, or 357,000 b/d. Similarly, product imports fell a further 34,000 b/d to average 3.0m b/d. Compared with a year earlier, November product imports fell by around 0.8m b/d. However, it is worth mentioning that in 2005 product imports during the same period were high due to the loss of major refining capacity as a result of the hurricanes. Motor gasoline and kerosene led the decline in product imports, while distillate imports increased. Such a pattern is consistent with the normal weakening of gasoline and improvement in distillates during the summer/winter transition period. However, the recent phase of mild weather in the US Northeast contributed to declining demand that lowered crude and product imports, as well as the refinery utilization rate.

In contrast, exports showed some increase on the product side with around a 47,000 b/d rise to average 1.3m b/d, while crude exports remained steady at a marginal level. Accordingly, US net oil imports reached a low for the year, averaging around 11.6m b/d, a decline of about 200,000 b/d. Compared with a year earlier, November net oil imports showed a y-o-y decline of around 1.5m b/d, or 12 per cent. Product net imports had the largest share of this drop with a decline of around 42 per cent compared with last year. However, this is related to the increase in imports following last year's hurricanes. Net crude oil imports averaged 9.85m b/d, a drop of around 150,000 b/d from the previous month, the lowest level this year.

With 17 per cent and 16 per cent respective shares, Mexico and Canada remained the main suppliers of US crude oil, followed by Saudi Arabia and Venezuela with 12 per cent each and Nigeria with a 14 per cent share. Concerning product imports, Canada, the Virgin Islands, and Algeria remain the main suppliers of the US.

Japan

Japan's crude oil imports continued to fall in November at a faster rate than in the previous month. A similar trend was noted for product imports. Preliminary data shows Japan's crude oil imports fell by eight per cent, or 300,000 b/d, in November from the previous month to average around 3.8m b/d, the lowest level since June. Compared with a year earlier, Japan's crude oil imports fell by around 300,000 b/d which can be attributed to weak demand, partially due to weather-related factors. Product imports experienced a similar trend with a lesser drop of 19,000 b/d to average 650,000 b/d, displaying a decline of around 25 per cent, or 200,000 b/d, compared with last year's figure. High stock levels, as well as delays in maintenance at petrochemical plants, were some of the main reasons for the product import decline. November data is dragging down the 2006 average as the January-November average closed lower than the January-October figure, at around 300,000 b/d and 16,000 b/d for both crude oil and product imports, respectively.

With 17 per cent and 16 per cent respective shares, Mexico and Canada remained the main suppliers of US crude oil.

In November, Japan's product exports reached 300,000 b/d, according to preliminary data, a drop of 3,000 b/d from October. As a result, Japan's net oil imports averaged 4.1m b/d, around 300,000 b/d less than the previous month. Compared with a year earlier, net oil imports showed a 12 per cent, or 550,000 b/d, decline.

Saudi Arabia remained Japan's main crude oil supplier with around a three per cent increase to reach 33 per cent, followed by the United Arab Emirates with a share of around 27 per cent, an almost four per cent gain over the previous month. Qatar came in third place with around 12 per cent, while Iran and Kuwait had around seven to eight per cent each. With regard to product imports, Saudi Arabia and the UAE remained Japan's top suppliers, covering almost 25 per cent of total product imports. Indonesia, Korea, Kuwait, and the US covered around five to six per cent each.

China

China's crude oil imports declined by 700,000 b/d in October to average 2.5m b/d. Product imports fell by 21 per cent, or

200,000 b/d, from the previous month to stand at 800,000 b/d, according to preliminary data. The decline amounted to a reduction in total oil imports of around 22 per cent, or 950,000 b/d, compared with the previous month. Additionally, the drop in imports represents a y-o-y decline of around 3.1 per cent, or 110,000 b/d. Chinese fuel oil imports led the decline, dropping by around 30 per cent. In contrast, China's gasoil and jet fuel imports increased in October from the previous month. During January-October 2006, China imported around 350,000 b/d more crude and 100,000 b/d more products than in the same period the previous year.

China's total oil exports increased by 120,000 b/d during October. Product exports led the way, while crude exports declined by around 36,000 b/d. The increase in oil exports amounted to 38 per cent, or 500,000 b/d, which represented y-o-y growth of around 77 per cent. However, it should be noted that China's total exports in October last year were very low.

India's total net oil imports averaged almost 2.0m b/d, an increase of 20 per cent, or 300,000 b/d, from a year earlier.

Consequently, China's net crude oil imports in October averaged 2.3m b/d, a decrease of around 23 per cent, or 700,000 b/d, from the previous month. Similarly, net product imports declined by 38 per cent, or 400,000 b/d, over the previous month to stand at 630,000 b/d, 100,000 b/d above the average of 2005.

In terms of deliveries, Iran became China's largest supplier in October with a 17 per cent share, as against 12 per cent in September. Oman and Angola took the next spots with 13 per cent each, followed by Saudi Arabia and Russia with 12 per cent each. The order of suppliers conforms to the same month last year with the exception of Oman, which has moved higher up the list.

India

Preliminary data shows that India's oil imports continued to be around 2.4m b/d in October, up 19,000 b/d from the previous month and around 400,000 b/d more than a year earlier. Crude oil imports stood at nearly 2.2m b/d in October, an increase of one per cent, or 16,000 b/d, over the previous month, while product imports reached 250,000 b/d, edging up also by around one per cent, or 3,000 b/d, from the previous month.

With product exports rising by 8,000 b/d to 450,000 b/d, India's total net oil imports averaged almost 2.0m b/d, an increase of 20 per cent, or 300,000 b/d, from a year earlier. Crude oil net imports stood at 2.2m b/d, a gain of 13 per cent, or 260,000 b/d, over a year ago, while product net exports averaged 200,000 b/d, around 73,000 b/d lower than a year ago.

Stock movements

United States

Total commercial oil inventories in the US ended the month at 1,044.8m b, a drop of 18.9m b from October, which left stocks almost on a par with the year-ago level and five per cent higher than the five-year average. The stock-draw came from products as crude oil inventories went up on a monthly basis.

