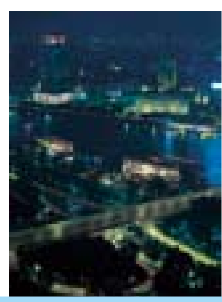
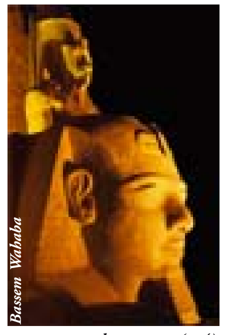
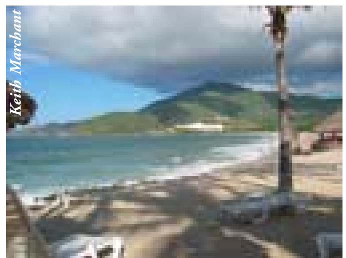
This month's cover ...
shows a night view of the Egyptian capital Cairo, site of December's OPEC Conference (see p4)
Photo: Bassem Wahaba, Philippe Photo Trade, Cairo



Vol XXXV, No 9 ISSN 0474-6279 November/December 2004



OPEC cuts overproduction (p4)



Margarita hosts contracts meeting (p12)

OPEC Members expand capacity (p20)

Iraqi elections in January (p58)

3 ***Commentary***
Pyramid scheme

4 ***Conference Notes***
OPEC agrees to cut overproduction by 1.0m b/d

12 ***Features***

Margarita hosts OPEC upstream contract workshop
Interview: HE Rafael Ramírez *(p18)*

OPEC Members rise to the challenge of expanding production capacity *(p20)*
Interview: Diane Munro *(p26)*

IMF and OPEC share analysis, ideas at the Secretariat *(p34)*

Russia ratifies Kyoto Protocol *(p38)*

42 ***Newsline***
Rafael Ramírez takes over role of PDVSA President
Saudi Arabia finds more hydrocarbon reserves (p44)
Oil and gas news from OPEC (p46)

54 ***Member Country Focus***
Iran's progress on nuclear freeze good, but incomplete
Development and economic news from OPEC (p56)

62 ***Market Review***
Covering September/October

88 ***OPEC Fund News***

94 ***Noticeboard***

95 ***Obituaries***

Publishers

OPEC
Organization of the Petroleum Exporting Countries, Obere Donaustrasse 93, 1020 Vienna, Austria
Telephone: +43 1 211 12/0
Telefax: +43 1 216 4320
Public Relations & Information Department fax: +43 1 214 9827
E-mail: prid@opec.org
E-mail: OPEC News Agency: opecna@opec.org
Web site: www.opec.org
Hard copy subscription: $70/year

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 comprises the five Founding Members and six other Full Members: Qatar (joined in 1961); Indonesia (1962); SP Libyan AJ (1962); United Arab Emirates (Abu Dhabi, 1967); Algeria (1969); and Nigeria (1971). Ecuador joined the Organization in 1973 and left in 1992; Gabon joined in 1975 and left in 1995.

Contributions

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

Secretariat officials

Secretary General
HE Dr Purnomo Yusgiantoro

Indonesian Governor for OPEC Acting for the Secretary General
Dr Maizar Rahman

Director, Research Division
Dr Adnan Shihab-Eldin

Head, Data Services Department
Dr Muhammad A Al Tayyeb

Head, Administration & Human Resources Department
Senussi J Senussi

Head, Energy Studies Department
Mohamed Hamel

Head, PR & Information Department
Dr Omar Farouk Ibrahim

Head, Petroleum Market Analysis Department
Mohammad Alipour-Jeddi

Senior Legal Counsel
Dr Ibibia Lucky Worika

Head, Office of the Secretary General
Karin Chacin

Editorial policy

The *OPEC Bulletin* is published by the Public Relations & Information Department. The contents do not necessarily reflect the official views of OPEC or its Member Countries. Names and boundaries on any maps should not be regarded as authoritative. No responsibility is taken for claims or contents of advertisements. Editorial material may be freely reproduced (unless copyrighted), crediting the *OPEC Bulletin* as the source. A copy to the Editor would be appreciated.

Editorial staff

Editor-in-Chief
Dr Omar Farouk Ibrahim
Editor
Graham Patterson
Deputy Editor
Philippa Webb-Muegge
Production
Diana Lavnick
Design
Elfi Plakolm

Web site: www.opec.org

Visit the OPEC Web site for the latest news and information about the Organization and its Member Countries. Recent and back issues of the *OPEC Bulletin* are available free of charge on the site in PDF format.

Indexed and abstracted in PAIS International

Printed in Austria by Ueberreuter Print and Digimedia

Advertisements

The *OPEC Bulletin* reaches the decision-makers in Member Countries. For details of its reasonable advertisement rates see the appropriate page at the end of the magazine. Orders from **Member Countries** should be sent directly to the Editor-in-Chief at the Secretariat address. Otherwise, orders should be placed through the Advertising Representatives, whose contact details are at the end of the magazine.

Pyramid scheme

OPEC's decision in Cairo to cut overproduction should help to arrest the recent price slide

As the eleven OPEC Ministers of Oil and Energy gathered in the Egyptian capital Cairo for the 133rd (Extraordinary) Meeting of the Conference, they were facing something of a dilemma. Oil prices, which had remained strong throughout the year on a well-known combination of fundamental and non-fundamental factors, had suddenly taken a steep tumble. The price of the OPEC Reference Basket of seven crudes had fallen from the highs of more than $46/barrel that it hit in October to less than $34/b by the time of the Conference, indicating that the market was oversupplied. On the other hand, it would have been counterproductive to risk a move that could have sent prices shooting back up to record highs. To cut, or not to cut? That was the question.

The decision of the Cairo Conference was, in fact, to reduce the overproduction by 1.0 million b/d from current actual output, with effect from January 1 next year. At the same time, the overall ceiling and individual production levels for the OPEC-10 (excluding Iraq) of 27m b/d will be maintained. While the final communiqué did note that "current crude oil prices reflect convergence towards market fundamentals", it also underscored the importance of the cut in overproduction, which was taken "in order to prevent crude oil prices continuing to deteriorate to undesirably low levels."

In a market that can be influenced by fundamentals and non-fundamentals, or — as is often the case — a combination of both, it can be hard to discern which particular factors constitute the driving force (or forces) behind price movements at any one time.

Thus, in recent months, we have seen prices rise to record highs on the back of what the media is fond of referring to as an "explosive cocktail" of circumstances, and a robust OPEC response in the form of overproduction in order to restore stability to the market.

As prices rose ever higher, it would have been very tempting for OPEC to forget about spare capacity and open the taps wide, pouring more and more crude into the market in the hope that somehow this would calm things down. Wisely, the Organization's Members resisted that temptation, maintaining a delicate balance while meeting the needs of the market. Their success in doing so, noted the final communiqué, was reflected in the fact that "the market remains well supplied, the adequacy of supply evidenced by the continued replenishment and build-up of commercial oil stocks."

As demonstrated by recent events, maintaining a balance in the crude oil market is no simple task. Unsurprisingly, there is no simple solution either, no magic formula to maintain market stability.

The only method that has been found to be effective is to constantly monitor developments as closely as possible and to be prepared to take any necessary action swiftly. Thus, OPEC will be meeting in Vienna at the end of January to assess the market situation, and again in the Iranian city of Isfahan in mid-March. After all, to keep abreast of the oil market is a monumental task — as monumental, some would say, as the pyramids of Egypt themselves.

133rd OPEC Conference in Cairo agrees to cut overproduction by one million b/d

by Graham Patterson

Their Excellencies the Ministers and Heads of Delegation pose under a Cairo Conference poster (from left): Nigeria's Dr Edmund M Daukoru, Syria's Prof Dr Ibrahim Haddad, the UAE's Mohamed Bin Dhaen Al Hamli, Qatar's Abdullah bin Hamad Al Attiyah, Russia's Dr Andrei G Reus, Indonesia's Dr Purnomo Yusgiantoro, Sudan's Dr Awad Ahmed Al Jazz, Saudi Arabia's Ali I Naimi, Egypt's Eng Amin Sameh Fahmy, Iran's Bijan Namdar Zangeneh, Algeria's Dr Chakib Khelil, Venezuela's Rafael Ramirez, Libya's Dr Fathi Hamed Ben Shatwan, Oman's Nasser bin Khamis Al-Jashmi, Angola's Desidério da Graça Veríssimo e Costa, Iraq's Abdulilah Kasim Al-Amir, and Kuwait's Sheikh Ahmad Fahad Al-Ahmad Al-Sabah.

OPEC decided to reduce over-production by one million barrels/day from current actual output levels when it met in the Egyptian capital Cairo on December 10. The decision is effective from January 1, 2005.

Above: Dr Purnomo (r) and Dr Rahman at the press conference

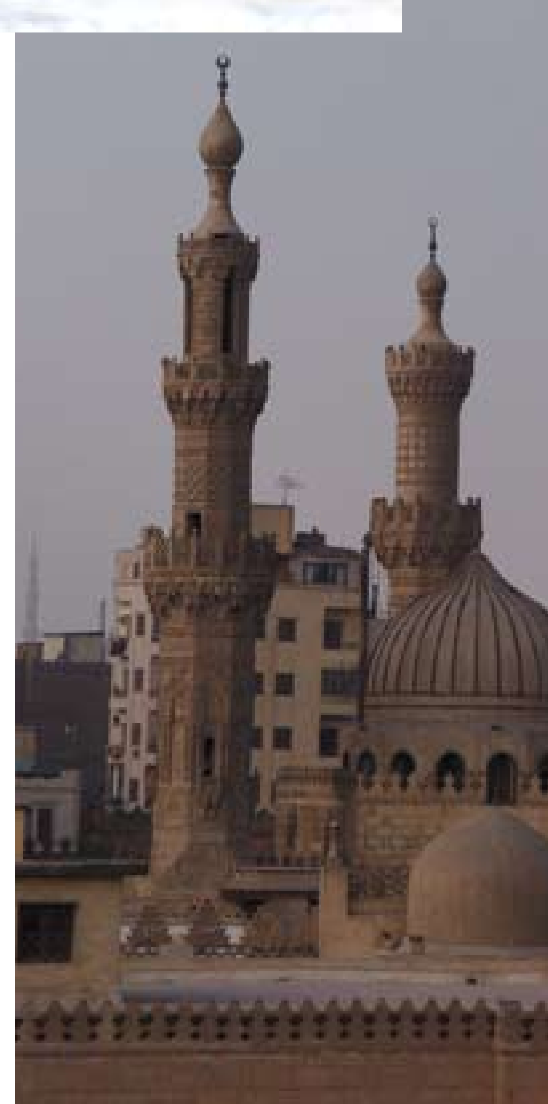
The current OPEC-10 production ceiling of 27m b/d and the individual production levels would remain unchanged, said the final communiqué, adding that stocks were back to normal and prices had moderated ahead of the winter season, when inventories are normally withdrawn.

In recent weeks, the price of the OPEC Reference Basket has fallen sharply from the peaks of over $46/b which it hit in October to under $34/b by the time of the Cairo Meeting, a loss of around $12/b.

Speaking at the closing press conference, the OPEC Conference President and Secretary General, HE Dr Purnomo Yusgiantoro, noted that oil demand was expected to be weakest in the second quarter of 2005 at around 82.0m b/d, hence the need to take measures to reduce overproduction.

The Organization would continue to monitor developments in the market closely, he noted, and had therefore decided to hold an Extraordinary Meeting in Vienna at the end of January to assess the latest situation.

The Director of OPEC's Research Division, Dr Adnan Shihab-Eldin, said



AP Photo/Amr Nabil

Above: Egyptian President HE Hosni Mubarak (right) receives (from left) Egypt's Minister of Petroleum, HE Eng Amin Sameh Fahmy; Saudi Arabia's Minister of Petroleum and Mineral Resources, HE Ali I Naimi; and Kuwait's Minister of Energy, HE Sheikh Ahmad Fahad Al-Ahmad Al-Sabah

Left: The Cairo skyline

Below: Camel and rider in the desert

that the Organization saw oil demand averaging 83.3m b/d for the whole of 2005, which was 1.5m b/d more than the level of 81.8m b/d seen in 2004.

Responding to a question on whether there was a risk of the strong price levels of 2004 being repeated in the wake in OPEC's decision in Cairo, Dr Shihab-Eldin noted that the two situations were quite different.

The Cairo decision did not represent not a reduction in the production ceiling, he pointed out. OPEC had been overproducing in response to the needs of the market and this was now clearly reflected in the rise in OECD stocks and the recent fall in prices, hence there was a need to reduce that overproduction.

Dr Shihab-Eldin also noted that since the cut in overproduction was effective from January 1, 2005, its effects would not feed through to the market until around the end of February, by which time the period of strong winter demand would be over, and so the market would remain well supplied.

"There will be no reduction in January or February that will be felt by refiners or markets," the Director of Research said.

Asked whether OPEC was considering changing the price band of $22–28/b, Dr Purnomo noted that the issue was a complex one, since factors such as inflation and the decline of the dollar had to be taken into account, and it was still under study.

On the question of when Iraq would rejoin the OPEC quota system, Dr Purnomo added that this could take place when the

OPEC production ceiling allocations

	November 1, 2004 *(1,000 b/d)*
Algeria	862
Indonesia	1,399
IR Iran	3,964
Kuwait	2,167
SP Libyan AJ	1,446
Nigeria	2,224
Qatar	700
Saudi Arabia	8,775
United Arab Emirates	2,356
Venezuela	3,107
OPEC *(excl Iraq)*	**27,000**

Top of page: At the closing press conference are (l-r) Dr Rahman, Dr Purnomo, Dr Shihab-Eldin and the Head of OPEC's PR & Information Department, Dr Omar Farouk Ibrahim

Left: The Conference was held at Cairo's Four Seasons Hotel

All photos in this section (except where otherwise credited): Diana Golpashin

Left: Cairo's famous El Fishawy coffee shop

Right: The bazaar in Cairo

Below: Water pipes at the bazaar

country was in a position to make further steady progress in its oil industry, but he gave no date.

The 133rd Conference decided that since the issue of the appointment of the Secretary General had been deferred until the next Meeting, the incoming President of the Conference and Kuwaiti Minister of Energy, HE Sheikh Ahmad Fahad Al-Ahmad Al-Sabah, would assume the responsibilities of the Secretary General, with effect from January 1, 2005.

The Conference extended its appreciation to Dr Purnomo (who is also the Indonesian Minister of Energy and Mineral Resources), for having shouldered the responsibilities of the Secretary General during 2004, and thanked Indonesia's Governor for OPEC, Dr Maizar Rahman, who was based at OPEC headquarters in Vienna during the year, for "his excellent conduct of the day-to-day affairs of the Secretariat."

Also in Cairo were high-level representatives from six non-OPEC countries: Angola, Egypt, Oman, Russia, Sudan and Syria. Their presence, noted the communiqué, "again highlights the importance these countries attach to constructive dialogue and co-operation with OPEC and its Member Countries."

OPEC's next Extraordinary Meeting will be held in Vienna on January 30, 2005, to review market developments. After that, the next Ordinary Meeting is scheduled to be held in the Iranian city of Isfahan on March 16, 2005.

Strong OPEC production contributes to price moderation, rise in stocks

The Director of OPEC's Research Division, Dr Adnan Shihab-Eldin, explains the reasons behind the decision of the Cairo Conference to reduce over-production by 1.0m b/d, and looks ahead to the market situation in 2005.

Question: OPEC has responded swiftly to the price fall seen in recent weeks by agreeing to rein in over-production. What are the factors responsible for the recent sharp downtrend in crude prices and are they temporary or permanent?

Answer: The decline observed in the OPEC Reference Basket price in recent weeks was particularly steep. After recording a record high of $46.61/b on October 21, the Basket lost more than $13/b to reach $33.8/b by December 8, two days before Cairo.

The factors behind this price decline include continued strong output levels by OPEC Member Countries (above 30.2m b/d in October 2004), which has contributed to rising oil stock levels both in crude and products; and the normalization of production in the US Gulf, which was severely affected by Hurricane Ivan in September.

This significant price drop represents a correction from the unusually high price levels that we saw in the preceding months, such as the early October peak. In fact, current price levels reflect convergence towards market fundamentals, following OPEC's recent efforts on production.

However, the large price differentials that were seen recently still prevail — although they have eased somewhat — and this remains apparent in lower prices for OPEC crudes and steep discounts.

Q: How would you assess oil market developments over the past year?

A: The year 2004 has been an unusual one for the global oil market, with prices reaching very high levels due the combination of fundamental and non-fundamental factors. The reasons are ones that we are all familiar with, such as the surge in demand due to strong economic growth, especially in China; unrelenting product demand; tightness in the capacity of the world's refining system; and the growing mismatch between the demand for light sweet crudes and incremental heavy sour barrels.

In addition to these factors, the situation was compounded by continued geopolitical concerns, as well as market perceptions and concern about available excess capacity. Finally, the confluence of all these factors pushing prices in the same direction was amplified by the strong speculative drive in the futures market.

At this point it is too early to say whether the sharp drop in prices of the last few weeks means that the exceptional price peaks of 2004 are behind us. However, there's no doubt that the continued strong levels of OPEC production have contributed to the recent price moderation, and have also helped the replenishment of OECD stocks, which have been rising steadily since the second quarter.

Q: What is being done to address concerns about the level of spare capacity?

A: A number of the OPEC Member Countries have brought forward their capacity expansion plans, and as these plans are realized and come on stream throughout 2005, it should help to ease market worries about the global spare capacity level.

Q: What is OPEC's forecast for oil demand growth next year? Will it continue at the same very strong levels we saw in 2004?

A: The Secretariat sees oil demand growth of 1.5m b/d for 2005, which — although it is lower than the 2.5m b/d that we experienced this year, mainly due to the unexpectedly strong level of Chinese demand — can be considered a respectable increase, as it is comparable to the 2003 growth level and above the average for the past ten years. This lower demand growth for next year is a consequence of an easing in the world economic growth rate, which is seen falling to 4.0 per cent in 2005 from 4.8 per cent in 2004, a drop of nearly one per cent.

Taking into account this lower level of demand growth, if production levels were to continue in 2005 at the same rate as we have seen recently, then there would have been a market oversupply of 1.6m b/d for the first quarter and 2.8m b/d for the second quarter, which would have meant a large counter-seasonal stock-build, putting downward pressure on prices.

That was one of the main reasons behind the decision in Cairo to reduce over-production by 1.0m b/d, with effect from January 1 next year. Otherwise there would have been a risk of an undesirably rapid fall in prices, especially with the second quarter coming up, when demand is traditionally lowest.

Q: How does OPEC view the oil market outlook for the whole of 2005?

A: In the early months of the year, the level of OPEC production will ensure not only that there is more than sufficient supply to meet demand, but also that stocks can continue to be rebuilt to more comfortable levels. Nonetheless, the Conference recognizes the need to monitor the market situation very closely, which is why it has been decided to hold an Extraordinary Meeting on January 30 at the Secretariat in Vienna, ahead of the scheduled Conference in Isfahan, Iran, on March 16.

In addition to this, the downstream bottlenecks, geopolitical factors and other non-fundamentals that influenced the market this year will continue to do so in 2005, even though many of these have eased somewhat. Thus, while OPEC will continue to monitor the market and take action when necessary, further price volatility in both directions during 2005 cannot be ruled out.

Q: Will the Organization continue to seek ways of enhancing co-operation with non-OPEC, as it has in the past?

A: Yes, we will. The Conference in Cairo was pleased to welcome a number of non-OPEC nations — Angola, Egypt, Oman, Russia, Sudan and Syria — as observers to the Meeting. The Secretariat also has a number of important meetings scheduled throughout the year 2005 on both on the technical and ministerial levels. OPEC will continue to discuss issues of importance such as oil industry investment, capacity expansion plans, data transparency and so on with our partners in non-OPEC.

MARGARITA hosts OPEC upstream contract workshop

Photo: Keith Marchant

Delegates from OPEC were invited by the Venezuelan government to the tropical Island of Margarita off the country's north coast late in November for a workshop to discuss the subject of upstream contracts and the need for co-ordinated policies within the Organization's 11 Members.

by Philippa Webb-Muegge

Photo: Luis Hurtado

Venezuelan Minister of Energy and Mines and PDVSA President, Rafael Ramírez (l), with the OPEC Acting Secretary General, Dr Maizar Rahman

Photo: Luis Hurtado

The Head of OPEC's Energy Studies Department, Mohamed Hamel (l), and the Venezuelan Governor for OPEC, Iván Orellana

In opening the workshop, the Venezuelan Minister of Energy and Mines, Rafael Ramírez, who also heads the country's national oil company, PDVSA, recognized the complexities involved in the signing of petroleum contracts, and said that, accordingly, such a workshop was vital for OPEC Member Countries to discuss the many issues associated with engaging foreign investors.

"Upstream petroleum contracts represent a fundamental topic in the management of our resources; it is a key subject for producer countries, with an enormous impact on issues of sovereign management of our resources, as well as their control and administration — and we say this, based on our own experience," he said.

He was speaking about the country being deprived of valuable revenue when the Venezuelan government engaged and courted the IOCs, especially during the 1990s in what was known as the opening-up of the upstream oil and gas sectors.

"There are some fundamental issues that we, as producing countries, should protect in our contracts," Ramírez said.

He referred to production regulation and the control over resources; the payment of royalties and taxes; and the issue of national jurisdiction in the protection of sovereign rights over international arbitration.

"I don't want my words to become the substance of the workshop itself … (but) everything that happened here in Venezuela during the opening-up process was done by the way of contracts and the capture of our national enterprise, which had become hostage to transnational interests," he said.

He added: "We do not mean to say that our experience will necessarily be repeated in the other OPEC countries, but it is an experience worth evaluating and taking into account."

"Let us recall that, before the arrival of President Chávez, Venezuela had become, in OPEC, a kind of fifth column: it was deliberately violating production quotas and was prioritizing a policy of volume versus price, producing one of the causes of the low oil price in 1998–99, as a result of the anti-OPEC policies followed by Venezuela itself," he said as a means of explaining the country's reticence to engage in any further contracts which would not bring the most benefit to Venezuela.

OPEC Member Countries present a range of opportunities for foreign investment in either their upstream and downstream petroleum sectors, or both.

Countries like Nigeria, Indonesia, Venezuela, Libya, Algeria, Iran and Qatar have various levels of foreign investment within their upstream sectors, while the United Arab Emirates is considering a limited opening of its upstream to outside investors.

Other countries like Saudi Arabia and Kuwait are more cautious about engaging the IOCs in their upstream sectors after past experiences when multinationals aggressively pursued oil at the expense of the resource owners.

Meanwhile, Iraq has a more complex task of deciding the legal status of the multi-billion dollar upstream agreements which were signed between the IOCs and the former government of Iraq under Saddam Hussein. The country now has to wait until it has an elected, sovereign government in place before it can decide the future of its petroleum policies and the level of participation of IOCs in its industry.

Oumessad Djermane (l) and Tayeb Yahou

Heri Poernomo (l) and Taslim Yunus

Khalid Hamed Al-Senani (l) and HE Yahya Shinawi

Dr Bernard Mommer (l) and Fernando Valera

Aliakbar Vahidi Aleagha (l), OPEC Governor Hossein Kazempour Ardebili (c) and Dr Seyed Abbas Hashemi

Photos: Luis Hurtado

Photo: Keith Marchant

Also speaking at the workshop was OPEC Acting Secretary General, Dr Maizar Rahman, who said that investment contracts within the Organization's Member Countries were based on the individual state's particular economic and political disposition.

"We are all sovereign states and have pursued separate paths of economic and social development, in accordance with our national cultures, objectives and interests," he said.

He noted, however, that as an Organization, "we must also make sure that, as Member Countries, we are always pulling in the same direction."

"This must be the case even in those areas where Member Countries hold different policy positions, such as with the opening-up of upstream sectors and the negotiation of upstream petroleum contracts with prospective outside parties," he stated.

He noted that the key objective of the workshop was to enhance understanding among participants on the important issue of upstream legal, regulatory and fiscal regimes and contracts, through exchanging views, experiences and information.

Referring to OPEC being called upon increasingly to supply the incremental barrel and the Organization's commitment to expand capacity, he said that OPEC Member Countries "were concerned about the many uncertainties involved in forecasting future demand patterns and the problems this creates for sound planning and investment in production capacity."

"It is a very risky business. Over-investment can prove extremely expensive for us. Every effort, therefore, must be made to guard against this, by improving the effectiveness of forecasting and reducing the uncertainties that hinder this process," he added.

The workshop, which lasted two days, concluded that the presentations that were delivered by the OPEC Secretariat and six Member Countries had shed much valuable light on the complexities of the issue, which was expected to grow in importance in the 21st century, as OPEC produced more of the world's oil. However, it was acknowledged that there was still much more to learn about the subject.

*The Venezuelan Minister of Energy and Mines and new Head of PDVSA, **Rafael Ramírez** was interviewed on the sidelines of the upstream contract workshop on Margarita Island by PRID Editor Keith Marchant, who asked him about his recent appointment, and the latest oil market developments.*

Question: Why has President Chávez decided to combine the posts of Energy and Mines Minister with PDVSA President?

Answer: As you know, PDVSA is a state-owned company. Under our legislation, it is possible to combine these two (posts). The main idea is for more integration between the state and our national oil company, for integration of the state plan orientation with the operation of the company.

How easy do you think it will be to combine the tasks of two extremely busy portfolios?

We have a very good team. After the sabotage (referring to the upheavals at PDVSA two years ago), we solved that problem for the country. We have now a very good relationship between the management and the Ministry people. We have an integrated team. With this integration, we are going to solve the main problems we have at the moment.

Will you pursue the same policies as your predecessor, Dr Alí Rodríguez Araque?

Yes.

Do you have any changes in mind?

No. We have the same policies. Our policies are not the (prerogative) of one man. We have a constitution. We have a strategic orientation in the control of our industry, in the regulation of our production, in the support for OPEC, the Organization, and in working together with the state to solve the really big problems that we have with social matters in our country. At this newest stage, we are going to transform some aspects of the old PDVSA to adjust for the new requirements of our country.

Can you give me an example?

Our new law for hydrocarbons established new roles for PDVSA — the internal role and the political role to support the national development plan.

Photo: Reuters/Kimberly White

In spite of your tight schedule — especially now — you have made a special point of coming to Margarita Island to open this workshop on upstream petroleum contracts. Why do you consider this issue to be of such importance?

For us, for Venezuela, this workshop is extremely important, because we believe that the matter, which we are talking about today, is a strategic matter for the oil producing countries. We have had a very bad experience (in Venezuela), in the process of opening-up our reserves to the international companies. We want to share these experiences with all the countries in the Organization.

Turning to the present situation in the oil market, prices are now falling after a long period of volatility and high levels. Do you welcome this development?

Yes, we welcome the stabilisation of the market, of course. (However,) it is not a matter of the principle of the market. The market is well-supplied. We have some other factors, like the situation in Iraq, like the situation of the speculators, like the situation of the deficit in refining capacity, that are affecting the price of oil. Today, we are looking at how the speculators are moving and changing the price. But we are sure that we have to modify the current price band, because now we have another condition in the market, we have a new reality. We have to create new capacity for production. We have the devaluation of the dollar and other factors that are affecting our cost of production. We have to discuss this at the (next) OPEC Meeting.

Can you give any figure as to what you think the price band should be at the moment or do you first need to talk to your fellow OPEC Ministers?

We prefer to discuss this beforehand, because of the speculators. We have to be very careful with that, with the new price band. It has to be sustainable. We are committed to change.

Photo: Saudi Aramco

OPEC Members rise to the challenge of expanding production capacity

by Graham Patterson

OIL PRICES reached extraordinary levels in 2004. As they were driven ever-higher by a variety of factors, including unexpectedly strong demand in countries like China and the USA, tightness across the supply chain, fears of supply disruptions and so on, the issue of capacity expansion became a hot topic. Markets were worried — could the gradual shrinkage of the global spare capacity cushion maintained by OPEC be countered?

The Organization's Member Countries are responding to the challenge. In this article, we outline some of their plans to ensure that the world's oil needs are met and that a sufficient spare capacity cushion is maintained to ensure the industry can cope with any possible disruptions, as recently reported in this magazine and elsewhere. All the issues of the *OPEC Bulletin* referred to here can be downloaded free of charge in PDF format from the OPEC web site at www.opec.org.

On the following pages, we also interview oil industry expert and co-author of a recent Wood Mackenzie report on OPEC capacity expansion, Diane Munro.

The Kingdom of **Saudi Arabia**, of course, has the largest oil reserves in the world of more than 260 billion barrels, or about a quarter of the global total. The country's response to the huge challenge of expanding its production capacity to meet growing demand was outlined by the Minister of Petroleum and Mineral Resources, Ali I Naimi, in a recent address to the Royal Institute of International Affairs at Chatham House in London at the end of November.

Saudi Arabia, having recently brought the Abu Sa'fah and Qatif fields on stream, has plans to expand capacity further to 12.5m b/d

Detailing recent developments in the Kingdom's upstream oil sector, the Minister noted: "This year we developed the Qatif and Abu Sa'fah fields, which brought on stream production of some 800,000 barrels/day. These mega-projects were completed ahead of schedule and increased our total production capacity from 10.5 million to 11.0m b/d, net of natural decline elsewhere."

Saudi Arabia's plans, added Naimi, were not simply based on reacting to recent events in the international oil markets, but were developed according to a long-term vision of increasing global demand for the Kingdom's huge oil and gas resources.

"We have also recently developed plans to increase gradually Saudi Arabia's sustainable production capacity to 12.5m b/d. These plans call for a substantial amount of work in both new and old oil fields over the next few years. Fields and reservoirs for the expansion programme have already been identified.

"The decision to invest in added production capacity on this scale reflects our belief that demand for Saudi oil will continue to increase through the coming years. For the longer term, scenarios to raise the capacity to 15m b/d have also been studied and can be set in motion if the global demand requires it," he said.

The Kingdom was also committed to securing oil market stability by ensuring that there was "a reasonable spare capacity of no less than 1.5m b/d. As in the past, the spare capacity helps assure the continuity of stable oil markets by making more oil available in times of supply dislocations or any unusual surge in demand," added Naimi.

As an example, he gave the Gulf crisis of the early 1990s, when Saudi Aramco "was able to increase production after the Iraqi invasion of Kuwait in August 1990 from 5.4m b/d to 8.6m b/d within three months."

Naimi was also keen to point out the importance of national oil companies and the role they played in contributing to both the hydrocarbon industry and the economies of their own countries.

"Today, one-half of the world's top 50 oil companies are fully or majority-owned government enterprises, and together they hold more than 70 per cent of the world's proven oil reserves. Moreover, their combined oil production provides about 50 per cent of the total global oil consumption.

"Saudi Aramco … is a true example of the capability of national oil companies to provide the world with the needed oil. Its performance during the last two decades speaks volumes," said the Minister.

Apart from filling the supply gap caused by the Iraqi invasion of Kuwait, Saudi Aramco "was able to advance its production capacity on a sustainable basis

An Iraqi oil worker walks through an oil processing plant in the northern Iraqi town of Baba Gurgur, near Kirkuk

AP Photo/Khalid Mohammed

from 7.0m to 10m b/d during the first half of the 1990s, a permanent increase of some 3.0m b/d, all the while finding new reserves to replace its production," he noted.

In addition to the recent Qatif and Abu Sa'fah developments described above (*OPEC Bulletin*, June 2004, pp22–23 and October 2004, p30), Saudi Aramco "regularly develops and brings on stream major new crude oil increments such as the Arabian Super Light crude from fields south of Riyadh and the massive Shaybah field in the Empty Quarter with its 500,000 b/d production increment," said Naimi.

Of course, it is not only Saudi Arabia that has recently expanded capacity and will continue to do so. The national oil companies of all eleven of the OPEC Member Countries are engaged in efforts to meet global demand by boosting their production capacity, either on their own or in co-operation with international oil companies (IOCs).

In **Algeria**, capacity has been rising thanks to a number of projects by state oil firm Sonatrach, both on its own and in conjunction with IOCs. For example, production has recently started up at the ROD field, which is a joint venture between Sonatrach, Italy's ENI and Australia's BHP Billiton. The ROD field is expected to reach a level of 80,000 b/d at full capacity (October 2004, p34).

Meanwhile, the country is planning to expand output at its largest oil field, Hassi Messaoud, over the next few years. Further exploration efforts are also under way in Algeria, with the award of eight blocks to IOCs under the fifth licensing round (July/August 2004, pp17–18).

Indonesia is a mature oil and gas province, having been producing for over a century. Its output has been in slow decline in recent years, and the country became a net oil importer earlier this year. Nonetheless, some possibilities still remain for Indonesia to bring new reserves into production.

The offshore Belanak field in the South Natuna Sea has recently started up, and will eventually produce around 100,000 b/d at full capacity, taking the country's production level back over 1.0m b/d.

As regards future prospects, 12 new oil and gas exploration blocks were recently awarded by the state to IOCs. Recently-discovered reserves of 600m b in the Cepu block operated by US giant ExxonMobil could also be developed, provided that a dispute between the American firm and state oil company Pertamina can be settled quickly (October 2004, p32).

Iran's Minister of Petroleum, Bijan Namdar Zangeneh, said on a recent visit to China that the country was planning to invest $50bn over the coming years to expand capacity from 4.2m b/d to 5.0m

b/d. One key development in these plans is the Yadavaran field, which was recently awarded to China's Sinopec. It has reserves of 3.0bn b and an estimated production level of 300,000 b/d (October 2004, pp28–29).

