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Membership and aims

OPEC is a permanent, intergovernmental Organization, established in Baghdad, September 10–14, 1960, by IR Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. Its objective is to coordinate 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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Visit the OPEC Web site for the latest news and information about the Organization and its Member Countries. The URL is

http://www.opec.org

This month's cover ...

shows an oil facility offshore the SP Libyan AJ, which has just been voted the world's top oil and gas exploration hotspot by a UK consultancy (see Newsline beginning on page 15).
Photo courtesy Libyan NOC.

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NOTICEBOARD

Forthcoming events

Paris, France, **May 21–22, 2002**, international conference on *Sanctioned oil states 2002: strategies, conflicts, legalities, investments & issues, sanctioned, marginalized & impacted states.* Details: Global Pacific & Partners. Tel: +27 11 778 4360; fax: +27 11 880 3391; e-mail: info@glopac.com; Web site: www.petro21.com/events.

London, **May 21–24, 2002**, course on *Fundamentals of petroleum refining processes.* Details: ENSPM Formation Industrie, 232 avenue Napoleon Bonaparte, 92852 Rueil-Malmasion Cedex, France. Tel: +33 1 47 52 61 63; fax: +33 1 47 52 70 41; e-mail: michael.howard@enspmfi.com; Web site: www.ifp.fr/enspmfi.

London, UK, **May 23–24, 2002**, *Angola oil & gas summit.* Details: The Bookings Department, IBC Conferences, Informa House, 30–32 Mortimer Street, London W1W 7RE, UK. Tel: +44 (0)1932 893851; fax: +44 (0)1932 893893; e-mail: cust.serv@informa.com; Web site: www.ibcenergy.com/angola.

Singapore, **May 23–24, 2002**, and Doha, Qatar, **May 27–28, 2002**, *International gas sales contracts seminar.* Details: The Conference Connection, PO Box 1736, Singapore 911758. Tel: -65 6226 5280; fax: -65 6226 4117; e-mail: info@cconnection.org.

Helsinki, Finland, **May 27–29, 2002**, 9th annual *Central European gas conference.* Details: www.alphatania.com; www.overview-gas.com.

Darussalam, Brunei, **May 27–30, 2002**, *Gasex 2002: powering sustainable growth.* Details: RAI Group, 226/36-37 Bond Street, Riviera Tower 1, Muang Thong Thani, Bang-pood, Pakkred Nonthaburi, 11120 Thailand. Tel: +662 960 0141; fax: +662 960 0140; e-mail: gasex@bkkrai.com; Web site: www.gasex2002.com.

Houston, Tx, USA, **May 30–31, 2002**, 6th annual *Worldwide independents forum 2002.* Details: Global Pacific & Partners. Tel: +27 11 778 4360; fax: +27 11 880 3391; e-mail: info @glopac.com; Web site: www.petro21.com/events.

Houston, Tx, USA, **June 3–4, 2002**, *The Caspian petroleum conference.* Details: Strategic Research Institute. Tel: +1 888 666 8514 or +1 646 336 7030; e-mail: info@srinstitute.com; Web site: www.srinstitute.com/cr225.

Montreux, Switzerland, **June 3–5, 2002**, Montreux Energy Roundtable XIII, *Investment in a world of uncertainty & volatility.* Details: Richard McKenn, President, Montreux Energy, BIN SA, 11 Route de Drize, PO Box 1811, 1227 Geneva, Switzerland. Tel: +41 22 827 2338; fax: +41 22 827 2340; e-mail: richard@wat.ch; Web site: www.montreuxenergy.com.

Houston, Tx, training courses: **June 3–7, 2002**, *Horizontal & directional drilling;* **June 10–14, 2002**, *Drilling practices I;* **June 17–21, 2002**, *Drilling practices II.* Details: GSM Training Services, Inc, PO Box 50790, Amarillo, Texas 79159-0790, USA. Tel: +1 806 358 6894; fax: +1 806 358 6800; e-mail: gsmrdg@arn.net; Web site: www.gsm-inc.com.

