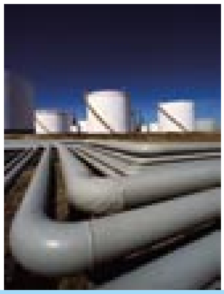
This month's cover ...
highlights the importance of industry data to the Joint Oil Data Initiative (see p4).



OPEC bulletin

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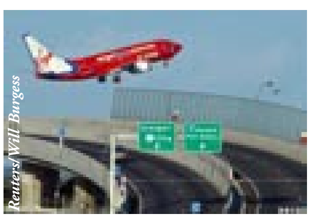

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Publishers

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
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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.

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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

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The fall and rise of fundamentals

Even though winter is approaching, crude prices have fallen sharply from their recent highs. Is this a sign that market fundamentals are reasserting themselves?

Just a few weeks ago, with oil prices setting fresh record highs on what seemed like a daily basis, you couldn't move for analysts who said they could see no end to the rally. Over-the-top predictions such as the imminent arrival of $100-a-barrel oil, sparking a possible global recession and a large-scale move away from fossil fuels, were the order of the day. But now, even as the northern hemisphere winter approaches — a time of the year when one might normally expect strong seasonal demand to prop up the market — prices have fallen to levels some $10/b lower than their recent peaks. What happened?

Part of the reason is, of course, the effect of OPEC's efforts to restore balance to the market by raising overall production. Although the output ceiling for the OPEC-10 is set at 27 million b/d, the Organization has responded to unprecedentedly strong demand growth from countries like China by increasing its actual production to around 30m b/d, with the result that OECD crude stocks have continued to rebuild to comfortable levels (although there is still some concern about distillate inventories). In a nutshell, there is no shortage of crude oil.

One factor that can be said to have spooked markets, however, is that in recent years, the global spare capacity cushion has been gradually thinning, leaving the supply chain more vulnerable to a potential interruption — and there has certainly been no lack of potential or actual disruptions to worry about. The ongoing tension in the Middle East, fears of supply interruptions in Nigeria and Russia (due to the Yukos affair), and the after-effects of Hurricane Ivan in the Gulf of Mexico have all played a role. Again, the OPEC Members have responded positively to this challenge, and the acceleration of their collective plans to increase capacity means that by the end of 2005, such fears will no longer have such a dramatic effect on prices.

Despite this measure of upstream relief from OPEC, the downstream industry remains somewhat stretched, with most refineries operating at close to their maximum, as well as an overall shortage of capacity in the USA and only limited upgrading facilities in Asia. If steps were taken by the consuming countries to address these issues, this would also help in returning crude prices to more normal levels.

Meanwhile, another sign that fundamentals may be reasserting themselves is that, like a swarm of locusts that has stripped a region bare of vegetation and then moves on in search of the next target, profit-driven speculators appear to be retreating from the market. French bank Société Générale, for example, has recently noted a "massive liquidation" of futures positions held by hedge funds. In any market, of course, there will always be some element of speculation, but there is no doubt that the exaggerated influence of speculators on the oil market in recent months has been detrimental.

OPEC strives for a healthy, balanced market where price movements solidly reflect the fundamentals of the industry, so that its players can respond appropriately to those price signals. That is why the Organization is involved in enterprises like the Joint Oil Data Initiative (featured in this issue), which aims to increase transparency in the market through improving data quality. The oil price spike of 2004 may have caused a lot of worries in the short run, but if its long-term effect turns out to be that market participants refocus on the fundamentals — as OPEC believes they should — then the industry as a whole may have benefited.

An offshore flow station of Petroleos de Venezuela SA (PDVSA) in Lake Maracaibo

AP Photo/Ana Maria Otero

JODI aims to reduce market volatility through better oil data

by Philippa Webb-Muegge

For a commodity as crucial as oil, reliable and accurate statistics mean everything — from tracking global crude production, trade, transport, refinery, stock and consumption levels, to planning future energy investments. It is widely believed that accuracy in such statistics could reduce volatility in oil prices by improving market transparency.

A straightforward task, one might assume, but in reality, arriving at a good reporting system is not the work of a couple of months. It can take years. And the process is more complicated than people would give it credit for.

For example, how does one measure the complexity of oil flows: from the wellhead to the end consumer; or when addressing stocks, is one talking about oil in transit, or static stocks; or how does one account for the differences between the reporting procedures in developed and developing countries? Perhaps agreement in finding answers to these questions may help eliminate such notions as the 'missing barrels' theory!

Surmounting these apparent hurdles is the work of the Joint Oil Data Initiative (JODI), launched in 2001, and comprising data from more than 90 countries which represent 95 per cent of global oil supply and demand. JODI is getting closer to reaching its goal of publicly releasing this oil data, which hinges on adequate participation, timely and complete reporting, with an eye on the quality and accessibility of those figures.

Bali Conference

The 5th International Conference on JODI was held in Bali early in October and opening the Conference, was the President of the OPEC Conference and Secretary General, and Indonesia's Minister of Energy and Mineral Resources, Dr Purnomo Yusgiantoro. Purnomo, in his opening address, said the current market situation, of high prices, clearly showed the need for reliable oil statistics, so as to reduce speculation on the trading floor. However, he said the road to achieving data transparency was not easy.

"Some of the challenges facing us include weak infrastructures and limited resources in data reporting systems in some of the developing countries, as well as problems with the methodology and definitions. Nonetheless, JODI has been successful in raising the profile of oil data statistics by encouraging the development of a reliable reporting system at a country level, enabling countries to directly provide us with basic oil data," he said.

Consequently, it was agreed in Bali that the project needed an additional six months to improve compliance and accuracy levels before the existing oil data could be made accessible to a wider audience. This was to eliminate the risk of making public data that was incomplete, which could have raised the issue of the market scrutinizing the figures and drawing negative conclusions, thus potentially threatening the credibility of the project.

The Data Services Department (DSD) at OPEC is responsible for JODI, and the Head of DSD, Dr Muhammad Al-Tayyeb, has been working on the project since its inception. He is very positive about what has been achieved to date, but says there are still weaknesses within the reporting procedure which have to be rectified before the data is released publicly.

Photo: OPEC

"... there is more support of the concept of the exchange of data and more transparency in the way it should be released by Member Countries ..."

Dr Muhammad Al-Tayyeb
Head of OPEC's
Data Services Department

"Although the initial aim of JODI was to gather data for the basic oil statistics, once you have the figures, they are then used for analysis, which is where the harmonisation of the data is crucial for it to be accurate. In fact, in Bali it was agreed that the market analysts from the various participating organisations should also be involved in the project to accurately assess the data against secondary sources. But initially, we had to have a solid basis on which to work. We needed to basically agree on the initial methodology for the quality of the data base," Al-Tayyeb said.

All participating countries submit a form every month giving figures on: production, demand, export/import and stocks closing/change for crude oil and petroleum products (see table below).

For some participating countries, setting up the procedure was difficult, Al-Tayyeb noted, because of the individual characteristics of the oil industries within the various countries. He added that simply gathering the figures could be quite a task in some cases, especially in countries which had to obtain the data from many parties, or in those which had expansive oil industries.

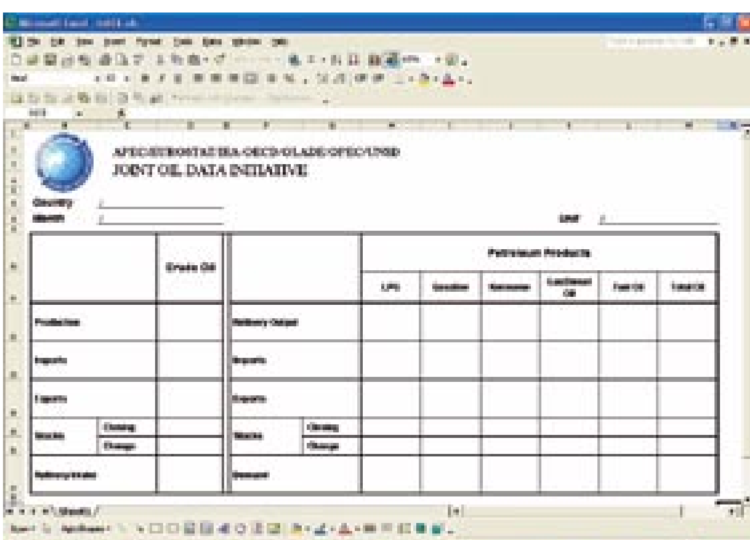
He noted that within OPEC Member Countries, most of the data was provided by the national oil companies (NOCs), where it was passed to various levels through the reporting chain, and finally to the concerned Ministry for formal reporting to the OPEC Secretariat.

Compliance levels

"We have noticed during our visits to Member Countries that sometimes the flow of data between the Ministries and NOCs is not as clear as it should be. That opens the door for more transparency even within our own Member Countries. Lately we have noticed that within the BoG (OPEC Board of Governors) and the ECB (OPEC Economic Commission Board), there is more support of the concept of the exchange of data and more transparency in the way that it should be released by Member Countries, not only to OPEC, but to the world," Al-Tayyeb said.

He continued that OPEC Member Countries were becoming more committed to the project as it gained momentum.

"When we started the project two to three years ago, we had less data than we have now and less accuracy than we have now, so I can only see that development as being positive. In terms of our Member Country compliance levels, we have reached almost 80 per cent of our target. We have all the data from Member Countries, except from Iraq.



A brief overview

Traditionally, the movements of oil have been tracked by secondary sources — by consultants, institutions, petroleum observers, the press. However, no comprehensive, official data from producing and consuming countries was in place until May 2001 when six organizations — the Asia Pacific Energy Research Centre (APEC), the European Union's EUROSTAT, the International Energy Agency (IEA), the Latin American Energy Organization (OLADE), and the United Nations Statistics Division (UNSD) and OPEC — met at the OPEC Secretariat in Vienna to finalise the table and definition for the Joint Oil Data Exercise.

This was in response to the call from the 7th International Energy Forum (IEF), held in Riyadh in November 2000, where concern was expressed by many producing and consuming countries about the extreme volatility in oil pricing levels arising from oil supply and demand imbalances.

In April 2003, the Joint Oil Data Exercise was transformed into a permanent mechanism and was renamed the Joint Oil Data Initiative (JODI). This was after an enormous amount of work and resources were invested into harmonising the basic definitions for reporting.

"Generally, we are quite optimistic. We feel that with more resources provided and commitment from the Member Countries, we will get there," Al-Tayyeb said.

Commitment to JODI

The Saudi Arabian Governor to OPEC, and former National Representative, Dr Majid A Al-Moneef, agreed with Al-Tayyeb, saying that much had been accomplished since the launch of JODI.

"When we started JODI back in 2001, the number of countries were limited and the level of commitment wasn't that strong. Now the number of countries and the willingness to provide the accurate data on time has improved a great deal," Al-Moneef said.

He continued that Saudi Arabia, a supplier of accurate and timely data, had been committed to the project since it started, and consequently, the Kingdom organized one of the meetings of JODI.

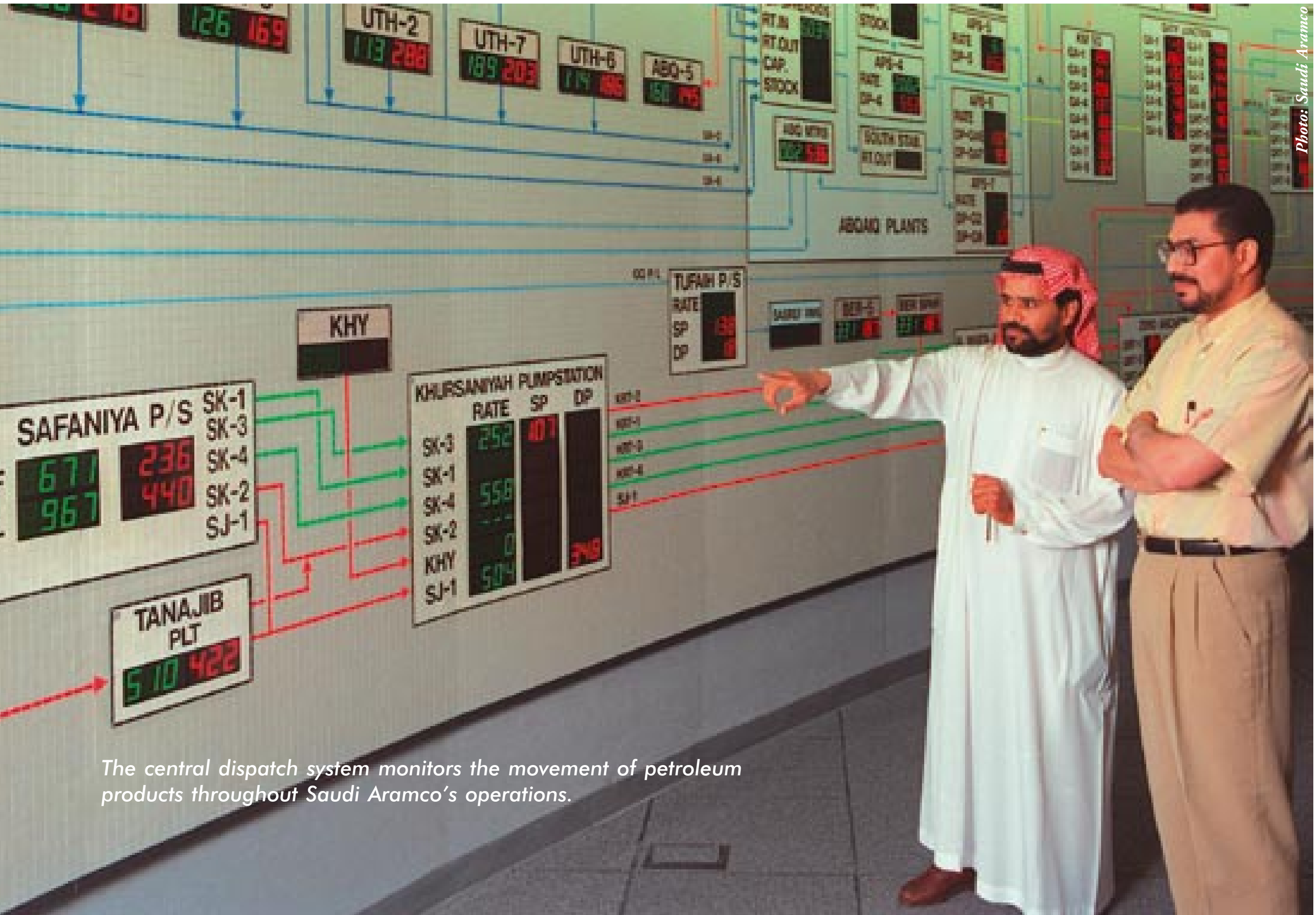
He added that the proposal to have the International Energy Forum (IEF) Secretariat take up the co-ordination effort of JODI, due to the IEF's role in bringing together producers and consumers, would give the initiative further impetus.

Clarifying definitions

Al-Moneef did note, however, that the definitions of the project needed further clarification. Even though the general format was agreed upon, he said that specific definitions still needed to be ironed out so that each participating party could submit their data in the same way to rule out contradictions.

"For example, there is the issue of what constitutes local consumption. What enters into that? Is it refined products and crude oil, and does ethane enter into the definition of liquid consumption?" Al-Moneef said.

He also brought up the issue of marine bunkers. For example, when a ship docks in a harbour and refuels, part of that fuel comes from what is deemed as that country's consumption. But because the ship then sails into international waters, some countries are of the belief that



The central dispatch system monitors the movement of petroleum products throughout Saudi Aramco's operations.

Photo: Saudi Aramco

"Two, three years is a very short time to have achieved what we have now."

Denie Tampubolon
OPEC Data Services Department Analyst

Photo: OPEC

that fuel should not be counted as part of their demand. The sensitivity of this can be partly attributed to Kyoto carbon emission counts because some countries are of the view that they should be responsible only for their actual emissions, which are calculated by consumption levels.

Some of the countries which have big marine bunkers include Singapore, the Netherlands and the United Arab Emirates. For example, Singapore's marine bunkering accounts for around 375,000 b/d, whereas their domestic consumption comes in lower at 350,000 b/d.

The Libyan National Representative, Mohamed M Abani, agreed with Al-Moneef, in that the definitions needed unifying.

"To release the data to the public, first you have to be sure that the data is correct, so we need to cross-check it, that's very important, and, second, you have to be sure that the data supplied is meeting the requirements of the project.

"There is no room for discrepancies between, say, OPEC and the data published by the other organizations because they have different methodologies and definitions.

"There are some problems which are not clear yet. There are problems concerning the methodology, the problem of conversion factors. These issues need a lot of work during the next six months before we release the data," Abani said.

Fostering understanding

While economists and statisticians can appreciate the importance of data for the purpose of analysis and future planning, the same cannot necessarily be said for those working in the industry, who are more concerned with the end product.

Kuwait's National Representative, Nawal Al-Fezai, said that while there was no problem accessing figures from the Ministry of Energy, the state's challenge lay in getting data from its refineries.

"As you can imagine, Kuwait refines a large number of products, so there's a lot of checking to be done so the output corresponds with the input. For example, we get a report from the Kuwait Petroleum Corporation saying they have delivered, say, 200,000 b/d for refinery X, and the refinery itself says they only received 195,000 b/d, so obviously that needs clarification.

"It's the gathering and checking which can be difficult sometimes, especially when I deal with seven different sources, or institutions. You have to talk with people when the data is not sent, you have to speak with the bosses, and explain to them the benefit of getting the data in, and you know,

AP Photo/Achmad Ibrahim

Right: A Shell employee on an offshore platform in the Niger Delta, Nigeria

AP Photo/Hasan Jamali

Above: Workers refill oil tankers at a fuel distribution centre in Jakarta, Indonesia

Right: A fuel storage tank at the Saudi Aramco-Shell oil refinery in Jubail, Saudi Arabia

refineries, they are concerned with their daily operations. So gathering data is not their first priority, their first priority is to get their products out on time, with their attention on safety," she said.

The reporting chain

DSD analyst, Denie Tampubolon, who has also been involved in the project from its inception, noted that more often than not it was developing countries which had problems in reporting their data due to a range of factors.

"Often it can be a matter of not having met the right person to give you the figures. It can be that you have been in contact with somebody who is secondary in the chain of reporting who does not feel comfortable to reveal the data, and then you manage to find the authoritative contact who gives you the figure without a problem. There have been cases where organisations have for years tried to get data from a country, only to find that they have not had the right contact," Tampubolon said.

He explained that India and China, both huge countries with weak infrastructures, also had problems with providing data, adding that China was not known for its history of transparency. Tampubolon also drew attention to the fact that Singapore, an important bunkering harbour which had a refining capacity of around 1.3 million barrels/day, was not part of JODI, despite having been invited several times to be a part of the project.

One of the speakers at the JODI meeting in Bali was well-known industry expert and President of FACTS Inc, Dr Fereidun Fesharaki, who said there was a relationship between the level of transparency in the market and the stage of deregulation a country was facing. He noted that, exceptions aside, the higher the level of deregulation, the higher the level of transparency and adherence to international standards, and cited the US market as being the most deregulated, with good data availability.

But despite the record of developing countries, Tampubolon said that some of the OECD countries in Bali had noted that it had taken years to establish correct reporting standards.

"Fesharaki admitted the difficulty of arriving at a good reporting system, and said it was not work of a couple of months, but rather years. Sometimes this has to be explained to policy makers, because when you're in the field you realise that it is not so easy. Two, three years is a very short time to have achieved what we have now. At least the awareness is there, whereas before the attitude was 'why bother'," Tampubolon said.

Venezuela on board

Other countries like Venezuela had rather more fundamental problems of not being able to provide data in the first place because of the crippling national strikes that the country experienced in 2002-2003, which brought its oil production to a virtual standstill.

At the Bali meeting, Venezuela made it apparent that it was going to improve its performance within JODI and provide the necessary data to OPEC.

Venezuela's JODI co-ordinator at


AP Photo/Shell

PDVSA, Yéremi Rojas, said that during and after the strikes it was very difficult — in fact impossible — to provide such data.

"I have now been assigned to make sure that Venezuela's data is transparent and I have been asked to provide all the figures for 2004, which is no problem. I check all the fields, including the jointly-operated fields (with international oil companies), and have sent OPEC the complete data, including stock figures," she said.

"I believe that JODI is a positive project. It will help all players understand the oil market and the true values of production in the world, including product and stock movements. PDVSA is committed to the project and is happy about the recent developments the country has made towards JODI," Rojas said.

Communication solutions

For a country like Nigeria, communication was the biggest challenge to overcome as far as getting the figures from the wellheads to the National Nigerian Petroleum Corporation (NNPC), according to the General Manager of the Crude Oil Marketing Division (COMD) of the NNPC, Aminu Baba-Kusa.

"Communication has been tough, but luckily over the last one and a half years we have had cell phones which cover most areas, so we now get the data very quickly, and everybody is aware that the figures are required. Before, we had a lot of communication failures and breakdowns on fixed lines and radios," Baba-Kusa said.

"We take two measurements — one from the wellhead and one from the export terminals. So everyone gets these weekly reports and we make sure that the terminal operators, which are the multinational companies, give us the accurate figures and we don't accept revised data, which is what happened constantly before. We also have our own staff at the terminals who send their own data. Then we compare the two sets. If there are any discrepancies, we call and find out what has happened and we can also discuss issues at a monthly meeting where all parties are present," he said.

Baba-Kusa said that such a reporting system was unheard of before the inception of JODI, so in that sense a lot had been achieved. He also noted that the NNPC was only now in the process of computerizing most of its operations, but currently most of the recording of the data was done on paper. Despite that, he said that "the timelines of the project have greatly improved".

JODI's strengths, weaknesses

Al-Tayyeb noted that a measure of JODI's strength was the strong support the project has had from the ministers of the IEF.

"The large number of participating countries could be seen as a manifestation of its strength, as well as having support from the industry, oil companies, analysts and policy makers.

"In terms of JODI's weaknesses, data submissions remain on a voluntary basis, so there is no clear reward for those countries submitting the data regularly and completely, meaning there is no punishment for those who do not," he said.

JODI has provided an excellent opportunity, Al-Tayyeb continued, for statisticians to meet and discuss specific issues related to oil statistics, and for the IEF Secretariat to include the improvement of oil data transparency in its own work programme because it was within their mandate to host the project.

"Of course, the threat to JODI is that some countries may get tired of supplying data when they don't see fast results. Also when the data is released, you may have

Countries participating in JODI

Algeria
Angola
Argentina
Australia
Austria
Barbados
Belgium
Bolivia
Brazil
Brunei Darussalam
Bulgaria
Cameroon
Canada
Chile
China
Chinese Taipei
Colombia
Costa Rica
Cuba
Cyprus
Czech Republic
Denmark
Dominican Republic
Ecuador
Egypt
El Salvador
Estonia
Finland
France
Gabon
Germany
Greece
Grenada
Guatemala
Guyana
Haiti
Honduras
Hong Kong, China
Hungary
Iceland
India
Indonesia
IR Iran
Ireland
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Jamaica
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Korea
Kuwait
Latvia
SP Libyan AJ
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Luxembourg
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Oman
Panama
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Poland
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Qatar
Romania
Russia
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Singapore
Slovak Republic
Slovenia
South Africa
Spain
Suriname
Sweden
Switzerland
Syria
Thailand
Trinidad & Tobago
Turkey
United Arab Emirates
United Kingdom
United States
Uruguay
Venezuela
Vietnam
Yemen

AP Photo/Achmad Ibrahim

the situation where data houses may criticize JODI because this project is a major threat to their livelihood. JODI would essentially provide the data free of charge, that they are selling, so that is one issue that we worry about," Al-Tayyeb added.

Reducing volatility?

The origins of JODI stemmed from concern back in the 1990s about volatility in crude oil markets. The idea was that if supply/demand fundamentals were accurate, oil prices would behave more predictably.

With oil prices having reached an all-time high, recently of over $55/b for WTI, when supply/demand fundamentals have been in balance, it is apparent that geopolitical factors and tight product supplies, amongst other things, are at play considering OPEC has reassured markets by increasing supply at the last Conference, as well as assuring the market that it had enough spare capacity to account for any short-term increases in demand.

However, a keynote speaker in Bali, the President of Strategic Energy and Economic Research Inc, Mike Lynch, said that such a situation in the oil market was not the result of a set of simple variables, but a combination of factors, which included bad weather and political tension. Added to that, he noted that the uncertainty in the real, perceived, and forecasts market data also significantly contributed to the recent volatility.

Lynch mentioned that while a number of efforts could reduce uncertainty in the oil market, such as increasing the capacity in the up-, mid- and downstream, essentially the cheapest and most important defence against volatility was improving the quality of oil data.

These types of issues were widely discussed at the recent OPEC International Seminar on the theme of Petroleum in an Interdependent World, held in Vienna after the OPEC Conference in September, in which participants from both producing and consuming countries referred many times to the possible causes of high prices.

In this sense, participants from both OPEC and non-OPEC countries referred to the importance of JODI in helping bring some sort of sanity check to oil prices which have been caught by a speculative fever. Several participants said this was based more on imaginary fears than fundamentals.

Norway's Minister of Petroleum and Energy, Thorhild Widvey, said that transparency in oil markets and the reliability of oil data was essential in promoting stability and predictability.

"Market participants should have access to the best available information as a way of reducing volatility," she said.

Meanwhile, Professor of Economics at the University of Grenoble and Special Adviser to Société Générale, Sadek Boussesna (a former Algerian Minister of Energy and Mines), in speaking about recent high oil prices, pointed to the reliability of oil statistics in evaluating oil demand growth (dramatically underestimated this year), perhaps drawing similar conclusions for capacity levels.

Such concern about high oil prices has also obviously caught the attention of the G7 countries, where prior to the recent meeting of finance ministers in Washington early in October, it was reported that oil market transparency was a major aim of the grouping to try to prevent speculation from pushing up crude prices.

Britain and Germany supposedly took a joint initiative to the G7 in an attempt to boost transparency in the international oil markets, although, interestingly, this was not revealed in their final communiqué.

As Reuters reported at the time, such a move was "essentially a recognition that the G7 nations themselves don't know why crude has taken off and remained stubbornly high".

Certainly the work of JODI could reduce volatility in oil markets. As Al-Tayyeb said: "If we provide data that is accurate, and closer to what the market anticipates, I am sure it would be a better way of measuring that commodity. Volatility can grow even more with unreliable, fundamental data. If we at least have accurate data, we could reduce the room in which speculative volatility takes place!"

Shell-owned tanker in the Niger Delta

Successful launch for giant

by Graham Patterson

AP Photo/Yousef Al-Ajely

Main picture: the gas plant at Mellitah on the Libyan coast (AP Photo/ENI press office)

Inset: Libyan Leader HE Colonel Moammer El Qaddaffi (centre) and Italian Prime Minister Silvio Berlusconi (left) push buttons to mark the start-up of the Western Libya Gas Project. On the right is the Chairman of the Management of the National Oil Corporation, HE Abdalla Salem El Badri.

Western Libya Gas Project

NATURAL GAS has begun flowing through the pipelines of the giant Western Libya Gas Project after it was inaugurated at a ceremony on October 7 at the Mellitah processing and compression station on the Libyan coast, about 100 km west of the capital Tripoli.

The ceremony to launch the project, which will produce a total of about 10 billion cubic metres/year of gas, was attended by top officials from both countries, including the Libyan Leader, HE Colonel Moammer El Qaddaffi, and the Italian Prime Minister, Silvio Berlusconi.