Another very important field in Iran's expansion plans is Azadegan, which has estimated total reserves of about 26bn b. A deal has been signed with Japan's Inpex to develop the Azadegan field, which is expected to produce about 260,000 b/d by 2012 (January/February 2004, pp18–19).

The situation in **Iraq** remains fluid following the US-led invasion of 2003, with the authorities making every effort to secure the country's oil and gas installations from attacks by saboteurs and maintain oil production and exports. Some analysts fear an increase in attacks in the run-up to the elections scheduled for end-January 2005.

Meanwhile, it was recently announced that the Iraqi National Oil Company is to be re-established, while the country's hydrocarbon industry will be overseen by the newly-formed Supreme Oil Policy Council (September 2004, pp51–52).

Top oil industry officials from another of OPEC's Middle Eastern Members with

Advanced technology like this Saipem vessel offshore Nigeria has enhanced the country's deep-water prospects

Photo: ENI

Kuwaiti oil workers examine a manifold on a crude oil flowline at the Maqwa oil field, 50 km south of Kuwait City

AP Photo/Gustavo Ferrari

large reserves, **Kuwait**, have also recently been outlining their country's ambitious plans for capacity expansion.

The nation is intending to increase its oil production capacity by 60 per cent from the current level of around 2.5m b/d to 4.0m b/d by 2020, according to the Deputy Chairman and Chief Executive Officer of state oil firm Kuwait Petroleum Corporation (KPC), Hani Hussain.

"We have massive projects worth $30bn to $40bn over the next 15 years," the recently-appointed Head of KPC was quoted by local media as telling an energy symposium earlier this month.

The *Middle East Economic Survey* (MEES) reported recently that the country's long-delayed plans to bring in IOCs to help expand capacity at its northern oil fields, known as Project Kuwait, recently witnessed "the most hopeful signs for some time."

The Kuwaiti Minister of Energy, Sheikh Ahmad Fahad Al-Ahmad Al-Sabah, "has sent two letters — one to the National Assembly and the other to the Council of Ministers — explaining that a new draft law has been drawn up which, the government hopes, will enable the project to go ahead," said MEES.

In addition to the above, Kuwait's capacity is slated to increase further when a gathering centre at the Rawdhatain oil facilities, which was severely damaged by an explosion almost three years ago (March 2002, p20), comes back into operation.

The lifting of sanctions on **Libya** will assist the country in its efforts to expand capacity, with a new bidding round for 15 oil and gas blocks having been recently launched (September 2004, pp50–51).

Meanwhile, Italy's ENI has started up production at the Elephant field, which is a joint venture between ENI, the Libyan National Oil Corporation (NOC) and the Korea National Oil Corporation. It is expected to produce about 150,000 b/d by the end of 2006 (January/February 2004, p20).

The Oasis Group, which consists of three US firms (ConocoPhillips, Marathon and Amerada Hess) together with the Libyan NOC, is hoping to return to the North African country soon. It was producing about 850,000 b/d before sanctions forced it to leave in 1986 (March 2004, pp24–25).

Nigeria's state oil firm, the Nigerian National Petroleum Corporation (NNPC) has followed a successful policy of operating in partnership with a number of IOCs, including Anglo-Dutch giant Royal Dutch/Shell, US major ChevronTexaco and Italy's Agip (part of ENI).

As oil exploration and production technology has continued to advance in recent years, the offshore West Africa region has opened up as a major new oil and gas province, with IOCs making several large discoveries and a number of smaller ones.

Some of these, including Shell's Bonga field and ChevronTexaco's Agbami discovery, were outlined in a recent interview by

the country's Presidential Advisor on Petroleum and Energy, Dr Edmund Maduabebe Daukoru (September 2004, pp26–27). Such offshore finds could add more than 1.0m b/d to Nigeria's capacity.

As one of OPEC's smaller oil producers, **Qatar** has recently focused its attention on developing the massive natural gas reserves of its offshore North field, which are being exported by various liquefied natural gas projects.

However, working together with a number of IOCs, the country has also expanded its oil output. Second Deputy Prime Minister and Minister of Energy & Industry, Abdullah bin Hamad Al Attiyah, said recently that Qatar's reserves were around 5.0bn b, and its production capacity had risen to about 830,000 b/d (May 2004, p19).

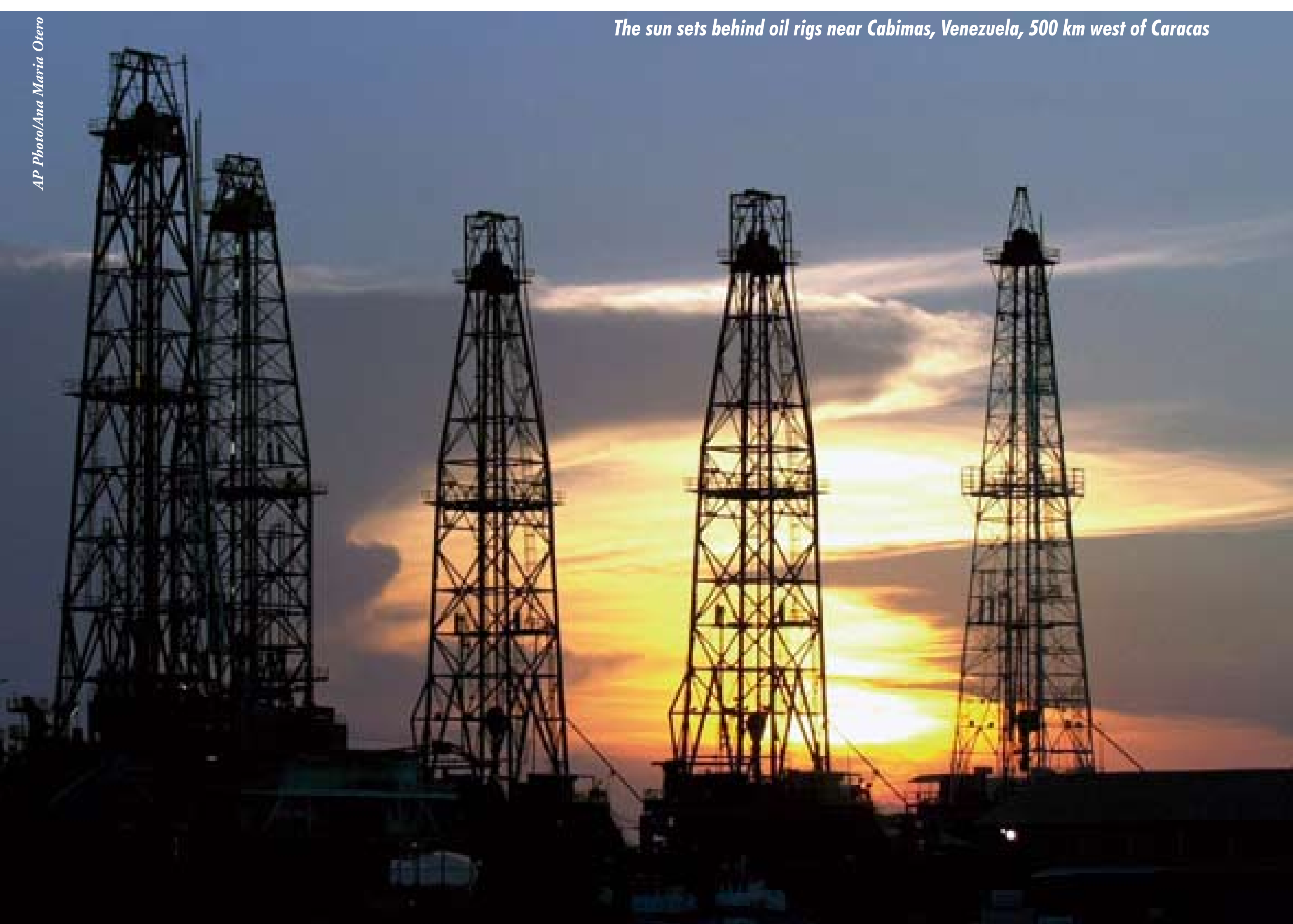
The **United Arab Emirates** (UAE) has plans to raise its oil production capacity by about 1.0m b/d with a number of huge expansion projects. One of the biggest is Upper Zakum, where output is seen rising from about 550,000 b/d to 1.2m b/d.

Also in the pipeline for the UAE are plans to expand production at ADCO's onshore Bab field by about 200,000 b/d. Additionally, output at the Bu Hasa field is expected to rise from 550,000 b/d to 730,000 b/d (April 2004, pp20–21).

Venezuela's plans to expand production capacity suffered a setback due to the strike action of December 2002–January 2003. The country's efforts to recover were outlined in a recent interview by former PDVSA President, Dr Alí Rodríguez Araque (September 2004, pp32–35).

Nonetheless, several expansion efforts, especially in connection with the massive heavy crude reserves of the Orinoco oil belt, are going ahead. For example, US major ChevronTexaco recently completed work on a crude upgrading unit at its Hamaca heavy oil project that will raise output from 120,000 b/d to 190,000 b/d (September 2004, p49).

Earlier this year, PDVSA Director, Nelson Martinez, said that Venezuela is planning to invest about $37bn in oil and gas projects from 2004–09, significantly expanding production capacity (June 2004, p26).



AP Photo/Ana Maria Otero

The sun sets behind oil rigs near Cabimas, Venezuela, 500 km west of Caracas

New report sees "significant gains" in crude production capacity for OPEC Members

The recent continuing strength in oil demand has sharpened the industry's focus on the issue of spare capacity. In this interview, one of the principal authors of a new study by analysts Wood Mackenzie on OPEC production, ***Diane Munro****, gives the OPEC Bulletin's editorial team of Graham Patterson and Philippa Webb-Muegge her insights into how the company sees future developments.*

Diane Munro is a Senior Associate at Wood Mackenzie, and has followed OPEC and oil markets for more than 20 years. Before joining Wood Mackenzie, she worked for consultants Arthur Andersen, and has also been Editor-in-Chief and President of the Oil Daily Company (now part of Energy Intelligence Group), where she launched the respected industry newsletter Energy Compass in 1989.

Question:
The recent Wood Mackenzie report, 'Significant gains in productive capacity ahead for OPEC', is just one of a number of analyses on OPEC capacity expansion that have been published recently. Your report is one of the more positive, as you're predicting a build in OPEC capacity of over 1.5 million barrels/day from the third quarter level of about 30.5m b/d to over 32m b/d by the end of this year, and then up to 33.1m b/d by the end of 2005. How did you get to this conclusion?

Answer:
I thought we were being very conservative! Here at Wood Mac I have the benefit of a huge team of experts behind me that focuses on detailed analysis of oil production and reserves on a field-by-field basis. We have country experts, geologists, engineers and financial specialists that analyze in depth oil and gas resources in OPEC as well as non-OPEC countries; so, for example, we have teams of experts that focus on specific regions such as the Middle East, Africa, Latin America, the former Soviet Union, North America, etc. The teams attempt to capture every field, what the depletion rates are for producing fields, what plans are in place to increase output, as well as factor in a multitude of other criteria that serve as a core building block of the company's research databases. While the company's analysts use this very detailed information in a multitude of ways for the products and services produced for our clients, as part of the Macro Energy team, I draw on this work so we can produce a very solid production profile for each OPEC country.

In most cases, we do try to be on the conservative side in our projections. Maybe

Photo: Reuters/Marc Serota

Hurricane Ivan caused a lot of damage both to the US Gulf pipeline network and onshore, such as this Shell service station in Pensacola, Florida, which was hit by the hurricane on September 17

the only thing that changes our outlook dramatically is when a country suddenly has to alter its plans due to technical issues. So, for example, when our OPEC capacity report went to press, Kuwait was still on course to bring up its northern gathering centre in late October. Those plans have since been delayed, so their capacity number is a little lower than our initial projections for this year.

Our teams do a pretty thorough job, regularly updating the information throughout the year, so I feel very confident about these numbers.

Q: So your teams have direct contact with the OPEC Member Countries to get the field information?

A: Yes, our analysts regularly travel to all the major OPEC and non-OPEC countries. The teams talk with the major players in the countries, including experts from the state oil companies, international oil companies (IOCs), oil service firms and the engineering firms working on the ground. In some countries like Nigeria, Venezuela and Iran, where there is greater participation by IOCs, you get a very balanced view of the situation on the ground.

It's important to note that Wood Mac is an independent research firm. Our data analysis is not produced in an effort to support any client's views or market position, so we don't have a vested interest in promoting one country or another's oil industry. From my perspective, this independence enables us to use our collective, critical judgment when preparing the country profiles. When we are analyzing various countries we will look at public statements versus what is happening on the ground. While the political objective of these statements may be to try and calm the market, I think the numbers might be over-optimistic.

Q: Considering the various plans to expand capacity in the OPEC Member Countries, what types of additional grades can the consuming countries expect to see on the market through the end of this year and next year, in terms of whether the crudes will be heavier and sourer, or lighter and sweeter?

A: Saudi Arabia is now bringing on stream lighter crudes, whereas almost all the increases so far this year were the heavier grades, which is why the market did not really respond to the higher output. The (Saudi) Abu Safah and the Qatif production are the more sought-after lighter grades, so I think you are soon going to see a better crude mix on the market. This year we've had upward pressure on WTI and Brent because there was too much heavy, high-sulphur crude out there and not enough light. So hopefully we are going to see more desirable grades coming onto the market between now and the first quarter of next year.

Q: Presumably that would have the effect of moderating prices?

A: Well, it should at least help narrow the unprecedented wide light/heavy differentials.

Q: By how much, do you think?

A: It depends on which markets the crude ends up in, whether it's Asia or Europe or the USA. And a lot of the huge spreads we've been seeing — I think it got to $14/b for Arab Heavy versus WTI last month, which is just phenomenal — stem from oil production closures in the Gulf of Mexico due to Hurricane Ivan last September. That's really why we surged to over $55/b for WTI.

A: Hurricane Ivan wasn't the first hurricane in the Gulf of Mexico and it won't be the last, so why were the effects of this one so bad?

Q: The big impact of Ivan wasn't that it shut down a lot of rigs in the Gulf, but that it affected about 10,000 of the 33,000 miles of pipelines. All these pipelines feed into the massive US Gulf refining centres in Louisiana and Texas. The web of pipeline breaks and leaks are difficult to track and repair so the operators had to keep the pipelines shut while they worked on the system. This affected the flow of domestic oil to the refineries at the Gulf Coast as well as the landlocked US mid-continent market. In addition, crude imports that normally flow up into the mid-continent were also disrupted.

The difference between other hurricanes and this time was that we had this huge shut-off of 500,000 b/d for a prolonged six to eight weeks, and some operations are still not back up to normal levels. These problems had an immediate impact on prices because it was so close to the market. Also I think that the loss of mostly sweet crude really boosted the price differentials. So to sum up, it was pretty significant because of the prolonged shut-in period and the loss of sweet crude production was magnified because of the immediate impact at such a key refining centre.

Q: On the subject of refining, there has been a lack of refineries able to run sour, heavier grades in the consuming countries. What can you tell us about any plans in the USA or elsewhere to invest in more refineries which can run these grades?

A: Refiners are still in the process of reviewing the market situation, but here in the USA I think that the strict environmental standards mean we'll probably never see a new refinery get built! But while the industry always laments that there have been no new refineries built in 20 years, overall refining capacity has nonetheless steadily been increasing for more than a decade due to expansion projects at existing plants.

I think you are going to see a number of companies in the USA and elsewhere invest in conversion projects that will enable them to handle higher volumes of heavier sour crudes.

Q: So how long would it take to carry out these upgrades to run sour grades?

A: Well, we haven't even seen that many plans announced yet. I think there are little upgrades and other tweaks underway to handle some more heavy sour grades by the spring. However, implementing a major upgrading of refining capacity could take anywhere from two to four years.

Q: Assuming that all the predicted crude oil capacity expansion plans take place and there are no further delays, that the refining problems are eased a little, and the Gulf of Mexico recovers and so on, do you think the kind of price environment that we saw in 2004 is going to be a thing of the past and if so, what kind of range will prices return to?

Photo: Reuters/John Gress

Strict environmental standards for US refineries, like PDVSA subsidiary Citgo's facility in Lemont, Illinois, mean that no new plants have been built in the States for around 20 years

A: There are capacity constraints across the whole supply chain — at the wellhead, in the tanker market to the refining process — so an increase in OPEC production capacity alone may not be enough to dampen prices. If there is no major supply disruption, we think that prices are going to ease in the first quarter as long as we have a normal winter. We see WTI prices coming down from average fourth quarter levels of $49/b to around $44/b in the first quarter and to about $39/b in the second quarter.

In addition, much of the new OPEC production capacity is slated to come online in the second half of the year. As a result, the exceptionally wide heavy/sweet differential may persist for some time. For example, in Asia, which has minimal upgrading capacity, demand for sweet crude is very robust and that's really heightened the competition for barrels with US refiners. I think that, as the year goes on and there is more production available in the market, there will be more options for refiners, especially if they tweak their systems to handle some of the heavier, sour barrels, but it'll be a gradual process throughout the year.

Q: You mentioned the upcoming northern hemisphere winter. Of course, no-one can predict the weather, but how would the market cope with a severe winter, especially as regards stocks of heating oil and crude?

A: I think that even if we have normal winter weather, a sudden cold spell could trigger a price run-up given that heating oil stocks are currently below year-ago levels. The fact is that the market overreacts to the slightest supply disruption or the smallest item of bad news. Heating oil stocks have been rising lately, but they are still below the levels of a year ago, so I think we're going to continue to see ups and downs.

In the near term, it is difficult to envision a build-up in inventories, of either crude or products, given these new higher price levels. Over time, I think that what will happen is that people will get more comfortable operating with lower stock levels just as they'll get used to living with lower spare crude production capacity.

Photo: Reuters/Henny Ray Abrams

Oil traders shout orders at the New York Mercantile Exchange on October 6, when prices rose to around $52/b for the US benchmark WTI

Q: So if people are just going to have to get used to a smaller capacity cushion, what do you think is a sufficient level of global spare capacity?

A: I think any time that capacity dips below one million b/d it's too low, and we've seen that already. However, we are not likely to see a return to the 3.0m or 4.0m b/d of spare capacity that we were used to because of investment constraints and the long-lead times needed to bring on new output. I think the industry will have to get used to a more modest capacity cushion of 2.0m to 2.5m b/d.

Q: How long would that take?

A: I think we are going to see another tough year! The escalation in geopolitical problems in key oil-producing countries such as Iraq, Nigeria and Venezuela in recent years has concentrated the markets' focus on supply constraints. I think the industry may adjust to a lower level of spare production capacity as some of these politically-charged problems are resolved — or at least tempered.

In Nigeria the government is working very hard to resolve civil unrest in the country's oil sector. In addition, the focus of Nigeria's expansion plans is in the offshore fields. Right now, the market reacts to any civil disturbance in Nigeria, but in the future the offshore fields will be largely unaffected by these strike actions and sabotage because of their isolated location. So with a lot of Nigeria's new production growth coming from its offshore fields, I think the market impact of unrest there will be muted over time.

Iraq, by contrast, is still very much a wild card. I fear that we are going to see an escalation in the number of acts of sabotage on the country's oil export infrastructure around the time of the elections in late January 2005. The Iraqis have really been ingenious in maintaining their energy infrastructure through all these years under sanctions and now the war. So far, the Iraqi Oil Ministry has largely managed to repair damage from the endless acts of sabotage by insurgents but the possibility that a major attack could yet cause a massive disruption in Iraqi exports still hangs over the market.

The political problems that have plagued the Venezuelan oil industry over

Photo: Reuters/Kimimasa Mayama

Gridlocked traffic on this seven-lane Tokyo expressway underscores Asia's growing thirst for imported crude, especially sweet grades

the past few years are also now mostly in the past following last August's recall referendum on President Chávez. However, we are unlikely to see a recovery in Venezuelan production volumes in the near term, due to the damage resulting from the strike action of December 2002–January 2003.

Q: The International Energy Agency (IEA) has recently revised down their demand growth projections for next year. If demand growth in 2005 is not as bullish as this year, OPEC might find itself in a position of building capacity and the demand isn't there to take it up. Is that a genuine risk or do you see demand continuing to grow?

A: The IEA appears to erring on the side of caution and I suspect they may have to revise their demand growth figures upward. It appears that they were basing their latest slower growth scenario on a one-month steep decline in Chinese demand, But since then it appears Chinese demand has rebounded. We believe a key difference between this year's price rise and the higher levels seen in 2002 and 2003 is that markets are now being driven by higher oil demand growth. Previously, the run-up in prices largely stemmed from supply disruptions in Venezuela, Nigeria, Iraq and elsewhere. So while worries over supply are certainly adding upward pressure on prices at times, robust oil demand growth in Asia and the USA is providing the underlying support to the market. As a result, increased OPEC production capacity is expected to be absorbed by the market due to the structural shift to stronger global oil demand going forward. Demand for OPEC crude supplies may fluctuate based on the light and heavy (crude) needs of the market, but I think it will be absorbed.

Aside from demand, which will still be at a very healthy rate next year, I think Russian production growth rates are going to be curtailed. One of the reasons people did not see the surge in demand for OPEC crude this year, was that everyone just assumed non-OPEC, including Russian production, would keep climbing and that it would absorb all the growth in demand. That has proved a bit misplaced, and the same applies to US and UK production. You are seeing more significant declines there even at these higher prices,

With many of Nigeria's new capacity additions located offshore, like this Shell-owned platform in the Niger Delta, the market impact of future unrest will be muted

because the US and UK fields are very mature provinces.

Q: So, despite the use of advanced technology in mature regions like the North Sea, the bottom line is that there's just not much oil left there?

A: That's right, I think what we're seeing is a structural shift in the decline in some non-OPEC supplies. Even at these higher price levels the economics just aren't there. The OPEC countries have many more options than non-OPEC as regards what they can do: they can use techniques like more gas injection, they can drill some more wells, and so on.

I think part of the psychological change I mentioned earlier is getting used to higher oil prices. I don't think we will see oil below $30/b for a sustained period again. The OPEC Countries need these higher prices to develop their infrastructure and meet domestic budget requirements. There's been a lot of talk lately about how the IOCs need to go into these OPEC Countries, but a country like Saudi Arabia is fully capable of increasing its own production. Saudi Aramco is just on such a different scale than the other national oil companies.

Q: The Saudi Minister said at Chatham House recently that the Kingdom would hike its capacity further to 12.5m b/d…

A: Yes, they have hired a lot of oil service firms to double their rig operations. I think we are going to see a big up-tick in oil service company activity in those countries that are looking to add incremental (capacity), but whether they use these firms for big projects is another matter.

Then you have countries like Algeria. They have been very savvy, they've put a lot of their focus into plans to raise production, and they bring in partners whenever they need them. So they've been very responsive and I think Nigeria has too.

I also think that where we've had delays, for example in Abu Dhabi with regard to bringing in an IOC to work on Upper Zakum, or in Kuwait, where Project Kuwait has been long delayed, we will see breakthroughs in all of these. These countries will lose many billions of dollars if they don't (expand capacity to) capture the increase in demand. Money is a very good motivator, so I think you will see many of these issues resolved in 2005, and that is going to give a new tone to the market.

There are certainly opportunities for IOCs in most of the OPEC Countries,

like the UAE, Iraq, Iran, Libya, Kuwait, Qatar, Algeria and Nigeria, but it will not be the big deals that they keep hoping for. Even in Venezuela the investment climate has improved now.

Q: So to sum up…

A: If I have to add up all the pros and cons, I think the increase in OPEC production capacity will have a measurable impact next year, and that should help to temper oil prices. But there are also other issues at work that could strain the market: Chinese demand, slower production growth rates in some key non-OPEC Countries, etc. However, if the OPEC Countries maintain a (spare capacity) cushion of what we think they will, I think that should be a stabilizing influence and it will reduce some of the volatility.

A lot of the impact of the situation in Venezuela and Iraq was amplified by the very bare bones level of spare capacity that we hit in the third quarter, but I think that the OPEC Countries are addressing that, and things will definitely ease as the year goes on. There is no question that it's a positive development in stabilizing the oil market.

Diane, thank you very much indeed for your time.

The recent rapid growth in Russian production, such as from this Lukoil facility near Kagalym in western Siberia, is likely to be curtailed in the coming years

Photo: Reuters/Viktor Korotayev

IMF OPEC share analysis, ideas *at the Secretariat*

by Philippa Webb-Muegge

Head of the OPEC Data Services Department, Dr Muhammad Al-Tayyeb, chaired the meeting between OPEC and the IMF

IMF Senior Economist in Research, Sam Ouliaris (l), and OPEC Econometrician, Seyed Jazayeri, swap business cards at the meeting

A team of economic and financial experts from the International Monetary Fund (IMF) in Washington visited the OPEC Secretariat on a fact-finding mission in November, after having had discussions with various other oil industry experts both in London and Paris.

The themes of the talks, chaired by the Head of the OPEC Data Services Department, Dr Muhammad Al-Tayyeb, involved an assessment of the global oil market, the prospects for capacity expansion during 2005-06 and the global refining situation.

The IMF team consisted of the Head of the Commodities Unit, Hossein Samiei; Senior Economist in Research, Sam Ouliaris; and *World Economic Outlook* Economist, Martin Sommer.

After hearing a detailed presentation on OPEC's analysis of the oil market from Econometrician, Seyed Jazayeri; Oil Demand Analyst, Oswaldo Salas; and Petroleum Product Market Analyst, Safar Ali Keramati, the IMF's Samiei commented that there were issues raised which had certainly given him pause for thought.

In particular, he said the OPEC view on the widening spread between light sweet and heavy sour crudes and the increasing lack of refining capacity to deal with heavier crudes, which had helped feed the oil price rise, made a lot of sense to him.

From the IMF's perspective, he questioned whether higher oil prices were going to be a more permanent fixture on the world economic scene and, if that was the case, how both consumers and producers would deal with this.

Essentially, he pointed to the unanticipated rise in oil demand in 2004, due primarily to the rapid growth experienced in China and India, and questioned whether it represented a fundamental shift in demand, and if it did, how consumers would deal with structural adjustments and how producers would account for their expenditure planning, or investment.

Samiei continued that while many organizations like the International Energy Agency (IEA), OPEC and the IMF had revised downwards their figures for oil demand in 2005, he said he believed it was too early to know fully the extent of the energy demand situation in China for next year, which would have a considerable bearing on the total figure.

These downward revisions of oil de-

Photo: OPEC

Photo: OPEC

Photos: OPEC

Above: Head of the Commodities Unit at the IMF, Hossein Samiei (l) and Senior Economist in Research, Sam Ouliaris (r)

mand and the level of the anticipated increase in Chinese demand were based on a number of assumptions, he noted.

"It assumes that the inventory issue, power generation issue, and high GDP growth — all of those would change next year."

Accordingly, the IMF, he said, was erring on the side of caution with a weaker downward revision.

"If you look at the country (China) from the point of view of the way it is developing, for example in the transport sector, where still the number of cars per capita is so low, it is conceivable that things (demand) could move up rapidly, and the same goes for India," Samiei noted.

Like his colleague, Ouliaris also thanked the OPEC Research Division for its "extremely informative and very well thought out" presentation on the oil market.

He took note of the issues that OPEC highlighted, in terms of the speculative activity in the market and also the bottlenecks in the global refining sector.

Of equal importance, he added, was the limited excess capacity in both the refining and the upstream sectors.

The OPEC Research Division did mention in its presentation that during the latter part of this year, the Organization's spare capacity cushion had been eroded since the OPEC-10 countries were pumping above their official ceiling of 27m b/d, which the market had chosen to take as a bullish sign.

Ouliaris conceded that the perception of the spare capacity cushion had definitely had an influence on prices.

"We struggle very much in trying to understand what the incentives are to the world, in particular to OPEC, to build up excess capacity again, since you have very graciously in the past held a lot of excess capacity and used it to moderate price volatility in the past. But the real issue from our point of view is that we need that (excess capacity) going forward for the stability of the world economy," he said.

However, Ouliaris did say that better access to

Photo: OPEC

Above: OPEC Oil Demand Analyst, Oswaldo Salas (l) and OPEC Petroleum Product Market Analyst, Safar Ali Keramati (r)

any spare capacity plans would be invaluable for organizations like the IMF, with regard to planning.

In terms of the impact on global oil prices of the thinning spare capacity cushion, Ouliaris mentioned that in the many studies carried out at the IMF, the good news was that "the current movement in oil prices is unlikely to have a very strong substantial impact on the global economy."

He continued: "Let's be very clear here, it is unlikely that it (the higher oil price) is pushing it (the world) into a recession. If anything, the effects compared to the 1970s are very small."

He said, interestingly, a lot of people still compared current oil price movements in terms of the 70s experience and they still thought of higher oil prices as having a detrimental effect on the global economy.

"One important difference with the 70s is that oil intensity is a lot lower, the credibility of monetary policies is higher in many industrial countries, and labour and product markets are more flexible, which means they can cope better with higher oil prices," he noted.

In its September *World Economic Outlook* report, the IMF said that the rise in oil prices had contributed to a weakening of economic expansion, however, "the overall impact seems moderate."

Ouliaris said that this did not mean that there would not be a sizeable impact on the world economy if oil prices went up a lot.

"Obviously that is going to have a serious impact … in particular for the poorer, developing countries it is an important concern … and especially if the offsetting effects of commodity prices does not help them," he clarified.

In concluding the meeting, both Samiei and Al-Tayyeb agreed that co-operation between organizations such as the IMF and OPEC was invaluable in enhancing the understanding between the various parties and to open up opportunities for further dialogue.

The IMF team also visited the Bank of England, the UK Treasury Department, private sector analysts, organizations and companies, such as the Centre for Global Energy Studies, Shell and BP in London, as well as the IEA in Paris.

Russia ratifies Kyoto
What are the implications?

by Graham Patterson

Photo: Reuters/Stringer

Pollution rises into the air from a nickel smelting plant in the Siberian city of Norilsk in Russia

Protocol

Photo: Reuters/Itar-Tass

The Kyoto Protocol is back in the news. After years of prolonged discussions, Russia has now ratified the international accord on tackling greenhouse gas emissions, which means that it will come into force in February next year.

The Russian President, Vladimir Putin *(above),* signed the federal law ratifying the Kyoto Protocol on November 4. It had earlier been adopted by the lower house of the Russian parliament, the State Duma, and approved by the upper house, the Federation Council.

Russia's Ambassador to the United Nations, Andrei Denisov, speaks to the press at a UN meeting in Nairobi, where he handed his country's Kyoto ratification documents to UN Secretary General Kofi Annan (left)

The documents confirming Russia's ratification of Kyoto were officially handed over to the United Nations Secretary General, Kofi Annan, by the Russian Ambassador to the UN, Andrei Denisov, on the sidelines of a UN meeting in the Kenyan capital Nairobi in mid-November.

Annan described the Russian decision as "a historic step forward in the world's efforts to combat a truly global threat." Referring to the long delay before Russia finally ratified the treaty, the UN Secretary General noted that the move "ends a long period of uncertainty."

Denisov added that his country believed that its ratification of Kyoto "will be a very significant step in promoting international co-operation on climate change. This decision has great social and economic consequences."

The text of the law itself acknowledges that "the obligations imposed by the Protocol on the Russian Federation will have serious consequences on its economic and social development."

A statement from the Russian Ministry of Foreign Affairs noted: "The decision on ratification was adopted after a careful analysis of all the factors, *inter alia* with regard for the importance of the Protocol for international co-operation, as well as the fact that this document will enter into force only on the condition of our participation in it.

"In adopting this decision, the wide spectrum of our co-operation with the European Union was also taken into account," it added.

However, the statement went on to point out that, while Russia's ratification of Kyoto and its subsequent entry into force was an important first step in tackling climate change, in order to ensure the effectiveness of the measures outlined by the Protocol, it would be necessary "to seek a reduction of greenhouse gas emissions by the efforts of the entire world community."

There were many in Russia who opposed the ratification of Kyoto. One of the most vocal was President Putin's Chief Economic Adviser, Andrei Illarionov, who said repeatedly that the country's economic growth would be harmed by ratification.

Nonetheless, the Russian move was welcomed by the Executive Secretary of the UN Framework Convention on Climate Change (UNFCCC), Joke Waller-Hunter, who said in a statement: "President Putin's leadership in asking the Duma to support the Protocol sends an inspiring signal to the international community."

Russian ratification of Kyoto became the key to its entry into force after the United States, which is the world's largest emitter of greenhouse gases, said it would not ratify the accord, as it would not only damage the US economy, but also unfairly exempted large developing countries like China and India from having to reduce their emissions of greenhouse gases.

The Kyoto Protocol:

Q & A

So just what is the Kyoto Protocol?

The United Nations Environment Programme describes the Kyoto Protocol to the UNFCCC as "a legally binding agreement under which industrialized countries will reduce their collective emissions of greenhouse gases by 5.2 per cent compared with the year 1990" by 2012. It was negotiated in the Japanese city of Kyoto in December 1997, hence the name.

Why was it so important that Russia should ratify Kyoto?

Because in order for the Protocol to come into force, it has to be ratified by at least 55 industrialized nations, accounting for at least 55 per cent of global greenhouse gas emissions in 1990. The USA, the world's largest polluter with around 36 per cent of 1990 carbon dioxide emissions, has said it will not ratify Kyoto. The US position meant that ratification by Russia, which accounted for about 17 per cent of 1990 emissions, became the key to the Protocol. Without Russia, Kyoto couldn't have come into force.

What does Russia get out of ratifying Kyoto?