Saudi Arabia
May 21–22, 2002

The Eastern Province's Chamber of Commerce and Industry's

50th Anniversary Oil and Gas Conference

Details: ITE Group Plc
105 Salusbury Rd
London, NW6 6RG, UK
Tel: +44 (0)207 596 5092
Fax: +44 (0)207 596 5111
E-mail: tariq.mohammed@ite-exhibitions.com
www.ite-exhibitions.com

Baku, Azerbaijan, **June 4–7, 2002**, *Caspian oil & gas 2002 — new focus on opportunity for contracting and supply companies.* Details: Spearhead Exhibitions, Coombe Hill House, Beverley Way, London SW20 0AR, UK. Tel: +44 (0)20 8949 9222; fax: +44 (0)20 8949 9868; e-mail: caspian@spearhead.co.uk; www.caspianoilgas.co.uk.

Monte Carlo, Monaco, **June 6–7, 2002**, *2002 European oil refining conference & exhibition.* Details: DRI WEFA, Wimbledon Bridge House, 5th Floor, 1 Hartfield Road, London SW19 3RU, UK. Tel: +44 (0)20 8544 7904; fax: +44 (0)20 8544 7809; e-mail: karen.yarranton@dri-wefa.com; Web site: www.dri-wefa.com.

Kuala Lumpur, Malaysia, **June 9–11, 2002**, *Asia oil & gas conference.* Details: The Conference Connection, PO Box 1736, Singapore 911758. Tel: -65 6226 5280; fax: -65 6226 4117; e-mail: info@cconnection.org; Web site: www.cconnection.org.

London, UK, **June 17–19, 2002**, *Production separation systems.* Details: The Bookings Department, IBC Conferences, Informa House, 57–61 Mortimer Street, London W1N 8JX, UK. Tel: +44 (0)20 7637 4383; e-mail: cust.serv@informa.com; Web site: www.ibcenergy.com.

London, UK, **June 19–21, 2002**, *US SEC and GASB accounting and reporting requirements for oil and gas enterprises.* Details: The Institute of Petroleum, 61, New Cavendish Street, London, W1G 7AR, UK. Tel: +44 (0)20 7467 7100; fax: +44 (0)20 7255 1472; e-mail: nwilkinson@petroleum.co.uk; www.petroleum.co.uk.

London, UK, **June 19–21, 2002**, *Introduction to oil industry operations;* **June 24–26, 2002**, *Introduction to petroleum economics.* Details: The Institute of Petroleum, 61, New Cavendish Street, London, W1G 7AR, UK. Tel: +44 (0)20 7467 7100; fax: +44 (0)20 7255 1472; e-mail: nwilkinson@petroleum.co.uk; www.petroleum.co.uk.

London, UK, **June 24–26, 2002**, *Accounting for international petroleum contracts: production sharing and risk service contracts and joint operating agreements.* Details: The Institute of Petroleum, 61, New Cavendish Street, London, W1G 7AR, UK. Tel: +44 (0)20 7467 7100; fax: +44 (0)20 7255 1472; e-mail: nwilkinson@petroleum.co.uk; www.petroleum.co.uk.

London, UK
May 27–28, 2002

Iran Energy Forum

Details: CWC Associates
3 Tyers Gate
London SE1 3HX, UK
Tel: +44 (0)20 7089 4200
Fax: +44 (0)20 7089 4201
E-mail: bookings@thecwcgroup.com
www.thecwcgroup.com

Moscow, Russia, **June 25–26, 2002**, MIOGE 2002, *11th Moscow international oil & gas conference.* Details: ITE Oil & Gas. Tel: +44 (0)207 596 5233; fax: +44 (0)207 596 5106; e-mail: oilgas@ite-exhibitions.com; Web site: www.ite-exhibitions.com/og.

London, UK, **June 26–27, 2002**, *Financing oil and gas projects in Africa.* Details: CWC Associates, 3 Tyers Gate, London SE1 3HX, UK. Tel: +44 (0)20 7089 4200; fax: +44 (0)20 7089 4201; e-mail: bookings@thecwcgroup.com; Web site: www.thecwcgroup.com.