Also in attendance were Libya's Secretary of the People's Committee for Energy, HE Dr Fathi Hamed Ben Shatwan, and the Chairman of the Management of the National Oil Corporation (NOC), HE Abdalla Salem El Badri. Representing Italian oil and gas giant ENI, which is the NOC's partner in the project, were the company's Chairman, Roberto Poli, and its Chief Operating Officer, Vittorio Mincato.

Commenting on the start-up of the Western Libya Gas Project, Mincato said it was "one of the most technologically advanced gas projects in the world. (It) represents yet another defining moment in the deep-rooted relations with Libya."

A statement released by ENI described the scheme as "the most important integrated project in the oil and gas sector ever carried out in the Mediterranean."

The project, it added, "enhances the value of Libyan natural gas through export and trading in Europe, writing a new page in the history of energy and co-operation between Italy and Libya."

The Western Libya Gas Project was originally launched in 1999 and was finished at a cost of around €7 billion, of which ENI's share was €3.7bn. A workforce of nearly 20,000 people was involved in ensuring that the project was completed on schedule.

The gas for the project comes from two fields, Wafa in the Libyan desert and Bahr Essalam, which is offshore. It is sent to the plant at Mellitah on the coast, from where it is transported across the Mediterranean through the underwater Greenstream pipeline to a receiving terminal in Sicily.

Right: Two views of the Wafa field, showing an oil train (top) and the production facilities (bottom).

The Wafa Field

The onshore Wafa field is located around 500 km south of the Libyan coast, close to the border with Algeria. Development work at the field includes the drilling of 29 new wells (of which 12 are oil wells and 17 gas) and 8 work-over wells.

The natural gas and condensates produced and processed at the Wafa facilities will be sent to the Mellitah plant through two 530-km pipelines, with a diameter of 32 and 16 inches, respectively. When Wafa is fully operational, its output will be around 4.0bn cu m/y of gas.


Photo: ENI

Above: The Sabratha platform jacket

The Bahr Essalam Field

The second of the two fields, Bahr Essalam, is located about 110 km off the Libyan coast. It will be the site of the country's first offshore gas platform, which is known as Sabratha and has been developed by an international consortium headed by ENI's partly-owned subsidiary Saipem.

A total of 38 wells will be drilled, 15 from the Sabratha platform and 23 subsea. Two sub-sea pipelines, with a diameter of 36 and 10 inches, respectively, will transport the gas and condensates to the processing plant at Mellitah. Production from Bahr Essalam is expected to be around 6.0bn cu m/y of gas.

ENI is the operator of both the Wafa and Bahr Essalam fields, with a 50 per cent stake, while Libya's NOC holds the rest. The Italian firm's equity recoverable reserves total about 950 million barrels of oil equivalent.

Of the 10bn cu m/y of gas that the Western Libya Gas Project will produce, about 8.0bn cu m/y will be exported to Italy where it will be sold to various companies. The buyers are Edison, which is taking 4.0bn cu m/y, Gaz de France (2.0bn cu m/y) and Energia Gas (2.0bn cu m/y). The remaining 2.0bn cu m/y is aimed at local markets.

Photo: ENI

The Mellitah gas plant

The Mellitah gas treatment plant on the Libyan coast is being constructed by an international consortium led by another ENI unit, Snamprogetti. The plant will process the gas from the offshore Bahr Essalam field. This gas, combined with the gas already treated at Wafa, will be piped from the treatment plant to the compressor station, and from there to Italy through the Greenstream pipeline.

Left: two areas of the Mellitah gas compression plant

Photo: ENI

The Greenstream pipeline

The Saipem-developed Greenstream pipeline connects Mellitah to the gas receiving terminal at Gela in Sicily. The longest underwater pipeline in the entire Mediterranean, Greenstream is 520 km long, has a diameter of 32 inches and runs through waters which reach depths of 1,127 metres.

The technological challenges facing the constructors of Greenstream included the water depths, the contours of the seabed where the pipeline was laid and the numerous cable crossings, noted ENI in a statement. Nevertheless, despite the strict environmental and time constraints, first gas was delivered successfully on October 1.

Greenstream is, of course, not ENI's first large-scale pipeline project. In 2002, the Italian company completed Blue Stream, the giant gas pipeline which runs from Russia to Turkey, crossing the Black Sea at depths of 2,189 m. In the late 1970s, ENI was also involved in the construction of the Transmed pipeline to transport natural gas from Algeria across Tunisia, the Sicilian Channel and up the peninsula to the Po Valley.

The Gela receiving terminal

The receiving terminal for the gas at Gela in Sicily is connected to the 30,000-km national pipeline network of Snam Rete Gas, another ENI company. During the design and construction of the facilities, care was taken to reduce the environmental impact to a minimum.

ENI has had a presence in Libya since 1959, where the company has an average operated production in 2004 of about 230,000 boe/d, of which its equity share is 96,000 boe/d. With the completion of the Western Libya Gas Project and other developments, the Italian firm's operated production in Libya will rise to 570,000 boe/d (of which its equity share will be 240,000 boe/d) by the end of 2005.

Left: A Thai oil worker stands by a section of the Greenstream pipeline

Examining current and future developments in the world oil and gas market

While high prices have sharpened the global focus on the current state of the oil market, the medium and long term outlook is equally deserving of attention, notes the Indonesian Governor for OPEC, Acting for the Secretary General, HE Dr Maizar Rahman, in this article.

* *Based on the address delivered by* **Dr Rahman** *on behalf of the Conference President and Secretary General of OPEC, and Indonesian Minister of Energy & Mineral Resources, HE Dr Purnomo Yusgiantoro, to the 4th Russian Oil and Gas Week, Moscow, October 26–28, 2004.*

The eyes of the world are currently focused on the near-term outlook for the international oil market, due to its volatile state. This is understandable, but it constitutes only part of the challenge facing us. Since we are committed to the future of the industry, we need to examine not only the present state of the market, but its future outlook, and the linkages between the two.

The current market volatility and high prices have been a major cause for concern among OPEC's Member Countries. Prices for OPEC's Reference Basket of seven crudes have recently reached record levels since this yardstick was introduced in January 1987, rising above $45/barrel for the first time earlier in October. This compares with an average level of $25.8/b from the inception of the OPEC price band in 2000 through 2003. In other words, the average was close to the centre of the $22–28/b price band during that period, and this won wide acceptance among producers and consumers, as being both fair and reasonable.

We see a combination of factors contributing to the rising price trend this year, even though fundamentals have been sound and the market has remained well-supplied with crude. These include higher-than-expected oil demand growth, especially in China and the USA; refining and distribution industry bottlenecks in some major consuming regions, coupled with more stringent product specifications and compounded by the recent hurricanes in the Americas; and the present geopolitical tensions and concern about adequacy of spare capacity to meet possible supply disruptions. Combined, these factors have led to fears about a possible future supply shortage of crude oil, which, in turn, have resulted in increased speculation in the futures markets, with substantial upward pressure on prices.

To help restore order and stability, OPEC raised its production ceiling twice at the Organization's Meetings on June 3 in Beirut and September 15 in Vienna. The total rise for the OPEC-10 (excluding Iraq) was 3.5 million barrels/day, taking the ceiling to 27.0m b/d, with the final increase of 1.0m b/d coming into effect on November 1. These decisions were taken, even though our assessments had indicated that there was sufficient crude already in the market and that Member Countries were already pumping out levels of crude well above previous ceilings. It was believed that, as well as the actual physical fact of agreeing to these big increases in supply, such actions, in themselves, would also send a powerful psychological signal that OPEC was ready to act in order to help stabilise prices.

With regard to the ability to meet rising demand in the short-to-medium term, OPEC has spare production capacity of around 1.5–2.0m b/d, which would allow for an immediate additional increase in production. Furthermore, in response to the expected demand growth in the near future, Member Countries have plans in place to further increase capacity by at least 1.0m b/d towards the end of this year and through 2005. In addition, plans for additional capacity expansion are available and could be enacted soon; however, this capacity would typically become available around 18 months after commencement of this process.

Nevertheless, it must be pointed out that our latest studies show that, for the third quarter, the market was over-supplied by nearly 2.0m b/d and that this trend was being continued into the fourth quarter, although to a lesser extent, due to demand seasonality and other factors.

A further Extraordinary Meeting of the Conference is scheduled for December 10 in Cairo, to review market developments and, if necessary, adjust the production ceiling agreement accordingly.

OPEC keeps a close watch, at all times, on energy market developments, as part of its ongoing research activities. This covers all reasonable time-horizons — the short term, the medium term and the long term. The purpose is to provide the Organization's Oil Ministers with the necessary high-quality support material for their decision-making on market issues, whether this be for their short-term production agreements or for their deliberations on important longer-term issues. The objective throughout is to achieve and maintain market order and stability, with reasonable prices, steady revenues, secure supply and fair returns for investors.

Let us now look further into the future, to 2025. According to our projections, based on OPEC's World Energy Model (OWEM), the early decades of the 21st century are expected to see fossil fuels account predominantly for increases in world energy demand, with oil maintaining its major role. There is also a clear expectation that the oil resource base is sufficiently abundant to satisfy this demand growth.

The OWEM reference case sees average annual world economic growth of 3.6 per cent over the period 2003–25, with the most rapid rates being in the developing countries, particularly China, which has a projected figure of 6.4 per cent. The average annual rate of 5.0 per cent for the developing countries is double the OECD's 2.5 per cent, for the period up to 2025.

Global oil demand is projected to rise by 38m b/d to 115m b/d by 2025 — annual average growth of 1.6m b/d, or 1.7 per cent, over the years 2002–25 (see **Table 1**). OECD countries will continue to account for the largest share of oil demand. However, almost three-quarters of the increase in demand up to 2025 will come from developing countries, whose consumption will almost double. Asian countries will remain the key source of demand increase in the developing world, with China and India central to this growth.

At the global level, the transportation sector accounts for about 60 per cent of the rise in demand in 2000–25. This will amount to nearly all the growth in transition economies, almost four-fifths of it

Table 1: World oil demand and supply outlook in the reference case *(m b/d)*

	2002	2005	2010	2015	2020	2025
Oil demand						
OECD	47.7	49.3	51.2	52.9	54.5	55.8
DCs	24.7	26.9	32.3	38.5	45.3	52.5
Transition economies	4.5	4.8	5.3	5.7	6.0	6.3
Total world	**77.0**	**81.0**	**88.7**	**97.1**	**105.8**	**114.6**
Oil production						
OECD	21.9	22.1	21.4	20.8	20.1	19.2
DCs (excl OPEC)	14.6	15.9	17.7	18.6	18.8	18.3
Transition economies	9.5	11.5	13.5	14.8	15.4	15.4
Non-OPEC	**47.8**	**51.3**	**54.6**	**56.5**	**56.9**	**56.3**
OPEC (incl NGLs)	**29.2**	**29.7**	**34.1**	**40.6**	**48.9**	**58.3**
OPEC market share (%)	*37.9*	*36.7*	*38.4*	*41.8*	*46.2*	*50.9*

Source: Oil & Energy Outlook to 2025, OWEM Scenarios report (OPEC Secretariat, March 2004).

Table 2: Fuel shares in the global energy mix in the reference case *(per cent)*

	2000	2010	2020	2025
Oil	40.1	38.7	37.6	36.9
Solids	26.0	25.8	25.5	25.2
Gas	23.3	25.7	28.3	29.9
Hydro/nuclear/renewables	10.6	9.8	8.6	8.0
Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: Oil & Energy Outlook to 2025, OWEM Scenarios report (OPEC Secretariat, March 2004).

in the OECD and close to half in developing countries *(see pp62-65 for how the OPEC Fund is aiding the construction of roads in developing nations)*. The industrial and household/commercial/agriculture sectors will also be important sources of growth in the developing world.

Turning to the oil supply outlook, in the short-to-medium term, overall non-OPEC supply is expected to continue to increase, reaching a plateau of 55–57m b/d in the post-2010 period (see Table 1). This represents an increase of 7–9m b/d from 2002, although the eventual scale of this future expansion is subject to considerable uncertainty. The key sources for the increase in non-OPEC supply will be Latin America, Africa, Russia and the Caspian.

This will all result in OPEC being increasingly called upon to supply the incremental barrel. OPEC has both the capability and the will to do this, especially since around four-fifths of the world's proven crude oil reserves are located in OPEC's 11 Member Countries, although the latter account for only about two-fifths of current world output. Moreover, these reserves are more accessible and cheaper to exploit than those in non-OPEC areas. In 2025, OPEC is projected to meet more than half the world's oil demand, at 51 per cent, with 58m b/d.

Thus, one of the most basic challenges facing OPEC — as well as other oil producers — is to ensure that sufficient production capacity will be available at all times to help meet the forecast rise in oil demand in the coming years and decades, which brings us on to the subject of investment. Before examining that, however, let us look at the role of other energy sources, especially gas.

Order and stability in the oil sector are essential not just for oil, but also for gas. This is because of the linkage between oil and gas prices in major consumer markets, with oil price movements in volatile markets likely to be followed, to some extent, by same-direction gas price movements. Therefore, the case for ensuring that a sound international oil price structure is in place at all times finds further valuable support.

Strong gas industry base

OPEC has a strong base in the gas industry, even though the focus of our Organization is on the oil market. Our Member Countries hold almost half the world's proven natural gas reserves, with Iran and Qatar being second and third, respectively, to Russia, in global rankings. Algeria and Indonesia also place a heavy emphasis on the gas sector in their hydrocarbon activities.

Gas producers share many of the basic challenges of oil producers. Demand for gas is forecast to rise faster than that of oil, although from a lower base. It is the source of commercial energy that is most favoured by environmentalists, as well as being a reliable and highly efficient source of power generation. Production costs are coming down too.

But the transportation of gas remains expensive, in spite of the big advances that are being made with liquefied natural gas, which are expected to turn it from being a regional into a global fuel. Also, legislation to liberalise energy markets, particularly in the European Union, has been handled without due regard to longstanding agreements with gas suppliers.

The share of gas in the world energy mix is around 23 per cent at the moment and this is expected to climb to 30 per cent by 2025. Even so, this will still be well below the share of oil, which will have dipped slightly from around 40 per cent now to 37 per cent share in 2025. The share of solids — mainly coal — will remain at around 25–26 per cent during this period, while that of hydro, nuclear and renewables, treated as one group in this analysis, will fall by more than two percentage points to eight per cent (see **Table 2**).

This begs the question: What about the future contribution of renewables? While there is an understandable call to develop renewables, the fact remains that the technology is still in its infancy. Therefore, while the renewable energy industry is being developed, all other available resources, which are friendly to the environment, must also be accessed, enhanced and utilised to meet the energy needs of mankind and support sustainable development. Petroleum has a big role to play in this.

This underlines the need for full and timely investment in oil production capacity. Investment is needed to meet the forecast absolute increase in demand; to see that exhausted reserves are replaced, as and when necessary; and to ensure that oil-producing nations always have sufficient spare capacity available to cope with sudden, unexpected shortages in supply. Also, the oil must be cleaner, safer and more efficient than ever before, to meet the very high expectations of the modern consumer.

This investment will be large — although not necessarily different in magnitude to that observed in the past. However, the magnitude of the required capital injection is far from clear, even in the short and medium terms. This is partly due to the wide range of feasible demand growth scenarios, but it is also reinforced by contrasting views on the potential evolution of non-OPEC production. Uncertainties over future economic growth, government policies and the rate of development and diffusion of newer technologies are among the main factors that lie behind this.

To appreciate the significance of this, one must consider investment lead times that are measured in years rather than months, as well as the importance of getting the amount of investment right. Over-investment may result in excessive, costly, idle capacity, while under-investment may lead to a shortage of crude and higher prices. In both cases, the losses and the broader collateral damage, such as to the world economy, can be huge.

"Over-investment may result in idle capacity, while under-investment may lead to a shortage of crude and higher prices."

Producers, in particular, are very concerned about the risk of over-investment, which can prove extremely costly to them. Every effort must be made, therefore, to guard against this, by improving the effectiveness of forecasting and reducing the uncertainties that hinder this process.

Moreover, it is important to note that, while most people are all too familiar with the concept of security of supply, there is also a flip side to this coin — security of demand. Producers need assurances of stable, predictable markets just as much as consumers require certainty and consistency with supplies.

Also worthy of attention is the fact that much of the recent price volatility has resulted from problems and bottlenecks in the downstream sector. This is very much the preserve of consuming nations, even though, in recent years, oil producers have been gaining a bigger presence downstream, too.

In short, the onus is on the oil community at large to ensure that the market is well-run. A collective approach is required. All responsible parties stand to gain from a stable, orderly market. After all, the starting-point for a sound investment strategy is market order and stability today, with reasonable prices. All parties must contribute to this — OPEC and non-OPEC producers, consumers, oil companies, financial institutions, governments and so on. The challenges are too large, too complex and too important to be left to individual, concerned groups.

Big advances in dialogue and co-operation have facilitated this process over the past couple of decades, from large-scale international ministerial gatherings, such as the meetings of the now-institutionalised International Energy Forum, to bilateral or regional contacts that extend across national boundaries. Indeed, the establishment of the Forum's Secretariat in Saudi Arabia bears witness to OPEC's commitment to dialogue and co-operation. Recent years have also witnessed the development of a closer working relationship between OPEC and the International Energy Agency, to exchange ideas and information.

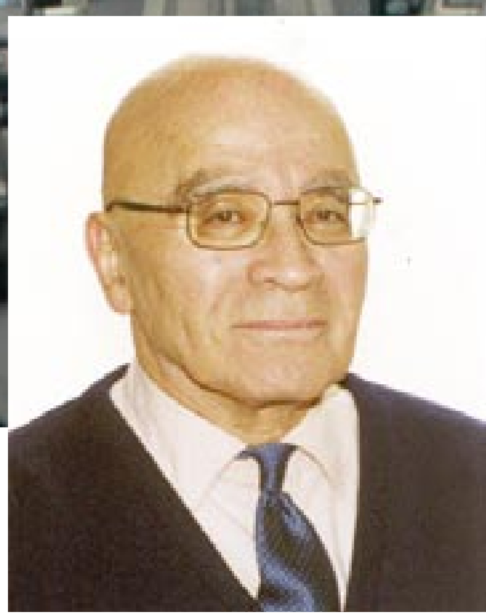
Co-operation is not confined to the oil industry, of course. The Gas Exporting Countries Forum recognises the need for discussion of issues of mutual interest to gas producers and its role is likely to grow in the future. Its membership includes seven OPEC Member Countries and Russia. The fact that these eight countries are also leading oil producers brings with it further important benefits, in terms of co-operation across the two closely-related petroleum sectors.

OPEC welcomes all of this. The oil and gas industries are much better off if there is an underlying consensus on the means of handling, at least, the major issues that concern all parties — such as price stability, security of demand and supply, and investment.

This should all be done in a framework of an increasingly globalised industry, where technology is enabling us to make remarkable advances in every field of activity and where the orderly, equitable provision of cleaner, safer energy services is seen as an integral part of sustainable development, the eradication of poverty and the general enhancement of mankind.

Economic theory and the oil road not taken

Photo: Reuters/Claro Cortes



Despite recent high prices, writes **Professor Ferdinand E Banks,** the world is not running out of oil, huge amounts of which will continue to be necessary for the smooth functioning of the global economy.

The first thing that crossed my mind when I saw an interview with Professor Peter Odell in *The Observer* (October 3, 2004) was his statement from a decade or so ago that the world oil market could function beautifully without calling on the resources of Middle Eastern countries — particularly if the large oil firms in the rest of the world were more aggressive in exploiting the immense oil reserves that he believed still existed in places like North America and Europe (eg, the North Sea and Arctic Ocean).

Running out of oil? Absurd. Running into it was Odell's way of describing the situation a few months ago in the *Financial Times*.

This matter can be settled easily enough. We are not running out of oil, and we are still running into it. The problem is that this way of describing the situation is not particularly helpful from a scientific point of view. In the USA, the new high price of oil has led to what *Business Week* (October 11) has called "A gusher of cash for domestic drilling", but even so, the US Department of Energy (DoE) has predicted that in the 'lower 48', onshore production will fall by 1.8 per cent/year. Running into oil for that region means that an increasing percentage of oil consumption will originate with imports.

Why be concerned with just the US onshore? Because that is where the "gusher of cash" referred to above is heading. Moreover, this money originates with smaller companies, because it seems that large oil firms are becoming increasingly skeptical about all of North America, and perhaps even Russia. Another major change from a few years ago is the palpable decline in expectations by these enterprises about Gulf of Mexico assets — unlike the cheerful prognostications of self-proclaimed gurus like Bjorn Lomborg, who several years ago informed his 'Copenhagen consensus' that a hundred years of plentiful oil was the true prospect.

The above can be summed up as follows: even if we are running into oil, that commodity is scarce. In particular, it is scarce with respect to the future demand for it — a demand that to a considerable extent is inflexible because of the inelasticity of the oil-intensive activities underlying this demand (for example, petrochemicals and motor vehicles). Here the reader can refer to Shihab-Eldin, Hamel and Brennand (2004) for an up-to-date survey of this issue.

That brings us to this concept of the oil road not taken, because more than a decade ago OPEC floated the idea of co-operation between oil consumers and producers. It is likely that some important consumers were positive, and a few of us made heavy weather of an important axiom from game theory which maintains that when co-operation is possible it should be strongly considered; however, certain influential opinion-makers in the consuming countries lost no time in quashing this departure since, along with Professor Odell, they were counting on an oil price de-escalation.

A look at the future

"Over the longer term, however moderate demand growth may be, it will confront an inexorable decline in the production capacity of currently proved reserves, combined with reserve additions that will on average be less than production. This is ultimately the recipe for a tightened market."

— Edward W Erickson (1985)

Note the date of Erickson's prediction: 1985. Writing in 1984, Harry Saunders was equally as alert. As he assured readers of his excellent paper: "… the return of higher oil prices is inevitable." It also needs to be emphasized that what is obvious now was considered dubious at that time, if not outright offensive to the high-and-mighty of the energy economics world. The remarkable thing is that to a certain extent this was still the case when the new millennium was being rung in.

We can thus ask if illusions about the future oil supply have been discarded or modified by observers and researchers of the *flat-earth* variety — to use an expression coined by the geologist Colin Campbell and Professor (of physics) Kjell Aleklett. Not quite, according to Nicolas Sarkis. In a recently-published paper in the journal *Medenergie,* which was entitled *Les prévisions et les fictions* (2003), he questions the ability of OPEC countries to sweeten the dreams of the oil-importing world.

Dr Sarkis knows — as I and many of you know — that regardless of the goodwill that the governments of the OPEC countries have for their clients, they might find themselves subjected to considerable economic and/or political discomfort if they become involved in trying to make the impossible possible. Not everyone, of course, agrees with this appraisal, where by 'everyone' I am thinking in particular of the International Energy Agency of the OECD and the US DoE. The question then becomes, why would the highly-educated experts of these organizations go off the deep end with their theorizing about the availability of oil? The answer here is obvious: the people who pay their salaries have told them — directly or indirectly — that it would be best for all concerned if they did not fall head-over-heels in love with reality.

The same thing happened in Scandinavia with regard to electricity. In the course of the 'impartial' research initiated at great expense to investigate whether consumers should have the opportunity to 'enjoy' deregulation with its reputed low prices and increased reliability, hardly any economists or journalists with a mistrust of deregulation became officially involved with this project, nor were they provided with an official outlet for their misgivings or given an opportunity to express their beliefs in either the 'scientific' or pseudo-scientific literature.

On the basis of projected oil demand in 2020, and non-OPEC and OPEC intended or likely supply, Sarkis detects an *ex-ante* gap of about 15 million barrels/day. The implication here is clear: since an *ex-post* gap is impossible, OPEC will have to find and produce more oil, because on this score, the non-OPEC producers do not have a great deal to offer. For example, within the foreseeable future, heavy oil and/or tar sands are not going to provide us with a bonanza on the order of Saudi Arabia's potential output, despite what we are constantly told. Similarly, although Professor Eugene Khartukov insisted in a recent issue of Asian magazine *Petromin* that on the basis of proved reserves, Russia should eventually be able to pump 30m b/d of oil, it happens that Russian oil production is still well below the peak of 13m b/d that was reached about 15 years ago. Output is increasing at the present time, and with more investment it can continue to grow for a while, but a theory has been offered by analysts at Sanford Bernstein (and elsewhere) that this upswing can only last until 2007–08. If so, then it is likely that neither Russia nor the Caspian region can live up to expectations!

Without going into figures and dates, similar observations have been put forward by the CEO of the large French oil group Total, Thierry Desmarest, who makes it clear that for oil supply to meet growing demand, OPEC must "open its doors", and open them very wide for investment in exploration and new production (*Financial Times*, September 13, 2004). Total has recently paid a billion dollars for some Russian energy properties, but unless I am badly mistaken, the purpose of this investment is to obtain oil from existing facilities to sell at the high prices that

Desmarest and his colleagues expect to prevail in the future. Only a minor amount of that billion is likely to be earmarked to raise output.

In an important article in the *Financial Times* (September 22, 2004), Carola Hoyos noted that most oil companies now prefer access to easily exploitable reserves than involvement in high risk ventures. This has been true since at least the turn of the century, when the business press began to point to the manner in which reserve acquisition was being subordinated to profitability. As we know from mainstream textbooks, of course, profitability has always been uppermost in the intentions of management; however, until recently it was believed that the best way to approach its maximization was through the accumulation of various properties, followed by a round of intensive (ie, costly) exploration. It was during those soon-to-be-forgotten days that it was found to be 'strategically correct' (in the *game theory* sense) to endorse predictions of large-scale future oil supplies and low future oil prices.

Oil companies still spend billions of dollars every year on things like exploration, but as far as I can tell, their heart isn't always in it. Carola Hoyos tells us that technology is now being developed so that it can squeeze more crude out of existing properties. However, this is a kind of plan B: what is genuinely desired, as Total's Desmarest makes clear, is to apply any new technology coming along to extracting the resources of the Middle East. Moreover, Hoyos provides a particularly relevant quote by the Charles River Associates consultants Stewart Johnston and David Bramley: oil technology is "something of a paradox. No one doubts its value in the long term, but it's notoriously hard to justify investing in the short term."

The logic here is simple: from a *social* point of view, investments in technology have almost always paid off in the long run, but a sizeable oil 'gap' of the kind that Dr Sarkis refers to above might appear at any time, and it is possible to find observers who believe that it already exists.

Of late we hear a great deal about the energy plan that the US government has or will soon launch, but the reason that it is derided by high-level insiders like the CEO of ExxonMobil, Lee Raymond, is that the only energy plan that makes sense in the short run is one promoting the deployment of more nuclear installations, as well as providing a sensible explanation of how the USA and other high oil-consuming countries are going to be able to gain access to in the near — as opposed to the distant — future, the huge amounts of oil that are absolutely necessary for the international macro-economy to function in a relatively satisfactory manner.

> "Experience is an expensive school, but the only one in which fools can learn."
>
> — Benjamin Franklin

Final comments

Some new logic about the world oil market has started making the rounds. It is being said by certain observers that the problem with the oil price does not have anything to do with supply and demand for the physical commodity, but with some antics in international financial markets. The electricity derivatives markets are basically a scam, but the oil derivatives markets are more than 'the best game in town', as they were once characterized. With adequate liquidity they can enable a sizeable amount of risk management to take place; and they might also furnish the best estimate of the oil price in the future — regardless of whether (*ex-post*) that estimate is correct or not. Persons who are interested in this topic should look at the chapter on oil in my energy economics textbook (2000), and particularly the stock-flow model shown there: the oil derivatives markets are useful institutions, but the short-run oil price is determined by supply/demand considerations, and in particular the size of inventories relative to demand. Amazingly enough, this concept — which was first made systematic by Professor Franklin Fisher of MIT and myself — is still absent from textbooks, although it cannot avoid being noticed by readers of, for example, the *Financial Times*.