Crude oil stocks continued to increase in November, gaining 5.1m b to stand at 339.7m b, which represents a healthy cushion of 5.4 per cent and 13.9 per cent more than a year-ago and the five-year average, respectively. The minor increase in production may explain the build in crude oil inventories, which came despite an increase in refinery runs in November, which rose from 15.06m b/d to 15.14m b/d from the previous month and a slight decline in imports. In terms of forward cover, crude oil stocks also look comfortable at 22.5 days - five per cent and 15 per cent above the same month last year and the five-year average. Nevertheless, it is expected that a fall in crude oil inventories will take place in the coming weeks when refiners increase throughput and the impact of OPEC's 1.2m b/d cut materializes.

Gasoline stocks experienced a 4.2m b draw in November from the previous month, which left the level at 200m b, slightly below the year-ago figure and 3.4 per cent below the average of the last five years. Forward cover for gasoline stood at 21.6 days, a decline of two per cent compared with the same month last year and five per cent below the five-year average. Despite a slight drop in November, domestic demand for gasoline stood at 9.3m b/d, a very high level for this time of the year. This may be caused by the warm winter leading to more traveling by car.

Middle distillate stocks were seen at 132.4m b in November, a drop of 6.9m b from the previous month, one per cent, or 1.3m b, below the year-ago level and around one per cent, or 1m b, higher than the five-year average. Diesel stocks declined by 3.6m b to 74.8m b in November compared with the previous month. They stood at around one per cent above the year-ago level and the five-year average.

Despite larger imports and production, the considerable expansion in domestic demand may partially explain falling diesel inventories. Heating oil inventories saw a drop of 2.6m b to 57.6m b in November from the previous month, which left them 3.5 per cent below the year-ago level and one per cent higher than the five-year average. The fall in heating oil stocks can be attributed to the drop of 1.8 per cent in production.

In the week ending December 8, a draw on both product and crude stocks prompted a fall in total commercial oil inventories week-on-week in the US. Total inventories declined by7.47m b to 1,037.4m b, one per cent and five per cent above the year-ago level and the five-year average, respectively. Crude oil inventories declined for the third consecutive week, with a draw of 4.30m b week-on-week leaving the level at 335.43m b. This was the result of lower imports as refinery runs declined. However,

crude stocks remained comfortable at four per cent and 13 per cent over the year-ago level and the five-year average. The forward cover of 21.9 days, or 12 per cent above the five-year average, also appears healthy.

As a result of high demand, gasoline stocks declined by 170,000 b to 199.86m b which meant that stocks are two per cent and three per cent below the year-ago level and the five-year average, respectively. In terms of forward cover, gasoline stood at 21.4 days, four per cent and seven per cent below the year-ago level and the five-year average. Concerning middle distillates, heating oil stocks were seen at 56.88m b in the week ended December 8, a drop of 700,000 b week-on-week, due to the recent cold spell in the US Northeast which boosted demand. However, the forward cover for this key winter product was still at 61.6 days, four days above the year-ago level and two per cent higher than the five-year average. Diesel inventories increased by 250,000 b, which set the level at 75.03m b week-on-week, attributable to higher imports and production and lower demand.

Western Europe

Reversing a three-month downward trend, Western Europe's total commercial oil stocks improved by 1.9m b to 1,149.62m b in November, compared with the previous month, almost on a par with the year-ago level, but seven per cent above the five-year average. An increase in crude oil inventories was responsible for this development.

Crude oil stocks saw a considerable gain of 4.1m b, or around 140,000 b/d, in November from the previous month. This left the level at 495.9m b, 5.4 per cent and 7.7 per cent higher than a year earlier and the five-year average, respectively. The build took place despite a recovery in refinery runs mostly in Germany, which, with the end of turnarounds, rose from 11.9m b/d to 12.2m b/d in November compared with the previous month. Nevertheless, refinery runs were still well below year-ago levels, and this combined with lower exports of North Sea crude to the US was a result of BFO's premium to WTI in November.

Total product stocks declined by 2.2m b to 625m b in November from the previous month. This level was 3.6 per cent below the year-ago level, but 3.7 per cent above the five-year average. Gasoline inventories rose by 800,000 b to 130.3m b in November, but were around eight per cent and six per cent below the year-ago level and the five-year average, respectively. The upward effect of higher refinery runs was partly offset by growing exports to the US. Middle distillate stocks fell by 800,000 b to 381m b in November compared with the previous month which was two per cent below the same month last year. This was caused by greater domestic demand which outpaced higher refinery runs. Residual fuel oil inventories dropped by 2.2m b, which left the level at 113.8m b, a fall of 3.8 per cent from a year earlier, despite higher refinery output and imports from Russia and as exports to Singapore were reported.

Japan

Total commercial oil inventories in Japan were up by 6.2m b to 200.6m b in October relative to September, 0.8 per cent and three per cent above the year-ago level and the five-year average, respectively. This development seems to be the result of a contra-seasonal build in crude oil stocks, which outpaced the draw on product inventories.

Compared with September, crude oil stocks rose by a further 6.4m b to 116.7m b, 2.3 per cent above the year-ago level, but 0.3 per cent below the five-year average. Lower refinery runs, down by 7.9 per cent, and falling imports from the previous month explained this development. A cut in the utilization rate in Japanese refineries was prompted by unusually high kerosene stock levels, resulting from contra-seasonal lower demand, owing to the warm winter weather.

Moving to total product inventories, the build in September became a small draw in October, with the level of 84m b hovering 1.2m b below the year-ago level, but still 6.1m b above the five-year average. Despite falling exports and larger imports, a fall in production and an 11.5 per cent monthly increase in domestic sales led to the draw on product stocks. The lowest refinery utilization rate in three years contributed to the decline in product inventories in Japan. Naphtha, gasoil and Fuel Oil BC experienced the largest fall in stocks. In the case of gasoil, there was a strong decline in imports. METI reported that kerosene inventories went up by five per cent month-on-month in October owing to the higher temperatures, but recent reports point to a falling trend which is expected to continue when temperatures fall.