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

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Keeping the oil flowing

Why OPEC does not — and in fact never has — supported the use of an oil embargo to achieve political ends

The 21st century has not had an easy start. The memory of the September 11 attacks on the United States is still fresh in many people's minds, and the ongoing tension in the Middle East is giving governments in numerous countries grave cause for concern. Meanwhile, various other conflicts around the world rumble on unchecked and, it seems, almost unnoticed. Technology may be advancing at lightning pace, but human nature, if the evidence is anything to go by, takes rather longer to change.

One consequence of this is that, in the current international climate, there is naturally a great deal of nervousness in the capitals of the world, especially in the major oil-consuming countries, such as the USA, Japan and the nations of Europe. Might the situation in the Middle East continue to worsen, with unforeseeable consequences, and if so, is there a possibility that the oil embargo of 1973–74 could be repeated? In other words, could what has come to be called the "oil weapon" be unsheathed once more?

Let us be quite clear about this from the start: OPEC believes that the answer to this question is a firm and unequivocal "no". Firstly, oil is not a weapon. It is a strategic commodity of such vital importance that the modern world simply could not function without it. Take away oil, and you would take away cars, planes, plastics, petrochemicals and a host of other things, without which life as we know it would be simply unimaginable. And secondly, weapons of all types have a habit of backfiring on their users. Where would the oil-exporting countries be today if they had not been able to benefit from oil revenues to further their development?

OPEC has always been at great pains to point out that — contrary to popular myth — the oil embargo of 1973–74 was not an OPEC action. It is true that some of the countries which took part in the embargo at that time were also Members of the Organization. However, the action that they took at that time was as individual, sovereign nations, not as a result of any OPEC decision. It should be remembered that Article 2 of the OPEC Statute expressly states that the Organization shall give due consideration to maintaining regular and efficient supplies of petroleum to the consuming nations, essentially recognizing the importance of oil for the world economy.

If we contrast the situation in 1973–74 with the situation today, it becomes clear that there are a number of similarities. Today, just as was the case almost 30 years ago, the tragic conflict in the Middle East shows no sign of easing. And today, there are still calls in some countries in that sadly strife-torn region for the "oil weapon" to be used again, although it appears at the moment that any such action will probably be largely of a symbolic nature.

But there are also differences between then and now, and these differences are reason to be cautiously optimistic. One of the most significant is that there is a general recognition that political problems need political solutions, and attempting to address them with economic or other means cannot help. Recognizing this, one OPEC Member, Saudi Arabia, has put forward a comprehensive peace plan for the Middle East region, a move that deserves to be embraced by all sides. It is only through this type of initiative that oil can be kept out of politics and retain its rightful place as the world's number one strategic commodity.

PRESS RELEASE

Resolutions of the 119th Meeting of the OPEC Conference

No 4/2002
Vienna, Austria, April 15, 2002

The 119th Meeting of the Conference of the Organization of the Petroleum Exporting Countries, held in Vienna, Austria, on March 15, 2002, adopted the following Resolutions, which, in accordance with customary procedures, have been ratified by the Member Countries and are issued herewith:

Resolution No 119.392

The Conference,

upon the recommendation of the Board of Governors,

approves

1. The Statement of Income and Expenditure for 2001 showing a total expenditure of ATS 202,504,780.

2. The Statement of Accounts as at December 31, 2001, and the Audit Report submitted thereon by the appointed Auditors, TPA Control Wirtschaftsprüfung GmbH.

Resolution No 119.393

The Conference,

resolves

that the next Ordinary Meeting of the Conference shall be convened in Vienna, Austria, on September 18, 2002.

Done in Vienna this 15th Day of March, 2002.

Head of the Delegation of Algeria
Dr Chakib Khelil

Head of the Delegation of Indonesia
Dr Purnomo Yusgiantoro

Head of the Delegation of the Islamic Republic of Iran
Bijan Namdar Zangeneh

Head of the Delegation of Iraq
Taha H Musa

Head of the Delegation of Kuwait
Ahmad F Al-Ahmad Al-Sabah

Head of the Delegation of the Socialist Peoples Libyan Arab Jamahiriya
Dr Abdulhafid Mahmoud Zlitni

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Head of the Delegation of Qatar
Abdullah Bin Hamad Al Attiyah

Head of the Delegation of Saudi Arabia
Ali I Naimi

Head of the Delegation of the United Arab Emirates
Obaid Bin Saif Al-Nasseri

Head of the Delegation of Venezuela
Alvaro Silva Calderón

Paying for oil: will the euro rise to challenge the dollar's supremacy?