Russia will likely benefit both politically and financially. On the political side, Russia will get European Union support for its bid to join the World Trade Organization. Financially, Russia could benefit from participating in the EU's emissions trading scheme, where it could sell its carbon credits. The Paris-based International Energy Agency has calculated that Russia could have about 640 million tonnes of carbon credits that it could trade by 2010, potentially earning billions of dollars in revenues.

So is Russia part of Kyoto for good now?

Not necessarily. The text of the Russian law on Kyoto says that since negotiations on reducing greenhouse gas emissions after the initial 2012 target date will only start in 2005, Russia will take a decision on participation in the second and subsequent periods of the Protocol (that is, after 2012) based on the results of these negotiations.

And the USA has pulled out altogether, right?

The USA has said it will not ratify Kyoto, but it hasn't withdrawn either. In summer 1997, before Kyoto was negotiated, the US Senate voted 95-0 not to support any accord that either didn't include emissions reduction targets for developing countries, or would damage the US economy. President George W Bush has described Kyoto as "a flawed treaty" and said his administration will not submit it for ratification.

Might the USA ratify Kyoto at a later date if its concerns are met?

It seems highly unlikely with a 95-0 vote in the Senate against Kyoto. And at the 10th Conference of the Parties (COP-10) to the UNFCCC, which took place in Buenos Aires from December 6–17 this year, the chief US negotiator, Dr Harlan Watson, said that Kyoto was a politically motivated treaty, rather than being based on sound science.

Is the USA the only industrialized nation that isn't taking part?

No. Australia, which has a large coal industry, has also said it won't ratify Kyoto.

Can Kyoto really be effective if big emitters of greenhouse gases like the USA, China and India aren't taking part?

Many people have questioned the effectiveness of Kyoto for precisely this reason. Even Kyoto's staunchest defenders agree that its real significance may well be political rather than practical.

What was discussed at the COP-10 meeting in Buenos Aires this month, and what does it mean for oil-producing nations like the OPEC Member Countries?

We hope to have a report on the Buenos Aires meeting and its significance in a future issue of the magazine.

Venezuelan President names **Rafael Ramírez** to also take over role of PDVSA President

by Graham Patterson

Venezuelan President Hugo Chávez has announced that the country's Minister of Energy and Mines, Rafael Ramírez, is also to take over the role of President of the state oil firm Petróleos de Venezuela (PDVSA).

According to Presidential Decree No 3,264, Ramírez will retain his role as Minister, while the outgoing President of PDVSA, Dr Alí Rodríguez Araque, has been appointed as the new Minister of Foreign Affairs *(see Member Country Focus on p56 for details)*.

During the appointment ceremony at the Miraflores Presidential Palace, Chávez underlined the fact that Ramírez's extensive skills and experience would enable him to take on the responsibility of both positions. The twin role would be "a new commitment for him, but we all know Ramírez's abilities, patriotism and efficiency," the President emphasized.

The President also praised Rodríguez Araque for the work done during his tenure at PDVSA. The new Foreign Minister became OPEC Secretary General in January 2001, but returned to his home country after just 18 months in the job to head up the state oil firm following the failed coup against President Chávez in April 2002.

Rodríguez Araque added that, since Venezuelan international affairs had a great political influence on the hydrocarbon sector, there would be very close relations between the Ministry of Energy and Mines, PDVSA and his new portfolio.

He also paid tribute to the workers of the state oil company and their efforts in assisting PDVSA to recover from the strike of December 2002—January 2003.

"My affection goes to them and the reaffirmation of my deep trust they gained during this battle to rescue not only the industry but also our nation's dignity," Rodríguez Araque said.

After being sworn in as the new President of PDVSA, Ramírez noted that the Venezuelan oil industry played a key role in the country's economy and would be a driving force for change.

"The new PDVSA will be a decisive instrument to meet the strategic objectives of the Venezuelan state, in order to give our country the energy required to make structural changes in economic relations and territorial distribution, as well as in relations with the Venezuelans who are undoubtedly the owners of our main natural resource," he said.

Ramírez made it clear that, despite the fact that he now holds two posts, there would still be a separation of the roles of both institutions. "We want to be extremely careful in this regard. The Ministry continues to bear its own responsibilities, and PDVSA keeps its own," he noted.

The new Head of PDVSA also announced that he would soon meet the country's oil industry workers in order to jointly work out a proposal for what he termed "a step forward", based on the no-

President Chávez (r) congratulates Ramírez on his appointment as Minister in July 2002

Photo: Reuters/Kimberly White

As Minister and Head of PDVSA, Ramírez will have overall responsibility for all aspects of Venezuela's oil and gas industry, such as the Amuay refinery in Paraguana

Photo: Reuters/Chico Sanchez

tion that the year 2005 should be one of economic and social progress for the nation.

Ramírez added that, after more than two years of battling oil industry stoppages and sabotage following the failed coup against Chávez, PDVSA was on the way to becoming a stronger institution.

"We have made great progress, but there is still the need for deeper change, as required by our people and the political circumstances," the Minister said.

Shortly after his appointment to the state oil company's top job, Ramírez flew to Venezuela's Margarita Island, where he opened a workshop of experts from OPEC Member Countries on upstream petroleum contracts.

Speaking to the *OPEC Bulletin* on the sidelines of the workshop, Ramírez said that his dual role as Minister and new Head of PDVSA should not pose any problems.

"We have now a very good relationship between the management (of PDVSA) and the Ministry. We have an integrated team," he said *(see pp12–19 for the full text of the interview with the Minister and a report on the workshop)*.

Ramírez is a Mechanical Engineer from the University de Los Andes and holds a Master's Degree in Energy Studies from the Central University of Venezuela. His oil industry career began in PDVSA subsidiary Intevep, where he was assigned the management of the extra-heavy crudes from the Orinoco Belt.

He has extensive experience in developing and managing engineering and construction projects for the domestic oil and gas industry, and has completed work assignments in the USA on the development of the Cardón refinery expansion project and in France for the Nigerian Liquefied Natural Gas project.

Ramírez was also a founding member and President of Enagas, the agency in charge of structuring the national gas plan and responsible for designing, developing and promoting the state's policy in the gas sector. He has been Minister of Energy and Mines since July 2002.

SAUDI ARABIA DISCOVERS NEW RESERVES OF SUPER LIGHT CRUDE AND GAS

Photo: Saudi Aramco

Facilities at Saudi Aramco's Shaybah field

Dhahran — State oil and gas giant Saudi Aramco has discovered new reserves of super-light crude oil and natural gas in the central and eastern regions of the country, according to a company statement.

The newly-discovered oil field is called Abu Sidr and is located in central Saudi Arabia. In recent tests, the Abu Sidr-1 well produced oil at a rate of 3,000 barrels/day of Arabian Super Light crude (with an API gravity of 54°) from a vertical cased hole.

The test was conducted over the Unayzah A reservoir at 8,530 feet. The wellhead flowing pressure was 152 pounds per square inch on a 36/64-inch choke. Higher rates from this zone are expected when using horizontal completions.

The Abu Sidr-1 well is located 185 kilometres south of Riyadh and 480 km south-west of the Saudi Aramco offices in Dhahran.

Meanwhile, the company also announced that it has found gas at the Midrikah field, located in the Kingdom's Eastern Province.

The Midrikah-1 gas well, 30 km south of the giant Ghawar field, was tested in November and produced an average 38 million cubic feet/day of natural gas, associated with 1,650 b/d of condensates.

The permanent production capacity of the well, which is located 300 km south-west of Dhahran and 270 km south-east of Riyadh, is expected to exceed the current test level of production.

Saudi Aramco's Senior Vice-President of Exploration and Production, Abd Allah S Al-Saif, thanked the exploration teams for their efforts leading to the two new oil and gas discoveries, and noted that they would help the company maintain its position as the world's leading supplier of energy.

Total CEO Desmarest tours Saudi Aramco's oil production facilities

Dhahran — The Chairman and Chief Executive Officer of French oil company Total, Thierry Desmarest *(pictured right),* toured the facilities of state oil firm Saudi Aramco in late November.

Total and Saudi Aramco are partners in the South Rub Al-Khali (Empty Quarter) gas project, each holding a 30 per cent share. The third partner, Royal Dutch/Shell, holds the remaining 40 per cent.

Desmarest was hosted on his trip by Saudi Aramco President and CEO, Abdallah S Jum'ah. Accompanied by the Chairman of the South Rub Al-Khali Gas

Company, Khalid A Al-Falih, and the President of Total Middle East, Philippe Boisseau, the Total boss visited the offices of both companies.

"In addition to being a Saudi Aramco partner in the South Rub Al-Khali project, Total is one of our top customers in crude sales," Jum'ah said.

"This visit will reinforce our excellent working relationship with Total, which has been built over many years. There are many areas in which we may have additional co-operation opportunities," he noted.

Al-Falih added: "Total is an excellent partner. Their positive attitude and flexibility have been a major reason that we were able to overcome obstacles facing the joint venture during the start-up phase."

Desmarest said that the two companies had enjoyed a long and fruitful relationship, and he praised Saudi Aramco's "very high level of expertise and close co-operation" in the South Rub Al-Khali project.

"Things are going really well. Of course, it is an ambitious, difficult undertaking, but everyone is working hard to meet the challenge," the Total CEO said.

Desmarest said that although he had traveled to the Kingdom a number of times in the past, this was his first time visiting Saudi Aramco's head offices and expansive oil field complex in Shaybah in the Empty Quarter.

AP Photo/Remy de la Mauviniere

During their stay in Dhahran, Demarest and his delegation visited the Oil Supply, Planning and Scheduling control centre, where they were received by Saudi Aramco's Senior Vice-President of Refining, Marketing and International, Abdulaziz F Al-Khayyal.

The French group also visited the EXPEC Centre, where they were received by the exploration and production management team headed by the Executive Director of Exploration, Abdullah A Al-Naim. The visitors saw a demonstration of the centre's computing power and some of the technologies developed by EXPEC to meet the unique challenges of Saudi Aramco's exploration and production business.

In brief

Near-capacity ops needed, says IEA

PARIS — Sustained near-capacity operations are needed to ensure ample winter heating oil supply, according to the latest *Oil Market Report* from the International Energy Agency (IEA), published on November 10. World oil supply increased by 890,000 b/d in October to 84.6 million b/d, said the Paris-based IEA. The end of North Sea maintenance, the continuing recovery from hurricane damage in the US Gulf of Mexico, and ongoing growth in the FSU led to a 685,000 b/d rise from non-OPEC. Non-OPEC supply is seen climbing by 1.1m b/d in 2004 and 1.3m b/d in 2005, with an extra 400,000 b/d of OPEC 'other liquids' expected in both years. OPEC crude supply rose by 215,000 b/d to 30.0m b/d, near to sustainable capacity. Saudi Arabian supply held above 9.5m b/d and Iraqi output averaged close to 2.2m b/d.

ExxonMobil announces record results

IRVING, TEXAS — US giant ExxonMobil has announced net income for the third quarter of $5,680 million, up by $2,030m from the third quarter of 2003. Excluding a special charge of $550m for legal costs, 3Q04 earnings of $6,230m were the highest ever. Revenues and other income totalled $76,375m compared with $59,841m in 3Q03, while capital and exploration expenditures of $3,634m were down $204m compared with the same quarter last year. Breaking down the results, ExxonMobil Chairman Lee Raymond noted that upstream earnings of $3,929m (an increase of $1,227m from 3Q03) reflected higher average crude and natural gas prices. Downstream earnings were $1,401m, an increase of $490m from last year's third quarter, reflecting improved worldwide refining conditions partly offset by continued weakness in marketing margins.

Total makes Bolivian gas discovery

PARIS — French oil giant Total has announced that its subsidiary, Total Exploration & Production Bolivia, has made a significant gas discovery in Bolivia's Ipati block, located 300 km south of Santa Cruz. Drilled to a depth of 5,150 metres, the Incahuasi X1 exploratory well tested at more than 1.0 million cubic m/day of gas through a 44/64-inch choke. The well, which is the first discovery on the Ipati permit, is currently being appraised to determine its potential. Total Exploration & Production Bolivia is the operator of the Ipati block with an 80 per cent interest, while Argentina's Tecpetrol owns the remaining 20 per cent. The two companies are also partners in the adjacent Aquio block, under the same terms. Total has had a presence in Bolivia since 1996.

Italy's ENI commences production at South Pars phases four and five

Milan — Italian oil and gas giant ENI has announced the successful start-up of production in phases four and five of Iran's South Pars gas and condensate field.

The South Pars field, located offshore in Iranian waters, will initially produce 14 million cubic metres/day of gas, and at full capacity will reach a rate of 58m cu m/d (around 20 billion cu m/year).

The project, of which ENI is the operator, involves the construction of two offshore platforms in water depths of around 70 metres, the drilling of 24 production wells and the construction of two gas pipelines. Each pipeline is approximately 105 km long with a diameter of 32 inches, and will connect the platforms to the onshore gas treatment centre to be built at Assaluyeh, located 250 km south-east of Bushehr.

The gas centre will have a treatment capacity of 20bn cu m/y and will be able to produce 47.6m cu m/d of natural gas, 1.0m t/y of liquefied petroleum gas and 80,000 b/d of condensates. Construction work is under way on completing the platforms and building the treatment plant, as well as the drilling of development wells.

Capital expenditure for the development of the project is estimated at about $2.0bn, of which ENI's share is about $1.4bn. The Italian firm will act as operator for the development phase and will supply technologies, know-how and resources.

ENI entered into a buy-back contract in July 2000 with the National Iranian Oil Company (NIOC) for the development of South Pars phases four and five. The project is on schedule to be completed within five years from the date of signature.

The contract foresees that the production of liquids from the field over a period of eight years will repay costs incurred and ensure return on capital employed. ENI's net share of the recoverable reserves amounts to about 170m barrels of oil equivalent.

The Italian firm is operator of the development of phases four and five with a 60 per cent stake. It operates in a joint venture with Petropars (20 per cent) and Naftiran Intertrade Company (20 per cent) on behalf of NIOC.

An ENI statement noted that the success of the South Pars project marked a further consolidation of its activity in Iran, where it has been present since 1957.

The South Pars field is an eastern extension of Qatar's giant North field, which is located offshore in Qatari waters and is ranked as the world's largest gas field.

In a related development, ENI has also given an update on progress at the three main Iranian oil fields which it is involved in developing: Darquain (where it is the operator with a 60 per cent interest), Balal (38.25 per cent) and Dorood (45 per cent).

Darquain started production in the second half of 2003 at a level of 10,000 b/d net to ENI in this period. Production is sent to an oil treatment centre, which currently has a capacity of 60,000 b/d, but is being upgraded. Production is expected to peak in 2007 at 22,000 b/d net to ENI.

The Balal field was started up in 2003 with a production of 29,000 b/d (5,000 b/d net to ENI) and is expected to peak in 2005 at 6,000 b/d net to the Italian firm.

The development of the Dorood field also continued during 2003. Production (4,000 b/d in 2003) is expected to reach a peak of 10,000 b/d net to ENI in 2005.

Algeria awards contract for Gassi Touil integrated natural gas development

Algiers — A consortium of two Spanish firms, Repsol YPF and Gas Natural, has been awarded an integrated project for the joint exploration, production, and marketing of natural gas in the Gassi Touil region in eastern Algeria.

The contract, which was awarded by the Algerian Ministry of Energy and Mines and the state oil and gas company Sonatrach, is the country's first-ever integrated gas and LNG project. The bids were opened in November at the Sheraton Hotel in Algiers, in the presence of the bidders.

The Spanish consortium beat off stiff competition to win the deal, which included rival bids from UK oil giant BP and two other consortia (one consisting of Royal Dutch/Shell and France's Total, and the other of Italy's ENI and US firm Anadarko).

A Sonatrach statement noted that the interest expressed by international oil and gas companies in the Gassi Touil project confirmed the attractiveness of Algeria's energy and mining sector.

The winning consortium, in which Repsol YPF holds a 60 per cent stake and Gas Natural the other 40 per cent, will make a joint investment of more than €1.6 billion ($2.1bn) under the accord.

The two companies, which began work on this project in 2003, will produce gas from the reserves already discovered in Gassi Touil, Rhourde Nouss and Hamra, and will carry out exploration work in the contract region to discover additional oil and gas reserves for their subsequent development and production.

The full scope of the Gassi Touil project encompasses exploration and development, liquefaction, and the commercialization of the gas. It involves the drilling of 52 development wells, the reworking of 16 existing wells, and the construction of surface facilities for the treatment of 22 million cubic metres/day of gas.

Also envisaged are the construction of new facilities for the transportation of 6.5bn cu m/y of gas and the building of a new liquefaction plant at Arzew with an initial capacity of 4.0m t/y which could be expanded later, according to Sonatrach.

The production-sharing deal is for a 30-year period, including a development period of 54 months, and is scheduled to be completed within 48 months so as to start commercial operations in September 2009.

Repsol YPF noted in a statement that the award of the Gassi Touil project would enable both it and Gas Natural to take advantage of synergies with their existing oil and gas assets in Algeria.

The Gassi Touil-Rhourde Nouss zone is adjacent to the Berkine basin, where Repsol YPF and Gas Natural won a tender last July for oil and gas exploration in an area covering 4,831 sq km known as Gassi Chergui Ouest.

The two Spanish companies also have other significant exploration assets in Algeria, such as Repsol YPF's assets in Reganne (where gas has already been discovered) and M'Sari.

"The Gassi Touil project is part of the Gas Natural and Repsol YPF strategy to jointly study and develop, on a project-by-project basis, those integrated gas projects where both companies' combined efforts contribute added value," said Repsol YPF in a statement.

"Thanks to this award, Repsol YPF strengthens its leadership in Algeria, which, along with the other concessions in Libya, enhances the company's privileged position in the Maghreb," added the Spanish firm.

Repsol YPF and Gas Natural are among the leading LNG suppliers in the world, with a significant presence in Spain and the USA, and the number one position in the Atlantic basin. Algeria plays an important role in providing gas to Spain, supplying over 50 per cent of the Spanish market's needs.

Nigeria's Brass LNG awards engineering deal to US firm Bechtel

Lagos — Nigerian firm Brass LNG has awarded the contract for the front end engineering and design (FEED) of its planned liquefied natural gas plant, which will be located in Brass, Bayelsa State, to the overseas unit of San Francisco-based engineering giant Bechtel.

The contract was signed at a ceremony in Houston, Texas, attended by senior executives from both companies. The Managing Director of Brass LNG, Martin Hutchison, signed on behalf of his company, while Bechtel Senior Vice-President, Jim Jackson, inked the deal on behalf of the engineering firm.

Speaking at the ceremony, Hutchison said that the FEED work would be completed within the 12-month period scheduled for the execution of the contract.

He also pointed out that the contract contains a provision for a Nigerian engineering firm — the National Engineering and Technical Company, which is a subsidiary of the Nigerian National Petroleum Corporation (NNPC) — to participate in the work covered by the FEED contract.

Bechtel's Jackson expressed thanks to Brass LNG management and shareholders for selecting his company to carry the assignment and said that Bechtel was totally committed to carrying out the contract.

The award of the FEED contract follows the earlier framework agreement signed in October 2003 by the shareholders of Brass

In brief

Royal Dutch/Shell abolishes twin board

LONDON — Anglo-Dutch oil giant Royal Dutch/Shell has announced that it is to abolish its controversial twin board structure, which was blamed for a lack of transparency during the recent reserves downgrade crisis, according to a BBC report. The group currently has two boards, one overseeing Royal Dutch Petroleum, which owns 60 per cent of the group, while the other heads London-based Shell Transport and Trading. The two companies have now agreed to unify under a single parent, Royal Dutch/Shell, which will be based in The Hague in the Netherlands. Having one board, with Jeroen van der Veer as the sole Chairman and CEO, would improve clarity, efficiency and accountability, Shell said in a statement. Earlier this year, Shell stunned investors when it downgraded its reserves by about 20 per cent, hammering the stock price.

BP unveils strong 3Q04 results

LONDON — UK oil giant BP has announced that its third quarter pro forma result was $3,937 million, compared with $2,758m a year ago, an increase of 43 per cent. The result for the first nine months of 2004 was $12,562m compared with $9,971m in 2003, up 26 per cent. Replacement cost profit for the third quarter and nine months was $3,456m and $11,060m respectively, compared with $2,260m and $8,216m a year ago. The result includes net exceptional and non-operating charges of $401m compared with a net charge of $217m in the third quarter of 2003. The trading environment was generally stronger than a year ago, with higher oil and gas realizations and higher refining and chemicals margins.

CPC now transporting Russian oil

MOSCOW — The Caspian Pipeline Consortium (CPC) has begun receiving oil produced on Russian territory following the construction by NaftaTrans of the Kavkazskaya trans-shipment facility in Krasnodar Krai, southern Russia. "The beginning of Russian oil transportation is a milestone event not only for CPC but also for Russia and Russian oil producers," said CPC General Director, Ian MacDonald. "It is important for Russia to continue to benefit from CPC not only in terms of financial contributions to the Russian state but also through having this additional export route for Russian oil. Financially, CPC has already paid over $500 million to Russia in taxes, fees and contributions," he added. In October CPC both transported and shipped to world markets over 2.1 million tons of oil, all of which originated in Kazakhstan.

In brief

PetroChina achieves strong 3Q results

Beijing — PetroChina has announced that it has met all its production and operational targets in the third quarter of 2004. "By leveraging the opportunities presented by high oil prices and strong market demand, the company continued to optimize and enhance its production and operations. All benchmarks recorded are better than the same period in 2003," said a PetroChina statement. The company further accelerated its crude oil and natural gas production in the third quarter, with total oil and gas output amounting to 229 million barrels of oil equivalent, up 3.6 per cent year-on-year. The oil and gas output in the first three quarters of 2004 amounted to 686m boe, up 20.5m boe, or 3.1 per cent, over the same period last year. During the first three quarters in 2004, PetroChina produced 585m b of crude oil, up 0.8 per cent, and 605.3 billion cubic feet of marketable natural gas, up 18.9 per cent.

ChevTex makes West African find

San Ramon, California — US major ChevronTexaco has announced that its subsidiary, Chevron Overseas Congo, and its partners have made a significant discovery at the Lianzi-1 exploration well in the deep-water area between Angola and Congo. The discovery, in the shared 14K/A-IMI unit, is on the same stratigraphic trend as previous block 14 deepwater crude oil discoveries at Landana and Tombua in Angola. The Lianzi-1 exploration well was drilled in 909 metres of water. The well encountered two oil bearing reservoirs and a drill stem test of one of the intervals flowed at a rate of more than 5,000 barrels/day of 40º API oil on 40/64 inch choke.

Saipem wins Kashagan pipeline deal

Milan — ENI subsidiary Saipem has been awarded the contract for the construction and installation of an offshore pipeline system at the giant Kashagan field, located in the Kazakh sector of the Caspian Sea, approximately 80 km south-east of the town of Atyrau. The contract, which was awarded to Saipem by the members of the North Caspian Sea Production Sharing Agreement (PSA) following an international tender, has a total value of $520 million. The scope of work comprises the engineering, procurement of bulk materials, coating, laying and pre-commissioning of pipelines, fibre-optic cables and umbilicals. Saipem will install the pipeline system between 2006–07 with a new lay barge. The members of the North Caspian Sea PSA are Agip (the operator), BG Group, Total, Shell, and ExxonMobil with 16.67 per cent each, plus ConocoPhillips and Japan's Inpex with 8.33 per cent each.

LNG for the development of the two-train LNG facility, and means that the project is now on track for completion by the second half of 2009.

Bechtel had earlier carried out conceptual studies for the project, which assessed the viability of an onshore LNG facility to be built near the Brass oil terminal, which is operated by the Nigerian Agip Oil Company, a unit of Italy's ENI.

Successful execution of the FEED studies will pave the way for the engineering, procurement and construction stage of the Brass LNG project, which is expected to commence in the third quarter of 2006.

Brass LNG is a company incorporated under Nigerian law. Its shareholders are the NNPC, US giants ChevronTexaco and ConocoPhillips, plus ENI.

A joint statement released by the shareholders noted that "with this contract award, Brass LNG has moved a step further towards its objective of joining other stakeholders to monetize Nigeria's vast natural gas resources and to contribute to gas flaring reductions as well as meeting the growing worldwide demand for clean energy."

Qatar to invest $60bn in natural gas sector by 2010, says Minister

Doha — Qatar is slated to invest around $60 billion in its natural gas sector by 2010, according to a report in the *Gulf Times*, quoting the country's Second Deputy Prime Minister and Minister of Energy & Industry, Abdullah bin Hamad Al Attiyah.

The pace and scope of Qatar's liquefied natural gas projects meant that the country would soon overtake Indonesia as the world's top gas producer, Al Attiyah said.

"We will surpass Indonesia's 27 million tonnes/year (of LNG) very soon. We now expect to produce about 77m t/y by the end of the decade," he told a regional forum for the Middle East and North Africa.

"Of the 77m t/y we target, a third will go to the United States, a third to Europe and the rest to Asia. The UK and India promise to be major markets," the Minister added.

The $60bn, said Al Attiyah, would be invested not only in LNG development but also in other projects such as gas-to-liquids (GTL) and natural gas liquids.

Qatar's vision, he explained, was to be the world's largest production centre for GTL fuels, and no less than six GTL projects are currently either being implemented or are under study.

Also by the end of the decade, Qatar plans to boost its oil production capacity to 1.0m barrels/day from the current level of around 750,000 b/d.

Although the country's crude oil reserves of 4.5 billion barrels are relatively modest when compared to other major Middle East producers, Qatar has nonetheless managed to double its production capacity over the past ten years.

"This would not have been possible but for our policy on production-sharing agreements with our foreign partners. Such agreements are characterised by equitable and flexible fiscal arrangements ensuring reasonable returns on our partners' investments," said Al Attiyah.

"Since the early 1990s, Qatar and Qatar Petroleum (QP) have been resorting to non-recourse project finance, which lenders have approved wholeheartedly. This means QP doesn't have to furnish Qatar's guarantee on many aspects of project financing.

"Premier lenders all over the world now quickly respond to Qatar's funding requirements, which is a sign of the confidence they have in Qatar. Our prudent fiscal management attracts financial institutions that do not hesitate to lend money for projects, mainly in the energy sector.

"Furthermore, the stamp of confidence has been verified by the leading credit agencies, which successively upgrade Qatar's sovereign rating," said the Minister in his keynote address to the forum.

Al Attiyah added that the healthy investment climate in Qatar had been one of the main reasons behind the country's economic boom, leading to unprecedented growth in the last few years. Strong oil and gas prices meant huge cash inflows for Qatar, which were being used to develop the state's infrastructure, he noted.

The Minister went on to point out that, with the concluding of a finance package worth around $6.9bn for QatarGas II, the country was now looking beyond that to the QatarGas III and IV projects.

Asked whether the market had been

secured for QatarGas III and IV, since the investments in these two projects would be huge, Al Attiyah replied: "No, we have not tied up the markets as yet, but ConocoPhillips will be our joint venture partner in QatarGas III, which will have a capacity of 8.0m t/y."

Abu Dhabi celebrates 20 years of ADIPEC oil and gas conference

Abu Dhabi — The Emirate of Abu Dhabi, the largest of the United Arab Emirates (UAE), has celebrated twenty years of its prestigious oil and gas industry gathering, the Abu Dhabi International Petroleum Exhibition and Conference, known as ADIPEC.

The recently-concluded ADIPEC 2004 saw the number of exhibitors increase to 1,209 companies from 54 countries, compared with 935 exhibitors representing 48 countries in ADIPEC 2002. Total visitors numbered around 8,000 per day over the four days of this year's event.

Opening the conference, the Deputy Crown Prince of Abu Dhabi, HH Sheikh Mohammed bin Zayed Al Nahyan, said that ADIPEC had emerged as a globally-acknowledged platform for decision makers and professionals from the oil and gas sector to conclude deals, as well as discuss the latest developments in the industry.

Describing ADIPEC 2004 as an important milestone in the evolution of the event over the last 20 years, Sheikh Mohammed said that the ever-growing number of exhibitors from around the world was a testimony to the reputation that ADIPEC had built up over the years.

"The list of exhibitors reads like a who's who of major players in the oil and gas industry," said Sheikh Mohammed, who is also the Chairman of the General Exhibitions Corporation (GEC).

He pointed out that Abu Dhabi itself combined the best of many factors: an open international environment with all the amenities of a modern city, coupled with the traditional Arabian hospitality, warmth and friendliness.

With the third largest known reserves of crude oil and the fourth largest reserves of gas in the world, Abu Dhabi ranked as one of the most important sites in the global oil and gas industry, he added.

"The city's growing importance to the regional and international oil and gas community, combined with its attraction as a world-class investment haven as well as an idyllic tourist spot, continues to make Abu Dhabi one of the most preferred destinations for discerning investors and travellers," Sheikh Mohammed said.

He added that with global oil demand forecast to continue to grow strongly in the foreseeable future, most oil companies in the region were carrying out major expansion projects, and the export earnings of many oil-producing countries were expected to soar to new highs in 2004.

"These and related developments are of enormous significance to ADIPEC 2004, as major deals will be concluded and strategic decisions will be taken that will have a far-reaching impact on the economies and the future development of the participating countries," he said.

After opening ADIPEC 2004, Sheikh Mohammed, accompanied by senior UAE, Arab and foreign officials, toured the various pavilions of the exhibition and spoke to several of the exhibitors.

He also met with the Secretary General of the Supreme Petroleum Council and Chief Executive Officer of the Abu Dhabi National Oil Co (ADNOC), HE Yousef Omair bin Yousef. ADNOC is one of the co-sponsors of ADIPEC.

Meanwhile, the organizers of ADIPEC 2004 have announced that next ADIPEC will be held from November 5-8, 2006. The majority of this year's exhibitors have already confirmed their participation.

In a statement released on the final day of ADIPEC 2004, the organizers noted that ADIPEC was set to expand in the future due to the growing importance of the region in the global oil and gas industry.

"ADIPEC 2004 is ending on a successful note and it has proved once again to be truly an outstanding show. The response has been overwhelming, encouraging us to make this show bigger and better," said GEC Director General, Ahmad Humaid Al Mazroui.

GEC Project Manager, Ashok Pillai, added that this year's response had exceeded all expectations and that ADIPEC had established itself as one of the top oil and gas shows in the world.

In brief

Repsol YPF posts €1,696m net income

MADRID — Spain's Repsol YPF has announced that its net income for the period January to September 2004 rose 5.5 per cent to €1,696 million versus €1,608m in the same period a year earlier. Operating income increased 10.4 per cent to €3,320m, while January to September net cash-flow was up 7.1 per cent year-on-year, reaching €3,794m. These earnings were partly due to high oil prices, with Brent trading at an average level of $36.29/barrel, compared to $28.65/b the year before, and wider refining margins, which rose from $3.23/b to $4.97/b in the first nine months of 2004. Repsol YPF's average oil and gas production in the January–September 2004 period climbed 3.7 per cent to reach 1,171,700 barrels/day of oil equivalent.

Indian government raises fuel prices

NEW DELHI — The Indian government has raised the retail prices of a number of fuels including petrol, diesel and cooking gas, but kept kerosene prices unchanged, according to a report in the *Hindustan Times*. The country's Minister of Petroleum and Natural Gas, Mani Shankar Aiyar, said that petrol prices would be charged at the same rate as the import price, while diesel prices will be increased but will not be brought into line with import prices. The extent of the increase will be announced by India's oil companies. Meanwhile, cooking gas prices will be increased by 20 rupees a cylinder immediately and five rupees every month thereafter. Retail prices of petrol and diesel have not been increased since August despite soaring crude oil prices, due to pressure from the government's communist allies.

Russia's Lukoil sells drilling company

MOSCOW — Russian oil giant Lukoil has signed a deal with the Eurasia Drilling Company under which the latter will purchase Lukoil's 100 per cent stake in drilling firm Lukoil-Bureniye for the sum of $130 million. The accord was signed in Moscow by Lukoil Vice-President Leonid Fedoun, and EDC's Chief Financial Officer, Martin Hansen. EDC will invest a minimum of $75m in upgrading the production capacity of Lukoil-Bureniye, and will also provide drilling services to Lukoil over the next five years. Commenting on the sale, Lukoil's Fedoun said that it was "another stage in the company's programme to reduce production costs. We are determined to actively promote the restructuring process by divestiture of non-core assets. In addition, we expect that the new owners of the drilling company will increase the efficiency of the drilling operations."

In brief

Good 3Q result for ConocoPhillips

HOUSTON — US major ConocoPhillips has reported third quarter net income of $2,006 million, an increase of 54 per cent compared with $1,306m for the same quarter in 2003. Total revenues were $34.7 billion, versus $26.5bn a year ago. Income from continuing operations for the third quarter was $2,011m, an increase of 61 per cent compared with $1,249m for the same period a year ago. Commenting on the results, the company's Chairman and Chief Executive Officer, Jim Mulva, said: "We had a good quarter. Upstream, we ran well, producing 1.48m barrels/day of oil equivalent. Downstream, our refineries ran at 94 per cent of capacity, slightly higher than last quarter. At the same time, we completed significant planned maintenance in our upstream business and elected to accelerate turnarounds at two refineries. Our quarterly results continued to benefit from strong commodity prices."

ExxonMobil in North Sea gas start-up

IRVING, TEXAS — US major ExxonMobil has announced the participation by its subsidiary, Esso Exploration and Production UK, in first production from the North Sea Goldeneye project, in which it has a 39 per cent stake. The $560 million development, operated by Shell UK, involves transporting the full well stream at reservoir pressure from a single unmanned platform to the existing Shell/Esso onshore processing facilities at St Fergus on the north-east coast of Scotland. The expected production rate is 300 million standard cubic feet/day of gas and associated liquids. Estimated recoverable resources from the project total approximately 135m barrels of oil equivalent.