Estimated demand for OPEC crude in 2007 is expected to average 28.3m b/d, representing a decline of 600,000 b/d from 2006.

Balance of supply/demand

Estimate for 2006

Estimated demand for OPEC crude in 2006 is expected to average 28.9m b/d. On a quarterly basis, the new forecast shows that demand for OPEC crude is expected at 29.8m b/d, 28.2m b/d, 28.6m b/d and 29.1m b/d in the four quarters of the year, respectively. According to secondary sources, average total OPEC crude capacity was 32.1m b/d, 32.3m b/d and 32.5m b/d in the first, second and third quarters, respectively.

Forecast for 2007

Estimated demand for OPEC crude in 2007 is expected to average 28.3m b/d, representing a decline of 600,000 b/d from 2006. On a quarterly basis, the forecast shows that demand for OPEC crude is expected at 29.4m b/d, 27.2m b/d, 27.9m b/d and 28.5m b/d in the four quarters of the year, respectively.

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

World demand	2002	2003	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
OECD	47.9	48.6	49.3	49.6	50.2	48.0	48.8	50.6	49.4	50.5	48.1	49.0	50.9	49.6
North America	24.1	24.5	25.4	25.5	25.1	25.1	25.5	26.0	25.5	25.5	25.2	25.7	26.3	25.7
Western Europe	15.3	15.4	15.5	15.5	15.8	15.0	15.4	15.8	15.5	15.6	15.1	15.5	15.8	15.5
Pacific	8.5	8.6	8.5	8.6	9.3	7.9	7.9	8.8	8.5	9.4	7.8	7.9	8.8	8.5
Developing countries	20.3	20.6	21.7	22.4	22.7	23.2	23.1	23.1	23.0	23.3	23.7	23.8	23.8	23.6
FSU	3.7	3.8	3.8	3.8	3.7	3.6	3.8	4.0	3.8	3.8	3.5	3.8	4.1	3.8
Other Europe	0.8	0.8	0.9	0.9	1.0	0.9	0.9	0.9	0.9	1.0	0.9	0.9	0.9	0.9
China	5.0	5.6	6.5	6.5	7.1	7.3	7.2	7.0	7.2	7.4	7.9	7.7	7.4	7.6
(a) Total world demand	**77.8**	**79.4**	**82.3**	**83.3**	**84.7**	**83.0**	**83.9**	**85.6**	**84.3**	**86.0**	**84.0**	**85.2**	**87.1**	**85.6**
Non-OPEC supply														
OECD	21.9	21.7	21.3	20.5	20.4	20.0	20.1	20.8	20.3	20.6	20.6	20.5	21.0	20.7
North America	14.5	14.6	14.6	14.1	14.2	14.2	14.3	14.6	14.3	14.5	14.6	14.5	14.7	14.6
Western Europe	6.7	6.4	6.2	5.8	5.7	5.3	5.1	5.5	5.4	5.4	5.4	5.3	5.7	5.4
Pacific	0.8	0.7	0.6	0.6	0.5	0.5	0.6	0.7	0.6	0.7	0.6	0.7	0.7	0.7
Developing countries	11.5	11.6	12.0	12.5	12.9	12.8	13.0	13.4	13.1	13.5	13.5	13.8	14.1	13.7
FSU	9.3	10.3	11.1	11.5	11.7	12.0	12.1	12.2	12.0	12.3	12.5	12.7	12.9	12.6
Other Europe	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.4	3.4	3.5	3.6	3.7	3.7	3.7	3.7	3.7	3.8	3.7	3.8	3.9	3.8
Processing gains	1.7	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Total non-OPEC supply	48.1	48.9	50.0	50.2	50.7	50.5	50.9	52.2	51.1	52.3	52.4	52.8	54.0	52.9
OPEC NGLS and non-conventionals	3.6	3.7	4.0	4.1	4.2	4.2	4.3	4.3	4.3	4.3	4.4	4.5	4.6	4.4
(b) Total non-OPEC supply and OPEC NGLS	**51.7**	**52.7**	**54.0**	**54.3**	**54.8**	**54.7**	**55.3**	**56.5**	**55.3**	**56.6**	**56.8**	**57.3**	**58.6**	**57.3**
OPEC crude supply and balance														
OPEC crude oil production[1]	25.4	26.9	29.0	29.9	29.7	29.6	29.7							
Total supply	77.0	79.6	83.0	84.2	84.5	84.3	85.0							
Balance[2]	-0.8	0.2	0.7	0.9	-0.1	1.4	1.1							
Stocks														
OECD closing stock level *m b*														
Commercial	2478	2517	2547	2595	2596	2654	2761							
SPR	1347	1411	1450	1487	1487	1493	1495							
Total	3825	3928	3998	4082	4083	4148	4256							
Oil-on-water	816	883	906	961	964	975	968							
Days of forward consumption in OECD														
Commercial onland stocks	51	51	51	53	54	54	55							
SPR	28	29	29	30	31	31	30							
Total	79	80	81	83	85	85	84							
Memo items														
FSU net exports	5.6	6.5	7.3	7.7	8.0	8.4	8.3	8.2	8.2	8.5	9.0	8.9	8.8	8.8
[(a) – (b)]	**26.1**	**26.7**	**28.3**	**29.0**	**29.8**	**28.2**	**28.6**	**28.1**	**28.9**	**29.5**	**27.2**	**28.0**	**28.5**	**28.3**