*The adoption of the euro as legal tender across most of Western Europe has refocused attention on whether it might one day rival the dollar, especially in the oil market. The Head of OPEC's Petroleum Market Analysis Department, **Javad Yarjani,*** *looks at the future possibilities.*

Europe's single currency, the euro, has been a reality since 1999. Starting this year, it was adopted as legal tender in the 12 countries of the euro-zone, and the old currencies were phased out. Today, more than 300 million people use the euro, which signals a positive step for European economic integration.

Indeed, the 12 European Union (EU) nations that form the euro-zone deserve to be congratulated on the successful transition from their twelve different national currencies to the euro. Everyone was pleasantly surprised at how smoothly and swiftly the switchover took place, considering it involved the largest currency swap undertaken in history.

The question that now comes to mind is whether the euro will establish itself in world financial markets, thus challenging the supremacy of the US dollar, and consequently trigger a change in the dollar's dominance in oil markets.

As we all know, the mighty dollar has reigned supreme since 1945, and in the last few years has even gained more ground with the economic dominance of the United States, a situation that may not change in the near future. By the late 1990s, more than four-fifths of all foreign exchange transactions, and half of all world exports, were denominated in dollars.

In addition, the US currency accounts for about two-thirds of all official exchange reserves. The world's dependency on US dollars to pay for trade has seen countries bound to dollar reserves, which are disproportionately higher than America's share in global output. The share of the dollar in the denomination of world trade is also much higher than the share of the USA in world trade.

Nevertheless, it is worthwhile to note that in the long run, the euro is not at such a disadvantage versus the dollar when one compares the relative sizes of the economies involved, especially given the EU enlargement plans. Moreover, the euro-zone has a bigger share of global trade than the USA, and while the latter has a huge current account deficit, the euro area has a more balanced external accounts position. One of the more compelling arguments for keeping oil pricing and payments in dollars has been that the US remains a large importer of oil, despite being a substantial crude producer itself. However, looking at the statistics of crude oil exports, one notes that the euro-zone is an even larger importer of oil and petroleum products than the USA.

While the euro has the potential to be a viable competitor and possible alternative to the dollar in international financial and commodity markets in the medium to long term, its external weakness to date has meant it has been unable to gain inroads in the last two years.

From the time the euro was floated in January 1999, the currency drifted downwards, losing about 30 per cent of its initial value against the dollar by October 2000. It has since regained some of this lost ground, but is still far removed from parity with the dollar and even further removed from its starting value.

Many reasons have been suggested to explain the weakness of the euro in the last two years, but they all overlook the fact that a fledgling currency needs time to establish itself and gain credibility even under the best internal and external conditions.

There is of course also the issue of the economic diversity within the countries of the EU to consider. Many fundamental structural issues need to be addressed and many steps taken in order to harmonise the economies of the countries within the euro-zone. One can appreciate that the European Central Bank has a serious challenge, and indeed a difficult task, to adopt one policy to fit all countries facing different immediate requirements and various structural problems. Thus, it could well be that the euro will be subjected for quite some time to more scrutiny than the dollar, because of the diversity of its region, which may give the greenback a temporary edge over its new competitor.

* *Based on the speech delivered by Mr Yarjani on behalf of OPEC's Secretary General,* ***Dr Alí Rodríguez Araque,*** *to the seminar on 'The international role of the euro' in Oviedo, Spain, April 14, 2002. The logo on these pages symbolizes the Spanish presidency of the European Union in the first half of 2002.*

It must also be recalled that the links between crude oil and the dollar are deeply embedded in economics, politics and trading traditions. Naturally, the trading of oil in dollars has served the interests of the USA, giving it an immediate advantage over other countries because it carries no currency exchange risk. For most other oil consumers around the world, the pricing and payment of crude in dollars increases the risk for these countries because of currency fluctuations. When the dollar rises against other currencies, the price of oil is more expensive for the rest of the world, thus potentially increasing inflation in these countries.

