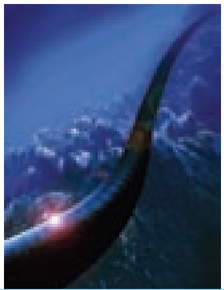
This month's cover ...
shows Norway's Ormen Lange sub-sea gas development (Photo: Norsk Hydro)



OPEC bulletin

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Publishers

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OPEC is a permanent, intergovernmental Organization, established in Baghdad, September 10–14, 1960, by IR Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. Its objective is to co-ordinate and unify petroleum policies among Member Countries, in order to secure fair and stable prices for petroleum producers; an efficient, economic and regular supply of petroleum to consuming nations; and a fair return on capital to those investing in the industry.

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

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A complex combination

Restoring stability to the market after the record highs hit by oil prices should be a shared responsibility

In recent weeks, the international oil markets have witnessed a scenario that few were anticipating just a short while ago: crude prices have continued their seemingly inexorable climb and have now hit all-time highs, breaking through the $41/barrel level on the New York Mercantile Exchange (NYMEX). And with summer almost upon us, when the US driving season is in full swing and demand for gasoline is at its peak, there is no sign that prices will be coming down to more reasonable levels any time soon.

Most industry-watchers point to these record prices as being due to a combination of factors. Apart from the problems that the US refining network is experiencing in meeting the country's growing thirst for gasoline, the analysts also cite reasons including the continuing tension in the Middle East, strongly-growing demand from China, and the record long positions being held by market speculators. All this is taking place at a time when there is no major physical supply interruption, as there was during the Gulf crisis in 1990–91, the last time prices approached these levels.

These developments have led some analysts to ask a number of pertinent questions: could rising demand be on the verge of outstripping supply, pushing prices into a higher range? Will we have to get used to the idea of $40/b oil? What would be the consequences of permanently higher energy costs for the global economy? One thing, however, is clear: oil prices which threaten to spiral out of control — either upwards or downwards — are beneficial to nobody.

Low prices harm the industry's profitability and make it difficult to attract the necessary investment to ensure that future demand growth can be met. Unsustainably high prices, on the other hand, can put a brake on global economic growth, making stock markets nervous and feeding through into inflation. In the longer term, excessively high oil prices will subdue demand for hydrocarbons and increase the economic viability of alternative fuels.

Best environment for growth

In other words — as OPEC has often said — no-one has anything to gain from excessive price volatility. Neither markets nor investors like uncertainty. The market stability that the Organization seeks is the best environment for ensuring that global economic growth continues along a steady path, and for making the massive investment decisions that need to be made if the oil industry is to meet future growth in demand.

OPEC is currently discussing the market situation and how best to address it. However, whatever decisions the Organization takes in Beirut and in subsequent Meetings, the factors outlined above that have contributed to the recent record-high oil prices are likely to remain influential. If oil stays at a level of around $40/b or above, there is a risk that global economic growth could be derailed by excessive energy costs. And while OPEC will do whatever it can to restore stability to the market, the fact is that finding a solution to this complex set of intertwined issues is a responsibility that should be shared by all.

Algeria ideally placed to play a central role in the future

Algeria's geographical location and its 40 years of experience in the gas industry mean the country will continue to play a vital role in the gas and LNG sectors, according to the country's Minister of Energy and Mines, ***HE Dr Chakib Khelil.**** *

Based on the speech delivered by* ***Dr Khelil* *to the LNG 14 conference in Doha, Qatar, March 21-24, 2004.*

of the global LNG industry

Today, we have arrived at a turning point in the history of natural gas, and in the development of the world liquefied natural gas (LNG) industry in particular.

Considering its availability and its qualities as a clean source of energy, interest in natural gas makes it a vital economic part of the process of energy globalization. Natural gas is already considered the premium energy choice for the 21st century.

Assessments converge to confirm the trend that natural gas is expanding strongly — particularly in the form of LNG — into various markets. The majority of experts expect that during the next three decades, demand for LNG will register significant progress, compared to other sources of energy.

World LNG exports in 2002 exceeded 150 billion cubic metres. Japan alone imported 71.9bn cu m, followed by South Korea with 23bn cu m, France with 14bn cu m and Spain with 12bn cu m.

The gas industry today is in a state of evolution. LNG, which was initially just a supplement for gas deliveries by pipeline, is gradually becoming a means of decompartmentalization of regional markets, as well as a means of linking these markets.

The spot market and cargo swaps are becoming increasingly frequent. Insofar as it plays an auxiliary and a regulatory role by improving supply flexibility, this phenomenon is beneficial for consumers as well as for producers.

In fact, we find ourselves in fact at a crossroads between the regionalization and globalization of natural gas markets. Even if the share of inter-regional trade for natural gas remains very weak (six per cent) compared to intra-regional trade (94 per cent), the fact still remains that many new gas projects are transcontinental in nature.

But let us make no mistake. The futures markets that accompany the expansion of LNG trade often suffer from a lack of liquidity. Let us also not forget that the availability of LNG implies massive investments and long delays in cost recovery, which can only be offset by long-term contracts.

The spot market does not provide any guarantee for long-term supplies. Thus, a movement towards short-term trade remains exposed to two major risks: firstly, a risk of underinvestment in the infrastructure, which is one of the pillars of the security of supply; and secondly, a risk of price volatility, which may result in tariff shocks for the final consumer.

The recent liberalization of the gas sector in Europe has taught us several lessons in this respect: no decrease in prices for the final consumer; the rate of interconnection remains very weak (seven per cent, whereas it should have been 30 per cent); inadequate links between the grid systems management and the means of production management; lack of heterogeneity in regulatory procedures in the European market, and so on.

An examination of regional developments in LNG trade shows us that Asia has great potential for the growth of its gas market. Asian consumption will triple over the next two decades, rising from 198bn cu m in 2001 to 623bn cu m by 2025, an annual growth rate of 4.5 per cent.

There is no doubt that LNG will make a significant contribution to meeting the region's growing energy needs. Together, Japan and South Korea already consume more than 70 per cent of globally marketed LNG. And with rising consumption in China and India as well, all forecasts point to strong demand in Asia.

Meanwhile in Europe, a forecast by the European Commission (EC) shows that natural gas consumption will attain an annual growth rate of 2.9 per cent over the next eight years. The share of natural gas in Europe's energy balance will rise from 20 per cent in 2000 to 27.5 per cent in 2020.

Rising consumption

Natural gas consumption in Europe is forecast to double by 2025, rising from 425bn cu m in 2001 to 736bn cu m. Europe's dependence on natural gas imports will reach 80 per cent by 2025.

However, the opening of European markets in accordance with the EU Gas Directive is encountering difficulties related to the disparity between the countries of Europe in terms of the degree of openness in their markets.

Also, the access procedures for emerging players to the gas transport grid system, as well as to the storage of products, still remain to be perfected, in particular at the legislative level, where harmonization between the countries is necessary.

According to forecasts by the International Energy Agency, natural gas use in the United States will show increase significantly in the coming years, reaching

"The tremendous development of the LNG industry in recent years has only been possible thanks to long-term agreements."

766bn cu m in 2010, and 910bn cu m by 2020.

Recent years have been marked by a strong rise in the price of natural gas on the US market. This situation is explained in part by an insufficient number of LNG import terminals in the US. During the ministerial summit on LNG held in Washington in December 2003, US Energy Secretary Spencer Abraham estimated that by 2025, nine new LNG regasification terminals would be necessary, since the US would by then be importing 20 times more LNG than in 2002.

According to some analysts, the absence of regasification installations could have a very detrimental effect on the power generation sector. The US, where there is a very important potential market for LNG, will therefore have to resort to the reactivation of existing regasification plants and/or plan new units.

One question which arises is this: is LNG trade, which contributes to the globalization of gas markets, able to do without the bilateral contracts in the long run? It would take a bold person to answer yes to this question.

While gas exports by pipeline grew by 39 per cent between 1995 and 2001, growth in LNG trade reached 55 per cent for the same period, a dynamic trend which should lead to the progressive decompartmentalization of regional markets.

Long-term contracts

The LNG chain remains capital intensive. A regasification terminal constitutes only the end of the chain. An LNG project can only be designed economically with its corresponding liquefaction plant.

That is why LNG trade has been based on sales purchase contracts with a duration of 20–25 years. Take-or-pay commitments were the basis for securing these projects, which was a consequence of capital-intensive nature of the LNG industry. Investment costs are high, averaging about $5 billion for an LNG project with two trains of 6m tonnes/year (comprising liquefaction, tankers and regasification facilities).

The tremendous development of the LNG industry in recent years has only been possible thanks to long-term agreements, balancing the advantages to all the parties involved along the value chain.

On the one hand, these contractual arrangements allow the supplier to protect himself against the financial risks associated with the rigidity of the gas chain. On the other hand, the importer can also secure a reliable supply of gas in the long term at competitive prices. These are the conditions that allowed the LNG industry to come into existence, and it is these same conditions that will allow it to continue.

Even if the spot market is regarded as potentially useful, in the sense that it will offer good arbitration opportunities between the major markets, it cannot be a substitute for long-term transactions, which remain essential for stabilizing the market and for the financing of new LNG export projects.

The development of the LNG market offers also considerable opportunities with regard to swaps. These transactions, which are not new in the gas industry, constitute an instrument of co-operation between producing countries. They can play a role either by shortening delivery distances or by allowing sellers to seize new market opportunities by better meeting the commercial specifications of various buyers.

In the new global world of LNG, Algeria will be called upon to play a central role for two reasons. The first reason is its geographical position, which places the country at a crossroads for the development of the LNG industry. Algeria is on an optimal line between the Atlantic basin and the Pacific basin. Because of its position, Algeria can seize market opportunities from both the east and the west.

That is why the recent partnership agreement with BP (the Isle of Grain regasification facility) will allow Algeria to return to the UK market and to reinforce its position in the Atlantic basin.

Additionally, through its upstream participation in the Camisea gas project in Peru, Algeria can exercise its option to export LNG to the US west coast. State oil and gas firm Sonatrach has signed an agreement with Norway's Statoil for an ex-ship sale of 1bn cu m/y of LNG, which will reinforce its presence in the US gas market.

The second reason is Algeria's important role in regional energy integration, thanks not only to new gas pipelines like Medgaz and Galsi, but also to gas-electricity convergence in Europe, which offers new possibilities in the Euro-Mediterranean basin.

For example, Sonatrach holds a ten per cent stake in the capital of Reganosa, a company that will operate an LNG storage terminal, a regasification plant at Mugardos, and a gas transport system in Galicia in Spain.

In order to better respond to the growth in worldwide demand for natural gas, Sonatrach has set an export target of 85bn cu m of gas in 2010. The development of the fields in the south of Algeria should provide the additional quantities of gas required by this strategic objective.

The new liquefaction train at Arzew (the Gassi Touil project), the new gas pipelines (Medgaz and Galsi), and the extension of the transcontinental pipelines (Duran Farrel and Enrico Mattei), will provide the necessary infrastructure for the production and routing of gas to market.

The development of partnerships is critical for the development of the hydrocarbon sector in Algeria. Over the past three years, this sector has diversified thanks to the introduction of new, more efficient procedures, as regards contract signing.

New partnership formulas have also been implemented. As an example, Sonatrach has launched an integrated project, which covers the whole chain from upstream to downstream, in Gassi Touil. This project will involve the development of fields in the area, the transport of the gas, the construction of a new liquefaction train with a capacity of at least 4–5m t/y, and the marketing of the LNG.

Algeria's gas exports have almost doubled during the last ten years, going from 32bn cu m in 1994 to 60bn cu m in 2003, with 46 per cent in the form of LNG. The country is ranked second after Indonesia in terms of LNG output capacity.

It is also the second-largest worldwide exporter of LNG. Today, Algeria has 40 years' experience in the field of natural gas liquefaction, since the nation's first gas complex dates back to 1964.

Algeria's export capacities (pipelines and liquefied gas) at the end of this decade will be thus approximately 95bn cu m/y, an increase of more than 50 per cent compared to the current levels.

Nowadays, certain gas-importing countries, which have traditionally enjoyed the privilege of security of supply, are more inclined to adopt flexibility as a management principle for the gas industry, without consulting the exporting countries.

Thus, the long-term gas contracts that have ensured security of supply are now sometimes challenged or, even if recognized, not considered as completely necessary by the supporters of total and immediate liberalization.

The consequence of this situation could be the emergence of two types of extreme tensions at the international level: inter-gas competition between producers, which is likely to deprive them of an appropriate return on their investments, and competition between importing countries to access the gas supplies. To counter this possible development, Algeria has chosen the path of dialogue with both gas-producing and gas importing countries.

This was the position we adopted in response to the new legal and regulatory framework that the EC intended to enact through the liberalization of the European gas markets, as specified in the Gas Directive of 1998.

Progressive changes

Along with other gas-producing countries, we consider that any changes affecting gas markets should be introduced progressively. Dialogue and consultation are the means of achieving this objective while preserving the stability of commercial transactions.

This concern was raised during the meetings of the Gas Exporting Countries' Forum held in Algiers in September 2002 and in Doha in February 2003, when representatives of gas-exporting countries, gas companies, financial institutions and the EC convened to discuss the necessity of preserving long-term contracts, especially considering their role in maintaining security of supply.

The EC now acknowledges the role played by long-term contracts in the development of the European gas market. A recent proposal of a Directive from the European Parliament and the Council relating to security of energy supply recognizes the importance of these contracts in the security of supply of Europe. It also establishes that these long-term contracts constitute a significant stabilizing element for external suppliers and make it possible for these suppliers to improve their capability to continue the development of large projects.

At the 8th International Energy Forum, which was held in Osaka, Japan, in September 2002, Algeria stressed the necessity of reinforcing dialogue and consultation between all the players. We are convinced that these two conditions will help the global gas industry to develop normally and it will thus be shielded from the negative effects of arbitrary changes in international relations.

"Algeria has chosen the path of dialogue with both gas-producing and gas importing countries."

Algeria strongly believes in the future of the gas industry, and is investing in order to satisfy the anticipated growing global need for LNG. We are ready to work with all our partners to ensure that international energy demand, especially for LNG, is met.

Algeria has been involved in the gas industry since its early days and, having acquired forty years' experience, the country has sufficient resources to continue to play an important role today and in the future.

Alternative energy in Indonesia: past, present and future

*The rapidly-growing demand for oil and gas in Indonesia, writes **Bachrawi Sanusi***, means that the country needs to make the maximum use of other energy resources in order to extend the life of its oil reserves.*

* ***Bachrawi Sanusi*** *is Head Lecturer in the Faculty of Economics and a Member of Centre for Energy and Mineral Resources Assessment at Trisakti University, Jakarta, Indonesia.*

Long before the modern uses of oil were discovered in the western world, the people of Indonesia had found several practical uses for the dark liquid that they found seeping from the earth in various places in their islands.

Possibly the first contact that westerners had with the oil of Indonesia came during a battle at sea in the sixteenth century, when the Sumatrans burned two Portuguese galleons by hurling oil-soaked fire balls at them. This battle in the Strait of Malacca was the first, but far from the last, disagreement between Europeans and Indonesians involving oil.

Although the use of petroleum for illumination had been known since the time of Herodotus around 500 BC, it only became important in the modern world after the first United States oil well was drilled in 1859 near seepages along Oil Creek, Venango County, at Titusville, Pennsylvania.

In what was then the Dutch East Indies (later to become Indonesia), the first man to make a commercial search for oil was a government official, Jan Reerink, who set up camp near Tjibodas, West Java, in December 1871.

Reerink's reason for drilling in the Tjibodas region was the abundance of surface seepages in the area. He used an ox-driven Pennsylvania drilling rig in his search, but had constant trouble with the soft soil, which kept caving in.

The first discovery of crude oil was made by another man, Aeilko Jans Zijlker, in 1883. That find was in fact made accidentally when Zijlker was overtaken by monsoon rains as he was inspecting the tobacco fields in Langkat, North Sumatra. Afterwards, he formed a new company, and discovered a commercially exploitable well in Telaga Said in June 1885.

Thanks to Zijlker's discovery, Indonesia has been producing crude oil for more than one hundred years. Like other oil exporters, the country enjoyed an oil price boom during the 1970s, as the conflict in the Middle East in October 1973 triggered a series of increases in world oil prices.

During that period, Indonesia's national economic development was supported by foreign loans and state revenue from the oil sector. However, in the 1980s, oil prices began to fall, and soon the country's oil boom was over. The Indonesian economy was hit by a severe monetary crisis in 1997, the effects of which are still being felt even now.

A number of experts (including the author) have predicted that Indonesia is likely to become a net oil-importing country in the near future. As a consequence, Indonesia needs to reduce its oil consumption and to promote the use of alternative (ie, non-oil) sources of energy. These include coal, natural gas, hydro power, geothermal energy, biomass, biogas, *gambut* (turf or peat moss), solar energy, wind and wave power, nuclear energy and so on.

In the long term, economic growth and social development can be measured not only by gross domestic product levels, but also by the amount of energy consumed per capita, both as primary energy (ie, crude oil, coal and other sources) and as secondary energy (electricity).

As the amount of energy needed by nations around the world is constantly increasing, the demand for each type of energy will be influenced by a variety of factors including its price, the amount of pollution it creates, ease of transportation, ease of use, and so on.

Crude oil versus coal

As mentioned above, Indonesia's first commercially exploitable crude oil discovery was made in June 1885 in Telaga Said. For many years, the production of oil was always ample to meet demand, particularly once the big Middle Eastern producers came on stream, and so oil prices remained low, averaging below $2.50/barrel before the outbreak of conflict in the Middle East in late 1973.

As a consequence of low crude prices, oil tended to replace coal as a source of energy, and coal production in Indonesia declined significantly as an increasing number of countries switched to oil and natural gas. In 1930, Indonesia's coal production was 1.3 million tonnes, but although this had increased to 2.0m t by 1940, a long period of decline followed, and by 1973 coal production had fallen to 149,000 t.

But in the period after 1973, when crude prices continued to increase, oil was no longer a cheap alternative to coal. In Indonesia, coal production began to rise again, and by 1994–95, the volume of coal produced in the country had increased to 35m tonnes. By 1999, total coal production had reached 72m t, climbing further to 76.6m t in 2000.

However, Indonesia's domestic oil demand was also rising, and by 1992–93, it had increased to 39.8m kilolitres, including 15.3m kl of diesel oil, 8.6m kl of kerosene, 7.3m kl of premium gasoline, and 5.4m kl of bunker oil. By 1998–99, the volume of domestic oil sales had risen further, and had reached about 52.3m kl.

Reducing oil usage

The Indonesian government's policy is to promote energy diversification and conservation. This means that oil consumption should be reduced in order to increase the role of other energy sources such as coal, natural gas, geothermal, and so on. In particular, the transportation, electricity and industrial sectors are expected to utilize these alternative energy sources.

For example, the consumption of coal briquettes reached 4.8m t by 1998–99, and the government has targeted a further increase to 10.8m t by 2008–09. However, it will be difficult to achieve this target as long as the government does not provide fiscal incentives (particularly tariff and tax incentives) for the import of equipment for the coal industry and for consumers.

On the one hand, the government and the House of Representatives agree on the need to increase domestic oil fuel prices, but on the other, the people have found it difficult to replace oil products, particularly kerosene, with coal. Some of

"Thanks to Zijlker's discovery, Indonesia has been producing crude oil for more than one hundred years."

info box

Repelita *(Rencana Pembangunan Lima Tahun)* is the name given to Indonesia's five-year economic development plans.

These are as follows:

Repelita I	1969–1973
Repelita II	1974–1978
Repelita III	1979–1983
Repelita IV	1984–1988
Repelita V	1989–1993
Repelita VI	1994–1998
Repelita VII	1999–2003
Repelita VIII	2004–2008

the reasons for this include limited availability of the latter commodity, and the lack of infrastructure.

The price of primary energy is to a large extent determined by fundamentals like supply and demand. Many people base their choice of primary energy sources on factors including affordability, ease of transportation, easy of finding the product in the market, environmentally friendly considerations, and so on.

Although the Indonesian government has promoted its energy diversification programme for years, it has not met with great success. The idea behind energy diversification is to reduce oil consumption by replacing oil with alternative energy sources. The people are expected to consume non-oil energy in order to prolong the life of the country's crude reserves, thus maintaining state oil revenues.

By prolonging the life of its oil reserves, Indonesia hopes to delay the time when it becomes a net oil importing-country. However, despite the conservation efforts, the country's oil production and reserves are gradually declining, as domestic oil consumption continues to increase following rapid developments in industry and technology. Thus, at the end of Indonesia's fifth five-year development plan (Repelita V) in 1993–94, the nation's primary energy consumption had reached 426.2m barrels of oil equivalent.

Nonetheless, according to data released by the Paris-based International Energy Agency (IEA), there was still an imbalance in Indonesia's primary energy consumption during 2000. Coal production, for example, reached 76.6m t, including 55.4m t for export, 13.9m t for electric power, and 5.6m t for other sectors.

Alternative energies

On the subject of alternative energy consumption, the noted economist Kenneth E Boulding has written that no substitute for oil and natural gas offers the same combination of reasonable prices, ease of transportation, and low pollution. For example, coal is not regarded as a clean fuel, and nor is it easy to transport.

Despite Boulding's remarks, the example of Russia (which has increased coal output in recent years, at the same time as oil exports are rising) has shown that coal can play a role in enabling a country to reduce its oil consumption. Japan also uses coal as one of the primary energy sources for its industries. It should thus be possible for Indonesia, which has abundant coal reserves, to optimize the potential of coal as an alternative energy source.

"No substitute for oil and natural gas offers the same combination of reasonable prices, ease of transportation, and low pollution."

Coal mining

In Indonesia, coal was first discovered and mined in Pengaron, East Kalimantan, in 1849. From 1965 to 1994, the country produced about 134.7m t of coal. In 1995, Indonesian coal reserves consisted of proven reserves of around 5.2 billion t, and possible reserves of about 12.9bn t.

The areas considered to have the highest coal potential are Sumatra, Kalimantan, Java, Sulawesi and Papua. The development of fiscal incentives will enable an expansion of potential coal exploitation and production in the country.

Natural gas

Indonesia has abundant natural gas reserves. In 1994, the country's total gas reserves reached 114.8 trillion cubic feet, consisting of proven reserves of around 68.9tr cu ft, and potential reserves of about 45.9tr cu ft.

The country is also the biggest exporter of liquefied natural gas (LNG) in the world, with most of its exports going to Asia (Japan and South Korea). However, stiff competition in the world LNG market has motivated the government to develop power generation plans using natural gas.

Hydro power

In 1969–70, Indonesia's hydro power consumption was just 2.4m barrels of oil equivalent. After a period of significant growth, consumption increased to 26.3m boe in 1983–84, as a consequence of the completion of hydro power plants in Asahan, Saguling and Cirata.

Geothermal energy

Indonesia has been using geothermal energy to generate electricity since 1982, since the start of the geothermal operation at Kamojang, West Java. From 1993 to 1999, geothermal energy consumption increased from 143,000 boe to 2.1m boe.

The country has many potential geothermal energy resources, such as those to be found in Bukit Barisan, Sumatra, Java, Bali, Nusa Tenggara, Sulawesi, Halmahera and Irian Jaya.

Biomass and biogas

Biomass is mostly used as a source of energy for home industries in suburban areas. The consumption of biomass fuels in Indonesia could eventually reach as high as 40 per cent of the total energy consumption.

Biogas is an energy source which can easily be produced from organic waste in cities. Biogas technology was introduced in the 1930s by colonialists in Ngasem, Yogyakarta and developed as a commodity in the 1970s. The industry aims to utilize the gas as a fuel for cooking.

Gambut as a fuel

During the fourth five-year development plan (Repelita IV) from 1984–88, the potential for *gambut* (turf or peat moss) was explored, and the fuel was produced in Bengkalis, Siak, Kempeh in Sumatra province, Sampit, Pangkalan Bun, Pontianak, Banjarmasin, Palangkaraya, and Kanamit in Kalimantan.

In the second year of this five-year development plan, a private company in Riau produced a total of 270,000 t of *gambut*. The commodity is used in the pulp industry.

Solar energy

Solar energy has been used in Indonesia since the 1960s. The development of solar energy in the country often aims to bring power to villages that are too remote to have to a connection to the power grid. Solar home systems have been installed in several locations throughout Indonesia.

Nuclear energy

Many developed nations utilize nuclear energy for electric power. However, the future development of the nuclear energy industry faces many challenges because of concerns over nuclear waste, public opinion and so on, and a number of countries have postponed further nuclear energy development. Indonesia has studied various options for nuclear power, but has not implemented any of them.

Finally, it should be mentioned that small-scale wind energy projects are often used in coastal areas in order to produce clean water for the agricultural and industrial sectors.

Conclusion

A country which has limited or no capacity to diversify its energy supplies may face problems if any of its current energy sources experience difficulties. In the case of Indonesia, the country's consumption of oil and oil products is set to increase significantly because of factors including rapid industrial development, growing transportation use and higher electric power demand.

This means that, in order to prolong the life of the nation's oil resources, Indonesia needs to diversify its energy sources and move away from oil. In this regard, the country has good prospects for success as it has many potential alternative energy sources besides oil and natural gas.

"The development of solar energy often aims to bring power to villages that are too remote to be connected to the power grid."

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Norway
another 50 years of oil another 100 years of gas

Offshore Northern Seas invited a group of around 20 international journalists to Norway on March 31–April 2, to catch up on the latest developments in the Norwegian petroleum industry. They included ***Keith Marchant*** *(pictured) from OPEC's PR and Information Department, who wrote this feature for the OPEC Bulletin.*

The journalists attended 11 company presentations and a press briefing with the Norwegian Petroleum and Energy Minister during the two days, with a total of 19 different speakers.

Statoil, the Norwegian Petroleum Directorate, ConocoPhillips, Halliburton and Smedvig made presentations in Stavanger on April 1, while Norsk Hydro, FMC Kongsberg Subsea, Ruhrgas, Norske Shell, Statkraft and Aker Kværner did so in Oslo the next day, when the press briefing at the Norwegian Petroleum and Energy Ministry was also held.

Photo: Karin Øvstebø

Norway is the world's seventh-largest oil producer and its third-largest exporter, behind Saudi Arabia and Russia. In 2002, it produced 3.33 million barrels/day, of which 3.12m b/d was exported.

Petroleum accounted for 20 per cent of Norway's gross domestic product in 2003 and 45 per cent of its export revenue. The oil and gas business directly and indirectly provides about 300,000 jobs nationwide.

Norway believes it has the potential to be an oil producer for another 50 years and a gas producer for more than 100 years (see **Graph 1**).