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 91 while* ***Graphs One and Two*** *(on page 92) show the evolution on a weekly basis.* ***Tables Three to Eight****, and the corresponding graphs on pages 93–94, 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 Nov	Dec	2006 Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Weeks 44–48 (week ending) Nov 3	Nov 10	Nov 17	Nov 24	Dec 1
Arab Light – Saudi Arabia	51.55	52.84	58.43	56.56	57.54	63.85	64.83	65.03	69.06	68.76	59.72	55.64	55.53	54.82	56.14	55.14	54.66	57.34
Basrah Light – Iraq	48.07	49.15	55.59	52.32	54.01	61.18	62.32	62.38	66.49	65.42	56.40	51.53	52.31	51.09	52.80	51.37	51.51	55.27
BCF-17 – Venezuela	41.33	42.34	47.90	45.90	49.52	56.01	56.62	55.01	58.72	60.29	50.96	46.99	46.86	46.51	47.61	46.92	45.82	48.41
Bonny Light – Nigeria	57.18	57.91	64.04	62.12	63.80	71.80	71.75	70.22	75.49	75.29	63.87	58.75	60.32	57.49	59.68	59.46	60.91	64.15
Es Sider – SP Libyan AJ	54.92	57.14	61.77	59.12	60.22	67.03	67.25	66.62	71.42	70.72	61.54	56.20	57.32	54.67	56.68	56.46	57.91	61.04
Iran Heavy – IR Iran	49.28	50.88	57.10	55.43	56.56	63.09	63.27	62.24	66.59	66.42	57.14	53.27	53.97	52.73	54.34	53.75	53.35	55.68
Kuwait Export – Kuwait	49.19	50.83	56.52	55.01	55.80	62.20	62.80	62.37	66.35	66.02	56.75	53.02	53.56	52.60	54.20	53.46	52.69	55.01
Marine – Qatar	53.17	54.72	59.85	59.06	59.39	65.62	66.29	66.16	70.21	70.05	60.90	57.15	57.33	56.63	58.04	57.45	56.45	58.46
Minas – Indonesia	53.87	54.43	63.35	61.35	62.30	69.17	70.47	68.49	74.13	75.42	63.32	54.87	56.93	53.39	56.97	57.19	56.82	59.49
Murban – UAE	56.13	57.47	62.72	61.77	62.33	68.46	69.84	69.66	73.70	73.66	65.01	61.04	60.94	60.28	61.39	60.93	60.20	62.35
Saharan Blend – Algeria	56.15	57.65	64.06	61.59	62.98	70.21	70.31	69.15	74.37	74.50	63.27	58.55	59.77	57.08	59.13	58.91	60.36	63.49
OPEC Reference Basket	**51.29**	**52.65**	**58.48**	**56.62**	**57.87**	**64.44**	**65.11**	**64.60**	**68.89**	**68.81**	**59.34**	**54.97**	**55.42**	**54.16**	**55.74**	**55.05**	**54.89**	**57.59**

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

Crude/Country	2005 Nov	Dec	2006 Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Weeks 44–48 (week ending) Nov 3	Nov 10	Nov 17	Nov 24	Dec 1
Arab Heavy – Saudi Arabia	47.40	49.16	54.91	53.52	54.08	60.74	60.88	59.84	63.74	63.57	54.56	50.49	51.54	50.39	52.21	51.60	50.66	52.81
Brent – North Sea	55.41	57.02	63.05	60.12	62.08	70.35	69.83	68.69	73.66	73.11	61.71	57.80	58.92	56.27	58.28	58.06	59.51	62.64
Dubai – UAE	51.63	53.22	58.56	57.61	57.82	64.14	65.07	65.22	69.17	68.92	59.82	56.36	56.72	55.83	57.30	56.77	55.89	58.04
Ekofisk – North Sea	55.76	57.54	63.34	60.36	62.53	70.32	69.88	68.45	73.74	73.09	62.24	58.17	59.14	56.44	58.73	58.64	59.19	62.80
Iran Light – IR Iran	51.31	53.20	58.99	57.00	58.77	65.14	64.67	64.30	68.81	68.49	58.56	55.42	55.39	54.73	56.31	54.81	54.49	56.99
Isthmus – Mexico	51.57	52.77	58.54	53.87	56.85	64.51	64.82	63.88	68.30	67.47	57.18	52.46	53.34	52.09	53.67	52.13	52.50	56.91
Oman -Oman	52.78	54.21	59.35	58.61	59.19	65.54	66.39	66.17	70.22	70.12	61.01	57.32	57.36	56.63	58.13	57.44	56.44	58.50
Suez Mix – Egypt	49.29	51.59	56.92	54.54	55.54	62.43	62.46	61.95	66.51	65.78	56.96	52.91	53.60	51.46	53.99	53.62	53.07	55.90
Tia Juana Light[1] – Venez.	48.77	49.23	54.27	50.97	52.32	58.77	58.66	56.98	60.93	60.99	52.35	48.05	51.63	49.35	51.96	50.46	50.82	55.09
Urals – Russia	52.38	54.63	59.58	57.06	58.11	64.95	65.09	64.51	69.20	68.49	59.47	55.68	55.95	53.90	56.39	55.99	55.37	58.18
WTI – North America	58.42	59.36	65.39	61.49	62.82	69.46	70.89	70.88	74.33	73.01	64.00	58.82	58.94	58.43	59.85	57.46	57.68	61.98