Despite this, it is worth examining some of the issues surrounding the denomination of payments for oil, with the euro in mind. Firstly, it is good to note that oil producers and big crude consumers, and importers from non-dollar areas, like the EU, have common interests. They are both interested not only in stability of oil prices and a reduction in price volatility but also in stable currencies. In other words, they would like to minimize oil price risk and currency risk. Producers and consumers may differ as to the desired oil price level, although I think they are probably not so far apart on that question, but they would both easily agree that currency risk is undesirable.

Removing currency risk

From the EU's point of view, it is clear that Europe would prefer to see payments for oil shift from the dollar to the euro, which effectively removes the currency risk. It would also increase the demand for the euro and thus help to raise its value. Moreover, since oil is such an important commodity in global trade, in terms of value, if the pricing of oil were to shift to the euro, it could provide a boost to the global acceptability of the single currency. There are also very strong trade links between OPEC Members and the euro-zone, with more than 45 per cent of total merchandise imports of OPEC Members coming from the countries of the euro-zone, while OPEC Members are major suppliers of oil and crude oil products to Europe.

From the point of view of producers, OPEC Members are mainly interested in a currency that provides a stable store of value for their revenues. At various points in time since the early 1970s, oil producers have discussed the question of what currency oil payments should be denominated in, especially in periods when the dollar has been weak.

Opinions have tended to be wide and ranging, depending on the strategic and trade alliances certain OPEC Members have with particular trade blocs. But in recent years, the strength of the dollar has helped OPEC in cushioning some of the erosion in the value of the oil barrel.

Now let us turn to two main issues. One relates to the denomination of crude oil pricing in dollars and the other to the choice of currency for payments for oil. Oil is a globally traded commodity and the present pricing system is one in which OPEC crude oil prices are calculated based on formulas derived from marker crudes like Brent, WTI or Dubai, all of which are denominated in dollars in international oil markets. The whole system of global oil trading and hedging is built around the dollar, and there appears to be little chance of change to another currency in the near future.

'Producers and consumers are interested not only in stable oil prices, but also in stable currencies.'

Of major importance to the ultimate success of the euro, in terms of oil pricing, will be if Western Europe's two major oil producers — the United Kingdom and Norway — join the single currency. Naturally, the future integration of these two countries into the euro-zone and Europe will be important considering they are the region's two major oil producers in the North Sea, which is home to the international crude oil benchmark, Brent. This might create a momentum to shift the oil pricing system to euros.

However, from today's perspective, even after the UK joins the single currency, there would seem to be little incentive for London's International Petroleum Exchange (IPE), where Brent is traded, to switch its Brent crude oil and gas oil contracts to euros, since both are traded internationally and the dollar is at the centre of a complex global oil trading and hedging system. There is more chance that the IPE will consider changing its natural gas and power contracts to euros.

Product price disparities

With respect to petroleum products, it appears that here the euro may make some inroads. Within the euro-zone, petroleum products to the final consumer are now sold in euros, highlighting the disparities in final product prices within the EU. The only spot market that has so far adopted the euro is the Hamburg barge market, which previously used Deutschmarks.

So what is the OPEC position on this critical question? Can the Organization consider switching its crude oil pricing from dollars to euros? Or will a basket of currencies be used?

Because crude oil contracts are currently traded in dollars, and the prices of OPEC crudes are determined by using complex formulas derived from marker crudes, such as Brent and WTI, there is not much the Organization can do unilaterally until, and unless, there is a switch of denomination in these markets.

OPEC has no control over the quotations of these marker crudes, whereas in the past, the Organization did in fact set the official selling prices. That has all changed with the introduction of market-related prices which saw the system change from a seller's to a buyer's market, or at least where market forces now dictate prices. Moreover, the entire infrastructure of the oil market has been based around the dollar, and that will be hard to displace. However, as previously mentioned, a lot depends on Britain and Norway in determining what their level of EU integration will be, and whether their marker crude, Brent, could be traded in euros.

The other question, of course, is whether importers can pay for oil in another currency than the dollar. The EU would like to pay for oil in euros. The question is now whether oil producers

would be willing to accept euros instead of dollars and who carries the implied currency risk, since prices are set in dollars but payment is made in euros.