Shell opens hydrogen/gasoline station

WASHINGTON — Shell Hydrogen has opened the first hydrogen dispenser at a US retail gasoline station, which will service a fleet of six fuel-cell vehicles from General Motors (GM), the two companies said in a joint statement. Located in Benning Road in north-east Washington, DC, the station is part of a collaboration between Shell and GM to demonstrate hydrogen fuel cell vehicles and refuelling infrastructure technology. The new station is an important contribution in making fuel cell vehicles an everyday reality, added the statement. Shell will offer both compressed and liquid hydrogen at the facility. Commenting on the development, the Chief Executive Officer of Shell Hydrogen, Jeremy Bentham, said that it "marks the next major step in Shell Hydrogen's effort to make a substantial advance and move research further into reality."

Australia's Woodside seeks to expand its operations in Libya

Perth — Australian firm Woodside Petroleum has announced that it is planning to expand its existing operations in Libya, as part of its overall business development strategy.

At a briefing for analysts and journalists on the company's latest performance, projections and strategies, Woodside officials said that the firm was bidding in a new licensing round in the North African country.

The Australian company is also shooting two seismic surveys in Libya. It is acquiring 2-D seismic over the 3,300 sq km block NC210, and conducting a 3-D survey over blocks NC208 and NC209.

In addition, Woodside is planning a drilling programme for the end of next year in the Libyan concessions, and is involved in a feasibility study of the Atshan oil field.

The briefing also updated analysts on Woodside's activities in Algeria and Iraq. The firm participated in two exploration wells in Algeria this year. The RERW-1 well is commercially viable, while RERC-1 was a dry hole.

Meanwhile, Woodside has signed a two-year memorandum of co-operation with Iraq covering the evaluation of potential oil and gas projects and human resource development in the Kurdistan region of northern Iraq.

In a separate development, Libya has been invited by the Philippines to participate in the development of a ten million barrel oil storage facility in the latter's Clark-Subic corridor, which would be used to support Libya's growing Asian oil trade.

The President of the Philippines, Gloria Macapagal Arroyo *(pictured below),* has written to the Libyan Leader, HE Colonel Moammer El Qaddaffi, proposing the development of the facility on the site of a naval base previously used by American forces.

Speaking after his return from a meeting in Libya, Philippines Vice-President

Photo: Reuters/Erik de Castro

Noli de Castro said that senior Libyan officials have agreed to hold talks in January 2005 on his country's proposal to turn the Clark-Subic corridor into a storage depot for Libyan oil bound for Asian countries.

"I am happy that our relations now (cover) not only peace-building efforts, but also oil talks," said de Castro, adding that the Libyan government had also said it would give preferential treatment to Filipinos wanting to work on the North African country's reconstruction projects.

Kuwait and India to co-host oil conference in January 2005

New Delhi — Kuwait and India are to co-host an international oil conference early next year to address the issues of price stability, energy security and sustainability, according to India's Minister of Petroleum and Natural Gas, Mani Shankar Aiyar *(pictured below).*

OPEC Member Countries Indonesia, Iran, Qatar, Saudi Arabia and the United Arab Emirates, as well as non-OPEC oil producers Malaysia and Oman, have been invited to attend the conference, to be held on January 6. Major importers such as China, Japan and South Korea will also be present.

The theme of the conference will be 'Stability, security and sustainability through mutual interdependence in the Asian oil economy', said the Indian Minister.

"We will be discussing all the dimensions of the oil economy, ranging from market issues, investment, research and development, to environment issues," he was quoted by the OPEC News Agency as telling reporters in New Delhi.

Aiyar also highlighted the issue of the Asian premium paid by India and other developing Asian economies for crude oil imports, compared with developed economies, despite the close proximity to the main producers in the Middle East.

"The Asian premium is the consequence of the way in which oil products

Photo: Reuters/B Bathur

In brief

BP's Lord Browne sees oil at $30/b

London — The Chief Executive of UK oil giant BP, Lord Browne, has said that healthy demand is likely to keep oil prices at $30/barrel over the medium term. Speaking at a press conference in London, Lord Browne noted that the recent surge in prices to over $50/b had raised the question of whether or not the oil market has changed in some fundamental way. One reason for the price hike, he said, was that "the rapid recent rise in demand has eaten into global spare oil production capacity, now estimated to be 1.0 million b/d, compared with an average over the last decade of 3.0m b/d. As spare capacity has reduced, prices have responded to demand in a more sensitive way." However, if demand growth returned to its historic annual average of 1.3m b/d, then by the year 2008, global spare capacity should return gradually to the more normal level of around 3.0m b/d. This would mean that oil prices would have a support level of around $30/b for at least the medium term, said Lord Browne.

Amerada Hess reports 3Q results

New York — US firm Amerada Hess has reported net income of $178 million for the third quarter of 2004, compared with $146m for the third quarter of last year. The firm's exploration and production earnings were $155m in the third quarter of 2004 compared with $124m in 3Q03. Oil and gas production, on a barrel-of-oil equivalent basis, was 323,000 barrels/day in 3Q04, a decrease of 5.0 per cent from the same period last year. The company's average worldwide crude oil selling price, including the effect of hedging, was $26.59/b, an increase of $1.94/b from 3Q03. The average US natural gas selling price, including the effect of hedging, was $4.40 per million cu ft in 3Q04, an increase of 87 cents from last year.

Total, Sinochem in service station JV

Paris — French major Total and China's Sinochem have announced the signing of a joint venture agreement to set up a network of 200 service stations around the Bohai Sea in northern China. The $120 million project, which will be 49 per cent owned by Total and 51 per cent by Sinochem, is subject to the approval of the Chinese authorities. The new venture aims to develop a high-potential network around Beijing and Tianjin and in the Hebei and Liaoning provinces, an area with some 133 million inhabitants. Total's presence in China includes an interest in the Dalian refinery in the north, service stations in Wuhan (Hubei province), and the sale of Elf and Total-branded products.

In brief

Italy's ENI announces 3Q results

MILAN — Italian major ENI has announced strong results for the third quarter of 2004. The first nine months of the year showed net income of €5,094 million, a €1,049m increase over the first nine months of 2003. This rise of 25.9 per cent was due to a positive operating performance (up €1,760m), generated largely in the core business of oil and natural gas, partly offset by lower margins on natural gas sales and higher income taxes (€821 million), said the Italian firm in a statement. ENI's hydrocarbon production for 1Q–3Q amounted to 1,598,000 barrels/day of oil equivalent, of which oil and condensates accounted for 1,015,000 boe/d and natural gas 583,000 boe/d.

Repsol YPF appoints new Chairman

MADRID — Spanish-Argentine oil giant Repsol YPF has announced the appointment of Antonio Brufau as the company's new Chairman, taking over from Alfonso Cortina. A statement from the firm said that Cortina had resigned voluntarily "with the objective of facilitating the beginning of a new era", and praised the outgoing Chairman for having turned Repsol YPF into "one of the best petroleum companies in the world" during his eight years in charge. New Chairman Brufau has broad experience in the energy sector, having been a senior official with Spain's Grupo Gas Natural SDG for a number of years, where he designed and actively participated in the 1992 merger of Catalana de Gas and Gas Madrid. In 1996 he was appointed as a member of Repsol YPF's board of directors, and is also currently a member of the company's audit and control commission.

Revamped Romanian refinery starts up

PLOESTI — The revamped Petrotel-Lukoil refinery in Ploesti, Romania, has started up again after the completion of a $120.7 million modernization programme, according to a statement from Russian's Lukoil. As part of the upgrading of the plant, three new facilities were constructed: a gasoline hydrotreatment unit, an isomerization unit and a hydrogen production unit. Eighteen technological and auxiliary facilities were upgraded, including a diesel fuel treatment unit, a coker unit and purification facilities. Fire-fighting and water-supply systems were also revamped. The aggregate throughput of the new plant will be 2.4m t/y, of which the share of light petroleum products will grow from 73.3 per cent to 81.7 per cent, or almost 2.0m t/y. During the course of 2005, the refinery will fully switch over to the output of products that comply with Euro-3 and Euro-4 standards.

are marketed the world over," he said, calling for a change in the price marker, as Asian buyers now accounted for two-thirds of the market for West Asian oil producers.

"With the radical change in the profile of the buyers and sellers, it is time we developed an Asian oil products market," said the Minister, who made a similar call at the OPEC International Seminar in Vienna in September (see the *OPEC Bulletin*, September 2004, pp20 and 30 for details).

"The Asian oil products market could serve as a marker for developing countries like India," said Aiyar, adding that a change in the pricing mechanism would help India better manage the current anomalies in the global oil price structure.

Indian demand for oil and gas is growing rapidly and the country already imports around 70 per cent of its crude oil requirements, mostly from the Middle East.

Iraqi oil sector still attractive, economy recovering, says EIA

New York — Despite the current security problems, Iraq is still a highly attractive oil prospect, according to the latest update on the country from the US Energy Information Administration (EIA), which is part of the Department of Energy.

So far, only 17 of Iraq's 80 discovered fields have been developed, and the country has few deep wells compared to its neighbours, noted the EIA. In addition, only about 2,300 wells have been drilled in Iraq, of which about 1,600 are actually producing oil, compared to around one million wells in Texas.

However, the EIA also pointed out that the legal status of agreements signed by foreign firms with the previous government to develop the petroleum sector was unclear, increasing the uncertainty level for companies interested in doing business with Iraq.

Besides these legal issues, companies were also looking for a relatively stable security situation, a functioning government, and other conditions to be in place before they moved heavily into the country, added the EIA report.

Iraq's Trade and Investment Minister, Ali Allawi, has said that negotiations with potential investors in the country's upstream oil sector will be delayed until an elected sovereign government is in place. Elections are scheduled for January 2005, which means that such deals cannot be signed until later next year at the earliest or even 2006.

In September this year, the Iraqi Prime Minister, Iyad Allawi, said that he preferred production-sharing contracts as a means of attracting foreign investment into Iraq's oil sector.

Moving on to the state of the Iraqi economy, the EIA noted that although the unemployment rate of around 30 per cent remained high, the economic climate was recovering rapidly from the effects of the war, fueled largely by US and international reconstruction aid.

For the whole of 2004, Iraqi real GDP growth is expected to rebound strongly to reach 37 per cent, and even higher to 41 per cent in 2005, following a 21.2 per cent decline in 2003 because of the war.

The currency has also appreciated sharply since its introduction in October 2003, with the new Iraqi dinar (NID) climbing from around NID 1,950 to the US dollar to around NID 1,460 to the dollar by mid-October this year.

In another positive sign, Iraq was granted observer status to the World Trade Organization (WTO) in early February 2004. The country sent the WTO a formal request for membership last September.

Indonesia to cut fuel subsidies, sees limited impact on inflation

Jakarta — Indonesia's central bank expects only a limited impact on inflation from the government's plan to cut fuel subsidies and increase domestic oil prices, according to a report in the *Jakarta Post.*

"Inflation is not only caused by price factors, but other factors such as the amount of currency in circulation, the rupiah exchange rate, and the supply of goods," the paper quoted Bank Indonesia Deputy Governor, Maman Sumantri, as saying.

Maman also gave assurances that the central bank would take measures to help

minimize the impact of higher domestic fuel prices and other factors on inflation.

"We might adopt a tighter monetary policy, although it is not always necessary. The inflation target for next year is 6.5 per cent, with an anticipated decline to 6 per cent and 5.5 per cent in the following years," he said.

Indonesia's Co-ordinating Minister for the Economy, Aburizal Bakrie, said recently that the government would reduce fuel subsidies next year, which would mean an increase in domestic fuel prices.

The central bank has worked hard to bring down the country's inflation rate from the record level of nearly 78 per cent that it reached during the 1998 financial crisis.

However, inflation has started to climb again lately to around seven per cent, due to the weakening of the rupiah against the US dollar, and the indirect impact of high international oil prices.

Oil industry experts have said that the government is expected to raise fuel prices by about 10 per cent next year, which would result in a 0.6 per cent increase in inflation.

Reducing fuel subsidies is one of the most challenging tasks facing Indonesia's new President Susilo Bambang Yudhoyono. Previous attempts to do so have been met with public protests, forcing the government to back down.

The current surge in oil prices has compelled the government to increase the subsidy level to 59.2 trillion rupiahs (about $6.5 billion), far higher than the initial allocation of 14.5tr rupiahs.

New safety record for Citgo's Lake Charles oil refining complex

Caracas — Citgo Petroleum, the US subsidiary of Venezuela's state oil firm PDVSA, has announced that its manufacturing complex at Lake Charles, Louisiana, has logged more than six million hours of operation without an employee lost work-day.

Commenting on the new safety record, Citgo's President and Chief Executive Officer, Luis Marin, said: "Safety is a key element of our values. This is an outstanding safety achievement, not only for the Lake Charles facility, but for the entire Citgo family and reflects our system-wide goals.

"The challenge now is to continue operating safely and efficiently, while identifying opportunities for continuous improvement in health, safety and environmental performance," Marin added.

The Lake Charles complex, located on the banks of the Calcasieu ship channel, encompasses 2,000 acres and includes both the Citgo refinery and the Lake Charles lubricants and wax plant. Together, the two facilities employ about 1,650 people.

IMF sees Algerian oil, gas export revenues reaching $33.5 billion

Algiers — The International Monetary Fund (IMF) has forecast that Algeria's revenues from its oil and gas exports will amount to $33.5 billion this year, compared with $24bn in 2003.

An IMF analysis of the country's financial situation, carried by the Algerian Press Service, said that the recent strength in crude oil prices had considerably improved Algeria's economic position.

With an improvement in the current account surplus, the country's foreign exchange reserves would reach $42bn at the end of 2004, in comparison with $33bn last year, said the IMF report.

The repayment of external debt had substantially reduced the country's liabilities, which would amount to $18.8bn in 2005 and would fall further $9.8bn in 2009, in comparison with about $23bn last year.

Regarding the country's economic and financial prospects for the period 2005–09, the IMF said it was forecasting that Algeria's gross national product would reach $93.5bn in 2005, with an increase to $107.6bn in 2009.

During the period under study, the country's trade balance is estimated to show a surplus of $20.83bn in 2005, declining to $12.36bn in 2009. The IMF's estimates were made on the basis of average prices for Algeria's Saharan Blend crude of $42.7/barrel in 2005 and $34/b in 2009.

In brief

Russia's Yukos mulls its options

Moscow — Shareholders in embattled Russian oil giant Yukos are mulling their options after the government said it would put its main oil-producing unit, Yuganskneftegas, up for sale in order to pay the firm's huge tax bill. Menatep, the Russian bank which is Yukos' main shareholder with a 60 per cent stake, has filed a legal complaint under the Energy Charter to try and stop the Russian government's move. Liquidation or bankruptcy are two other options that are being considered, according to a report from Russian news agency Interfax. Meanwhile, the top management of Yukos are staying out of Russia for fear of arrest. The firm's former boss Mikhail Khodorkovsky is currently in jail, facing charges of fraud and tax evasion. It is widely believed that Yukos is being targeted for take-over by the Kremlin after Khodorkovsky used his vast wealth to fund opposition political groups in Russia.

Statoil's Kvitebjørn gas field inaugurated

Oslo — Norway's Minister of Local Government and Regional Development, Erna Solberg, has officially inaugurated Statoil's Kvitebjørn gas and condensate field in the Norwegian sector of the North Sea. The Kvitebjørn field is due to deliver about 20 million cubic metres/day of gas and roughly 62,000 barrels/day of condensate at peak production levels. Natural gas liquids will be removed from the gas in a new facility at the Kollsnes processing plant, and this part of Kvitebjørn's output will then be piped to Statoil's Mongstad refinery complex further north for fractionation, said the Norwegian firm in a statement. The development comprises a fully-integrated fixed steel platform standing in 190 metres of water, with drilling and process facilities as well as living quarters.

Unocal signs Bangladesh gas deal

El Segundo, California — US firm Unocal has announced that two of its subsidiaries have signed a natural gas purchase and sales agreement with the Bangladesh Oil and Gas Corporation (Petrobangla) to develop and produce natural gas from the Bibiyana field. Under the agreement, Unocal's minimum production will be 200 million cubic feet/day of gas from the field, beginning in 4Q06. The government of Bangladesh has indicated that it intends to nominate between 250m and 300m cu ft/d. Minimum production sales volumes under the accord will increase to 400m cu ft/d (gross) at the end of 2008. The Head of Unocal Bangladesh, Andrew L Fawthrop, said that his company's goal was "to assist Petrobangla in developing the country's energy resources."

Photo: Reuters/Leonhard Foeger

Mohamed ElBaradei smiles before an IAEA board meeting in Vienna in November

by Philippa Webb-Muegge

Vienna—The International Atomic Energy Agency (IAEA) has completed its work of verifying the suspension of Iran's nuclear programme, except for the request by the country to exempt 20 centrifuges for R&D without using nuclear material, the Director General of the IAEA, Mohamed ElBaradei, said at a recent Board of Governors meeting.

The meeting in Vienna followed the agreement which was brokered between Iran and the UK, France and Germany on November 7, where it was decided that Iran suspend its uranium enrichment activities in return for improved trade and political relations with the international community.

IAEA inspectors subsequently were dispatched to Iran to verify the cessation of the programme for reporting to the IAEA Board of Governors meeting which was held in the Austrian capital on November 25.

ElBaradei, in briefing the press after the meeting, commented: "We are making good progress. It was difficult at the beginning, but … we have seen an appreciable improvement in co-operation, access to sites, and access to information. Therefore, we are now in a position to say that declared materials in Iran have not been diverted, but we still have a lot of work to do with regard to possible undeclared material or activity."

He added that the process of inspections would need to be carried out over the long-term.

"We would expect to take a longer time in Iran because of the undeclared nature of the programme for many years. To speed that process I look to Iran to

IRAN's progress on nuclear freeze good, but incomplete — ElBaradei

demonstrate full transparency and full co-operation," he said.

ElBaradei made it clear that while the IAEA understood Iran's programme a lot better now, "the jury is still out on our ability to provide assurance that everything has been declared to us."

As to Iran's request to exempt 20 centrifuges for R&D, ElBaradei said later that the Agency had received a letter from Iran permitting the IAEA to place the components under surveillance. The Agency has subsequently put surveillance cameras in place to monitor the components.

Centrifuges purify uranium to fuel power plants or weapons by spinning at supersonic speeds.

Meanwhile, Iran has made it clear that the cessation of uranium enrichment was temporary and did hinge on improved relations with the international community.

The country has also asserted that such activities were well within its rights, saying on numerous occasions that it had no intent to build nuclear weapons, maintaining that such enrichment was for the purpose of generating nuclear power.

The agreement with the three EU countries was apparently made in exchange for a promise not to refer the matter to the United Nations Security Council for possible sanctions, a Western diplomat told CNN after the initial agreement was brokered.

Referring the matter to the UN Security Council has been very much the wish of the US, but the move has been strongly opposed by China, another permanent member of the Security Council.

Meanwhile, the outgoing US Secretary of State, Colin Powell, claimed on November 17 that he had information that "would suggest they (the Iranians) have been actively working on delivery systems", meaning the appropriate device to deliver a weapon.

However, Powell's assertions probably would not hold much sway with the international community considering his previous claims made to the UN Security Council insisting that Iraq had weapons of mass destruction were seriously flawed.

As former chief UN weapons inspector, David Kay, put it, with regard to Powell's assertions: "US intelligence capability to warn — and the Secretary of State's capability to warn — about weapons programmes has been seriously impeded by the false warnings given about Iraq."

Tehran also hit back at Powell's assertion that it was trying to adapt its ballistic missiles to carry nuclear warheads.

"I believe Powell has understood his remarks were false," Iran's chief nuclear negotiator, Hassan Rohani, told state television at the time, adding: "Such claims are totally baseless."

But Powell refused to back down, telling reporters on a flight to the Middle East: "I stick with it."

After the IAEA meeting in Vienna, diplomats present who had seen the resolution, said that it was unlikely to satisfy the US, which is thought to prefer a tougher stance where any lapse would immediately trigger Iran's referral to the UN Security Council, the BBC reported at the time.

One of the major US complaints after the meeting in Vienna was that while the accord which was signed with European officials appears to have halted Tehran's uranium enrichment programme temporarily, it left the country free to produce plutonium, which can be used as fuel for nuclear weapons, diplomats and arms experts told the *International Herald Tribune*.

As for the request to operate the centrifuges, a senior Bush administration official said that the Arak reactor was not an immediate concern because its completion was estimated to be a decade away.

PDVSA's Rodríguez appointed as Minister of Foreign Affairs

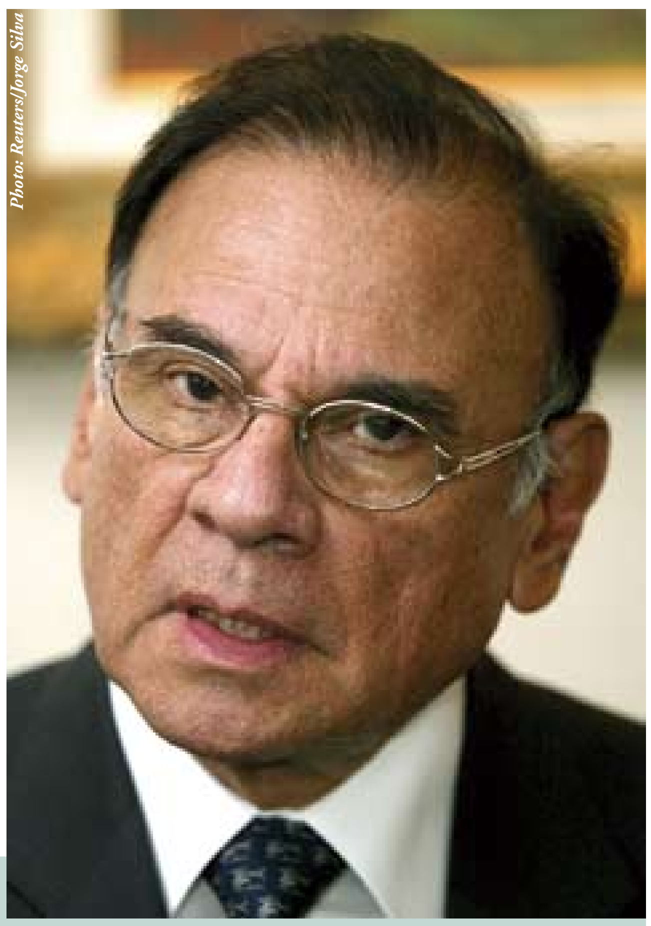


Photo: Reuters/Jorge Silva

Caracas — Venezuelan President, Hugo Chávez, has named the Head of Venezuela's national oil company and former OPEC Secretary General, Alí Rodríguez Araque *(pictured)*, as the country's new Minister of Foreign Affairs, the BBC reported recently.

The Minister of Energy and Mines, Rafael Ramírez, takes over as President of Petróleos de Venezuela (PDVSA), while retaining his role as Minister.

Meanwhile, Francisco Armada was sworn in as the new Minister of Health, replacing Roger Capella.

The appointments put to rest speculation about a reshuffle in the Venezuelan Cabinet and came just hours before Chávez left on a trip to Spain, Libya, Russia and Iran.

In the event, the swearing-in of Rodríguez as the Minister of Foreign Affairs, in mid-November, was overshadowed by the tumult that followed the assassination of the Venezuelan Public Prosecutor, Danilo Anderson.

Rodríguez, who replaces Jesus Perez, is a well-known figure on the international stage. His extensive experience in international oil industry matters should reinforce Venezuela's foreign policy related to OPEC and the United States, as well as fostering the expanding market for Venezuelan crude in China where Chávez is due to visit for top-level talks on December 23 to 24.

Chávez praised Rodríguez for "his performance and patriotic task at the head of our oil industry", while of Ramírez, he said that he has "proved his unquestionable efficiency."

Rodríguez served as Venezuela's Minister of Energy and Mines at the beginning of Chávez's presidency, where he spearheaded Venezuela's new oil policy. Later, he became Secretary General of OPEC.

More recently, Chávez has praised his role in restructuring PDVSA, following an opposition-led shutdown of the industry two years ago.

Rodríguez is regarded as more of a heavyweight than the outgoing Minister of Foreign Affairs, Jesus Perez. Some analysts believe his appointment may herald a more robust diplomacy and a possible shake-up at the Venezuelan Ministry.

According to Venpres, Rodríguez said that one of his tasks as the new Minister of Foreign Affairs would be to consolidate multi-polarity and integration in Latin America.

This would be to further Chávez's wish, made clear since his victory in the recent referendum gave him a clear mandate to rule, for greater political, economic and social integration in South America.

Rodríguez also expressed his commitment to work on what he referred to as the "fundamental" axis, such as the struggle for the democratization of international organizations like the United Nations, the Organization of American States (OAS), and other institutions which, in his opinion, "are located far from a democratic scheme and regime."

He also said that his other objectives would be to strengthen the fight against terrorism, because that type of threat "has already touched Venezuela", referring to the assassination of Anderson.

Right: US Treasury Secretary, John Snow, walks to a meeting with Iraq's Minister of Finance, Kamel Al-Keylani, and Central Bank Governor, Sinan Al-Shibibi in Dubai

Photo: Reuters/Chris Helgren

Iraqi debt of $38.9bn written off by Paris Club

Paris — The Paris Club of creditor nations agreed to write off $38.9 billion, or 80 per cent, of Iraqi debt last month, recognizing that the country was in a unique position where it would be difficult for it to repay the liability in coming years.

Iraq would still have an outstanding debt of $7.8bn, according to the Paris Club.

Nevertheless, the decision was considered landmark in that it may set a precedent for other debt-related negotiations.

Discussions among negotiators from the 19-strong Paris Club group took place in Berlin on the sidelines of the G20 summit of rich and developing nations.

In the six days of talks, the Iraqi delegation described to the Paris Club the challenging economic and financial situation faced by the country, and presented to the group of creditor nations the main measures for recovery which the Iraqi government has planned in association with the International Monetary Fund (IMF).

The Iraqi Minister of Finance, Adel Abdul-Mahdi, hailed what he called a "historic agreement," AP reported at the time.

"This money is needed for Iraq not only because Iraq is a ruined country but because Iraq is an important player internationally," Abdul-Mahdi said.

"What will happen in Iraq will affect politically and economically the Middle East and the world," he added.

Meanwhile, the US Treasury Secretary, John Snow, also welcomed the substantial debt reduction as a "real milestone." Speaking to reporters after the meeting in Berlin, he said it "shows the trans-Atlantic alliance remains a strong force for good in the world."

The United States had been pressing for as much as 95 per cent of Iraq's Paris Club debt to be written off, arguing that it was hindering postwar reconstruction efforts that are already challenged by the ongoing war against armed insurgents.

The deal represents a significant compromise on the parts of France, Germany and Russia, which all opposed the US-led invasion of Iraq.

Accordingly, these countries had previously expressed reluctance to forgive much more than half of Iraq's debt.

The French President, Jacques Chirac, was quoted as saying that singling out Iraq for preferential treatment would be unfair to other heavily indebted, and least developed countries, which continued to struggle to pay back their debt — without having the earning potential which oil-producing countries like Iraq do.

The Paris Club said the debt reduction would be carried out in three stages — 30 per cent immediately, another 30 per cent in 2005 and 20 per cent in 2008.

The deal also depends on Baghdad's successful completion of an IMF economic programme.

Under a "comparability clause" in the agreement, the Paris Club could theoretically suspend part of the debt reduction if it were not matched by Iraq's other major creditors — led by Saudi Arabia and Kuwait.

Among the Paris Club's members are Australia, Canada, Japan, South Korea, Russia, Switzerland, the United States and the richer European Union countries, including Britain, France, Germany and Italy.

Iraqi elections scheduled for January 2005

Baghdad — Iraq will hold its first elections on January 30, 2005 since the toppling of the former Iraqi President, Saddam Hussein.

Photo: Reuters/Ceerwan Aziz

Left: United Nations envoy for Iraq, Ashraf Qazi, is "guardedly optimistic" that credible elections will take place on January 30

The announcement came from the independent Iraqi Electoral Commission in Baghdad after there had been mounting speculation as to whether elections would be feasible given the continuing violence in the country.

Iraqi Electoral Commission Spokesman, Farid Ayar, said the areas of Falluja and Ramada — insurgent strongholds — would also participate in the elections.

"No Iraqi province will be excluded because the law considers Iraq as one constituency and therefore it is not legal to exclude any province," he said, quoted by Associated Press.

Support for the Iraqi elections was also given at the recent meeting in the Egyptian resort town of Sharm El-Sheikh where G8 countries, China and international organizations joined ministers from Iraq and its neighbours.

The aim of the two-day conference was to ensure that the planned elections in Iraq can take place in January.

But the BBC's Heba Saleh in Sharm El-Sheikh said the officials drafting the final communiqué spent weeks trying to paper over the many differences.

She commented that there was still a long way to go before pessimism in the region over Iraq's future could be dissipated.

Despite that, the final communiqué did stress the importance of the role of the United Nations in supporting, as circumstances permitted, the political process in Iraq, as was stipulated in Security Council Resolution 1546, as well as the leading role the UN has played in terms of advice and support for the process of holding the elections.

Iraqis will vote for the 275-member transitional National Assembly, which will then pick the new government, and those living in the semi-autonomous northern region will cast votes for the 105-member Iraqi Kurdistan National Assembly. Voters will also elect governorate councils in each of Iraq's 18 provinces, which will provide the framework for elected local government. Adverts have been running on Iraqi television encouraging participation in the vote.

Iraq's Shia majority, repressed under the former regime, is eager for the elections to take place, the BBC's Caroline Hawley said in Baghdad. But the Sunni minority, which previously held power, is less keen.

Much of the conflict between US-led troops and insurgents has taken place in Sunni areas of the country, and Sunni militants have already threatened to disrupt the vote. Voters are still being registered, even though some of the registration centres are closed because of attacks.

Ayar said 122 political parties out of 195 applications had been accepted and registered for the elections. Only senior members of Saddam Hussein's former Baath party are being excluded from taking part in the poll.

The top UN envoy for Iraq, Ashraf Qazi, said he was "guardedly optimistic" that credible elections would take place on January 30, but cautioned that the current violence was having an adverse effect on the political and electoral processes, the UN News Service reported.

Iraqi women read the registration form for the coming elections in Baghdad

Photo: Reuters/Ali Jasim

Qazi said he hoped the Iraqi interim government would take a number of outreach measures with a range of people with whom it has so far not engaged in order to improve security.

"Hopefully that will contribute to an alleviation of the current tensions and bring about an improvement in the security environment which will be essential for the electoral process to be feasible and on schedule," Qazi told UN Radio in Sharm El-Sheikh, where he attended the conference on Iraq.

Asked about the criticism levelled at the UN for refusing to send in more international staff to help the process along, Qazi said security had to be the major consideration in assessing the world organization's ability to serve in Iraq, where a terrorist bomb last year killed top UN envoy to Iraq, Sergio Vieira de Mello, and 21 others.

"We have to have security as the uppermost guiding principle at all times because the Secretary General is responsible for the safety of people, the international staff and indeed the national staff, who work for the United Nations all over the world," he said.

United Arab Emirates appoints first female minister

Dubai — The United Arab Emirates (UAE) has appointed its first female government minister in its latest Cabinet reshuffle.

Sheikha Lubna Al Qasimi *(pictured right),* a member of the Sharjah royal family, is set to take up the key portfolio of economics and planning within the UAE government.

Tejari photo file

The announcement of her appointment was made with a host of other changes in Cabinet, which were signed by the late UAE President, His Highness Sheikh Zayed bin Sultan Al Nahyan, just prior to his death, on the suggestion by the then Vice-President and Prime Minister of the UAE, His Highness Sheikh Maktoum Bin Rashid Al Maktoum.

Lubna's appointment is one of the most senior to date within the Gulf countries of the UAE, Bahrain, Oman and Qatar, which now have women serving in their governments.

A graduate of Computer Science from the California State University of Chico, with an MBA from the American University of Sharjah, Lubna's meteoric rise through the business ranks of her country saw her become the CEO of Tejari.com, the Middle East's premier electronic business-to-business marketplace, after 16 years in the IT sector.

She was appointed as CEO of Tejari by the Crown Prince of Dubai, Sheikh Mohammed Bin Rashid Al Maktoum.

Before joining Tejari, Lubna was the senior manager of the information systems department at the Dubai Ports Authority (DPA), a position she held for more than seven years.

Prior to that, she acted as the Dubai branch manager for the General Information Authority, the organization responsible for automating the federal government of the UAE.

Lubna has inspired many women in the UAE to become involved in IT, saying that many doors have opened for women to become involved in the workplace through better access to information via the Internet.

"Today we are seeing a new generation of Arab women working from home as Internet entrepreneurs and other innovators, using a variety of mobile options to forge business ties and stay connected to the world outside their doors," she told a gathering of female university students prior to her appointment.

She also maintained that women, through increased access to technology and computing, were better equipped to take on outsourced work.

"Many companies today would welcome the opportunity to outsource jobs to a professional managed services organization, and women IT entrepreneurs and professionals have excellent prospects of meeting this need," she said.

Lubna has often praised the country's leaders for having taken up the issue of raising the profile of women within the UAE, especially in encouraging them to take up more visible and significant roles in both the government and private sector.

Even though her background is clearly in IT rather than economics, it is believed that her personality suggests that she'll take a hands-on role as the country's first female minister.