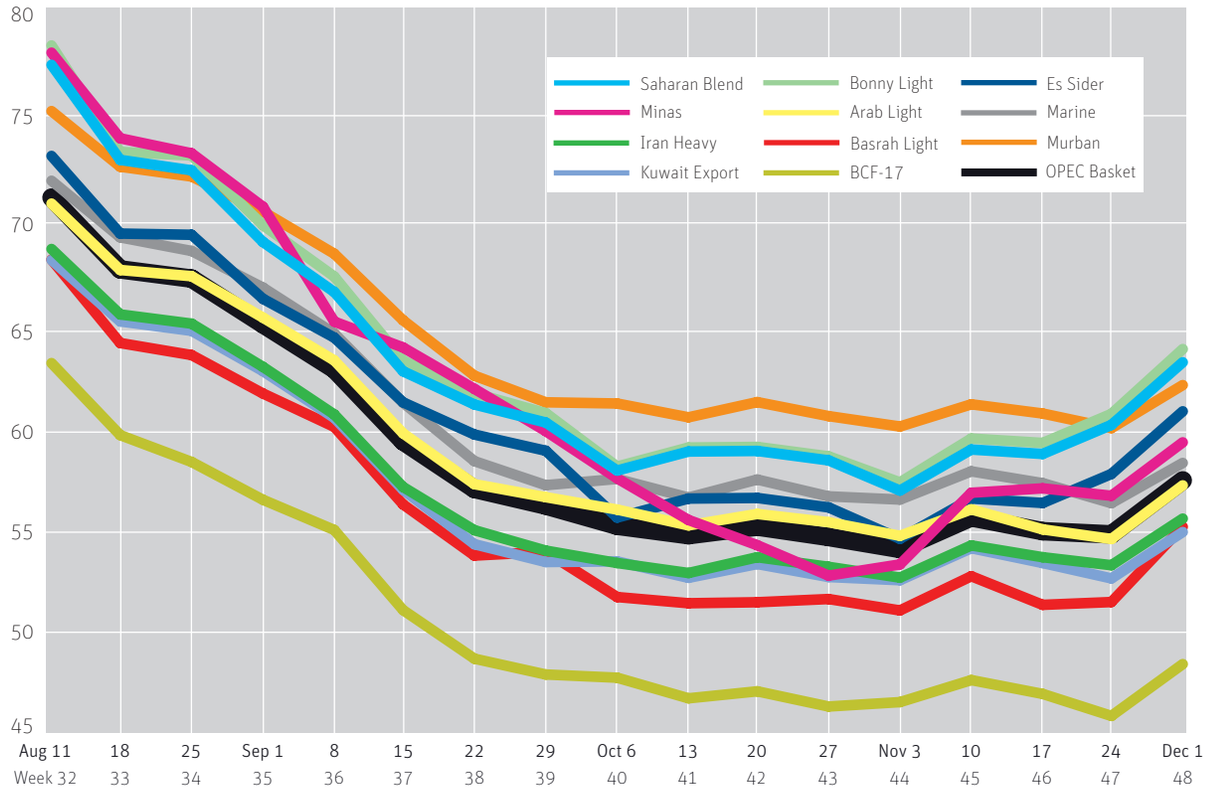
Note: As of January 2006, monthly averages are based on daily quotations (as approved by the 105th Meeting of the Economic Commission Board). As of June 16, 2005 (ie 3W June), the OPEC Reference Basket has been calculated according to the new methodology as agreed by the 136th (Extraordinary) Meeting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

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

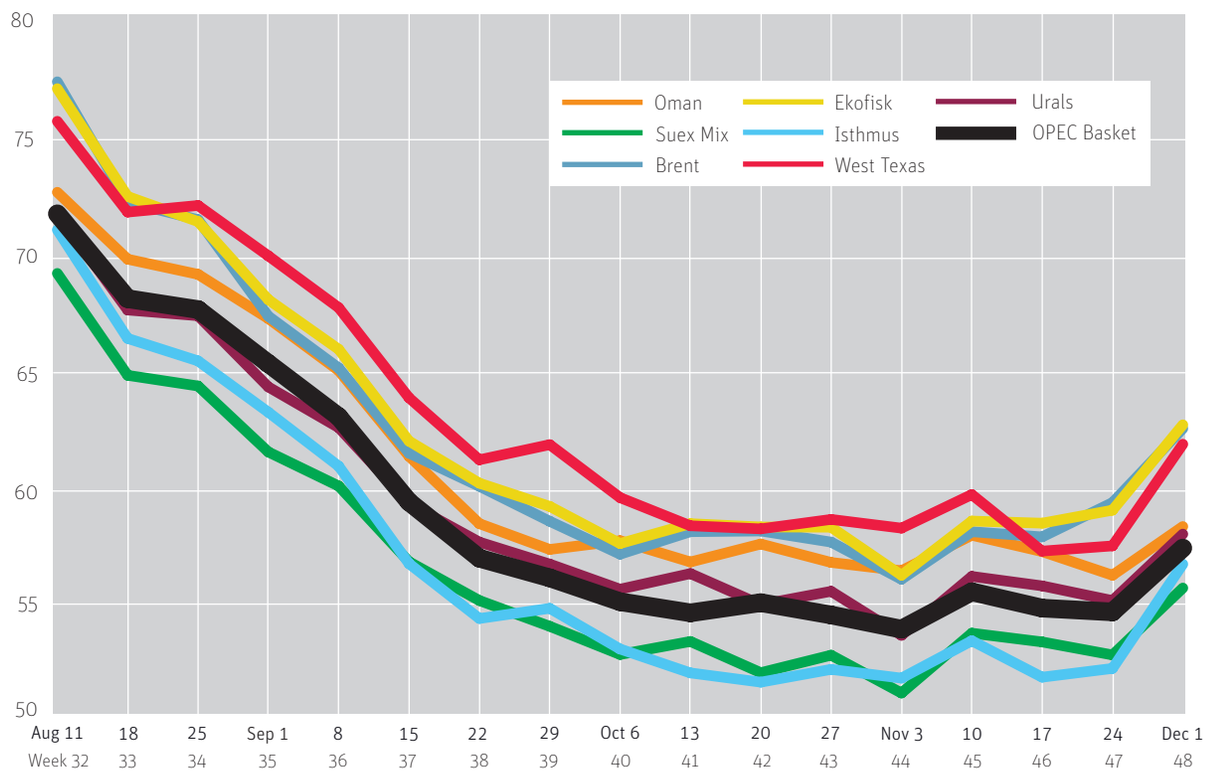
Brent for dated cargoes; Urals cif Mediterranean. All others fob loading port.

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

Graph 1: Evolution of the OPEC Reference Basket crudes, July to October 2006 *$/b*



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



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.