If OPEC Members were to accept the denomination of oil bills in euros, it would be desirable if the buyers would carry some of the currency risk, or alternatively if both the seller and the buyer would perhaps share the risk. Currency clauses could be introduced in sales contracts that specify these issues. The use of financial hedging tools to manage the currency risk could be envisaged, with the cost of hedging shared between buyer and seller.

In the short-term, OPEC Members, with possibly a few exceptions, are expected to continue to accept payment in dollars. Nevertheless, OPEC will not discount entirely the possibility of adopting euro pricing and payments in the future. The Organization, like many other financial houses at present, is also assessing how the euro will settle into its life as a new currency. The critical question for market players is the overall value and stability of the euro, and whether other countries within the Union will adopt the single currency.

Varying preferences

It must be remembered that OPEC is comprised of eleven sovereign Member Countries, all with varying preferences as to the denomination of oil bills. These preferences depend on which markets in the world the OPEC crude is destined for and from which countries OPEC imports goods and services.

For example, countries that trade mainly with Asia or North America would gain little advantage by pricing oil in euros. Equally, countries with large assets in dollars would have little interest in changing the current system. Alternatively, there are other OPEC Members that conduct most of their trade with Europe, which would be more likely to favour pricing in euros.

It is quite possible that as the bilateral trade increases between the Middle East and the European Union, it could be feasible to price oil in euros, considering Europe is the main economic partner of that region. This would foster further ties between these trading blocs by increasing commercial exchange, and by helping attract much-needed European investment to the Middle East.

In the long term, perhaps one question that comes to mind is could a dual system operate simultaneously? Could one pricing system apply to the western hemisphere in dollars and for the rest of the world in euros? This will remain the test for the euro, should the currency gain ground in the market of oil transactions.

An increased level of international trade, if undertaken in euros, will help determine the value of the currency. Essentially, increased trade in euros, associated with a rise in the value of the currency, would also encourage people to view it as a safe bet in terms of savings, or as a store of value. For the euro to emerge as a serious competitor to the US dollar, it would need to replace or parallel the dollar as the currency of choice for hard currency reserves. In addition, it will be the financial and trading institutions that will also determine the speed of the euro's integration into world markets.

The global competition between the euro and the dollar will evolve in the future depending on many factors. Essentially, a strong, and therefore attractive euro to hold, will ultimately depend on a robust and stable European political and economic system. The more integrated Europe becomes, the greater the likelihood that it will play an increasingly active role in world economic and political affairs and the more confidence its currency will inspire.

As the share of reserves held by central banks begins to reflect the share of the euro in world trade, there will be a chance for the single currency to gain ground in the denomination of commodity trading as well as being used as a means of payments and a store of value.

However, one should also be aware that the dollar now benefits from its status as an incumbent currency and that the forces of entropy are expected to lend support to the US currency versus the euro. This was the case for the pound sterling long after the UK had lost its economic supremacy.

Moreover, confidence in the US economy remains unrivalled, despite the recent slowdown. This level of optimism could mean that capital and investment flows to America will remain strong, from Europe as well.

Projecting ahead, the largest proportion of future incremental oil growth will come from developing countries as they realise their developmental goals. The projected economic growth in developing countries will be oil-intensive. This fact may have a bearing on the currency, or currencies, that OPEC Members may individually or collectively choose for future currency denomination of their oil bills, depending on the preferences of both buyers and sellers.

One last point deserves to be mentioned. We are experiencing a phase in the oil market where OPEC and other market players are revisiting the issue of the marker crudes. Serious thinking is going into seeking alternatives to the present marker crudes that would be more representative and that would reflect the reality of the underlying physical market.

In the coming years the present marker crudes may become less and less representative and more liable to manipulation and squeezes due to smaller volumes of production. While it is too early to talk of alternatives with any degree of precision and still even earlier to speculate about the currency in which it will be denominated, it is good to remember that some changes in the way we conduct the oil business will become inevitable in the coming years and we must prepare for them.