The UAE's appointment of Lubna comes months after Bahrain appointed Dr Nada Abbas Haffadh as its first female Minister of Health and in March this year, Oman appointed Sheikha Aisha bin Khalfan Al-Syabiyah as Minister of National Authority for Industrial Craftsmanship. In Qatar, Sheikha Ahmad Al Mahmoud was the first woman in the Gulf to win the title of "Her Excellency the Minister" for the portfolio of Education.

Saudi Arabia plans first local government elections in 40 years

Riyadh — Male Saudi Arabian citizens have begun registering to vote in the planned municipal elections which are due to take place next year. These are the first elections to be held in the Kingdom in over 40 years.

The Chairman of the General Committee for Municipal Elections, Prince Mansour bin Miteb bin Abdul Aziz *(pictured right),* said at a press conference that the decision was part of the Kingdom's plans to broaden popular participation in government.

Voting would take place in three rounds, in Riyadh, the Eastern Region and Najran and Baha, he said.

Voters in the capital, Riyadh, will be able to register until December 22 in some 140 polling stations around the city and voting will start on February 10. If all goes according to plan in Riyadh, the subsequent rounds will take place in March and April.

On the question of whether women would be allowed to vote, Mansour said that "regulations for municipalities and villages and the election of municipal councils do not preclude the participation of women."

He added, however, that "the logistics of organizing elections within the requested timeframe ... will make difficult the registration and participation of female voters for the Kingdom's 178 Councils."

The Saudi Arabian Minister of Interior, Prince Nayef bin Abdel Aziz, reconfirmed this view in a statement to a Kuwaiti newspaper, where he was quoted as saying: "I don't think that women's participation is possible."

All Saudi citizens older than 21, including prisoners, will be able to vote — except members of the military and women.

Mansour also noted that no foreign observers would be involved in the election process.

Saudi municipal elections have been postponed several times, with authorities citing the need for more time to prepare. They were first scheduled for October this year, then they were postponed until November, and now they will take place in February next year.

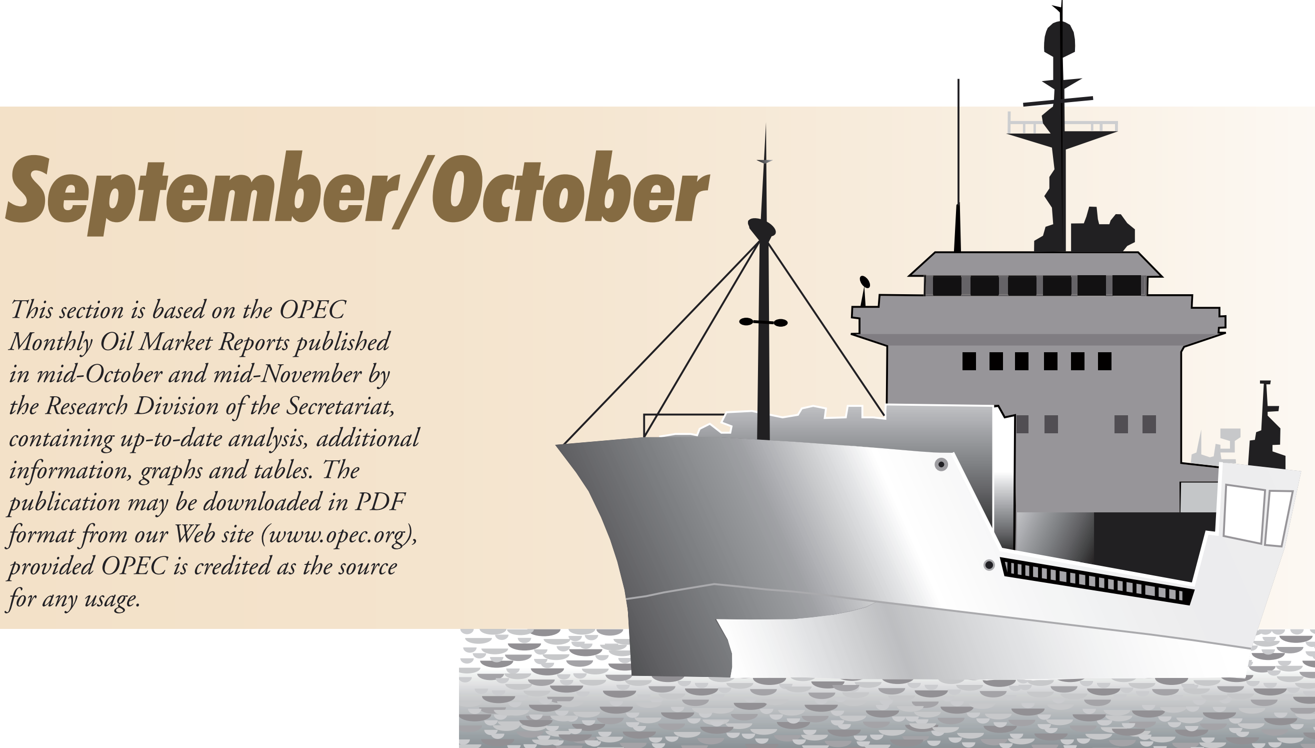
Voters would only be electing half of the Council's members, while the other half will be appointed.

While the elections will only represent a proportion of the population, Saudi nationals are hopeful that they represent a step in the right direction.

AP Photo/Stringer

September/October

This section is based on the OPEC Monthly Oil Market Reports published in mid-October and mid-November 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

September

OPEC Reference Basket

The OPEC Reference Basket[1] started to ease towards the end of August, beginning a downtrend that extended into early September. Prices softened on the easing of supply concerns following the referendum in Venezuela, the revival in Iraqi exports from southern and northern outlets, the end of the driving season in the USA and a boost in OPEC spare capacity. This helped the Basked to shed nearly six per cent in the first week of September. In the second week, ample OPEC supply calmed rising prices helped by increased Middle East output and assurances of more OPEC production, with the Member Countries agreeing to raise the production ceiling by one million barrels/day to 27m b/d as of November 1 (see **Table A**).

1. An average of Saharan Blend, Minas, Bonny Light, Arabian Light, Dubai, Tia Juana Light and Isthmus.

However, the ongoing struggles at Russia's Yukos at a time of declining US oil inventories kept market bullishness intact, especially after Hurricane Ivan roared through the Gulf of Mexico disrupting both oil production and refining operations. This pushed oil prices to record highs, with the Basket rallying by nearly 11 per cent in the last two weeks of September.

On a monthly basis, the average Basket in September inched up a marginal 0.2 per cent or 9¢/b to $40.36/b from the previous month. The Basket jumped a hefty $5.24/b or nearly 14 per cent to settle at a record high of $43.39/b at the end of the month. Concern over supply disruptions in Nigeria amid low US crude oil stocks kept alertness in the marketplace. The OPEC Basket surged further in the first half of October to $45.48/b to average $43.94/b for the period on continued fears of a supply shortfall. Moreover, the Basket's year-to-date average was $34.98/b for a rise of $6.88 or nearly 25 per cent over the previous year.

US market

The upward oil price movement continued as bullish sentiments dominated the US market in September, replacing the bears of late August. While supply concerns eased, causing the price to slide early in the month, worries returned with the onset of Hurricane Ivan, which pushed the West Texas Intermediate (WTI) price up over four per cent on September 9. As the threat seemed to dissipate, prices retreated, giving up most of the previous day's gains. However, the hurricane gathered strength and plowed right through oil installations, closing petroleum operations and halting shipments into the US Gulf Coast, disrupting nearly 5m b/d over the weekend of September 19.

WTI prices surged by over 12 per cent in the final decade of the month. WTI rallied nearly 18 per cent or $5.70 in September to set a record high of $49.59/b and carried on to surpass $54/b in October. If supply disruptions continue to prevail and the pressure from downstream product cycles do not ease, market perception may move towards a higher price threshold.

On the supply side, US crude oil stocks dropped a hefty 7.10m b in the week ending September 10, followed by another substantial drawdown of 9.10m b in the subsequent week, to show eight consecutive weekly losses. Although demand fell as

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

	Sep 04	Oct 04	Year-to-date average 2003	2004
Reference Basket	**40.36**	**45.37**	**27.91**	**35.74**
Arabian Light	36.58	39.00	27.42	34.40
Dubai	35.52	37.61	26.54	33.47
Bonny Light	43.56	49.91	28.65	37.57
Saharan Blend	43.92	50.48	28.59	37.69
Minas	44.27	49.68	29.17	36.99
Tia Juana Light	37.23	43.55	26.93	33.35
Isthmus	41.47	47.40	28.08	36.69
Other crudes				
Brent	43.43	49.74	28.71	37.59
WTI	45.98	53.32	30.98	40.49
Differentials				
WTI/Brent	2.55	3.58	2.27	2.90
Brent/Dubai	7.91	12.13	2.17	4.12

refinery operations were interrupted, prices remained high on the halt of shipments into the Louisiana Offshore Oil Port and the loss of production from offshore the US Gulf Coast. Hurricane Ivan suspended nearly 500,000 b/d out of a total of 1.7m b/d of oil production in the Gulf of Mexico. Moreover, the refinery utilization rate in the USA dropped to a record low of some 85 per cent, adding to concerns over the seasonally important heating fuels. US crude oil inventories fell to less than 270m b in September, just below the perceived minimum operational level.

On quality differentials, the spread for Middle East heavy sour grades saw all time highs in the US market, keeping the sweet/sour spread at record levels.

The WTI/WTS (West Texas Sour) September average spread was at $4.86/b versus August's $3.96/b. Concern over the lack of sufficient supply of light sweet crude in the USA as a result of Hurricane Ivan helped the spread to remain wide amid rising seasonal heating fuel demand. Because of their low sulphur content, the crudes produced off the Gulf of Mexico are exceptionally attractive to refiners, making their absence even more worrisome.

The spread escalated further in October to around $10/b. Moreover, New York Mercantile Exchange (NYMEX) heating oil futures surpassed gasoline in mid-September. Winter fuel remains in short supply around the globe, with end-September European distillate stocks 3.4 per cent below last year and kerosene supplies in Japan down 20 per cent from 2003. US heating oil inventories are already at a six per cent deficit to last year.

European market

While sour grades in Europe received support from healthy refining margins, the widening spread for Middle East sour crude exerted downward pressure on the grade with Urals trading at a $7/b discount to dated Brent. Moreover, the prospects of emerging seasonal refinery maintenance sent the differentials for North Sea crudes lower amid a decline in demand, flipping the forward market into contango. However, the sale of overhang September cargoes supported differentials which are expected to gain momentum with the emergence of the October programme and the restart of several refineries at the end of pre-winter turnarounds.

Sweet crude buying was enhanced on both sides of the Atlantic, but high freight rates diminished the prospect of transatlantic shipments.

Far East market

In Asia, Middle East sour crude traded at a record low for the year with October Oman selling at a 58¢/b discount to MOG amid the low refining margin for fuel oil. The outlook for the kerosene-rich Abu Dhabi grade was good, while October Murban saw a high premium of 70¢/b to the Abu Dhabi National Oil Company (ADNOC) official selling price (OSP). Nevertheless, as the grade differential continued to hold a pricey $1/b premium into November loading, the market turned to the cheaper sour grade.

ADNOC set Murban's premium to Dubai at $4.30/b for September loading, higher than most traders had expected. This represents a $1.30 increase against the August premium. However, the retroactive OSP for Oman crude for September was set at 50¢/b over Dubai, compared to a 45¢/b premium for August crude. Oman November loading fetched a slight discount of 3-5¢/b to MOG with deals heard taking place at a 7–8¢/b premium to MOG. The wide Brent/Dubai spread hovered around $10/b, which prevented

rival western grades from heading east given high freight rates. Still, West African crude continued to flow eastward amid healthy refining margins for light-end products as light sweet supplies tightened on the perception that China had no alternative for West African medium and heavy sweets.

October

OPEC Reference Basket

The OPEC Reference Basket continued to move sharply upward in October as Hurricane Ivan halted oil operations on the US Gulf Coast. Fears of a possible disruption in Nigerian supply furthered the market's bullish tone, as did concerns over heating oil stocks in the run-up to winter, which helped push the Basket up nearly two per cent to $44.08/b in the first week of the month.

The upward trend continued into the second week on the lingering effects of Hurricane Ivan and a strike in Nigeria, causing the Basket to jump to $45.86/b for the week. Prices rose even further in the third week to set an all-time weekly high of $46.04/b, mainly driven by fears of a supply shortfall in winter fuels and an impending strike in Nigeria. Prices began to ease in the last part of the month as high energy costs were seen to be eating into demand and government intervention ended an escalating strike in Norway.

Moderate builds in US commercial crude oil stocks and the return of production in the Gulf of Mexico added further bearishness to the market, as did an interest rate increase in China, where the government is attempting to slow the economy to more sustainable levels, which would imply lower demand. Together, this host of factors caused the Basket to shed just over one per cent.

The Basket's monthly average surged a hefty 12.4 per cent or $5.01/b to $45.37/b in October, the highest monthly gain this year. Concern over a shortfall in winter fuels, hurricane-related outages in the US Gulf Coast and strike threats in Nigeria were the main triggers for this price rise.

By mid-November, the Basket had eased to $36.11/b, a level not seen since July 21 when the Basket stood at $36.16/b. Factors behind the decline include OPEC producing at a high rate of 30m b/d, the resultant rise in crude oil stocks, the cancellation of a planned strike in Nigeria and the return of refineries from seasonal turnarounds, which should boost low product stocks. Although the year-to-date average increased to $35.95/b, the month-to-date average slipped to $40.54/b, with the expectation of a continuation in the downward trend.

US market

The surge in US oil prices continued throughout October. In the first week, the market saw upward pressure from an announced strike in Nigeria as well as the lingering outage in US Gulf Coast production caused by Hurricane Ivan. This caused oil prices to surge nearly $4/b for the week.

While prices were tempted to head downward in the second week, the slow recovery in oil operations in the US Gulf Coast and the fear of an ongoing strike in Nigeria kept bullishness intact. Although the weekly US oil inventory report showed a crude build in the previous week, the hefty drop in heating oil inventories dominated the petroleum market, supporting a surge in WTI prices to a record high of $55.08/b in the second week.

The perception that the recent high price was dampening growth contributed some bearishness to the marketplace, but this was more than countered by concern over low heating fuel stocks and an ongoing oil workers' strike in Norway. Consequently, WTI surged to an all-time high of $56.42/b in the third week of the month. In the final week of the month, continued stock builds and a partial return of production in the Gulf of Mexico were enough to send WTI down a hefty eight per cent.

According to the US Energy Information Administration (EIA), commercial crude oil inventories in the USA have risen for several weeks and forecasters expect the Agency to report a continual build in supply. Another weight on oil prices is the expectation that heating oil supplies will grow in the coming weeks as refiners complete pre-winter maintenance in time to take advantage of high prices. US crude oil stocks stood at nearly 290m b, well above the perceived minimum operational level, amid a recovery in the refinery utilization rate to 90 per cent.

The tight supply of light sweet crude, as production in the USA had been disrupted by Hurricane Ivan, sent the sweet/sour (WTI/WTS) spread to a record high of $9.11/b late in the first half of October. However, deep discounts from Middle Eastern producers made sour grades more attractive, and as production returned in the US Gulf Coast, the spread began to narrow somewhat, but remained wide. High freight rates amid stronger refinery demand supported some easing on the sour grades, further narrowing the spread in November to around $5/b.

European market

Prompt prices in Europe for sweet grades soared to all time highs amid demand for light-end products and concern over a possible strike-induced shortfall in supply from both Nigeria and Norway. Brent crude escalated to a record high amid fear of insufficient winter fuels.

In early October, onshore and offshore North Sea crudes diverged further as freight rates extended rapid gains amid several available prompt-loading Oseberg cargoes which put pressure on North Sea terminal differentials. Freight rates at 30-year highs prevented arbitrage opportunities from pressuring Urals.

The market remained bearish on the prospect that the persistent slide in differentials would continue amid deep discounts offered by the Middle Eastern producers to the European market. Urals crude prices continued to see price cuts as Russia's main export grade struggled to compete with cheaper Middle East sour supplies. Urals continued to slip to a discount of around $8/b to dated Brent on lower refinery demand due to the pre-winter maintenance season.

Far East market

With pricey sweet crude in the east, sophisticated Asian refiners turned to ample Middle Eastern sour crude supplies as rising freight rates made the eastbound arbitrage uneconomical. The Brent/Dubai spread widened to nearly $15/b in mid-October, before narrowing to around $8/b in early November. December Oman continued to trade at a premium of 13¢/b early in October, rising to 34¢/b in the first week of November. As the market digested the retroactive September OSP, which was

within industry expectation, the premium continued and December barrels traded at 34-36¢/b to MOG.

The steep differential between Middle Eastern crudes and Brent made sour grades attractive on healthy refining margins especially from Japan. The premium for December-loading Oman peaked at 42¢/b by mid-October while Murban was set at 50¢/b to ADNOC's OSP before moving up to $1.60/b in the last days of October.

As most December requirements were fulfilled amid extra volumes available, the premium narrowed to 15-20¢/b with the emergence of the January programme in late October, before dropping to a slight discount in early November on rising freight rates. Oman's retroactive OSP for October was hiked by $2.45 to $38.50/b. Oman raised its premium to Dubai by 46¢/b to 96¢, which was 10–15¢ more than the market had expected. Given the unattractive arbitrage situation for West African crude flowing eastward, regional Asian crude continued to see increasing premiums amid healthy refining margins.

Indonesia's November Cinta/Widuri crudes were heard traded at a $1.50/b premium to ICP with Malaysia's Tapis traded at a $1.30/b premium to APPI. However, high outright prices started to eat into the premiums with a December-loading Tapis cargo initially being offered at a 85¢/b premium in late October before being slashed to 50¢/b early in the following month.

Product markets and refinery operations

September

The good performance of the middle of the barrel complex has supported refinery margins across the globe in September, particularly in Asia. With the level of heating oil stocks below average around the world, especially in Japan and South Korea, and limited operational possibilities to increase output, the middle distillate crack value may strengthen further and remain the driving force of the market in the next months (see **Table B**).

Table B: Selected refined product prices $/b

		Aug 04	Sep 04	Oct 04	Change Oct/Sep
US Gulf (cargoes)					
Naphtha		48.42	51.33	56.86	5.53
Premium gasoline	*(unleaded 93)*	53.64	55.59	58.45	2.86
Regular gasoline	*(unleaded 87)*	49.64	52.25	56.89	4.64
Jet/kerosene		51.74	57.46	64.19	6.73
Gasoil	*(0.2% S)*	48.25	52.38	61.54	9.16
Fuel oil	*(1.0% S)*	29.30	29.63	34.51	4.88
Fuel oil	*(3.0% S)*	25.23	26.07	31.47	5.40
Rotterdam (barges fob)					
Naphtha		54.96	54.88	61.21	6.33
Premium gasoline	*(unleaded 95)*	51.06	50.77	55.72	4.95
Regular gasoline	*(unleaded)*	51.06	50.73	55.81	5.08
Jet/kerosene		55.74	58.49	65.91	7.42
Gasoil	*(0.2% S)*	49.99	53.02	63.06	10.04
Fuel oil	*(1.0% S)*	23.73	23.40	28.10	4.70
Fuel oil	*(3.5% S)*	24.62	24.12	25.88	1.76
Mediterranean (cargoes)					
Naphtha		45.94	45.90	50.76	4.86
Premium unleaded	*(0.15g/l)*	48.80	49.87	54.39	4.52
Premium gasoline	*(unleaded 95)*	48.76	49.84	54.43	4.59
Jet/kerosene		53.52	56.28	62.82	6.54
Gasoil	*(0.5% S)*	49.41	53.12	60.78	7.66
Fuel oil	*(1.0% S)*	25.47	25.66	29.03	3.37
Fuel oil	*(3.5% S)*	23.59	22.81	24.20	1.39
Singapore (cargoes)					
Naphtha		44.19	43.95	48.81	4.86
Premium gasoline	*(unleaded 95)*	51.50	49.06	54.73	5.67
Regular gasoline	*(unleaded 92)*	50.62	48.20	53.68	5.48
Jet/kerosene		52.29	55.30	61.25	5.95
Gasoil	*(0.5% S)*	51.67	54.29	58.40	4.11
Fuel oil	*(180 cst 2.0% S)*	28.82	27.84	30.96	3.12
Fuel oil	*(380 cst 3.5% S)*	28.19	27.18	29.95	2.77

Table C: Refinery operations in selected OECD countries

	Refinery throughput *(m b/d)*				Refinery utilization *(%)*[1]			
	Aug 04	Sep 04	Oct 04	Oct 04/03	Aug 04	Sep 04	Oct 04	Oct 04/03
USA	16.34	15.39	15.23	–0.35	97.9	92.2	91.2	–2.5
France	1.78[R]	1.73[R]	1.72	–0.14	91.0[R]	88.6[R]	88.1	–9.6
Germany	2.36[R]	2.24[R]	2.36	0.02	103.2[R]	97.8[R]	102.9	–0.3
Italy	1.95[R]	1.87[R]	1.79	–0.04	84.3[R]	81.0[R]	77.4	–2.1
UK	1.73[R]	1.66[R]	1.66	0.23	95.1[R]	91.1[R]	91.3	11.6
Eur-16	12.85[R]	12.30[R]	12.21	0.00	93.1[R]	89.1[R]	88.4	–0.5
Japan	4.30	3.82[R]	3.65	–0.30	91.4	81.2[R]	77.7	–5.2

1. Refinery capacities used are in barrels per calendar day.
R Revised since last issue.
Sources:
OPEC statistics, Argus, Euroilstock Inventory Report/IEA.

The upward trend for middle distillates has tempted speculators to increase net long positions in heating oil as well.

Despite bullishness for the middle of the barrel, the bottom still suffered from huge discounts against the benchmark crudes, in particular versus sweet crudes. This situation was exacerbated recently by the impact of Hurricane Ivan, which has reduced US Gulf Coast crudes by about 500,000 b/d in the last few weeks.

US market

Demand for distillate products increased six per cent in the USA over the last nine months compared to the same period last year. Combined with recent supply losses, huge inventory draws and import disruptions, this has resulted in a sharp increase in middle distillate prices as well as the crack value against the WTI benchmark. It has also fuelled the view that US refiners may have more difficulties than expected to supply enough products this winter.

Hurricane Ivan has affected the gasoline market, supporting its crack value versus crude oil. This persuaded funds to return to the market and massively increase their long positions, which provided further upward price pressure on gasoline. The expected return of US refinery operations should lead to a build in gasoline stocks and an easing of the crack value versus WTI crude. Despite the healthy performance of the top and middle of the barrel, fuel oil values versus WTI are very poor amid a wealth of supplies. This situation is expected to persist as any improved demand, particularly for bunker fuel, would do little to narrow the sky-high gap between high sulphur fuel oil and WTI (see **Table B**).

US refinery operations were severely affected by Hurricane Ivan. Despite an improvement of refinery margins over the previous month, refiners were forced to shut down about 2m b/d of refinery capacity for a few days in the second half of September. As a result, the utilization rate was reduced to 92.2 per cent from 97.1 per cent in August (see **Table C**).

European market

Light and middle distillate product prices increased in tandem with the European benchmark crude price. Refinery margins in north-west Europe saw a modest improvement, while those in the Mediterranean area rose significantly due to healthy demand from Syria, Turkey and Greece; hefty maintenance of the regional refineries; and the widening gap between Urals and Brent benchmark crude oil prices (see **Table B**).

The gasoline crack spread in the north-west European market versus Brent was relatively stable in September, while strong demand from Nigeria and eastern countries in the Mediterranean produced sufficient support for regional gasoline prices. The naphtha market in Europe also benefited from exports to Brazil.

With regard to fuel oil, the bottom of the barrel saw further losses to its crack value against the corresponding benchmark crude, which resulted in continued pressure on sour crude oil in Europe.

Meanwhile, due to the heavy maintenance schedule, especially in the Mediterranean area, European refinery throughput fell in September to 89.8 per cent from 90.9 per cent in August. The higher distillate crack is expected to contribute to an increase in refinery utilization as soon as operationally possible (see **Table C**).

Asian market

Additional harvest season requirements for gasoil and increased concerns about Japanese kerosene inventories may further strengthen distillate prices in Asia. Since Asian refineries are less equipped with hydro-treating and hydro-cracking units compared to their competitors in the USA and Europe, most will have to switch to lighter distillate-rich crude oil to secure distillate requirements. This is expected to dramatically stretch the already wide sweet/sour grade differential in Asia (see **Table B**).

The Asian gasoline market remains relatively strong due to diminishing exports from China and demand growth in other parts of the Pacific basin. The crack value for naphtha products looks strong as well, because of healthy regional demand and a slide in exports from India. Fuel oil prices eased, as growing supply from Europe, the

Middle East and the Caribbean outweighed fresh demand from Vietnam, Indonesia and China. The crack spread of high-sulphur fuel oil versus the Dubai benchmark crude remained below –$7/b.

In Asia, encouraging refinery margins persuaded refiners to run as much as operationally possible. However, the Japanese refinery utilization rate in September dropped to 81.5 per cent from 91.3 per cent the previous month due to the maintenance schedule (see **Table C**).

October

Lower refinery runs as a result of the pre-winter maintenance schedule, particularly in the USA and Europe, have tightened the distillate market around the globe and boosted the distillate crack versus benchmark crudes in October. Lower runs have also caused an earlier than normal stock-draw in the US market.

However, with the completion of refinery turnarounds and a switch to maximum distillate mode as well as the relatively mild weather across the board, the fear of a winter heating oil shortage has eased, resulting in the recent downtrend in distillate product prices. But some concern remains about the ability of refiners to sustain operations at near capacity to ensure an ample supply of heating oil, and it seems that distillate products will drive the market in the next few months.

Meanwhile, the poor performance of the top and the bottom of the barrel, along with high freight costs and expensive Atlantic basin benchmark crudes, have overwhelmed the strength of the middle of the barrel, reducing refining margins in the USA and Europe in October from the previous month. However, refining margins in Asia were boosted by the less expensive Dubai crude oil and high prices of different products to a new record-high of over $9/b.

The lingering effects of Hurricane Ivan and scheduled maintenance in October reduced the US refinery utilization rate to 91.2 per cent from a peak of 97.9 per cent in August. However, according to the EIA, this rate showed a healthy recovery in the first week of November, jumping to 93 per cent.

The heavy maintenance schedule in Europe caused the refinery utilization rate there to slide sharply to 88.4 per cent from 93.1 per cent in August.

In Asia, while Singapore's refineries extended their steady upward operational trend, Japan's refinery utilization rate declined by 3.5 per cent in October from the previous month, following a fire at one refinery and seasonal turnarounds. With the return of most refineries from maintenance and the approaching peak demand season, the refinery utilization rate is expected to pick up across the globe in November.

US market

Over the last four weeks of October, US distillate demand increased by 11 per cent on average compared to the same period last year. This upward demand trend, combined with lower refinery runs, has resulted in an unusual stock-draw in the last few weeks. The latest EIA figures on November 5 suggest that US distillate stocks have fallen to 115.6m b, about 11 per cent lower than at the same time last year. However, the bullishness in the distillate market has eased recently as refineries emerged from maintenance and switched to maximum distillate mode, which helped the distillate crack to fall against WTI. Despite this downtrend, distillates still lead the market, and a really cold winter could renew price strength (see **Table B**).

Demand for gasoline remained seasonally stable, but its crack spread versus benchmark WTI has decreased sharply in October, undermining refinery margins. Meanwhile, the price of low-sulphur fuel oil has recovered following increasing demand from utility plants. However, the high-sulphur fuel oil market remains disappointing, despite a recovery in bunker demand (see **Table C**).

European market

As high freight rates have closed the arbitrage window from Europe to the USA and Asia, gasoline and fuel oil markets have come under increasing pressure. This helped undermine refinery margins in Europe in October from the previous month. The lack of cold weather and the return of refineries from maintenance have eased distillate crack values, but lower primary and tertiary stocks, together with colder weather, may underpin prices over the next few months. Primary distillate stocks in Europe dropped by 6.1m b in October from the previous month, and German end-users have been slow to replenish their tanks, which currently stand at 60 per cent, almost nine per cent lower than the five-year average (see **Table B**).

The gasoline market in Europe also looks relatively bearish, as the lack of arbitrage opportunities to the USA has amplified an overhang of cargoes, and sellers of prompt cargoes have been struggling to place them. The naphtha market is also weak, and lower demand from naphtha crackers put pressure on its crack value as well.

High freight rates have also kept extra fuel oil barrels trapped in the region and sustained a growing discount against benchmark Brent.

Asian market

The gasoil crack spread versus Dubai reached a record-high of over $22/b in late October. However, in the last two weeks, the bullish sentiment in the Asian product market changed with plunging crude oil futures.

As a result, Asian product prices decreased across the barrel, particularly for naphtha. However, the gasoline market has seen some support from healthy demand in Australia and New Zealand, where the summer driving season is just about to begin, and requirements from Indonesia and China are also rising.

Naphtha, in contrast, has been suffering from sluggish demand and continued

ample supplies from both India and the Middle East (see **Table B**).

Meanwhile, Japanese distillate stocks recovered by about three per cent in October from the previous month. Sentiment in the distillate market eased, but as refiners are maximizing kerosene at the expense of gasoil to cover expected strong winter demand, an anticipated power shortage in China is likely to raise gasoil demand and prices in the weeks to come.

In Asia, high sulphur fuel oil prices have also recovered in October, and its crack spread against Dubai crude narrowed from about –$10/b in September to –$5/b in late October. The recovery in the high-sulphur fuel oil crack was attributed to fewer arbitrage cargoes from Europe and the Caribbean area to Asia and to strong bunker demand. Despite the temporary recovery of the fuel oil spread versus its corresponding crude in October, the market for that product remains fundamentally weak.

The oil futures market

September

Speculative funds on the NYMEX reduced their net longs on September 14 from the August 17 high of 48,000 lots to 13,000, in line with the price movement of WTI. This decline came following news that Iraq has resumed exports from its northern outlet, complementing increased exports from the south. However, further into the month, concern over the impact of Hurricane Ivan in the Gulf of Mexico, which halted oil production and imports, triggered fund buying with longs increasingly outpacing shorts. Net long positions closed on September 28 at some 33,000 lots as the WTI NYMEX futures price surged to a record high of $49.90/b. Nonetheless, open interest stayed below the 700,000 level before surpassing it in the early part of October at 709,000 contracts. When options are included, open interest hovered at around 1.1 million contracts.

The forward curve flattened out into a slight contango in the early part of September as supply concerns eased on OPEC's signals that it would raise official quotas in an effort to ensure sufficient supply at a time of rising demand. As the month progressed, the curve flipped into backwardation on the lingering impact of the hurricane which hampered US Gulf Coast oil operations and led to draws on the country's oil stocks. These concerns dominated the market and attracted speculators. Fear of a possible supply disruption from Nigeria provided further support for a price rise late in September and on into October. Accordingly, the forward curve steepened further in backwardation at 80¢/b for the 1st/2nd month spread. The August spread averaged 50¢/b with the September average at 26¢/b, while the average price for the second forward month rose at a faster rate than the prompt month.

October

Crude oil futures continued to escalate in October on a planned strike in Nigeria. However, as the strike was called off, the WTI futures contract moved down to around $50/b. Nevertheless, the downward trend was short-lived and concerns revived. In the week ending October 5, non-commercial funds' net long positions surged to the highest level since August 17 at around 37,000 contracts on the continued disruption of US Gulf Coast output. However, after five consecutive days of price rises, profit-taking halted the rally, sparking a downturn, which caused the prompt month futures contract to slip over two per cent and net longs to be slashed by a hefty 12,000 lots to nearly 25,000 contracts in the week to October 12.

The NYMEX WTI November contract slipped three per cent in two days of profit-taking ending on October 19 as the market perceived a slowing in global economic growth. However, upward price pressures were revived on concern over low heating fuel stocks in the USA and the ongoing strike in Norway.

As a result, the WTI December futures contract saw a record peak of $55.71/b on October 22. On a cumulative basis, the WTI front month net change was up $2.63/b. In the last week of October the futures contract dropped six per cent on profit-taking. Accordingly, the non-commercial net long positions slipped to 21,000 lots in the week ending October 26, the lowest level since September 14.

With oil prices falling from recent highs, hedge funds and others began to switch money out of energy futures and into equities, which caused a further decline in crude futures. The perception in the marketplace is that the reduction of speculators' substantial net long positions is one of the foremost factors behind the recent price dip. Nevertheless, open interest remained above the 700,000 level throughout the month after peaking at 735,000 on October 12, indicating strong speculator interest.

The forward curve remained in backwardation at 46¢/b for the 1st/2nd month spread, almost in line with the previous month but slightly steeper than in the same period last year. Widening from the 30–40¢/b level for the 1st/2nd month, the spread peaked at nearly $1/b in the second part of the month on lingering concern over low heating oil stocks in the run-up to winter. However, in the last part of the month, backwardation slid to 20¢/b on easing supply concerns and ample output from OPEC Members.

The monthly average for the 1st/2nd month spread was 46¢/b compared to 26¢/b in September. The forward curve remained similar to last month's backwardation and moderately steeper than in the same period of last year, despite a recent bullish stock report which revealed lower crude inventories in the USA, especially distillates which include heating oil. Nevertheless, by November, the spread had narrowed and flipped into contango.