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	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
	March	69.12	68.03	76.53	77.42	76.52	45.37	44.02
	April	77.49	80.84	90.97	84.69	84.70	47.77	47.67
	May	78.73	83.24	93.84	86.03	87.00	47.14	48.13
	June	80.63	84.91	95.72	86.13	87.06	44.65	44.60
	July	84.43	91.03	102.17	87.80	89.69	46.10	46.79
	August	81.35	82.74	93.21	89.75	91.68	46.38	46.41
	September	68.51	64.54	72.69	77.31	79.71	42.04	40.67
	October	66.51	59.57	67.12	74.92	73.68	37.91	39.25
	November	67.40	61.17	69.11	74.53	73.81	38.69	38.70

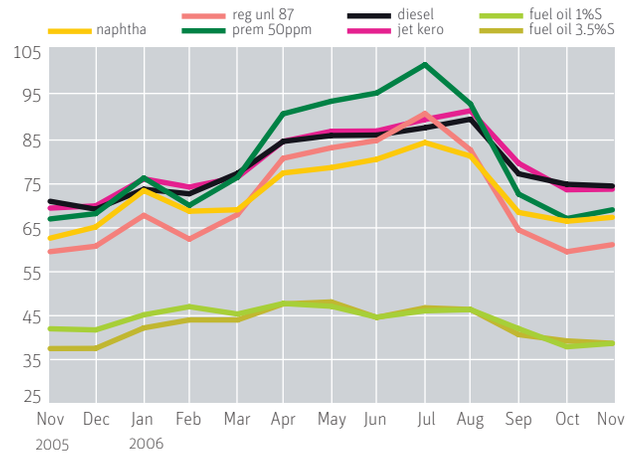


Table and Graph 4: South European market — spot cargoes, fob Italy

$/b

		naphtha	premium gasoline 50ppm	diesel ultra light	fuel oil 1%S	fuel oil 3.5%S
2005	November	51.20	64.69	69.80	41.91	35.57
	December	53.71	67.95	70.64	43.53	35.02
2006	January	59.23	75.71	74.58	47.98	39.62
	February	56.42	68.48	74.41	51.10	42.56
	March	57.70	77.70	77.59	47.73	43.29
	April	64.78	90.10	84.93	47.66	46.28
	May	65.85	94.46	87.09	48.89	46.44
	June	67.45	95.00	85.85	46.95	44.47
	July	70.21	102.69	88.92	49.59	46.80
	August	67.81	93.24	89.83	49.86	44.99
	September	56.94	71.74	77.33	40.94	39.72
	October	55.46	67.91	73.68	38.41	37.96
	November	56.16	70.33	74.31	38.29	37.49

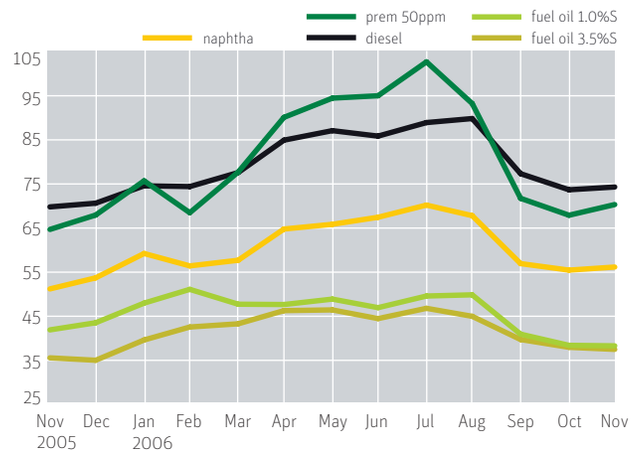
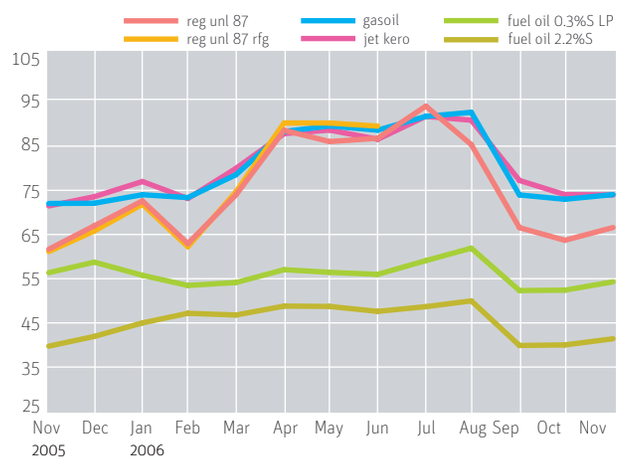


Table and Graph 5: US East Coast market — spot cargoes, New York

$/b, duties and fees included

		regular gasoline unleaded 87	regular gasoline unl 87 rfg	gasoil	jet kero	fuel oil 0.3%S	fuel oil 2.2%S
2005	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
	March	73.97	74.67	78.53	79.97	54.13	46.78
	April	88.59	90.25	88.32	87.84	57.04	48.80
	May	86.03	90.23	89.57	88.63	56.44	48.72
	June	86.79	89.54	88.62	86.56	55.98	47.60
	July	94.07	*na*	91.74	91.74	59.09	48.67
	August	85.35	*na*	92.66	90.87	61.91	49.98
	September	66.56	*na*	73.96	77.24	52.32	39.88
	October	63.69	*na*	72.98	74.03	52.40	40.01
	November	66.58	*na*	74.04	73.96	54.29	41.40



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	November	58.23	70.47	71.86	35.73	37.15
	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	42.56
	March	71.08	74.98	79.53	42.78	42.56
	April	83.72	83.72	88.06	44.80	44.72
	May	72.61	83.50	87.84	44.72	44.65
	June	78.88	81.20	88.22	43.60	43.37
	July	82.38	82.39	91.23	44.67	44.55
	August	71.17	85.12	90.20	46.00	45.51
	September	61.91	72.46	76.92	35.88	35.81
	October	61.31	69.90	73.81	36.01	35.93
	November	62.44	69.83	73.86	37.40	37.24