The Norwegian continental shelf (NCS) is divided into three main petroleum provinces: the North Sea, the Norwegian Sea and the Barents Sea (see map). These areas differ in geology and exploration maturity. The North

Sea is the most mature, having a well-developed infrastructure for production and transportation. The eastern part of the Norwegian Sea is relatively well-known, as several fields are in production, whereas the deep-water areas are less explored, thus representing frontier exploration areas. The Barents Sea has been successfully explored in the south, but there are vast virgin areas in the eastern and northern parts, where geological data indicates large structures with petroleum potential.

Petroleum resources

The total petroleum resources in Norway are the sum of discovered and undiscovered recoverable resources, and include volumes that have already been produced. They are now calculated to total 12.9 billion cubic metres of oil equivalent. However, the uncertainty in arriving at such a figure is large, and other estimates range from a low of 10.7bn cu moe to a high of 13.8bn cu moe.

The resources can be divided into 7.0bn cu moe of liquids and 6.0bn cu moe of gas, of which 4.0bn cu moe of the liquids and 5.1bn cu moe of the gas remain. In other words, only a quarter of the estimated recoverable resources of the NCS has been produced and sold, the quarter that was easiest to find and recover. Much more effort will be needed to recover the remainder. Undiscovered resources amount to 40 per cent of the estimated recoverable resources that remain.

The volumes can be further divided into 5.9bn cu moe of oil, 6.0bn cu moe of gas, 0.2bn cu moe of natural gas liquids (NGLs) and 0.6bn cu moe of condensate.

Seventy-five per cent of prospects on the NCS are in waters less than 500 metres deep and less than 50 kilometres from existing infrastructure or land.

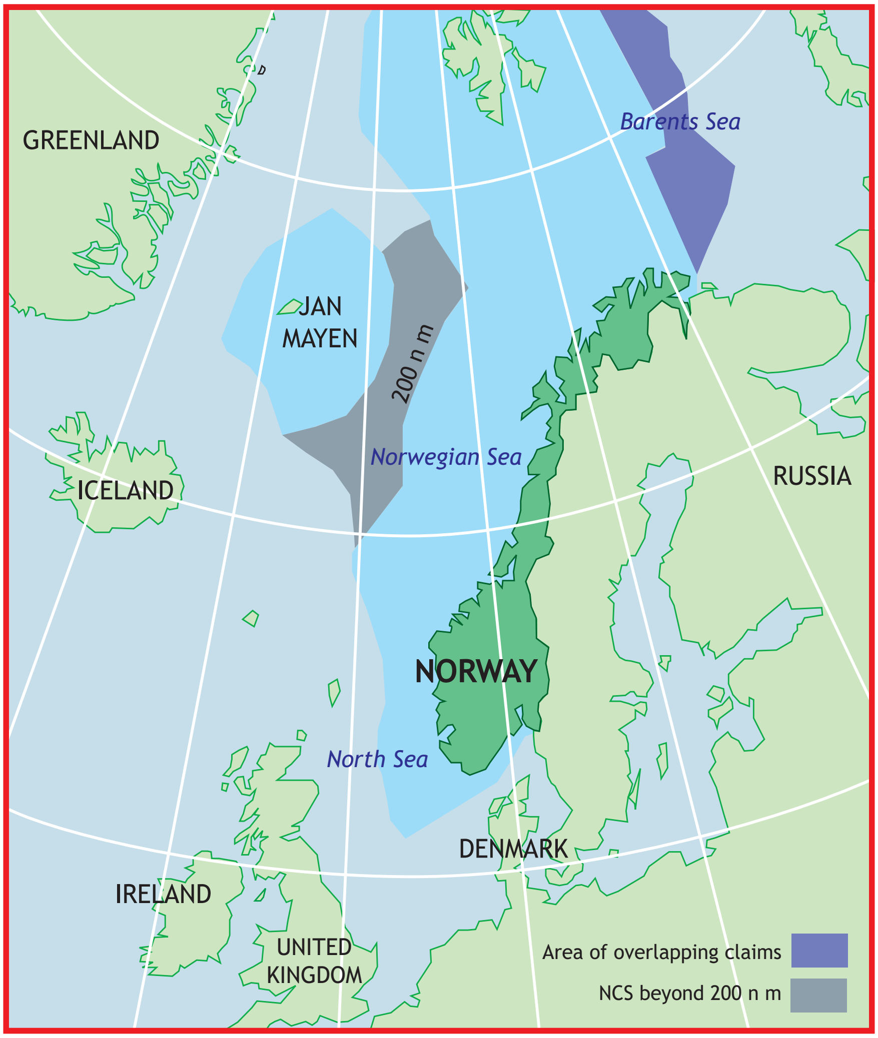
In recent years, oil and gas production volumes have exceeded the volumes of new discoveries. Explanations for this situation are that fewer wildcat wells have been drilled than previously, and that the discoveries made have been smaller. The Norwegian sector of the North Sea has been far less intensively explored than the United Kingdom sector.

Substantial volumes of oil will remain in the reservoirs after the large fields have been shut down. A great deal of effort is being put into the task of identifying and planning measures to enable the profitable recovery of some of these resources.

The expected recovery factor for oil from oil fields is now calculated to be 45 per cent. The authorities aim to attain a 50 per cent average recovery factor for oil from oil fields and 75 per cent for gas from gas fields.

There is expected to be increasing emphasis on gas, and especially liquefied natural gas (LNG), with the Snøhvit field in the Barents Sea leading the way.

The Norwegian Continental Shelf, showing the three main petroleum-producing areas



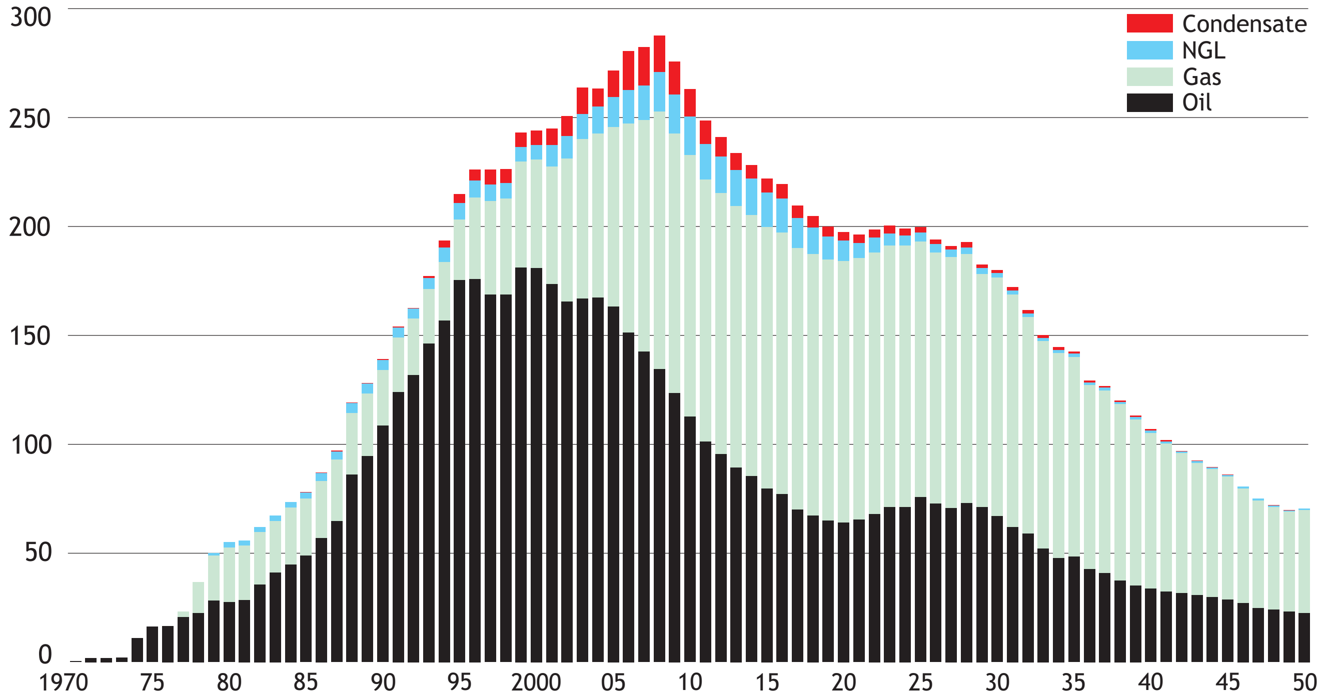
Source: Norwegian Petroleum Directorate.

The North Sea

The first 20 years of petroleum operations in the North Sea were marked by large discoveries and high development activity. After nearly 40 years of exploration and production, the situation is now different. Total annual production has been stable in recent years, but a considerable drop is expected after 2005. This decline in production is mostly because the largest sandstone fields, Statfjord, Gullfaks and Oseberg, are entering their late production phase.

Gas production will peak somewhat later and fall more slowly. According to

Graph 1: Total petroleum production on the Norwegian Continental Shelf, 1970–2050 *(million cubic metres/year)*



Source: Norwegian Petroleum Directorate.

current plans, deliveries of gas from North Sea fields will not fall below the present level for about another 15 years. The largest proportion of the gas comes from the Troll field.

The total recoverable petroleum resources in the North Sea are 8.0bn cu moe, of which 4.4bn cu moe are oil, 3.3bn cu moe gas, 0.1bn cu moe NGLs and 0.1bn cu moe condensate.

The Norwegian Sea

Production in the Norwegian Sea began in 1993, with oil output from the Draugen field.

Gas production will increase markedly in the future, especially after 2007, when the Ormen Lange field starts up *(see Ormen Lange article on page 17)*.

The total production of liquids in the Norwegian Sea, in contrast to gas, will reach the decline phase shortly.

The total recoverable petroleum resources in the area are 3.1bn cu moe, of which 1.0bn cu moe are oil, 1.8bn cu moe gas, 0.1bn cu moe NGLs and 0.1bn cu moe condensate.

The Barents Sea

There are good prospects for making both oil and gas/condensate discoveries in the Barents Sea and the area may add considerably to the already discovered recoverable resources.

The transportation of gas is a challenge facing petroleum activity in the Barents Sea. Transport via pipeline is not currently expedient, since the distance to present-day gas markets is too long. In 2002, it was decided to develop the Snøhvit field using ships to transport the gas in liquefied form, thus providing the basis for possible gas sales from other future developments in the area.

The total petroleum resources in the Barents Sea are 1.2bn cu moe. About 90 per cent of the liquid resources of 0.5bn cu moe remain undiscovered. The gas in the Snøhvit field comprises almost a quarter of the gas resources of 0.8bn cu moe; the remaining three-quarters are undiscovered.

OPEC has played "a very important and very responsible role" in balancing the market — Steensnæs

*Norway's Petroleum and Energy Minister, **Einar Steensnæs**, held a press briefing for the ONS-trip journalists at the Ministry in Oslo on April 2, on current developments in the country's hydrocarbons sector. This was highly topical, because the briefing came just two days after the 130th Meeting of the OPEC Conference in Vienna, where the Organization confirmed its earlier decision to reduce production by one million barrels/day, with effect from April 1.*

Keith Marchant asked the Minister these questions:

Question: Do you welcome OPEC's decision two days ago to confirm its earlier decision to reduce its output by one million b/d with effect from April 1? What do you think the impact of this will be on the market in the coming weeks and months?

Answer: I have taken note of the decision, which was not surprising. Before the meeting, there were different signals from the Oil Ministers connected to the OPEC Organization. However, at the end of the Meeting, it was clear that they wanted to cut by one million b/d. Norway has no intention of following up with a production cut. We consider that the oil price is still so high that there is a need for sufficient capacity in the market, to balance supply and demand.

I am very satisfied with the declaration from the Saudi Ambassador to the United States of America, Prince Bandar bin Sultan, to the USA today. This stated that Saudi Arabia and OPEC will see to it that there will be sufficient oil in the market to prevent too high a price for oil. I think that is very responsible. I acknowledge the role which OPEC has played in recent years to balance the market. This has been a very important and very responsible role. I am confident that (this will continue).

Q: What do you feel is a reasonable price range for crude oil, based on OPEC's Reference Basket? In other words, is \$22–28/b a reasonable range?

A: Norway does not aim for a special oil price. (With regard to the) price Basket decided by OPEC, between, as you said, \$22/b and \$28/b, I respect that. However, Norway prefers to leave it to the oil market to decide the oil price. But any price between \$20/b and \$30/b, I think we should accept. What is important is that we should avoid oil prices collapsing into a sort of price range which will be unproductive for the world economy. We took action in 2002 and we cut production by 150,000 b/d, from January 1, 2002 to July 1 the same year. But, after that, we suspended it. We thought that this was sufficient to balance the market, while OPEC decided to continue (with) its production cuts. So sometimes we are in line with what OPEC decides and sometimes we have our own assessment. We make our decisions unilaterally, only by the Norwegian government itself. But, of course, it is important to consult with and to have good contact with the OPEC Organization. As you may know, I have been twice to Saudi Arabia and (Saudi Arabian Minister of Petroleum and Mineral Resources) HE Ali I Naimi has been to Norway several times. So we have very good contact and I think this is very productive and very useful.

> ***"We must understand the need for a stable income for the oil-producing countries, especially countries that are unilaterally dependent on oil revenues."***

Q: The US has been calling on non-OPEC countries to raise their oil production. Are you in a position to raise your oil production in Norway?

A: In Norway, we are producing at maximum capacity and so we are not in a position to contribute to increased production. What we can do, if necessary, is to cut production, which we did, as I told you, in 2002.

Q: You have visited several OPEC countries in the past few months: Saudi Arabia, the United Arab Emirates and Venezuela. Is it part of a deliberate strategy to improve ties with OPEC and its Member Countries? Which Member Country do you feel offers the best prospects?

A: It is very important for Norway, as the third-largest oil-exporting country, to have good contact with the OPEC countries. It is impossible to have the same good contact with all of them, however. As you know, Saudi Arabia is by far the (the biggest producer). Luckily, also HE Naimi has expressed that Norway for him is an important country to have contact with. Also, personally, we have got along in a very good way. So Saudi Arabia is one of the countries that has been important for me to follow-up with good contact. Historically, the contact between Venezuela and Norway has also been very good. Moreover, there have been especially countries outside OPEC, like Mexico, Russia and Norway that, in recent years, have had a sort of informal network of contact by telephone and visits. I have visited Mexico and its new Energy Minister, Felipe Calderon (as well as his predecessor). But, as you said, I have visited other OPEC countries too. I think this is important and necessary for a country like Norway.

Q: Has the big fall in the value of the dollar in recent months made you feel more comfortable with higher crude oil prices than might have been the case, let us say, a year ago?

A: We must understand the need for a stable income for the oil-producing countries, especially countries that are unilaterally, so to speak, dependent on oil revenues. For that, the value of the dollar is essential. It is not only (a case of) counting the dollars. So we can understand that, when, for example, OPEC countries are looking at the oil price, they will also take into account the value of the dollar. Oman's Minister of Oil and Gas (Mohammad bin Hamad bin Seif al-Rumhy) visited me yesterday and we talked about the situation in the oil market. We are both very focused on the situation for developing countries.

We know that, over time, developing countries will be negatively affected by an oil price over \$30/b. They cannot cope with that. So such a high price, even with the present value of the dollar, will be very unproductive and very negative for the developing countries. Therefore there are interests on both sides. We also know that a high price for oil will reduce the (prospects of) recovery in the global economy. I can respect the US; they are focusing on this side of it. Oil is playing a very important role in the global economy and the exporting countries have this common responsibility to (find a) balance. I think the OPEC Organization is well aware of that responsibility.

Q: Concerning the value of the dollar, quite often, when the dollar does fall heavily in value, a debate rages on the wisdom of denominating the international price of crude oil in one particular currency. Do you have any particular views about that?

A: What I think is that to link the price of oil to a stable currency is obviously a good thing and (Russian) President (Vladimir) Putin has proposed that perhaps it is a good idea to price it in euros. This is not on the agenda for Norway.

Shaping our energy future is theme of Norway offshore conference in August

ONS 2004

Shaping our energy future is the theme of the 16th Offshore Northern Seas International Conference, Exhibition and Festival, which will take place in Stavanger, Norway, on August 24–27. There will be a special emphasis on gas and a perceived energy shortage in Europe in this offshore event, which is held every two years. In addition, new technology for more efficient recovery — and especially the so-called 'e-field' — will feature prominently in the programme. For more details visit the ONS Web site at www.ons.no.

Norwegian Parliament approves development of huge Ormen Lange gas field

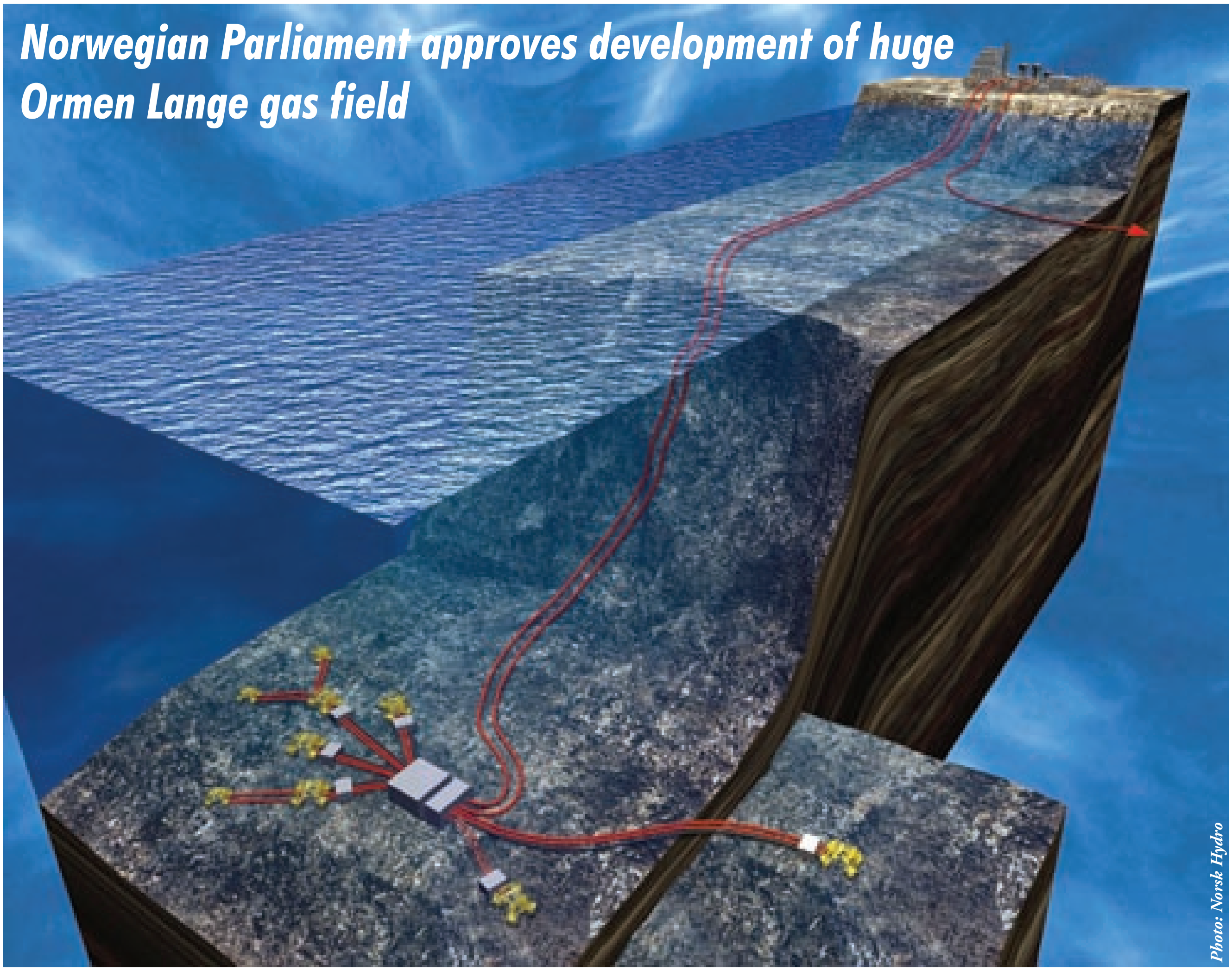


Photo: Norsk Hydro

The timing could not have been better as far as the ONS international press trip was concerned. On the second day of the trip (April 2), the Norwegian Parliament, the Storting, approved plans to develop the second-biggest gas field on the Norwegian Continental Shelf, Ormen Lange, together with a 1,200-km pipeline which will carry gas from the field to the United Kingdom.

The total cost is estimated at 66 billion Norwegian kroner (around \$10bn). The recoverable reserves are estimated at 399bn cubic metres, and the development is designed to handle around 20bn cu m/year of gas.

When production starts in 2007, Norway will become the world's third-biggest gas exporter, after Russia and Canada.

Earlier in the day, the Oil and Energy Executive Vice-President of Norsk Hydro (which will be the operator of the field in the development phase), Tore Torvund, gave a presentation in which he described the venture as the "largest project ever undertaken in Norway."

There are six partners: Norsk Hydro, with 18.1 per cent; Royal Dutch/Shell, 17.0 per cent (which will take over as operator when the field begins production in 2007); Norway's state-owned Petoro, 36.5 per cent; Statoil, 10.8 per cent; BP, 10.3 per cent; and ExxonMobil, 7.2 per cent.

The field is situated in the Norwegian Sea, 100 km north-west of the Møre coast, and processing will take place at Nyhamna on the west coast of Norway. The gas will be exported, via the Sleipner distribution station in the North Sea, to Easington on the east coast of England through the 1,200-km long Langeled pipeline. This will be operated by Norway's state-owned Gassco and will be the world's longest sub-sea gas line. Its links to Sleipner mean that gas can also be sent to continental Europe.

The field was discovered by Hydro in 1997. The reservoir is around 40 km long, 8 km wide and approximately 3,000 metres below the surface of the sea. The sea-depth is 800–1,100m. Due to the depth, underwater robot technology and advanced installation techniques will be required for the building of the pipelines and 24 wellheads.

The focus on the UK market has come about as a result of the fact that this country's domestic natural gas output is expected to tail off dramatically in the coming years, and the UK is seen as the world's second-most attractive gas market, behind the USA.

Offshore goes onshore

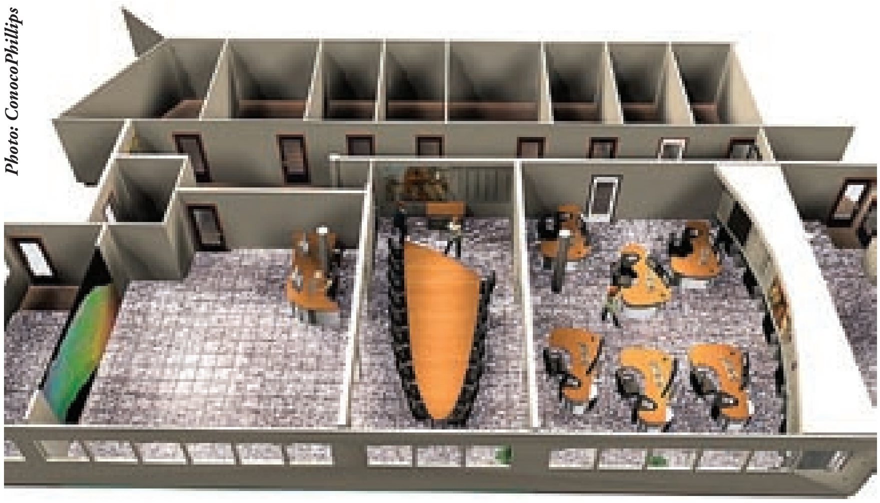


Photo: ConocoPhillips

The future challenge for the industry will be to design equipment around remote operations, due to the reduction in offshore manning levels.

This was the message from a senior ConocoPhillips official, in describing the company's new Onshore Drilling Centre (ODC) at Stavanger.

ODC Manager Mike Herbert was explaining how the ODC was divided into an operation room, which is manned round the clock throughout the year, a meeting or collaboration room and a large 3D visualisation room.

The purpose is to create the perception — inside the *onshore* drilling centre — of being at the *offshore* drilling site using existing modern visualisation and communication technology.

As the ODC's brochure states: "Let technology bring people together in a truly integrated team."

The focus is on these main areas of well construction: the planning phase; the operational and drilling phase; and the reservoir navigation or geosteering phase.

The use of visualisation and other communication tools, during the planning and operational phases, has helped break down some traditional barriers between internal and external operations.

This has allowed ConocoPhillips to move some offshore positions onshore. These positions are all PC or 'data-focused' jobs which can be run remotely. It means that one onshore position can support more than one operation, if required. The incumbent can offer support and expertise to several operations. This can further improve the utilisation of people and resources.

Real time data is sent from offshore to onshore via a fibre optic cable. This includes not only surface data, but also downhole data from various sensors in the 'measurement while drilling' and in the drilling tools. This data is displayed and analysed in various applications, including those within the 3D geological and geophysical visualisation room.

Remote operation of downhole drilling tools has been carried out from the ODC and is seen as an important future development. The ODC has also been set up so that it can be securely linked to ConocoPhillips' contractors support centres in Norway, as well as in other places around the world.

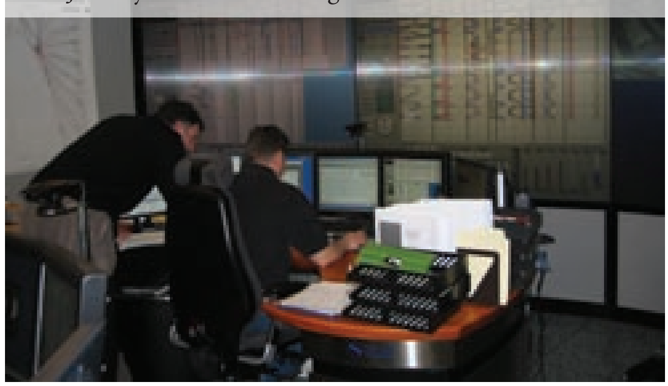
Construction was completed in November 2002 and operations began with the Eldfisk 2/7-A field in January 2003. Other fields have been added since.

The centre cost 30 million Norwegian kroner to build, and the improvements and changes to collaborative working practices meant that it had paid for itself after only seven months of operation.

"There will also be an onshore operating room later this year," said Herbert. Turning to the high-tech equipment, he noted that there was nothing special about it: "It can all be bought off the shelf."

He acknowledged that there were major changes to long-established working practices, but that these had been discussed a length with the trade unions, which had been very co-operative about the venture.

The illustration above shows the layout of the ODC. The visualisation room is below left and the operations room is below right.