Tanker markets

September

OPEC area spot fixtures increased by six per cent or 760,000 b/d to stand at 14.12m b/d in September, up 2.5m b/d from last year's figure. This increase was due to high OPEC crude oil production, which reached 30.12m b/d in September according to secondary sources, the highest level in the last 25 years. Despite the increase in spot fixtures, OPEC's share of global spot chartering declined slightly by one percentage point to 62.7 per cent, but remained higher than last year's figure of 60 per cent.

The main contributors to OPEC spot fixtures were the regions outside the Middle East, which increased spot fixtures by 650,000 b/d or 11 per cent due to the high demand for sweet crudes, mainly from Africa. Middle East spot fixtures rose 110,000 b/d or just one per cent causing combined eastbound and westbound shares to fall to 54 per cent, against nearly 57 per cent in the previous month. Non-OPEC spot fixtures reached 8.39m b/d, which corresponds to an increase of 720,000 b/d, roughly the same level as OPEC's. Compared to last year, non-OPEC spot fixtures were up 500,000 b/d in September, but at 37 per cent their share of global spot fixtures was three per cent below the year-ago level.

Global spot chartering increased by nearly 1.5m b/d or seven per cent to stand at 22.5m b/d, which was 3m b/d more than last year's figure. According to preliminary data, sailings from the OPEC area rose 500,000 b/d to 28.4m b/d in September. Middle East sailings, which represented 65 per cent of total OPEC sailings, jumped by 1m b/d to stand at 18.43m b/d. For arrivals, preliminary estimates show that all the regions experienced a decline, except NW Europe.

The decrease was more significant in the US Gulf Coast, US East Coast and Caribbean region, which declined 1.22m b/d, the largest drop since the start of 2003. This fall was due to Hurricane Ivan disrupting unloading at ports and refining operations in the US Gulf Coast. The hurricane depressed US imports by 1.5m b/d in its first week and at its peak knocked out almost 2m b/d of refining capacity.

The crude tanker market remained very tight, resulting in an increase of freight rates on all main routes, especially in the Suezmax sector. Very large crude carrier (VLCC) freight rates on the Middle East/eastbound and westbound long-haul routes gained six and five points respectively to stand at monthly average levels of Worldscale 113 and W100 in September.

It is worth noting that the VLCC rates for these two routes took a significant turn during the second half of September, after dipping in the first week. In the last week of that month, both routes reached their highest levels since mid-February to stand at W155 and W123, respectively.

This significant increase in freight rates of between 60 per cent and 80 per cent in just three weeks was mainly due to high demand in the USA and Asia, compounded by limited tonnage availability in the Gulf of Mexico, following powerful hurricanes in the Caribbean and the US Gulf Coast. Furthermore, strong demand in China and India for sweet crudes from Africa and the North Sea put more pressure on tanker availability by tying up tankers for long voyages. In addition, the threat of a cut in Nigerian production following the announcement of a planned national strike and rebel attacks at the end of the month contributed to the increase in VLCC freight rates.

Suezmax experienced nearly the same developments as VLCCs, but the rise was higher. Freight rates on the West Africa/US Gulf Coast and NW Europe/US East Coast-Gulf Coast routes moved up 11 and 10 points to reach monthly averages of W163 and W169, respectively, their highest levels since February. Both routes experienced considerable increases of 61 points and 83 points respectively in the last week. This significant increase was mostly due to high demand for light sweet crude from Africa and NW Europe.

Aframax freight rates in the Mediterranean and from there to NW Europe were still on the rise due to increased activity from charterers and the strong demand for sweet crude oils. The drop of seven percentage points for the Indonesia/US West Coast route represents a downward correction of the high rates of the previous month.

For the product tanker market, the main routes gained between 16 and 17 points on average, except for the Middle East/East and Caribbean/US Gulf Coast routes, which were almost stable compared to August.

The strength in freight rates on the routes to NW Europe, the Mediterranean and the USA was due to relatively healthy activity on high demand for products, especially distillates ahead of winter in combination with seasonal refinery maintenance in these regions. The weak trade due to hurricanes kept rates almost unchanged on the Caribbean/US Gulf Coast route.

October

OPEC area spot fixtures witnessed a robust increase of 15 per cent or 2m b/d to stand at around 15.6m b/d in October. This growth in fixtures — the highest increase since last May — is due to OPEC's sustained high production, which reached a new record of 30.23m b/d in October, and the surge in crude oil demand in preparation for the end of the refinery maintenance season.

With this increase, OPEC's share of global spot chartering moved up by five percentage points to 67.5 per cent, the highest level in the last five years. The major contributor to this strong growth in OPEC area spot fixtures was the Middle East with around two thirds of the total increase, which pushed the combined eastbound and westbound share up by one percentage point to 56 per cent.

Contrary to the OPEC area, non-

OPEC spot fixtures declined by more than eight per cent or 670,000 b/d to stand at 7.5m b/d, which was nearly 1.8m b/d lower than in the previous year. This decline, in conjunction with the increase in OPEC area spot fixtures, reduced the share of non-OPEC fixtures to 32 per cent from 38 per cent in the previous month. Global spot chartering increased by more than 1.3m b/d or six per cent to stand at 23.8m b/d, which is 800,000 b/d lower than last year's figure.

According to preliminary estimates, sailings from the OPEC area experienced a minor slide of 70,000 b/d to 27.8m b/d. Middle East sailings, which represent 65 per cent of total OPEC sailings, witnessed a slight increase of 150,000 b/d to stand at nearly 18m b/d, while the rest of OPEC sailings declining by 220,000 b to 9.8m b/d. Arrivals in the main consuming regions saw mixed trends. Preliminary estimates show that arrivals in the US Gulf, East and Caribbean rose 720,000 b/d to 11.25m b/d, while arrivals in the Euromed moved up by 440,000 b/d to 4.70m b/d.

Meanwhile, arrivals in Japan fell sharply by 1.6m b/d to around 3.8m b/d, the same level as last year's figures, due to the refinery maintenance season. Arrivals in north-west Europe also declined by just 370,000 b/d to around 7m b/d.

Soaring winter crude oil demand combined with a lack of tanker availability to keep freight rates climbing in October to reach their highest levels since 1973. Most routes in all sectors experienced an increase of at least 100 points.

Shipping crude on long voyages, mostly to Asia from Africa and Russia because of the growing need for sweet crudes in the region, locked up availability and tightened the tanker market further. VLCC freight rates on the Middle East/eastbound long-haul route nearly doubled compared to the September figures to stand at a monthly average of W214.

Freight rates on the Middle East/westbound long-haul route increased by 50 per cent to reach W151 due to high demand and the replenishment of stocks in the USA, which had been affected by Hurricane Ivan in September. For Suezmax, freight rates increased by over 120 points to approach W290 on both the West Africa/US Gulf Coast route and the NW Europe route to the US East Coast and the US Gulf Coast. This represented an increase of over 170 points from last year's figures.

The surge in freight rates was more significant in the Aframax sector, which saw a spectacular increase in Worldscale rates of around 190 within the Mediterranean and from there to NW Europe to stand at W392 and W342, respectively. In addition to sustained activity, delays of up to 12 days in the Bosporus Straits due to reduced daylight and bad weather put upward pressure on freight rates.

Rates along the Indonesia/US West Coast route rose 86 points to stand at W271, reversing the fall in September. Healthy activity between the Caribbean and the US East Coast following the hurricanes pushed up freight rates on this route to W337, an increase of 140 points compared to the September level.

The tanker market for products remained very tight in October thanks to sustained demand, especially for middle distillates, as well as limited tanker availability. On average, freight rates for medium-range tankers carrying 30,000-50,000 dwt on the Middle East/East route witnessed a considerable increase of 154 points, compared to the September figures, to stand at W368.

This significant increase was due to healthy activity as a result of a surge of product imports by Japan to meet rising demand and refill near record-low stocks, as refiners were operating at low rates due to a fire and maintenance shutdowns.

The other routes for cargoes carrying 25,000–30,000 dwt gained between 50 and 60 points on average, except for the Mediterranean/NW Europe route, which rose 10 points to W265. This accelerated activity to meet distillate demand and the rebuilding of inventories in the US Gulf Coast following the hurricanes reversed the downfall observed in September to stand at W295.

World oil demand

September

Revision to historical figures (2002-03)

World oil demand for the year 2003 was revised upward a marginal 110,000 b/d to 79.17m b/d. The minor adjustment was spread among all the regions with upward revisions ranging from as little as 10,000 b/d in North America, Latin America and Africa to 50,000 b/d in the Other Europe group and a 20,000 b/d downward revision to the former Soviet Union.

Forecast for 2004

World

The world oil demand forecast has seen further upward revisions due to this year's stronger-than-expected expansion in the world economy (currently estimated at 4.91 per cent versus the previous 4.79 per cent) along with higher than anticipated demand in 2Q04 and higher preliminary demand figures for both the OECD and non-OECD in July and August. In absolute terms, world oil demand is expected to reach 81.79m b/d on average by the end of the year while y-o-y growth will average 2.62m b/d or 3.31 per cent.

In the first two quarters of 2004, where preliminary figures are already available, world oil demand grew by 1.8m b/d or 2.26 per cent in 1Q and by an astonishing figure of almost 4m b/d or over five per cent in 2Q. The exceptionally high growth seen in 2Q originates from the 1.31m b/d rise in Chinese apparent demand, combined with the strength in consumption in North America, Other Asia, the Middle East and the FSU.

Preliminary figures for July and August imply that oil demand picked up momentum in North America and Europe while OECD Pacific demand showed little change. The rate of growth in Chinese demand has been lowered to around 12 per cent in 3Q and 4Q04 from the 23.9 per cent observed in 2Q of the year. Thus, world oil demand is expected to grow by 2.54m b/d or 3.22 per cent to 81.45m b/d in 3Q04 and by 2.21m b/d or 2.73 per cent to 83.36m b/d in 4Q.

OECD

The OECD countries, which account for roughly 60 per cent of total world oil demand, will contribute less than one-quarter of expected demand growth this year, evidencing the declining trend in energy intensity. Total OECD demand is expected to rise by 600,000 b/d or 1.23 per cent to average 49.30m b/d in 2004.

The lion's share will originate in the North American region with the USA accounting for four fifths of the estimated 530,000 b/d increase.

Despite indications of stronger than usual demand in Western Europe during the last couple of months, year-on-year demand growth is expected at around 200,000 b/d or 1.37 per cent. OECD Pacific consumption is projected to shrink by 140,000 b/d or 1.58 per cent, mainly on lower Japanese and South Korean demand.

The split of total OECD oil requirements by products for the period January-July 2004 shows that inland deliveries of LPG, gasoline and gasoil/diesel grew by 220,000 b/d, 190,000 b/d and 130,000 b/d, respectively, compared to the same period of last year. In contrast, residual fuel oil requirements declined by almost nine per cent or 280,000 b/d during the seven-month period. Fuel oil consumption shrank in all major OECD countries but the decline was more severe in the OECD Pacific countries where demand fell by almost 15 per cent during the first seven months of this year. The restart of Tepco's nuclear power plants early this year meant considerably lower fuel oil use for power generation in Japan. Nonetheless, an accident early in August could delay the restart of more than a dozen nuclear plants.

Developing countries

Oil demand in developing countries is projected to rise 910,000 b/d or 4.5 per cent to average 4.48m b/d for the current year. Almost 50 per cent of the growth will take place in Other Asia underpinned by the strength in demand for transportation fuel in India. Preliminary figures for 1Q and 2Q of this year indicate that India's demand grew by eight per cent and ten per cent respectively.

Solid rates of economic growth and increasing revenue from record high oil prices, along with heavily subsidized energy prices in the Middle East indicate that consumption of petroleum products will increase by close to six per cent this year. In the other two regions, oil demand is projected to rise at a more moderate pace with Latin America showing three per cent growth while Africa's oil demand will increase by less than two per cent.

Other Regions

More than two-fifths of total world oil demand growth in 2004 will take place in the Other regions group with almost 80 per cent of that growth originating in China. Oil demand in this group is projected to rise 1.11m b/d or 11 per cent to 11.27m b/d. China's astonishing growth rates of 16 per cent and 24 per cent seen in 1Q and 2Q of this year are expected to moderate in the remaining two quarters.

The increase in Chinese domestic consumption was met by a surge in oil and product imports which rose to 2.83m b/d and further to 3.29m b/d in the first two quarters. Production and trade figures show that apparent demand in the FSU dropped in 1Q by almost nine per cent y-o-y but rose 14 per cent in 2Q.

The drop in FSU exports and increased production over the last two months have resulted in an upward revision of apparent demand figures for the remainder of the year. Estimates call for apparent demand to come close to 4m b/d in 2004 with a growth rate of 4.3 per cent or 160,000 b/d. Oil demand in other Eastern European countries will rise 80,000 b/d to 9.41m b/d.

Forecast for 2005

Due to lower than anticipated global economic growth (currently 4.14 per cent versus the previous 4.29 per cent) and the possible effect that price levels could have on consumption, oil demand growth in 2005 has been revised down by 130,000 b/d to 1.61m b/d. Thus, total world oil demand next year is projected to average 83.41m b/d, which implies a growth rate of 1.97 per cent for the year.

In the case of China, which will account for one third of total world oil demand this year and more than one quarter in 2005, significantly lower preliminary import figures for July and August point to a slowdown in that country's apparent demand for the remainder of the year, a trend that might extend into 2005. Government measures to cool the economy are now more likely to occur as Premier Hu Jintao, one of the strongest advocates of these measures, concentrates more power after the resignation of former President Jiang Zemin as the Chairman of the Central Military Commission (CMC). If such a slowdown does take place, this might significantly eat into the country's oil consumption.

Furthermore, the Chinese government is pushing to bring oil-saving projects in hydroelectricity, nuclear and coal-fired generation capacity to completion ahead of schedule which could further slow oil demand growth.

Demand is projected to rise during every quarter of 2005, with the fourth quarter oil demand increment of 1.93m b/d or 2.31 per cent leading the gains, followed by rises of 1.74m b/d, 1.6m b/d and 1.18m b/d in 3Q, 1Q and 2Q, respectively.

On a regional basis, developing countries will account for almost 50 per cent of the estimated 1.61m b/d total for world oil demand growth, followed by the Other regions group with just over a third, and then the OECD countries with 16 per cent.

October

Revision to historical figures (2002-03)

World oil demand data for 2003 experienced another minor upward revision of 70,000 b/d which leaves the new yearly average at 79.24m b/d. The adjustments were widespread among all regions with Western Europe and Other Asia revised up by 40,000 b/d each, while the FSU revision was 50,000 b/d.

In contrast, two developing country regions, namely Latin America and the Middle East, were revised down by 10,000 b/d and 50,000 b/d, respectively.

Forecast for 2004

World

The world oil demand estimate for the current year has been slightly adjusted downwards to account for the slowdown in Chinese consumption in the second half of the year, as well as expected lower apparent demand in the FSU due to the slower pace of economic activity.

Other minor adjustments were made to developing countries' estimates on the back of revisions to regional GDP figures. Following an adjustment of approximately 120,000 b/d for the year, oil demand is estimated to grow by 2.5m b/d while the yearly average is assessed at 81.74m b/d.

The most up-to-date figures for the first two quarters of the year indicate that demand grew slightly higher than previ-

ously anticipated. Demand data from Western Europe, Other Asia and Other Europe came out stronger while the FSU and Middle Eastern figures were revised down. 1Q demand growth is estimated at 1.76m b/d which translates into a 2.2 per cent rise with respect to 1Q03. China and North America (mainly the USA) accounted for three quarters of the growth in demand, while developing countries added 800,000 b/d, only to offset the pronounced contractions in OECD Pacific and FSU demand.

The exceptionally high growth of 2Q originates from the strength in consumption in almost all regions with the sole exception of the OECD Pacific. China, North America and Other Asia accounted for 70 per cent of the total 3.9m b/d estimated growth. The forecasts for the last two quarters of the year have been marginally revised downward to account for the further deceleration of the pace of apparent demand growth in China.

OECD

Total OECD demand, which remains unchanged from the last report, is projected to rise 600,000 b/d to average 49.34m b/d, representing a year-on-year gain of 1.23 per cent. Close to 90 per cent of the growth will take place in the North American region where demand is expected to rise 530,000 b/d, or 2.16 per cent.

Western Europe is expected to contribute 210,000 b/d, while OECD Pacific demand will shrink by 140,000 b/d or 1.59 per cent. Preliminary data for July and August point to further growth in oil product deliveries in the USA and Canada although the rate of growth has moderated from the previous quarter.

In Western Europe, demand in France and Italy contracted on average by 6.3 per cent and 1.0 per cent respectively during July and August, although the rise in product deliveries in the UK and Germany partially arrested the decline.

Japanese demand is seen to have picked up in July and August, rising an average of 250,000 b/d in the two months following contractions of 4.9 per cent and 4.2 per cent in the first two quarters of the year. Power producers had to switch to burning crude and fuel oil following the string of outages and shutdowns at several Tepco and Kepco nuclear power plants.

The breakdown of total OECD oil requirements by product for the period January-August 2004 shows that inland deliveries of gasoil/diesel, LPG and gasoline grew by 190,000 b/d, 180,000 b/d and 150,000 b/d with respect to the same period last year. In contrast, residual fuel oil requirements continued to decline, shrinking by almost 10 per cent or 300,000 b/d over the eight-month period.

Fuel oil consumption shrank in all major OECD countries but the decline was more severe in OECD Pacific, where demand fell by more than 12 per cent, followed by a drop of 9.2 per cent in North America and 7.6 per cent in Western Europe during the first eight months of this year.

Developing countries

Estimates for regional oil demand growth in developing countries have stayed relatively unchanged from last month with an aggregated growth of 920,000 b/d or 4.5 per cent to average 21.23m b/d for the year. Almost 90 per cent of the growth will concentrate in Other Asia and the Middle East, with Latin America and Africa accounting for the remaining 20 per cent. The income effect arising from record high oil prices, solid rates of economic growth — revised upwards to almost five per cent for the year — and the heavily subsidized energy prices in the Middle East point to a growth in petroleum product consumption of close to six per cent for the year. Very preliminary figures for July and August indicate that India's consumption has slowed from the rapid pace seen in the first half of the year. Nevertheless, there is evidence of healthier consumption in Indonesia, Taiwan, Thailand and Singapore.

Other regions

Considerable revisions were made to apparent demand in Other regions to account for the slowdown in the pace of Chinese consumption following government measures introduced in April this year to cool down the runaway economy. Apparent demand growth estimates for the year were adjusted to reflect more moderate rates of growth in 3Q and 4Q of 9.3 per cent and 7.7 per cent, respectively, compared to 15.6 per cent and 23.9 per cent in the first two quarters. The Chinese government introduced a number of administrative measures during 2Q in an attempt to engineer a soft landing of the economy. The flows of bank loans to overheated sectors of the economy such as construction, steel and cement have been targeted by the government. Judging by the 9.1 per cent growth in economic activity in 3Q, it seems that these measures are yet to have the desired effect. Lately the Chinese government has made use of monetary policy by raising interest rates by 27 percentage points in a new attempt to slow down the economy. Preliminary apparent demand figures for July for China, derived from production and trade data, shows demand at 6.33m b/d, down from 6.8m b/d in 2Q of 2004, but higher than the 6.26m b/d seen in 1Q of the year. Apparent consumption estimates in the FSU were also revised down to account for the lower GDP figures.

Forecast for 2005

World oil demand growth estimates for next year have once again been adjusted to account for the lower rate of global economic growth. The latest estimate of global GDP growth has been lowered by 0.11 per cent to 4.03 per cent from the previous 4.14 per cent. On a regional basis, rates of economic growth have been reduced across the board. The OECD Pacific GDP growth rate for next year is now estimated at 2.06 per cent, down 0.38 per cent from last month, while OECD Europe economies are estimated to grow by 2.31 per cent, down 0.12 per cent from the October estimate. Non-OECD Asia — an engine of oil demand growth — as well as Eastern Europe, Africa and the FSU have seen GDP growth rates revised down 0.21 per cent, 0.31 per cent, 0.05 per cent and 0.01 per cent, respectively. China remains the wild card for oil demand growth next year. It is too early to assess the effectiveness of the recent rise in interest rates on administrative measures implemented by the central government early this year to slow down the economy. It is questionable how effective the central government's economic policy might be, especially when it is at odds with that of local governments. While the central government seeks to cool down the economy, regional governments are more interested in creating jobs and increasing investment. Our forecast for next year assumes a more moderate GDP growth rate for China of 7.6 per cent versus the 9.1

per cent estimated for this year. Chinese demand is therefore expected to rise by 410,000 b/d which translates into slightly more than one quarter of total world demand growth in 2005. As for total world oil demand growth, it is now forecast at 1.49m b/d which translates into a year-on-year change of 1.82 per cent.

World oil supply

September

Non-OPEC

Forecast for 2004

The 2004 non-OPEC supply has been revised down to 49.95m b/d. The quarterly figures stand at 49.61m b/d, 49.71m b/d, 49.66m b/d and 50.81m b/d, respectively. The downward revisions were mainly due to the impact of Hurricane Ivan on production in the Gulf of Mexico and underperformance in the North Sea. The yearly average increase stands at 1.37m b/d, compared with the downwardly revised 2003 figure.

Forecast for 2005

Non-OPEC supply for 2005 is forecast to rise 1.21m b/d. North America is expected to witness a rise of 160,000 b/d, mainly from a 80,000 b/d increase in Canada, which was partially offset by the 90,000 b/d decline expected in both OECD Pacific and Western Europe, where the UK is forecast to decline by 80,000 b/d. Total OECD is expected to increase to 21.48m b/d. Total developing countries are expected to rise 570,000 b/d, mainly contributed by Latin America, where Brazil gained 120,000 b/d and Trinidad added 50,000 b/d, along with Africa where Angola, Sudan and Chad increased 190,000 b/d, 60,000 b/d and 40,000 b/d, respectively. The FSU is expected to be the major contributor to the rise, mainly on Russia's 470,000 b/d and 60,000 b/d increases from Kazakhstan and Azerbaijan. Quarterly figures are redistributed at 50.85m b/d, 50.91m b/d, 50.87m b/d and 52.02m b/d, respectively. The yearly average is forecast at 51.16m b/d.

The FSU's net oil exports for 2005 are expected at 7.69m b/d, an increase of 430,000 b/d over the 2004 figure of 7.26m b/d. Some minor revisions were also made to 2002 and 2003 figures in both directions (see **Table D**).

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

	1Q	2Q	3Q	4Q	Year
2001	4.30	4.71	4.89	4.47	4.60
2002	5.14	5.84	5.85	5.49	5.58
2003	5.87	6.75	6.72	6.61	6.49
2004[1]	7.18	7.30	7.39	7.42	7.32
2005[1]	7.39	7.79	7.90	7.95	7.76

1. Forecast.

OPEC NGLs and non-conventional oils

The OPEC NGL+NCO figure for 2005 remains unchanged at 4.14m b/d, an increase of 190,000 b/d over the 2004 figure. Figures for 2001–2003 stayed the same at 3.58m b/d, 3.62m b/d and 3.71m b/d, respectively, compared with the figures in the last report.

OPEC NGL production, 2001–05

	m b/d
2001	**3.58**
2002	**3.62**
2003	**3.71**
1Q04	3.88
2Q04	3.89
3Q04	3.97
4Q04	4.04
2004	**3.95**
Change 2004/2003	0.24
2005	**4.14**
Change 2005/2004	0.19

OPEC crude oil production

Available secondary sources indicate that OPEC output for September was 30.12m b/d, up 430,000 b/d over the revised August figure. **Table E** shows OPEC production as reported by selected secondary sources.

October

Non-OPEC

Forecast for 2004

Non-OPEC supply for 2004 has been revised down to 49.91m b/d, with a quarterly distribution of 49.63m b/d, 49.72m b/d, 49.49m b/d and 50.79m b/d, respectively.

The downward revisions were mainly due to the continuing impact of Hurricane Ivan on Gulf of Mexico production and the underperformance of the Norwegian sector of the North Sea. The yearly average increase stands at 1.32m b/d, compared with the 2003 figure.

Forecast for 2005

Non-OPEC supply for 2005 is forecast to increase 1.21m b/d. North America should witness a rise of 160,000 b/d, mainly from 80,000 b/d growth in Canada, partially offset by the expected 90,000 b/d decline in both OECD Pacific and Western Europe, where the UK is forecast to dip 80,000 b/d.

Total OECD supply is expected to increase to 21.46m b/d. Total developing countries' supply is forecast to rise 570,000 b/d, mainly contributed by Latin America, with Brazil adding 120,000 b/d and Trinidad 50,000 b/d, as well as Africa where Angola, Sudan and Chad should see increases of 190,000 b/d, 60,000 b/d and 40,000 b/d, respectively.

The FSU is expected to be the major contributor to the rise, mainly from Russia's 470,000 b/d, while Kazakhstan and Azerbaijan are expected to add 60,000 b/d each. Quarterly figures are redistributed at 50.86m b/d, 50.91m b/d, 50.69m b/d and 52.02m b/d, respectively. The yearly average is forecast at 51.12m b/d.

The FSU's net oil exports for 2005 are expected at 7.76m b/d, an increase of 440,000 b/d over the 2004 figure of 7.32m b/d. Some minor upward revisions were also made to the 2003 figure (see **Table D**).

OPEC NGLs and non-conventional oils

The 2005 forecast for OPEC NGL+ NCO remains unchanged at 4.14m b/d, an increase of 190,000 b/d over the 2004 figure. Figures for 2001–2003 were also unchanged at 3.58m b/d, 3.62m b/d and 3.71m b/d, respectively, compared with the figures in the last report.

OPEC NGL production, 2001–05

	m b/d
2001	**3.58**
2002	**3.62**
2003	**3.71**
1Q04	3.88
2Q04	3.89
3Q04	3.97
4Q04	4.04
2004	**3.95**
Change 2004/2003	0.24
2005	**4.14**
Change 2005/2004	0.19

OPEC crude oil production

Available secondary sources indicate that OPEC's output for October was 30.23m b/d, 80,000 b/d over the revised September figure. **Table E** shows OPEC production as reported by selected secondary sources.

Rig count

September

Non-OPEC

Rig activity was lower in September compared with the August figures. North America declined by 73 rigs, mainly in Canada, while Western Europe lost two rigs to drop to 58. Rig activity in developing countries increased, mainly in Africa, adding three rigs to stand at 388.

OPEC

OPEC's rig count was 262 in September, a rise of five rigs compared with the August figure. The gain in rig activity was mainly contributed by Kuwait and Indonesia.

October

Non-OPEC

Non-OPEC rig activity was higher in October compared with the September figure. North America gained 94 rigs, mainly in Canada, while Western Europe added seven rigs to total 65. Rig activity in DCs declined three rigs to 385, mainly in Africa.

OPEC

OPEC's rig count was 246 in October, a decline of 16 compared with the September figure. The loss in rig activity was mainly contributed by Indonesia.

Stock movements

September

USA

US commercial oil stocks showed a steeper draw for the second consecutive month in 3Q of 2004, falling 16.1m b to stand at 962.4m b during the period September 3–October 1, 2004. Most of the draw occurred on crude oil stocks which dropped by 11.7m b, while product inventories witnessed much lower declines. Total commercial oil stocks are 11.2m b or about one per cent below the level registered a year ago.

Crude oil stocks have continued to head south since July, reflecting a sustainable decline in US crude oil output due to persistent problems in Alaska and in the Gulf of Mexico. Hurricane Ivan made things worse in September, pushing crude oil production below 5m b/d, a level not seen since 1954. Declining imports due to delayed arrivals of shipments because of Hurricane Ivan, which averaged 9.60m b/d in September compared with 10.29m b/d in the previous month, were partly responsible for the draw on crude oil stocks. At the end of September, crude oil stocks stood at 274.0m b which is 12.7m b or 4.4 per cent below last year's level, and the lowest level since January 2004. The damage caused by Hurricane Ivan to oil production facilities in the Gulf of Mexico, where about 500,000 b/d remains shut in,

Table E: OPEC crude oil production, based on secondary sources *1,000 b/d*

	2002	2003	2Q04	Sep 04*	3Q04*	Oct 04*	Oct/ Sep
Algeria	864	1,134	1,199	1,264	1,256	1,273	9
Indonesia	1,120	1,027	969	959	958	956	–3
IR Iran	3,416	3,757	3,903	3,954	3,944	3,945	–9
Iraq	2,000	1,323	2,009	2,249	2,014	2,224	–26
Kuwait	1,885	2,173	2,292	2,426	2,397	2,443	17
SP Libyan AJ	1,314	1,422	1,499	1,585	1,575	1,600	15
Nigeria	1,969	2,131	2,342	2,362	2,383	2,349	–14
Qatar	648	746	772	800	798	800	0
Saudi Arabia	7,535	8,709	8,637	9,454	9,404	9,508	54
UAE	1,988	2,243	2,243	2,492	2,460	2,518	25
Venezuela	2,586	2,291	2,547	2,606	2,603	2,615	9
Total OPEC	**25,323**	**26,955**	**28,412**	**30,151**	**29,792**	**30,228**	**78**

*   Not all sources available.
Totals may not add, due to independent rounding.

will not help US crude oil stocks to recover any time soon, as it is expected to take a few months before output fully recovers. Gasoline inventories followed the same pattern as crude oil stocks, showing a steady draw since July despite the decline in implied demand. Gasoline stocks lost 4.7m b to stand at 199.4m b which is 900,000 b or 0.50 per cent less than that witnessed last year. Lower gasoline production due to the fall in refinery runs because of hurricanes as well as lower imports were the main reason behind this draw on gasoline stocks. Higher implied demand and lower production justified the draw of 3.2m b to 123.4m b on distillate fuel stocks which registered a y-o-y deficit of 7.9m b or six per cent. The only exception was jet fuel which registered a build of 1.6m b to stand at 41.0m b on weaker implied demand, resulting in a y-o-y surplus of 900,000 b or about two per cent.

During the same period, the Strategic Petroleum Reserve (SPR) did not reverse its long uptrend although the US administration decided after Hurricane Ivan hit the US Gulf Coast to release some SPR crude under a loan programme. The SPR rose by 1.2m b to stand at 670.2m b which is a y-o-y surplus of 45.8m b or about seven per cent. This trend is expected to change as of next month and oil companies which have signed contracts start to lift their loan cargoes.

During the week ending October 8, total US commercial oil stocks displayed a minor draw of 800,000 b to 961.6m b compared with the previous week, while they were 11.3m b or about one per cent lower than the level registered at the same time last year. The most noticeable draw was on distillates which fell by 2.5m b to 120.9m b compared with last week. This decline was larger than the market expected and could be attributed to strong implied demand which rose by 4.25 per cent over the previous week as a sign that consumers started to fill their tanks ahead of the winter season. Other main product stocks moved in different directions, where gasoline registered a build of 1.2m b to 200.6m b which is 3.5m b higher than the level observed a year ago. This increase came on the back of higher imports which rose 120,000 b/d to 1.03m b/d, as well as on stagnant implied demand which remained unchanged compared with the previous week. Crude oil stocks showed a considerable build of 4.20m b to 278.2m b, narrowing the y-o-y deficit to 10.3m b or 3.5 per cent. Higher oil production, especially from Alaska, and weaker implied demand contributed to this build. Lower refinery runs which declined by about two per cent also justified this build as some refineries have not returned to operation yet after the forced shutdown caused by Hurricane Ivan.

Western Europe

At the end of September 2004, total oil stocks in the EU-16 (Europe plus Norway) lost the previous month's gain, falling by 4.0m b to 1,082.6m b. This level makes the y-o-y deficit 2.7m b or just 0.3 per cent. Product inventories contributed solely to this draw, while crude oil stocks rose slightly.

After four months of draws, crude oil stocks in EU-16 changed their trend, showing a build of 2.1m b to 462.5m b, keeping the y-o-y surplus at 6.4m b or more than one per cent. Higher arrivals, especially from the Middle East and Russia, as well as increasing oil production from North Sea fields, ended the summer maintenance shutdowns. All main product stocks showed draws except fuel oil which continued to rise, adding 1.4m b to stand at 112.6m b. The bulk of the draws on products occurred on middle distillates where 6.2m b were lost, pushing them to 348.0m b or 12.4 below last year's level. Strong demand, especially from German household consumers, helped to reduce distillates. Lower supplies also contributed to this draw. Gasoline stocks showed a marginal draw of 800,000 b to 135.3m b, registering a y-o-y shortage of 1.2m b or about one per cent.

Japan

At the end of August, Japanese commercial oil stocks reversed the upward trend observed last month, decreasing by 9.8m b at a rate of 320,000 b/d to 169.2m b. This was mainly due to crude oil stocks, which decreased 16.0m b to 102.7m b, while total major products abated the draw with a build of 6.2m b to 66.5m b. Total commercial oil stocks remained at 32.2m b or 16.0m b below last year's level. The strong draw on crude oil stocks came on the back of increasing crude throughputs which moved up by 8.6 per cent from the July level or 10.1 per cent from a year earlier, to represent a rate of 90.2 per cent of refinery capacity. The decline of 8.4 per cent in crude imports also contributed to the strong draw on oil stocks. However, crude imports were still 1.6 per cent above a year ago at this time. On the product side, concerns were raised about a kerosene shortage when demand peaks in winter, as stocks were 25.3 per cent lower than a year earlier and supplies were also expected to be tight overseas, including the USA and Europe. Kerosene stock levels for the month of August were the lowest since 1972. The level is improving on a monthly basis as kerosene stocks showed a build of 27.5 per cent in August compared to the previous month, but it will be a big problem in winter if inventories continue to increase at moderate levels. Gasoline stocks dropped a slight 2.6 per cent to 11.5m b due to the 6.4 per cent rise in wholesale gasoline sales from the July level of 5.2 per cent from a year earlier. This was the highest level for any month on record as good weather encouraged more drivers to flood onto the roads during the summer.