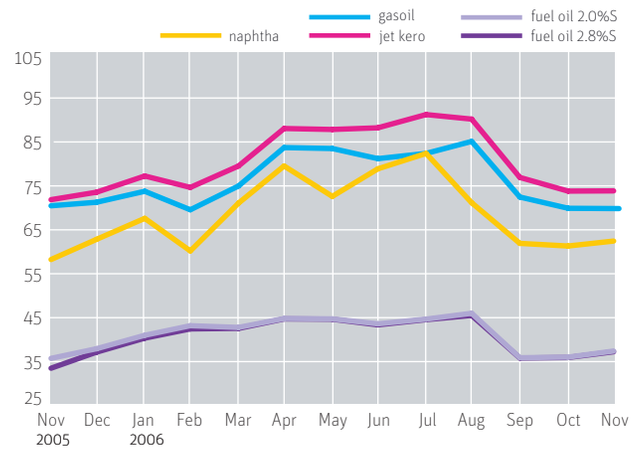


Table and Graph 7: Singapore market — spot cargoes, fob

$/b

		naphtha	premium gasoline unl 95	premium gasoline unl 92	diesel ultra light	jet kero	fuel oil 180 Cst	fuel oil 380 Cst
2005	November	53.19	60.87	59.48	66.50	70.37	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	75.66	49.18	47.95
	March	59.82	69.64	69.05	82.11	75.66	49.43	48.89
	April	64.45	81.13	80.15	90.68	84.77	51.81	51.32
	May	65.59	86.80	86.17	92.78	85.55	52.02	51.32
	June	68.06	82.76	82.21	89.13	86.18	49.68	48.46
	July	70.55	85.50	84.47	88.17	87.57	52.28	50.72
	August	66.59	81.22	80.36	88.19	89.47	50.16	47.61
	September	57.32	65.86	65.18	77.75	80.55	43.25	42.24
	October	56.03	61.83	61.21	73.12	74.02	42.46	42.40
	November	57.66	62.89	62.14	72.04	73.63	40.53	39.84

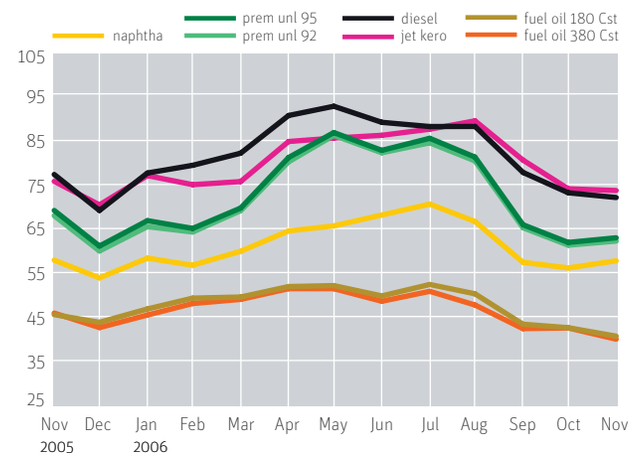
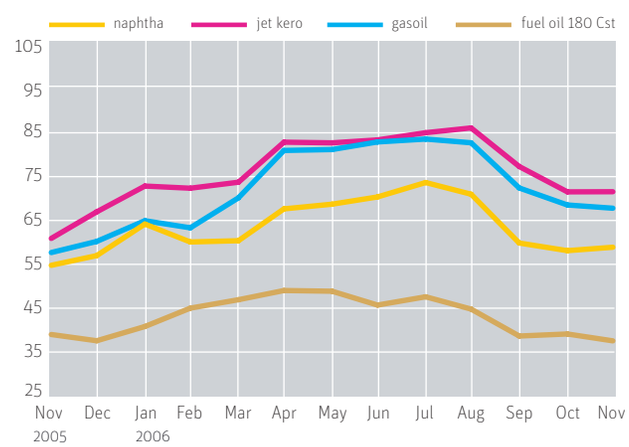


Table and Graph 8: Middle East Gulf market — spot cargoes, fob

$/b

		naphtha	gasoil	jet kero	fuel oil 180 Cst
2005	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
	March	60.39	70.17	73.73	46.93
	April	67.65	80.97	82.86	49.03
	May	68.72	81.18	82.71	48.87
	June	70.37	82.91	83.38	45.71
	July	73.66	83.57	85.02	47.60
	August	70.99	82.72	86.11	44.79
	September	59.86	72.42	77.31	38.65
	October	58.12	68.54	71.53	39.12
	November	58.90	67.80	71.56	37.55



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

Forthcoming events

Water and gas shut-off in the Gulf states, January 21–24, 2007, Muscat, Oman. Details: Society of Petroleum Engineers, Dubai Knowledge Village, Block 17, Offices S07-S09, PO Box 502217, Dubai, UAE. Tel: +971 4 390 3540; fax: +971 4 366 4648; e-mail: spedub@spe.org; website: www.spe.org.

GTLtec 2007, January 22–23, 2007, Doha, Qatar. Details: Centre for Management Technology, 80 Marine Parade Road #13-02, Parkway Parade 449269 Singapore. Tel: +65 6345 7322 / 6346 9132; fax: +65 6345 5928; e-mail: cynthia@cmtsp.com.sg; website: www.cmtevents.com.

Smart grids forum 2007, January 22–23, 2007, Amsterdam, The Netherlands. Details: Marcus Evans Conferences, 11 Connaught Place, London W2 2ET, UK. Tel: +44 203 002 3002; fax: +44 203 002 3003; e-mail: flaminiag@marcusevansuk.com; website: www.meenergy.com.

Shutdowns and turnarounds, January 23–24, 2007, London, UK. Details: IQPC, Anchor House, 15–19 Britten Street, London SW3 3QL, UK. Tel: +44 207 368 9300; fax: + 44 20 7368 9301; e-mail: enquire@iqpc.co.uk; website: www.iqpc.co.uk.