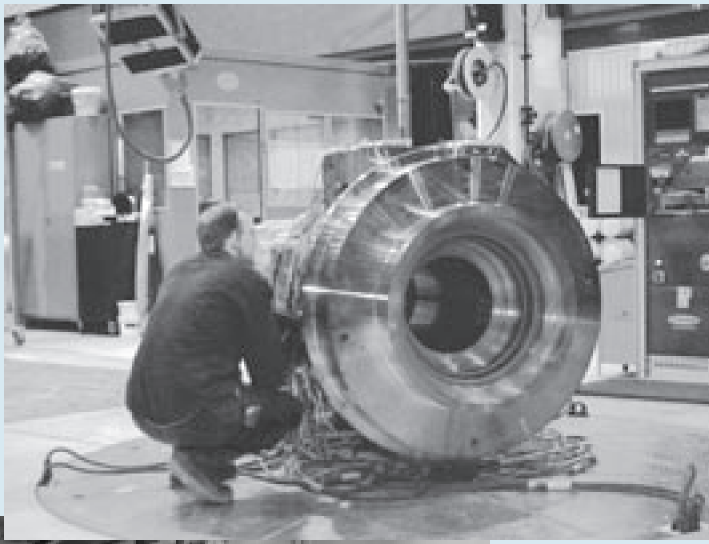
Petroleum industry among the most advanced in the world

The Norwegian petroleum industry evolved steadily during the second half of the 20th century and is now among the most advanced and technologically equipped in the world, with a vast array of companies specialising in every field of offshore activity.

Typical of this is the Aker Kværner group, which is undergoing a restructuring into three separate companies: Aker Kværner, an oil and gas engineering and construction company; Kværner, an industrial holding company; and Aker Yards, a shipbuilding company.

The ONS journalists had a chance to visit Aker Kværner's assembly and testing hall at Tranby, just outside Oslo. This was purpose-built for wellhead production about five years ago and, to date, about 150 Christmas trees (as wellheads are called in the petroleum industry) have been built, with such subsea destinations as the Kristin field in the Norwegian Sea, the Broom field in the UK sector of the North Sea and the Dalia field in Angola.

The picture below shows the assembly area, while the photo right shows a technician overlay-welding with nickel-based material.



Norway's 18th licensing round is biggest since 1965

The 18th licensing round for exploration blocks on the NCS is currently under way. For the first time for many years, blocks are being offered in the southern Barents Sea, as well as in the North Sea and Norwegian Sea.

The 95 blocks on offer mean that the licensing round is the biggest since the first in 1965. The round, entitled 'Awards in Predefined Areas 2004' (APA 2004), was announced by the Ministry of Petroleum and Energy in January.

"This year I have made further improvements of the concession system in order to contribute to higher activity on the shelf," said Petroleum and Energy Minister, Einar Steensnæs. The area in the North Sea and the Norwegian Sea was somewhat expanded, compared with APA 2003.

"Before Christmas, the government decided to allow for further all-year petroleum activity in the Barents Sea south and concluded that it is important to prove additional gas resources that can be tied in to the Snøhvit field," said Steensnæs.

"In line with the Government's decision, I include an area in the Barents Sea around Snøhvit in the announcement," he added

Eighteen companies applied for new oil and gas licences on the NCS by the deadline on March 15, up from 13 in the previous round. "I am very satisfied with the interest companies have shown in the frontier areas in the Norwegian Sea and the North Sea," noted Steensnæs.

The deadline for submission of applications is noon on October 1, and the awards are planned to take place in December.

Sources: *Aker Kværner; ConocoPhillips; International Oil Daily; Norsk Hydro; Norwegian Ministry of Petroleum and Energy; Norwegian Petroleum Directorate; Offshore Northern Seas; Petroleum Intelligence Weekly; Reuters.*

United Arab Emirates moves ahead with plans to boost oil output capacity by nearly 1m b/d

The United Arab Emirates (UAE) is moving ahead with a number of huge projects with the aim of boosting its oil output capacity by nearly one million barrels/day, according to a report published in the local newspaper *Gulf News*.

Official figures show that the country has invested at least $25 billion in major projects over the past 10 years, in a bid to maintain its present capacity and expand production to meet growing global demand from countries such as China.

The UAE has around 97.8bn b of proven crude reserves, but this figure could more than double if advanced extraction technology is employed, according to the Ministry of Petroleum and Mineral Resources, the Abu Dhabi National Oil Company (ADNOC), and other oil companies.

At an average production of around 2.5 million b/d, the UAE's recoverable oil resources could last nearly 105 years, said the report.

"Oil and gas investments over the past decade have exceeded $25bn. The UAE plans to increase sustainable oil production capacity to 3.58m b/d by 2006 from the current 2.63m b/d," it noted.

"A crucial element in this plan is the development of the Upper Zakum field from its present level of 550,000 b/d to 1.2m b/d. ADCO's (the Abu Dhabi Company for Onshore Oil Operations) onshore development at Bab, and other fields due to add 200,000 b/d, bring the combined capacity of these fields to around 460,000 b/d. In addition, development work at the Bu Hasa field, due for completion in 2006, is planned to increase production from 550,000 b/d to 730,000 b/d," the report added.

The report gave no figures for the prospective investment into those ventures, but oil industry sources said at least $2.5bn would have to be pumped in every year.

In a related development, the UAE's Minister of Petroleum and Mineral Resources, Obaid bin Saif Al-Nasseri *(pictured)*, has said that the country's oil sector grew for the third year running to reach record levels in 2003, as a result of firm prices and an increase in production.

Al-Nasseri, who is also Chairman of the Board of the Abu Dhabi Islamic Bank, noted in a report at the Bank's annual general meeting that oil prices averaged $28.1/b in 2003, significantly higher than in the previous two years, which had a positive effect on the UAE's economic climate, as the GDP growth rate reached 10 per cent and growth in the non-oil sector climbed to 6.4 per cent *(see Member Country Focus section for details)*.

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 positive effect of higher oil prices on the UAE economy was also confirmed by another *Gulf News* report, according to which the strength in oil prices widened the UAE's trade surplus in 2003.

The current account is also expected to have improved, despite large cash transfers by expatriate workers, noted the report, citing figures from the Ministry of Planning, carried in the monthly bulletin of the Ministry of Petroleum and Mineral Resources.

Official figures showed that the UAE's exports of goods hit an all-time high of around $58.03 billion last year, while imports peaked at nearly $46.32bn, creating a surplus of $11.7bn.

The 2003 trade surplus is higher than the 2002 level of $10.7bn, and is the second-largest commercial surplus ever recorded by the UAE, after the 2000 surplus of around $14.8bn.

Last year's surplus was lower than in 2000 although exports were much higher, which experts attributed to a large increase in the country's imports, due to an upturn in business.

The surge in exports last year was mainly due to the increase in oil prices and the UAE's crude supplies, as well as growth in non-oil exports at Jebel Ali and other free zones.

Saudi Aramco finds new gas reservoir in Shaybah oil field

Exploration efforts by teams from Saudi Arabia's state oil and gas firm, Saudi Aramco, have resulted in the discovery of a new gas reservoir in the Eastern Province's Shaybah field, according to a statement on the company's website.

The new Shaybah-700 well produced 20 million cubic feet/day of gas and 650 barrels/day of condensate from a cased-hole test conducted in the Arab-C reservoir at a depth of 7,815 feet. The wellhead flowing pressure was 1,135 pounds per square inch on a one-inch choke.

Drilling at the well will continue, so that gas potential at lower depths can be evaluated. The well is 370 miles south-east of the company's headquarters in Dhahran and 497 miles south-east of Riyadh.

The Shaybah oil field produces an average of 500,000 b/d of extra light Arabian oil from the Shuaiba reservoir at a depth of 4,650 ft.

Saudi Aramco's Senior Vice-President of Exploration and Producing, Abd Allah S Al-Saif, expressed his great appreciation for the work of the exploration teams that led to the discovery, adding to their many similar successes in the past.

Al-Saif commended the teams' expertise and efforts, which he described as "paving the way for Saudi Aramco to be among the best oil companies in exploring and developing hydrocarbon resources."

In a separate development, Saudi Aramco has also announced that its exploration unit met or exceeded all its objectives for the past year.

The company added 5 trillion cu ft of non-associated gas reserves, replaced annual crude oil production of 3.3 billion b of oil reserves, and discovered new hydrocarbon reservoirs in Awtad, Yabrin and Ghazal.

It also completed the processing of 10.3bn traces of 2D and 3D seismic data for exploration and 6.2bn traces of land 3D seismic for development.

Saudi Aramco drilled 45 gas development wells and five gas delineation wells, as well as 94 oil development wells, 72 of which required some degree of geo-steering.

OPEC and IEA hold second joint workshop on oil investment prospects

OPEC and the Paris-based International Energy Agency (IEA) held a second joint workshop in the French capital on oil investment prospects in April.

The first workshop, which took place in Vienna in June 2003, provided input to the IEA's *World Energy Investment Outlook* (WEIO), a major study which concluded that availability of reserves and capital was not a key constraint in bringing on the oil required by 2030. The IEA's Executive Director, Claude Mandil, highlighted the OPEC Secretariat's "valuable contribution" to the WEIO study.

During the second workshop, the findings of the WEIO and OPEC's oil outlook were presented. Discussions focused on the challenges in promoting the necessary investments in the oil sector, as well as the key drivers, uncertainties and implications. The workshop was attended by a select group of high-level delegates representing the IEA and OPEC Secretariats, their member countries, major private and national oil companies and the investment community.

Flow of investment

"A pivotal area in shaping the flow of investment to oil development is the Middle East. Although the costs of developing the region's vast reserves are lower than anywhere else in the world, financing this investment will be determined partially by perceptions of security risk, but even more so by national decisions establishing the pace of resource exploitation," said Mandil at the opening of the workshop.

"Unlike the major privately owned international oil companies that can mobilise large cash resources, the amount of earnings national oil companies can retain for investment purposes will necessarily be a derivative of the broader needs of national budgets," explained Mandil.

"Financing new projects could become a problem where the national debt is already high and national considerations discourage or preclude private or foreign investment. If the projected amount of investment in the Middle East is not forthcoming and production does not, therefore, increase as rapidly as expected, more capital would need to be spent in other more costly regions," he said.

Mandil added that "maintaining the momentum of the rebound in Russian production and exports will be difficult. It will require bringing on new producing provinces, expanding crude oil export pipelines and sea terminals and reinforcing government efforts to stabilise the legal and tax regime for investors."

In his opening remarks delivered on behalf of the OPEC Secretariat, the Director of the Organization's Research Division, Dr Adnan Shihab-Eldin, commended the increasing level of co-operation between the two organisations and assured the meeting that more joint projects would be carried out that would benefit the international oil industry.

He highlighted the challenges that would have to be overcome in order to

In brief

Shell sacks CFO as scandal widens

London — Anglo-Dutch oil giant Royal Dutch/Shell sacked Chief Financial Officer Judith Boynton in April in response to growing pressure after it emerged earlier this year that the company had inflated its oil and gas reserves figures. The scandal, which forced Shell to slash around twenty per cent from its proven oil and gas reserves, hammering the stock price, has already claimed two high-profile victims, Chairman of the Board of Shell Transport & Trading, Sir Philip Watts, and Group Managing Director, Walter van de Vijver. Shell also released the results of an internal inquiry in the overstatement of its reserves, saying they would need to be cut for a third time, necessitating changes to the company's financial results for the last few years. Internal correspondence between the sacked Shell executives showed that they were aware of the overstated reserves problem for years and tried to cover it up.

ExxonMobil to boost Ringhorne output

Irving, Texas — US major ExxonMobil has announced that its subsidiary, Esso Exploration and Production Norway, is to add production of around 25,000 barrels/day of oil from its Ringhorne field to the existing gas exports. The output hike involves the start-up of a new process module on the Ringhorne platform and associated oil pipeline to the Jotun field floating production, storage and offloading unit to develop the Ringhorne Jurassic reservoir. Gas exports from Ringhorne began via a separate pipeline in October 2003. The Ringhorne project was designed to optimize production and processing capacity among the three ExxonMobil-operated fields (Balder, Ringhorne and Jotun) and their facilities. The total investment cost for both the Ringhorne Jurassic and Ringhorne/Balder gas export projects was put at approximately $200 million.

IEA upgrades 2004 demand growth

Paris — The International Energy Agency (IEA) has raised its forecast of 2004 demand growth by 60,000 b/d to 1.7 million b/d, with surging Chinese apparent demand counteracting lower-than-expected deliveries in Japan. Higher projected demand for the second quarter, coupled with a reduction in the first quarter assessment, cut the second quarter demand dip to 2.0m b/d, versus 3.1m b/d last year, said the Paris-based Agency in the latest edition of its *Oil Market Report* (published on April 9). OECD industry oil stocks fell in February to 2,462m b on product draws, but closed 124m b above last year. Forward demand cover rose to 52 days, 2.5 days above 2003.

obtain the necessary investment to fund sectoral expansion over the longer term.

"These challenges cover many issues of both a short- and a long-term nature, in a world that is more complex and interdependent than ever before," he said.

"We all face these challenges, regardless of whether we are producers or consumers, OPEC or non-OPEC. Moreover, we need to handle these challenges — or, at least, most of them — in a manner that stretches across all participating groups," he added.

Shihab-Eldin also noted that the IEA's "comprehensive and valuable" study, WEIO, confirmed the OPEC view that the resource base (of oil) was sufficiently abundant to satisfy expected demand growth over the coming decades and that large levels of investment would be required.

Large uncertainties

"I am sure that this meeting will spend time looking at the expected scale of these investment needs, and how this relates to past experience within the industry," he said, adding: "We need to be fully aware of the large uncertainties that we will have to deal with."

These, he went on, included the major unknowns associated with future levels of oil demand, policy developments and technological impacts.

Shihab-Eldin welcomed a steadily growing sense of collective responsibility for the state of the market within the international petroleum community, noting: "The benefits of this can be felt throughout the industry, not only upstream, but also downstream, including transportation and distribution. Indeed, it has become widely acknowledged that the downstream industry should feature prominently in our assessments both now and in the future, so as to avoid it becoming a source of price volatility."

He concluded by re-emphasising that OPEC remained committed to its fundamental objectives of seeking order and stability in the international oil market, with secure supply, reasonable prices and fair returns for investors. But, he said, "OPEC's perspective is not just the immediate time-horizon; it also extends well into the future. This is why we attach so much importance to such workshops."

Indonesian House keen to pass new energy bill before September

Indonesia's House of Representatives is keen to pass a new draft energy bill before its legislative term ends in September, in order to maintain the country's status as a net oil exporter for as long as possible, reported local newspaper, the *Jakarta Post.*

The Deputy Chairman of the House Commission VIII on Energy, Agusman Effendy, said that the passing of the bill was urgent, so as to prevent Indonesia from rapidly becoming a net energy importer, due to a worrying decline in the country's primary energy resources, such as oil, coal and natural gas.

"We need a policy to manage when to use different primary and alternative energies," Agusman told the *Post*, adding that he expected the bill would become law by August.

Indonesia's oil reserves could dry up in just 10 years if no new discoveries are made, according to government figures. The country's proven natural gas reserves of 90 trillion cubic feet are expected to last for 30 years, and its coal reserves of 100 million tons will last for 50 years. Power and fuel consumption is expected to grow by about seven to eight per cent a year.

The new energy bill integrates three separate laws — oil and gas, electricity, and geothermal — which were passed in 2001, 2002 and 2003, respectively.

The draft bill seeks to manage and conserve non-renewable energy resources such oil, natural gas and coal. It also promotes the use of renewable resources such as wind, solar power, water, geothermal steam and bio-diesel energy.

A clause in the bill requires power sellers to buy a share of power from renewable energy-generated power plants in a bid to promote wider use of such energy sources. Incentives would also be given to producers and users of energy-saving equipment to promote energy conservation.

The new law would also compel the government to obtain approval from the House before signing contracts with foreign companies in oil and gas projects, power infrastructure development, and renewable energy projects, according to another member of the House Commission VIII, Soetrisno.

Transactions with foreign countries, including the sale of liquefied natural gas, will also require House approval, he added.

In addition, the new bill will allow the House to annul contracts given to companies with a bad reputation for environmental management, the *Post* quoted Soetrisno as saying.

However, he stressed that it would not dampen investor interest in the energy sector, as investors would be offered greater legal protection. The government is offering better oil and gas splits to lure back foreign investors in new oil exploration, which local companies are unable to do.

Kuwaiti oil firm Kufpec sees 94 per cent rise in profits for 2003

The Kuwait Foreign Petroleum Exploration Company (Kufpec) has announced a 94.2 per cent increase in 2003 net profits to $87.8 million as a result of high oil prices and a rise in production, according to an AFP report.

The Kuwaiti firm, which operates in several foreign countries, had reported a 46 per cent drop in its net income in 2002 due to heavy investment spending.

Kufpec's Chairman, Bader Al-Khashti, told a news conference that the company recorded a net income of $23.7m in the first three months of 2004 and forecast an improvement in annual profits.

Revenues for the state-owned company increased by 31.5 per cent to $312.6m in 2003. The company also witnessed a 28 per cent increase in reserves to 269.3m barrels of oil equivalent in 2003, 62.5 per cent of it natural gas.

Production at the end of last year stood at 42,000 boe/d, up 27.3 per cent from the 33,000 boe/d recorded in 2002. Its current production is 46,000 boe/d, Khashti said.

Kufpec entered into nine new projects in 2003, four in Australia, two in Egypt, and one each in Qatar, Pakistan and Malaysia. It is also evaluating potential investment opportunities in Iraq and Russia, Khashti added.

Kufpec, a fully-owned subsidiary of the Kuwait Petroleum Corp (KPC), is involved in oil production in Algeria, Australia, China, Egypt, Indonesia, Malaysia, Pakistan, Qatar, Sudan, Tunisia and Yemen.

According to the US Energy Information Administration, most of Kupfec's interests abroad are either small fields or minority stakes in larger projects, but the company is aiming to increase production capacity to 100,000 boe/d by 2010.

Sustained profits over the past several years have enabled Kufpec to erase accumulated losses that at one stage reached $293m.

Established in 1981, Kufpec made its first profits in 1994 after years of losses due to the drop in oil prices in the 1980s. The firm's target is to increase its reserves to 410m b in 2010 and produce some 200,000 b/d in 2015.

Qatar Petroleum signs new E&P agreement with Maersk Oil unit

State-owned Qatar Petroleum (QP) and Maersk Oil Qatar have signed an exploration and production-sharing agreement (EPSA) for the block 5 extension area, QP said in a statement.

The agreement was signed by Qatar's Second Deputy Prime Minister and Minister of Energy & Industry, Abdullah bin Hamad Al Attiyah, and the President & CEO of Maersk Olie og Gas, Kjeld Fjeldgaard, at a ceremony held at QP headquarters in Doha and attended by senior officials of both companies and the media.

The accord with Maersk, said the statement, reflects QP's policy of increasing the country's hydrocarbon reserves base and oil production potential, as well as diversifying the country's national income and boosting its economy.

The 139 sq km offshore acreage known as the block 5 extension area is located north-west of the Al-Shaheen field in block 5, which is also operated by Maersk Oil Qatar under an EPSA with QP. The two companies are continuing to appraise the development potential of the field.

As part of the new agreement, Maersk Oil Qatar will undertake an extensive work programme, which includes conducting detailed geological and geophysical stud-

In brief

BP makes new find off Angola
LONDON — Angola's state oil firm Sonangol and UK oil giant BP have announced the Chumbo-1 oil discovery in deep-water block 18, offshore Angola. The Chumbo-1 well was drilled by the semi-submersible rig *Leiv Eiriksson* in 1,600 metres of water some 200 kilometres off the Angolan coast. The well flowed at a rate of 1,080 barrels/day in a test undertaken to evaluate the oil formation. Further work will be needed to evaluate the full extent of the Chumbo-1 discovery, which lies some 10 km to the south south-west of the Platina-1 oil discovery in the same block, said BP in a statement. Block 18 was awarded in 1996 by Sonangol to Amoco (the operator) and Shell, with a 50 per cent stake each. Following the merger between BP and Amoco in 1999, BP now manages the interest formerly held by Amoco.

Caltex expands Singapore refining stake
SINGAPORE — US major ChevronTexaco has announced that its wholly-owned subsidiary, Caltex Singapore Private (Caltex), is to increase its stake in the Singapore Refining Company (SRC) to become a 50/50 joint venture partner with the Singapore Petroleum Company (SPC). Caltex and SPC have each agreed to acquire half of BP Singapore's one-third stake in SRC, including inventories, and in the unincorporated joint venture that manages SRC. The President of Global Refining for ChevronTexaco, Jeet Bindra, commented: "ChevronTexaco is focused on strengthening its position in key growth markets around the world and this further reinforces our already strong presence in a strategic region." Caltex and SPC will each pay approximately $70 million for the stake and will acquire certain other rights and obligations from BPS.

PetroChina makes record profit in 2003
HONG KONG — PetroChina has announced a net profit of 69.614 billion renminbi (RMB) for the full year 2003, up 48.40 per cent from 2002. This was PetroChina's best-ever performance since its IPO, and it was the first time that it realized full profitability in all four business segments, the company said in a statement. The increase in PetroChina's profits was primarily attributed to the strong demand from the domestic petroleum and petrochemical markets, which were driven by the sustainable and rapid development of the Chinese economy. During the period, the company's turnover reached RMB 303.779bn, up 24.28 per cent from 2002. Commenting on the results, the President of PetroChina, Chen Geng, said: "The overall development of PetroChina in 2003 was better than expected."

In brief

LNG fleet must treble by 2020

Chertsey, UK — The size of the global LNG tanker fleet will need to treble by 2020 in order to meet growing demand for the fuel, according to a new study by UK analysts Ocean Shipping Consultants (OSC). World LNG demand is seen rising from the current 158 billion cubic metres/year to 269bn cu m by 2010 and 428.5bn cu m by 2020, said the report, adding that this would necessitate an increased vessel-building programme. Although there are 59 new LNG vessels currently on order, an additional 33 ships will be required by 2010, another 76 by 2010–15 and 83 more by 2015–20, added the study. Southeast Asian gas-exporting nations such as Indonesia and Malaysia will continue to dominate world LNG trade movements, rising from the current 67bn cu m to 97bn cu m by 2020.

Total Gabon sees higher profits in 2003

Libreville — Total Gabon has reported net income of $195.7 million in 2003, compared with $141.1m in 2002. Total oil production from the fields operated by the company reached 38m barrels in 2003, a slight increase over the previous year. Revenues amounted to $768.6m, representing an increase of $95.2m, or 14 per cent, compared to the fiscal year 2002. Although the volume of crude sold was slightly less in 2003 than the previous year, this was more than offset by much higher oil prices, which averaged $27.37/b in 2003, compared to $23.69/b in 2002. Operational costs in 2003 increased and were more than 22 per cent higher than in 2002, due to the continuation of strong activity affecting external services and other supplies, a heavy maintenance programme, and an adverse exchange rate effect due to the movements of the euro and the CFA franc versus the US dollar.

Saipem wins Dolphin project contracts

Rome — ENI subsidiary Saipem has been awarded two offshore contracts as part of the Dolphin project, involving the laying of a gas pipeline from Qatar's North field to the port of Ras Laffan to supply Qatari gas to the United Arab Emirates (UAE). The scope of work of the two contracts, whose total amount is in excess of $350 million, includes the engineering, procurement, construction and pre-commissioning of shore approaches at Ras Laffan, Qatar, as well as 12 km of two 36-inch pipelines and 372 km of a 48-inch gas pipeline from Ras Laffan to a receiving facility terminal at Taweelah in the UAE. The work will be performed between the second quarter of 2004 and the first half of 2006, and the installation phase will be carried out by the vessels *Castoro 6* and *Castoro 10*.

ies and drilling a number of wells. Pending the results, fast track development will be carried out. All relevant operations and studies will be implemented under the supervision of QP.

This agreement is one of a series of EPSAs that QP has signed with several international oil companies to explore and produce Qatari oil and gas resources.

These agreements have resulted in the discovery, appraisal, development and production of several fields, such as the Al-Khaleej field by Total E&P Qatar; the Al-Shaheen field by Maersk Oil Qatar; the Idd Al-Shargi North Dome and South Dome fields by Occidental Petroleum; and the Al-Rayyan field by Anadarko Qatar Energy.

QP is also investing heavily to prolong and expand production from the Dukhan onshore oil field, as well as the Maydan Mahzam and Bul Hanine offshore oil fields. The plans will have a direct positive impact by boosting the Qatari economy.

ChevronTexaco wins rights to field offshore Nigeria and Sao Tome and Principe

US major ChevronTexaco has confirmed that one of its subsidiaries has been awarded rights to conduct exploration activities in deep-water block 1 in the Joint Development Zone (JDZ), offshore Nigeria and Sao Tome and Principe.

The award, which was made to ChevronTexaco JDZ by the Nigeria-Sao Tome and Principe Joint Development Authority (JDA), follows the company's $123 million bid for the block.

"Naturally, we are very pleased with the decision by the JDA," commented the President of ChevronTexaco Overseas Petroleum, George Kirkland.

"This represents a new opportunity to expand and strengthen further ChevronTexaco's asset base in West Africa in alignment with our growth strategy for the region," he said

ChevronTexaco will be operator with a 51 per cent interest in the block, located approximately 300 km north of the city of Sao Tome in 1,750 metres of water.

Another US giant, ExxonMobil, has been awarded a 40 per cent interest, while the remaining nine per cent has been awarded to the Norwegian company Equity Energy Resources.

ChevronTexaco's Managing Director for Nigeria/Mid-Africa, Jay Pryor, added: "Block 1 represents an exciting opportunity to explore a new and promising area. We are looking forward to finalizing all the necessary contract details shortly so that we can be in a position to commence exploration activities as early as possible in 2004."

Pryor also welcomed the progressive approach to governance and transparency adopted by the Nigerian and Sao Tome governments throughout the bidding process.

"Like ChevronTexaco, Presidents Obasanjo and de Menezes understand that good governance is a cornerstone of good business and that it is in all our interests to make progress in this important area," said Pryor.

"The disclosure of the block 1 signing bonus is fully in line with what we have long believed and called for — that efforts to address the management of oil revenues should be led by affected governments, not imposed on them by others.

"We are pleased that the JDA has taken this bold step, and we stand by to work openly with the JDA in support of its future transparency efforts," he added.

Iranian Minister opens country's first conference on natural gas exports

The Iranian Minister of Petroleum, Bijan Namdar Zangeneh, has opened the country's first international conference on gas exports in Tehran, reported the OPEC News Agency.

The main topics of the event were introducing potential gas production and export capabilities, developing Iran's export potential to Europe, regional co-operation, gas pipeline export projects, as well as co-operation with East Asia and the Indian subcontinent.

The conference was attended by 100 experts and directors of international companies from various countries, as well as oil and gas analysts, along with high-ranking officials of the Iranian gas industry and domestic companies, representatives from 11 major European gas consumers, including Japan, India, Pakistan, Turkey, and major gas producers, including Russia and Algeria.

Addressing the conference, Zangeneh noted that, due to factors including its strong economic potential, Iran enjoyed a good basis for gas investments and could play a key role in global gas dealings.

Iran, he said, accounted for 18 per cent of total global gas reserves, which was five times that of North America, four times that of Europe, and three times that of reserves in Asia and the Pacific Rim, as well as half the gas reserves of the Middle East.