October

USA

US commercial oil stocks reversed their downward trend, showing a slight contra-seasonal build of 1.3m b to 963.7m b in the first month of 4Q, at a time when oil stocks typically see draws due to high demand, especially for heating fuels. During the period October 1–29, 2004, all stocks witnessed some increases except for distillate fuel and jet fuel, as the former experienced a significant draw while the latter fell marginally.

The resumption of import flows interrupted by Hurricane Ivan averaged 10.29m b/d during the period October 1–29 compared with the previous month's average of 9.60m b/d. This, together with the ongoing improvement in Gulf of Mexico production, helped crude oil stocks to regain all the previous month's losses, lifting them to 289.7m b for a build of 15.7m b, which was about six per cent higher than in the previous period but still about two per cent below the year-ago level. This upward trend is expected to continue at least in November when the lost Gulf of Mexico barrels will gradually return to the

Table F: US onland commercial petroleum stocks[1] *m b*

	Sept 3, 04	Oct 1, 04	Oct 29, 04	Change Oct/Sep	Oct 29, 03	Nov 5, 04[2]
Crude oil (excl SPR)	285.7	274.0	289.7	15.7	293.9	291.5
Gasoline	204.1	199.4	201.7	2.3	192.9	201.3
Distillate fuel	126.6	123.4	115.7	–7.7	132.0	115.6
Residual fuel oil	34.7	33.5	35.6	2.1	33.6	36.8
Jet fuel	39.4	41.0	40.2	–0.8	40.2	39.8
Total	**978.5**	**962.4**	**963.7**	**1.3**	**971.0**	**966.7**
SPR	669.0	670.2	669.7	–0.5	630.2	670.3

1. At end of month, unless otherwise stated.
2. Latest available data at time of publication.
Source: US/DoE-EIA.

Table G: Western Europe onland commercial petroleum stocks[1] *m b*

	Aug 04	Sep 04	Oct 04	Change Oct/Sep 04	Oct 03
Crude oil	460.4	468.0	465.5	–2.5	463.5
Mogas	136.1	135.1	133.5	–1.5	135.6
Naphtha	24.6	24.2	28.6	4.4	22.9
Middle distillates	354.2	354.0	347.9	–6.1	341.5
Fuel oils	111.2	114.5	115.1	0.5	108.2
Total products	**626.2**	**627.8**	**625.0**	**–2.8**	**608.2**
Overall total	**1,086.6**	**1,095.8**	**1,090.6**	**–5.2**	**1,071.7**

1. At end of month, and includes Eur-16.
Source: Argus, Euroilstock.

Table H: Japan's commercial oil stocks[1] *m b*

	Jul 04	Aug 04	Sep 04	Change Sep/Aug 04	Sep 03
Crude oil	118.7	102.7	112.5	9.8	122.6
Gasoline	11.8	11.5	12.8	1.3	12.9
Middle distillates	30.4	35.8	39.8	4.0	48.0
Residual fuel oil	18.1	19.2	18.3	–0.9	20.3
Total products	**60.3**	**66.5**	**70.9**	**4.4**	**81.2**
Overall total[2]	**179.0**	**169.2**	**183.4**	**14.2**	**203.8**

1. At end of month.
2. Includes crude oil and main products only.
Source: MITI, Japan.

market and import flows remain at very high levels to meet healthy demand, especially for light and sweet grades. Gasoline inventories rose 2.3m b to stand at 201.7m b which was 8.8m b or about five per cent above the same period last year. This stock build came on the back of slower implied demand which averaged 9.08m b/d during the current period compared with 9.21m b/d in the previous one. Increasing gasoline production added to this build as the average output hit 8.63m b/d for an increase of 180,000 b/d over the previous period.

Distillates were the exception to the upward stock trend. Even with increased production, which on average rose from 3.66m b/d to 3.74m b/d, distillate stocks fell considerably to 115.7m b, a draw of 7.7m b or about seven per cent below the previous month and 12 per cent lower than a year earlier. The main reason behind this draw is the improvement in implied demand which on average rose from 4.12m b/d to 4.21m b/d in the current period.

During the same time, the SPR showed a stock draw as expected in the previous report to stand at 669.7m b, but not a significant one as only 500,000 b were released under a loan programme.

Western Europe

After an upward revision of the September figures, total oil stocks in Eur-16 registered a draw of 5.2m b to 1,090.6m b in October which was 18.9m b or about two per cent higher than a year ago. The main contributor to this decline was middle distillate stocks and to a lesser degree crude oil stocks.

After a significant build in September, crude oil stocks lost part of their gains, declining by 2.5m b to 465.5m b which was 2m b above last year's level. Increasing freight rates discouraged refiners from importing expensive materials even with the slide in oil prices. On the product side, the stock draw was deeper especially on middle distillates which dropped by 6.1m b to stand at 347.9m b, still 6.4m b higher than last year's level. Strong demand, particularly from German consumers who are rushing to fill their tanks ahead of winter, as well as slower refinery runs, which averaged 12.21m b/d or 90,000 b/d below last month's average, were the reasons behind the draw on distillate stocks. Gasoline stocks also moved down on the back of lower production as higher naphtha prices determined reforming margins. Gasoline stocks fell by 1.5m b to stand at 133.5m b, leaving a y-o-y deficit of 2m b. Fuel oil and naphtha were the exceptional products, as both witnessed increases, with fuel oil rising 500,000 b to 115.1m b and naphtha gaining 4.4m b to 28.6m b, respectively. Steady import flows and lower demand were behind the builds in both products.

Japan

At the end of September, total commercial oil stocks in Japan stood at 183.4m b, up 14.2m b or about eight per cent from the level registered in August. Crude stocks were about 20.40m b or ten per cent below last year's level. Almost 70 per cent of the build occurred on crude oil stocks while product inventories, especially middle distillates, contributed the remaining 30 per cent.

Lower refinery runs, which fell by about 14 per cent, and higher crude oil imports, which rose by about five per cent in September from the previous month, were the main reason behind the surge in crude oil stocks which moved up 9.8m b or about eight per cent higher than the month of August, lifting them to 112.5m b which was 10.10m b or about eight per cent below last year's figure. Middle distillates registered a significant build, adding 4.0m b or about ten per cent to stand at 39.8m b. This stock build could be attributed to lower implied demand due to high prices, while decreasing production prevented distillate stocks from accumulating extra barrels. On the back of stagnant gasoline implied demand, gasoline stocks showed a moderate increase of 1.3m b to 12.8m b, erasing almost the entire y-o-y deficit which stood at just 100,000 b. Fuel oil stocks were the only product whose inventories showed a drawdown, declining by 900,000 b to 18.3m b, which widened the y-o-y deficit to 2m b.

Balance of supply/demand

September

Table I for 2004 shows a significant downward revision to total non-OPEC supply of 120,000 b/d, now at 53.90m b/d, and a significant upward revision to world oil demand of 220,000 b/d to 81.79m b/d, resulting in an estimated annual difference of around 27.90m b/d. The quarterly distribution now stands at 28.03m b/d, 27.23m b/d, 27.81m b/d and 28.51m b/d, respectively. The balance for 1Q04 was revised downward by 40,000 b/d to stand at 160,000 b/d, 2Q revised significantly lower by 310,000 b/d to 1.19m b/d, and according to initial calculations, the balance for 3Q stands at 1.97m b/d.

Table I for 2005 shows world oil demand expected at 83.41m b/d while total non-OPEC supply should reach 55.30m b/d. This has resulted in an annual difference of around 28.11m b/d, with a quarterly distribution of 28.19m b/d, 27.00m b/d, 28.16m b/d and 29.08m b/d, respectively.

October

Table I for 2004 shows minor downward revisions to total non-OPEC supply of 40,000 b/d to now stand at 53.85m b/d, while world oil demand has been lowered 50,000 b/d to 81.74m b/d, resulting in an estimated annual difference of around 27.89m b/d. The quarterly distribution stands at 28.08m b/d, 27.26m b/d, 27.90m b/d and 28.31m b/d, respectively. The quarterly balance was revised downward by 50,000 b/d, 40,000 b/d and 80,000 b/d, respectively, to now stand at 110,000 b/d, 1.16m b/d and 1.89m b/d.

Table I for 2005 shows world oil demand expected at 83.23m b/d and total non-OPEC supply expected at 55.26m b/d. This has resulted in an annual difference of around 27.97m b/d, with a quarterly distribution of 28.10m b/d, 26.95m b/d, 28.13m b/d and 28.70m b/d, respectively.

Table I: World crude oil demand/supply balance

m b/d

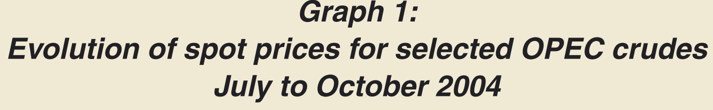
	2000	2001	2002	2003	1Q04	2Q04	3Q04	4Q04	2004	1Q05	2Q05	3Q05	4Q05	2005
World demand														
OECD	47.9	47.9	48.0	48.7	50.1	48.2	48.8	50.2	49.3	50.2	48.2	49.1	50.7	49.5
North America	24.1	24.0	24.1	24.6	25.0	24.8	25.2	25.3	25.1	25.2	25.1	25.3	25.7	25.3
Western Europe	15.1	15.3	15.2	15.4	15.7	15.3	15.6	15.8	15.6	15.8	15.3	15.6	15.9	15.7
Pacific	8.7	8.7	8.6	8.8	9.4	8.0	8.1	9.1	8.6	9.2	7.8	8.1	9.1	8.5
Developing countries	19.3	19.6	20.1	20.3	20.7	21.2	21.3	21.7	21.2	21.4	21.9	22.2	22.5	22.0
FSU	3.8	3.9	3.7	3.8	3.6	3.8	3.9	4.2	3.9	4.0	3.9	4.0	4.3	4.0
Other Europe	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0	0.9	1.0	1.0	1.0
China	4.7	4.7	5.0	5.6	6.3	6.8	6.3	6.0	6.3	6.6	7.2	6.8	6.5	6.7
(a) Total world demand	**76.4**	**77.0**	**77.7**	**79.2**	**81.6**	**80.9**	**81.4**	**83.1**	**81.7**	**83.0**	**82.0**	**83.0**	**84.9**	**83.2**
Non-OPEC supply														
OECD	21.9	21.8	21.9	21.6	21.8	21.5	20.8	21.6	21.4	21.8	21.6	20.8	21.6	21.5
North America	14.2	14.3	14.5	14.6	14.8	14.7	14.4	14.9	14.7	15.0	14.9	14.5	15.1	14.9
Western Europe	6.8	6.7	6.6	6.4	6.4	6.2	5.8	6.1	6.1	6.3	6.2	5.7	6.0	6.0
Pacific	0.8	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5
Developing countries	10.9	10.9	11.2	11.3	11.6	11.7	11.9	12.1	11.8	12.2	12.2	12.4	12.6	12.4
FSU	7.9	8.5	9.3	10.3	10.8	11.1	11.3	11.6	11.2	11.4	11.6	11.9	12.2	11.8
Other Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
China	3.2	3.3	3.4	3.4	3.4	3.5	3.5	3.4	3.5	3.4	3.5	3.5	3.4	3.5
Processing gains	1.7	1.7	1.7	1.8	1.9	1.8	1.8	1.9	1.8	1.9	1.8	1.8	1.9	1.8
Total non-OPEC supply	**45.7**	**46.4**	**47.7**	**48.6**	**49.6**	**49.7**	**49.5**	**50.8**	**49.9**	**50.9**	**50.9**	**50.7**	**52.0**	**51.1**
OPEC NGLS and non-conventionals	3.3	3.6	3.6	3.7	3.9	3.9	4.0	4.0	3.9	4.1	4.1	4.2	4.2	4.1
(b) Total non-OPEC supply and OPEC NGLS	**49.0**	**50.0**	**51.4**	**52.3**	**53.5**	**53.6**	**53.5**	**54.8**	**53.9**	**54.9**	**55.0**	**54.9**	**56.2**	**55.3**
OPEC crude supply and balance														
OPEC crude oil production[1]	28.0	27.2	25.3	27.0	28.2	28.4	29.8							
Total supply	77.0	77.2	76.7	79.3	81.7	82.0	83.3							
Balance[2]	0.6	0.2	–1.0	0.0	0.1	1.2	1.9							
Stocks														
Closing stock level (outside FCPEs) *m b*														
OECD onland commercial	2530	2628	2476	2522	2467	2546	2597							
OECD SPR	1269	1284	1343	1406	1418	1424	1431							
OECD total	3799	3912	3819	3928	3885	3970	4028							
Oil-on-water	877	831	816	885	906	906	*na*							
Days of forward consumption in OECD														
Commercial onland stocks	53	55	51	51	51	52	52							
SPR	26	27	28	28	29	29	28							
Total	**79**	**82**	**78**	**80**	**81**	**81**	**80**							
Memo items														
FSU net exports	4.1	4.6	5.6	6.5	7.2	7.3	7.4	7.4	7.3	7.4	7.8	7.9	8.0	7.8
[(a) — (b)]	**27.4**	**27.1**	**26.3**	**26.9**	**28.1**	**27.3**	**27.9**	**28.3**	**27.9**	**28.1**	**26.9**	**28.1**	**28.7**	**28.0**

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

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

***Table I** 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 80, while **Graphs One and Two** (on pages 79 and 81) show the evolution on a weekly basis. **Tables Three to Eight**, and the corresponding graphs on pages 82–87, 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).*



Graph 1:
Evolution of spot prices for selected OPEC crudes
July to October 2004

$/barrel

Saharan Blend
Minas
Iran Light
Kuwait Export
Brega
Bonny Light
Arab Light
Arab Heavy
Dubai
Tia Juana Light
OPEC Basket

54
52
50
48
46
44
42
40
38
36
34
32
30

1 2 3 4 1 2 3 4 5 1 2 3 4 1 2 3 4

July August September October

Table 1: OPEC spot crude oil prices, 2003–04 *($/b)*

Member Country/ Crude (API°)	Feb	Mar	April	May	Jun	July	Aug	2004 September					October				
	4Wav	5Wav	4Wav	4Wav	5Wav	4Wav	5Wav	1W	2W	3W	4W	4Wav	1W	2W	3W	4W	4Wav
Algeria																	
Saharan Blend *(44.1)*	30.57	33.46	33.71	37.96	35.14	38.16	42.67	41.38	42.08	44.98	47.25	43.92	48.42	51.30	50.76	51.42	50.48
Indonesia																	
Minas *(33.9)*	29.38	32.21	32.19	37.18	36.75	36.28	41.79	43.12	42.90	44.11	46.94	44.27	47.77	51.27	52.31	47.36	49.68
IR Iran																	
Light *(33.9)*	28.00	30.78	30.41	34.97	32.67	35.42	38.40	37.90	36.73	39.26	41.17	38.77	42.39	43.84	43.50	44.61	43.59
Iraq																	
Kirkuk *(36.1)*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kuwait																	
Export *(31.4)*	28.61	30.97	31.75	34.78	33.83	34.98	38.44	35.41	35.16	35.91	38.00	36.12	38.64	38.89	38.89	38.83	38.81
SP Libyan AJ																	
Brega *(40.4)*	30.90	33.90	33.82	37.96	35.46	38.08	43.07	40.82	42.33	45.45	47.55	44.04	47.55	51.08	50.47	51.44	50.14
Nigeria																	
Bonny Light *(36.7)*	30.47	33.34	33.74	37.87	35.60	38.08	42.55	41.29	41.73	44.44	46.76	43.56	48.00	50.35	50.14	51.14	49.91
Saudi Arabia																	
Light *(34.2)*	29.18	31.62	32.48	35.63	34.70	35.55	38.93	35.87	35.62	36.36	38.45	36.58	39.09	38.99	38.99	38.93	39.00
Heavy *(28.0)*	26.93	29.42	30.31	33.07	32.00	32.75	35.41	31.67	31.42	32.16	34.25	32.38	34.89	33.44	33.44	33.38	33.79
UAE																	
Dubai *(32.5)*	28.49	30.77	31.69	34.65	33.58	34.70	38.22	34.96	34.57	35.28	37.26	35.52	37.80	37.72	37.54	37.38	37.61
Venezuela																	
Tia Juana Light[1] *(32.4)*	28.17	29.88	29.88	33.63	31.67	33.81	36.86	34.81	35.32	38.52	40.26	37.23	41.89	43.77	44.32	44.20	43.55
OPEC Basket[2]	***29.56***	***32.05***	***32.35***	***36.27***	***34.61***	***36.29***	***40.27***	***38.60***	***38.80***	***40.94***	***43.11***	***40.36***	***44.08***	***45.86***	***46.04***	***45.51***	***45.37***

Table 2: Selected non-OPEC spot crude oil prices, 2003–04 *($/b)*

Country/ Crude (API°)	Feb	Mar	April	May	Jun	July	Aug	2004 September					October				
	4Wav	5Wav	4Wav	4Wav	5Wav	4Wav	5Wav	1W	2W	3W	4W	4Wav	1W	2W	3W	4W	4Wav
Gulf Area																	
Oman Blend *(34.0)*	28.67	31.10	31.71	34.78	33.92	35.10	38.49	35.67	35.56	36.34	38.54	36.53	39.28	39.86	40.03	40.07	39.81
Mediterranean																	
Suez Mix *(Egypt, 33.0)*	25.42	28.11	28.40	33.00	30.56	33.21	36.75	34.87	35.61	37.45	37.80	36.43	37.40	39.85	39.84	41.15	39.56
North Sea																	
Brent *(UK, 38.0)*	30.65	33.70	33.23	37.71	35.21	38.33	42.87	40.77	41.53	44.65	46.75	43.43	47.15	50.68	50.07	51.04	49.74
Ekofisk *(Norway, 43.0)*	30.52	33.70	33.31	37.79	35.37	38.42	42.86	40.80	41.60	44.63	46.71	43.44	47.72	50.66	49.89	50.71	49.75
Latin America																	
Isthmus *(Mexico, 32.8)*	30.64	33.08	32.76	36.95	34.85	37.41	40.88	38.78	39.35	42.91	44.85	41.47	45.59	47.64	48.24	48.11	47.40
North America																	
WTI *(US, 40.0)*	34.62	36.59	36.80	40.11	38.18	40.69	44.77	43.62	43.72	47.09	49.50	45.98	51.12	53.60	54.40	54.14	53.32
Others																	
Urals *(Russia, 36.1)*	27.41	30.79	29.88	34.87	32.08	35.45	38.29	36.21	36.69	38.79	40.13	37.96	39.95	42.60	42.52	43.42	42.12

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

2. OPEC Basket: an average of Saharan Blend, Minas, Bonny Light, Arabian Light, Dubai, Tia Juana Light and Isthmus.

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

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

Graph 2:
Evolution of spot prices for selected non-OPEC crudes
July to October 2004

$/barrel

56
54
52
50
48
46
44
42
40
38
36
34
32
30

Oman
Suex Mix
Brent
Ekofisk
Isthmus
West Texas
Urals
OPEC Basket

1 2 3 4 1 2 3 4 5 1 2 3 4 1 2 3 4

July August September October

Table 3: North European market — spot barges, fob Rotterdam *($/b)*

		naphtha	regular gasoline unleaded	premium gasoline unleaded 95	gasoil	jet kero	fuel oil 1%S	fuel oil 3.5%S
2002	October	31.55	32.04	32.16	31.23	33.36	27.20	22.44
	November	28.67	27.75	27.88	28.52	30.48	23.59	18.40
	December	34.20	31.17	31.34	32.63	33.21	26.11	19.99
2003	January	40.35	35.19	35.31	35.22	36.66	26.83	25.97
	February	43.96	39.13	39.15	41.16	43.08	30.77	25.93
	March	40.60	35.98	36.06	39.61	42.75	26.86	21.91
	April	29.40	34.09	34.38	29.59	31.66	23.10	18.61
	May	28.03	31.74	32.06	29.00	30.30	21.68	20.29
	June	32.26	32.92	33.15	30.57	31.72	25.14	21.57
	July	32.81	35.17	35.36	31.08	32.98	25.56	24.15
	August	34.97	38.00	38.04	32.47	34.52	25.86	23.72
	September	32.66	33.64	33.70	29.84	32.23	23.84	21.64
	October	35.69	33.66	33.71	33.92	36.35	24.23	22.63
	November	37.49	33.51	33.54	34.21	37.57	23.08	22.56
	December	39.45	33.78	33.84	35.02	39.08	20.63	19.55
2004	January	43.00	37.66	37.73	36.58	40.35	22.05	20.75
	February	40.40	38.46	38.56	34.16	38.53	20.73	20.32
	March	42.65	41.57	41.68	37.77	40.55	23.33	21.49
	April	43.49	45.52	45.58	38.74	43.69	23.03	22.77
	May	48.99	53.08	53.11	42.83	47.81	25.70	25.10
	June	45.70	45.79	45.85	41.68	45.26	24.21	23.39
	July	48.87	52.01	52.03	46.18	49.88	24.28	24.44
	August	54.96	51.06	51.06	49.99	55.74	23.73	24.62
	September	54.88	50.73	50.77	53.02	58.49	23.40	24.12
	October	61.21	55.81	55.72	63.06	65.91	28.10	25.88

Source: Platts. Prices are average of available days.

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

Table 4: South European market — spot cargoes, fob Italy ($/b)

		naphtha	gasoline premium unleaded 95	gasoline premium 0.15g/l	gasoil	fuel oil 1%S	fuel oil 3.5%S
2002	October	26.18	31.13	31.41	29.86	24.28	20.58
	November	23.45	26.78	27.11	27.91	21.26	16.99
	December	27.71	30.57	30.86	32.02	24.07	18.32
2003	January	33.02	34.20	34.44	35.05	29.15	23.71
	February	35.86	38.05	38.22	40.11	31.05	24.65
	March	32.05	33.75	33.99	39.45	28.10	20.94
	April	22.88	29.69	29.96	29.69	21.14	18.18
	May	22.24	28.97	29.28	26.72	21.57	18.46
	June	26.31	31.51	31.78	29.88	25.01	20.94
	July	26.84	34.10	34.33	29.50	27.39	23.29
	August	28.57	37.21	37.40	31.49	27.66	22.64
	September	26.78	32.33	32.59	29.46	22.91	20.49
	October	29.45	33.18	33.43	34.99	24.81	21.48
	November	30.43	32.79	33.05	33.79	23.93	20.33
	December	31.90	33.08	33.33	33.87	21.60	16.68
2004	January	34.41	37.04	37.24	35.80	23.16	19.39
	February	32.03	37.91	38.10	32.98	21.40	19.56
	March	34.24	40.92	41.07	36.94	23.63	20.02
	April	35.78	44.55	44.65	38.31	24.32	21.01
	May	40.52	52.16	52.15	43.41	27.66	23.69
	June	37.48	44.64	44.74	41.92	26.54	21.07
	July	40.37	49.37	49.40	45.88	26.47	23.03
	August	45.94	48.76	48.80	49.41	25.47	23.59
	September	45.90	49.84	49.87	53.12	25.66	22.81
	October	50.76	54.43	54.39	60.78	29.03	24.20

Source: Platts. Prices are average of available days.

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

$/barrel

naphtha
jet kero
premium
fuel oil 1%S
gasoil
fuel oil 3.5%S

Nov 2002, Dec, Jan 2003, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec, Jan 2004, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct

Table 5: US East Coast market — spot cargoes, New York *($/b, duties and fees included)*

		regular gasoline unleaded 87	gasoil	jet kero	fuel oil 0.3%S	fuel oil 1%S	fuel oil 2.2%S
2002	October	34.44	31.98	33.97	28.33	26.39	24.43
	November	31.43	29.98	30.79	26.94	23.86	21.46
	December	33.59	34.21	34.67	32.62	26.68	24.30
2003	January	36.60	37.78	38.17	37.87	31.53	30.04
	February	41.65	47.11	48.11	46.52	35.06	30.61
	March	39.86	40.82	40.92	38.71	31.71	27.13
	April	33.37	32.66	32.88	27.29	23.98	20.51
	May	31.65	30.79	31.66	29.58	24.51	21.79
	June	33.58	31.69	32.21	28.40	25.18	22.46
	July	36.45	32.76	33.71	30.45	27.53	26.26
	August	41.92	33.96	35.36	30.97	27.74	26.43
	September	37.51	30.52	31.67	28.53	24.88	23.15
	October	36.24	34.10	35.21	29.94	25.93	24.22
	November	36.52	34.75	35.94	30.01	26.14	24.65
	December	36.97	37.06	38.28	31.28	25.76	22.91
2004	January	41.77	40.88	42.83	34.39	28.05	23.99
	February	43.76	38.05	42.04	34.25	26.26	23.02
	March	45.56	37.87	40.47	28.90	24.67	23.11
	April	46.94	38.33	42.10	29.85	25.65	24.62
	May	56.32	42.45	48.54	34.22	30.33	27.86
	June	48.06	41.40	43.80	32.71	29.64	25.62
	July	51.30	45.54	49.26	30.90	27.93	25.07
	August	50.39	48.57	52.29	32.08	27.97	25.34
	September	52.80	52.49	58.16	31.82	27.85	26.47
	October	57.67	62.09	65.82	39.29	33.17	31.16

Source: Platts. Prices are average of available days.

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

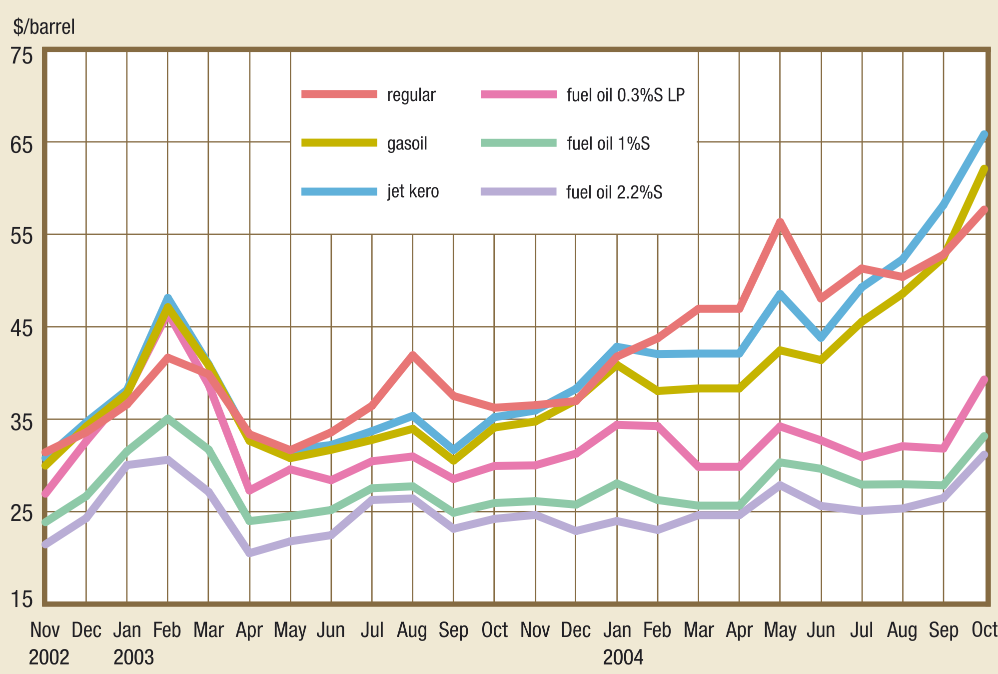


Table 6: Caribbean market — spot cargoes, fob ($/b)

		naphtha	gasoil	jet kero	fuel oil 2%S	fuel oil 2.8%S
2002	October	32.54	32.04	33.23	23.70	23.86
	November	24.39	29.65	29.51	20.73	19.97
	December	31.43	33.64	34.27	23.58	23.18
2003	January	37.00	37.44	37.87	29.31	28.51
	February	40.53	45.21	44.77	29.89	28.43
	March	36.78	37.87	37.94	26.05	24.18
	April	29.03	30.65	31.62	19.01	18.45
	May	28.84	29.84	30.36	20.27	19.62
	June	28.91	31.30	31.79	20.95	20.19
	July	30.95	32.35	32.97	24.71	24.64
	August	34.67	33.69	34.72	24.89	24.81
	September	30.23	30.28	31.21	21.60	21.51
	October	33.95	33.72	34.74	22.36	22.10
	November	33.90	34.24	35.16	22.65	22.33
	December	35.64	35.89	37.44	20.34	19.99
2004	January	39.72	40.21	42.44	19.99	19.56
	February	36.80	37.30	40.07	19.02	18.73
	March	40.69	37.93	40.74	19.11	18.82
	April	41.08	38.18	41.70	20.62	20.50
	May	46.82	42.18	46.71	23.86	23.73
	June	43.00	41.30	44.16	21.62	21.37
	July	44.95	45.39	49.00	21.06	20.82
	August	46.62	48.67	52.38	21.34	21.04
	September	49.65	52.80	58.10	22.47	22.11
	October	55.18	62.12	64.83	27.16	26.87

Source: Platts. Prices are average of available days.

Graph 6: Caribbean market — spot cargoes, fob

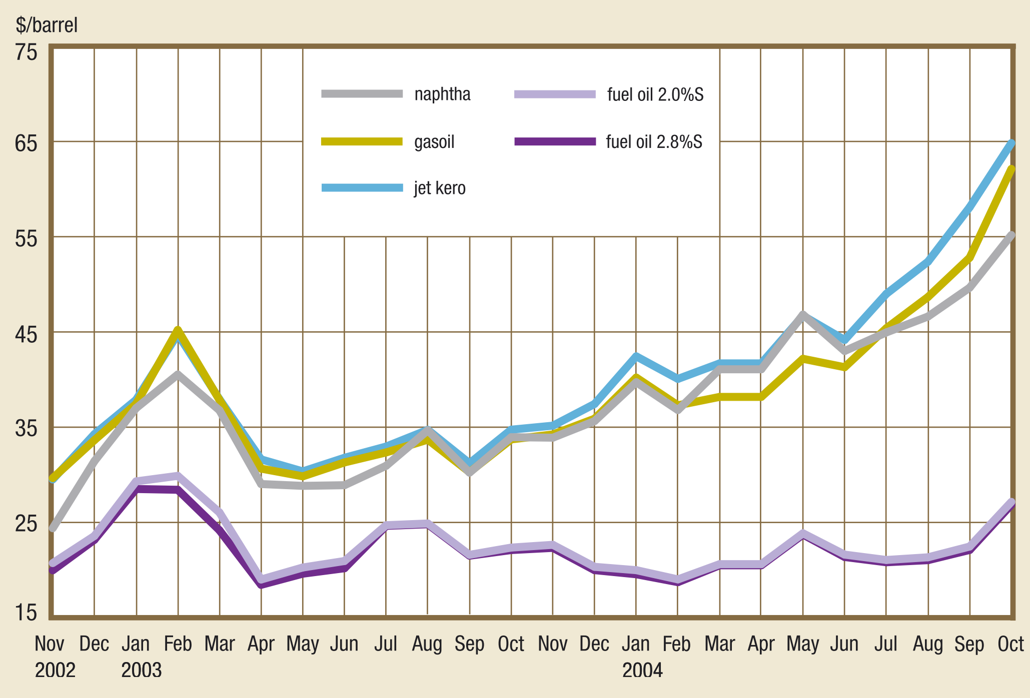


Table 7: Singapore market — spot cargoes, fob ($/b)

		naphtha	gasoline premium unleaded 95	gasoline premium unleaded 92	gasoil	jet kero	fuel oil 180 Cst	fuel oil 380 Cst
2002	October	26.87	29.62	28.37	33.10	32.43	23.13	23.46
	November	25.06	27.80	29.38	29.37	29.38	21.77	21.83
	December	29.57	30.25	29.35	31.88	32.10	23.95	24.24
2003	January	32.21	34.34	33.52	34.23	34.37	26.51	26.97
	February	37.34	40.14	39.28	39.35	39.27	29.05	29.33
	March	33.78	37.51	36.67	37.87	35.33	26.19	26.65
	April	23.58	28.74	27.79	30.03	28.35	22.55	23.12
	May	23.77	28.73	27.74	29.12	28.25	23.18	23.15
	June	26.66	31.59	30.84	29.33	28.48	24.20	24.51
	July	27.77	34.59	33.41	29.57	29.78	25.54	26.18
	August	29.67	37.30	35.95	33.27	33.58	24.27	24.92
	September	27.86	33.11	32.14	32.42	31.40	23.13	23.80
	October	30.46	35.55	34.39	33.58	33.84	23.88	24.38
	November	32.54	35.78	34.25	35.08	35.89	23.53	23.99
	December	34.67	39.52	38.43	36.67	37.50	23.38	23.79
2004	January	39.49	44.25	43.25	41.42	39.60	24.73	24.98
	February	34.21	40.05	39.33	38.74	37.44	24.61	24.88
	March	36.03	44.10	43.15	38.42	37.72	24.31	24.57
	April	36.48	44.09	42.79	42.82	40.92	25.30	25.54
	May	39.69	49.71	48.41	44.62	45.71	27.58	27.83
	June	37.19	45.19	44.04	42.84	43.17	26.63	26.87
	July	38.60	46.52	45.12	46.25	48.08	26.92	26.98
	August	44.19	51.50	50.62	51.67	52.29	27.99	28.19
	September	43.95	49.06	48.20	54.29	55.30	26.99	27.18
	October	48.81	54.73	53.68	58.40	61.25	30.14	29.95

Source: Platts. Prices are average of available days.