In the interview with Peter Odell mentioned at the beginning of this paper, he showed concern for the heavy oil in Venezuela, and the tar sands of Canada. This too is a road not taken, for the very good reason that at the present time it leads nowhere.

Nobody knows this better than the major oil companies, although they may be counting on advances in technology to eventually change this arrangement. At the present time though, turning to this subject might be of considerable value to those unfortunate energy economists and analysts who, having completely misjudged the outlook for conventional oil, are desperate to restore their credibility.

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Professor Banks teaches economics at Uppsala University, Sweden. The opinions expressed in this article are solely those of the author.

Iran and China sign oil and gas agreements worth $70 billion

Iran and China have signed agreements worth around $70 billion to develop various projects in the oil and gas sector, according to reports by the state news agencies of both countries, Iran's Islamic Republic News Agency (IRNA) and China's Xinhua.

The accords were inked during a three-day visit to Beijing at the end of October by a delegation of senior Iranian officials, headed by the country's Minister of Petroleum, HE Bijan Namdar Zangeneh *(pictured)*.

Under a memorandum of understanding (MOU) signed by Zangeneh and the Chairman of China's Development and Reforms Commission, Ma Kai, the second-largest Chinese state oil firm, Sinopec, has been awarded the rights to develop the Yadavaran oil field in Iran.

Sinopec will be commissioned to prepare a master development plan for Yadavaran in co-operation with international oil corporations. Once the details of the plan have been approved by the National Iranian Oil Company (NIOC), it will be implemented through a buy-back scheme.

Earlier this year, Iranian officials estimated that Yadavaran could have total recoverable reserves of more than three billion barrels of crude, and a production capacity of around 300,000 barrels/day.

When the development work at the field is complete, NIOC has agreed to sell as much as 150,000 b/d of oil to China at market prices over a period of 25 years. The Xinhua report put the value of the deal at around $70bn.

In return for the Yadavaran project, Sinopec has agreed to purchase 10 million tonnes/year of Iranian liquefied natural gas over a period of 25 years, according to the terms of the MOU. The two sides said that they would jointly support investment in the construction of an LNG plant in Iran.

Under a separate MOU also signed during Zangeneh's visit to Beijing, the two countries have agreed to construct a gas condensates refinery in the southern Iranian city of Bandar Abbas.

Around 56 per cent of the refinery's total capacity, which is estimated to be some 300,000–350,000 b/d, will be aimed at producing gasoline. Iran will own the gasoline produced at the refinery and China will export the other products.

Construction of the refinery will take place over the next three years, and Iran will take ownership of the refinery after 25 years. The total investment necessary for the joint project is projected at about $1.5bn.

The two sides also discussed co-operation on other oil exploration projects in Iran, as well as promoting consumption of condensed natural gas in automobiles. A joint oil and gas committee is to be formed in order to examine the possibilities for strategic co-operation in the energy sector.

Iran and China already have strong energy ties. According to official figures quoted by the Xinhua report, Iran supplied around 13 per cent of China's crude imports last year.

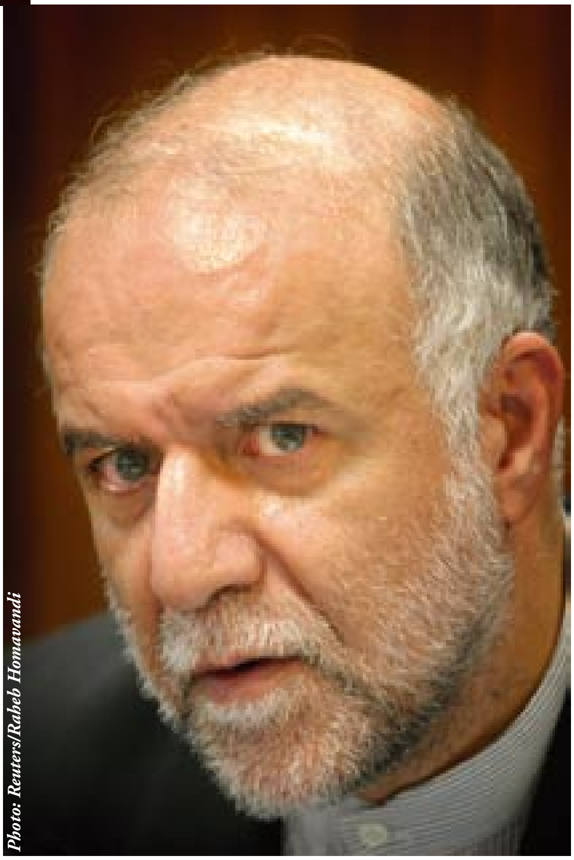
Speaking to IRNA before leaving Beijing, the Iranian Minister described his visit to China as very successful. The signing of the agreements was a "remarkable achievement" and oil and gas co-operation between the two countries would enter a new phase once the accords were implemented, he said.

During his trip to Beijing, Zangeneh met with the Chinese Foreign Minister, Li Zhaoxing, and the Minister of Commerce, Bo Xilai. The two sides reviewed issues of mutual interest, particularly in the oil, gas and petrochemical sectors.

In addition, Zangeneh and his delegation met with the heads of several of China's state-owned oil companies for talks that the Iranian Minister said were "very positive". He also took part in a one-day conference on the theme of opportunities for co-operation between Iran and China in the energy sector.

Meanwhile, a report by Agence France Presse (AFP) quoted Zangeneh as saying that his country was planning to invest around $50bn in its energy industry over

This section is compiled from various sources, including the OPEC News Agency (OPECNA), which transmits three daily bulletins of news, analysis and features from OPEC Member Countries and emerging economies. Those interested in news on oil, energy and economic development issues can e-mail opecna@opec.org for more details.



the next five years, which would enable Iran to expand its oil production capacity from 4.2m b/d to 5.0m b/d.

Zangeneh said that Iran's oil reserves totalled around 130bn b and its gas reserves amounted to 28 trillion cubic metres, according to the AFP report.

In a separate development, the Head of NIOC's Exploration Department, Mahmoud Mohaddes, has announced that Chinese companies have presented five proposals for implementing oil and gas projects in 16 blocks in Iran, the OPEC News Agency (OPECNA) reported.

Two Chinese firms, Sinopec and the China National Petroleum Corporation, had indicated their willingness to take part in the bidding for exploration and development rights in the 16 oil blocks, OPECNA quoted Mohaddes as saying.

Sinopec's performance with regard to exploring the Zavareh-Kashan block had been positive, he said, adding: "This achievement has encouraged other companies to think about investing in oil exploration and development in Iran."

In recent years, Chinese companies have been some of the biggest investors in Iran's oil industry, with Sinopec agreeing to the construction of a huge oil terminal on the Caspian Sea. Deals to upgrade several refineries have also been signed.

United States firms are banned from investing in Iran under the Iran-Libya Sanctions Act (ILSA), which also has a provision for the USA to impose penalties on foreign firms investing in Iran.

However, the threat of sanctions under ILSA has not stopped various Asian and European oil firms signing oil and gas deals with Iran. Earlier this year, Japan's Inpex inked a $2.0bn agreement for the development of the giant Azadegan field, which is estimated to hold some 26bn b of reserves (for details, see pp18–19 of the January/February 2004 issue of the *OPEC Bulletin*).

Rapidly-growing Chinese oil demand has been one of the factors behind strong crude prices this year. The country has now overtaken Japan to become the world's second-largest energy consumer, with strong economic growth fuelling its thirst for energy, especially oil.

This unprecedented growth means that China, along with other large fast-growing economies such as the USA and India, is now having to import more and more crude as domestic oil output levels continue to fall. The country is already suffering from power shortages.

China has large reserves of coal, but the pollution levels in its major cities caused partly by the use of coal as a fuel has led to the country making moves to increase its consumption of natural gas.

Deals have already been signed for the purchase of LNG from nations including Indonesia and Australia. Additionally, a Chinese-led consortium is constructing a gas pipeline from the north-western Xinjiang region to Shanghai.

In brief

BP-Rosneft JV makes Sakhalin find

London — The Elvary Neftegas joint venture between UK oil giant BP and Russia's Rosneft has announced the successful completion of its first exploration well under the Kaigansky-Vasukansky exploration licence in the south of the Sakhalin V area, offshore Sakhalin Island. The well, drilled on the Pela Lache prospect, encountered significant volumes of oil and gas in a number of high quality sandstone reservoirs, said BP in a statement, although it did not give any figures. The new well is about 49 km offshore Sakhalin, and in water depths of around 114 metres. Rosneft-BP added that, since the objectives for this operational season have been met and the rig has completed drilling activities, it was suspending the well but would return to it in the future to test and gather additional data. The Elvary Neftegas joint venture is 51 per cent owned by Rosneft and 49 per cent by BP.

IEA revises 04 demand up, 05 down

Paris — The International Energy Agency (IEA) has again raised its global oil demand forecast for 2004, but cut the figure for 2005, reflecting expectations of slower economic growth and the impact of high oil prices on demand and the economy. The 2004 demand forecast has been raised by 240,000 barrels/day to 82.4 million b/d, while 2005 demand was trimmed by 70,000 b/d to 83.9m b/d, said the IEA in the latest edition of its *Oil Market Report*, released on October 12. Chinese demand growth showed signs of easing, with preliminary data suggesting August growth slowed to 6 per cent, down from 12 per cent in July and 25 per cent in the second quarter. On the supply side, world oil output rose by 640,000 b/d to 84.0m b/d in September, while non-OPEC output fell for a third month, by 100,000 b/d.

ExxonMobil announces Congo find

Irving, Texas — US major ExxonMobil has announced that its subsidiary, Esso Exploration and Production Congo (MTP Sud), has participated in the second oil discovery in the Congo deep-water Mer Tres Profonde Sud (MTPS) block. The Pegase Nord Marine-1 well was drilled to a total depth of 11,880 feet and tested two intervals with a combined rate of 14,360 barrels/day of oil. The well is located approximately 133 miles south-west of Pointe Noire in water depths of 6,600 ft. The ExxonMobil unit has a 30 per cent interest in the block, along with the operator Total E&P Congo (40 per cent) and ENI Congo (30 per cent). The President of ExxonMobil Exploration Company, Tim Cejka, said that the discovery further demonstrated the hydrocarbon potential of the MTPS block.

Saudi Arabia to raise crude output capacity to 11 million b/d

Riyadh — Saudi Arabia has announced that it will raise its crude oil output capacity to 11 million barrels/day, as oil prices in international markets have remained above $50/b for the US benchmark crude WTI in recent weeks.

The Kingdom's Minister of Petroleum and Mineral Resources, HE Ali I Naimi, told the Saudi Press Agency (SPA): "Saudi Arabia is closely monitoring the various developments in the international oil market and is seeking to stabilize the market and curb the surge in prices that could be detrimental to the growth of the global economy, particularly that of the developing countries."

Saudi Arabia had a desire "to make available adequate production capacity as soon as possible", SPA quoted the Minister as saying.

The Kingdom, he went on, would use the newly-developed Abu Safah and Qatif fields, which are now on stream, to raise its production capacity to 11m b/d by intensifying well drilling in producing fields.

This would take Saudi Arabia's surplus production capacity to around 1.5m b/d, the Minister said, adding that the bulk of the new additions to the country's production would be in Arabian Light oil.

"The Kingdom is fully prepared and well equipped to meet the oil requirements of its customers for any additional quantities of oil, and is also ready and capable of making up for a production shortfall occurring anywhere in the world," Naimi concluded.

In a separate development, a new board has been formed for state oil and gas giant Saudi Aramco under the chairmanship of Naimi. The new board will serve for three years starting from October 29.

Its members are Dr Ibrahim A Al-Assaf, Dr Abdulaziz I Al-Mana, Dr Abdul Rahman A Al-Tuwaijri, Dr Mohammed I Al-Suwaiyel, Abdallah S Jum'ah, Abd Allah S Al-Saif, Abdulaziz F Al-Khayyal, Khalid A Al-Falih, Rodney B Wagner, Victor G Beghini and James W Kinnear.

Two of the members, Al-Khayyal and Al-Falih, are new to the board and are Saudi Aramco executives. Both have been with the company for more than 20 years and have held a number of high-level positions during their careers.

Al-Khayyal is currently Senior Vice-President of Refining, Marketing and International, while Al-Falih is also a Senior Vice-President and serves as the Chairman of the board of the newly-formed Southern Rub Al-Khali joint venture between Anglo-Dutch firm Royal Dutch/Shell, France's Total and Saudi Aramco.

Russia's Lukoil to invest around $1.0 billion in Venezuelan oil sector

Moscow — Russian oil and gas giant Lukoil could invest as much as $1.0 billion to develop oil fields in Venezuela, according to Russian media reports quoting a top company official.

The *Moscow Times* said that the President of Lukoil Overseas, Andrei Kuzyaev, told reporters that the Russian company was seriously considering such a move and planned to sign an agreement with state oil and gas firm Petróleos de Venezuela (PDVSA) in the coming months.

"We're still negotiating with PDVSA," Kuzyaev told reporters, although he declined to give any further details on the proposed accord.

The Venezuelan Ambassador to Russia, Carlos Mendoza, has also said that Lukoil is contemplating a number of investment possibilities in the South American country, including oil and gas exploration, heavy crude production and refining projects, and the upgrading of less productive oil fields.

In early October, Kuzyaev and Lukoil First Deputy CEO, Ravil Maganov, held a meeting in Moscow with a high-level Venezuelan delegation, headed by Vice-President Jose Vicente Rangel and including Ambassador Mendoza.

The two sides discussed various aspects of co-operation in the oil sector under the memorandum of understanding signed by PDVSA and Lukoil in December 2003. Among other things, Lukoil is reported to be interested in setting up a joint venture with PDVSA to produce oil in Venezuela's eastern basin and the Lake Maracaibo region.

Last year, Venezuela said it would invite Russian oil companies to develop its recently-discovered Tomoporo oil field, which is located near Lake Maracaibo.

On the subject of Iraq, Lukoil's Kuzyaev said that his company was preparing to enter into negotiations with the Iraqi authorities and was in the process of completing the energy co-operation accords signed by the two sides earlier this year.

"Once the new (Iraqi) government is formed (after elections), then we hope we can enter into negotiations," Kuzyaev told reporters in the Venezuelan capital Caracas.

"All the accords for development with the Oil Ministry that were signed in March are being fulfilled," he added.

In March this year, Lukoil signed a memorandum of understanding with the Iraqi Oil Ministry to set up a committee to co-ordinate oil and gas projects. The Russian company is already training Iraqi oil industry employees, and around 130 Iraqi workers had been sent to Russia for training courses, Kuzyaev said.

In addition, Lukoil has teamed up with US major ConocoPhillips in order to bid for the development of Iraq's giant West Qurna oil field, with the US firm aiming to gain about 17.5 per cent of the project.

Lukoil originally won the rights to develop the field in 1997, but the present Iraqi authorities have said that any oil and gas deals signed with the former regime of President Saddam Hussein will need to be re-evaluated.

Qatar mulls exporting LNG to new European Union member Cyprus

Doha — The Mediterranean island of Cyprus, which was one of the ten new countries to join the European Union (EU) earlier this year, is planning to import liquefied natural gas from Qatar, according to reports in the local media.

A delegation of senior officials from Cyprus, led by the Minister of Commerce, Industry and Tourism, Yiorgos Lillikas, visited the Qatari capital Doha in October to explore the possibilities of strengthening economic co-operation between the two nations.

Lillikas said that his country planned to import Qatari LNG to meet the huge future requirements that would arise from a proposed switch to gas-based power plants from 2009.

"Our visit to Qatar assumes significance as it comes barely months after Cyprus joined the EU," the Minister was quoted as saying at a press conference by local newspaper *The Peninsula*.

He added that, at the invitation of Qatar's second Deputy Prime Minister and Minister of Energy & Industry, HE Abdullah bin Hamad Al Attiyah, his country had sent a team of experts to discuss the technicalities of the proposal to import LNG with their counterparts in Doha.

With Lillikas at the press conference were the Cypriot Ambassador to Qatar, George C Kasoulides; the Director of Energy at the Ministry of Commerce in Nicosia, Olympia Stylianou; and the Director of Trade at the Ministry, Andreas Sofocleous.

Stylianou said that the proposal to import Qatari LNG had been found viable in a study conducted by experts, and noted that this would require the construction of an LNG receiving terminal in Cyprus.

Lillikas added that Cyprus was the EU member that was the closest to the Arab world, including the nations of the Gulf Co-operation Council (GCC), both in terms of physical proximity and culture. "We are better placed in EU to play the role of a bridge between the Arab world and Europe," he said.

Exports to the Arab world, especially of foodstuffs, account for about 30 per cent of total exports from Cyprus. The size of the country's gross domestic product is around $15 billion.

Cyprus has a service-dominated economy and is more than willing to share its experience in that field as well as tourism with Qatar, said Lillikas, pointing out that both countries have small but rapidly-growing economies.

Over 50,000 foreign companies are registered in Cyprus, making it a hub of business and industry in the region. The country's environment is very conducive to business and investment, noted Lillikas.

During their visit, Lillikas and his delegation also met the Qatari Minister of Economy and Commerce, HE Sheikh Mohamed bin Ahmed bin Jassim Al Thani.

In brief

Gazprom, Petro-Canada mull LNG deal
MOSCOW — The CEOs of Russia's Gazprom and Petro-Canada, Alexei Miller and Ron Brenneman, have signed a memorandum of understanding to investigate a joint liquefied natural gas project which would see LNG from Russia shipped to North American markets by 2009. The MOU encompasses a co-operative study of all aspects of the LNG value chain including liquefaction, re-gasification and the supply-demand fundamentals relevant to marketing arrangements. Under the accord, options will be examined for Petro-Canada and Gazprom to jointly develop a liquefaction plant in the St Petersburg region. The two sides will also look at the options for gas supplies to the new LNG plant and re-gasification in North America.

Shell Malaysia finds more oil off Sabah
LONDON — Shell Malaysia has announced that its joint venture with Petronas Carigali and ConocoPhillips has made another oil discovery in the waters offshore Sabah. The Malikai-1 exploration well was drilled as a vertical hole in water depths of 565 metres, approximately 110 km from the existing Gumusut field in block J. The Chairman of Shell Malaysia, Jon Chadwick, commented that the well had encountered "a long oil column in very good quality reservoirs. Initial indications are that Malikai crude oil is of a high quality. As a long-term partner in Malaysia's progress, we are delighted to announce this highly significant discovery." The new find is located in Malaysia's deep-water block G, in waters on the north-west of Sabah. Shell Malaysia's upstream company, the Sabah Shell Petroleum Company, is the operator of the block.

India's ONGC Videsh signs Ghana accord
NEW DELHI — India's ONGC Videsh and the Ghana National Petroleum Corporation (GNPC) have entered into a memorandum of understanding designed to enhance co-operation between the two sides, ONGC said in a statement. The agreement covers a framework for the study and evaluation of areas identified by ONGC Videsh, as well as scope to enter into exploration, development and production agreements with GNPC. It also envisages enhancing bilateral co-operation in exploration and production, including the training of GNPC staff in India. The Chairman of GNPC, S Sekyere Abankwa, said that the signing of the agreement had been driven by his company's desire "to leverage ONGC Videsh's significant competence and know-how in exploration and production activities, as well as lay down the principles for future co-operation."

In brief

ChevTex makes Mexican Gulf find

San Ramon, California — US major ChevronTexaco has announced a new deep-water oil discovery in the Jack prospect, in the Gulf of Mexico. The new find is located in Walker Ridge block 759, approximately 270 miles south-west of New Orleans. The Jack-1 discovery well, in approximately 7,000 feet of water, was drilled to a total depth of 29,000 ft and encountered more than 350 ft of net pay oil sands. Further appraisal drilling is planned to determine the extent of the discovery, said the US firm in a statement. The President of ChevronTexaco Exploration and Production, Ray Wilcox, described the Jack-1 well as being "our latest success in the deep-water Gulf of Mexico."

Saipem wins offshore Angola deal

Milan — ENI's engineering subsidiary, Saipem, has been awarded a lump sum turnkey contract for the sub-sea development of the Rosa field, offshore Angola. The scope of work comprises the engineering, procurement, construction, installation and pre-commissioning of the SURF facilities (sub-sea umbilicals, risers and flowlines) in water depth of approximately 1,400 metres as a tie-back to the Girassol FPSO vessel, which is located in block 17, about 200 km north-west of the Angolan capital Luanda. The contract, awarded by block 17 operator Total Exploration & Production Angola, has a total value of approximately $440 million. The vessels *Saipem 3000* and *Saibos FDS* will carry out the job between the first and third quarters of 2006. The partners in block 17 are Total, Esso Exploration Angola (Block 17), BP Exploration (Angola), Statoil Angola Block 17 and Norsk Hydro, with state oil firm Sonangol being the concessionaire.

Lukoil makes $1.7bn profit in 1H04

Moscow — Russia's Lukoil has announced that its net profit was $1,696 million in the first half of 2004, which was $594m higher than in the same period of 2003. The figures exclude the cumulative effect of changes in accounting policy and the effect of the sale of the company's stake in the Azeri-Chirag-Gyuneshli project, noted Lukoil. Despite the strengthening of the rouble in real terms, average oil production expenses fell from $2.59/barrel to $2.53/b (a drop of 2.3 per cent), which was made possible by an increase in the average flow rate per oil well from 9.42 tonnes/day to 10.52 t/d, as well as by the restructuring of the firm's oil production assets in Perm region. Lukoil increased average daily production by 8.7 per cent, and total production for the first six months amounted to 313.3m b (42.3m t).

The meeting focused on issues of mutual concern, especially those related to trade and the economy. The two sides signed a number of agreements covering such areas as encouraging and protecting investments, and co-operation in the economic, technical and trade sectors.

Indonesia awards 12 new oil, gas blocks in bid to boost production

Jakarta — Indonesia has awarded exploration rights in 12 new oil and gas blocks to a number of local and foreign companies in a bid to boost the country's declining oil ouput, according to reports in the local media.

The companies that were awarded blocks, which are located in offshore and onshore fields around the country, include Petronas Carigali, the overseas subsidiary of Malaysia's Petronas; US firm Andarko Petroleum; and Altar Sociedade de Investimentol Mobiliario of Portugal.

The Director of Exploration at the Ministry of Energy and Mineral Resources, Novian Thaib, said that companies are expected to invest a total of $163 million during the first three years of exploration.

Indonesia will also offer 10 more blocks for bidding in December, said Thaib. These will include one offshore block in the Natuna Sea, one onshore block in South Sumatra province and three blocks off the north-west coast of Sulawesi island.

In a related development, the new Indonesian President, HE Dr Susilo Bambang Yudhoyono, has inaugurated a new offshore oil-producing facility that will restore the country's oil production to above one million barrels/day.

When it reaches full capacity, the $800m floating production, storage and offloading (FPSO) facility is designed to produce 100,000 b/d from the Belanak field in the South Natuna Sea. The Belanak FPSO is one of the largest of its kind in the world with a storage capacity of 1.0m b.

"(Output) won't be that large at the beginning but it should reach that peak level in less than a year. It will not only produce crude oil, it will also produce gas, condensate and liquefied petroleum gas in significant amounts," said the Indonesian Minister of Energy and Mineral Resources, HE Dr Purnomo Yusgiantoro.

Part of the natural gas will be exported through underwater pipelines to Malaysia and Singapore. The Indonesian government will get 85 per cent of the output under a production-sharing contract with US firm ConocoPhillips.

"Hopefully, the Belanak project will attract other investors into the country, some of whom could embark on new exploration nationwide," the OPEC News Agency quoted Purnomo as saying.

Indonesia's crude oil output had declined by an average of 16 per cent in recent years to below 1.0m b/d, noted Purnomo, adding that current production levels were well below the country's OPEC quota of 1.27m b/d.

The Minister also called for a quick settlement to the dispute between Indonesian state oil and gas company Pertamina and US major ExxonMobil over the development of new oil and gas reserves in the Cepu block.

ExxonMobil took over the concession rights to the Cepu block, which is located in the border area between Central and East Java, from Pertamina in 1999.

However, after the US firm made a new discovery of about 600m b of oil and between 700 billion and 1.25 trillion cubic feet of natural gas reserves in 2001, Pertamina called for a new contract to develop the new reserves on a joint-venture basis.

"I will leave the discussions to the related parties, but it needs to be resolved quickly, so it does not disrupt production," Purnomo said.

France's Total announces significant oil discovery in Nigerian offshore

Paris — French oil and gas giant Total has announced that its Nigerian subsidiary, Elf Petroleum Nigeria, has made a significant discovery in the western Usan field area in the deep-water oil prospecting license 222 (OPL 222), offshore south-eastern Nigeria.

The Usan 5 well, located around 110 km offshore and 6 km west of the Usan 4 discovery well in water depths of approximately 750 metres, is the fourth successful appraisal of the Usan field discovered in 2002.

Oil was sampled at Usan 5 in several levels confirming the presence of additional quantities of oil as well as further potential in previously untested reservoirs, said Total in a statement.

The Nigerian National Petroleum Corporation is the concessionaire for OPL 222 under a production-sharing contract operated by Elf Petroleum Nigeria (20 per cent), in partnership with Chevron Petroleum Nigeria, Esso Exploration and Production Nigeria (Offshore East) and Nexen Petroleum Nigeria.

Total also has a 15 per cent partnership interest in the Bonny gas liquefaction plant in Rivers State, in south-eastern Nigeria, where trains four and five are presently under construction and the construction of a sixth train has been approved.

Separately, the French firm has also announced the production start-up of the third phase of development at Qatar's Al Khaleej oil field, and the bringing on stream of a platform for water separation and treatment.

Thanks to the Al Khaleej North development project, production on the field will be increased by 20,000 barrels/day of oil, compensating for the field's natural decline. With the finalization of the drilling phase in January 2005, production at Al Khaleej will reach 50,000 b/d.

The additional output will be provided by ten new production and injection wells with the separation, treatment and re-injection of water to be handled by a new unmanned and remotely operated platform.

Kofi Annan praises work of Paul Volcker-led inquiry into Iraqi oil-for-food programme

New York — The United Nations Secretary General, Kofi Annan, has praised the "thorough work" of the independent inquiry examining allegations of corruption surrounding the UN's now defunct oil-for-food programme with Iraq.