"Iran's gas production amounted to 120 billion cubic metres in 2003, about 29bn cu m of which was used for injection into oil wells. The figure will add up to 60bn cu m in the coming years," he said.

The strategy of the Petroleum Ministry is based on supplying gas to industries, power plants and households, ensuring optimal use of the country's advantages in the energy sector, injection into oil fields to increase output, and promoting gas exports, Zangeneh went on.

"The share of natural gas in the domestic energy basket has reached 54 per cent and will increase to about 69 per cent by the end of the fourth Economic Development Plan," he said.

"The main problem faced for using gas is the high cost of its transfer to consumption areas and, based on expert estimates, about $300bn would be needed to do this until 2020," he was quoted as saying by the Petroenergy Information Network.

Zangeneh further noted that innovation in gas production and transfer technology and improving managerial approaches were two key factors that had reduced the cost of some projects by 30-50 per cent compared to a decade ago.

"Manufacturing pipelines at a suitable diameter that can tolerate high pressures has reduced the costs of gas transfer by using ultra-high pressure pipeline," he said, noting that Iran started gas exports to Turkey in 2001.

"After Turkey, the United Arab Emirates (UAE) and Kuwait are potential consumers for Iranian gas and the National Iranian Gas Company has finalized gas sales to the UAE," he noted.

The Minister added that based on current projections, global demand for natural gas will increase by 2.5–3.0 per cent per year, while growth in demand for LNG has been put at double that figure.

"Iran has made extensive plans to enter global LNG markets and the first joint venture for marketing and development of LNG units has been launched in co-operation with Total and Petronas, and negotiations with Royal Dutch/Shell, British Gas, and a number of other international corporations are under way," he said.

The Minister added that, thanks to investments by the state-owned National Iranian Oil Company, the NIOC LNG project was under way.

"To facilitate construction and commissioning of LNG, GTL and petrochemical units, the Petroleum Ministry has established the Pars Special Economic Energy Zone with special customs regulations, and the Islamic Consultative Assembly has generalized most regulations of the country's free zones to the said zone. So far, investment contacts approximating $15bn have become effective," he said.

International firms see higher output from fields in Algeria

Two international oil and gas firms, Burlington Resources of the US and BHP Billiton of Australia, have reported increases in output from hydrocarbon fields in Algeria, according to a report in Paris-based magazine *Arab Oil and Gas.*

Burlington Resources, the operator and holder of a 65 per cent stake in block 405a, the Menzel Ledjmet North (MLN) acreage in Algeria's Berkine basin, has indicated that its share of production amounted to 12,400 barrels/day in December 2003, up from 4,900 b/d the previous July, when the MLN field was brought onstream.

According to Burlington sources, the increase in production towards the end of 2003 was due to the start-up of several satellites of MLN. Burlington, which is associated with Talisman Energy, spent millions of dollars on operations in the area last year.

The report noted that the two associates fulfilled all their exploration work commitments with the drilling of the

In brief

Petronas signs new offshore block PSC

KUALA LUMPUR — Malaysia's Petronas has signed a new production-sharing contract (PSC) for offshore block PM-314 with Talisman Malaysia and Petronas Carigali, following the expiry of an earlier PSC for the block awarded in 1998 to Amerada Hess Malaysia. Under the terms of the new PSC, Talisman Malaysia (the operator) will hold a 60 per cent equity interest in the block, while Petronas Carigali, which is the exploration and production subsidiary of Petronas, holds the remaining 40 per cent. Block PM-314, located about 70 kilometres off the coast, covers an area of 10,200 square kilometres, in water depths of between 50 and 80 metres. It is believed to offer huge potential for new discoveries, as it is situated in the middle of the highly prospective Malay basin, adjacent to significant producing oil and gas fields.

Petro-Canada welcomes gov't share sale

CALGARY — Petro-Canada has welcomed a statement by the Canadian government that it plans to sell its remaining 49 million shares in the company during the 2004–05 fiscal year. "We welcome this announcement, which represents the final step in a process that the government started in 1991 with our initial public offering," said Petro-Canada's Chief Financial Officer, Harry Roberts. "We will work with the government to ensure an effective placement of the shares in the market. The government has been a supportive shareholder all along, so this change will not affect Petro-Canada business strategies or daily operations," he added. The timing and details of the share sale will be at the government's discretion.

Repsol-YPF earned €2bn in 2003

MADRID — Spanish oil major Repsol-YPF has announced that the company achieved net attributable income of more than €2 billion in 2003. The firm's Chairman and Chief Executive Officer, Alfonso Cortina, also told shareholders that last year, Repsol-YPF's shares on the New York Stock Exchange achieved the greatest revaluation out of all oil companies, rising 50 per cent versus an average of 26 per cent for the sector. On the Madrid stock market, the company's shares rose 23 per cent. In the last few years, added Cortina, Repsol-YPF had transformed itself from being "a domestic refining and marketing company where 86 per cent of its profits were generated in Spain, to become the eighth-largest petroleum company in the world, in which the activity outside of our country has tripled in the last three years and now represents 77 per cent of the net resources obtained by our group."

In brief

Lukoil starts supplying fuel to Iraq

Moscow — Russian firm Litasco, a wholly-owned subsidiary of Lukoil, has signed a contract with US firm Refinery Associates of Texas for the supply of gasoline and diesel fuel to the northern provinces of Iraq. According to the contract, Litasco will assume responsibility for all operations connected with logistics, including all material and financial aspects of the deliveries. The duration of the contract is for three months with the possibility of an extension to 12 months. Supplies per quarter will be 180,000 tons of gasoline and 130,000 t of diesel fuel. Deliveries began on April 1, 2004. Litasco (Lukoil International Trading and Supply Company) was registered in Geneva in 2000, and its main business is the transport and sale of Lukoil's oil and oil products.

BP boss outlines company's strategy

London — BP's Chief Executive Lord Browne has told a meeting of analysts and shareholders that the company plans to buy back shares with free cash flow when the oil price exceeds $20/barrel. He confirmed that BP had already bought back some 155 million shares for $1.25 billion in the first quarter of 2004. Laying out the group's strategy to end-2006, Browne said BP was in transition from a period of acquisition and consolidation to a phase of strong organic growth. Capital spending is expected to moderate from the "relatively high levels" of 2002 and 2003 to some $13.5bn this year, $12–12.5bn in 2005 and 2006 and $12–13bn beyond 2007, with the company maintaining its five-year rolling average finding and development cost for oil and gas at between $4–5/b.

ExxonMobil builds Malaysian gas platform

Irving, Texas — US major ExxonMobil has announced that its subsidiary, ExxonMobil Exploration and Production Malaysia (Emepmi), is to start construction of the Guntong E gas compression platform, located about 130 miles off the east coast of peninsular Malaysia. The facility will consist of an eight-leg jacket and modules for gas receiving, separation, dehydration and compression. Three large turbine-driven compressor trains will handle 540 million cubic feet/day of gas and 30,000 barrels/day of condensate. Production will flow to shore using existing pipelines. Guntong E is scheduled to be fabricated in Malaysia and installed offshore by the third quarter of 2005. Upon start-up in 2006, Guntong E will form the hub for offshore gas production from several fields. The Guntong hub is expected to process four trillion cubic feet of gas for sale in peninsular Malaysia.

MLSE-8 well, which resulted in a minor natural gas discovery at a relatively shallow depth.

Meanwhile, BHP Billiton has said that its share of condensate from Algeria's Ohanet fields totaled 800,000 b in the first quarter, up from 444,000 b in the fourth quarter of 2003.

A spokesman for BHP told the magazine that the company's share of liquefied petroleum gas production rose from 24,360 tons to 57,760 t from one quarter to the next.

The Ohanet wet gas fields were developed under the terms of a risk service contract and not a production-sharing agreement, the report noted, adding that foreign companies in the project alongside Algeria's Sonatrach were remunerated out of the liquids production from the fields.

The report also said that at the end of March, BHP Billiton completed its development drilling programme at the ROD fields in the Berkine basin.

This project involves the development of six satellite oil fields that are due to produce 80,000 b/d of crude, as well as a certain volume of associated gas that will be re-injected into the reservoirs to maintain pressure.

The fields are due to start up in the middle of this year, the publication reported, adding that altogether there were 34 development wells ready for exploration at the fields, including 24 new wells.

Iraqi crude oil exports reach 1.65 million b/d, says Oil Minister

Iraqi crude oil exports through the coutry's northern and southern pipelines reached 1.65 million barrels/day in April, according to the country's Minister of Oil, Dr Ibrahim Bahr Alolom.

Last month's experimental operation of the northern pipeline, transporting oil to the Turkish port of Ceyhan, took place in two stages, each with an export capacity of six million barrels, he said.

The Kuwaiti News Agency quoted Alolom as saying that although the Ministry was facing great challenges in the form of leaks and vandalism, all of this would not stop the increase in the sales of Iraqi oil and the country would benefit from the revenues.

Alolom added that reaching these oil export rates in such a short time was due to the efforts of the Ministry's employees and was a great achievement.

The Ministry's policy is to find new export points, as well as establishing good relations with neighbouring countries, Alolom said, noting that during his visits to Syria, Turkey, Kuwait, Saudi Arabia, and Iran he was able to achieve progress and discussed exporting oil through these countries' territories.

He added that he was able to reach an agreement with the Iranian authorities on the pipeline in southern Aadan for oil exports.

Alolom went on to say that that Iraq's large refineries have been greatly neglected and were in need of maintenance. This left them unable to meet domestic requirements for petrol and gas, and Iraq had to spend close to $170m every month on importing oil products from neighbouring countries.

Iraq, however, does have new projects for the establishment of refineries to increase production of oil products and to meet local needs, he concluded.

Total Chairman holds oil project talks with Libyan Prime Minister

The Chairman of French oil giant Total, Thierry Desmarest, met with the Libyan Prime Minister, Dr Shokri Ghanem, in Paris in April to discuss oil projects in the North African country, according to an OPEC News Agency report.

Last year, Total produced 42,000 barrels/day of oil in Libya through its interests in onshore and offshore fields and holds permits to explore a section of the north-western Murzuk basin.

Ghanem, who was on a three-day visit to France, met with President Jacques Chirac as part of a drive by Libya to improve its ties with France and other European states.

The Libyan Premier also travelled to the south-western city of Toulouse, headquarters of the European aircraft manufacturer Airbus, and met with Foreign Minister Michel Barnier.

Meanwhile, Libya's Secretary of the People's Committee for Energy, Dr Fathi Hamed Ben Shatwan, said that although Libya is enjoying the benefits of the recent surge in oil prices, he does not want to let prices get out of control.

However, the Minister refused to be drawn on what he considered to be a healthy oil price. Shatwan said Libya had started to reduce production to reach its new quota of 1.26 million b/d, but he did not know when it would hit the new limit.

Venezuela's Citgo moves corporate headquarters from Tulsa to Houston

Citgo Petroleum, the US subsidiary of Petroleos de Venezuela, is to move its corporate headquarters from Tulsa, Oklahoma, to Houston, Texas, the company has announced in a statement.

The move will mean that some 700 jobs will be transferred to Houston, while the remaining 300 positions will stay in Tulsa, Citgo said, adding that the relocation will begin this summer and will take around two years to complete.

"This has been a long road for the Citgo family, but we know we have arrived at the correct decision, a decision that will strategically position Citgo as a major player in our industry," said Citgo's President and Chief Executive Officer, Luis Marín.

"Furthermore, the energy business is the cornerstone in the state of Texas and the city of Houston, and when combined with Citgo's people, resources, and assets, I feel confident that this relocation will propel the company to the next level of success," he added.

"Of course Tulsa has been the home of Citgo's headquarters for 30 years and we are extremely grateful to the Tulsa community for providing such a great place to live and work.

"With 300 positions remaining in Tulsa, Citgo will obviously retain its presence here and will remain committed to both the city and to those employees who stay," noted Marin.

As part of the move, Citgo will receive a $5 million grant from the Texas Enterprise Fund, and the cities of Houston and Corpus Christi, Texas will sponsor $30m in low-interest loans through the Texas Economic Development Bank and its bond programme.

"Because of this investment in Citgo, in addition to moving the headquarters to Houston, over the next 10 years we have committed to invest $828m at the Corpus Christi refinery and add 120 jobs, which will result in an increase in the volume of gasoline produced at that location," said Marín.

It was Marín who commissioned a feasibility study of a possible relocation of the corporate office when he joined the company in August 2003. Those findings were presented to the boards of both Citgo and PDVSA and were factored into the final decision.

Indonesia to hold oil and gas seminar in Russia in September

The Indonesian Embassy in Russia plans to hold an oil and gas seminar in September to forge bilateral investment co-operation between the two countries, according to the Indonesian Minister of Energy and Mineral Resources, Dr Purnomo Yusgiantoro.

The Minister will attend the seminar and meet with Russian energy officials and businessmen, as well as visit a number of oil and gas projects in the country, including an oil refinery project in Siberia.

The Indonesian Ambassador to Russia, Susanto Pudjomartono, said that Moscow welcomed Yusgiantoro's planned visit in September.

The OPEC News Agency quoted Yusgiantoro, who is also OPEC Conference President and Secretary General, as saying that the development of the Russian oil and gas industry would make the global energy market more competitive, which the Indonesian government must take into account, especially as Indonesia relied heavily on its revenue from oil and gas exports.

Energy experts and officials will discuss the future of the two countries' oil and gas industries at the seminar, which is part of a series of events organized by Indonesia's

In brief

Shell plans sale of gas pipeline unit

London — Shell US Gas & Power has announced the proposed sale of its Gulf of Mexico natural gas pipeline business unit, Shell Gas Transmission. The sale is being pursued as part of the Royal Dutch/Shell Group's ongoing programme of portfolio rationalization, the company said in a statement. "Shell Gas Transmission's extensive natural gas pipeline network is well positioned in all producing corridors in the Gulf of Mexico," noted the President and CEO of Shell US Gas & Power, Gus Noojin. "However, as part of an ongoing portfolio review, it was determined that Shell's Gulf of Mexico business objectives do not require all gas infrastructure to be owned and operated by Shell," he added.

ChevronTexaco awards Mexican Gulf deals

New Orleans — ChevronTexaco has announced that its wholly-owned subsidiary Chevron USA has awarded two major engineering contracts for the development of the Tahiti project's subsea systems and floating production facility, approximately 190 miles south-west of New Orleans in the Gulf of Mexico. Under the agreement, Technip Offshore will perform front-end engineering and design (FEED) for the proposed truss spar floating production facility, while Mustang Engineering will handle the FEED for the Tahiti topsides oil and gas processing facilities. Construction contracts are expected to be awarded in the second quarter of 2005. Commenting on the contract awards, ChevronTexaco Vice-President Ray Wilcox said that Tahiti was "a significant component of our upstream growth strategy. It will also add considerably to our Gulf of Mexico deep-water portfolio." ChevronTexaco is the operator of the Tahiti Project with a 58 per cent stake, with EnCana Gulf of Mexico holding 25 per cent and Shell Exploration & Production the other 17 per cent.

Anadarko outlines capital spending plans

Houston — Anadarko Petroleum Corporation has allocated $2.3–2.6 billion for worldwide exploration and development in 2004, the firm said in a statement outlining its spending plans for the year. "Anadarko's 2004 capital programme offers us flexibility to pursue a wide range of opportunities based on actual cash flow, and we have a deep portfolio of projects in the event projected cash flows remain strong," commented the firm's President and Chief Executive Officer, Jim Hackett. Approximately 80 per cent will be designated for development and about 20 per cent for exploration. The company expects to operate an average of about 70 drilling rigs in North America during 2004.

In brief

PetroChina signs gas deal with Tianjin

BEIJING — PetroChina has announced the signing of a natural gas take-or-pay agreement with Tianjin Gas Group Company for the second Shanxi-Beijing gas pipeline. A feasibility study for the pipeline was recently reviewed and approved by China's State Development and Reform Commission and the State Council. The pipeline, which is scheduled for completion in September 2005, is designed to have a transmission capacity of 12 billion cubic metres/year and will cover the five provincial and municipal markets of Beijing, Tianjin, Shanxi, Hebei and Shandong. When in operation, the pipeline will satisfy the demand for clean energy in northern and eastern China. It will significantly contribute to adjustments in the existing energy infrastructure, and improve the natural surroundings and the investment environment, said PetroChina in a statement.

EnCana sells Petrovera stake to CNR

CALGARY — Canada's EnCana has sold its 53.3 per cent interest in Petrovera Resources to Canadian Natural Resources (CNR) for approximately $285 million before working capital adjustments, the company has announced. In order to facilitate the transaction, EnCana purchased the 46.7 per cent interest of its partner, ConocoPhillips Canada, and then sold the 100 per cent interest in Petrovera to CNR for a total of approximately $535m before working capital adjustments. Petrovera is an Alberta partnership that produces heavy oil in western Canada. EnCana's share of Petrovera's 2003 production represents about 20,000 barrels/day of oil equivalent on an after-royalties basis.

ENI signs Portuguese energy accord

LISBON — Italian energy giant ENI has signed a deal with Portugal as part of the process of reorganizing the Portuguese energy sector, the company has announced. The accord, which was inked in Lisbon by ENI, representatives of the Portuguese government, Electricidade de Portugal (EdP), Galpenergia, Parpublica and Red Electrica National (REN), follows a preliminary agreement signed in February by the Minister of the Economy, Carlos Tavares; the Minister of Finance, Manuela Ferreira Leite; and ENI's Chief Executive Officer, Vittorio Mincato. Under the deal, ENI will focus its activities in Portugal in the gas sector through a 49 per cent shareholding in Gas de Portugal (GdP) and will exit from the refining and marketing sector of oil products. GdP will be owned jointly by ENI, EdP and REN, for an initial maximum period of 18 months, and will subsequently be owned by ENI with 49 per cent and EdP with 51 per cent.

Russian Mission to celebrate its 15th anniversary.

Moscow is expecting $105 billion annually in investment over the next three years and has introduced various incentives to make the energy sector more attractive to private investment.

Among its major deals, Russia's second largest energy firm, Yukos, is to export 17 million tons of crude oil by rail over the next four years to Sinopec of China. The first delivery will be made in May from Russian territory to Erenhot in China's Inner Mongolia Autonomous Region, according to Chinese media reports.

The contract is part of Russia's move to considerably raise oil exports to China using rail. Yukos and Russian Railways have agreed to more than double rail crude oil exports to 6.4m t this year, up from 3.0m t last year.

The China National Petroleum Corporation will import 3.86m t of crude from Russia, and Sinopec will purchase the remaining 2.6m t.

Indian firm Petronet seeks additional LNG supplies from Qatar

Indian firm Petronet LNG is seeking an additional one million tonnes of LNG from Qatar, according to a report by the India Abroad News Service.

India's first LNG receiving terminal at Dahej in Gujarat State, where the gas is imported, will reach a capacity of five million tonnes by September, the agency quoted Petronet CEO, Suresh Mathur, as saying.

Petronet was expecting its second ship *Rahi*, with a capacity of 138,000 cubic metres, to be delivered ahead of schedule and had therefore asked Qatar to make available an additional one million tonnes of LNG, Mathur said.

"This will take our capacity to five million tonnes by September instead of December," the Petronet boss told a lecture organised by the Confederation of Indian Industry.

Since its dedicated berth at Dahej in Gujarat was commissioned in February, Petronet has been receiving shipments of 138,000 cu m of LNG every fourth day. The company has started supplying LNG on a commercial basis, mainly to industries in Gujarat.

The Gas Authority of India Ltd (GAIL) is picking up 60 per cent of the output, while the Indian Oil Corporation is taking 30 per cent and Bharat Petroleum Corporation the remaining 10 per cent.

Petronet is currently working on a detailed project report for doubling the regasification plant capacity to 10m t/y by 2006, and would be seeking board approval soon, noted Mathur.

To ensure future supplies of LNG, he said there was a possibility that Petronet could take equity stakes overseas if the opportunity arose.

UN Secretary General announces formation of oil-for-food probe panel

UN Secretary General Kofi Annan has announced the formation of the independent panel that will conduct an inquiry into allegations of corruption in the administration and management of the Iraq oil-for-food programme, according to a report by the UN News Agency.

The panel will be chaired by former Federal Reserve Chairman, Paul A Volcker. Its other two members are Justice Richard Goldstone of South Africa, who previously served as the Chief Prosecutor of the UN International Criminal Tribunals for the former Yugoslavia and Rwanda, and Mark Pieth of Switzerland, a Professor of Criminal Law and Criminology at the University of Basel with expertise in money-laundering.

According to the terms of reference that will govern the independent inquiry, the panel will have the authority to investigate whether the procedures established by the UN for the administration and management of the programme were violated.

It will also determine whether any UN officials, personnel, agents or contractors engaged in any illicit or corrupt activities in the carrying out of their respective roles in relation to the programme. In addition, it will determine whether the accounts of the programme were in order and were maintained in accordance with UN regulations and rules.

The members of the independent panel will have the authority to access all relevant UN records and information, written or unwritten, and to interview all relevant UN officials and personnel. It is also authorized to obtain records and interviews from persons unaffiliated with the UN who may have knowledge relevant to the inquiry, including allegations of impropriety, and to seek co-operation from UN member states to conduct its inquiry.

UAE petrol prices hiked by 20 per cent in April

The price of petrol in the United Arab Emirates (UAE) was raised by 20 per cent from Dh4 to Dh4.75 for a gallon of special 95 octane, and by five per cent from Dh5 to Dh5.25 for a gallon of super 98 octane in April.

The rise in domestic fuel costs was due to the continuing high level of international oil prices, according to a statement issued by the UAE petroleum marketing companies.

"In view of the increase in international petroleum prices, which negatively affected the local distribution companies' performance and caused them big losses over the past few years, an agreement has been reached between the petroleum authorities and the petroleum marketing companies, including Adnoc-Fod, Emarat, ENOC and Eppco, to increase domestic oil prices," said the statement.

"The national petroleum distributing companies would like to stress their commitment to providing petroleum services and products throughout the UAE, and underline their continuing support for environmental initiatives," it added.

"All retail fuel companies are suffering. The government has decreed that the fuel retailers follow a fixed-price policy," commented the Chief Executive of ENOC, Hussain Sultan.

"We are a commercial organisation and it is we who are subsidising the fuel market. In the other GCC (Gulf Co-operation Council) countries, all fuel is sold at fixed prices, but they in turn get a fixed margin on sales. In the UAE we sell fuel at a fixed price, irrespective of the price of the crude," he pointed out.

The General Manager of a Dubai-based petrol station, Saleh Al Mahammadi, said that the price hike would mainly affect people in the UAE on low incomes.

"Some people are hardly concerned about oil prices in this part of the world, they swipe their card for a full-tank service and they never get offended by the prices and the differences that might be caused as a result of the new prices. Both nationals and a large segment of expatriates have high incomes, therefore they hardly have any problem with the price hikes," he said.

"However, the increase is substantial for low income people who represent more than 60 per cent of the residents in the UAE. We in the petrol stations will face a bit of a problem in the first few days," he added.

Iran's Abuzar oil field to raise oil production to 220,000 barrels/day

Iran's Abuzar oil field expansion project will mean that its production will reach 220,000 barrels/day of oil on completion, according to a report in the *Tehran Times.*

The Manager of Production Operations at Iran's Offshore Oil Company, Abbas Vakil, said that last year, Abuzar's production level was boosted to 190,000 b/d.

The rise was achieved through drilling in the western part of the Abuzar field, installing new jetties in the area, and linking the secondary jetties with the Abuzar jetties, via pipeline, which made the drilling of a new well possible, he said.

Noting the fact that the PetroIran Development Company has undertaken to transform a number of vertical wells existing in the Forouzan field into horizontal ones, Vakil continued: "Some of the wells of the field have reached the production phase, in a manner that the crude oil yield from them has reached 50,000 b/d, from the previous 30,000 b/d."

Vakil added that the drilling operations of the wells will continue in the Forouzan field, alongside which operations for the construction and installation of new facilities were under way, to keep up with the increase in production.

In brief

Petronas inks offshore deal with Morocco

KUALA LUMPUR — Malaysia's Petronas, through its wholly-owned subsidiary Petronas Carigali Overseas, has signed an exploration deal with the Moroccan state oil company Onarep for the deep-water Rabat-Sale Haute Mer block, offshore Morocco. The Rabat-Sale Haute Mer block covers an area of 14,000 sq km and is located in water depths of between 1,000–4,000 metres. Under the agreement, Petronas Carigali will acquire and process 2,000 km of new 2D seismic data and drill one exploration well in the initial three-year period, with further seismic acquisition and drilling to come in subsequent years. Petronas Carigali is the operator of the block with a 75 per cent stake, and the remaining 25 per cent is held by Onarep.

Lukoil to sell some oil, gas assets

MOSCOW — The board of Russia's Lukoil has approved the sale of some of the company's oil and gas assets located in the Komi Republic, the Nenetsk autonomous region and the Perm region. The decision was taken as part of Lukoil's strategic development programme, which is aimed at reducing production costs, optimizing its assets portfolio and increasing returns on capital investment. Up for sale are Lukoil-Komi's assets relating to the Nizhneomrinskiy, Verhneomrinskiy and Voyvozhskiy license blocks with ABC 1 residual recoverable reserves amounting to 3.9 million tons; UralOil's assets relating to the Sivinskiy, Nezhdanovskiy, Vereschagenskiy, Travnenskiy and Ocherskiy license blocks with reserves amounting to 2.2m t; and Arktikneft's assets relating to the Peschannoozerskiy license block with reserves of 7.5m t.

Petro-Canada in Syrian contract talks

LONDON — Petro-Canada and its partners Occidental Petroleum and Petrofac have been selected to enter into negotiations with the Syrian Ministry of Petroleum & Mineral Resources to conclude a contract for the North and South Middle Area gas project. Negotiations to finalize the terms and conditions of the production-sharing contract, with Petro-Canada as operator, will commence immediately. The proposed project involves appraising and developing up to 15 gas discoveries. The fields are located in two clusters: one east of the city of Homs and the other south-east of the city of Aleppo. Two gas treatment and separation plants are planned and the gas will be destined for the domestic Syrian market. The Executive Vice-President of Petro-Canada's International Business Unit, Peter Kallos, said that the company was "committed to expanding our existing investment in Syria."

February

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

Following the $4/barrel recovery that started early in the fourth quarter of 2003 and extended to January of this year, the OPEC Reference Basket[1] finally lost some ground in February when it dropped 77¢/b or 2.54 per cent to average $29.56/b. The year-to-date average, which stood a few cents-per-barrel below the $30/b mark ($29.94/b) at the end of the month, was exactly $1/b lower when compared to the same period of 2003 when prices shot skywards on March 19, 2003 in anticipation of the invasion of Iraq (see **Table A**).