Graph 7: Singapore market — spot cargoes, fob

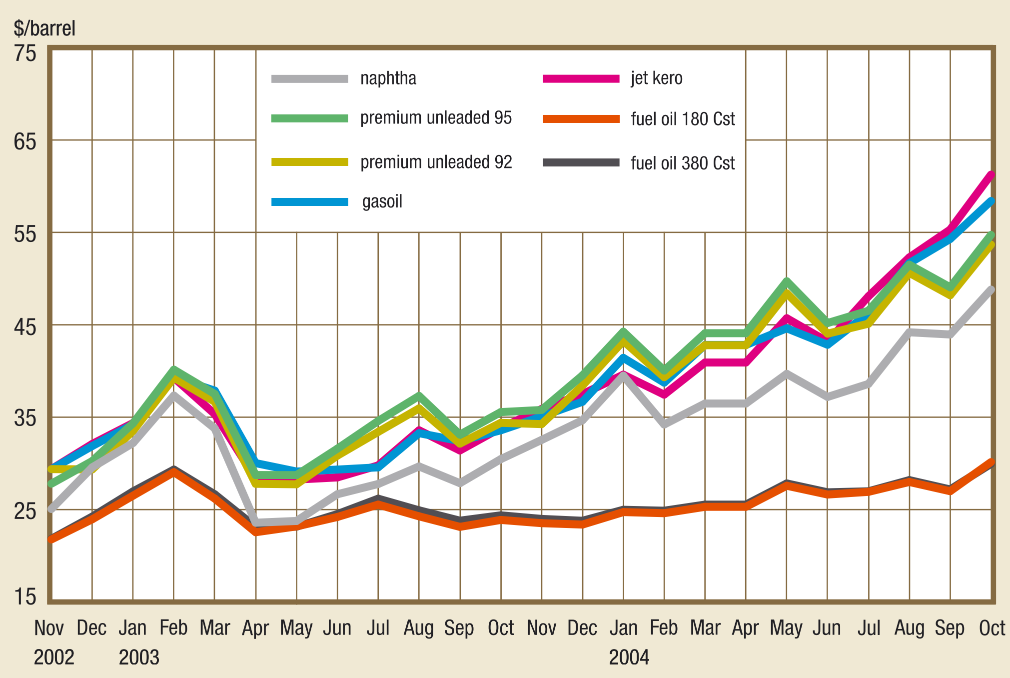


Table 8: Middle East Gulf market — spot cargoes, fob ($/b)

		naphtha	gasoil	jet kero	fuel oil 180 Cst
2002	October	26.53	30.81	30.84	22.05
	November	24.50	27.03	27.63	20.31
	December	28.14	28.53	29.77	21.95
2003	January	30.36	30.66	31.79	24.57
	February	34.85	35.81	36.77	27.31
	March	32.26	34.22	32.74	23.73
	April	22.57	26.24	25.52	20.35
	May	22.42	25.67	25.68	21.65
	June	26.01	26.56	26.44	22.88
	July	27.16	26.63	27.59	24.15
	August	28.54	29.67	31.06	22.88
	September	26.86	28.80	29.11	21.67
	October	29.76	30.53	32.06	22.29
	November	31.81	31.85	34.17	21.81
	December	32.88	32.91	35.43	21.32
2004	January	36.84	37.13	37.49	22.42
	February	33.25	34.84	34.67	22.20
	March	35.04	34.84	35.02	21.96
	April	36.54	36.89	38.98	23.53
	May	39.94	40.74	43.77	25.89
	June	37.06	38.79	40.88	24.61
	July	38.47	42.75	45.58	24.86
	August	44.23	47.98	50.03	25.72
	September	44.07	50.44	53.04	24.71
	October	48.42	53.79	58.29	26.79

Source: Platts. Prices are average of available days.

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

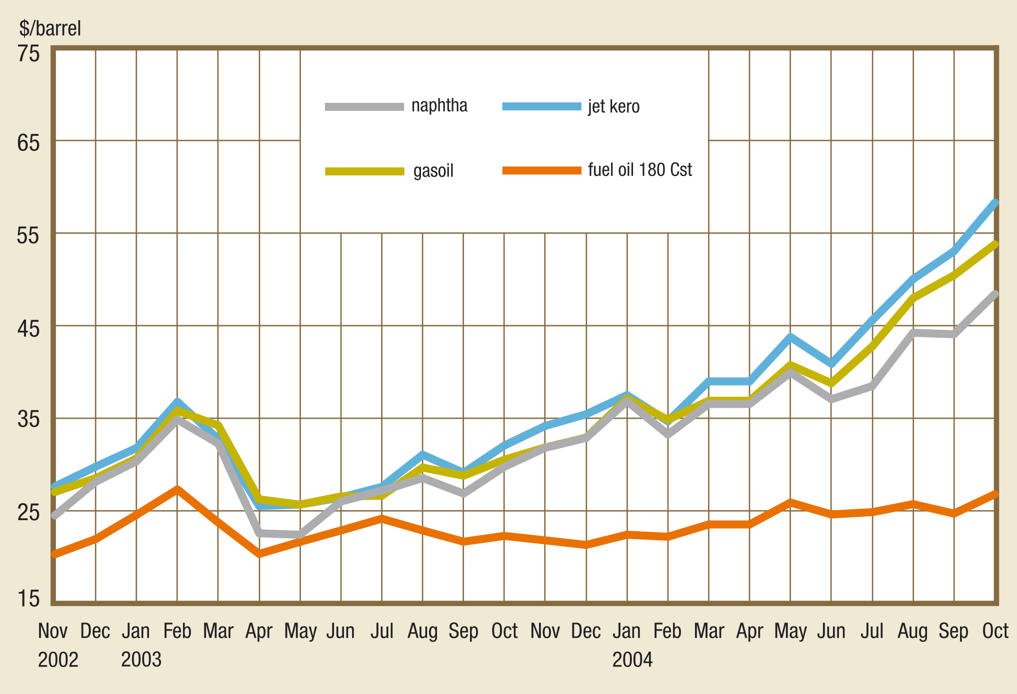


Photo: Deutsche Forstservice GmbH

Sustainable development and the environment:

Creating a virtuous cycle

by Allison McKechnie

Economic development is essential to improve people's standard of living, but traditionally it has been achieved at the expense of the environment. This has led to a vicious cycle where resources are depleted without being renewed and waste products are disposed of in an uncontrolled way.

The environment has suffered appalling damage in the process. For the rural poor in the developing world, who live on the margins of survival, the consequences of such damage are often particularly devastating. Most of the world's poorest people depend on agriculture of some kind for a living, and environmental degradation hits them hard because it often translates into poor yields and a greater struggle for survival. They then need to intensify exploitation of their natural resources to try and produce more, and so the vicious cycle continues.

It has long been recognized that this situation cannot continue; since the groundbreaking 1992 Rio Earth Summit, countries around the world have taken to heart the need to ensure that development is sustainable by harmonizing it with the environment.

Many definitions of 'sustainable development' have been arrived at, notably that quoted in the 1987 UN report *Our Common Future*. As far as the poor countries are concerned, the emphasis is firmly on meeting the needs of the present, because it is hard to persuade impoverished people that looking after the environment is a good idea when they may not know where their next meal is coming from. The poor have to see tangible results from sustainable development and experience the enormous benefits of conserving the environment so that it becomes a way of life; part of the process of poverty reduction rather than an 'added extra.'

Since its inception, the OPEC Fund has supported many institutions and projects that are dedicated to promoting sustainable development, reversing environmental degradation and ensuring the wise use of natural resources now and in the future. Such activities are not peripheral to poverty reduction, they are integral to it.

Biosaline agriculture

Providing food security is one of the key ways of reducing poverty. The need to produce enough food for the world's burgeoning population has led to a huge growth in the agriculture sector, but it has also placed great stress on key agricultural resources, notably soil and water. More and more food is being grown under irrigation, particularly in the arid and semi-arid regions of the world where the amount of land being irrigated from groundwater has increased by an estimated 15 per cent over the past two decades.

As more and more land is irrigated the groundwater levels fall, creating severe shortages so that farmers, especially in dryland areas, are forced to irrigate their crops with poor quality water, including reclaimed water and highly saline seawater.

This has had a damaging effect on soil quality, with an estimated 10 million hectares of arable land being lost every year to waterlogging, salinization and pollution. The end result is poor yields and inferior crops.

Clearly, existing freshwater resources must be protected. Adequate supplies of clean water are essential both for domestic use and industrial purposes. The challenge is how to harness and develop alternative sources of water for agriculture so that the food demands of a rapidly growing world population can be met.

Biosaline agriculture focuses on improving crop yields in the arid and semi-arid regions of the world

Aware of the importance of preserving freshwater resources for human health, environmental and food security, the OPEC Fund promotes research into the use of salt water for irrigation and other agricultural activities. One of the ways it does this is by supporting the International Centre for Biosaline Agriculture (ICBA), a non-profit research centre for the development, co-ordination and dissemination of knowledge on biosaline agricultural technology. Located in Dubai, in the United Arab Emirates (UAE), ICBA has been in operation since 1999.

ICBA specifically addresses the challenges facing arid and semi-arid regions of the African Sahel by, among other things, developing sustainable management systems for the irrigation of forage and food crops with saline water, and identifying salt-tolerant plant species.

If properly exploited, salt water sources could increase food security and raise living standards in some of the most deprived regions of the world.

Scientists have developed many types of seeds that thrive in salty conditions, yet very few of these are currently used in conventional agriculture systems, primarily because research efforts have been largely unco-ordinated.

ICBA's mission is to fill this gap by serving as a regional and international research centre for the development of field crops, vegetables, fodder, fruit and trees that can be irrigated with saline water. It aims to transfer the results to national research services and communities around the world.

With a 100-ha research station and specially equipped laboratories and computer-controlled saline irrigation, ICBA has established itself as a leading authority on biosaline agriculture, and has already demonstrated that viable opportunities exist to create new and sustainable agricultural systems based on the use of saline water. The OPEC Fund is one of the major partners in the establishment of ICBA, having provided grants totalling $1.65 million (as of April 2003) towards its initial construction, the installation of an irrigation and drainage system network, and funding for people from poor countries to receive training there.

In April 2003, a grant of $200,000 was approved for a joint project between ICBA and the International Crop Research Institute for the Semi-Arid Tropics (ICRISAT), to identify salt-tolerant, high-yielding varieties of pearl millet and sorghum, two important staple crops grown in the arid and semi-arid tropics of Asia and Africa. ICRISAT is the world centre for research on sorghum and pearl millet. The three-year project will cost a total of $1.9m and is being co-financed by the Arab Fund for Economic and Social Development, ICRISAT and the Dubai Municipality.

Rolling back the desert

The encroachment of deserts into fertile lands threatens food security and deepens poverty. Hence, combating desertification is a major priority in the vulnerable parts of the world and a vital part of the fight against poverty.

The West Asia and North Africa (WANA) region is particularly vulnerable to desertification; it is very arid and has lim-

ited water resources, but population growth rates are high and there are many demands on the scarce water that is available.

To help combat the problem, in 2003 the OPEC Fund provided a grant of $300,000 to support a project to help protect the WANA countries from encroaching desertification.

The programme was designed by the Global Mechanism of the United Nations Convention to Combat Desertification (GMUNCCD), and the 13 participating WANA countries[1] are responsible for its implementation.

In these countries environmental degradation has resulted in reduced soil fertility so that crop and livestock productivity has declined, hitting the rural poor especially hard. The programme's objective is to help the countries launch investment programmes for sustainable use of dryland resources and to promote regional co-operation in their management, while at the same time reducing environmental degradation.

The programme will last for five years and has five main components:

- Developing an enabling environment conducive to investment in the drylands.
- Technological innovations.
- Maximizing financial resources (by, for example, avoiding duplication of projects and encouraging partnerships to share information).
- Regional networking and knowledge sharing.
- Capacity building.

Reforestation in Benin

In many parts of the developing world wood is a major source of energy, and if it is over-harvested it can lead to natural forests being cut down at an ecologically dangerous rate. In the West African state of Benin, fuelwood is practically the only source of energy for the four million rural people who comprise the majority of the population.

Over the past few decades, rapid population growth put pressure on the forests of Benin as demand for wood outstripped renewable supplies. By the mid-1970s, many parts of rural Benin were facing acute wood shortages and other problems associated with deforestation, such as soil erosion and declining soil fertility, were becoming a serious problem.

To address this, in 1983 the OPEC Fund approved an interest-free $2.5m loan to co-finance a fuelwood development project in some of the worst affected areas in Benin's southernmost provinces, Mono, Atlantique and Odèmé. The project expanded existing tree plantations and created new ones — both government and privately owned — to alleviate the shortages and provide a sustainable source of fuelwood. It was also envisaged that in the long-term the plantations would supply timber and other forest products for commercial use. Reforestation would also help restore soil fertility, protect the area's watersheds, halt environmental degradation and provide employment opportunities for local residents.

Under the project, 13 tree nurseries were established to raise seedlings for the plantations, as well as to conduct research on the most productive tree species for local growing conditions. Over 120 village tree schools, where young trees develop until they are large enough to be permanently replanted, were also started.

Tending the seedlings at the nurseries proved to be a popular form of employment, especially among women. Local residents were also employed to clear the land, plant seedlings and take care of the young trees at several government-owned plantations. To extend the benefits of reforestation over as wide an area as possible, local farmers were also encouraged to grow trees on their own land and, as an incentive, were given tree seedlings and special training free-of-charge. They were provided with small loans and food rations until the trees were mature enough to be sold, and then marketing assistance was given in the form of 150 co-operatives to help sell the wood.

By the time the project was completed in 1997, nearly 18.8m seedlings had been planted on over 5,900 ha of land, of which 3,500 ha were government owned and the rest in private hands. At full development, the plantations are expected to produce 130,000 cubic metres of wood a year. The tree nurseries are well established, and at completion had produced over 20m seedlings.

The project began to benefit local people even before the trees were large enough to be transplanted. Many of the villagers have found employment through the project, and those who have planted trees on their own land will have a continuous supply of wood and other forest products to sell once the trees are large enough to harvest. The project's extension service has brought valuable information about new agricultural methods to many villages.

The project has also benefited the basic infrastructure of the region, as it involved building 38 km of rural and access roads as well as the rehabilitation or construction of services such as schools, dispensaries and community centres.

Today, 20 years after the project was started, groves of

young trees grace what were once barren fields. Maize and other crops grow between the saplings, protected by their shade and mulched with their leaves.

By reversing environmental degradation, Benin's fuelwood development project has helped create conditions conducive to sustainable development and given thousands of people the means to improve their standard of living.

Funding sustainable energy

Energy is absolutely crucial for economic development and poverty reduction. It is no coincidence that the regions of the world with the highest consumption of energy are also the most prosperous ones. If people in developing countries, particularly the rural poor, do not get increased access to energy sources, many of these countries will never rise out of poverty. The challenge is to meet the demand for energy without causing damage to the environment, the atmosphere and to human health.

The focus must be on 'sustainable energy,' which the UNDP defines as 'energy produced and used in ways that support human development over the long term in all its social, economic and environmental dimensions.'

The UNDP's Thematic Trust Fund on Energy for Sustainable Development, successor to the UNDP Energy Fund, supports sustainable energy in poor countries. Among many other activities, it operates an Energy Account that finances pre-investment surveys and small-scale projects in energy use, energy management, technical training and assistance, particularly in low-income countries. As one might expect, the countries that created the OPEC Fund appreciate more than most the importance of energy to the broader goals of development and poverty alleviation. The Fund has been an enthusiastic contributor to the Energy Account since 1980, having co-financed no fewer than 25 projects and contributed a total of $27.8m.

The projects that have been supported over the years embrace a variety of energy types from biomass gasifiers to small scale hydropower stations, and a number of training courses and national and regional workshops have also been funded.

One of the recent projects includes helping the central American country of Honduras create a national energy policy. Such a policy is a prerequisite for accelerated growth in this poor country, which still depends heavily on fuelwood and imported fossil fuels. This places a heavy burden on the economy and results in environmental damage.

The UNDP and the Honduran Ministry of Natural Resources and Development (SERNA) teamed up to strengthen the national energy framework and promote sustainable energy.

The OPEC Fund has supported another scheme, in Haiti, that also aims to help the energy sector promote environmentally sound sources and at the same time address the needs of the rural poor. Haiti is another country that makes heavy use of fuelwood and coal for energy, and is suffering rapid deforestation.

One of the earlier UNDP Energy Account projects that the OPEC Fund financed or co-financed was in the Sudan to provide solar energy sources for lighting at community centres and mosques, solar evaporators for producing salt, and solar pumps for drinking water and irrigation. A global wind pump evaluation programme in the 1980s was financed to the tune of $240,000.

The purpose was to evaluate the technical and economic potential of wind pumping for meeting rural water requirements in 13 developing countries. A geothermal exploration project to investigate geothermal resources in Uganda was also supported, as was a project aiming to improve the efficiency of Syria's electric power plants, and to increase the capacity of the Syrian authorities to evaluate and implement energy conservation activities.

Managing the oceans

The oceans, seas, islands and coastal areas of the world are a vitally important part of the Earth's ecosystem and crucial to the prosperity and very survival of many parts of the developing world. About two-thirds of the world's population lives within 60 km of the coast, and many of the most important cities on Earth are situated on river estuaries near the sea. People depend on the sea for food, transport, employment and trade to name just a few things. Yet like most natural environments the sea's resources, both living and non-living, are finite and overuse or abuse of these resources is causing environmental damage in many parts of the globe.

In recognition of the importance of the oceans and coastal areas for global food security and economic prosperity, the OPEC Fund has supported an institution founded to promote the peaceful uses of the ocean and its resources. The International Ocean Institute (IOI) focuses on enhancing the ability of developing countries to develop and manage their marine resources sustainably and for their own benefit, of furthering education, training and research relating to the oceans. Based in Malta, the IOI was founded in 1972 as an independent, international non-governmental and non-profit organization that has assumed a leading role in advocating an integrated approach to conservation of the marine environment through co-operative ocean management and regulation. The IOI has more than 20 operational centres across the world, covering most major seas and oceans.

The IOI's work includes training programmes, publications, research, and conferences and seminars. The annual ten-week training courses on ocean governance are particularly successful, attracting delegates from all over the world, having been held for over 25 years. Since the late 1990s the OPEC Fund has provided several grants to enable participants from developing countries to attend the training programmes.

Conservation congress

About ten per cent of the surface of the Earth is covered by national parks or protected areas, which indicates the importance accorded to land set aside for conservation. Marine and terrestrial reserves are home to millions of plant and animal species, and as such are genetic storehouses vital to ensuring species' future survival. These areas also play a vital role in regulating and buffering the Earth's natural processes to balance our climate. Besides their ecological importance, pro-

tected areas can play a large role in poverty alleviation in the developing countries. A World Parks Congress (WPC) is held every ten years to set the agenda for the protected areas for the forthcoming decade, and in 2003 the Fifth World Parks Congress took place in Durban, South Africa. Member countries of West and Central Asia and North Africa (WESCANA) have formed a common platform for collective action in environmental conservation, and the OPEC Fund sponsored the attendance of delegates from poorer WESCANA countries at the Congress. Organized by the World Conservation Union (IUCN[2]), the conference was the first WPC to take place in Africa and it enjoyed the patronage of Her Majesty Queen Noor of Jordan and Nelson Mandela, former South African President.

The theme was 'Benefits Beyond Boundaries,' and the focus was very much on removing the fences that have traditionally enclosed protected areas and often excluded local people. One of the recommendations of the Congress was that people who live near protected areas must be consulted in the management of these areas, and that they should share in the economic benefits of such areas. During the Congress, several new national parks were declared, including six protected areas covering 3.8m ha of land in the Amazon region of Brazil.

1. *Algeria, Egypt, Iran, Jordan, Libya, Mauritania, Morocco, Oman, Palestine, the Sudan, Syria, Tunisia and Yemen.*
2. *The IUCN was founded in 1948 to influence, encourage and assist societies throughout the world to help preserve the environment and ensure that the use of natural resources is equitable and sociologically sustainable. It has 980 members spread across 140 countries.*

Reprinted with the kind permission of Bi-Ti-Ex Worldwide Ltd, London, UK.

Forthcoming events

New Delhi, India, January 9–12, 2005, *Petrotech 2005 and Power-Gen India & Central Asia 2005.* Details: IndiaCore Response Team, 114 B, Jaina Tower II, District Centre, Janak Puri, New Delhi 110 058. India. Tel: +91 11 2554 2551; fax: +91 11 5158 9329; e-mail: info@IndiaCore.com; Web site: www.indiacore.com.

New Delhi, India, January 18, 2005; **London, UK, January 20–21, 2005**; **Dubai, UAE, January 24–25, 2005**; **Houston, USA, January 31–February 1, 2005**; **Calgary, Canada, February 3–4, 2005**; *Upstream investment opportunities in oil & gas India — NELP V road shows.* Details: CWC Associates Limited, 3 Tyers Gate, London SE1 3HX, UK. Tel: +44 (0)20 7089 4200; fax: +44 (0)20 7089 4201; e-mail: fpearson@thecwcgroup.com; Web site: www.thecwcgroup.com.

Tunis, Tunisia, January 24–25, 2005, *Africa pipeline 2005.* Details: Dan Morrissy, Director, International Event Partners Ltd, 293 Queenslane, Muswell Hill, N10 1DN, UK. Tel: +44 (0)20 8815 9570: mobile + 44 (0)7771 874436; fax + 44 (0)20 8815 9571; e-mail: dmorrissy@i-ep.com; Web site: www.i-ep.com.

Singapore, January 24–28, 2005, *World fiscal systems for oil and gas — Singapore.* Details: CWC Associates Limited, 3 Tyers Gate, London SE1 3HX, UK. Tel: +44 (0)20 7089 4200; fax: +44 (0)20 7089 4201; e-mail: bookings@thecwcgroup.com; Web site: www.thecwcgroup.com.

London, UK, January 25, 2005, *UK emissions trading.* Details: SMi Conferences Ltd, The Clove Building, Maguire Street, London SE1 2NQ, UK. Tel: +44 (0)870 9090 711; fax: +44 (0)870 9090 712; e-mail: client_services@smi-online.co.uk; Web site: www.smi-online.co.uk/emissions.asp.

London, UK, January 25, 2005, *Managing carbon in your supply chain.* Details: SMi Conferences Ltd, The Clove Building, Maguire Street, London SE1 2NQ, UK. Tel: +44 (0)870 9090 711; fax: +44 (0)870 9090 712; e-mail: client_services@smi-online.co.uk; Web site: www.smi-online.co.uk/emissions.asp.

Aberdeen, Scotland, January 25–26, 2005, *Production optimisation in horizontal and high-angle wells.* Details: IQPC Ltd, Anchor House, 15–19 Britten Street, London SW3 3QL, UK. Tel: +44 (0)20 7368 9300; fax: +44 (0)20 7368 9301; e-mail: enquire@oilandgasIQ.com; Web site: www.oilandgasIQ.com/2392a.

Kuala Lumpur, Malaysia, January 26–27, 2005, *Tight gas development Asia 2005.* Details: IQPC, No 1 Shenton Way, #13–07 & #13–08, Singapore 068803. Tel: +65 6722 9388; fax: +65 6224 2515; e-mail: enquiry@iqpc.com.sg; Web site: www.oilandgasiq.com/AS-702.

Houston, USA, January 26–27, 2005, *Contract risk management LNG.* Details: IQPC, 555 Route One South, Iselin, New Jersey, 08830; USA. Tel: +1 973 256 0211; fax: +1 973 256 0205; e-mail: enquire@oilandgasiq.com; Web site: www.oilandgasiq.com/2377a.

Kuala Lumpur, Malaysia, January 26–27, 2005; **Melbourne, Australia, February 14–15, 2005**, workshop on *Petrochemicals — from economics to markets.* Details: Centre for Management Technology, Ms Nancy Phua, Event Executive, 80 Marine Parade Road, #13–02 Parkway Parade, Singapore 449269. Tel: +65 6345 7322; fax: +65 6345 5928; e-mail: nancy@cmtsp.com.sg; Web site: www.cmtevents.com.

Aberdeen, Scotland, January 27–28, 2005, *Technical strategies for marginal assets.* Details: IQPC Ltd, Anchor House, 15–19 Britten Street, London SW3 3QL, UK. Tel: +44 (0)20 7368 9300; fax: +44 (0)20 7368 9301; e-mail: enquire@oilandgasIQ.com; Web site: www.oilandgasIQ.com/2391a.

London, UK, January 31–February 1, 2005, *Financing the LNG supply chain.* Details: IQPC Ltd, Anchor House, 15–19 Britten Street, London SW3 3QL, UK. Tel: +44 (0)20 7368 9300; fax: +44 (0)20 7368 9301; e-mail: enquire@oilandgasIQ.com; Web site: www.oilandgasIQ.com/2376a.

Houston, USA, February 1–2, 2005, *Oil field automation.* Details: IQPC, 555 Route One South, Iselin, New Jersey, 08830, USA. Tel: +1 973 256 0211; fax: +1 973 256 0205; e-mail: info@iqpc.com; Web site: www.oilandgasIQ.com.

London, UK, February 2–3, 2005, *E&P data & information management.* Details: SMi Conferences Ltd, The Clove Building, Maguire Street, London SE1 2NQ, UK. Tel: +44 (0)870 9090 711; fax: +44 (0)870 9090 712; e-mail: client_services@smi-online.co.uk; Web site: www.smi-online.co.uk/epdatainfo.asp.

Singapore, February 2–4, 2005, *ARTC asset maximization conference.* Details: Vicki Pope, Global Technology Forum, Highview House, Tattenham Crescent, Epsom Downs, Surrey KT18 5QJ, UK. Tel: +44 (0)1737 365118; e-mail: vicki@gtforum.com; Web site: www.gtforum.com.

London, UK, February 4, 2005, *Organizational records management in the E&P sector: from theory into practice.* Details: SMi Conferences Ltd, The Clove Building, Maguire Street, London SE1 2NQ, UK. Tel: +44 (0)870 9090 711; fax: +44 (0)870 9090 712; e-mail: client_services@smi-online.co.uk; Web site: www.smi-online.co.uk.

London, UK, February 15–18, 2005, *Strategic management of oil and gas portfolios.* Details: Petroleum Economist Ltd, 15/17 St. Cross Street, London EC1N 8UW, UK. Tel: +44 (0)20 7831 5588; fax: +44 (0)20 7831 4567/5313; e-mail: training@petroleum-economist.com; Web site: www.petroleum-economist.com.

Algiers, Algeria, February 16–17, 2005, *CAPE 2005 — 2nd African petroleum congress and exhibition.* Details: CWC Associates Limited, 3 Tyers Gate, London SE1 3HX, UK. Tel: +44 (0)20 7089 4200; fax: +44 (0)20 7089 4201; e-mail: alafond@thecwcgroup.com; Web site: www.thecwcgroup.com.

Kuala Lumpur, Malaysia, February 16–17, 2005, *HSE risk management in oil & gas.* Details: IQPC Ltd, Anchor House, 15–19 Britten Street, London SW3 3QL, UK. Tel: +44 (0)20 7368 9300; fax: +44 (0)20 7368 9301; e-mail: enquire@oilandgasIQ.com; Web site: www.oilandgasIQ.com/AS-699

London, UK, February 15, 2005, *2nd PetroAfricanus dinner.* Details: Global Pacific & Partners, Suite 27, 78 Marylebone High Street, Marylebone, London W1U 5AP, UK. Tel: +44.(0)20 7487.3173; cell: +44.77.39.45.77.69; fax: +44.(0)20 7487.5611; e-mail: duncan@glopac.com; Web site: www.petro21.com.

London, UK, February 16, 2005, *AIPN — African state oil companies.* Details: Global Pacific & Partners, Suite 27, 78 Marylebone High Street, Marylebone, London W1U 5AP, UK. Tel: +44 (0)20 7487 3173; cell: +44 77 39 45 77 69; fax: +44 (0)20 7487 5611; e-mail: duncan@glopac.com; Web site: www.petro21.com.

Sheikh Zayed Bin Sultan Al-Nahyan

The President of the United Arab Emirates, His Highness Sheikh Zayed Bin Sultan Al-Nahyan, died after a long illness on November 2, 2004, in Abu Dhabi. Born in 1918, Sheikh Zayed was the youngest son of Sheikh Sultan Bin Zayed Al-Nahyan, the traditional ruler of Abu Dhabi from 1922 to 1926.

Sheikh Zayed was voted in as the President of the UAE in 1971 and was re-elected on four subsequent occasions, assuming his role up until his death.

Sheikh Zayed was a popular man, and was liked and respected by many people from all creeds and religions for his liberal and tolerant ways. He was most respected around the world for his unifying influence — he tolerated Christian gatherings within the UAE — and his commitment to join the seven emirates into one nation.

He was also known as a supporter of women's rights, including the education and participation of women in the workforce. Sheikh Zayed donated generously to many charities in a manner which never sought public attention, but was done in a way that was modest and private. His popularity was attributed to his gentle and anti-authoritarian nature and his preference of living a humble and unpretentious life.

Sheikh Zayed will be remembered as being one of the most important leaders within the Gulf countries in recent history.

AP Photo/Remy de la Mauviniere

Tunji Oseni

The OPEC News Agency's former Editor-in-Chief, Tunji Oseni, died at his home in Lagos, Nigeria, on November 29, 2004.

Oseni joined OPEC in 1982, from the Nigerian *Daily Times,* as an editor and rose to the position of Editor-in-Chief of OPECNA from 1984–89. On his return to Nigeria, he became the Director of News at Voice of Nigeria Radio from 1990–93, where he left to become the Managing Director of the *Daily Times* from 1993–95.

In 2001, he was appointed by the Nigerian President, Olusegun Obasanjo, as his Special Assistant on Media, a position he held until 2003. Oseni, who was born in 1943, is survived by his wife and two daughters.

OPEC Annual Statistical Bulletin 2003

This 144-page book, including colour graphs and tables, comes with a CD-ROM featuring all the data in the book and more (for Microsoft Windows only). The book with CD-ROM package costs $85.

❒ ***Please send me .... copies of the OPEC Annual Statistical Bulletin 2003 (book plus CD-ROM)***

OPEC Bulletin

is published ten times/year and a subscription costs $70. Subscription commences with the current issue (unless otherwise requested) after receipt of payment.

❒ ***I wish to subscribe to the OPEC Bulletin for a one-year period***

OPEC News Agency

provides a twice-daily news service on energy developments within Member Countries as well as reports from the key world energy centres. OPECNA also carries up-to-date data and reports prepared by the OPEC Secretariat. Charges depend on the mode of transmission (e-mail, telefax or post) and location of subscriber.

❒ ***I would like information on subscription prices to OPECNA***

OPEC Monthly Oil Market Report

Published monthly, this source of key information about OPEC Member Country output also contains the Secretariat's analyses of oil and product price movements, futures markets, the energy supply/demand balance, stock movements and global economic trends. $525 per year (including airmail delivery) for an annual subscription of 12 issues.

❒ ***I wish to subscribe to the MOMR for a one-year period*** ❒ ***Please send me a sample copy***

OPEC Review

contains research papers by international experts on energy, the oil market, economic development and the environment.
Available quarterly only from the commercial publisher.
For details contact: Blackwell Publishing Ltd, 9600 Garsington Road, Oxford OX4 2DQ, UK.
Tel: +44 (0)1865 776868; fax: +44 (0)1865 714591; e-mail: jnlinfo@blackwellpublishers.co.uk; www.blackwellpublishing.com.
Institutional subscribers £265/yr (North/South America $429); Individuals £117/yr (North/South America $126).

Shipping address (please print in block letters):

Name:
Address:

Invoicing address (if different from shipping address):

Name:
Address:

How to pay:
Invoice me ❒ Credit card ❒ (Visa, Eurocard/MasterCard and Diners Club)
Credit card company: Credit card no: Expiry date:

Holder: Signature:

Please mail this form to:
PR & Information Department
OPEC Secretariat
Obere Donaustrasse 93, A-1020 Vienna, Austria

or telefax to:
PR & Information Department
+43 1 214 98 27

Windows™ is a trademark of the Microsoft Corporation.

OPEC offers a range of publications that reflect its activities. Single copies and subscriptions can be obtained by contacting this Department, which regular readers should also notify in the event of a change of address:

PR & Information Department, OPEC Secretariat
Obere Donaustrasse 93, A-1020 Vienna, Austria
Tel: +43 1 211 12-0; fax: +43 1 214 98 27; e-mail: prid@opec.org

Annual Report 2003
Free of charge

OPEC Bulletin
Annual subscription $70

OPEC Monthly Oil Market Report
Crude oil and product prices analysis
Member Country output figures
Stocks and supply/demand analysis
Annual subscription $525 (12 issues)

OPEC Review
(published quarterly)
annual subscription rates for 2004: Institutional subscribers £265/yr (North/South America $429); Individuals £117/yr (North/South America $126).
Orders and enquiries: Blackwell Publishing Journals, 9600 Garsington Road, Oxford OX4 2DQ, UK. Tel: +44 (0)1865 776868; fax: +44 (0)1865 714591; e-mail: jnlinfo@blackwellpublishers.co.uk; www.blackwellpublishing.com

OPEC Annual Statistical Bulletin 2003
144-page book with CD-ROM
Single issue $85
The CD-ROM (for Microsoft Windows only) contains all the data in the book and much more.
- Easy to install and display
- Easy to manipulate and query
- Easy to export to spreadsheets such as Excel

To order, please fill in the form opposite