Annan's comments came after he met with the senior official who is heading the independent inquiry committee, the former Chairman of the US Federal Reserve, Paul Volcker *(pictured).*

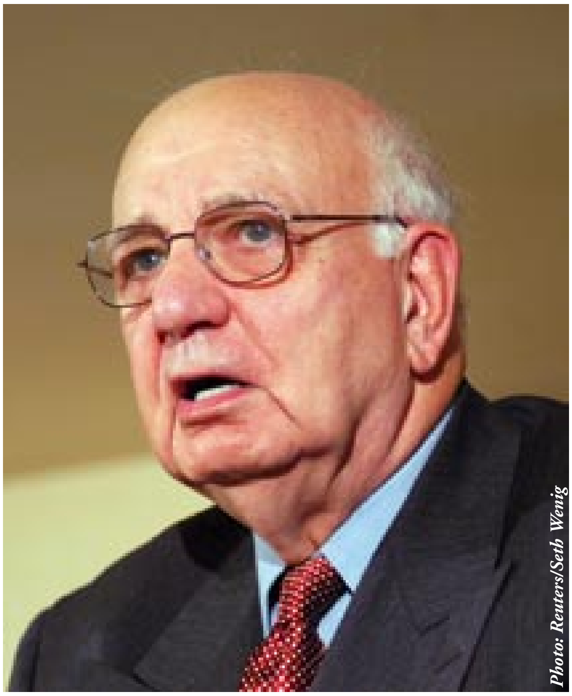


Photo: Reuters/Seth Wenig

"The Secretary General is encouraged that the committee is working diligently on the inquiry and looks forward to receiving its final report," said a UN spokesperson in a statement released after the meeting between Annan and Volcker.

Speaking to reporters prior to the meeting, the Secretary General was asked by reporters about the scandal's impact on the world body.

"There is no doubt that the constant campaign has, and the discussions have, hurt the UN. That's why we want to get to the bottom of it and clear it as quickly as pos-

In brief

Statoil welcomes fuel tax cut
Oslo — Norway's Statoil has welcomed a cut in duty on sulphur-free automotive fuel proposed in the central government's budget, which was presented earlier in October. The government is proposing to increase fuel tax by NOK 0.02–0.03/litre on existing grades of petrol and diesel oil, while reducing it by NOK 0.02/lt for sulphur-free types. A European Union directive requires automotive fuels containing virtually no sulphur to be phased in from next year, with all petrol and diesel oil meeting this criterion by 2009. The head of Statoil's Mongstad refinery, located north of Bergen, Bjørn Kåre Viken, described the move as "very welcome, both for the environment and for us as a company." A tax incentive would encourage a simpler and swifter shift to sulphur-free petrol and diesel oil in Norway, he noted.

Unocal announces successful Thai drilling
Bangkok — Unocal Thailand has announced the completion of successful delineation drilling in the South Gomin operating area, comprising approximately 319 sq km in concession block 13, located in the Gulf of Thailand. The delineation drilling programme involved three follow-up wells, which encountered 195, 183, and 95 feet of net natural gas pay. The South Gomin field was discovered in 1998 when the South Gomin-1 well was drilled and encountered a total of 269 ft of net gas and condensate pay. The first production from the South Gomin field is expected in late 2006. The President of Unocal Thailand, Tara Tiradnakorn, commented: "The original South Gomin well established that a working petroleum system was present. We have confirmed the commerciality of the area with three very successful follow-up wells."

API sees rise in 3Q04 drilling figures
Washington — Estimated completions of US oil wells, natural gas wells and dry holes increased by nine per cent in the third quarter of 2004 compared with the same period of 2003, according to the latest figures from the American Petroleum Institute (API). Gas completions were up 13 per cent to 6,435; oil well completions rose two per cent to 2,329, and dry holes fell three per cent to 1,113, said the API in its *Quarterly Well Completion Report* for the third quarter. An estimated 9,877 oil wells, natural gas wells and dry holes were completed in the third quarter of this year, compared with 9,101 completions in the third quarter of 2003. Total exploratory completions fell eight per cent in 3Q and development completions were up ten per cent compared to the same quarter last year.

In brief

BP orders four new LNG ships
London — BP Shipping has announced that it has ordered four new liquefied natural gas carriers from Hyundai Heavy Industries of South Korea. In addition to the firm orders, options for an additional four ships have been agreed, said BP in a statement. The new double-hulled ships will have a capacity of 155,000 cubic metres each. Due to be delivered in 2007–08, the four vessels will have a membrane-type design and will be equipped with dual fuel diesel-electric propulsion. BP has interests in LNG exports in countries including Indonesia, the United Arab Emirates, Australia and Trinidad & Tobago.

ChevTex, Gazprom sign co-operation deal
Washington — Chevron Neftegaz, an affiliate of US major ChevronTexaco, has announced the signing of a memorandum of understanding with Russian gas giant Gazprom that will allow the two companies to undertake joint feasibility studies on possible oil and gas projects in Russia and the USA. Specifically, the two companies will assess the feasibility of an integrated liquefied natural gas project in Russia, Gazprom's potential participation in a ChevronTexaco-led gas import terminal project in North America, ChevronTexaco's potential participation in existing Gazprom projects in north-west Siberia, and possible joint participation in other oil and gas opportunities. Commenting on the announcement, Gazprom Chairman Alexei Miller said: "The signing of the MOU is confirmation of the commercial dialogue between Russia and the USA, as well as an example of the co-operation between our two companies. For Gazprom, access to the American gas market is strategically important."

ExxonMobil V-P Longwell to retire
Irving, Texas — US giant ExxonMobil has announced that long-serving Executive Vice-President and Director, Harry J Longwell, is to retire at the end of 2004 after more than 41 years of service. As a consequence of his retirement, a number of other management changes will take place at ExxonMobil between now and the end of the year. The current President of ExxonMobil Production Company (EMPC), Stuart McGill, will become a Senior Vice-President and will relocate from Houston to the corporate headquarters at Irving, Texas. His role as President of EMPC will be taken over by Morris Foster, who is currently President of ExxonMobil Development Company (EMDC). Mark Albers, currently Executive Assistant to the Chairman of ExxonMobil, will succeed Foster as President of EMDC, with effect from October 2004.

sible," Annan was quoted as saying by the UN news service.

The Volcker inquiry has released comprehensive tables of companies participating in purchases of Iraqi oil and the sale of goods under the oil-for-food programme.

According to the inquiry, 248 companies received and paid for contracts totalling $64.2 billion, while 3,545 companies exported goods to south and central Iraq, receiving payment totalling $32.9bn. Another 941 companies are identified by name only for exports to northern Iraq.

In a briefing paper accompanying the release of the data, the Volcker inquiry said that the investigation has made "substantial progress," organizing its 65 staff members into specific investigative teams.

Scores of witness interviews have been conducted in Europe, the USA, Iraq and elsewhere in the Middle East. Committee staff members are continuing to review UN records as well as transactions related to the programme.

Production starts up at ROD oil field in eastern Algeria

Algiers — Production has started up at an initial rate of 18,000 barrels/day at the ROD oil field, which is located in the Berkine basin in eastern Algeria, the partners involved in the project have announced.

The oil from the field will be processed at a neighbouring plant until the ROD central processing facilities are finished later this year. With the completion of the latter, output will rise to around 80,000 b/d of Saharan Blend.

The ROD development project consists of six satellite oil fields in the Berkine basin. A total of 34 development wells have been drilled and will be available for production operations. Water and associated gas will be reinjected into the field to assist recovery.

The partners in the field's development are Algeria's state oil and gas firm Sonatrach, Italy's ENI and Australia's BHP Billiton. Sonatrach and BHP Billiton are jointly operating the development phase, while the Algerian firm and ENI will jointly operate the production phase.

Completion of the work at the ROD field was originally scheduled for the first quarter of 2004, but the three partners decided to delay the completion date for the project by more than six months after problems in securing some equipment.

Despite the delay, the capital cost of the project is forecast to be within the original budget. ENI funded 64 per cent of the project and BHP the other 36 per cent, with the Australian company's share being around $192 million.

BHP Billiton said in a statement that the ROD project was its second development in Algeria. First gas from the company's jointly-owned Ohanet gas and liquids stripping project started flowing in October last year.

"ROD and the Ohanet development have given us a platform for growth," commented BHP Billiton's Group Energy President, Philip Aiken, adding that the company had acquired further Algerian exploration acreage in recent bidding rounds.

Abu Dhabi's Gasco shortlists four bidders for gas development

Abu Dhabi — The Abu Dhabi Gas Industries Company (Gasco) has shortlisted four bidders for the third phase of its onshore gas development scheme, according to a report in the local newspaper *Gulf News*.

The shortlisted firms are US giant Bechtel, France's Technip, and two Japanese companies, Chiyoda Corporation and JGC. The bids are currently being evaluated and an engineering, procurement and construction contract will be announced shortly.

Commenting on the move, Gasco's General Manager, Mohammad A Sahoo, said: "We have already narrowed down the technical and legal issues with the bidders, after thorough negotiations.

"We will award the contract in a few weeks' time, once the negotiations and formalities are completed," he was quoted as saying by the paper.

The $1.3 billion scheme is part of three projects currently in the tendering phase, the others being the third Ruwais

NGL train, which is valued at $1.0bn, and phase two of the Asab gas development project, valued at $700 million.

Gasco has also issued a tender for a $600m expansion project involving the construction of a gas injection compressor/feed compressor at Habshan.

"The completion of these projects will increase the total capacity of our production from the current 5.0bn cubic feet/day to 8.0bn cu ft/d," Sahoo told an audience of over 200 businessmen at a two-day conference on major new project opportunities in Abu Dhabi.

"Besides, we are floating a new tender for an additional gas train in Habshan later this year for a possible contract during the third quarter of next year," he went on.

"We are also undertaking upgrade projects in some of the existing facilities, including the Bu Hasa facilities, Habshan ethane recovery maximization, Habshan capacity enhancement, Bu Hasa integrated control system, pipeline network extensions, and storage capacities, the total value of which will be over $200m," said Sahoo.

By 2008, Gasco is planning will increase its supply of ethane from the current level of 2,500 tonnes/day to 8,000 t/d, he added.

Kuwait's KOC renews technical assistance deal with France's Total

Paris — The state-owned Kuwait Oil Company (KOC) has renewed its technical assistance contract with French oil and gas giant Total, according to a statement from the latter's Paris headquarters.

Under the contract, which was initially signed in 1997 and previously renewed in 2001, Total provides expert assistance to KOC in matters relating to oil production from the fields in the Neutral Zone, which is shared between Kuwait and Saudi Arabia, and the exploration of onshore Kuwait.

The contract enables Total to more effectively assess the country's high-potential upstream segment. The French firm is also a partner in a ChevronTexaco-led consortium that is competing with two other foreign consortia for the rights to oil exploration in northern Kuwait.

KOC is the upstream subsidiary of the state-owned Kuwait Petroleum Corporation, handling all aspects of production-related activity.

In a separate development, Kuwait has resumed negotiations with Iran regarding the import of natural gas, according to a report by Iran's official Islamic Republic News Agency (IRNA).

A member of an Iranian delegation visiting Kuwait for talks on the subject told IRNA that the discussions aimed to finalize an agreement, and would focus on the quality amount and price of gas exports from Iran to Kuwait.

The Kuwaiti media have quoted the country's oil officials as saying that, given the importance of signing of an agreement, Kuwait was satisfied with the progress of the discussions so far, even though negotiations had been moving slowly on the issue.

The Iranian official said that Kuwait has informed Iran it is not satisfied with quality and proposed price of gas and wants to negotiate a better rate.

In addition, Kuwait has said that upon ratification of an agreement with Iran, the technical work on laying the pipeline will start immediately. Initial estimates are that the pipeline will cost around $200 million.

Kuwait's own gas reserves are not sufficient to meet its domestic demand, and country is also negotiating with Iraq and Qatar regarding possible imports of gas.

Strike ends in Nigeria but fuel prices remain an issue of concern

Abuja — A four-day general strike in Nigeria in October to protest against recent fuel price rises shut down banks, businesses, shops and public services across the country, but did not affect the country's oil industry, according to media reports.

Nigerian trade union leaders also warned that they would call an indefinite work stoppage in mid-November if the government failed meet their demands to reverse the recent increases in the price of fuel.

However, the strike, which the union leaders claimed would target the oil indus-

In brief

Record output at Athabasca oil sands
Calgary, Alberta — Shell Canada has announced that its Athabasca oil sands project has achieved record monthly production of 182,000 barrels/day of bitumen. After just over one year of operations, the project has demonstrated its ability to meet and exceed the design rate of 155,000 b/d of bitumen on a sustained basis, said Shell in a statement. The company has also outlined growth plans for the Athabasca oil sands project that would increase bitumen production to between 270,000–290,000 b/d by 2010. The Athabasca project consists of the Muskeg River mine, which is located north of Fort McMurray, Alberta, and the Scotford upgrader, located near Edmonton. A joint venture between Shell Canada (60 per cent), Chevron Canada (20 per cent) and Western Oil Sands (20 per cent), the Athabasca project is Alberta's first new oil sands mining project in 25 years and can supply 10 per cent of Canada's oil needs.

ENI unit gets Azeri field contract
Milan — ENI subsidiary Saipem has been awarded two contracts for development work at the Azeri-Chirag-Gunashli (ACG) field, located 120 kilometres south-east of Baku in the Azeri sector of the Caspian Sea. The two contracts cover the fabrication, transport and installation of offshore structures as part of phase three of the ACG field's development. The first contract covers the fabrication and load-out of a template and two jackets and associated piles, with a total weight in excess of 45,000 tons, while the second involves the transport and installation activities for the two platforms. The total value of the two contracts, which were awarded by the Azerbaijan International Operating Company, is around €235 million, and work is expected to be finished in 2007.

Repsol buys Portuguese petrochems plant
Madrid — Spain's Repsol YPF has announced the signing of an agreement with plastics supplier Borealis to purchase all the assets of the latter's petrochemical complex at Sines, Portugal. The completion of the transaction is subject to authorisation by the European Commission. The site comprises a cracker with a volume of approximately 350,000 tonnes/year of ethylene and 180,000 t/y of propylene, and two polyethylene plants, a low density plant with a production capacity of 145,000 t/y and a high density plant of 130,000 t/y. The deal represents a 38 per cent rise in Repsol YPF's cracker production capacity, plus a 28 per cent increase in total polyolefins capacity and a 55 per cent increase in polyethylene.

In brief

ConocoPhillips, Lukoil form alliance

Moscow — US major ConocoPhillips and Russia's Lukoil have announced an agreement to form a broad-based strategic alliance in which ConocoPhillips will become a strategic equity investor in Lukoil. The two companies also announced the creation of a joint venture to develop resources in the northern part of Russia's Timan-Pechora oil and gas province and their intention to jointly seek the right to develop the giant West Qurna oil field in Iraq. Under a shareholder agreement, ConocoPhillips will purchase 7.59 per cent of Lukoil's authorized and issued ordinary shares held by the Russian government for a price of $1.988 billion, or $30.76 per share.

ONGC announces Australian acquisition

New Delhi — India's ONGC Videsh has announced that it has reached an agreement with Antrim Energy of Canada to acquire majority interest in an exploratory block offshore Australia. The acquisition is subject to the approval of the Australian government. Under the terms of the agreement, ONGC Videsh will acquire a 55 per cent interest in block WA306P, located in the Australian north-west shelf, with the remaining stake being held by Magellan Petroleum. The block, which covers an area of 4,600 sq km, contains a cluster of drilling prospects in Barcoo sub-basin. Commenting on the move, ONGC Videsh's Chairman, Subir Raha, said: "The stake in block WA306P is our first acquisition in Australia and we believe that this opening should pave the way for our participation in many other opportunities in the Australian hydrocarbon sector. The block has good potential and we expect to spud the first well in the coming few weeks."

Norway's Statoil to buy Russian crude

Oslo — Norway's Statoil has concluded its first-ever deal to buy and sell Russian crude with an agreement to purchase oil produced by Surgutneftegas. "This deal means that both we and Surgutneftegas will be able to reach more — and different — customers," commented the Head of Statoil's crude oil trading department in Stavanger, Geir Heitmann, adding that Statoil would be re-exporting Russian crude together with Norwegian oil from its large terminal at Mongstad near Bergen. Deliveries are due to begin this autumn from Surgutneftegas, one of Russia's largest private oil companies with a production of more than 1.0 million barrels/day of oil, or about 13 per cent of total Russian oil production. Most of this output derives from fields around the town of Surgut in the central region of western Siberia, where the company has its head office.

try, was called off after the government decided to back down, reducing the price of fuel by about 10 per cent.

Analysts said that even though the strike threat had forced the government to compromise on the latest price increase, there was little doubt that the era of cheap fuel was now over for Nigerians.

Fuel costs in Nigeria have been rising since President Obasanjo deregulated the sector a year ago and removed government subsidies. A committee including government and union representatives has been set up to discuss ways of easing the impact of the rise in fuel prices, but agreement between the two sides has remained elusive.

This was the third general strike over fuel prices in 18 months. After the last one in June, President Obasanjo introduced legislation which reduced the powers of the NLC and made it more difficult for unions to go on strike.

A report by the BBC noted that many of the poorest Nigerians said they supported the idea of a strike, but if they did not work they could not eat. About two-thirds of Nigeria's population live on less than a dollar a day and many see cheap fuel as the only benefit they receive.

The continuing unrest in Nigeria and worries over possible disruptions to its oil and gas industry has been one of the factors contributing to strong crude oil prices, which have reached record highs in recent months.

Algeria's Sonatrach makes two more oil and gas finds in south-eastern region

Algiers — The Algerian state oil and gas company Sonatrach has announced that it has made two further discoveries, one of oil and the other of natural gas, in the south-east of the country.

According to a statement released by Sonatrach, the oil discovery was made by the Sif-Fatima well, which was drilled to a depth of 3,100 metres and is located on block 402b in the Berkine basin.

First tests produced a flow of 3,170 barrels/day of crude and 3,000 cubic metres of gas, with a wellhead pressure of 1,560 psi, said the company.

The gas find was made following the drilling of the Tin Mazoukine well to a depth of 2,650 m. The well is located on block 203 in the Illizi basin.

Initial tests showed output of 1,500 cu m of gas at a wellhead pressure of 330 psi, said the statement, adding that the two discoveries were the fourth and fifth hydrocarbons finds made this year by Sonatrach alone.

India's GAIL to buy 2.5 million tonnes/year of LNG from Iran's NIOC

New Delhi — The Gas Authority of India Ltd (GAIL) has finalized a gas purchase deal with the National Iranian Oil Company (NIOC) to buy 2.5 million tonnes/year of liquefied natural gas, according to a report in the New Delhi-based *Business Standard*.

The deal gives a major boost to the plans by India's Petronet LNG, which is GAIL's major stakeholder, to double the capacity of its LNG receiving terminal at Dahej in the western Indian state of Gujarat from the existing 5.0m t/y to 10m t/y.

Petronet has already signed an agreement with RasGas of Qatar to source an additional 2.5m t/y of LNG, in addition to its current purchases of 5.0m t/y from the Qatari firm.

"The negotiations have been going on for over the past four months and finally we have closed a deal and decided to buy LNG from NIOC at a very attractive rate," said GAIL's Executive Director, A K Ray.

"The gas may be unloaded at the Dahej terminal for regasification and then sold through GAIL's pipelines to prospective customers. As the agreement is for long-term supply from NIOC, supply of 10m t/y of LNG has been ensured," added Ray.

In a related development, the Iranian Foreign Minister, Kamal Kharrazi, has lent his support to a project to transfer Iranian natural gas to India via Pakistan, saying that the plan could strengthen security in the region and boost economic activity.

"The project to transfer gas (from Iran to India across Pakistan) would lead to an economic blossoming and guarantee the interests of the people in the regional as well as strengthen security and peace," he was quoted by the official Iranian News

Agency (IRNA) as telling the visiting Indian National Security Adviser, Jyotindra Nath Dixit.

India has reservations over the security of the Pakistan route, fearing that any diplomatic upheaval in its often stormy relations with Pakistan could affect the gas flow.

Earlier this year, the Indian Minister of Petroleum and Natural Gas, Mani Shankar Aiyar, was quoted as saying that Tehran and New Delhi were studying the possibility of supplying Iranian gas to India through a deep-water offshore gas pipeline that would bypass the Pakistani option altogether.

The two countries were looking into various aspects of the proposal, including different modes of transportation, route options and related political, security, economic and technical issues, he said.

The project would involve laying undersea pipelines in water depths of about 3,600 metres for a larger part of the route, falling outside Pakistani territory.

Asked to comment on the overland gas pipeline option through Pakistan, Aiyar said there were security concerns which had to be addressed to New Delhi's satisfaction.

However, the Indian External Affairs Minister, Natwar Singh, has said that New Delhi is willing to consider the gas pipeline from Iran via Pakistan if Islamabad provides international security guarantees.

Islamabad says it has no objection to the proposed multi-billion dollar pipeline, with Pakistani President Pervez Musharraf giving assurances that his country would give a 100 per cent security guarantee for the proposed project.

Pakistan's Prime Minister, Shaukat Aziz, has also expressed his enthusiastic support for the project to build the pipeline across his country. "It makes economic sense for all of us. My approach would be that if it makes bottom-line sense, get on with it," he was quoted as saying.

In a bid to tap the growing gas market in India, Iran has offered New Delhi an equity stake in its gigantic South Pars gas field, provided that India buys gas from it.

The 3,700-sq km South Pars gas field, which is an extension of Qatar's giant North gas field, is located 105 km southwest of the port of Asalouyeh, in Bushehr province. It has an estimated 14 trillion cubic metres of gas reserves and 18 billion barrels of condensate.

ChevronTexaco makes gas find in Venezuela's Plataforma Deltana

San Ramon, California — US major ChevronTexaco has announced that its affiliate in Venezuela has made a significant gas find with its offshore Plataforma Deltana Loran 2X exploration well in block 2.

Loran 2X is ChevronTexaco's first well in block 2, which is located on a fault block adjacent to the original Loran 1X discovery well drilled in 1982 by the South American country's state oil and gas firm Petróleos de Venezuela (PDVSA).

The Loran 2X well encountered five gas sand intervals for a total thickness of 494 feet. The well was tested at a rate in excess of 32 million cubic feet/day from two sand intervals and both tests were equipment-restricted. The well commenced drilling on schedule on August 11 in 360 ft of water and has reached its total depth as planned.

"We are optimistic with the results of the Loran 2X well. We have now completed testing of two major reservoirs in block 2 and we plan to drill two more wells by the end of the year," said the President of ChevronTexaco Latin America Upstream, Ali Moshiri.

The head of ChevronTexaco Overseas Petroleum, George Kirkland, added: "The confirmation of the Loran field discovery could go a long way toward developing a commercially viable natural gas resource base in Venezuela, which would align with our strategy to grow an integrated global gas business.

"This success underscores our corporate exploration strategy of focusing on core, high-impact opportunities and builds on our other exploration successes in Australia, Nigeria and Angola," noted Kirkland.

ChevronTexaco (60 per cent) operates block 2 in partnership with ConocoPhillips (40 per cent). The company, along with PDVSA, was also recently awarded an exploration license for Plataforma Deltana block 3 by the Venezuelan Ministry of Energy and Mines.

In brief

Marathon gets okay for Norway field

Houston — Marathon Oil and its partners have received approval from the Norwegian Ministry of Petroleum and Energy for their plan to develop and operate the Alvheim field located on the Norwegian continental shelf. The Alvheim project, in which Marathon holds a 65 per cent interest and serves as operator, is expected to begin production in early 2007. The field is currently estimated to contain resources of approximately 180 million barrels of oil equivalent. "Approval of the Alvheim project places us one step closer to bringing this important development on production in 2007," said Marathon's Senior Vice-President of Worldwide Production, Steven B Hinchman, adding: "We are pleased that the Norwegian Ministry of Petroleum and Energy has approved the approach we will be taking to help commercialize the Alvheim field."

Canadian gov't sells Petro-Canada stake

Calgary — Petro-Canada has announced the completion by the Canadian government of the sale of its remaining 19 per cent stake in the formerly state-owned company. The government sold its 49,390,104 Petro-Canada common shares at a price of $50.42 per share, for total gross proceeds to the government of nearly $2.5 billion. Petro-Canada did not sell any newly issued common shares as part of this offering and did not receive any proceeds from the sale of the shares. The joint book-running managers for the offering were CIBC World Markets, Merrill Lynch and RBC Capital Markets. Petro-Canada is one of Canada's largest oil and gas companies, operating in both the upstream and the downstream sectors of the industry.

Gazprom, CNPC sign co-operation deal

Beijing — The heads of Russian gas giant Gazprom and the China National Petroleum Corporation (CNPC) have signed an agreement on strategic co-operation, the two companies have announced. The accord, which was signed during Russian President Vladimir Putin's recent visit to the People's Republic of China by Alexei Miller on behalf of Gazprom and Chen Gen on behalf of CNPC, stipulates the main directions of future co-operation between the two companies in the natural gas industry. The main area of co-operation will be the study and realization of projects regarding the supply of natural gas produced by Gazprom to CNPC. Under the terms of the agreement, the parties will carry out a concrete study of issues related to supplies of Gazprom's gas to CNPC, and will agree on timing, volumes, transfer points, price formula and other conditions.

August

This section is based on the OPEC Monthly Oil Market Report published in mid-September 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

In August, all recent record highs were overshadowed by the dramatic surge in the OPEC Reference Basket.[1] On a monthly basis, the 11 per cent rise of almost $4/b took the Basket average well above $40/b for the first time since the Organization adopted the price marker. The $41.94/b average for the week ending August 19 constitutes an all-time weekly high, while the $43.16/b reached on August 8 set a new record daily average. The year-to-date average widened by more than 21 per cent or $6/b compared to 2003 (see **Table A**).

On a weekly basis, the month started with the Basket surging 4.6 per cent or $1.72/b to average $39.12/b, followed by further gains of 96¢/b and $1.86/b in the next two weeks. Then the Basket saw a downturn, losing 61¢ or almost 1.5 per cent to average $41.33/b. The fall extended into the month of September with the Basket losing $2.44/b or close to six per cent of its value in the week ending September 2 which took the average below the $40/b mark to $38.89/b. The Basket continued to fall in the following week, although at a slower pace, shedding another 27¢ to close at $38.62/b.

The Atlantic basin benchmark traded at levels previously unthinkable. The New York Mercantile Exchange (NYMEX) front month September light sweet crude contract shot up to $49.40/b before its expiration date in intraday trade, while on London's International Petroleum Exchange (IPE) Brent futures surged past the $45/b mark on August 20. Fundamentals as well as non-fundamental factors combined in August to send crude prices to new highs.

On the demand side, relentless unforeseen demand continues to be revised up with growth now estimated at around 2.5m b/d for the present year and more than 1.7m b/d in 2005. The spectacular hike in Chinese demand, now estimated at more than 800,000 b/d, has the potential to rise even further in the remaining months of the year, which would mean new upward revisions might be expected as we head towards autumn. The latest estimates call for a rise of more than 2m b/d in 4Q to 83.05m b/d and a further rise during the winter quarter to 83.32m b/d. On the supply side, the loss of Iraqi production on several occasions, including halts in total exports for prolonged periods, have raised speculation about when the country will return to the production level of 2.8m b/d. Earlier in the year, Iraq was expected to return to previous levels late in the second or early in the 3Q of 2004. However, it appears that the Iraqi production so far has plateaued at the 2.35m b/d seen in April of this year. The other fundamental component, stocks, seems to be on the low side and a build would bring some comfort to the market. By the end of June, total OECD commercial stocks stood at the same level as in 2003, towards the bottom of the last five-year average range.