The monthly price movements show that the Basket retreated more than 3.5 per cent or $1.07/b to average $28.75/b during the first week of February, followed by another lesser fall of 8¢/b to $28.67/b. In the week ending February 19, the Basket made a sharp upturn, recovering all the ground lost in the previous two weeks, with a surge of $1.53/b or 5.3 per cent for a weekly average of $30.20/b. The upward movement extended past the last week of the month when the Basket gained another 41¢/b to reach $30.61/b. In early March, the weekly Basket average soared by another four per cent or $1.26/b to $31.87/b, followed by another 38¢/b rise to $32.25/b in the week ending March 11.

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

At this time of year, all eyes in the petroleum market turn to gasoline, particularly the US gasoline market, which is facing potential problems. Not only is the market more fragmented than ever, with increasingly stringent specifications, but it must also bear further pressure from a combination of special blending requirements, seasonal turnarounds and stagnant refinery capacity in an already tight market. If this were not enough, the healthy demand for products in Asia Pacific and tighter sulphur specifications that can only be met by Taiwanese, Japanese and South Korean refiners will cap that region's ability to export gasoline to the US, leaving Europe and perhaps Latin America as the only possible suppliers of the US market. The further one digs into the US gasoline market the more troublesome it appears. Reformulated gasoline inventories in the US at the end of February stood at 27.2m b, almost 23 per cent lower than the 35.2m b seen at the end of the same month last year. Apparent demand for gasoline has been on the rise in the past few weeks and is approaching 9m b/d, higher than the level of the last two years. This, together with the perception of low crude stocks amid a buoyant economy, has kept crude oil markets on edge. US sweet benchmark crude jumped by nearly $2/b early in February, closing at $34.98/b on February 2 and topping $36/b two weeks later on February 19. Brent crude futures on the IPE in London followed suit, closing just a notch below the $31/b mark on February 18 before surging to $32.23/b on the last trading day of the month. European refiners have benefited from the windfall as the spread between gasoline and BFO (Brent, Forcados and Oseberg) has come close to $10/b, which is three times higher than the typical average for 1Q of the year. This in turn has resulted in the shipment of considerable volumes of gasoline to the thirsty US market. Meanwhile, in view of an expected considerable excess in supply during the seasonally low demand 2Q, OPEC decided at its 129th (Extraordinary) Meeting in Algiers on February 10 that a supply response was needed. The result was a new output ceiling of 23.5m b/d to be implemented as of April 1 and a call for strict OPEC-10 compliance with the existing production ceiling of 24.5m b/d.

US and European markets

The transatlantic arbitrage from the North Sea and West Africa to the US East and Gulf Coasts was wide open for the entire month of February at around $4/b with subsiding freight rates favouring the westward flow of crude. Nevertheless, demand in the US was low as refiners were engaged in maintenance programmes which extended into March. According to API statistics, refinery runs fell below 15m b/d in January and stabilized around 14.5m b/d in the following month, yet remained well above the levels for the same periods in 2002 and 2003. Sour grades were particularly distressed, with Basrah Light's discount to WTI nearing $5/b and some

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

			Year-to-date average	
	Jan 04	**Feb 04**	**Feb 03**	**Feb 04**
Reference Basket	**30.33**	**29.56**	**30.94**	**29.94**
Arabian Light	29.83	**29.18**	30.10	29.50
Dubai	28.93	**28.49**	28.98	28.71
Bonny Light	30.94	**30.47**	31.55	30.70
Saharan Blend	31.29	**30.57**	31.86	30.93
Minas	30.27	**29.38**	32.10	29.82
Tia Juana Light	29.28	**28.17**	30.68	28.73
Isthmus	31.78	**30.64**	31.32	31.21
Other crudes				
Brent	31.33	**30.65**	31.93	30.99
WTI	34.33	**34.62**	34.36	34.48
Differentials				
WTI/Brent	3.00	**3.97**	2.43	3.49
Brent/Dubai	2.40	**2.16**	2.95	2.28

West Coast-bound Latin American grades (Oriente) and Alaskan North Slope coming under increasing pressure by refinery shut-downs and rising foreign competition to the region. In Europe the North Sea market was supported by healthy demand from regional refiners that cleared almost all availabilities until the end of March. The healthy gasoline crack of $8–10/b induced refiners to step up buying. Russian Urals benefited from OPEC's February output agreement, as most of the cut will affect sour crudes. The stronger official selling price of Iraqi Basrah Light to Europe also supported Urals and made it easier to allocate the record 825,000 b/d March loading programme from Primorsk.

Far East market

The premium of dated Brent to Dubai widened from $1.75/b early in February to $3.50/b by the end of the month, thus shutting down the arbitrage window and making it increasingly difficult for West African and North Sea crudes to head east. The lack of out-of-the-region competition underpinned regional grades, with light sweet grades trading at near record premiums to their benchmarks at the beginning of the month. Medium crudes strengthened with respect to Minas, as demand from Japan surged again on delays in restarting some of the country's nuclear reactors. Trading for April deliveries, which started early in February, began on a weak note especially for medium sour Oman, as regional consumers assessed the market in the light of the OPEC Meeting in Algiers. Middle East grades for April delivery cleared at the end of the month, although at weaker levels. However, support seems to be on the rise as some regional producers reduced their term volumes by approximately ten per cent in line with the most recent OPEC output cut agreement. Nigeria's preliminary loading programme for April volumes also showed a ten per cent reduction from the March allocation, indicating the implementation of OPEC's Algiers decision.

Product markets and refinery operations

With the exception of gasoline in the Atlantic basin markets, average product prices fell in February in all three main world refining centres. Refining margins, however, converged at healthy levels, driven largely by the prevailing strength in gasoline prices in the US and European markets, and despite recent sharp falls in major Asian product prices (see **Table B**).

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

		Dec 03	Jan 04	Feb 04	Change Feb/Jan
US Gulf					
Regular gasoline	*(unleaded)*	35.97	41.57	43.37	+1.80
Gasoil	*(0.2% S)*	35.72	39.84	36.88	–2.96
Fuel oil	*(3.0% S)*	22.35	22.64	22.08	–0.56
Rotterdam					
Premium gasoline	*(unleaded)*	33.84	37.33	38.56	+0.83
Gasoil	*(0.2% S)*	35.02	36.58	34.16	–2.42
Fuel oil	*(3.5% S)*	19.55	20.75	20.32	–0.43
Singapore					
Premium gasoline	*(unleaded)*	39.52	44.25	39.87	–4.38
Gasoil	*(0.5% S)*	36.67	41.42	38.81	–2.61
Fuel oil	*(380 cst)*	23.79	24.98	24.90	–0.08

US Gulf market

Product prices displayed divergent trends in the US Gulf market in February. On average, the gasoline price faired the best, rising four per cent, while the price of gasoil fell the most, declining by seven per cent, and high sulphur fuel oil (HSFO) slid two per cent, thereby shrugging off a moderate increase of less than one per cent in the marker crude, WTI, over the same period. Nevertheless, the preliminary four-week average published by the Energy Information Administration (EIA), representing the bulk of US February refinery and product activities, highlighted the following developments.

Although the retail gasoline price saw a gradual increase during the course of the month to reach an average of $1.70/gal, US gasoline demand rose during the month by 300,000 b/d or 3.6 per cent to register an average of 8.8m b/d, which translated into y-o-y growth of 4.5 per cent. Although these two reference periods were considered historically weak, the increase in US gasoline demand in February seemed to reflect strong growth in the US economy and, most importantly, might indicate that consumers are getting used to high pump prices. US refiners had no choice but to boost gasoline output to nearly 8.4m b/d, representing an increase of 2.5 per cent and 4.5 per cent above last month's and the preceding year's volume, respectively. US refiners' emphasis on gasoline production, together with a ten per cent or 680,000 b/d rise in gasoline imports, reduced gasoline stock-draws to only 3.6m b over the month. However, US gasoline imports fell six per cent below February of last year, essentially reflecting the impact of stringent new gasoline specifications in key US markets since the beginning of the year (see **Table B**).

US distillate demand remained robust, increasing by nearly one per cent to 4.3m b/d over the month, but still 1.3 per cent below the strong level of the same time last year. Distillate demand was driven by rising heating oil consumption, together with an agricultural diesel buying spree in the last few days of the month. Meanwhile, refinery distillate production was curtailed by 3.7 per cent to almost 3.5m b/d, owing to refiners favouring gasoline production, and imports surged by 26 per cent to hit last year's strong level of 520,000 b/d. However, residual fuel oil demand dropped by nearly two per cent from the previous month and seven per cent y-o-y to 870,000 b/d.

February's average refining margin for WTI was close to $4/b in the US Gulf Coast. Prevailing healthy refinery economics was largely attributed to the surge in gasoline prices, the main US refined prod-

Table C: Refinery operations in selected OECD countries

	Refinery throughput (m b/d)			Refinery utilization (%)[1]		
	Dec 03	Jan 04	Feb 04	Dec 03	Jan 04	Feb 04
USA	15.54	15.21	15.19	93.5	91.1	91.0
France	1.84	1.79R	1.84	96.5	91.7R	94.2
Germany	2.22	2.22R	2.24	98.1	97.2R	97.8
Italy	1.79	1.79R	1.84	77.8	77.4R	79.4
UK	1.58	1.58R	1.54	88.2	86.8R	84.5
Eur-16	12.27	12.32R	12.38	89.3	89.3R	89.7
Japan	4.30	4.32R	4.41	90.3	90.6R	92.6

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

uct, which outpaced a moderate increase in crude cost and offset the price slide for the remaining products.

However, the prevailing strength in refining margins had little impact on US refinery throughput, which remained almost unchanged (down 25,000 b/d) to register an average of 15.19m b/d in February. This suggested that January refinery maintenance was prolonged into February. The corresponding utilization rate remained almost stable at around 91 per cent, a rise of nearly two per cent above the preceding year's level (see **Table C**).

Rotterdam market

Despite a two per cent fall in Brent's average price in February, the gasoline price held firm, surging by two per cent. However, the average gasoil price plunged seven per cent and the counterpart HSFO decreased two per cent below the previous month's corresponding values. A number of fundamentals contributed to the shaping of the European product markets. Despite continuously rising freight rates, the transatlantic gasoline arbitrage was higher than the preceding month, as strong US gasoline prices eclipsed the increase in shipping costs.

Europe sent more than 1.8 million tonnes of gasoline in February to US markets, which was 200,000 t more than January's level. Lack of purchases from Europe's main heating oil consuming country, Germany, which was linked to relatively adequate end-user inventories, depressed the European distillate market, resulting in subdued barge markets. Distillate cargoes were actively shipped to the US East Coast and demand held steady in the Eastern Mediterranean region. Both grades of residual fuel oil, HSFO and light sulphur fuel oil (LSFO) were amply supplied as steady Russian fuel oil cargoes continued to face receding regional demand. However, recent shipping to the Asian market should help absorb surplus quantities of European fuel oil (see **Table B**).

The relative weakness of Brent, compared with other marker crudes, coupled with a strong gasoline price, led to enhanced refining profits. Indeed, the average Brent margin in Rotterdam was more than $3/b in February.

Prompted by healthy refining margins, refinery throughput in the Eur-16 rose to average 12.38m b/d, registering 63,000 b/d above the previous month's level. The equivalent utilization rate was slightly below 90 per cent, or one per cent above year-ago runs (see **Table C**).

Singapore market

After several months of continuous rises, average spot product prices fell in Singapore in February. Gasoline lost a hefty ten per cent, followed by a six per cent plunge in the gasoil price. The average HSFO price remained relatively unchanged amid a 1.5 per cent fall in Dubai's counterpart compared to the preceding month's value. Nevertheless, with the exception of the naphtha market, the remaining Asian product fundamentals continued to be more or less shaped by developments in China. Prevailing strong profits in the Asian ethylene industry continued to support the price of its key feedstock, naphtha, although below last month's high level. After a sharp reduction in January, China resumed gasoline exports in February, when more than 500,000 t were shipped. This weighed on Asian gasoline prices, despite active transpacific gasoline arbitrage to the US West Coast, totaling 12 cargoes. The Asian distillate market was essentially driven by the strong pace of demand in China, which approached 2m b/d, and thus forced the country to turn to imports in January. Asian distillate fundamentals look firm in the near future with the expectation of even higher demand from the agricultural sector in China and peak demand during the spring season in India amid refinery maintenance. However, the Asian residual fuel oil supply remained abundant, with its Singapore stocks swelling to more than 11m b during most of the month on continued weakness in Chinese purchases, combined with an influx of foreign cargoes (see **Table B**).

Dubai's average cracking refining margins in Singapore fell from the historical high set in January, dropping around $2/b in February, but still at a healthy level close to $4/b. The seven per cent decline in gross product worth, steeper than Dubai's 1.5 per cent loss, was the underlying factor behind falling refining margins.

In Japan, average refinery throughput rose 90,000 b/d to 4.41m b/d in February. Despite a two per cent increase to 92.6 per cent, the utilization rate fell a considerable five per cent compared to last year's runs, which were induced by fuel switching in the electrical utilities on the unplanned outage of nuclear power generators (see **Table C**).

The oil futures market

The relentless bullish trend that started late last September has continued with more impetus during the winter season. Bears, as they normally do in winter time, remained in hibernation. It is hard to make the case that the market can drop in the light of the abundant bullish signals cropping up everywhere. The crude oil market seemed dominated by the bullish perception of tight US crude oil stocks, which stood below the 270m b minimum operational level early in February.

This perception has continued even though crude levels have been rising to close at 279.5m b in the week ending March 6, according to the latest EIA report, which was almost ten per cent higher than in 2003. A tight gasoline market has also underpinned the exuberant bullishness of speculators. Although total commercial gasoline stocks showed a draw with respect to last year, the latest EIA figure of 200.4m b is just 1.6 per cent lower than in 2003 and 7.7 per cent versus the last five-year average. However, closer scrutiny of the gasoline market reveals that reformulated gasoline inventories of 26.8m b are eight per cent below last year and 13 per cent lower compared to the five-year average. To all of these bullish trends, one might also add healthy US demand and surging Chinese consumption. Futures markets also factored in the fact that the US government is poised to increase the amount in the Strategic Petroleum Reserve (SPR) by as much as 12m b in the next two months. Therefore, it should not come as a surprise that non-commercials (speculators) have amassed enormous long positions.

According to the Commodity Futures Trading Commission's Commitments of Traders' report for the week ending March 2, non-commercials held 162,442 long contracts with a net-long position of 82,451 lots, just a notch below the 18-year record high of 82,683 lots. The increased length has all the characteristics of a 'bull trap' in our view. A similar situation was seen twice last year: once before the start of the invasion of Iraq and again following the end of the US driving season.

As noted in the last report, it is anybody's guess what might trigger a price plunge. But when it happens it might mean a rapid correction of several dollars per barrel. It is important to remember that the low demand season is about to begin and the latest information indicates a more rapid return of Iraqi exports as several outlet options are now possible.

However, as a final consideration, the NYMEX WTI futures forward contract on March 9 showed a spread of slightly more than $5/b between the first and the twelfth forward months implying that the market today values crude for delivery in early 2005 at around $31/b. Thus, one might conclude that, although a considerable dip might occur in the immediate future, crude prices are poised to remain firm coming into the summer and autumn seasons.

The tanker market

OPEC area spot fixtures gave up ten per cent of last month's 35 per cent gain on the back of slightly lower oil production and weak demand due to refinery maintenance. Spot fixtures declined by 1.48m b/d to 14.64m b/d, which was 1.48m b/d or about 11 per cent higher than the level registered a year ago. In contrast, non-OPEC spot-chartering edged up by 490,000 b/d to stand at 9.23m b/d, which was 460,000 b/d or about five per cent above last year's figure, lifting non-OPEC's share of global spot fixtures by four per cent to about 39 per cent, nearly to last year's level. Consequently, global spot-chartering displayed a slight fall of 990,000 b/d to 23.88m b/d, an increase of 1.95m b/d compared with the same month in 2003. OPEC area's share of global spot fixtures fell by four per cent to stand at about 61 per cent, which was marginally above the same month last year. The decline in OPEC area spot fixtures was mostly concentrated on the Middle East westbound long-haul route, which lost 750,000 b/d to 2.22m b/d. This resulted in a drop in market share of about three per cent, taking the route's share of OPEC area spot fixtures down to about 15 per cent. Spot fixtures on the Middle East eastbound long-haul route showed a contrary trend with a marginal rise of 200,000 b/d to 6.10m b/d, leading to a five per cent increase in the eastbound share of OPEC area spot fixtures, taking them up to about 42 per cent. Together, these two routes accounted for about 57 per cent of total chartering in the OPEC area, an increase of one per cent from the previous month and about three per cent higher than in the same period in 2003. According to preliminary estimates, sailings from the OPEC area in February witnessed an increase of 700,000 b/d for a monthly average of 25.59m b/d. Most of the improvement happened in non-Middle East sailings, while sailings from the Middle East moved upward slightly by 30,000 b/d to 16.87m b/d, pushing their share of total OPEC sailings down by about two per cent to 66 per cent. According to preliminary estimates, long-haul arrivals rose on all main routes, registering the highest rise of 880,000 b/d to 11.09m b/d in the US Gulf Coast, US East Coast and Caribbean, while the lowest increment was in Japan, which added just 20,000 b/d to 4.39m b/d. In NW Europe and Euromed, arrivals saw moderate increases of 200,000 b/d to 7.46m b/d and 420,000 b/d to 4.35m b/d, respectively.

The tanker market displayed divergent trends in February with crude oil freight rates heading south and product freight rates soaring skyward. Most of the crude oil tanker sector lost the previous month's momentum, especially Suezmax and Aframax, where losses were remarkable. A dearth of activity was the main reason behind the huge setback as many refiners began spring maintenance. In the VLCC sector, the slow-down was larger on the Middle East westbound route, where freight rates fell by 24 points to a monthly average of Worldscale 104. Rates touched W90 at the end of the month on the back of low trade. A five-point increase in the monthly average to W135 on the Middle East eastbound route did not reflect what was going on in the market as the route also suffered from a lack of activity. The main reason for rates finishing with such a high average was the lofty start at the beginning of the month where rates hovered near W170. These high levels shed more than 60 points at the end of the month to stand at W110. Suezmax freight rates on the West Africa/US Gulf Coast route experienced huge losses, falling by 97 points to a monthly average of W167 due to very weak demand. The slowdown on the NW Europe/US East and Gulf Coast routes was less than that on the previous route, with freight rates dropping by 61 points to W198. The behaviour of the Aframax sector was similar to the Suezmax in terms of losses, especially on the Mediterranean/NW Europe route which saw a fall of 147 points to stand at a monthly average of W125 due to the sluggish Baltic market, particularly at the end of the month. Within the Mediterranean basin, rates also lost a hefty 97 points to register a monthly average of W275 on the back of accumulating available tonnage due to a lull in demand. In the Caribbean, Aframax freight rates suffered from a month of volatility, resulting in a moderate loss of 49 points for a monthly average of W279. The only route which showed some increase was Indonesia/US West Coast, where rates gained 24 points for a monthly average of W207 on healthy demand.

Tight tonnage availability on most main product routes pushed freight rates higher in February, especially in the east. Tankers of 50,000 tons from the Middle East moving eastward secured the highest rise, adding 48 points for a monthly average of W255 as imports, particularly to China, continued to drive up rates. Additionally, increasing imports from Japan forced charterers to pay more to secure suitable 30,000 t tankers on the Singapore/East route. This situation succeeded in lifting rates by 77 points for a monthly average of W294. Within the Mediterranean and from there to NW Europe, product freight rates managed to finish the month with moderate gains, increasing by 11 points to W338 on the former route and 10 points to W370 on the latter. Strong activity also boosted rates along the Caribbean/US Gulf Coast route by 50 points to stand at a monthly average of W383.

World oil demand

Estimates for 2003

World

Compared with the 78.51m b/d presented in the last report, our average 2003 demand estimate has been revised down by 210,000 b/d to 78.30m b/d, due to downward revisions in the actual historical consumption data of 70,000 b/d in 1Q estimates, 110,000 b/d in 2Q and 680,000 b/d in 4Q. The bulk of the downward revision is due to the unexpectedly lower apparent demand in the FSU. The final consumption data is expected to change sideways, possibly substantially, as further evidence on actual demand becomes available.

Slightly higher-than-expected consumption in North America, more than offset by lower-than-expected consumption in both OECD Europe and Pacific, has also resulted in a minor downward revision in OECD demand. As a result, the yearly increment, ie, the difference between the 2002 and the 2003 averages, has likewise been adjusted downwards by 230,000 b/d to read 1.29m b/d, as there has been a marginal 20,000 b/d upward adjustment to the average 2002 consumption.

On a regional basis, demand for 2003 is estimated to have risen by 720,000 b/d or 1.50 per cent in the OECD following a minor fall of 70,000 b/d in 2002. Only a moderate 110,000 b/d or 0.58 per cent rise in consumption is forecast in 2003 in developing countries, following much higher 180,000 b/d growth in 2002. Apparent demand in Other Regions is estimated to have grown a considerable 460,000 b/d or 4.84 per cent, more than doubling the volume and growth rate of 210,000 b/d or 2.21 per cent seen in 2002.

With the substantial reduction in 4Q estimate, the increment for that quarter has reached the same level as in 2Q. Compared with the exceptionally weak 1Q of 2002, world demand is estimated to have grown a significant 2.87 per cent or 2.20m b/d to average 79.01m b/d in 1Q of 2003. This is the net effect of the much colder-than-normal weather in most parts of the northern hemisphere, fuel substitution in Japan on nuclear power reactor maintenance, stockpiling ahead of the anticipated Iraq war, and record high natural gas prices in the US. The 2Q03 consumption is estimated to have risen 1.27 per cent or 960,000 b/d compared to the exceptionally weak 2Q02, due to robust economic growth in China and the continued fuel substitution in Japan. The 3Q consumption is assumed to have grown slightly more by 1.09m b/d or 1.42 per cent. The 4Q increment is estimated at 940,000 b/d or 1.19 per cent, similar to that in 2Q.

OECD

The actual data shows OECD consumption stands at 48.46m b/d, which constitutes 62 per cent of the total world demand in 2003, as indicated in the previous report. Out of the forecast 1.29m b/d world oil consumption increment in 2003, about 720,000 b/d or nearly 55 per cent is expected to be accounted for by the OECD. Within the group, North America ranks first in forecast demand growth with 460,000 b/d, encompassing 64 per cent of the group demand increment. OECD Pacific ranks second with 130,000 b/d or 19 per cent and Western Europe ranks third with 120,000 b/d or 17 per cent.

On the product side, gasoil/diesel registered the steepest gain during 2003, as data became available for the whole year. Gasoil/diesel consumption in total OECD increased by 310,000 b/d or 2.65 per cent, with the bulk of this rise coming from the USA and Europe due to fuel switching. Naphtha also registered a gain of 80,000 b/d or 2.82 per cent due to healthy margins in the petrochemical sector. Direct use experienced exceptionally high growth of 43 per cent due to the nuclear reactor outages in Japan. The only product whose consumption lost ground was LPG, which shed 20,000 b/d or 0.51 per cent due mostly to sustained high prices and a subsequent decline in consumption in the US.

Developing countries

Oil demand for developing countries is estimated to have grown by 110,000 b/d or 0.58 per cent to 19.81m b/d, unchanged from the previous report. However, Other Asia saw an increase of 190,000 b/d or 2.56 per cent to 7.66m b/d, up by 40,000 b/d compared to the previous month due to an improvement in economic growth. In contrast, Latin America's oil demand contracted a further 110,000 b/d or 2.27 per cent to 4.64m b/d due to persistent economic and financial problems. Middle East oil consumption remained unchanged at 4.65m b/d, the same level as observed in the year 2002. Africa's oil demand experienced a slight increase of 30,000 b/d or 1.3 per cent to 2.56m b/d.

Other Regions

Apparent demand in the Other Regions group of countries is estimated to have grown by 460,000 b/d or 4.8 per cent to 10.02m b/d, a drop of 200,000 b/d from the level mentioned in the last report. This downward revision came as actual statistical data on trade and production has become available for the entire year 2003, and showed a contraction of 460,000 b/d in apparent demand for 4Q03 compared with the 260,000 b/d gain forecast in the previous report. Due to a downward revision in 4Q, FSU's apparent demand is estimated to have dropped, resulting in an average yearly decline of 60,000 b/d or 1.58 per cent to 3.72m b/d.

In contrast, Chinese apparent demand is anticipated to have undergone healthy growth of 530,000 b/d or 10.48 per cent to 5.56m b/d. This remarkable estimated growth rate is more than 40 per cent of the estimated average rise in world oil demand. The share of Other Regions in the world oil consumption declined to 12 per cent from 13 per cent in the previous report.

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

	1Q	2Q	3Q	4Q	Year
2000	3.97	4.13	4.47	4.01	4.14
2001	4.30	4.71	4.89	4.47	4.59
2002	5.14	5.76	5.85	5.49	5.56
2003[1]	5.87	6.75	6.72	6.86	6.55
2004[2]	6.56	7.37	7.36	7.51	7.20

1. *Estimate.*
2. *Forecast.*

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

	2002	3Q03	4Q03	2003	Jan 04*	Feb 04*	Feb/ Jan 04
Algeria	864	1,160	1,178	1,134	1,172	1,173	2
Indonesia	1,120	1,011	1,000	1,027	986	982	–5
IR Iran	3,416	3,784	3,861	3,759	3,897	3,917	20
Iraq	2,000	1,046	1,845	1,313	2,040	1,947	–93
Kuwait	1,885	2,130	2,201	2,173	2,244	2,283	39
SP Libyan AJ	1,314	1,425	1,446	1,422	1,456	1,458	3
Nigeria	1,969	2,182	2,272	2,131	2,321	2,297	–24
Qatar	648	740	751	746	758	757	–2
Saudi Arabia	7,535	8,533	8,413	8,709	8,490	8,567	77
UAE	1,988	2,261	2,212	2,243	2,257	2,287	30
Venezuela	2,586	2,565	2,548	2,290	2,529	2,469	–60
Total OPEC	**25,323**	**26,839**	**27,728**	**26,946**	**28,149**	**28,136**	**–13**

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

Forecast for 2004

The world oil demand forecast for 2004 has been adjusted downward by 80,000 b/d to 79.75m b/d from 79.83m b/d due to a revision to the base figure for the year 2003. However, incremental growth has been revised up by 130,000 b/d, equivalent to 1.45m b/d or 1.86 per cent from the earlier report. This increase is due mainly to an upward revision in economic growth. All quarterly averages have been revised up, with the exception of 4Q, which has been significantly reduced by 550,000 b/d to reflect the downward revision in the corresponding period.

All three major groups of countries are forecast to register healthy demand growth. The Other Regions group is forecast to rank first in demand volume growth with 570,000 b/d or 5.69 per cent. At 510,000 b/d or 2.59 per cent, the rise in developing countries demand is expected to be the second highest in incremental volume. The OECD group is forecast to follow with 370,000 b/d or 0.76 per cent after strong gains in 2003.