Canada's oil sands industry, January 25–26, 2007, Calgary, 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: sjohnsgaard@ceri.ca; website: www.ceri.ca.

Contract risk management for mining, January 30–31, 2007, London, UK. Details: IQPC, Anchor House, 15–19 Britten Street, London SW3 3QL, UK. Tel: +44 20 7368 9300; fax: + 44 20 7368 9301; e-mail: enquire@iqpc.co.uk; website: www.iqpc.co.uk.

Security for energy infrastructure 2007, global summit, January 30–31, 2007, London, UK. Details: IQPC, Anchor House, 15–19 Britten Street, London SW3 3QL, UK. Tel: +44 20 7368 9300; fax: + 44 20 7368 9301; e-mail: enquire@iqpc.co.uk; website: www.iqpc.co.uk.

Horizontal wells summit 2007, January 30–31, 2007, Aberdeen, UK. Details: IQPC, Anchor House, 15–19 Britten Street, London SW3 3QL, UK. Tel: +44 207 368 9300; fax: + 44 207 368 9301; e-mail: enquire@iqpc.co.uk; website: www.iqpc.co.uk.

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Alternative fluids for improved oil recovery, January 31–February 1, 2007, Maracaibo, Venezuela. Details: Society of Petroleum Engineers, PO Box 833836, Richardson, TX 75083-3836, USA. Tel: +1 972 952 9393; fax: 1 972 952 9435; e-mail: spedal@spe.org; website: www.spe.org.

Introduction to the natural gas industry ... from wellhead to burner-tip, February 1–2, 2007, Calgary, 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: sjohnsgaard@ceri.ca; website: www.ceri.ca.

Asia petroleum strategy briefing, February 5, 2007, Singapore. Details: Global Pacific Partners, Suite 7, 4 Montpelier Street, Knightsbridge, London SW7 1EE, UK. Tel: +44 207 589 7804; fax: +44 207 589 7814; e-mail: babette@glopac.com; website: www.petro21.com.

Controlling E&P data capture efficiency and final databank integrity, February 2, 2007, London, UK. Details: SMi Group, Unit 122, Great Guildford Business Square, 30 Great Guildford Street, London, SE1 OHS, UK. Tel: +44 207 827 6000; fax: +44 207 827 6001; e-mail: client_services@smi-online.co.uk; website: www.smi-online.co.uk.

Electric industry fundamentals, electric industry restructuring, February 5–6, 2007, Calgary, 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: sjohnsgaard@ceri.ca; website: www.ceri.ca.

Middle East ship repair and conversion conference, February 5–6, 2007, Dubai, UAE. Details: CWC Associates, Regent House, Oyster Wharf, 16–18 Lombard Road, London SW11 3RF, UK. Tel: +44 207 978 000; fax: +44 207 978 0099; e-mail: sshelton@thecwcgroup.com; website: www.thecwcgroup.com.

Nigeria oil & gas 2007, February 5–8, 2007, Abuja, Nigeria. Details: CWC Associates, Regent House, Oyster Wharf, 16–18 Lombard Road, London SW11 3RF, UK. Tel: +44 207 978 000; fax: +44 207 978 0099; e-mail: sshelton@thecwcgroup.com; website: www.thecwcgroup.com.

12th Annual Asia upstream 2007, February 6–7, 2007, Singapore. Details: Global Pacific Partners, Suite 7, 4 Montpelier Street, Knightsbridge, London SW7 1EE, UK. Tel: +44 207 589 7804; fax: +44 207 589 7814; e-mail: babette@glopac.com; website: www.petro21.com.

Russia offshore 2007, February 7–8, 2007, Moscow, Russia. Details: The Energy Exchange, 5th Floor, 86 Hatton Garden, London. EC1N 8QQ, UK. Tel: +44 207 067 1800; fax: +44 207 242 2673; e-mail: marketing@theenergyexchange.co.uk; website: www.theenergyexchange.co.uk.

FCC training course, February 7–9, 2007, Brussels, Belgium. Details: Global Technology Forum, Highview House, Tattenham Crescent Epsom Downs, Surrey KT18 5QJ, UK. Tel: +44 1737 365100; fax: +44 1737 365101; e-mail: events@gtforum.com; website: www.gtforum.com.

International Petroleum Week, February 12–15, 2007, London, UK. Details: Energy Institute, 61 New Cavendish Street, London W1G 7AR, UK. Tel: +44 207 467 7116; fax: +44 207 580 2230; e-mail: jwarner@energyinst.org.uk; website: www.ipweek.co.uk.

LNG 2007, February 14–15, 2007, London, UK. Details: SMi Group, Unit 122, Great Guildford Business Square, 30 Great Guildford Street, London, SE1 OHS, UK. Tel: +44 207 827 6000; fax: +44 207 827 6001; e-mail: client_services@smi-online.co.uk; www.smi-online.co.uk.

Fundamentals of the oil and gas industry, February 14–16, 2007, London, UK. Details: The Petroleum Economist; 69 Carter Lane, London EC4V 5EQ, UK. Tel: +44 207 779 8800; fax: +44 207 779 8899; e-mail: customerservice@petroleum-economist.com; website: www.petroleum-economist.com.

Production sharing contracts and international petroleum fiscal systems, February 14–16, 2007, Wellington, New Zealand. Details: The Conference Connection Administrators, 105 Cecil Street #07-02 The Octagon, 069534 Singapore. Tel: +65 622 202 30; fax: +65 622 201 21; e-mail: info@cconnection.org; website: www.cconnection.org.

World oil future, February 15, 2007, London, UK. Details: Global Pacific Partners, Suite 7, 4 Montpelier Street, Knightsbridge, London SW7 1EE, UK. Tel: +44 207 589 7804; fax: +44 207 589 7814; e-mail: babette@glopac.com; website: www.petro21.com.

Introduction to the upstream petroleum industry, February 15–16, 2007, Calgary, 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: sjohnsgaard@ceri.ca; www.ceri.ca.

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