Commercial stocks in OECD, North America and Europe showed signs of recovery and are higher compared to end-June 2003. In contrast, OECD Pacific commercial stocks are well below last year's level at the lower limit of the five-year average range. Geopolitics and the Middle East situation also added to the bullish outlook. The ongoing Yukos saga threatened to stop production and exports of some 1.7m b/d, while the Venezuelan recall referendum of August 15 and escalating violence in Iraq fuelled crude and product prices in August. The impact of supply disruption concerns, combined with a perception of shrinking global spare capacity, has been greatly amplified by futures market speculation. Our analysis suggests that despite the rise in demand expected for the last quarter of 2004 and 1Q2005, world oil supply, which includes nearly 30m b/d of OPEC production, is more than adequate to cope with demand and at the same time allows for seasonal stock changes. In the short run, the supply/demand balance shows that OPEC's spare capacity will return to more normal levels as the Organization's maximum production capacity expands in 2005 to well above 32m b/d and production slows to more moderate levels next year. Despite the general belief that robust oil demand is absorbing incremental OPEC

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

	Jul 04	Aug 04	Year-to-date average 2003	Year-to-date average 2004
Reference Basket	**36.29**	**40.27**	**28.07**	**34.11**
Arabian Light	35.55	**38.93**	27.47	33.63
Dubai	34.70	**38.22**	26.58	32.76
Bonny Light	38.08	**42.55**	28.71	35.48
Saharan Blend	38.16	**42.67**	28.63	35.52
Minas	36.28	**41.79**	29.47	34.71
Tia Juana Light	33.81	**36.86**	27.30	31.75
Isthmus	37.41	**40.88**	28.32	34.92
Other crudes				
Brent	38.33	**42.87**	28.78	35.54
WTI	40.69	**44.77**	31.40	38.40
Differentials				
WTI/Brent	2.36	**1.90**	2.62	2.86
Brent/Dubai	3.63	**4.65**	2.20	2.78

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

supplies, sour crudes are inundating the market, a fact reflected in the widening of the sweet/sour spread, especially in the Asia Pacific market where limited conversion and desulphurization capacity as well as large amounts of fuel oil are depressing sour crude prices.

US and European markets

US commercial crude oil stocks fell from 300m b late in July to a little less than 286m b in the first week of September. Nevertheless, oil stocks remain higher compared to the 276m b seen during the same period of last year. Crude oil imports, excluding the Strategic Petroleum Reserve (SPR), have been running well above 10m b/d and reached 10.7m b/d early in September, which is more than 1m b/d higher than the same period last year. Likewise, crude oil refinery input has also surged above 16m b/d as refiners attempt to meet the extremely high gasoline demand while at the same time building distillate (heating oil) stocks ahead of the winter season. Arbitrage opportunities for North Sea and West African crudes dwindled early in August on strong BFO (Brent, Forcados and Oseberg) prices, but widened to more than $2/b late in the month. Sour crude discounts to WTI widened further because of depressed prices for heavier products. Heavy sour Mexican Maya, with its formula linked to high-sulphur fuel oil, traded at a discount of more than $13/b. Strong buying interest for North Sea grades early in August subsided later in the month on the back of weakening refining margins in Europe and depressed demand with the approaching autumn refinery maintenance season.

Far East market

Light regional Asian crude prices were underpinned by healthy margins for kerosene and gasoil. Malaysian and Australian light sweet crudes benefitted from strong Japanese demand as refiners were keen to process lighter crudes to maximize kerosene yield and rebuild winter stocks. Light and medium sour grades such as Oman and Murban firmed as the wide BFO premium to Dubai gave Middle Eastern grades an advantage against Russian crudes in Asia-Pacific. Sweet grades are commanding huge premiums over sour crudes as refiners are increasingly reluctant to buy grades that yield high proportions of fuel oil. With refinery utilization running above 90 per cent — unusual for the Asian region — limited conversion and desulphurization capacity has prevented refiners from running heavier high-sulphur crudes.

Product markets and refinery operations

With the end of the driving season, the market's focus has shifted from gasoline to middle distillates and distillates, which are now leading the product markets. In August, higher gasoline output and a lower-than normal stock-draw undermined gasoline prices across the globe. This, coupled with the strong light crude oil prices, resulted in a significant decline in refinery margins in the USA and Europe. But recently refinery margins in the Atlantic basin have improved on a combination of stronger product and weaker crude prices. In Asia, the performance of the product markets outpaced the rise in benchmark Dubai, and refinery margins in this region extended their previous upward trend. Due to lower gasoil stocks in Germany and higher demand for distillates from the Mediterranean area and the Asian market, it is projected that, with the start of autumn refinery maintenance, the crack spread in the middle of the barrel complex will remain strong (see **Table B**).

US market

In August, average premium and regular gasoline prices in the US Gulf Coast fell by $1.16/b and $2.46/b, respectively, while the WTI price rose $4.08/b. However, both demand and prices for distillate and jet fuel remained relatively strong. During the last four weeks up to September 3, 2004, average demand for distillate fuel increased by 6.8 per cent compared to a year ago, while jet fuel demand registered 8.4 per cent growth on average for the same period. Distillate demand was supported by industrial consumption and by increasing demand in the agricultural sector. In September and October, this pace may rise further.

Meanwhile, the mild weather kept US demand for low-sulphur fuel oil in check. At the same time, continued high refinery output as well as scarce export opportunities put pressure on the US Gulf Coast high-sulphur fuel oil market, which may lead to a further discount against WTI. The slide in refinery margins did not cause US refiners to reduce their throughput, as strong demand for premium products, especially distillate and jet fuel, prompted them to increase their utilization rate to a new record of 97.1 per cent in August, up 1.8 per cent versus July (see **Table C**).

European market

Healthy petrochemical margins supported the naphtha market and pushed its crack value against the Brent benchmark crude to a fresh high in August. Middle distillate also performed well. Despite refinery maximization for diesel output, supplies are expected to tighten in September due to the refinery maintenance schedule. The European market is still relatively strong for jet fuel, attracting many cargoes from the Middle East and the Caribbean area. The gasoil value also remained high, particularly in the Mediterranean, where demand was supported by solid buying from the eastern Mediterranean countries.

In Europe, as elsewhere, the fuel oil market remains depressed. A mild summer in northern Europe reduced utility demand and pushed the discount on high-sulphur fuel oil to Brent to about $20/b in August. Falling gasoline and fuel oil crack spreads against Brent crude squeezed European refinery margins, but an operating profit still existed for European refiners, encouraging them to run at a high utilization rate. In August, European refinery throughput showed a nominal slide to 90.9 per cent from 91.1 per cent in July (see **Table C**).

Asian market

The Asian product market was driven by robust demand for middle distillates, especially gasoil. At the start of the Chinese harvest season, demand for gasoil looked like remaining strong. The bullish sentiment in the gasoil market may be heightened by the preference of some refiners to change the gasoil slate to jet fuel and kerosene. The naphtha market was also supported by strong demand from petrochemical plants. However, with the approaching seasonal maintenance schedule and continued supply from the Middle East and India, this market may lose its bullishness.

Table B: Selected refined product prices *$/b*

		Jun 04	Jul 04	Aug 04	Change Aug/Jul
US Gulf (cargoes)					
Naphtha		44.68	46.68	48.42	1.74
Premium gasoline	*(unleaded 93)*	51.90	54.80	53.64	–1.16
Regular gasoline	*(unleaded 87)*	49.39	52.10	49.64	–2.46
Jet/kerosene		43.53	48.37	51.74	3.37
Gasoil	*(0.2% S)*	40.88	44.97	48.25	3.28
Fuel oil	*(1.0% S)*	31.45	30.01	29.30	–0.71
Fuel oil	*(3.0% S)*	24.99	24.93	25.23	0.30
Rotterdam (barges fob)					
Naphtha		45.70	48.87	54.96	6.09
Premium gasoline	*(unleaded 95)*	45.85	52.03	51.06	–0.97
Regular gasoline	*(unleaded)*	45.79	52.01	51.06	–0.95
Jet/kerosene		45.26	49.88	55.74	5.86
Gasoil	*(0.2% S)*	41.68	46.18	49.99	3.81
Fuel oil	*(1.0% S)*	24.21	24.28	23.73	–0.55
Fuel oil	*(3.5% S)*	23.39	24.44	24.62	0.18
Mediterranean (cargoes)					
Naphtha		37.48	40.37	45.94	5.57
Premium unleaded	*(0.15g/l)*	44.74	49.40	48.80	–0.60
Premium gasoline	*(unleaded 95)*	44.64	49.37	48.76	–0.61
Jet/kerosene		43.47	48.10	53.52	5.42
Gasoil	*(0.5% S)*	41.92	45.88	49.41	3.53
Fuel oil	*(1.0% S)*	26.54	26.47	25.47	–1.00
Fuel oil	*(3.5% S)*	21.07	23.03	23.59	0.56
Singapore (cargoes)					
Naphtha		37.19	38.60	44.19	5.59
Premium gasoline	*(unleaded 95)*	45.19	46.52	51.50	4.98
Regular gasoline	*(unleaded 92)*	44.04	45.12	50.62	5.50
Jet/kerosene		43.17	48.08	52.29	4.21
Gasoil	*(0.5% S)*	42.84	46.25	51.67	5.42
Fuel oil	*(180 cst 2.0% S)*	27.43	27.64	28.82	1.18
Fuel oil	*(380 cst 3.5% S)*	26.87	26.98	28.19	1.21

Table C: Refinery operations in selected OECD countries

	Refinery throughput *(m b/d)*			Refinery utilization *(%)*[1]		
	Jun 04	Jul 04	Aug 04	Jun 04	Jul 04	Aug 04
USA	16.12	16.06	16.34	96.5	96.1	97.9
France	1.64 R	1.77	1.74	84.1 R	90.5	89.3
Germany	2.25 R	2.33	2.33	98.5 R	101.8	101.8
Italy	1.86 R	1.79	1.86	80.6 R	77.4	80.4
UK	1.60 R	1.70 R	1.65	87.8 R	93.3 R	90.7
Eur-16	12.48 R	12.52 R	12.50	90.4 R	90.7 R	90.6
Japan	3.45	3.96 R	4.29	73.3	84.1 R	91.3

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

The crack spread for gasoline against benchmark Dubai decreased compared to last month. However, due to lower Chinese exports, the price fell less than in the Atlantic basin market. Regional demand for straight-run fuel oil as a feedstock and bunker has picked up recently. Asian demand for low-sulphur fuel oil remains firm, particularly from Japan to meet increased thermal power generation requirements, but demand for high sulphur fuel oil still remained subdued, and its crack spread versus the Dubai crude dropped to about –$11/b.

In Asia, the strong crack spread for light products, particularly gasoil, also encouraged refiners to run at higher levels compared to the previous month. In August, the Japanese refinery utilization rate jumped again to 91.3 per cent from 84.1 per cent in July (see **Table C**).

The oil futures market

The build-up in non-commercials' net long positions that started late in June extended well into August. However, speculators began to trim their net holdings following the peak reached in the week of August 17. The Yukos affair — which endangered supply and export of some 1.7m b/d — along with the recall referendum of August 15 in Venezuela and escalating violence in Iraq provided futures speculators with the right conditions to raise their positions considerably during the first half of the month, pushing WTI front-month prices above $46/b by mid-month.

According to the Commitments of Traders reports, non-commercials added nearly 22,000 contracts to their long holdings between the weeks of July 27 and August 17, while the change in their shorts was just 6,500 contracts in the same period. The result was a rise in their net-long positions of 14,248 contracts to 47,949. Market depth as measured by open interest rose to 730,069 lots by the week ending August 17, slightly lower than the all-time high of 735,377 lots seen on June 1, 2004.

On expectations of easing geopolitical risk, following the outcome of the Venezuelan referendum and the perception that the Russian government does not want to see production and exports from Yukos interrupted, non-commercials sharply disposed of long positions while at the same time increasing their short side. According to the Commitments of Traders report for the week ending August 24, speculators cut their longs by 13,906 lots to 199,236 while adding 2,609 lots to their short holdings. Net-long positions fell by 16,515 lots to 31,434, while open interest fell sharply by more than 50,000 lots to 679,123. Meanwhile the front-month WTI futures contract surged ahead of its expiration date to nearly $50/b on August 20 before falling sharply to $45.21/b on August 24.

Non-commercials continued to trim long positions in late August and early September while adding some length to their short side on a clear change in market perception. Crude futures dipped to $42/b by the end of August but regained some ground in September trading between $43-44.75/b. Nevertheless, the forward curve structure remains in backwardation, and on September 15 the spread between the October front-month contract to that of the second month was just 5¢/b, while the 12-month forward contract was assessed $4.40/b lower.

Tanker markets

Despite the persistent increase in OPEC oil production in August, OPEC area spot fixtures declined a marginal 210,000 b/d to 13.42m b/d during August 2004, which is about 16 per cent higher than the level registered a year ago. Charterers refrained from fixing vessels given the very high freight rates, which touched unprecedented levels during the second half of July, pushing down spot chartering. Even the oil flow out of the OPEC area, especially from Middle Eastern producers, stood at a historical low of about 30m b/d in August. OPEC's share of global spot chartering remained close to the previous month's level of 63 per cent, which is two per cent higher than that observed last year. The major contributor to this minor decline in OPEC area spot fixtures was the non-Middle East area.

Middle East spot fixtures remained nearly at the previous month's level, increasing by 50,000 b/d to 5.30m b/d on the Middle East/East long-haul route and by 80,000 b/d to 2.28m b/d on the Middle East/West route. Eastbound long-haul spot fixtures accounted for about 40 per cent of OPEC spot fixtures, about one per cent over last month's figure and about five per cent over the same period in the previous year.

Westbound long-haul spot chartering also rose one per cent to stand at 17 per cent of OPEC area spot fixtures which were three per cent above last year's level. Together, they accounted for about 57 per cent of total OPEC area spot fixtures or eight per cent above the August 2003 share. Non-OPEC spot fixtures behaved contrary to the OPEC area trend, rising a marginal 30,000 b/d to 7.76m b/d, equivalent to a share in global fixtures of about 37 per cent, which was an increase of one per cent from a month ago. Global spot fixtures dropped by 190,000 b/d or about one per cent to 21.18m b/d which is 13 per cent higher than a year ago.

According to preliminary estimates, sailings from the OPEC area rose a marginal 340,000 b/d to 28.75m b/d. Middle Eastern sailings contributed 260,000 b/d to this increase, standing at 18.52m b/d or about 64 per cent of total OPEC sailings, the same level as last month. All arrivals in the main consuming areas showed slight falls except in Japan which experienced a minor rise of 70,000 b/d to 4.20m b/d. Arrivals in the US Gulf, US East and Caribbean declined by 800,000 b/d to 10.35m b/d, while in NW Europe and Euro-Med, they fell by 430,000 b/d to 6.36m b/d and by 380,000 b/d to 4.31m b/d, respectively.

Lower spot fixtures due to slower tanker demand, as charterers were reluctant to book very expensive vessels, forced freight rates down in August after an unusual month of very high rates in July. Increasing tonnage availability added to the downward pressure, pushing freight rates down on most of the main routes. VLCC freight rates on the Middle East eastbound and westbound long-haul routes experienced large losses, falling by 35 and 18 points to average monthly levels of Worldscale 107 and W95, respectively. Suezmax freight rates behaved similarly but the fall was much lower than that seen in the VLCC sector, thanks to strong activity during the second half of the month following the slower first half. On average, Suezmax rates declined by eight points to W152 on the West Africa/US Gulf Coast route and by four points to W159 on the NW Europe/US East-US Gulf Coast route. Aframax freight rates within the Mediterranean and from there to NW Europe followed the same downward trend, falling a significant 62 and 23 points to average monthly levels of W192 and W143, respectively.

Freight rates on both routes managed to see some support from activity in the second half of the month in the Mediterranean and in the Baltic markets. The exception was on the Indonesia/US West Coast route where freight rates rose a considerable 26 points to a monthly average of W192 on the back of increasing demand mainly for regional light and sweet grades. In the Caribbean, freight rates for crude oil tankers remained strong, gaining five points to a monthly average of W194 thanks to high activity in the first half of the month which managed to lift rates up to W215.

The product tanker market was very quiet during August along all main routes due to the absence of most charterers because of summer vacations. August losses ranged from 20 points to about 50 points on average. The most affected route was within the Mediterranean where freight rates lost 51 points to a monthly average of W193. From the Mediterranean to NW Europe, the trend was similar and rates lost 33 points to W238. On the NW Europe/US East-US Gulf Coast route, rates fell by 35 points to W219. Stagnant tanker demand, especially in the first half of the month, resulted in lower freight rates along the Middle East/East route, which dropped to W214, a loss of 20 points compared with the previous month. Along the Singapore/East routes, freight rates plunged by 34 points to stand at a monthly average of W257.

World oil demand

Revision to historical figures (2002-03)

For the year 2003 the latest figures indicate an upward revision of 90,000 b/d, mostly due to higher than previously recorded consumption in the developing countries. Total world oil demand for the year is now estimated at 79.06m b/d.

Forecast for 2004

World

Based on higher than anticipated consumption in 1Q and 2Q, continued strength in the world economy and persistent firmness in mostly non-OECD consumption, forecast world oil demand has once again been revised up, this time by 400,000 b/d, to average 81.58m b/d. Similarly, 2004 world oil demand growth has been revised up by 300,000 b/d to 2.52m b/d, taking into account the upward revision of 90,000 b/d in the 2003 baseline average.

On a quarterly basis, preliminary actual consumption data indicates that 1Q demand has grown by 1.94m b/d or 2.43 per cent compared with the corresponding quarter in 2003. There are indications that demand growth in 2Q has been exceptionally high at 3.80m b/d or 4.95 per cent, representing the largest quarterly volume increment and the highest growth rate in any quarter since 1985. The previous high for the quarterly increment, which compares the quarter with corresponding one in the preceding year, was the 3.15m b/d seen in 3Q of 1997. The previous high for quarterly growth was the 4.69 per cent seen in 4Q of 1988. Significant strength is forecast for 3Q and 4Q oil demand with increases of 2.32m b/d and 2.00m b/d, respectively.

On a regional basis, 'Other regions' are expected to be the leading volume gainer with a 1.02m b/d or 10.12 per cent growth in demand. China is at the forefront with an astonishing 820,000 b/d, equivalent to 14.78 per cent. Developing countries follow with 900,000 b/d or 4.43 per cent. The lowest volume and percentage growth of 590,000 b/d or 1.22 per cent is anticipated in the OECD.

OECD

The OECD countries continue to record a declining trend in energy intensity. With more than 60 per cent of total world oil demand originating in the OECD, the expected share of growth of this group in total world oil demand is projected to reach at the very most just below one quarter of the total 2.52m b/d. The forecast for OECD consumption implies a rate of growth of 1.22 per cent or 590,000 b/d in 2004, with the lion's share coming from the North American region. As usual, and judging from the demand figures for the first half of the year, the USA will account for more than three quarters of the region's total demand growth, with the remaining one quarter more or less equally divided between Mexico and Canada. Oil demand growth in the energy-mature European market shows a rise of 1.43 per cent or 220,000 b/d, while in the third sub-group, OECD Pacific, oil consumption will shrink by 1.59 per cent or 140,000 b/d, in part due to the restart of almost all the nuclear plants in Japan which were closed for maintenance in 2003.

For the period January–June 2004, OECD oil requirements increased by 630,000 b/d or 1.12 per cent versus January–June 2003. In terms of volume and rate, LPG demand recorded the highest growth amounting to 220,000 b/d or 4.39 per cent. Gasoline demand followed with 210,000 b/d or 1.42 per cent growth. Residual fuel oil registered the largest consumption drop, falling by almost 9.09 per cent or 290,000 b/d within the first half of the year. Crude oil consumption for direct burning — an almost exclusively Japanese occurrence and not part of inland consumption — decreased by 40.44 per cent due to the restart of almost all the 17 Tepco nuclear reactors.

Developing countries

Oil demand in developing countries is forecast to grow by 4.43 per cent or 900,000 b/d to average 21.16m b/d, which is more than three times the growth registered during 2003. The transportation sector in India is emerging as a major consumer of diesel and gasoline thanks to improvements in the infrastructure. A significant increase in oil product consumption is also anticipated in oil-producing nations in the Middle East on the back of higher revenues from strong oil prices and the strong subsidies to the domestic products market.

Latin America is also expected to show some growth in demand after several years of contraction. Almost 45 per cent of total DC demand growth will come from the 'Other Asia' group of countries where demand is forecast to rise by 410,000 b/d or 5.24 per cent, followed by the Middle East where demand is projected to increase by 310,000 b/d or 6.00 per cent. Latin American demand is expected to reverse the trend of the previous years to grow by 2.68 per cent or 130,000 b/d, while African demand will rise 2.10 per cent or 60,000 b/d.

Other regions

Apparent demand in the 'Other regions' is projected to grow by 10.12 per cent or 1.02m b/d to average 11.15m b/d. Total apparent demand growth for this group will account for almost 41 per cent of total world oil demand growth while the group's share of global demand is around 14 per cent.

The major share of consumption growth will take place in China where the continued astonishing rates of economic expansion together with a surge in automobile sales have allowed oil demand to rise nearly 17 per cent in 1Q and more than 22 per cent in 2Q of this year.

For the whole year, Chinese apparent demand is projected to grow by 13.78 per cent on average or 820,000 b/d which represents more than one third of the global demand growth. The FSU's apparent demand growth is forecast at 130,000 b/d, as the contraction of more than 8.46 per cent or 340,000 b/d observed during 1Q is estimated to have been more than offset by a significant 410,000 b/d or 12.36 per cent growth in 2Q.

Forecast for 2005

Due to an upward revision of 400,000 b/d to our 2004 average world oil demand and 80,000 b/d to the 2005 increment, the average 2005 forecast has been revised up by 480,000 b/d to 83.32m b/d compared with the 82.84m b/d presented in the last report. The forecast 2005 oil demand increment now reads 1.74m b/d or 2.13 per cent. Out of this, China alone is expected to account for 560,000 b/d, equivalent to 32 per cent of the global oil demand growth.

On a quarterly basis, all of the four quarters are anticipated to register healthy growth with 4Q leading with 2.17m b/d or 2.62 per cent. The 3Q is forecast to follow with a 1.81m b/d or 2.23 per cent rise in oil demand. The lowest growth in demand of 1.20m b/d equivalent to 1.49 per cent is anticipated in 2Q. A significant demand rise at 1.78m b/d or 2.18 per cent will characterize 1Q.

All three main groups of countries are forecast to register healthy oil demand growth, the largest volume gainer being the developing countries with 680,000 b/d or 3.22 per cent. Other regions, mostly thanks to China, will follow with 660,000

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	5.13	5.74	5.83	5.47	5.55
2003	5.87	6.75	6.72	6.50	6.46
2004[1]	7.10	7.29	7.40	7.24	7.26
2005[1]	7.40	7.77	8.07	7.88	7.78

1. Forecast.

b/d or 5.91 per cent. OECD is expected to register the lowest growth in demand of 400,000 b/d or 0.82 per cent.

World oil supply

Non-OPEC

Forecast for 2004

2004 non-OPEC supply has been revised up to 50.07m b/d. The quarterly figures stand at 49.68m b/d, 49.80m b/d, 49.90m b/d and 50.90m b/d, respectively. The yearly average increase stands at 1.45m b/d, compared with the 2003 figure. Minor upward revisions were made to 2Q figures, mainly to China, while 3Q has been revised downward due to the availability of more data.

Forecast for 2005

Non-OPEC supply for 2005 is forecast to rise 1.19m b/d. North America is expected to witness an increase of 160,000 b/d, mainly from a 80,000 b/d gain in Canada, which is expected to be almost totally offset by the 90,000 b/d decline in both Western Europe, where UK is expected to shed 80,000 b/d, and OECD Pacific. Total OECD is expected to stay almost unchanged at 21.5m b/d. Total developing countries are expected to rise 570,000 b/d, mainly contributed by Latin America, where Brazil increased 120,000 b/d and Trinidad also saw gains, as well as by 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 increase of 450,000 b/d, along with Kazakhstan's and Azerbaijan's rise of 60,000 b/d each. The quarterly figures have been revised to 50.89m b/d, 50.98m b/d, 51.08m b/d and 52.09m b/d, respectively. The yearly average is forecast at 51.27m b/d.

The FSU's net oil exports for 2005 are expected at 7.78m b/d, an increase of 520,000 b/d over the 2004 downwardly revised figure of 7.26m b/d (see **Table D**).

OPEC NGLs and non-conventional oils

The OPEC natural gas liquids (NGL) and NCO forecast for 2005 has been revised up by 60,000 b/d and now stands at 4.14m b/d, an increase of 190,000 b/d over the 2004 figure. Figures for 2001–2003 remain unchanged since the last report at 3.58m b/d, 3.62m b/d and 3.71m b/d, respectively.

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 August output was 29.78m b/d, 260,000 b/d higher than the revised July figure. **Table E** shows OPEC production as reported by selected secondary sources.

Rig count

Non-OPEC

Rig activity was higher in August compared with the July figures. North America gained 28 rigs, mainly in the USA, while Western Europe added seven rigs to record 60. Rig activity in DCs also increased by 14 rigs to 385.

OPEC

OPEC's rig count was 257 in August, a rise of 11 rigs compared with the July figure. Iran and Qatar were the main contributors to this gain.

Stock movements

USA

Total commercial oil stocks remained almost unchanged at a level of 978.5m b during the period July 30–September 3, 2004. The 12.9m b draw on commercial oil stocks was offset by a build of the same amount in product inventories. Although the stock level was unchanged, total commercial oil stocks are at a comfortable level, registering a y-o-y surplus of 23.5m b or 2.5 per cent.

Standing at 285.7m b, the lowest US crude supply level since mid-March, crude oil stocks fell for the sixth straight week as refiners continued to run near capacity to boost output of petroleum products. Throughout the summer, US refineries have been running full tilt, benefitting from high product demand, especially for gasoline, distillate fuel and jet fuel.

Crude oil inputs averaged 16.1m b/d during the week ending September 3, up 402,000 b/d from the previous week's average, and the fourth highest weekly average ever. Refineries operated at 96.5 per cent of their operable capacity, an increase of 0.8 per cent from the previous week.

The drop in commercial crude stocks occurred even though crude imports remained strong. Indeed, in the week ending September 3, imports registered an increase of 190,000 b/d to 10.7m b/d, the third highest weekly average ever. Over the last four weeks, crude oil imports averaged nearly 10.5m b/d. Preliminary data shows that one reason for the recent high imports is the increase in Iraqi output. Despite the slide in the US crude oil inventories, crude oil stocks remained at 5.7m b or two per cent above this time last year, but still 9.2m b or three per cent below the recent five-year average.

On the product side, gasoline stocks continued their seasonal draw, sliding 6.0m b to 204.1m b due to strong demand for an average of 9.4m b/d over the last four weeks, an increase of 0.4 per cent over the same period last year. At the end of the week ending September 3, US gasoline stocks fell 2.5m b, more than most analysts anticipated, as implied demand for gasoline in particular rose ahead of the Labour Day weekend, which traditionally marks the last days of the summer driving season. Implied demand showed an increase of 190,000 b/d to 9.45m b/d, almost 600,000 b/d more than a year ago. Even with this draw, US gasoline stocks remained at a healthy 5.4 per cent y-o-y surplus and at the upper end of the last five-year average. Ahead of the winter season, the focus should turn mainly to distillate stocks and especially heating oil inventories. With the heating season starting on October 1, four weeks remain to build stocks before the draw-down usually begins.

During the period July 30-September 3, 2004, distillate stocks saw a build of 5.4m b to 126.6m b, or almost the same level as the year before, despite a strong 6.8 per cent rise in apparent demand compared to last year. In the week ending September 3, heating oil stocks saw a rise of 700,000 b to 51.35m b, an increase of three per cent over this time the previous year, but have failed to catch up with the five-year average, registering a y-o-y deficit of nine per cent.