Within the group of OECD countries, North America ranks first in estimated oil demand with 300,000 b/d or 1.21 per cent to 24.92m b/d, almost 160,000 b/d less than the incremental growth registered last year. This is due mainly to the moderate winter this year compared to the colder winter last year. Western Europe ranks second with 110,000 b/d or 0.71 per cent to 15.32m b/d, more or less the same growth as in the year 2003. In contrast, OECD Pacific oil demand is expected to fall by 40,000 b/d or 0.42 per cent to 8.59m b/d, reversing the exceptional trend which occurred last year as Japan has begun to bring its nuclear reactors back on line.

In the group of developing countries, Other Asia's oil consumption is expected to have the highest volume and percentage growth of 270,000 b/d or 3.53 per cent to 7.93m b/d.

This growth surpassed that of last year due to higher prospects for economic growth during this year in this region. Oil demand growth in Latin America and the Middle East turned positive, rising 90,000 b/d or 1.81 per cent to 4.73m b/d and 100,000 b/d or 2.10 per cent to 5.05m b/d, respectively, due to an improvement in economic growth. Africa's demand is forecast to grow by 50,000 b/d or 2.03 per cent to 2.61m b/d, slightly higher than the growth observed last year.

The group of Other Regions is projected to see positive growth in the FSU of 170,000 b/d or 4.54 per cent to 3.89m b/d after the contraction registered last year, while Chinese demand continued the upward growth trend of last year, but at a slower pace, mainly due the current forecast for economic growth of 8.3 per cent, down from 9.1 per cent in the year 2003. China's apparent demand is expected to increase by 380,000 b/d or 6.38 per cent to 5.94m b/d.

Every single quarter of 2004 is forecast to experience oil demand growth. The 1Q is expected to account for the lowest growth rate of 1.13m b/d or 1.43 per cent. The 2Q and 3Q are forecast to enjoy a much higher increase of 1.56m b/d or 2.05 per cent and 1.50m b/d or 1.92 per cent, respectively, while the highest growth of 1.62m b/d or 2.03 per cent is expected in 4Q.

World oil supply

Non-OPEC

Estimate for 2003

The 2003 non-OPEC supply figure was revised up to 48.66m b/d. Downward revisions were made to the quarterly distribution for the US and Canada, which were offset by upward revisions made to the UK, thus leaving the total OECD yearly average almost unchanged. Minor upward revisions were made to Argentina, Brazil and Oman resulting in an upward revision of 40,000 b/d to the yearly average for developing countries. The quarterly distribution now stands at 48.62m b/d, 47.90m b/d, 48.61m b/d and 49.52m b/d, respectively. The yearly average increase moved up slightly to 900,000 b/d, compared with the upwardly revised 2002 figure.

Forecast for 2004

Non-OPEC supply for 2004 is forecast to rise 1.35m b/d. Russia is expected to be the main contributor with around 710,000 b/d, followed by Chad with 190,000 b/d, Kazakhstan with 110,000 b/d and Angola with 90,000 b/d. Colombia is also expected to add 30,000 b/d. The quarterly distribution now stands at 49.93m b/d, 49.22m b/d, 50.02m b/d and 50.99m b/d, respectively. The yearly average is forecast at 50.01m b/d.

The FSU's net oil exports for 2004 are

expected at 7.20m b/d. The 2003 figure was revised up a significant 180,000 b/d to 6.55m b/d due to a substantial downward revision to 4Q apparent demand (also applied to 2004), while figures for 2000–2002 remain almost unchanged from the last report (see **Table D**).

OPEC NGLs and non-conventional oils

The OPEC NGL and NCO figure for 2004 has been revised up significantly to 3.80m b/d — mainly from NGLs contributed by Saudi Arabia, IR Iran, Algeria, Nigeria and the UAE — for an increase of 220,000 b/d over 2003. Figures for 2000–2003 remain unchanged at 3.34m b/d, 3.58m b/d, 3.62m b/d and 3.58m b/d, respectively, compared with the figures in the last report.

OPEC NGL production, 2000–04

	m b/d
2000	**3.34**
2001	**3.58**
2002	**3.62**
1Q03	3.44
2Q03	3.59
3Q03	3.64
4Q03	3.64
2003	**3.58**
Change 2003/2002	–0.04
2004	**3.80**
Change 2004/2003	0.22

OPEC crude oil production

Available secondary sources indicate that OPEC's output for February was 28.14m b/d, almost unchanged from the revised January figure. **Table E** shows OPEC production as reported by selected secondary sources.

Rig count

Non-OPEC

Rig activity rose in February. North America gained 27 rigs, compared with the January figure, as US rig activity rose 18 rigs to 1,119 and Canada added 14 rigs to 568, while Mexico dropped five rigs to 105. Western Europe added four rigs to 68, mainly contributed by Norway, up three rigs to 19, and Denmark, up two rigs to five. Other Asia declined by six rigs to 116 led by Malaysia's loss of five rigs, while Africa witnessed a rise of six rigs to 52.

OPEC

OPEC's rig count was 230 in February, a decline of 14 rigs compared with January. Kuwait and Indonesia were the major contributors to the decline, with respective losses of five rigs to four and four rigs to 45 from last month's figures.

Stock movements

US

US commercial onland stocks continued to show a considerable seasonal draw of 13.9m b at a rate of 460,000 b/d to 896.6m b during the period January 30–February 28, 2004, although the y-o-y surplus remained at a comfortable level of 35.2m b or 4.1 per cent. Commercial crude oil stocks experienced an increase of 4.2m b to 275.8m b, which was 5.2m b or 1.9 per cent above a year ago. The last two weeks of February have seen a gradual rise in stocks after a draw-down in 2003, which may signify the start of a crude oil build (see **Table F**).

During February crude oil imports averaged 9.4m b/d or 170,000 b/d below the same period in January, but by the end February, US crude oil imports moved up strongly to reach 9.8m b/d, an increase of 830,000 b/d from the week before. Crude oil refinery inputs registered only a slight decrease of 70,000 b/d to 14.72m b/d during February to capture a strong crack spread on gasoline. Even with high crude oil imports and some refinery maintenance, it will be hard to rapidly build commercial crude inventories as the US government plans to add 12m b to the SPR during March and April 2004.

On the product side, with the approaching end of the winter season, market focus shifted to gasoline products, where gasoline stocks registered a draw of 3.6m b to 205.6m b, which was 1.8m b or 0.9 per cent less than a year earlier. Gasoline inventories remained tight as imports continued to fall, partially due to the US Tier 2 sulphur restrictions and the MTBE ban in California, Connecticut and New York. In the coming weeks, gasoline production should increase to a record level due to lack of imports from traditional suppliers.

At the same time, gasoline demand is growing rapidly, almost reaching 8.8m b during February or 2.8 per cent over the same period last year. Middle distillates moved down a considerable 12.9m b, with a large decrease seen in both low-sulphur (diesel) and high-sulphur (heating oil) distillate fuel stocks. At 111.3m b, distillate fuel inventories are still a healthy 13.1m b or 13.3 per cent ahead of the same time last year. Compared to the previous week, distillate stocks remained more or less flat and have broken the significant trend of stock-draws for the last six consecutive weeks. Heating oil registered a build for the first time in seven weeks, suggesting that the winter season is approaching its end as warmer weather in the US north-east reduced demand for heating oil. Higher refinery throughput following the end of maintenance should increase distillate inventories in the coming weeks.

During the same period, the US SPR witnessed another increase of 5.5m b to reach a new record level of 646.6m b, as the US government continued to fill the reserve under the 'royalty-in-kind' programme. The SPR is now around 47.4m b above the same time last year.

During the week ending March 5, 2004, overall commercial oil stocks in the US showed a further increase for the second consecutive week of 6.9m b to 905.5m b, expanding the y-o-y surplus to about 43.5m b or 5.0 per cent. Crude oil stocks rose 3.7m b to 279.5m b, lifting them around 8m b or 2.9 per cent above the same period last year. This build came despite a rise of 80,000 b/d to 14.7m b/d in refinery throughput from the previous week's level.

Crude oil imports fell a slight 50,000 b/d, but stood at a steady level of 9.8m b/d. Crude oil inventories are currently about 11m b higher than at the beginning of this year due to the improvement in crude oil imports and reduced refinery runs during the maintenance period. This trend could continue for the next two to three weeks before refiners will need to increase their runs to build gasoline for the summer period. In line with the seasonal pattern, gasoline stocks declined by 1.6m b to 204.4m b and are now 2.4m b or 1.2 per cent less than last year at the same time. This draw occurred despite a strong increase in gasoline imports of 400,000 b/d to reach more than 1.0m b/d, which is due to robust transatlantic arbitrage shipments from Europe and weakening freight rates.

Gasoline demand was around 9.0m b/d, almost unchanged from the previous week. Distillate fuel inventories rose by 1.4m b to 112.7m b, with a drop in low sulphur distillate stocks, which was more than offset by an increase in high sulphur distillate inventories. This left distillate fuel at a comfortable level of 15.4m b or 15.8 per cent higher than in the same period last year, which came on the back of an increase in imports and a fall in apparent demand.

In the week ending March 5, the SPR continued its upward trend, registering a further increase of 900,000 b to 647.5m b, leaving the y-o-y surplus at 48.3m b or 8.1 per cent.

Western Europe

Total oil stocks in EU-16 (EU plus Norway) reversed the trend observed last month, decreasing by 11.1m b or 380,000 b/d to 1,060.9m b, due to a large draw on middle distillates. Despite this considerable draw, the y-o-y surplus remained at 44.0m b or 4.3 per cent. Crude oil stocks saw a build of 4.5m b to 433.6m b, even though crude throughput rose at a high rate of 760,000 b/d to 12.38m b/d compared to February last year. High refinery throughput absorbed almost all of the increase in Russian exports. European crude oil stocks stood around 10.7m b or 2.5 per cent above last year's level at the same time.

On the refined product side, middle distillates saw a large draw of 14.3m b despite higher refinery output and relatively mild weather. Most of this draw occurred in France, where distillate inventories fell by about 11m b. Even with this significant draw, European middle distillates remained at a healthy level indicating a y-o-y surplus of 23.3m b or 7.4 per cent.

Gasoline stocks rose by 800,000 b to 149.9m b, the highest level since March 2002. This build was due mainly to higher refinery runs and partially to lower US-bound volumes. Gasoline stocks ended the month of February at 5.3m b or 3.6 per cent above a year ago. Fuel oil stocks experienced a draw of 1.3m b to 113.2m b and were still slightly up by 2.7m b or 2.4 per cent compared to this period last year (see **Table G**).

Japan

Total commercial onland stocks in Japan reversed the previous month's pattern, decreasing by 3.4m b or 110,000 b to 179.3m b, but the y-o-y surplus remained at a comfortable level of 13.7m b or 8.3 per cent. Middle distillate stocks, which bore the bulk of the draw, moved down by 6.8m b to 33.7m b, while crude oil and gasoline stocks softened losses with increases of 2.7m b to 111.1m b and by 1.2m b to 13.7m b, respectively. In distillate stocks, kerosene fell on the back of increased domestic sales, while gasoil also saw a decrease due to a rise in exports to China.

Despite the large draw, distillate inventories remained at 2.5m b or 7.8 per cent higher than last year at this time. After a strong build in December 2003, crude oil stocks registered a moderate build despite robust refinery activity, which was 8.5m b or 8.3 per cent more than in the previous year. Fuel oil stocks experienced a marginal draw of 500,000 b to 20.7m b, with a large draw on fuel oil A, to stand at 2.3m b or 12.5 per cent above a year ago (see **Table H**).

Balance of supply/demand

For 2003, **Table I** shows an upward revision to total non-OPEC supply of 40,000 b/d to 52.24m b/d and a downward one to the world oil demand of 210,000 b/d to 78.30m b/d, resulting in an estimated annual difference of around 26.05m b/d. This represents a significant decline of 250,000 b/d from the last report's figure, with a quarterly distribution of 26.95m b/d, 24.72m b/d, 25.96m b/d and 26.60m b/d, respectively. Accordingly, downward revisions were made to the quarterly balance by 150,000 b/d, 190,000 b/d, –30,000 b/d and 710,000 b/d, respectively; the quarterly balance figures now stand at –200,000 b/d, 1.75m b/d and 880,000 b/d and 1.13m b/d, respectively. The annual average balance stands at 890,000 b/d.

For 2004, **Table I** shows world oil demand expected at 79.75m b/d and total non-OPEC supply expected at 53.81m b/d. This has resulted in a difference of around 25.94m b/d, with a quarterly distribution of 26.61m b/d, 24.76m b/d, 25.85m b/d and 26.52m b/d, respectively.

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

	Jan 2, 04	Jan 30, 04	Feb 27, 04	Change Feb/Jan	Feb 27, 03	Mar 5, 04[2]
Crude oil (excl SPR)	**269.0**	**271.6**	**275.8**	**4.20**	**270.6**	**279.5**
Gasoline	206.3	205.6	202.0	–3.60	203.8	200.4
Distillate fuel	135.5	124.2	111.3	–12.90	98.2	112.7
Residual fuel oil	38.8	37.1	38.5	1.40	30.8	40.4
Jet fuel	38.1	39.2	37.0	–2.20	38.6	35.2
Unfinished oils	76.1	82.0	88.9	6.90	83.2	90.8
Other oils	168.1	152.9	145.1	–7.80	138.0	146.5
Total	**931.9**	**912.5**	**898.6**	**–13.90**	**863.4**	**905.5**
SPR	638.2	641.1	646.6	5.50	599.2	647.5

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*

	Dec 03	Jan 04	Feb 04	Change Feb 04/Jan 04	Feb 03
Crude oil	**436.2**	**429.1**	**433.6**	**4.5**	**423.0**
Mogas	143.1	149.2	149.9	0.8	144.7
Naphtha	25.5	26.4	25.5	–0.9	23.5
Middle distillates	343.9	352.9	338.6	–14.3	315.3
Fuel oils	113.6	114.5	113.2	–1.3	110.5
Total products	**626.1**	**642.9**	**627.3**	**–5.7**	**594.0**
Overall total	**1,062.3**	**1,072.0**	**1,060.9**	**–11.1**	**1,016.9**

1. At end of month, and includes Eur-16.

Source: Argus Euroilstock.

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

	Nov 03	Dec 03	Jan 04	Change Jan 04/Dec 03	Jan 03
Crude oil	**97.2**	**108.4**	**111.1**	**2.7**	**102.6**
Gasoline	13.3	12.5	13.7	1.2	13.3
Middle distillates	48.0	40.6	33.7	–6.8	31.3
Residual fuel oil	20.7	21.2	20.7	–0.5	18.4
Total products	**82.0**	**74.3**	**68.2**	**–6.1**	**63.0**
Overall total[2]	**179.2**	**182.6**	**179.3**	**–3.4**	**165.6**

1. At end of month.
2. Includes crude oil and main products only.

Source: MITI, Japan.

Table I: World crude oil demand/supply balance

m b/d

	1999	2000	2001	2002	1Q03	2Q03	3Q03	4Q03	2003	1Q04	2Q04	3Q04	4Q04	2004
World demand														
OECD	47.7	47.8	47.8	47.7	49.4	47.2	48.0	49.3	48.5	49.6	47.5	48.5	49.8	48.8
North America	23.8	24.1	24.0	24.2	24.6	24.2	24.9	24.9	24.6	24.8	24.4	25.2	25.3	24.9
Western Europe	15.2	15.1	15.3	15.1	15.2	15.0	15.3	15.4	15.2	15.3	15.1	15.4	15.5	15.3
Pacific	8.7	8.6	8.5	8.5	9.6	8.0	7.9	9.0	8.6	9.6	8.0	7.9	8.9	8.6
Developing countries	18.9	19.2	19.5	19.7	19.4	19.5	20.0	20.3	19.8	19.9	20.1	20.5	20.9	20.3
FSU	4.0	3.8	3.9	3.8	4.0	3.3	3.7	3.8	3.7	4.1	3.5	3.9	4.0	3.9
Other Europe	0.8	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.8
China	4.2	4.7	4.7	5.0	5.4	5.5	5.8	5.6	5.6	5.8	5.8	6.1	6.0	5.9
(a) Total world demand	**75.5**	**76.2**	**76.6**	**77.0**	**79.0**	**76.2**	**78.2**	**79.8**	**78.3**	**80.1**	**77.8**	**79.7**	**81.4**	**79.7**
Non-OPEC supply														
OECD	21.3	21.9	21.8	21.9	22.1	21.3	21.5	21.9	21.7	22.0	21.2	21.4	21.8	21.6
North America	14.0	14.2	14.3	14.5	14.7	14.4	14.7	14.8	14.6	14.8	14.5	14.8	14.9	14.8
Western Europe	6.6	6.8	6.7	6.7	6.8	6.2	6.1	6.5	6.4	6.6	6.0	5.9	6.3	6.2
Pacific	0.7	0.8	0.8	0.8	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.6
Developing countries	10.7	10.7	10.9	11.2	11.2	11.1	11.4	11.6	11.3	11.7	11.7	12.0	12.2	11.9
FSU	7.5	7.9	8.5	9.3	9.9	10.1	10.4	10.7	10.3	10.7	10.9	11.3	11.5	11.1
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	3.2	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Processing gains	1.6	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.9	1.8
Total non-OPEC supply	**44.5**	**45.6**	**46.4**	**47.8**	**48.6**	**47.9**	**48.6**	**49.5**	**48.7**	**49.8**	**49.2**	**50.0**	**51.0**	**50.0**
OPEC NGLS and non-conventionals	3.2	3.3	3.6	3.6	3.4	3.6	3.6	3.6	3.6	3.7	3.8	3.8	3.9	3.8
(b) Total non-OPEC supply and OPEC NGLS	**47.7**	**48.9**	**50.0**	**51.4**	**52.1**	**51.5**	**52.3**	**53.2**	**52.2**	**53.5**	**53.0**	**53.9**	**54.9**	**53.8**
OPEC crude supply and balance														
OPEC crude oil production[1]	26.5	28.0	27.2	25.3	26.7	26.5	26.8	27.7	26.9					
Total supply	74.2	76.9	77.2	76.7	78.8	77.9	79.1	80.9	79.2					
Balance[2]	-1.4	0.7	0.5	-0.3	-0.2	1.7	0.9	1.1	0.9					
Stocks														
Closing stock level (outside FCPEs) *m b*														
OECD onland commercial	2446	2530	2622	2465	2408	2526	2569	2515						
OECD SPR[3]	1284	1268	1284	1343	1357	1361	1379	1405						
OECD total	3730	3798	3906	3808	3765	3887	3948	3921						
Other onland	997	1016	1045	1018	1007	1039	1056	1049						
Oil-on-water	808	876	831	816	857	886	874	900						
Total stock	**5535**	**5690**	**5781**	**5642**	**5629**	**5812**	**5878**	**5869**						
Days of forward consumption in OECD														
Commercial onland stocks	51	53	55	51	51	53	52	51						
SPR	27	27	27	28	29	28	28	28						
Total	**78**	**79**	**82**	**79**	**80**	**81**	**80**	**79**						
Memo items														
FSU net exports	3.4	4.1	4.6	5.6	5.9	6.7	6.7	6.9	6.6	6.6	7.4	7.4	7.5	7.2
[(a) — (b)]	**27.9**	**27.3**	**26.7**	**25.6**	**26.9**	**24.7**	**26.0**	**26.6**	**26.1**	**26.6**	**24.8**	**25.9**	**26.5**	**25.9**

1. Secondary sources.
2. Stock change and miscellaneous.
3. Korean government stocks are now included in Total OECD.
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 41, while* ***Graphs One and Two*** *(on pages 40 and 42) show the evolution on a weekly basis.* ***Tables Three to Eight****, and the corresponding graphs on pages 43–48, 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
November 2003 to February 2004**

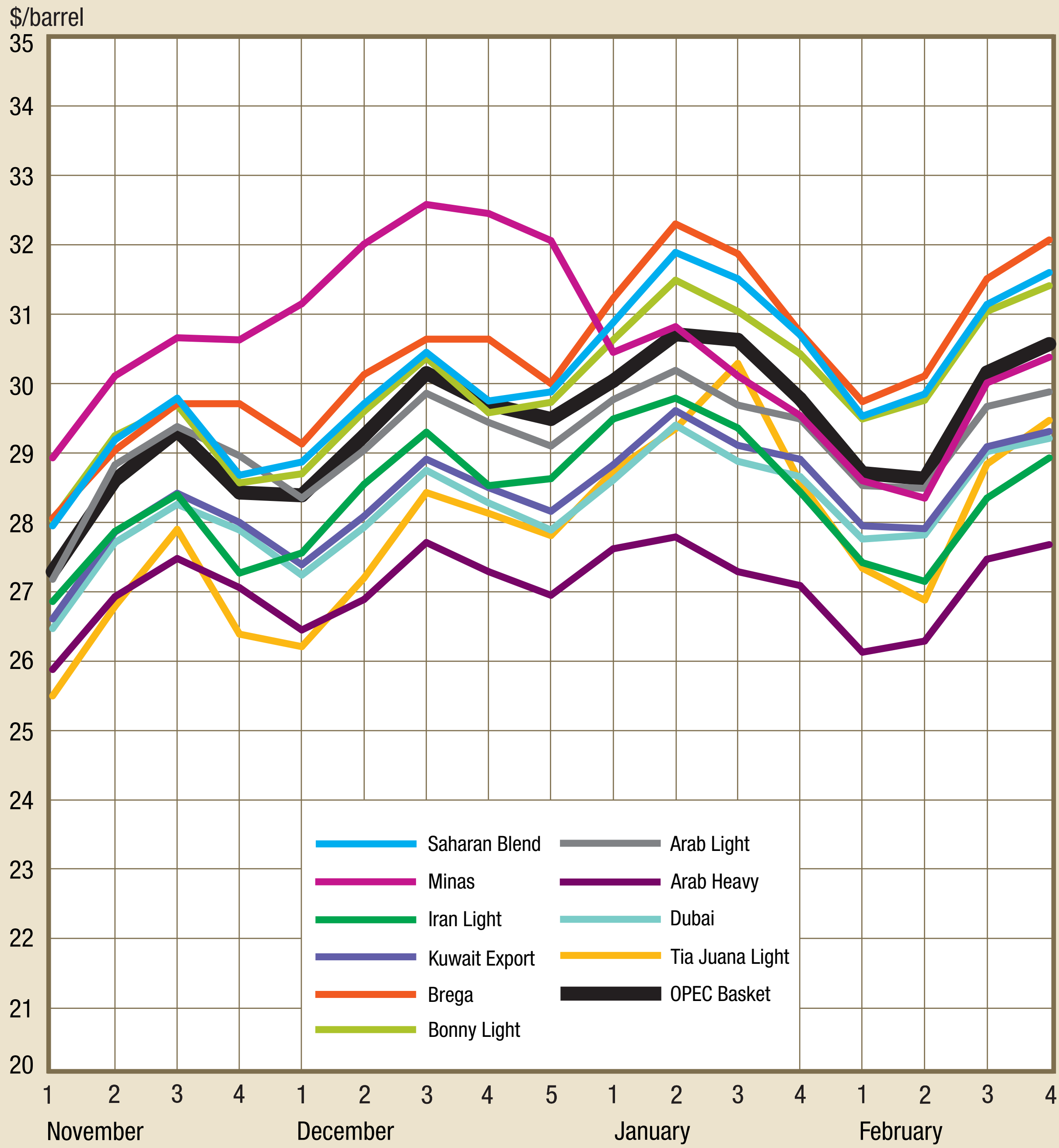


Table 1: OPEC spot crude oil prices, 2003–04 *($/b)*

Member						2003								2004			
Country/	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan			February		
Crude (API°)	4Wav	4Wav	5Wav	4Wav	4Wav	5Wav	4Wav	5Wav	4Wav	4Wav	5Wav	4Wav	1W	2W	3W	4W	4Wav
Algeria																	
Saharan Blend *(44.1)*	32.43	31.21	25.19	25.24	27.20	27.91	29.59	27.29	29.87	28.94	29.77	31.29	29.57	29.89	31.18	31.64	30.57
Indonesia																	
Minas *(33.9)*	31.89	30.70	29.66	28.76	27.19	27.33	28.38	26.74	29.67	30.12	32.09	30.27	28.64	28.39	30.05	30.42	29.38
IR Iran																	
Light *(33.9)*	29.89	27.94	22.85	23.06	24.43	26.03	28.62	26.66	28.79	27.64	28.55	29.31	27.46	27.19	28.39	28.97	28.00
Iraq																	
Kirkuk *(36.1)*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kuwait																	
Export *(31.4)*	30.02	27.81	23.78	24.35	25.50	26.70	27.78	25.78	27.67	27.76	28.25	29.16	27.99	27.95	29.13	29.35	28.61
SP Libyan AJ																	
Brega *(40.4)*	32.89	31.21	25.35	25.72	27.29	28.21	29.53	27.29	30.05	28.98	30.02	31.58	29.78	30.15	31.55	32.11	30.90
Nigeria																	
Bonny Light *(36.7)*	32.33	30.83	25.27	25.78	27.46	28.39	29.79	27.47	29.59	28.93	29.64	30.94	29.53	29.80	31.08	31.45	30.47
Saudi Arabia																	
Light *(34.2)*	31.11	28.98	24.70	24.92	26.15	27.24	28.36	26.41	28.26	28.63	29.20	29.83	28.57	28.53	29.71	29.92	29.18
Heavy *(28.0)*	29.86	27.33	23.50	24.19	25.37	26.68	27.63	24.92	26.87	26.88	27.10	27.49	26.17	26.33	27.51	27.72	26.93
UAE																	
Dubai *(32.5)*	29.94	27.76	23.59	24.31	25.46	26.66	27.66	25.52	27.42	27.62	28.06	28.93	27.80	27.86	29.06	29.25	28.49
Venezuela																	
Tia Juana Light[1] *(32.4)*	31.21	29.04	23.97	24.56	26.23	26.71	27.52	24.64	26.60	26.69	27.60	29.28	27.38	26.92	28.88	29.51	28.17
OPEC Basket[2]	***31.54***	***29.78***	***25.34***	***25.60***	***26.74***	***27.43***	***28.63***	***26.32***	***28.54***	***28.45***	***29.44***	***30.33***	***28.75***	***28.67***	***30.20***	***30.61***	***29.56***