During the same period, the SPR continued its upward trend, increasing by 4.5m b to reach a new record of 669.0m b, widening the y-o-y surplus to more than 50m b (see **Table F**).

Western Europe

Total oil stocks in EUR-16 (EU plus Norway) regained the previous month's overall loss, increasing a seasonal 4.6m b at a rate of 150,000 b/d to 1,082.9m b. The bulk of this build came from product inventories which rose 9.6m b, while crude oil stocks abated the increase with a decline of 5.0m b. Despite the build, inventories were 9.6m b or one per cent below last year's level at this time.

At 457.7m b, a draw on crude oil stocks took place for the fourth consecutive month as refineries continued to operate at full tilt. In fact, crude runs were at a four-year high of 12.5m b/d, an increase of 300,000 b/d over August last year as refinery margins remained healthy. The refinery capacity utilization rate stood at 95.45 per cent, slightly below the July rate of 95.53 per cent, but well above the 90.62 per cent of August last year. The utilization rate is expected to decline in September as European refiners go into a heavy round of autumn maintenance.

Crude oil inventories are now 4.6m b or one per cent lower than in the same month last year. Gasoline stocks rose 1.0m b to 137.8m b and are 2.3m b or 1.7 per cent higher than last August. This build came as limited arbitrage opportunities to the USA have kept motor fuel in the region. Refiners have also been building stocks to keep up with demand during the forthcoming refinery shutdowns.

Distillate stocks experienced a build of 7.0m b to 351.2m b, but are still 11.1m b or 3.1 per cent lower than this time last year. This build occurred as refiners boosted yields to meet strong demand that had pushed jet and diesel prices to new highs. At 111.5m b, fuel oil stocks rose a marginal 700,000 b to 111.5m b or 4.4 per cent above the same time last year on a decline in demand combined with the rise in output due to high refinery runs (see **Table G**).

Japan

At the end of July 2004, total commercial oil stocks in Japan showed a considerable build of 10.0m b or 320,000 b/d to 179.0m b. Despite this build, the July figure still represents a y-o-y deficit of 20.8m b or 10.4 per cent. Crude oil stocks were the main contributor to the build, increasing 6.7m b, followed by product inventories which rose 3.3m b.

The substantial build in crude oil stocks came as Japan's crude oil imports rose 9.1 per cent from a year earlier to 4.34m b/d, but were an impressive 23.9 per cent higher than the June figure. The United Arab Emirates remained the top crude supplier to Japan, followed by Saudi Arabia and Iran. At the same time, crude throughput was 3.95m b/d in July compared with 3.45m b/d in June. This increase came as Japanese refiners returned in force after completing scheduled maintenance closures. During July, refineries were running at 84 per cent of their capacity. Middle distillates saw a build of 3.6m b to 30.4m b, but remained 6.9m b or 18.5 per cent below a year ago.

Kerosene, a middle distillate used for home heating in Japan, increased by 22.7 per cent from a historically low level in May, but stocks are still down 25.9 per cent from a year earlier. Oil companies typically start building kerosene stocks in summer in preparation for the peak in winter demand. However, this year, stock building has been considerably delayed. Gasoline stocks declined a slight 600,000 b to 11.8m b and are 2.7m b below a year earlier. This level came on the back of the rise in gasoline sales, which increased by 19 per cent from June and were the highest since August 2002. Typically, gasoline demand in August is higher than in July. Gasoline output also rose 2.9 per cent from the year earlier, but was almost 20 per cent below the June figure (see **Table H**).

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

	2002	2003	1Q04	2Q04	Jul 04	Aug 04	Aug/Jul
Algeria	864	1,134	1,171	1,198	1,247	1,254	7
Indonesia	1,120	1,027	981	970	958	954	–4
IR Iran	3,416	3,757	3,889	3,903	3,933	3,940	8
Iraq	2,000	1,323	2,113	2,009	1,936	1,833	–103
Kuwait	1,885	2,173	2,237	2,292	2,373	2,396	24
SP Libyan AJ	1,314	1,422	1,461	1,496	1,548	1,586	38
Nigeria	1,969	2,131	2,343	2,354	2,398	2,424	27
Qatar	648	746	758	772	805	807	2
Saudi Arabia	7,535	8,709	8,426	8,634	9,310	9,501	191
UAE	1,988	2,243	2,252	2,246	2,428	2,476	48
Venezuela	2,586	2,291	2,557	2,547	2,591	2,614	22
Total OPEC	**25,323**	**26,955**	**28,188**	**28,421**	**29,526**	**29,785**	**259**

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

Balance of supply/demand

Table I for 2004, shows a rise in total non-OPEC supply of 140,000 b/d to 54.02m b/d and a significant upward revision to

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

	Jul 2, 04	Jul 30, 04	Sep 3, 04	Change Aug/Jul	Sep 3, 03	Sep 10, 04[2]
Crude oil (excl SPR)	**305.0**	**298.6**	**285.7**	**–12.9**	**280.0**	**278.6**
Gasoline	206.1	210.1	204.1	–6.0	193.7	202.5
Distillate fuel	114.0	121.2	126.6	5.4	126.8	128.3
Residual fuel oil	37.0	32.9	34.7	1.8	30.2	35.7
Jet fuel	38.2	39.4	39.4	0.0	38.7	40.7
Unfinished oils	88.9	88.3	87.3	–1.0	85.2	87.4
Other oils	177.2	187.9	200.7	12.8	200.4	201.7
Total	**966.4**	**978.4**	**978.5**	**0.1**	**955.0**	**974.9**
SPR	662.4	664.5	669.0	4.5	618.7	669.3

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*

	Jun 04	Jul 04	Aug 04	Change Aug/Jul 04	Aug 03
Crude oil	**474.2**	**462.8**	**457.7**	**–5.0**	**462.3**
Mogas	133.8	136.8	137.8	1.0	135.5
Naphtha	24.2	23.8	24.6	0.9	25.6
Middle distillates	343.4	344.3	351.2	7.0	362.3
Fuel oils	109.9	110.8	111.5	0.7	106.8
Total products	**611.4**	**615.6**	**625.2**	**9.6**	**630.2**
Overall total	**1,085.6**	**1,078.4**	**1,082.9**	**4.6**	**1,092.5**

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

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

	May 04	Jun 04	Jul 04	Change Jul/Jun 04	Jul 03
Crude oil	**110.8**	**112.0**	**118.7**	**6.7**	**126.0**
Gasoline	12.6	12.4	11.8	–0.6	14.5
Middle distillates	26.2	26.8	30.4	3.6	37.3
Residual fuel oil	18.8	17.7	18.1	0.3	21.9
Total products	**57.6**	**57.0**	**60.3**	**3.3**	**73.7**
Overall total[2]	**168.4**	**168.9**	**179.0**	**10.0**	**199.8**

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

the world oil demand of 400,000 b/d to 81.58m b/d, resulting in an estimated annual difference of around 27.56m b/d. The quarterly distribution stands at 27.99m b/d, 26.92m b/d, 27.20m b/d and 28.11m b/d, respectively. The balance for 1Q2004 was revised downward by 40,000 b/d to stand at 200,000 b/d, while 2Q saw a significant downward revision of 1.29m b/d to 1.50m b/d.

Table I for 2005 shows world oil demand expected at 83.32m b/d while total non-OPEC supply was forecast to reach 55.40m b/d. This has resulted in a difference of around 27.92m b/d, with a quarterly distribution of 28.34m b/d, 26.74m b/d, 27.63m b/d and 28.94m 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	50.1	49.3	50.3	48.4	49.2	50.8	49.7
North America	24.1	24.0	24.1	24.6	25.0	24.9	25.2	25.3	25.1	25.2	25.2	25.3	25.7	25.4
Western Europe	15.1	15.3	15.2	15.3	15.7	15.3	15.5	15.7	15.5	15.8	15.4	15.7	16.0	15.7
Pacific	8.7	8.7	8.6	8.8	9.4	8.0	8.1	9.1	8.6	9.3	7.8	8.2	9.1	8.6
Developing countries	19.2	19.5	20.0	20.3	20.6	21.1	21.3	21.6	21.2	21.2	21.7	22.1	22.4	21.8
FSU	3.8	3.9	3.8	3.8	3.7	3.8	3.9	4.4	3.9	4.0	3.7	3.9	4.4	4.0
Other Europe	0.7	0.7	0.7	0.8	0.9	0.9	0.7	0.8	0.8	0.9	0.9	0.8	0.9	0.9
China	4.7	4.7	5.0	5.6	6.3	6.7	6.4	6.2	6.4	6.8	7.2	7.0	6.8	6.9
(a) Total world demand	76.3	76.8	77.5	79.1	81.5	80.6	81.1	83.0	81.6	83.3	81.8	82.9	85.2	83.3
Non-OPEC supply														
OECD	21.9	21.8	21.9	21.6	21.8	21.5	21.2	21.6	21.5	21.8	21.6	21.2	21.6	21.6
North America	14.2	14.3	14.5	14.6	14.8	14.7	14.6	14.9	14.8	15.0	14.9	14.7	15.1	14.9
Western Europe	6.8	6.7	6.6	6.4	6.4	6.3	6.0	6.1	6.2	6.3	6.2	5.9	6.0	6.1
Pacific	0.8	0.8	0.8	0.7	0.6	0.6	0.6	0.5	0.6	0.6	0.5	0.5	0.5	0.5
Developing countries	10.7	10.9	11.2	11.4	11.7	11.8	12.0	12.2	11.9	12.3	12.3	12.5	12.8	12.5
FSU	7.9	8.5	9.3	10.3	10.8	11.1	11.3	11.6	11.2	11.3	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	3.4	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	45.5	46.4	47.7	48.6	49.7	49.8	49.9	50.9	50.1	50.9	51.0	51.1	52.1	51.3
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	48.9	49.9	51.4	52.3	53.6	53.7	53.9	54.9	54.0	55.0	55.1	55.2	56.3	55.4
OPEC crude supply and balance														
OPEC crude oil production[1]	28.0	27.2	25.3	27.0	28.2	28.4								
Total supply	76.9	77.2	76.7	79.3	81.7	82.1								
Balance[2]	0.5	0.4	-0.8	0.2	0.2	1.5								
Stocks														
Closing stock level (outside FCPEs) *m b*														
OECD onland commercial	2530	2628	2475	2522	2468	2561								
OECD SPR	1269	1284	1343	1406	1418	1424								
OECD total	3799	3912	3818	3928	3886	3985								
Oil-on-water	877	831	816	885	906	918								
Days of forward consumption in OECD														
Commercial onland stocks	53	55	51	51	51	53								
SPR	26	27	28	29	29	29								
Total	79	82	78	80	81	82								
Memo items														
FSU net exports	4.1	4.6	5.5	6.5	7.1	7.3	7.4	7.3	7.3	7.3	7.9	8.0	7.8	7.8
[(a) — (b)]	27.4	26.9	26.2	26.7	28.0	26.9	27.2	28.1	27.6	28.3	26.7	27.6	28.9	27.9

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 48, while* ***Graphs One and Two*** *(on pages 47 and 49) show the evolution on a weekly basis.* ***Tables Three to Eight****, and the corresponding graphs on pages 50–55, 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
May to August 2004

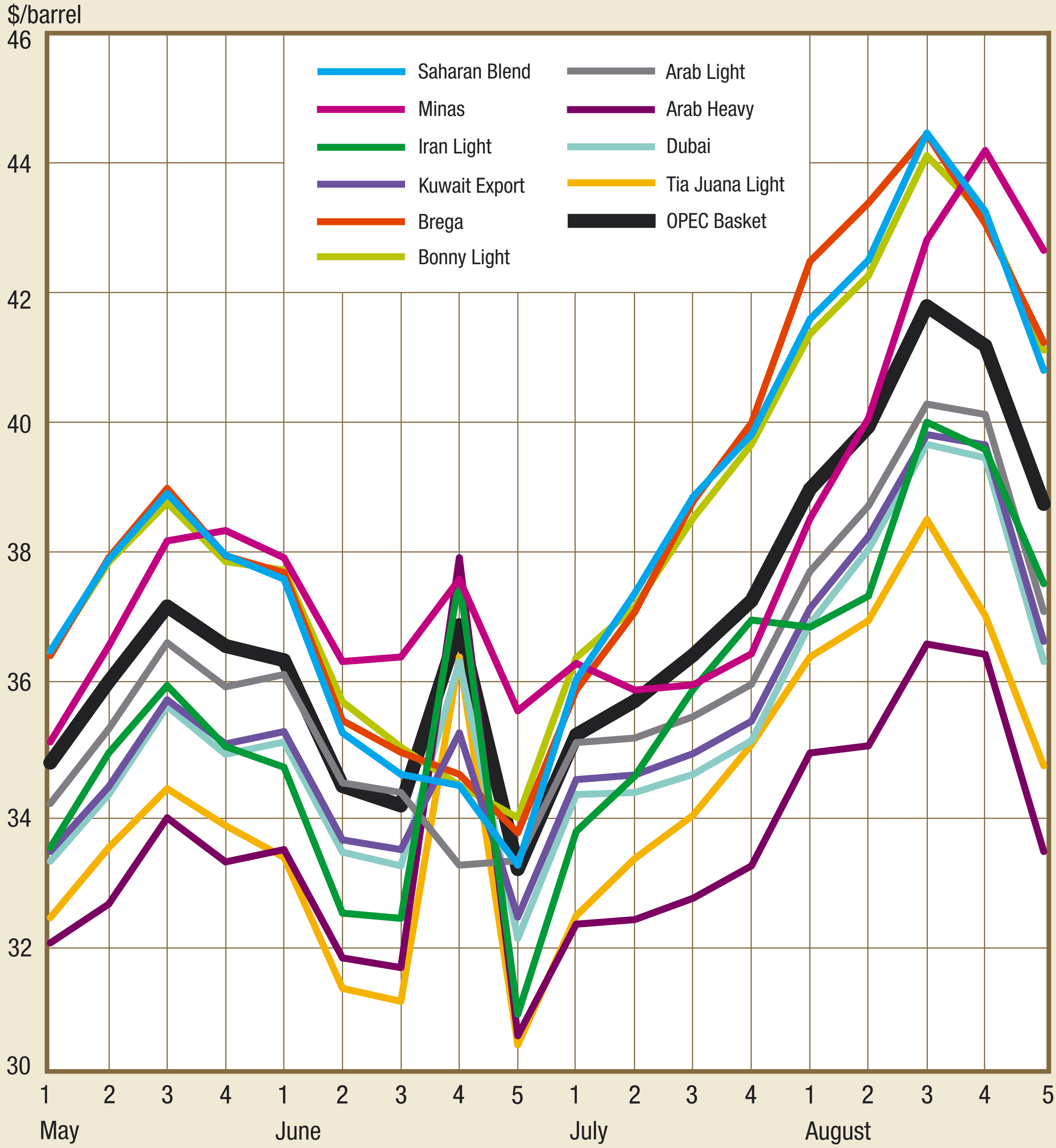


Table 1: OPEC spot crude oil prices, 2003–04 ($/b)

Member	2003				2004												
Country/	Sep	Oct	Nov	Dec	Jan	Feb	Mar	April	May	Jun	July	August					
Crude (API°)	5Wav	4Wav	4Wav	5Wav	4Wav	4Wav	5Wav	4Wav	4Wav	5Wav	4Wav	1W	2W	3W	4W	5W	5Wav
Algeria																	
Saharan Blend *(44.1)*	27.29	29.87	28.94	29.77	31.29	30.57	33.46	33.71	37.96	35.14	38.16	41.74	42.65	44.61	43.40	40.95	42.67
Indonesia																	
Minas *(33.9)*	26.74	29.67	30.12	32.09	30.27	29.38	32.21	32.19	37.18	36.75	36.28	38.66	40.21	42.96	44.34	42.80	41.79
IR Iran																	
Light *(33.9)*	26.66	28.79	27.64	28.55	29.31	28.00	30.78	30.41	34.97	32.67	35.42	36.99	37.47	40.15	39.73	37.66	38.40
Iraq																	
Kirkuk *(36.1)*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kuwait																	
Export *(31.4)*	25.78	27.67	27.76	28.25	29.16	28.61	30.97	31.75	34.78	33.83	34.98	37.28	38.39	39.96	39.80	36.77	38.44
SP Libyan AJ																	
Brega *(40.4)*	27.29	30.05	28.98	30.02	31.58	30.90	33.90	33.82	37.96	35.46	38.08	42.63	43.53	44.59	43.21	41.38	43.07
Nigeria																	
Bonny Light *(36.7)*	27.47	29.59	28.93	29.64	30.94	30.47	33.34	33.74	37.87	35.60	38.08	41.51	42.41	44.26	43.33	41.26	42.55
Saudi Arabia																	
Light *(34.2)*	26.41	28.26	28.63	29.20	29.83	29.18	31.62	32.48	35.63	34.70	35.55	37.85	38.86	40.43	40.27	37.23	38.93
Heavy *(28.0)*	24.92	26.87	26.88	27.10	27.49	26.93	29.42	30.31	33.07	32.00	32.75	35.05	35.16	36.73	36.57	33.53	35.41
UAE																	
Dubai *(32.5)*	25.52	27.42	27.62	28.06	28.93	28.49	30.77	31.69	34.65	33.58	34.70	37.04	38.19	39.81	39.60	36.46	38.22
Venezuela																	
Tia Juana Light[1] *(32.4)*	24.64	26.60	26.69	27.60	29.28	28.17	29.88	29.88	33.63	31.67	33.81	36.53	37.09	38.65	37.17	34.85	36.86
OPEC Basket[2]	***26.32***	***28.54***	***28.45***	***29.44***	***30.33***	***29.56***	***32.05***	***32.35***	***36.27***	***34.61***	***36.29***	***39.12***	***40.08***	***41.94***	***41.33***	***38.89***	***40.27***

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

	2003				2004												
Country/	Sep	Oct	Nov	Dec	Jan	Feb	Mar	April	May	Jun	July	August					
Crude (API°)	5Wav	4Wav	4Wav	5Wav	4Wav	4Wav	5Wav	4Wav	4Wav	5Wav	4Wav	1W	2W	3W	4W	5W	5Wav
Gulf Area																	
Oman Blend *(34.0)*	26.09	27.97	27.93	28.43	29.34	28.67	31.10	31.71	34.78	33.92	35.10	37.36	38.43	39.95	39.83	36.90	38.49
Mediterranean																	
Suez Mix *(Egypt, 33.0)*	24.70	27.02	26.17	25.89	26.55	25.42	28.11	28.40	33.00	30.56	33.21	36.34	37.28	39.11	36.81	34.22	36.75
North Sea																	
Brent *(UK, 38.0)*	27.32	29.85	28.68	29.82	31.33	30.65	33.70	33.23	37.71	35.21	38.33	42.58	43.48	44.54	43.16	40.58	42.87
Ekofisk *(Norway, 43.0)*	27.40	29.94	28.86	29.62	31.10	30.52	33.70	33.31	37.79	35.37	38.42	42.49	43.23	44.75	43.21	40.61	42.86
Latin America																	
Isthmus *(Mexico, 32.8)*	26.18	28.38	28.24	29.71	31.78	30.64	33.08	32.76	36.95	34.85	37.41	40.52	41.14	42.87	41.23	38.66	40.88
North America																	
WTI *(US, 40.0)*	28.55	30.43	30.94	32.15	34.33	34.62	36.59	36.80	40.11	38.18	40.69	43.71	44.66	47.11	45.28	43.07	44.77
Others																	
Urals *(Russia, 36.1)*	25.88	28.17	27.30	27.90	28.63	27.41	30.79	29.88	34.87	32.08	35.45	38.28	38.58	40.36	38.29	35.94	38.29

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
May to August 2004

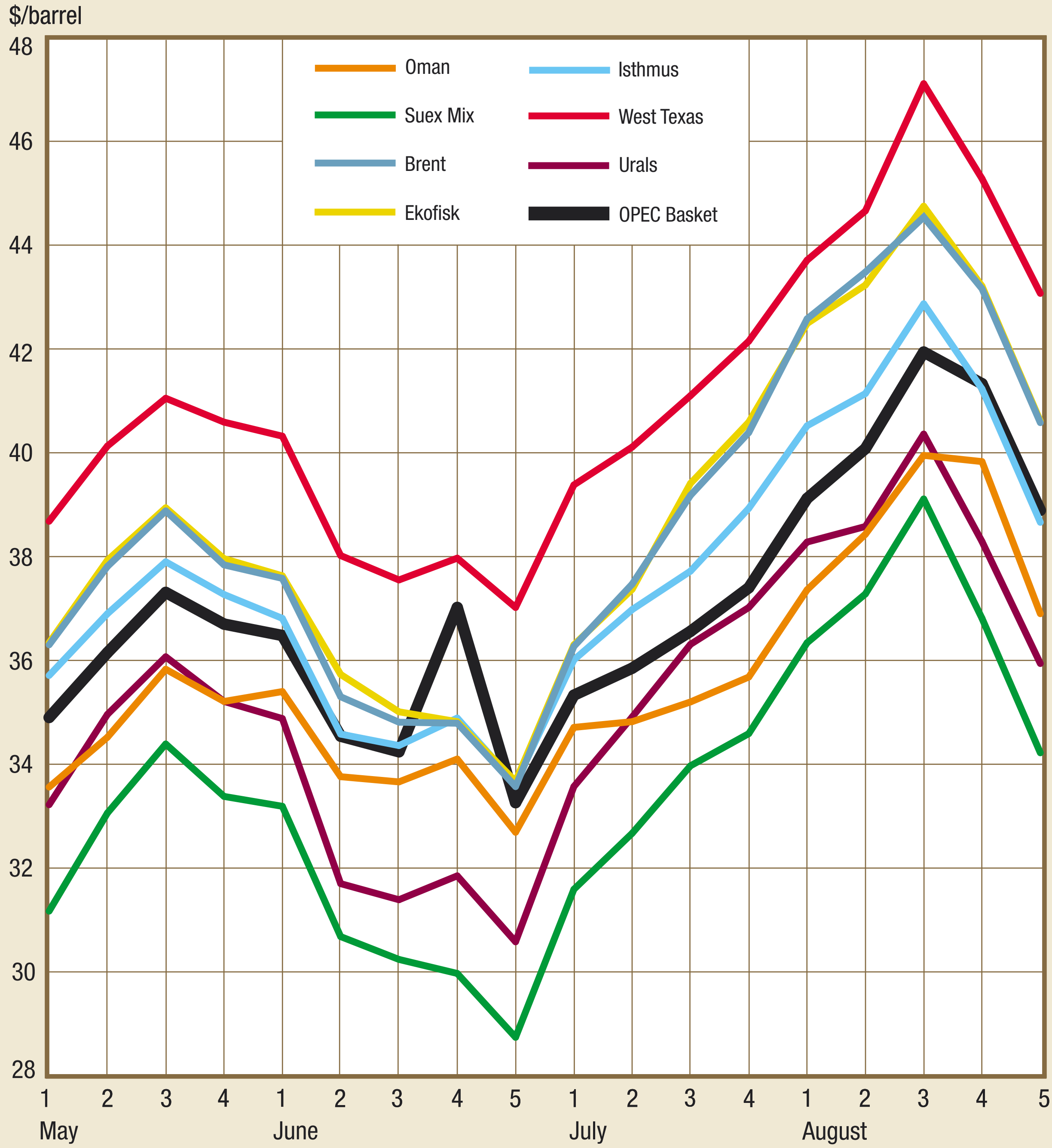


Table 3: North European market — spot barges, fob Rotterdam *($/b)*

		naphtha	regular gasoline unleaded	premium gasoline unleaded 95	gasoil	jet kero	fuel oil 1%S	fuel oil 3.5%S
2002	August	30.23	30.95	31.14	28.95	30.46	21.49	21.68
	September	33.46	32.40	32.63	31.54	34.19	24.33	24.02
	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

Source: Platts. Prices are average of available days.

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

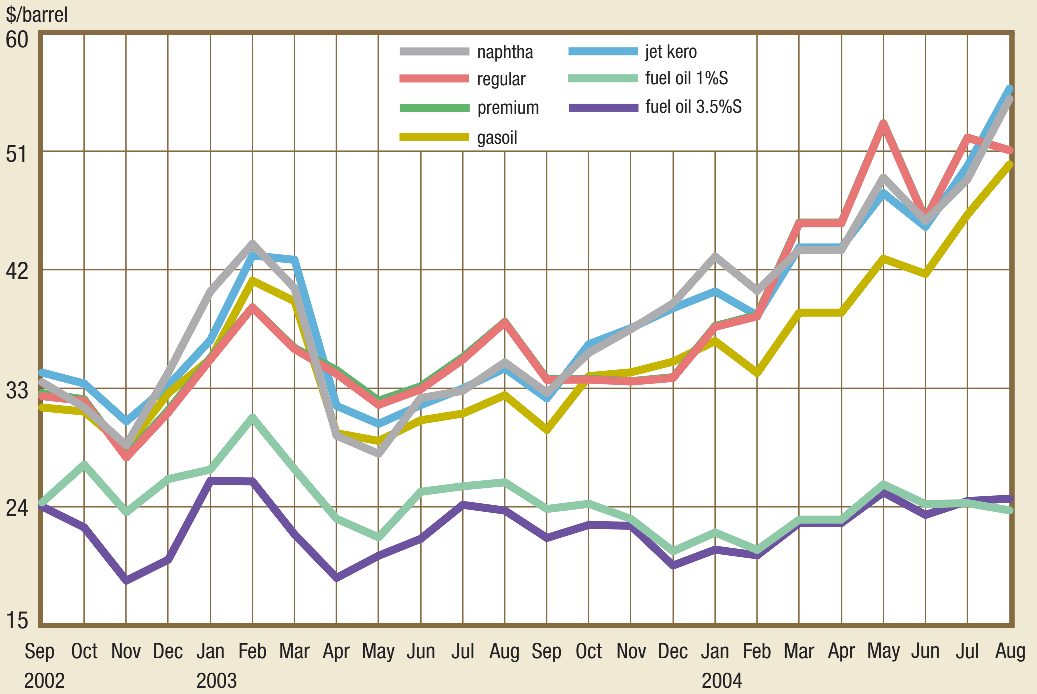


Table 4: South European market — spot cargoes, fob Italy

($/b)

		naphtha	gasoline premium unleaded 95	gasoline premium 0.15g/l	gasoil	fuel oil 1%S	fuel oil 3.5%S
2002	August	24.92	29.21	30.82	28.23	21.45	20.04
	September	27.95	31.79	32.26	30.56	25.07	22.53
	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

Source: Platts. Prices are average of available days.