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

						2003								2004			
Country/	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan			February		
Crude (API°)	4Wav	4Wav	5Wav	4Wav	4Wav	5Wav	4Wav	5Wav	4Wav	4Wav	5Wav	4Wav	1W	2W	3W	4W	4Wav
Gulf Area																	
Oman Blend *(34.0)*	30.31	28.06	24.14	24.53	25.64	26.80	27.96	26.09	27.97	27.93	28.43	29.34	28.13	27.99	29.15	29.39	28.67
Mediterranean																	
Suez Mix *(Egypt, 33.0)*	29.04	27.81	21.87	22.84	24.07	25.69	27.59	24.70	27.02	26.17	25.89	26.55	24.28	24.44	26.16	26.81	25.42
North Sea																	
Brent *(UK, 38.0)*	32.54	30.98	25.07	25.79	27.44	28.34	29.78	27.32	29.85	28.68	29.82	31.33	29.53	29.90	31.30	31.86	30.65
Ekofisk *(Norway, 43.0)*	32.80	31.15	25.17	25.85	27.48	28.43	29.83	27.40	29.94	28.86	29.62	31.10	29.32	29.72	31.13	31.92	30.52
Latin America																	
Isthmus *(Mexico, 32.8)*	31.90	29.96	24.99	25.61	27.48	27.79	29.08	26.18	28.38	28.24	29.71	31.78	29.77	29.28	31.41	32.09	30.64
North America																	
WTI *(US, 40.0)*	35.63	33.88	28.40	28.23	30.71	30.61	31.60	28.55	30.43	30.94	32.15	34.33	33.64	33.45	35.32	36.08	34.62
Others																	
Urals *(Russia, 36.1)*	30.76	28.38	22.48	23.96	25.68	26.92	28.67	25.88	28.17	27.30	27.90	28.63	26.43	26.54	28.09	28.56	27.41

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
November 2003 to February 2004

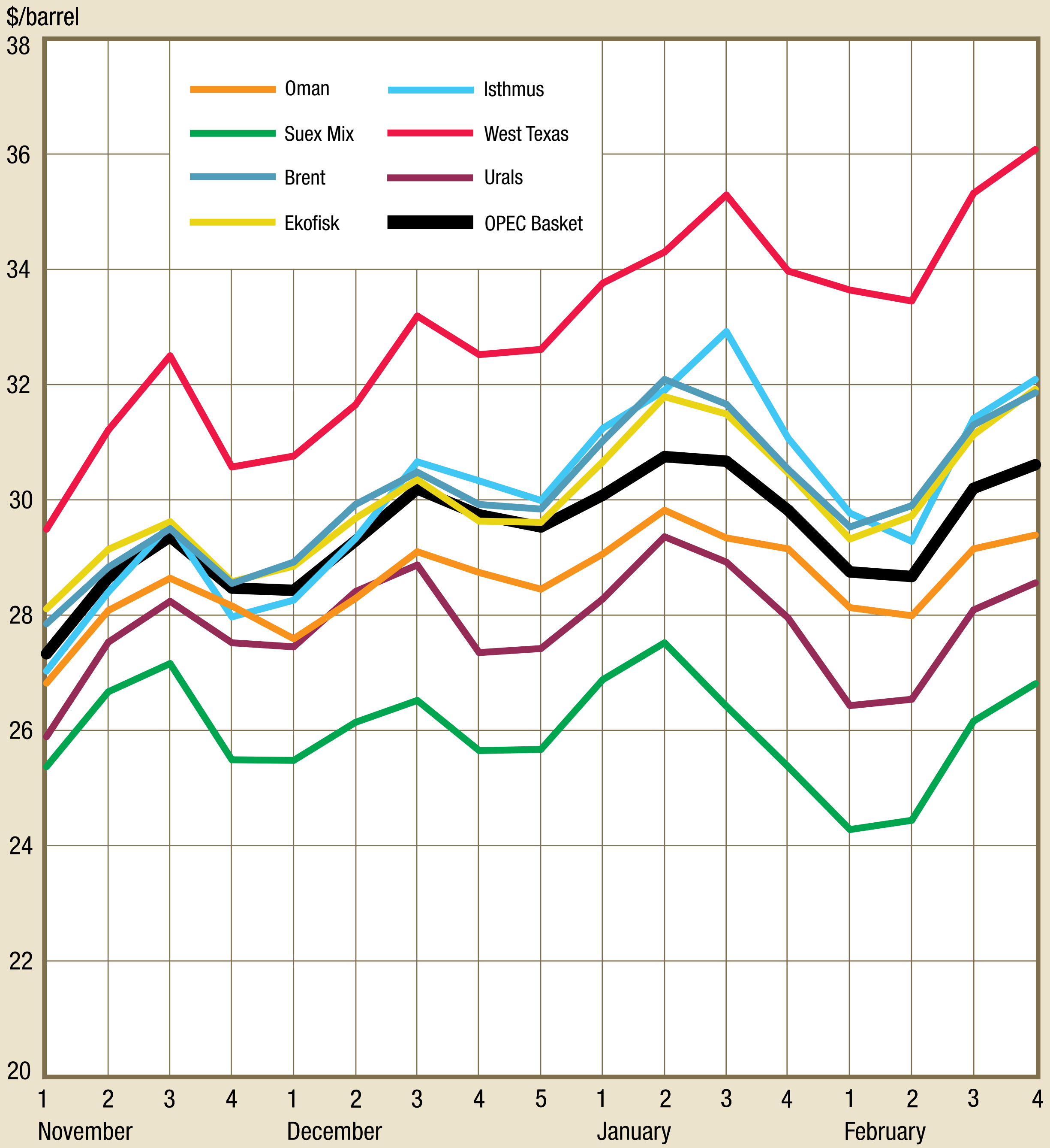


Table 3: North European market — spot barges, fob Rotterdam ($/b)

		naphtha	regular gasoline unleaded	premium gasoline unleaded 95	gasoil	jet kero	fuel oil 1%S	fuel oil 3.5%S
2002	February	23.77	21.18	21.17	21.69	23.43	14.70	15.52
	March	28.27	25.63	25.74	25.05	26.73	17.25	17.86
	April	29.29	29.77	29.94	26.53	28.01	19.51	19.93
	May	27.68	29.14	28.94	26.54	28.99	19.93	21.02
	June	24.33	28.90	29.02	25.97	28.04	19.32	19.94
	July	28.20	30.61	30.77	27.80	29.11	21.18	21.02
	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

Source: Platts. Prices are average of available days.

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

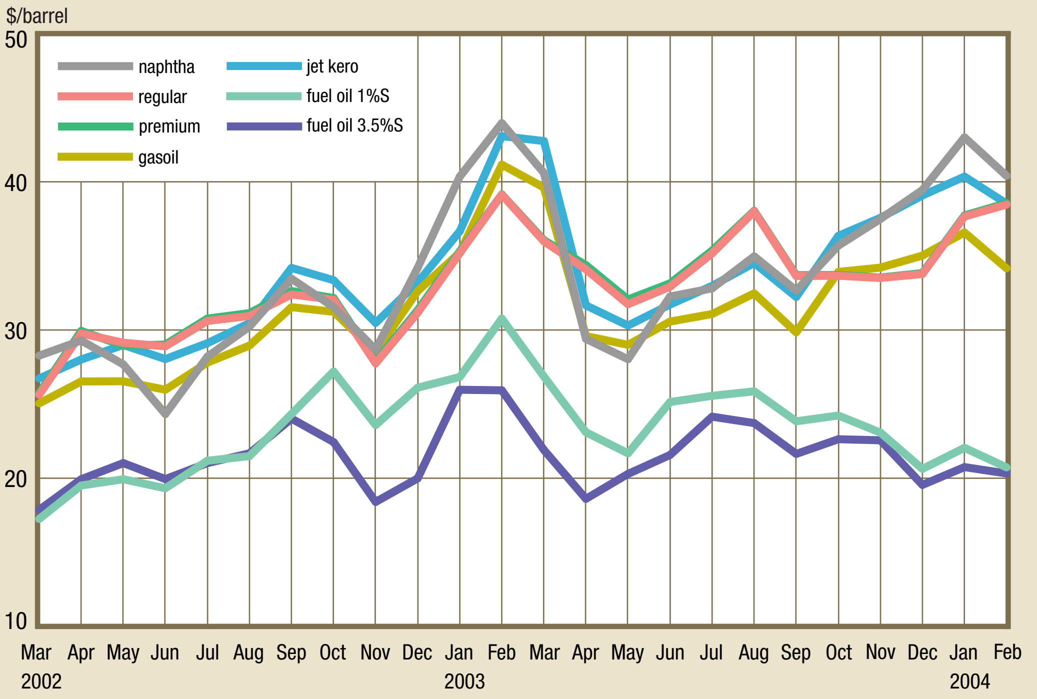


Table 4: South European market — spot cargoes, fob Italy ($/b)

		naphtha	gasoline premium unleaded 95	gasoline premium 0.15g/l	gasoil	fuel oil 1%S	fuel oil 3.5%S
2002	February	19.42	20.06	21.47	21.29	15.37	14.77
	March	23.43	24.07	26.34	24.15	17.99	16.33
	April	24.48	28.27	30.24	28.27	20.31	18.39
	May	22.88	27.80	29.46	25.48	20.01	19.18
	June	22.05	26.23	29.31	25.48	20.21	18.56
	July	23.79	28.45	30.40	26.92	20.43	19.27
	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

Source: Platts. Prices are average of available days.

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

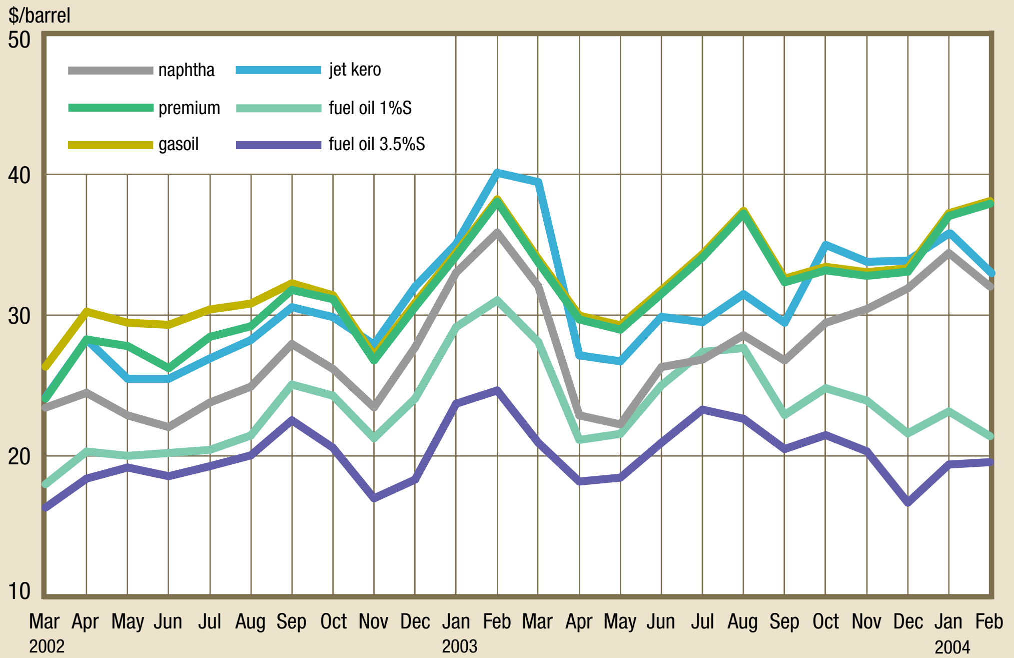


Table 5: US East Coast market — spot cargoes, New York ($/b, duties and fees included)

		regular gasoline unleaded 87	gasoil	jet kero	fuel oil 0.3%S	fuel oil 1%S	fuel oil 2.2%S
2002	February	23.01	22.51	23.96	18.09	14.83	14.42
	March	28.94	26.48	27.00	21.79	19.43	19.05
	April	31.00	27.78	28.61	25.24	22.24	21.59
	May	29.18	27.70	28.70	25.62	23.37	21.73
	June	29.78	26.89	28.34	24.63	22.70	21.54
	July	31.90	28.26	29.84	25.79	22.55	21.60
	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

Source: Platts. Prices are average of available days.

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

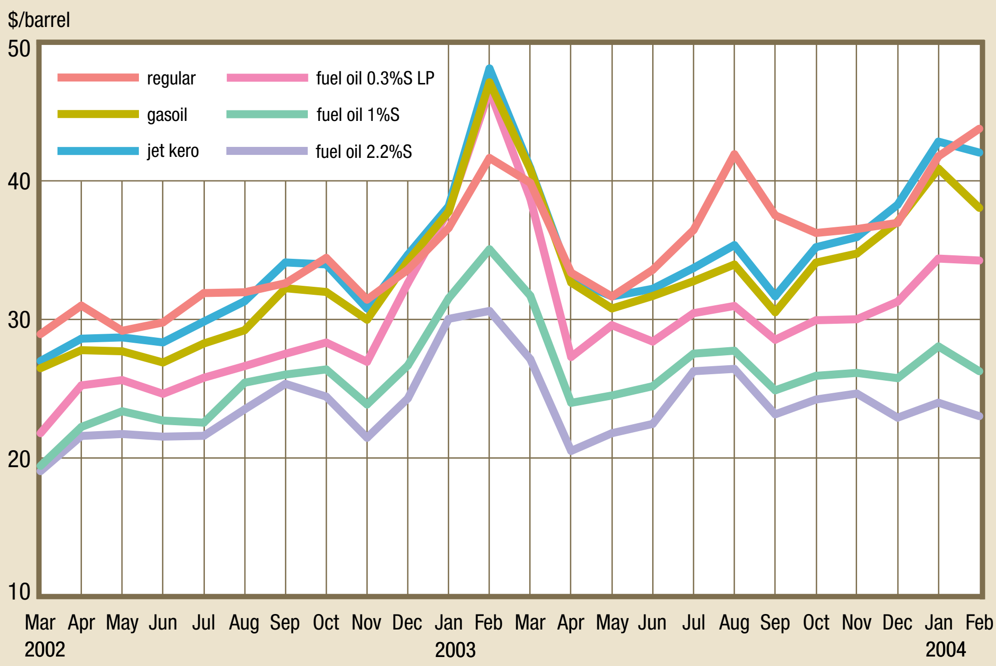


Table 6: Caribbean market — spot cargoes, fob ($/b)

		naphtha	gasoil	jet kero	fuel oil 2%S	fuel oil 2.8%S
2002	February	21.30	21.79	23.41	13.62	13.54
	March	25.86	25.77	26.72	18.25	18.09
	April	28.55	27.31	28.33	20.79	20.59
	May	27.14	27.28	28.31	20.95	20.65
	June	26.85	26.49	27.66	20.79	20.36
	July	27.98	28.11	29.43	20.88	20.67
	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

Source: Platts. Prices are average of available days.

Graph 6: Caribbean market — spot cargoes, fob

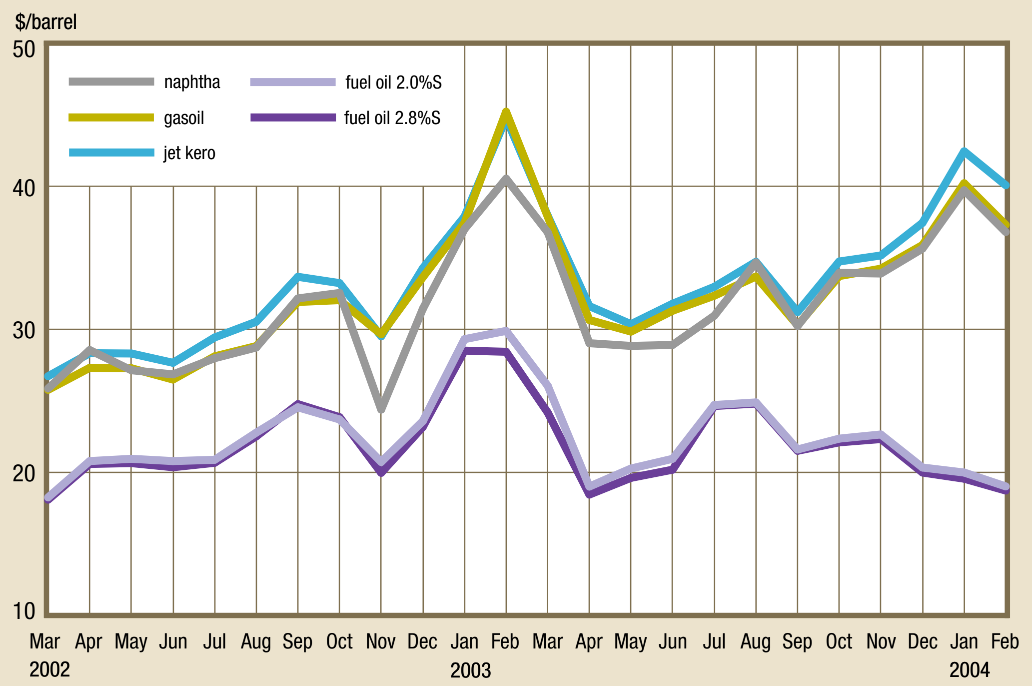


Table 7: Singapore market — spot cargoes, fob ($/b)

		naphtha	gasoline premium unleaded 95	gasoline premium unleaded 92	gasoil	jet kero	fuel oil 180 Cst	fuel oil 380 Cst
2002	February	21.04	24.16	22.95	22.54	22.54	17.04	17.37
	March	24.92	27.93	26.43	25.71	25.16	19.37	19.73
	April	26.11	30.11	28.80	28.64	27.27	21.45	21.75
	May	24.90	29.73	28.81	28.76	27.85	22.60	22.98
	June	23.84	28.54	27.45	27.82	26.49	21.66	21.99
	July	24.64	28.19	26.95	28.19	27.56	22.47	22.88
	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

Source: Platts. Prices are average of available days.

Graph 7: Singapore market — spot cargoes, fob

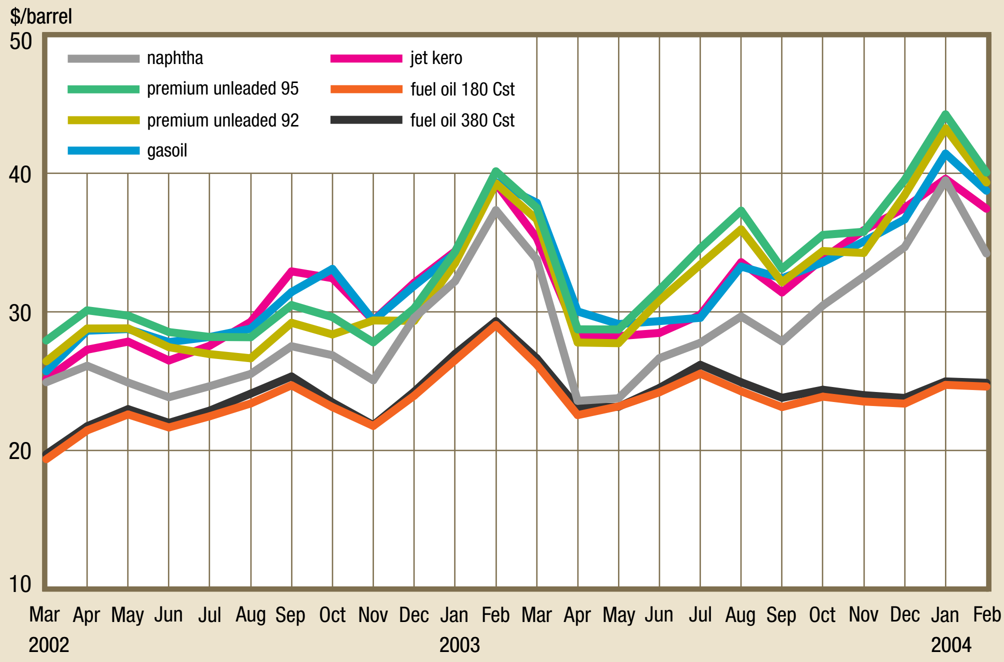
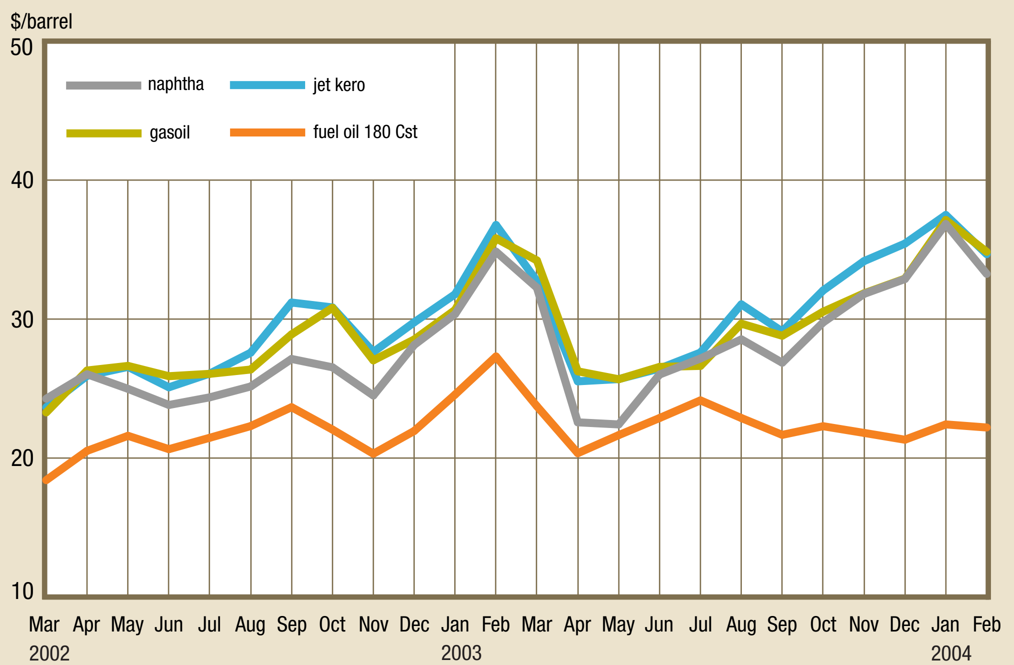


Table 8: Middle East Gulf market — spot cargoes, fob ($/b)

		naphtha	gasoil	jet kero	fuel oil 180 Cst
2002	February	20.11	20.21	21.12	16.00
	March	24.27	23.28	23.65	18.41
	April	26.03	26.30	25.92	20.52
	May	24.98	26.63	26.56	21.60
	June	23.82	25.89	25.09	20.64
	July	24.37	26.06	26.08	21.46
	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

Source: Platts. Prices are average of available days.

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



News from the OPEC Fund

April 2004

OPEC Fund and Djibouti 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 Djibouti. Drawn up within the framework of the Fund's Private Sector Facility, the agreement was initialed by HE Yacin Elmi Bouh, Minister of Economy, Finance and Privatization of the Republic of Djibouti, and by Suleiman J Al-Herbish, Director General of the OPEC Fund.

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. The objectives of the Facility 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 signature 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.

After a series of political crises over the past two decades, Djibouti has faced a number of economic challenges. With a population of approximately 650,000, in 2002 the country's gross national income (GNI) reached $589.8 million, and GNI per capita amounted to $900. In 1996, the government began an ambitious national poverty reduction programme aimed at accelerating the implementation of structural reforms to promote more private sector activity, while maintaining a stable macroeconomic environment and improving social services such as education, health and social protection. Other reforms have been designed to restore competitiveness, create new employment opportunities and develop infrastructure, all of which will help create an enabling environment for more investment in the private sector.

Investment encouragement and protection agreement signed by OPEC Fund, Jordan

An agreement for the encouragement and protection of investment has been signed between the OPEC Fund for International Development and the Hashemite Kingdom of Jordan. Drawn up within the framework of the Fund's Private Sector Facility, the agreement was initialed by Hazim El-Naser, Acting Minister of Planning and International Cooperation of the Hashemite Kingdom of Jordan, and by Suleiman J Al-Herbish, Director General of the OPEC Fund.

Jordan's achievements in human development over the past three decades have been impressive, with increased life expectancy, more than doubling of adult literacy rates and decreasing child mortality rates by nearly one-half. With a population of approximately 5.2 million in 2002, the country's gross national income (GNI) reached $9.1 billion, and GNI per capita amounted to $1,760 that same year. The government's primary objective is to further raise living standards through accelerated, private sector-led growth. Key elements of Jordan's medium-term economic strategy include deepening of structural reforms; boosting public sector investment in human capital and infrastructure; and continued implementation of sound macroeconomic policies, all which will help create an enabling environment for private sector investment.

OPEC Fund for International Development, Parkring 8, PO Box 995, 1011 Vienna, Austria. Tel: +43 1 515640; fax: +43 1 513 9238; cable: opecfund; e-mail: info@opecfund.org; Web site: www. opecfund.org.

Algeria's President Bouteflika sworn in for second term

by Lizette Kilian

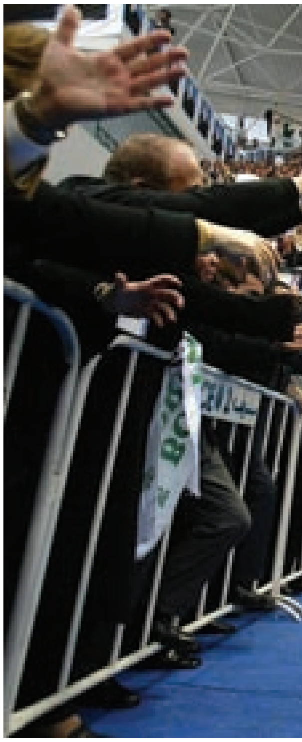


Photo: Reuters/Zohra Bensemra

Algeria — Algeria's President, Abdelaziz Bouteflika, was re-elected for a second five-year term, winning 85.0 per cent of the vote in a landslide election victory on April 8, 2004.

His main opponent, the former Prime Minister Ali Benflis, was a distant second with 6.4 per cent of the vote. Other candidates also drew little support: Abdallah Djaballah won around five per cent of the vote. The other contenders, who each gained less than two per cent, included Said Sadi from the Berber minority region and Louiza Hanoune, the first female presidential contender.

In his speech at the inauguration ceremony, Bouteflika vowed to continue fighting for national reconciliation, modernization and sustained economic development. "It is vital that our country disengage progressively from dependence on hydrocarbons and start to prepare the 'after-oil' economy in the context of accelerated globalization," he said.

The President noted that Algeria must envisage partnerships and privatization of state-owned companies. "But in no case is it a question of selling off the national patrimony or divesting ... the nation's strategic interests in any manner," he said, adding that terrorism has gone international and there must be no let up in the fight against it.

Bouteflika served as the country's Foreign Minister for 16 years until 1979. He left Algeria to return in 1987. In 1999, he stood for President with the backing of the army. Bouteflika is the eighth president of Algeria since the country gained independence from France in 1962, but one of only two without a military background.

At the time, many viewed him as the leader who could resolve the country's lingering civil conflict, which had erupted after the army intervened to prevent an Islamist victory in the 1992 general election.

Just five months after he took office, he won overwhelming endorsement for a reconciliation plan that granted amnesty to thousands of Islamists. Western countries welcomed the amnesty and he is credited with transforming Algeria's image abroad. As a result, he is widely credited with having restored peace to the country.

Some 120 international observers from the European Parliament, the Organization for Security and Co-operation in Europe, the Arab League, the United Nations and the African Union were present, another first for Algeria.