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

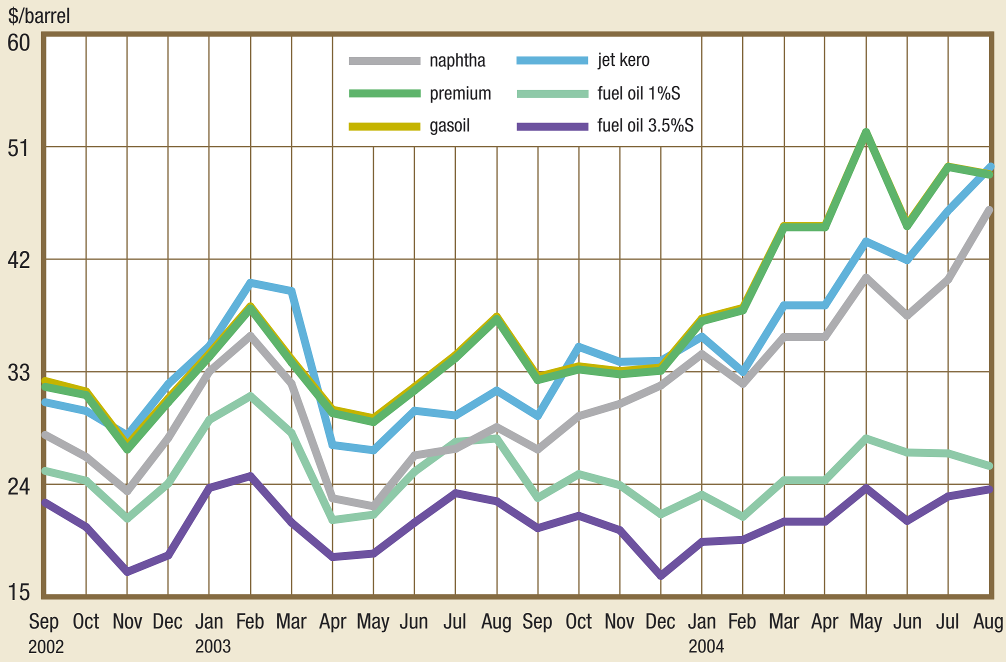


Table 5: US East Coast market — spot cargoes, New York *($/b, duties and fees included)*

		regular gasoline unleaded 87	gasoil	jet kero	fuel oil 0.3%S	fuel oil 1%S	fuel oil 2.2%S
2002	August	31.96	29.22	31.31	26.63	25.43	23.51
	September	32.61	32.25	34.11	27.52	26.02	25.35
	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

Source: Platts. Prices are average of available days.

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

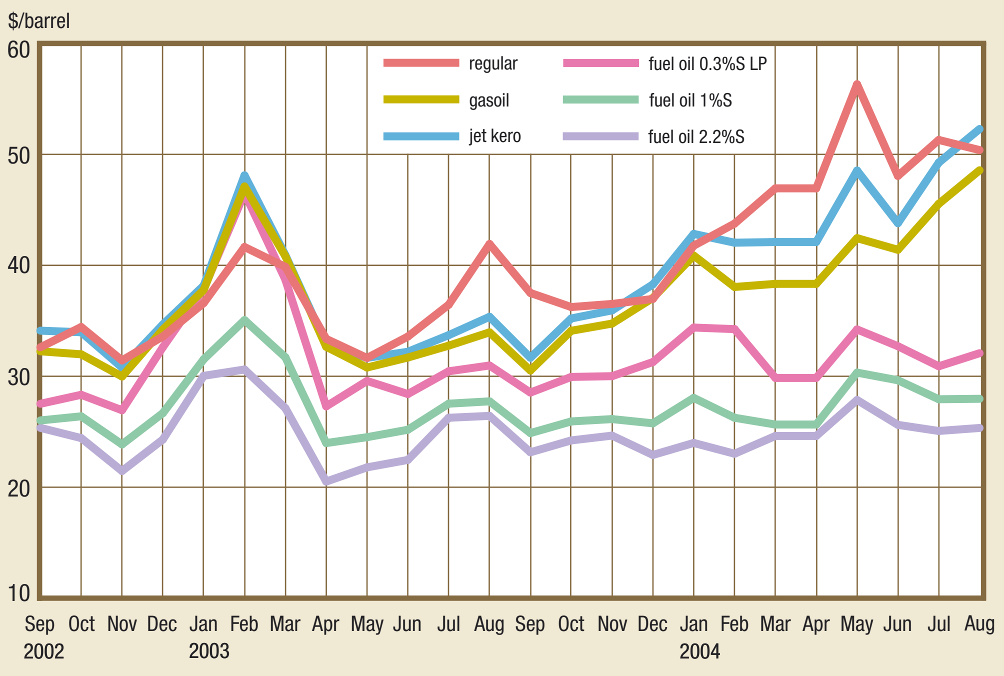


Table 6: Caribbean market — spot cargoes, fob ($/b)

		naphtha	gasoil	jet kero	fuel oil 2%S	fuel oil 2.8%S
2002	August	28.73	28.83	30.53	22.78	22.52
	September	32.16	31.91	33.67	24.55	24.77
	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

Source: Platts. Prices are average of available days.

Graph 6: Caribbean market — spot cargoes, fob

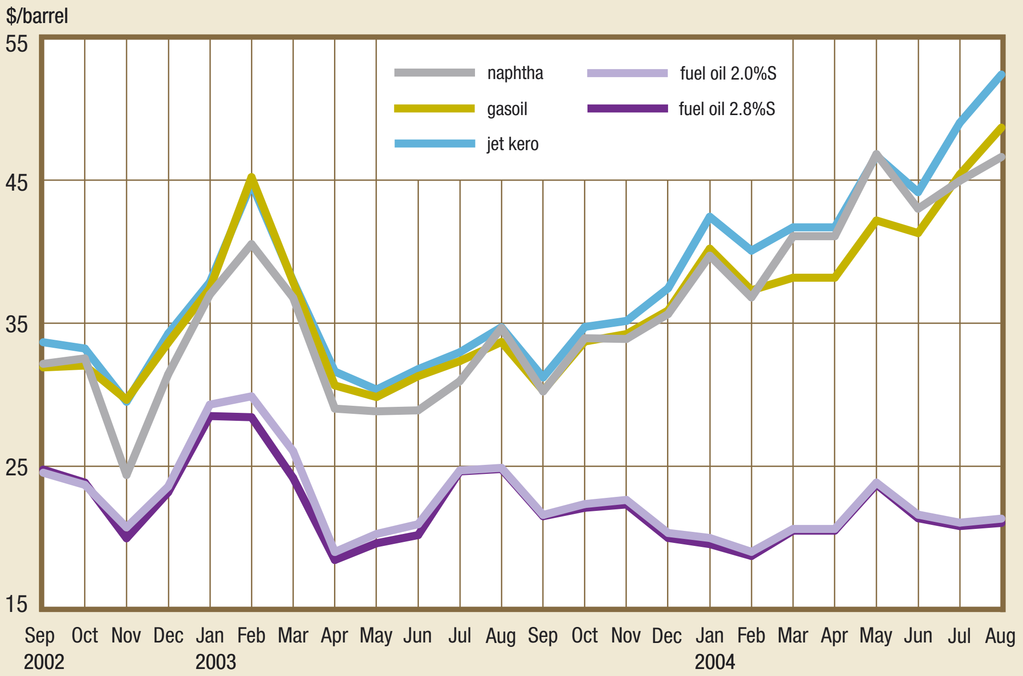


Table 7: Singapore market — spot cargoes, fob *($/b)*

		naphtha	gasoline premium unleaded 95	gasoline premium unleaded 92	gasoil	jet kero	fuel oil 180 Cst	fuel oil 380 Cst
2002	August	25.52	28.17	26.65	28.79	29.28	23.39	24.10
	September	27.52	30.49	29.21	31.43	32.92	24.70	25.34
	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

Source: Platts. Prices are average of available days.

Graph 7: Singapore market — spot cargoes, fob

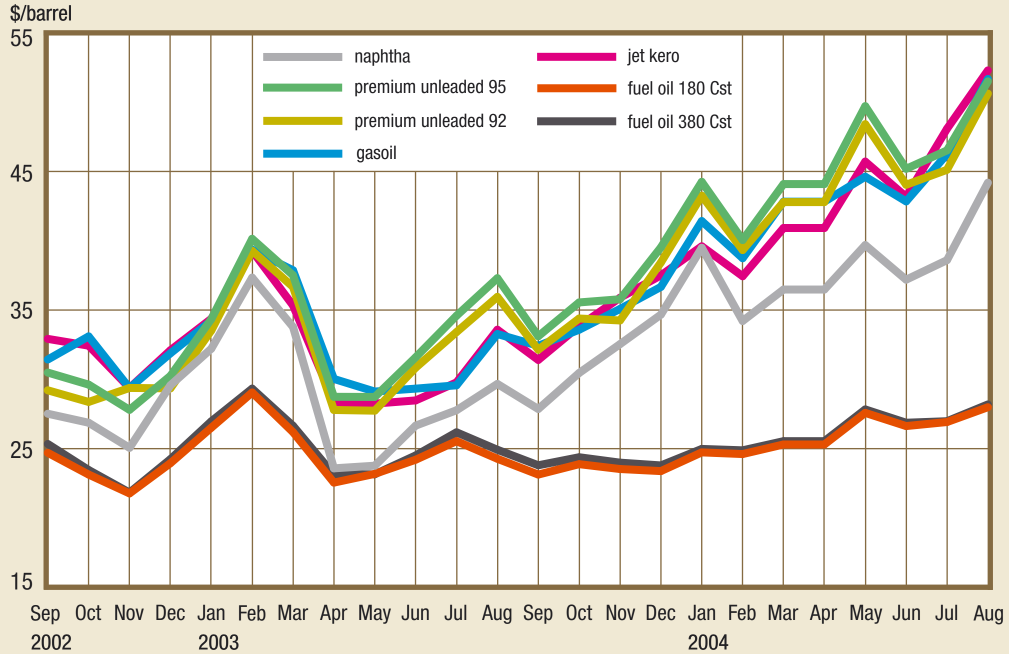


Table 8: Middle East Gulf market — spot cargoes, fob *($/b)*

		naphtha	gasoil	jet kero	fuel oil 180 Cst
2002	August	25.15	26.37	27.58	22.30
	September	27.13	28.90	31.19	23.66
	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

Source: Platts. Prices are average of available days.

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

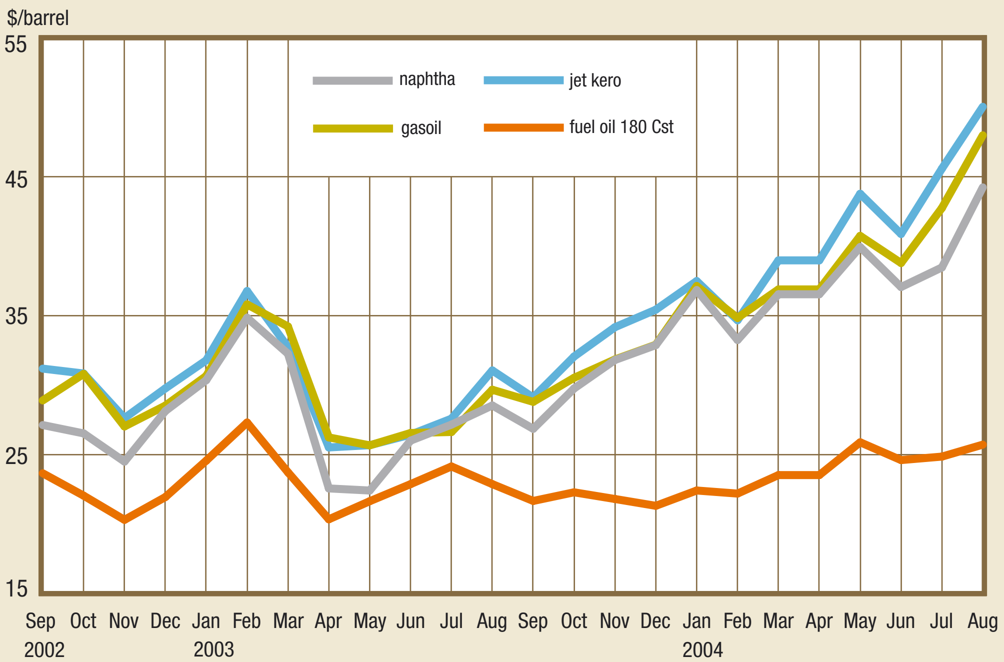


Photo: Reuters/Will Burgess

Virgin Atlantic to launch new airline in Nigeria

Virgin Nigeria is being modelled on Virgin Blue, a successful lower cost carrier in Australia

London — Virgin Atlantic Airways is to launch a new airline in Nigeria next year, the airline's latest international venture, the BBC reported recently.

Virgin signed a deal with the Nigerian government last month to create Virgin Nigeria, to be jointly owned by Virgin Atlantic and Nigerian investors. The airline will operate domestic, regional and international services including flights to Europe and the USA.

Virgin Atlantic already operates low cost airlines in Australia and Belgium, and is looking to expand into the USA. Virgin Nigeria is designed as a replacement for national carrier Nigeria Airways which collapsed last year.

The airline had suffered from years of financial mismanagement, resulting in debts of more than $60 million, and a poor safety record.

The Nigerian government has been looking for a foreign investment partner to relaunch a domestic airline. Virgin Atlantic, co-owned by Sir Richard Branson's Virgin Group and Singapore Airlines, will own a 49 per cent stake in the business. Financial investors will control the remaining 51 per cent.

An initial $50m will be invested in the airline's launch, while Virgin Nigeria hopes to create up to 20,000 jobs both within the airline and among suppliers.

Based in the Nigerian commercial centre Lagos, the airline will fly to cities such as Abuja and Kano, and African capitals including Accra and Dakar.

At the time of the announcement, speaking before a meeting with the Nigerian President, Olusegun Obasanjo, Sir Richard said he was "honoured and excited" to be involved in the venture.

"Nigeria is taking yet another bold step forward," he said. "We aim to create the best airline, not just in Nigeria but in the world, based in Africa."

Virgin Nigeria will operate separately from Virgin Atlantic's existing services between the UK and Nigeria, which will continue as normal. The airline is being modelled on Virgin Blue, a low cost carrier launched in Australia in 2000.

Virgin Blue has proved a success, garnering almost a third of the domestic market and floating on the Australian stock market in December 2003.

The Virgin Group is keen to launch a similar low cost operation, Virgin America, in the United States. Sir Richard's company is also looking to expand into less conventional aviation markets, announcing plans recently to launch commercial space flights within three years.

Photo: Reuters/Raheb Homavandi

Conservative Iranian MPs Gholamali Haddadadel (l) and Ahmad Tavakoli (r)

Iranian MPs vote for tighter controls on foreign investment

Nicosia — Iran's conservative dominated seventh parliament has approved the first reading of a new law which will compel the government to obtain parliamentary approval before concluding deals with foreign firms, the *Middle East Economic Survey* (MEES) reported last month.

The new bill would apply retroactively to any contracts signed from the beginning of the current Iranian year (which started on March 20) in which a foreign company has more than a 49 per cent stake in an Iranian venture.

The draft law, which will have to be reviewed article by article before being put to the vote and eventually submitted to the Guardian Council, singles out contracts related to telecommunications and airport services, MEES reported, adding that it did not appear so far to target contracts in the oil or petrochemical sectors.

"Our main targets are the contracts with Turkcell and TAV," conservative deputy, Ahmad Tavakoli, who supported the law, said.

The contract with Turkcell is worth $3.0 billion and that with TAV $200 million. The decision was criticised by reformist Iranian President, Mohammad Khatami, who said it threatened key investment.

The BBC said that the lawmakers had given themselves three months to decide whether to approve the contracts, which would be among the largest foreign investments in Iran since the Islamic revolution 25 years ago.

At risk from the decision is the $3.0bn licence awarded to Turkcell to operate Iran's second private mobile phone licence and a project to build two terminals at Tehran airport.

Turkish firm TAV, which has already invested $15m in completing one terminal, said it might sue the Iranian government to recover the money if the contract was not honoured.

The firm reached a goodwill understanding with the government that it would operate the terminal. It also hoped to be involved in a second phase of development, with a potential value of $193m.

An executive with the Turkish firm, Sani Sener, said: "If TAV's activities in Iran are blocked, we maintain our right to open a lawsuit in Iran.

"Under these conditions, European companies investing in Iran are in danger," he added.

President Khatami cancelled a scheduled visit to Turkey following the decision.

"We cannot attract more foreign investment when we change our rules every day," a government spokesman, Abdollah Ramazanzadeh, said.

"These changes of rules and regulations overnight cannot guarantee investment. We desperately need investment, internal or foreign.

"From now on, the government will not be able to negotiate with any foreign investor because they (the lawmakers) will tell the government that it does not have the necessary authority," he said.

Iranian lawmakers have claimed that the country's security would be compromised by awarding the contracts since both firms do business in Israel.

However, the Turkish Ambassador to Iran said there was no link between the firms and the Israeli government.

"This issue is really a reflection of Iran's internal politics," the Turkish Ambassador to Iran, Bozkurt Aran, said.

Chávez, Lula press closer ties

London — The presidents of Venezuela and Brazil have agreed to renew their efforts to achieve greater political, economic and social integration in South America, the BBC reported recently.

The agreement came during talks in the Brazilian city of Manaus, the capital of Amazonas State.

But Venezuela's President, Hugo Chávez, failed to win concrete backing from Brazil's President, Luiz Inacio Lula da Silva, for his more ambitious plans for continental unity.

The visit was Chávez's first trip abroad since winning a referendum on his rule last month.

The Venezuelan President came to Manaus, which he called the Amazonian heart of South America, seeking Brazilian backing for some ambitious projects, including creating a South American oil giant out of existing national oil companies; a continental state bank; and a pan-Latin American TV channel to rival CNN.

According to sources, what he got was more modest — clear support for his victory in last month's referendum and the promise of increased co-operation on a range of less controversial issues.

On his way into the talks, Chávez told the BBC that of course there were some differences between him and President Lula, but that both leaders had the same goal — a goal that he described as turning South America into a power bloc that could bring the world the political balance and peace it so badly needs.

President Lula made it clear that he also wanted to strengthen the region and to give it a bigger role in the world. But he also left no doubt that his view of how to do that was indeed a more cautious one.

Photo: Reuters/Jamil Bittar

Brazilian President, Lula da Silva (r), met with his Venezuelan counterpart, Hugo Chávez (l), in Manaus, Brazil, in September

Decree issued for setting up Dubai financial centre

Dubai — The Vice-President, Prime Minister of the UAE and Ruler of Dubai, Sheikh Mohammed Bin Rashid Al Maktoum, has issued a decree setting up the Dubai International Financial Centre (DIFC) as a zone with financial and administrative autonomy, the *Khaleej Times* reported last month.

The Government of Dubai announced that the 'Law of the Dubai International Financial Centre' had been passed.

This formally establishes the financial and administrative independence of the Dubai International Financial Centre and completes all of the necessary legislative steps required for the DIFC to operate formally.

The decree confirms the appointment of the Crown Prince, Sheikh Mohammed Bin Rashid Al Maktoum, as the President of the DIFC.

Further, the law creates the bodies vital for the operation of the DIFC. These include the DIFC Financial Services Authority, the DIFC Judicial Establishments and the DIFC Registrar of Companies.

The Director General of the Dubai International Financial Centre Authority, Dr Omar bin Sulaiman, welcomed the issuing of the decree.

"Since our inception we have strived to create a world class international financial hub, one that can rival established markets in its regulatory independence, its transparency and the opportunities it provides. I am delighted to now say that the DIFC is open for business. This final legislative approval has established our independence and formalises the legal framework within which the DIFC and its tenants will operate.

"The processing of the numerous applications for licences we have already received will begin soon, and we will announce when the first of these licences are to be granted in due course," bin Sulaiman said.

He added that since the announcement, the Authority had experienced a dramatic surge in interest from leading financial institutions, building on the solid commitment from earlier applicants.

"We can expect even higher levels of demand now that the legislative process is complete — the world's next great financial centre is now a reality," bin Sulaiman said.

Nigeria, Austria keen to foster lasting relationship

Vienna — Nigeria's new Ambassador to Austria, Biodun Owoseni, has formally presented his letter of credence to the Austrian President, Dr Heinz Fischer, at the Hofburg Presidential Palace in Vienna, OPECNA reported last month.

The presentation of a letter of credence is a formality that all new ambassadors undertake when they take up their duties in their appointed countries.

The Nigerian Ambassador extended President Olusegun Obasanjo's good will and best wishes to Fischer and the people of Austria.

Ambassador Owoseni also presented a message of an invitation from the Nigerian President to Fischer to visit Nigeria, which the Austrian President welcomed.

Fischer said he would like to see an improved relationship between Nigeria and Austria, in the key areas of social and economic development. He also said Nigeria and Austria have had a long trade relationship dating back to 1908.

Later at a reception organized by the Nigerian Embassy, Owoseni said he would work to promote the close relationships between Nigerian and Austrian institutions with a view to enhancing trade and other economic ties. He said Nigeria had put in place an enabling environment to attract both local and international investment, noting that the ongoing reforms within government institutions and agencies were aimed at creating opportunities for employment, a greater level of economic and social security, as well as infrastructural development for Nigerians.

Nigerian Ambassador to Austria, Biodun Owoseni (l), and the Austrian President, Dr Heinz Fischer

He also urged all Nigerians to support and assist the government in its development aspirations at all times.

Allawi calls for international help to rebuild Iraq

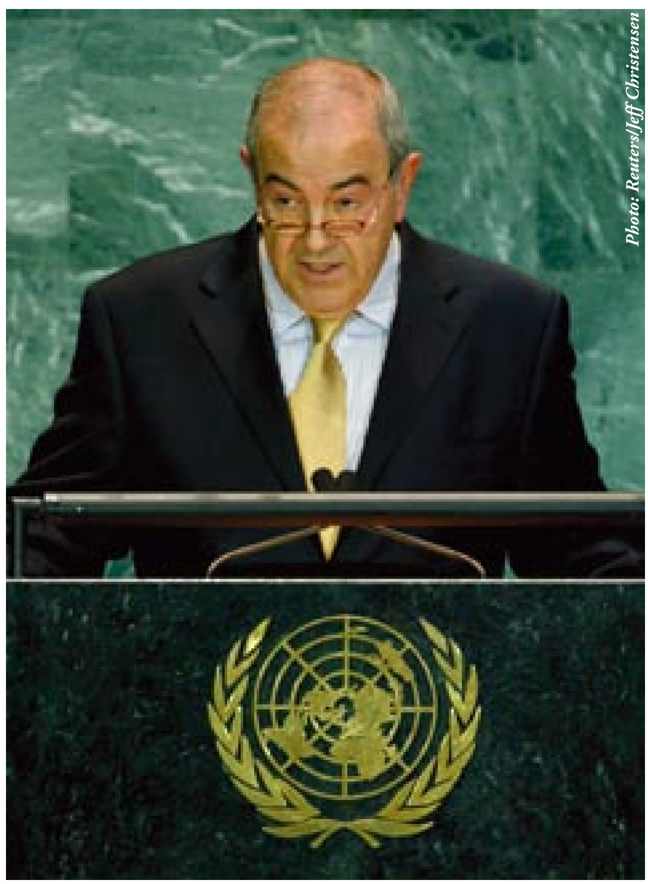
New York — As the United Nations General Assembly wrapped up the fourth day of its annual high-level debate last month, Iraqi Prime Minister, Iyad Allawi *(pictured below),* appealed to its neighbours and the international community for help in rebuilding the country, OPECNA reported.

Iraq was now a country that respected laws, human rights and freedoms, Allawi said, and the new government has given its people their due respect within a framework shaped by democratic freedoms.

He said elections due to be held in January were vital to improving the country's security situation and that his government was committed to adhering to the deadline despite the obvious complexities.

He expressed gratitude to the UN for its assistance in preparing for the elections, and said he looked forward to the return of all UN agencies in the future.

Allawi underscored that the most important priority was to defeat the terrorists and extremists who were still trying to target the dream of the Iraqi people who wanted to obtain peace. He added that these terrorists, who appeared to be consumed with the destruction of Iraq's civilization and culture, needed to be brought to justice.



Equally vital was restoring economic progress and the rule of law in the country, he said.

"We need more assistance from our neighbours and the international community as a whole to meet our objectives and the needs of the Iraqi people," he urged.

At a meeting later with the UN Secretary General, Kofi Annan, Allawi expressed the importance of the UN's role in supporting the elections in Iraq.

The Secretary General assured the Prime Minister that the UN would give all possible support in advising and assisting the country's Independent Electoral Commission.

A UN team was already in Baghdad and additional personnel would be sent as circumstances permitted.

ADB backs air quality management plan for Indonesian cities

Manila — The Asian Development Bank (ADB) will help develop an air quality management strategy and action plan for Indonesia through a technical assistance grant, OPECNA reported last month.

The United Nations Environment Programme ranks Jakarta as one of the world's most polluted mega-cities.

Levels of lead, nitrogen dioxide and particulates in the air are significantly higher than World Health Organization standards, primarily due to vehicles and industry, the ADB said in a statement announcing the grant.

The grant, from the Japan Special Fund, funded by the Japanese government, will help improve the framework of urban air quality management and strengthen enforcement strategies.

Five cities — Bandung, Jakarta, Jogyakarta, Semarang, and Surabaya — will be in the consultation process, and two will be selected to participate in the programme, to be implemented by Indonesia's National Development Planning Agency.

The grant will allow for a policy and regulatory framework review, the strengthening of institutional capacity, the development of implementation strategies, and the preparation of an investment plan to improve infrastructure for air quality management in the programme area.

"Air pollution costs the Indonesian economy at least $400 million every year, which could increase ten-fold by 2010 in the absence of pollution control," an ADB Principal Environment Specialist, Yue-Lang Feng, said.

A combination of rapid urbanization and weak enforcement mechanisms and strategies have made air pollution a significant urban health threat in Indonesia, more so for the poor, resulting in a loss of productivity, she said.

"The lack of a comprehensive implementation framework, coupled with regional governments' limited capacity to manage air quality, weakens the enforcement of air quality regulations and harms the health and welfare of urban residents," Feng said.

"A shortage of consistent funding also hampers government air quality management efforts which calls for a sector development programme to provide the financial and technical assistance to strengthen both the central and regional governments' capacity of policy development, and their enforcement infrastructure," she said.

The ADB has already provided technical assistance to the government for reducing vehicle emissions, and a regional programme in partnership with the World Bank, known as the Clean Air Initiative for Asian Cities, is helping selected developing member countries, including Indonesia, build up a knowledge-sharing network on air quality management.

Indonesia's National Development Planning Agency will implement the grant, which will be carried out in two phases over 12 months to October 2005.