Following the elections, the newly re-appointed Prime Minister, Ahmed Ouyahia, assigned with the task of forming a new cabinet, announced that HE Dr Chakib Khelil has been reappointed as Minister of Energy and Mines.

The new cabinet remains largely unchanged, but is expected to push through free market economic reforms and work to achieve further privatization the gas sectors.

Parliamentary system in Algeria

The President is elected for a five year term by the people. The government is formed by the RND, MSP, FLN, MRI, RCD and ANR (Alliance Nationale Républicaine, National Republican Alliance).

President	*April 8, 2004 (58.1 %)*	%
Abdelaziz Bouteflika	Rassemblement national pour la démocratie	85.0
Ali Benflis	Jabha al Tahrir al Watani/Front pour la Libération Nationale	6.4
Abdallah Djaballah	El-Islah	5.0
Said Sadi	Rassemblement pour la Culture et la Démocratie	1.9
Louiza Hanoune	Hizb al-Ummal/Parti des Travail-leurs	1.0
Fawzi Rebaine	Ahd 54	0.6

Source: Wikipedia.

Parliament

Parliament has two chambers. The al-Majlis al-Sha'abi al-Watani/Assemblé Populaire Nationale (National People's Assembly) has 380 members, elected for a five year term in multi-seat constitituencies by proportional representation. Eight seats in the national assembly are reserved for Algerians abroad. The al-Majlis al-Umma/Conseil de la Nation (National Council) has 144 members, 96 members elected by communal councils and 48 members appointed by the President.

Al-Majlis al-Sha'abi al-Watani *May 30, 2002 (46.2 %)*		%	380
Front pour la Libération Nationale/Jabha al Tahrir al Watani (Front for National Liberation, socialist)	FLN	34.3	199
el-Islah/Movement for National Reform	Islah	9.5	43
Rassemblement national pour la démocratie (National Rally for Democracy, authoritarian)	RND	8.2	47
Mouvement de la société pour la paix/ Harakat Moudjtamaa As-Silm (Movement of the Society for Peace, islamist)	MSP	7.0	38
Parti du Travail (Workers' Party, socialist)	PT	3.3	21
Algerian National Front	FNA	1.6	8
Mouvement de la Renaissance Islamique/ Harakat al-Nahda al-Islamiyya (Islamic Renaissance Movement, moderate islamist)	MRI	0.6	1
Party of Algerian Renewal	PRA	0.3	1
Movement of National Understanding		0.2	1
Non-partisans		4.9	30

Source: percentages: IPU Parline

Indonesia kicks off first phase of national elections

Indonesia held its ninth parliamentary election on April 5 to elect representatives at local, regional and national levels.

Twenty-four parties took part in the election, and approximately 147 million registered voters cast their ballot at over 590,000 polling stations, to elect 550 members of the People's Consultative Assembly, consisting of the House of Representatives, the Regional Representative Council, the Provincial and Regency/Municipality Legislature.

Indonesia's proportional representation system is built around 69 electoral districts for the national parliament. The number of districts in the 32 provinces ranges from one to 10, depending on the size of the population; each district gets from 3 to 8 seats.

The table below shows the provisional vote count from the General Elections Commission (KPU) as of April 19.

It should be noted that the percentage of votes gained by the parties does not indicate that the parties will get seats in the House of Representatives (DPR).

The system of distribution of seats favours bigger parties over smaller parties and those who fare well in the outer islands than those who have done well in Java. In view of the multi-party system in Indonesia, and with no party getting majority support, it may become necessary to form coalition parties.

Formed in 1964, the Golkar party has dominated Indonesia's political landscape since the rule of former President Suharto. From the provisional election results, the Golkar party looks set to be the biggest party in parliament. Meanwhile, the former Defence Minister and Head of the armed forces, General Wiranto, has been nominated as the Golkar party's presidential candidate.

Photo: Reuters/Enny Nuraheni

Right: Monitor shows Indonesina election results in vote counting room in Jakarta.

	Party	Votes	Per cent	Seats
1.	The Golkar Party	19,287,067	21.11	128
2.	The Indonesian Democratic Party of Struggle (PDI-P)	17,814,035	19.49	109
3.	The United Development Party (PPP)	7,615,482	8.33	58
4.	The Democratic Party (PD)	6,879,372	7.53	57
5.	The National Awakening Party (PKB)	10,886,977	11.91	52
6.	The National Mandate Party (PAN)	5,918,636	6.48	52
7.	The Prosperous Justice Party (PKS)	6,549,961	7.17	45
8.	The Crescent Star Party (PBB)	2,345,426	2.57	11
9.	The Reform Star Party (PBR)	2,099,182	2.30	13
10.	The Concern for the Nation Functional Party (PKPB)	1,945,837	2.13	12

Source: General Elections Commission (KPU).

Another front-runner is former Energy and Mines Minister and Co-ordinating Minister for Security and Political Affairs, Susilo Bambang Yudhyono. His choice of Jusuf Kalla as running mate may consolidate his position. Kalla is a businessman from the island of Sulawesi. As such, he should broaden support beyond Bambang's natural constituency.

Thus far, neither President Megawati *(pictured left)* nor General Wiranto *(pictured right)* has picked their vice-presidential running mates. This is Indonesia's third free election for the lower house of parliament in 50 years, and the first for the new upper house.

The results of the first election phase will also have a major impact on the presidential poll, which is to be held on July 5. According to Article 1001 (transitional provision) of the Election Law No 23/ 2003, for the 2004 election only, a political party which receives three per cent of the 550 seats in Parliament, or five per cent of the national votes, is eligible to nominate a presidential candidate.

The leading presidential candidates are: Akbar Tandjung of the Golkar Party; current President Megawati Sukarnoputri of the PDI-P; Susilo Bambang Yudhyono of the PD; and Amien Rais of the PAN.

This is Indonesia's first direct presidential election. In the past voters elected MPs who in turn elected the president. With a turn-out of 124,449,039 (83 per cent) voters, the Indonesian elections are among the largest ever organized anywhere in the world.

The elections are organized by the KPU, which also prepared and distributed more than 650 million ballot papers. The KPU is an independent commission managed by prominent academics, intellectuals and NGO activists.

Photo: Reuters/Beawiharta

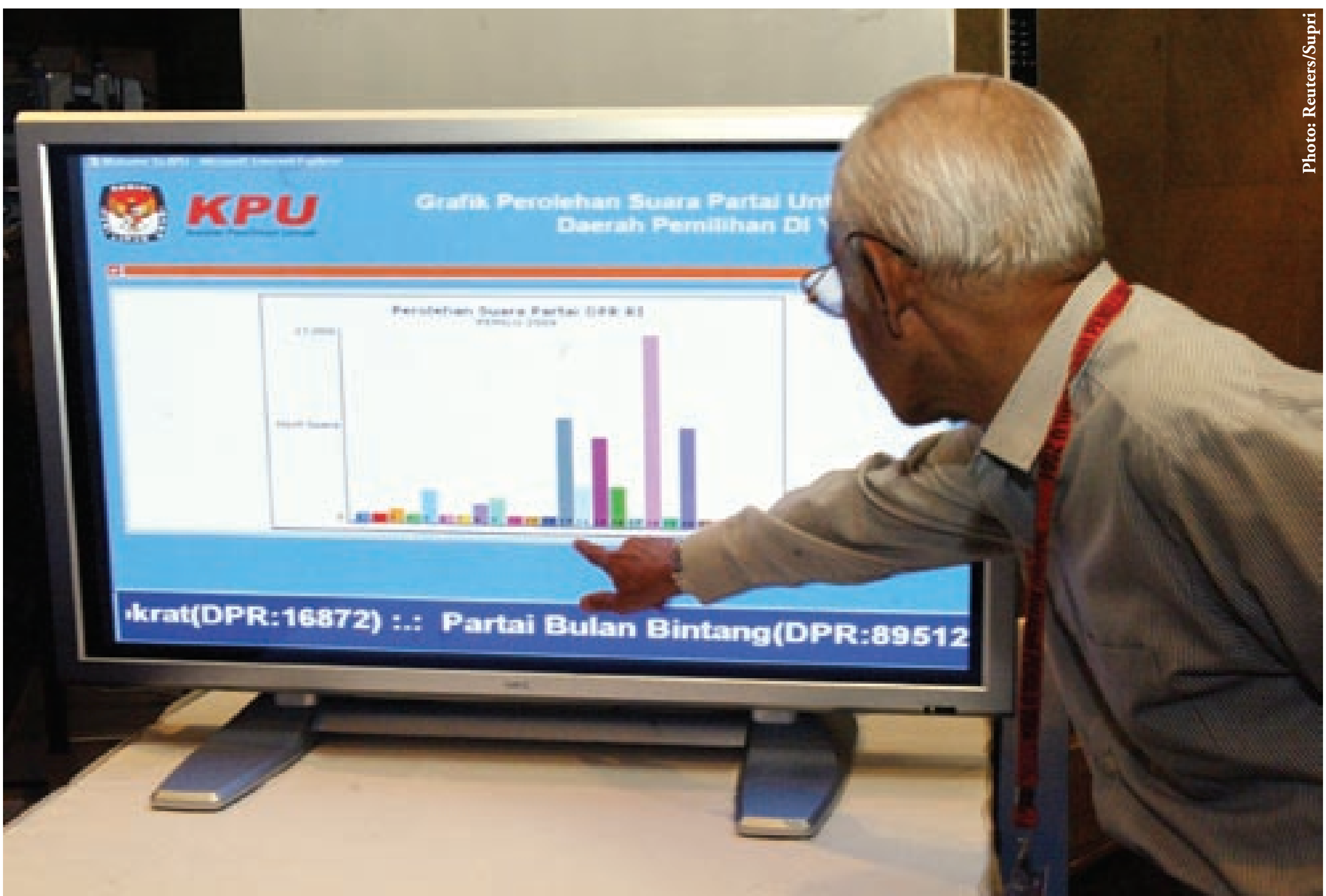


Photo: Reuters/Supri

Strength in oil sector boosted UAE economy in 2003

Abu Dhabi — The United Arab Emirates (UAE) oil sector continued its growth for the third year running to reach record levels in 2003, as a result of the improvement in global oil prices, coupled with an increase in production, according to an Abu Dhabi Islamic Bank report.

The UAE Minister of Petroleum and Mineral Resources and Chairman of the Board of the Abu Dhabi Islamic Bank, Obaid bin Saif Al-Nasseri, said at the annual general meeting that oil prices averaged $28.1/barrel in 2003, compared to $24.4/b in 2002 and $23.1/b in 2001.

"This had a positive effect on the recovery of economic conditions in the United Arab Emirates, where the average GDP growth rate (according to preliminary estimates) reached 10 per cent (in current prices) and the growth rate of the non-oil sector reached 6.4 per cent," he stated.

"Moreover, the UAE obtained a rating of A+ from the international rating agency Moody's, to rank first in the Gulf as to credit rating. It is worth mentioning that a rating of A+ is usually given to countries that enjoy strong credit worthiness and a low investment risk environment," he added.

The Minister also pointed out that the past three years have presented a series of security and political challenges, and that the global economic environment was shrouded in uncertainty.

However, although 2003 was full of challenges and causes of tension, most world economies were able to grow. Al-Nasseri said that the UAE banking sector has achieved positive results and maintained its strength and resilience in the face of these challenges.

This allowed the banking sector to become more profitable, which will ensure the ability of the country's banking system to cope with the new developments and challenges and to meet the Basel II requirements for risk management, which will be implemented in 2007 by banks world-wide, according to the report.

Venezuela's PDVSA to improve refining capacity

Caracas — State oil corporation Petroleos de Venezuela (PDVSA) is carrying out a plan aimed at improving the capacity and quality of its refineries, both inside and outside Venezuela, according PDVSA President Dr Alí Rodríguez Araque.

Speaking on President Hugo Chávez's weekly radio programme *Hello President,* Rodríguez Araque said that the move will bring about greater efficiency to generate income for the country in order to contribute towards the state's efforts to deal with the problem of poverty.

Commenting on the recently-held meeting organized by PDVSA in Puerto La Cruz, in eastern Venezuela, Rodríguez Araque explained that the meeting "was aimed at conducting a detailed examination of the situation of the international market, changes that have emerged and what repercussions this has had on our refining system, both inside and outside Venezuela, which will allow us to adjust our 23 refineries to the said changes, especially regarding environmental restrictions, thereby revaluing the importance of what it means for our endogenous development."

He also noted that there are great opportunities in the United States and the Caribbean for Venezuelan hydrocarbons, as well as great interest in China and India.

"The horizon that presents itself for the Venezuelan oil industry is today more promising than ever," he added.

First Eurogulf energy workshop hosted by EIFS in Riyadh

Riyadh — The International Energy Forum Secretariat (IEFS), which was established in December 2003 upon the initiative of Saudi Arabia's Crown Prince Abdullah, hosted the first Eurogulf workshop in Riyadh on April 5–6.

Eurogulf is a research project on GCC-EU energy relations, supported by the European Commission in the framework of the Synergy Programme and implemented by a consortium of Arab and European research institutes.

The workshop was convened in the presence of Deputy Minister of Petroleum and Mineral Resources, Prince Abdul Aziz ibn Salman, who in his welcoming address expressed his support for the EU-GCC dialogue on energy stability and sustainability, according to a press release issued by the IEFS.

In his opening remarks, the Secretary General of the IEFS, Ambassador Arne Walther, said that "our mission is to support the dialogue, and this workshop is one such element to promote a broader energy vision".

OPEC Governor for Saudi Arabia and Chairman of the GCC Energy Team, Dr Majid A Al-Moneef, and the Head of the EU Delegation to the Kingdom, Ambassador Bernard Savage, also expressed their wishes for the success of the workshop.

Co-Director of the Mediterranean Programme at the Robert Schuman Centre for Advanced Studies in Florence, Italy, Professor Giacomo Luciani, chaired the workshop discussions.

Issues on the agenda included the oil market, strategic stocks, natural gas and the role of GCC supplies to the European market, as well as renewable energy resources, rational use of energy and institutional aspects of co-operation such as the relationship of GCC members to the Energy Charter Treaty in the light of WTO membership, according to the IEFS press release.

The Secretariat for the IEF is expected to provide additional opportunities to facilitate and strengthen the process of the dialogue and cooperation, which already exist between oil and gas producing and consuming countries.

In addition, the Secretariat will help to ensure the continuity of the dialogue between the biennial Ministerial Forums, and broaden the focus to include both international and regional energy issues. It will also provide a platform to study and exchange views on the interrelationship between energy, technology, the environment and economic growth.

Following the IEF's call for greater co-operation and more timely access to energy data, the Joint Oil Data Initiative (JODI) was launched in April 2001, as a result of which APEC, Eurostat, IEA, OLADE, OPEC, the UN Statistics Division and their member countries are engaged in efforts to improve the quality, timeliness, coverage and scope of data.

The 9th IEF Ministerial conference will be hosted by the Netherlands and co-hosted by Iran and Norway from May 22–24 this year. The main theme of the forthcoming meeting will be *Investing in energy: choices for the future*. Ministers from more than 70 countries as well as the heads of leading international energy organizations have been invited.

UN timetable for solving remaining Cameroon-Nigeria dispute

New York — The Cameroon-Nigeria Mixed Commission, set up by the United Nations to peacefully resolve the two countries' border dispute, has set a timetable for the withdrawal of troops and the transfer of authority in the remaining two contested areas, according to a UN communiqué.

The communiqué, issued after the Commission's ninth meeting in Yaounde, Cameroon, stated that the withdrawal and transfer in the land boundary will take place between June 15 and July 15.

The withdrawal in the Bakassi Peninsula will take place between July 15 and September 15. Cameroon and Nigeria have already agreed to withdraw forces and transfer authority in the Lake Chad area.

For many years the two countries have disputed sovereignty over their land boundary, stretching from Lake Chad to the sea, their maritime boundary, and the Bakassi Peninsula in the Gulf of Guinea.

The Commission also thanked the United Kingdom for agreeing to contribute one million pounds to the UN Trust Fund for Demarcation.

UN Secretary-General Kofi Annan set up the Commission in late 2002 at the request of Presidents Olusegun Obasanjo of Nigeria and Paul Biya of Cameroon. It aims to help peacefully implement an International Court of Justice ruling on the border dispute.

Iran's seventh olefin project makes good progress

Tehran — Iran's seventh olefin project, handled by the Maroun Petrochemical Company, has achieved progress of more than 86 per cent, the National Iranian Industries Company announced.

The project is being constructed on 93 hectares of land in the Bandar Imam Special Petrochemical Zone. It is aimed at developing downstream industries, creating high value-added, and developing the petrochemical sector.

The project has thus far spent 7,908 billion rials and is expected to yield 5,648bn rials annually. It will use 25 million cubic metres of oil-associated natural gas, 5,000 tonnes of butane 1, and 299,000 t of oxygen as feed, and is expected to produce 342,000 t of ethylene, propylene, heavy polyethylene, polypropylene, benzene pyrolysis, and ethylene glycol. The products will be used as feed for downstream units for manufacturing various kinds of plastics, paints, antifreeze, glues and textiles.

Separately, it was announced that the development of Iran's Doroud oil field will be completed in September. The project aims to increase total recovery from the field to 2.5bn billion barrels, from 1.5bn.

Production from the field has been put at around 13,550 b/d and based on the latest figures, the field yielded over 392,000 b of crude oil in February.

Meanwhile, three new crude oil storage tanks have become operational at the Isfahan refinery, increasing its total crude storage capacity by about 1m b.

The Managing Director of the Isfahan refinery, Ayatollah Joshan, said the new tanks each have a capacity of 300,000 b.

"Three more tanks with respective capacities of 500,000 b are to be constructed at the refinery too," noted Joshan, adding that the refinery could store about 1.8m b of crude.

Qatar shipping firm signs $223 million financing deal

Doha — The Qatar Shipping Company (Q-Ship) has signed a $223 million financing deal with the Korean Export Import Bank (Kexim), and a consortium of commercial banks led by Credit Lyonnais, to part-finance eight vessels being built in South Korea. This is the first transaction for Kexim and Credit Lyonnais (CL) with Q-Ship.

The eight Q-Ship vessels include six Aframax size crude oil tankers for delivery between October 2005 and June 2006. These are now being built at the Hyundai Heavy Industries yard in South Korea.

In addition, two liquefied petroleum gas/ammonia carriers being built at the STX Shipbuilding Co Ltd shipyard, again in South Korea, are expected to be delivered between May and October this year.

Q-Ship Chairman and Managing Director, Salem Butti Al-Naimi, said the financing has been structured in a way that 70 per cent of the funding comes from Kexim and the balance from the consortium led by CL.

The consortium comprises the Qatar National Bank, Commercialbank, Gulf International Bank, Arab Bank, and Emirates International Bank.

"Qatari and regional banks were given priority in joining the syndication as they have already extended support in Q-Ship's expansion and growth," said Al-Naimi.

Q-Ship Chief Executive, Nasser Al-Romaihi, added: "We have geared up to meet the demands of Qatar's rapidly developing LNG and GTL industries.

"The Qatari and regional banks have been extremely supportive of our expansion and growth," he noted.

Forthcoming events

Aberdeen, UK, **May 24–25, 2004**, *Subsea reliability and availability.* Details: IQPC Ltd, Anchor House, 15–19 Britten Street, London SW3 3QL, UK. Tel: +44 (0)20 7368 9300; fax: +44 (0)20 7368 9301; e-mail: enquire@iqpc.co.uk; Web site: www.oilandgasiq.com/2223a.

Houston, USA, **May 24–26, 2004**, *West Africa oil and gas.* Details: IBC Energy Conferences, Informa House, 30–32 Mortimer Street, London W1W 7RE, UK. Web site: www.ibcenergy.com.

Kuala Lumpur, Malaysia, **May 25–26, 2004**, *Contract risk management for production sharing agreements.* Details: IQPC, 1 Shenton Way #13–07, Singapore 068803. Tel: +65 6722 9388; fax: +65 6224 2515; e-mail: enquire@iqpc.com.sg; Web site: www.iqpc.com.sg.

Kuala Lumpur, Malaysia, **May 26–27, 2004**, *Commercial strategies for LNG shipping and transportation.* Details: IQPC, 1 Shenton Way #13–07, Singapore 068803. Tel: +65 6722 9388; gax: +65 6224 2515; e-mail: enquire@iqpc.com.sg.

Kuala Lumpur, Malaysia, **May 26–27, 2004**, *Pipeline integrity management for oil and gas.* Details: IQPC, 1 Shenton Way #13–07, Singapore 068803.Tel: +65 6722 9388; fax: +65 6224 2515; e-mail: enquire@iqpc.com.sg; Web site: www.iqpc.com.sg.

Houston, USA, **May 26–27, 2004**, *Produced water management US 2004.* Details: IQPC Ltd, Anchor House, 15–19 Britten Street, London SW3 3QL, UK. E-mail: info@iqpc.com; Web site: www.iqpc.co.uk.

Houston, USA, **May 26–28, 2004**, *3rd Annual LNG North America.* Details: CWC Associates Limited, 3 Tyers Gate, London SE1 3HX, UK. Tel: +44 (0)20 7089 4200; fax: +44 (0)20 7089 4201, e-mail: bookings@thecwcgroup.com; Web site: www.thecwcgroup.com.

Calgary, Canada, **May 27–28, 2004**, *Introduction to the upstream petroleum industry.* Details: Canadian Energy Research Institute (CERI), #150, 3512-33 Street NW, Calgary, Alberta T2L 2A6, Canada. Tel: +1 403 220 2357; fax: +1 403 289 2344; e-mail: sjohnsgaard@ceri.ca; Web site: www.ceri.ca.

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March

OPEC Meetings

The *112th Meeting of the Board of Governors* was held at the OPEC Secretariat in Vienna, Austria, March 2–4, 2004.

The *101st Meeting of the Economic Commission Board* was held at the OPEC Secretariat from March 23–26, 2004.

The *48th Meeting of the Meeting of the Ministerial Monitoring Sub-Committee* was held at the OPEC Secretariat, Vienna, Austria, March 31, 2004.

The *130th Meeting of the OPEC Conference* was held in Vienna, Austria, March 31, 2004.

Secretariat missions

Saudi Arabia's North Rub Al-Khali gas signing ceremony was organized by the Saudi Arabian Ministry of Petroleum & Mineral Resources and took place in Riyadh, Saudi Arabia, March 7, 2004.

The *5th European Fuels Conference* was organized by the World Refining Association and held in Paris, France, March 15–17, 2004.

A *Joint Oil Data Initiative Meeting,* organized by the IEA, Eurostat, APEC, OLADE, OPEC and the UN Statistics Division was held in Amsterdam, Netherlands, March 17, 2004.

Meetings of the *Executive Board and Informal Support Group of the International Energy Forum* were organized by the Ministry of Economic Affairs, Netherlands and held in Amsterdam, Netherlands, March 18–19, 2004.

A *Global Gas Flaring Reduction Partnership (GGFRP) Steering Committee Meeting* was organized by GGFRP and held in Paris, France, March 23–24, 2004.

An *Offshore Northern Seas (ONS) international press trip* was arranged by the ONS Foundation, and took place in Norway, March 31–April 2, 2004.

Forthcoming OPEC Meetings

The *49th Meeting of the Ministerial Monitoring Sub-Committee* will take place in Beirut, Lebanon, June 3, 2004.

The *131st (Extraordinary) Meeting of the Conference* will take place in Beirut, Lebanon, June 3, 2004.

The *4th Meeting of Deputy Ministers of Petroleum/Energy on Long-Term Strategy* will be held in Beirut, Lebanon, June 4, 2004.

A *WPC and OPEC Workshop* will be held at the OPEC Secretariat in Vienna, Austria, June 8–9, 2004.

The *132nd Meeting of the Conference* will take place in Vienna, Austria, September 15, 2004.

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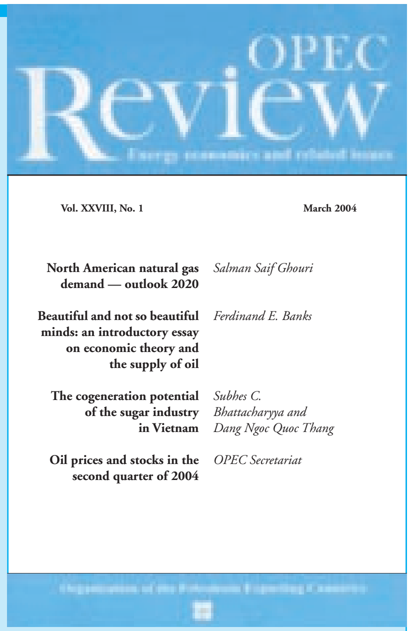

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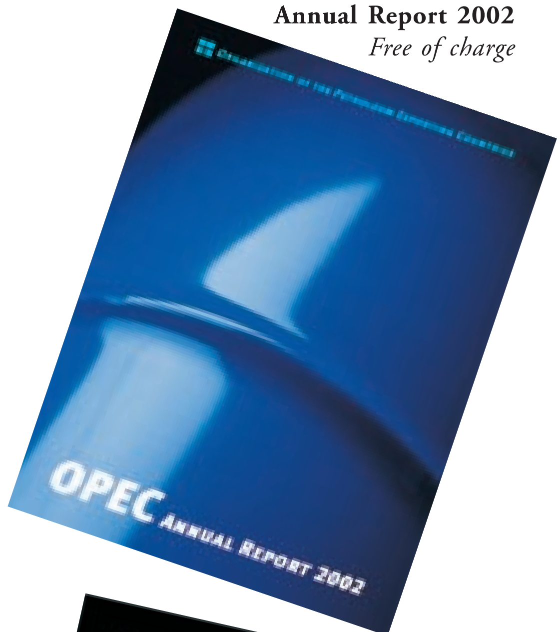

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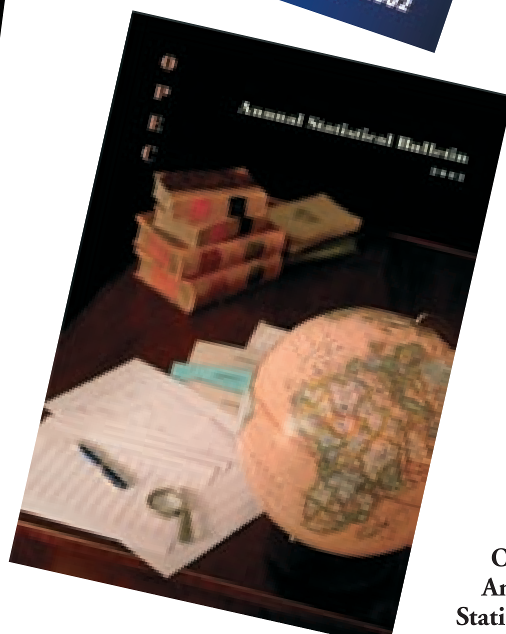

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