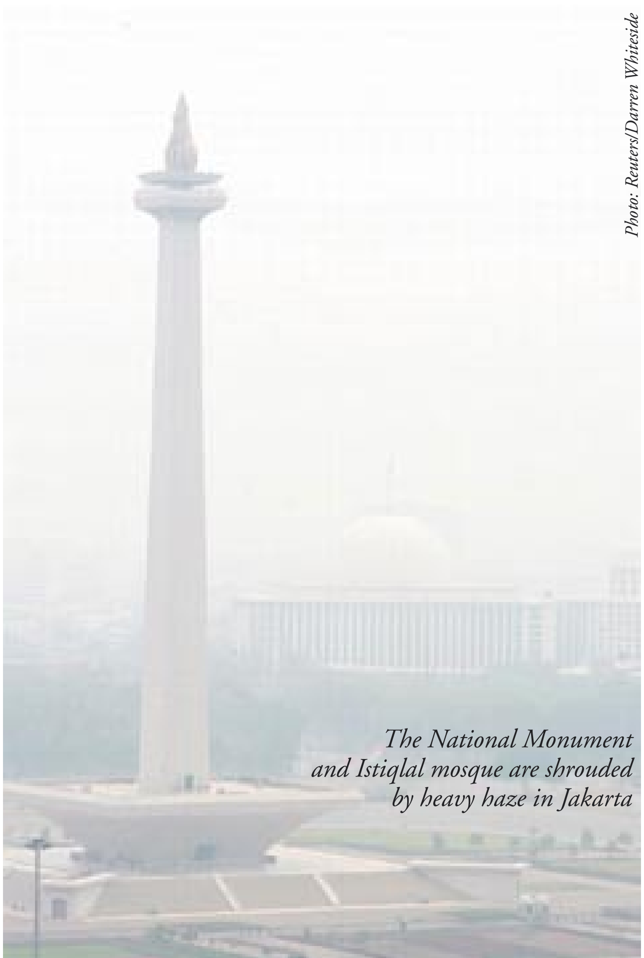


Photo: Reuters/Darren Whiteside

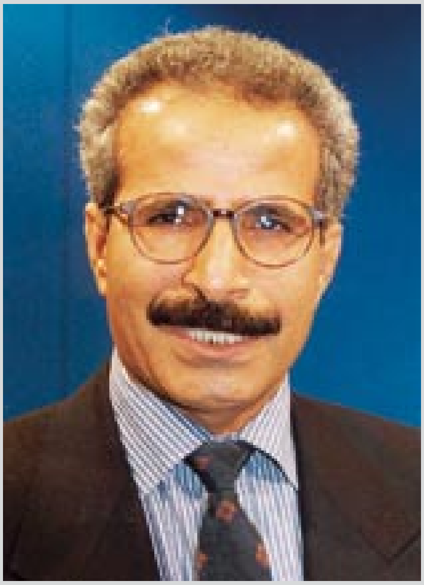
The National Monument and Istiqlal mosque are shrouded by heavy haze in Jakarta

UAE seeks free trade agreement with USA

Dubai — The UAE is ready to enter into negotiations with the United States for a fully-fledged free trade agreement (FTA) that will dramatically boost trade and the flow of investment between the two countries, a senior UAE economic official said recently, according to OPECNA.

"We are looking forward to signing the agreement in less than a year," the UAE Minister of State for Financial and Industrial Affairs, Mohammad Khalfan bin Kharbash, told the American Business Council.

APPOINTMENTS



The United Arab Emirates has appointed HE Mohamed bin al-Dhaen Al-Hamili as the country's first Minister of Energy — a new portfolio which was previously known as Petroleum and Mineral Resources. Hamili, in his early 50s, obtained his initial education in business studies and certified accounting in the United Kingdom, and went on to become a management graduate of the Harvard Business School.

Hamili has extensive experience in the oil industry, having worked for the UAE's national oil company, the Abu Dhabi National Oil Company (ADNOC) in many capacities. In 1999 he was appointed as Director of Marketing and Refining at ADNOC. Prior to that, he worked for ADNOC's distribution company, and the Abu Dhabi Marine Operating Company. Hamili also served as the UAE Governor for OPEC from 1994 to 2002.

He is the Chairman of the Board of Directors for the National Gas Shipping Company (NGSCO) and the Abu Dhabi National Tanker Company (ADNATC). He is also an active Board Member on several companies, among which are ADNOC Distribution, the Abu Dhabi Oil Refining Company (TAKREER), and the International Petroleum Investment Company (IPIC).

Kharbash said the FTA would automatically eliminate the need for trade sponsorships that have in the past been cited by American business leaders as hampering the flow of trade between the two partners.

"It goes without saying that the signing of a fully-fledged FTA in the fullness of time will constitute a significant milestone in our efforts to drive forward economic progress (in the UAE)," bin Kharbash said.

"It is our hope that this will lead to the introduction of an even greater number of vibrant American businesses to our shores, and increase UAE business in your country," he added.

He noted that the ties between the two countries had been characterized by a mutual willingness to co-operate.

"The American model of hard work, economic prosperity and entrepreneurship is one that we aspire to in the UAE," Kharbash said in his opening remarks.

"It must be clear that the Trade and Investment Framework Agreement our countries signed earlier this year is absolutely crucial in defining the future of economic relations and trade between the USA and the UAE," he pointed out, adding that the whole process was likely to take about a year.

Kharbash added that the new agreement would grant national status to foreign businesses which would eliminate the need for local sponsorship.

American Business Council President, Phil Garrison, said: "We are excited about the progress of this treaty. The sole mission of the American Business Council of Dubai and the northern Emirates is to promote trade between the USA and the UAE.

"Our membership is made up of private sector companies of all sizes from many different industries and we believe the treaty will benefit the entire UAE/US business community."

Japan to help Nigeria develop solar energy

Abuja — The Japanese government has expressed interest in supporting Nigeria in the development of solar energy technology, OPECNA reported last month.

The leader of a team of experts from the Japan International Cooperation Agency (JICA), Takeshi Kikukawa, said in the northern Nigerian Jigawa state capital of Dutse that Japan was interested in partaking in alternative solar energy development in the country.

Kikukawa said JICA, which helps co-ordinate knowledge sharing between Japan and developing countries, was collaborating with the Federal Ministry of Science and Technology in conducting studies to enhance the development of solar energy.

He said the team would inspect the Jigawa Alternative Energy Fund with a view to improving it.

"After feasibility studies, JICA will support the government to improve energy supply for effective utilisation," he said.

Kikukawa added that the team had already visited the states of Niger and Ondo to assist the governments in providing alternative sources of energy.

The Jigawa Deputy Governor, Alhaji Ibrahim Hadejia, told the delegation that the alternative energy fund was established in 2000 to boost power supply in rural communities.

The aim of the fund, he explained, was to provide alternative source of energy, prevent environmental degradation, assist in agricultural irrigation, provide potable water and boost the state's economic base.

Partners on the road to progress

Since the mid-1990s, the OPEC Fund has witnessed a growing demand among its partner countries for investment in transportation infrastructure

Photo: Hans Thurner

Many roads in Africa are unpaved and turn into muddy ponds during the rainy season, cutting off communities for weeks at a time

The transport sector tends to attract the lion's share of Fund public sector lending. In 2003, almost one-half of the OPEC Fund's public sector project loans went to transport projects, most of them roads.

The emergence of transportation as a major growth sector in the developing regions of the world is a clear indication of its importance to the wider development process. Inefficient transport networks often represent significant obstacles to both social and economic progress, restricting the movement of goods as well as people, and inhibiting the kind of social and economic integration necessary for sustainable development.

Many developing nations, for example, boast a wealth of fertile farmland; land which, if worked productively, could yield bountiful supplies of both food and cash crops, leading to improved self-sufficiency and valuable export earnings, as well as a more comfortable living for thousands of smallholders. Ironically, many such tracts of land are located in remote rural regions, frequently isolated from the country's major economic centres by an unsatisfactory transport infrastructure. Rail networks are scarce and roads often have dirt or gravel surfaces, are poorly maintained and impassable in the rainy season. Even those that have been bituminized are seldom kept in a good state of repair.

As a result, access to and from many agricultural areas is not only difficult but also expensive. For many smallholders, poor transportation links act as a strong disincentive for increasing production. Vital agricultural inputs such as seeds, fertilizers and machinery can only be obtained at great cost, and the task of transporting produce to market is often an expense which may not be offset by the amount sold. The outcome is that vast numbers of small farmers in developing countries, trapped in the same subsistence lifestyle that their forefathers experienced, have little or no motivation to change.

In addition to inhibiting agricultural production and other economic activities, inferior communication links are often to blame for poor social development. In the same way that access to markets is made difficult, so too is access to schools, health centres and other social services. Consequently, health and literacy standards among residents of remote areas are usually much lower than among urban dwellers.

Trans-Saharan road

Nowhere is the creation of good communication links more vital than in Africa, a continent characterized by its vast land area, varying ecological zones and a concentration of landlocked countries.

Since the Fund's inception in 1976, its African partners have sought more development assistance for transportation projects than for any other kind of activity.

One of the most ambitious road projects ever carried out in Africa, the Trans-Saharan road, lies along the ancient caravan routes from the Sahel to the North African coast. When completed the road will extend some 4,800 km from the Algerian capital, Algiers, to Lagos in Nigeria. There are high hopes that it will revive the once bustling trade between the two regions, help pave the way for African integration and so improve the lives of millions of poor people. The road will open up formerly remote mining, farming and industrial areas, enabling goods and people to travel, in a matter of hours, distances that once took days to cover.

Six countries — Algeria, Chad, Mali, Niger, Nigeria and Tunisia — organized under the Liaison Committee on the Trans-Saharan Highway (TRLC), are involved in upgrading the road. On completion, it will provide rapid, all-weather transport through the formerly inaccessible Sahara Desert.

The OPEC Fund has been assisting the TRLC with its work since 1997, having awarded it three grants during this time. The grants were used to help finance seminars attended by technical

Narrow mountain roads coupled with the ever-present threat of landslides make travel a hazardous and time-consuming activity

and administrative staff from the countries involved to share experiences, plan future activities and coordinate their individual road building programmes.

So far some 3,000 km of the highway have been completed, and all of the countries in the region eagerly look forward to the time when the final asphalt is laid.

Overcoming Tajikistan's isolation

In parts of Asia, the challenges of building and maintaining good roads are just as great as in Africa, and nowhere more so than in Tajikistan, which is the poorest of the Central Asian republics.

The improvement of road transport services is vital for economic development and poverty reduction in this former Soviet republic.

The break-up of the old Soviet Union, along with civil conflict and major natural disasters (including floods and avalanches) have resulted in a dramatic decline of economic activity and an increase in poverty among the predominantly rural population. Some 83 per cent of people here are believed to be living in poverty. Tentative economic recovery is now under way, but building better roads will be crucial to sustain this trend.

Roads are Tajikistan's most important mode of domestic freight and passenger transport. Maintenance of a good road network is vital for the agriculture sector, which accounts for 65 per cent of total employment in Tajikistan. Roads provide farmers with crucial access to markets as well as sources of inputs, and make it easier for the rural population to access economic opportunities and social services. They are also vital arteries for exports and imports, and road expansion is crucial if Tajikistan is to improve contacts with its neighbours and other countries further afield in Asia.

The OPEC Fund is co-financing a project in Tajikistan aimed at linking the cities of Shkev and Zigar with a good quality all-weather tarred road some 38.5 km long. The Fund has given a $4.0 million loan to the project, which will have a total cost of $33.95m. Other contributors include the Kuwait and Saudi Funds, and the government of Tajikistan.

The Gorno-Badakhshan Oblast, or province, in the southwest of the country, which will be served by the new road, is one of the most remote and deprived parts of Tajikistan. The existing Shkev-Zigar road traverses several steep mountain passes at an altitude of over 4,500 m, and is often affected by heavy snow that forces it to close for over two months of the year, effectively isolating outlying villages. Vehicle operating costs are high since traffic must be diverted through longer, more circuitous routes. Tarring this road means that people will be able to use it all year round. Drainage works will be installed to prevent flooding, and eight bridges constructed. Once the project is completed, the region's economy will receive a boost through cheaper and improved transportation of agricultural goods. In addition, remote rural populations will be able to enjoy year-


Photo: Sepp Puchinger

In Africa roads are the most important mode of transport, but are often subjected to extensive wear and tear due to heavy vehicle loads

round access to social services and jobs. The road is part of the 170 km-long Koliab to Kalikhamb route which connects the formerly isolated south-west to the heart of Tajikistan.

Upgrading the Pan-American Highway

The great Pan-American Highway connects the capitals of 17 Latin American countries and provides a vital link between them and the United States. As well as easing trade and tourism with the US, the system is pivotal to the social and economic integration of South and Central America, as it offers a comprehensive network for the distribution of raw materials and agricultural products throughout much of the region.

In the poor Central American state of Nicaragua the highway is of critical importance to the country's predominantly agricultural economy and is the main link with the neighbouring states of Costa Rica and Honduras.

The Nicaraguan stretch of the network was built about 30 years ago. It has since suffered from decades of inadequate maintenance, and parts of it were severely damaged by Hurricane Mitch in 1998. The poor state of the road has hindered the free flow of goods and people, making travel difficult, costly and time consuming and isolating many outlying regions from the main commercial centres. Within its national reconstruction programme, the government places a high priority on rehabilitating the road infrastructure, and in particular Nicaragua's portion of the Pan-American Highway.

The plan to upgrade the Highway received a boost in November 2001 with the procurement of a $5.0m loan from the OPEC Fund. Along with additional funding from the government and the Inter-American Development Bank, the financing is being used to repair severely damaged sections of the road.

Altogether, six sections (totalling 259 km) of the northern Pan-American corridor, as well as portions of the southern stretch are targeted for rehabilitation. The road is being re-tarred and a new system of ditches and drains integrated into its design to protect against flooding. In addition, a number of new bridges are planned and others are under repair.

News from the OPEC Fund

September 2004

Grants approved

Fund supports personnel in biosaline agriculture

Amount: $400,000.
Project: Strengthening human resources in biosaline agriculture.
Executing agency: ICBA/NARS of beneficiary countries.
Total cost: $4.09m.
Co-financiers: Arab Fund for Economic and Social Development; International Fund for Agricultural Development; International Water Management Institute; National Agricultural Research Systems (NARS).
The OPEC Fund has approved a grant worth $400,000 to support a capacity-building project of the International Centre for Biosaline Agriculture (ICBA), a non-profit resource centre for the development, co-ordination and dissemination of knowledge on biosaline agriculture technology. The project will build upon the successes of an earlier capacity-building scheme carried out by the ICBA in 2001–2003, which was also co-financed by the OPEC Fund, to target the biosaline agriculture needs of National Agricultural Research Systems (NARS) in arid, least-developed countries. To be implemented over the next three years, the initiative will support the establishment of demonstration plots for producing and distributing salt-tolerant forage grasses, legumes and shrubs in 15 arid and semi-arid countries in North Africa, and West and Central Asia. A series of capacity-development activities will also be carried out in the form of intensive training programmes, on-the-job training and travelling workshops. Proceeds from the OPEC Fund grant will be used specifically towards the human development component for central Asian countries, namely, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Azerbaijan and Kazakhstan.


Photo: ICBA

Scientists are investigating the salt-tolerant properties of pearl millet, grown in arid regions

Education gets boost in West Bank, Gaza

Amount: $2.0m.
Project: Assistance to Educational Institutions (Phase II).
Executing agency: Welfare Association; Palestinian Ministry of Education; beneficiary universities.
Total cost: $20m.
Co-financiers: Arab Fund for Economic and Social Development (Arab Fund).
The OPEC Fund has approved a grant of $2.0m to support the second phase of a project that will provide grants to nine non-governmental, non-profit universities to directly cover the tuition fees of needy students in Palestine's West Bank and Gaza Strip. Implemented in 2002, Phase I, which was co-financed by the Arab Monetary Fund, the Arab Fund for Economic and Social Development and the OPEC Fund, helped pay tuition fees for over 85,000 students. Universities also received an allocation for establishing a revolving credit fund, which beneficiaries pay back in small monthly installments once they graduate and start their careers. The credit scheme helped more than 12,000 poor students defray their living expenses. To expand on these successes, Phase II will be implemented following the same mechanism over two more academic years.

Focus on handicapped facilities in Tunisia

Amount: $250,000.
Project: Establishment of a Vocational Training and Recreation Centre for the Disabled.
Executing agency: Association for the Promotion of Employment for the Disabled (BASMA).
Total cost: $7.6m.
Co-financiers: BASMA.

The OPEC Fund has approved a grant of $250,000 to co-finance a programme sponsored by BASMA, which aims at establishing a vocational training and recreation centre for the handicapped in Tunisia, where an estimated 85 per cent of the disabled population is unemployed. Poverty and disability are inextricably linked in developing countries, where social isolation and marginalization prevent many disabled individuals from becoming productive members of society. Under the present programme, BASMA will construct three buildings in the Tunisian town of Gammarth, situated some 20 km north of the capital Tunis. The new facilities will comprise a 6,360 sq m vocational centre that will house a training area catering to specialties such as multimedia, handicrafts, leather and textile work, electronics, music and dance, as well as small stores where individuals can sell their goods. The Centre will also have administrative offices, a leisure activity area and a multi-purpose hall for sports and physical rehabilitation. A second building will serve as the BASMA headquarters, while a third will contain a restaurant that the Association will use to support its administrative expenses. The OPEC Fund's contribution will directly support the construction and equipping of the vocational training centre.

Arab cities benefit from $50,000 grant

The OPEC Fund has approved a $50,000 grant to co-finance a scheme of the Arab Urban Development Institute (AUDI), a regional, non-governmental, non-profit urban research, technical and consulting organization founded in 1980. Its primary aim is to enhance the quality of municipal services in Arab towns and cities. In order to confront the challenges posed by unprecedented urban growth rates and rising poverty levels, cities need to plan ahead to make more informed choices about the future. City Development Strategies (CDS) is an integrated tool to help provide support in this critical decision-making process. To assist the Arab world in preparing their own CDS, AUDI, in co-operation with the Cities Alliance (CA) and the World Bank's Middle East and North Africa (MENA) regional office, is undertaking an initiative to establish a special CDS Facility within its organizational structure. The proposed Facility will assist in creating sustainable and healthy urban environments, particularly among the poor, and in turn, help maximize employment opportunities and promote income growth. During a two-year period, AUDI will build a knowledge base on issues related to urban development; establish an information network on CDS within the MENA region; hold three regional workshops to introduce CDS and tap into the available resources within the CA and World Bank.


Photo: An-Najah University

The tuition fees of thousands of Palestinian students are paid for by institutions such as the Fund

Guinea vocational training facility gets $25,000 grant

The OPEC Fund has approved a $25,000 grant to help finance a project designed by the Austrian Guinea Society (AGS) to build a vocational training facility (an 'Austria House') in Conakry, Guinea. Based in Vienna, Austria, the AGS is an NGO that aims to build a platform for the co-operation and exchange of information and experience for the implementation of joint activities with Guinean ministries and national institutions. It also provides technical expertise in the areas of vocational training in order to enable talented youth gain the skills needed to obtain good jobs and in turn, help reduce poverty. Construction of the Austria House began in 2002. Grant proceeds from the OPEC Fund will cover the construction, furnishing and equipping of the facility, which will contain a workshop, and offer training programmes in the areas of electrical engineering, carpentry, tiling, bricklaying and plumbing.

Loans signed

Albania

Amount: $8.0 million.
Project: Fushe Kruja Cement Factory.
An $8.0m loan agreement has been signed between the OPEC Fund and the Fushe Kruja Cement Factory in Albania, which plans on expanding and modernizing its production plant. Albania is in the process of reviving its infrastructure, and the government has embarked upon a major road rehabilitation and reconstruction programme. The country is also experiencing a residential housing boom. As a result, the Albanian market for cement more than doubled to 1.53m tonnes/year between the years 1996–2003, and it is projected that cement consumption will exceed 2.0m t/y by 2010. The present project — one of the largest private sector investments in the country — will enable the Fushe Kruja Cement Factory to increase its production capacity. This will, in turn, reduce Albania's reliance on imported cement products.

Tourism has become one of the world's most important sources of employment and has proved to be a powerful tool in alleviating poverty, as in Jamaica

Syria

Amount: $10m.
Project: Telecommunications.
A $10m loan agreement has been signed between the OPEC Fund and SpaceTel Syria, the second GSM mobile service provider in the country. Formed in 2001, SpaceTel was awarded a 15-year licence on a build, operate and transfer basis. The purpose of the Fund's loan is to assist the company in the expansion of its network capacity to meet the growing demand for mobile telecommunication services. SpaceTel has been offering pre-paid services since July 2003, which are envisaged to be the main source of growth. To date, the company has some 770,000 subscribers, of which almost one-half are pre-paid. SpaceTel is aiming to close the year with more that 900,000 active subscribers. The development of an acceptable customer-responsive mobile telecommunications network will enable the country to compete more effectively in the world economy.

Jamaica

Amount: $10m.
Project: Tourism.
A $10m loan agreement has been signed between the OPEC Fund and the Ackendown Newtown Development Company (ANDCo), a company formed specifically to build, own and lease a hotel situated in the underdeveloped south coast of Jamaica. Tourism has become one of the world's most important sources of employment and has proved to be a powerful tool in alleviating poverty. In Jamaica, the tourism industry is the country's leading foreign exchange earner. ANDCo's project will develop, construct and equip a 360-room, all-inclusive resort hotel in Whitehouse, Westmoreland. The new hotel will act as a catalyst for encouraging further foreign direct investment and assist in the development of tourism along the south coast. The project will also create over 700 new jobs and benefit local firms and suppliers who can offer the hotel their goods and services.

OPEC Fund Governing Board holds 108th Session

The Governing Board of the OPEC Fund for International Development convened its 108th Session at the Fund's headquarters in Vienna, Austria in September.

Following the adoption of the meeting's agenda, the Director-General of the Fund, Suleiman J Al-Herbish, reporting to the Board on the Fund's activities, indicated that on a cumulative basis, and as of the end of July 2004, $5,521.3 million had been approved in loans to the public sector and $3,603.5m disbursed. These loans, which were extended for project and programme financing and balance of payments support, as well as within the framework of the HIPC Initiative, number 997. All major economic and social sectors have benefited from the Fund's assistance, including agriculture, transportation, health, education, water supply and sewerage, industry, energy, etc.

The Director-General further indicated that a total of 58 operations had been approved under the Fund's Private Sector Facility. As of the end of July 2004, cumulative commitments through this window totalled $292.1m.

In addition, the Fund has approved a total of 676 grants in support of various activities in the areas of technical assistance, food aid, emergency relief and research. Cumulative grant commitments, as of the end of July 2004, amounted to $312.8m, of which $212.9m has been disbursed. Moreover, the Fund has contributed, in grant form, substantial amounts to the resources of other international development institutions benefiting the South; these contributions total $971.8m, most of which has been disbursed. To date, the Fund has provided financial assistance to 111 countries in Africa , Asia , Latin America and the Caribbean, the Middle East and Europe.

The Board also discussed the Fund's Private Sector Facility: two new private sector investment proposals were approved; a number of pipeline proposals were considered, and an evaluation report on the Facility examined.

OPEC Fund and Sierra Leone sign investment encouragement and protection agreement

An agreement for the encouragement and protection of investment has been signed between the OPEC Fund for International Development and the Republic of Sierra Leone. Drawn up within the framework of the Fund's Private Sector Facility, the agreement was initialled by the Minister of Finance of the Republic of Sierra Leone, HE Joseph B Dauda, and by the Director-General of the OPEC Fund, Suleiman J Al-Herbish.

The Fund's Private Sector Facility is a financing window, endowed with its own resources, through which the Fund channels support directly to the private sector in developing countries. Its objectives are to promote economic development by encouraging the growth of productive private enterprise and supporting the development of local capital markets. Under the Facility, loans are made to financial institutions for on-lending to small, medium and micro-enterprises, as well as directly to specific projects. Equity participation in private enterprises is also undertaken. As a pre-condition to such investment, the Fund requires the conclusion of a standard agreement with the country concerned for the encouragement and protection of investment. The agreement accords the OPEC Fund the same privileges as those normally given to international development institutions in which the country holds membership.

Inhabited by some 5.2 million people, Sierra Leone has abundant mineral, agricultural and fishery resources. Agriculture employs around two-thirds of the population and the mining of diamonds, bauxite and rutile provide the country with its main source of hard currency. The 1990s were marked by government efforts to implement reforms aimed at stabilizing the economy and laying the foundations for sustainable economic growth, which were interrupted by periodic episodes of political instability and civil conflict. Economic activity began to recover in 2000, and accelerated in 2001. Impressive gains were made in 2003, when GDP reached $793.3m, annual GDP growth was recorded at 6.5 per cent and GNI per capita estimated at $150. The government has embarked upon a long-term poverty reduction plan, which focuses on boosting economic recovery and growth by instituting a framework conducive to private sector development, modernizing infrastructure and enhancing poor communities' access to health care, education and other social services.

Forthcoming events

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Nice, France, **November 30–December 2, 2004**, *Production sharing contracts and international petroleum fiscal systems.* Details: The Conference Connection Inc, PO Box 1736, Raffles City, Singapore 911758. Tel: +65 6222 0230; fax: +65 6222 0121; e-mail: psc@cconnection.org; Web site: www.cconnection.org.

Rome, Italy, **December 1–3, 2004**, *5th annual Rome world LNG summit.* Details: CWC Associates Ltd, 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.

Regina, Canada, **December 2–3, 2004**, *Introduction to the Canadian natural gas industry.* Details: Canadian Energy Research Institute, 150, 3512–33 St NW, Calgary, AB T2L 2A6, Canada. Tel: +1 403 282 1231; fax: +1 403 284 4181; e-mail: sjohnsgaard@ceri.ca; Web site: www.ceri.ca/events.

Bagshot, Surrey, UK, **December 2–3, 2004**, *25th CGES executive retreat meeting — The oil market today: the current price shock, the cause and the impact?* Details: Centre for Global Energy Studies, 17 Knightsbridge, London, SW1X 7LY, UK. Tel: +44 (0)20 7309 3610/12; fax: +44 (0)20 7235 4338/ 5038; e-mail: jenni.wilson@cges.co.uk; Web site: www.cges.co.uk.

Dubai, UAE, **December 5–7, 2004**, *Production sharing contracts and international petroleum fiscal systems.* Details: The Conference Connection Inc, PO Box 1736, Raffles City, Singapore 911758. Tel: +65 6222 0230; fax: +65 6222 0121; e-mail: psc@cconnection.org; Web site: www.cconnection.org.

Calgary, Canada, **December 6–7, 2004**, *CERI 2004 electricity conference.* Details: Canadian Energy Research Institute, 150, 3512-33 St NW, Calgary, AB T2L 2A6, Canada. Tel: +1 403 220 2380; fax:+1 403 284 4181; e-mail: jstaple@ceri.ca; Web site: www.ceri.ca/events.

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Geneva, Switzerland, **December 6–7, 2004**, *The inaugural US-Libyan summit.* Details: CWC Associates Ltd, 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.

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Singapore, **December 6–7, 2004**, *Condensate and naphtha forum.* Details: Conference Connection Administrators Pte Ltd, 105 Cecil Street #07–02 The Octagon, Singapore 069534. Tel: +65 6222 0230; fax: +65 6222 0121; e-mail: info@cconnection.org; Web site: www.cconnection.org.

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Houston, Texas, **December 7–8, 2004**, *Pipeline integrity.* Details: IQPC Ltd, 150 Clove Road, Little Falls, NJ 07424-2157, USA. Tel: +1 800 882 8684 or +1 973 256 0211; fax: +1 973 256 0205; e-mail: info@iqpc.com.

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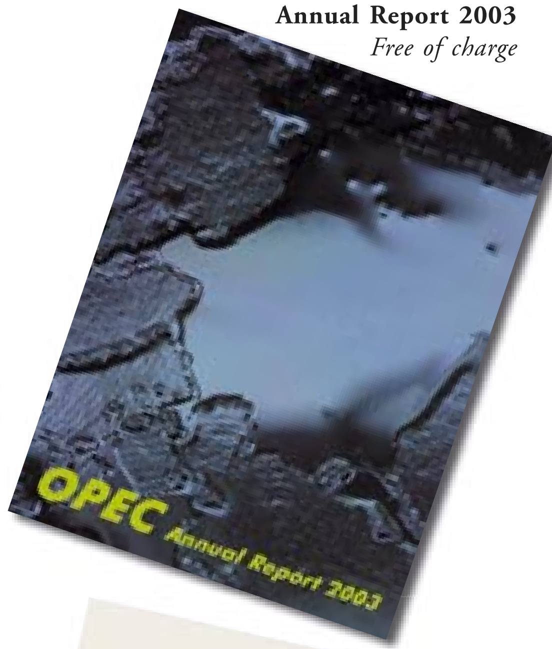

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