In these interesting times, the possibilities that may result from the launching of the euro remain to be seen. Essentially, OPEC is concerned with delivering fair and stable prices to consumers. The underlying imbalances in the existing system as to the denomination of oil bills could be ironed out partially with the inclusion of other currencies in the trade of oil.

Ultimately, for every scenario that may emerge, there is a note of caution, and that is oil market stability should not be jeopardised or threatened in any way. The existing oil pricing and payments system, despite its known deficiencies, is a system that functions smoothly.

Should the euro challenge the dollar in strength, likely giving it a greater role in the international oil market and payments for oil, it could be that a system may emerge which benefits more countries in the long term. Perhaps with increased European integration and a strong European economy, this may become a reality.

Norway:

combining utilization of its oil and gas resources with environmental harmony

Norway is the third-largest crude oil exporter in the world and the largest supplier of gas to north-west Europe, with extensive operations in the North Sea and the Norwegian Sea and significant potential in the Barents Sea. Oil production now stands at just over 3.1 million barrels/day of oil and is forecast to remain above 3m b/d for five years. The country is expected to become an even greater supplier of gas to Europe, as supply from the United Kingdom falls.

However, at the present time, Norway's own electricity generation relies 99 per cent on hydro-power. Although not a member of the European Union, Norway is adopting some EU directives on market liberalisation, so as to protect its access to European markets — this has recently meant considering restructuring of the state-controlled oil and gas sectors.

The Norwegian Petroleum Directorate's (NPD) latest estimate of total petroleum resources on the Norwegian continental shelf is 13.8 billion standard cubic metres of oil equivalent (cu moe), which is the sum of the discovered and undiscovered, recoverable reserves, including quantities that have already been produced. The total is made up of 6.1bn cu moe of oil, 7.0bn cu moe of gas and 0.7bn cu moe of condensate and natural gas liquids. The remaining recoverable reserves are estimated at 10.8bn cu moe. The total resource base (recoverable oil, gas, NGL and condensate) has shown a positive trend over the past ten years, with the estimate for total recoverable resources rising by more than 60 per cent since 1990.

The North Sea is the most explored part of the Norwegian shelf, but there is a declining level of growth in resources and size of discoveries. On the other hand, the growth in resources over the past ten years has been the greatest in the Norwegian Sea and it is expected that future exploration will reveal further major discoveries. The NPD's calculations show there is also significant potential for resources in the Barents Sea. In April, Norway signed a co-operation agreement with its northern coastal neighbour Russia, with regard to developing petroleum activity in the Barents Sea, in harmony with the fisheries industry and other environmental considerations.

Environmental harmony rides high on Norway's social and political agenda, with environmental sustainability being described as the most important challenge facing its petroleum industry today and with the government seeking to make Norway one of the first industrialised countries to sign the Kyoto Protocol.

Industry showcase

Every two years, there is an offshore oil and gas industry showcase held in the south-western town of Stavanger. This year's event — the 15th International Conference, Exhibition and Festival — will take place on August 27–30 and will focus on the theme 'Energizing a new generation' (see the conference Web site at *www.ons.no* for more details).

The organisers, Offshore Northern Seas (ONS), regularly invite international journalists to Norway to catch up on the latest developments in the country's petroleum industry. Among the group which visited Norway on April 7–12, was **Keith Marchant**, Editor in OPEC's PR and Information Department, who wrote this feature for the *OPEC Bulletin.*

Norway to remain reliable long-term provider of oil and gas, says Energy Minister

Norway's Petroleum and Energy Minister, Einar Steensnæs, held a press conference for the ONS-trip journalists at the Ministry in Oslo on April 12. There follows the text of his statement, in which he provides a general overview of the country's petroleum sector and outlines the challenges for the future.

Norway's Petroleum and Energy Minister, Einar Steensnæs (l), outlines government policy. Next to him is Kjell Ursin-Smith, the Managing Director of ONS.

The theme of this year's ONS, 'Energizing a new generation', fits perfectly into what is on the agenda of the Ministry of Petroleum and Energy. Our goal is to maintain the Norwegian oil and gas sector's competitive position and to continue to be a reliable long-term provider of energy to Europe and the rest of the world.

Further, the industry, based on the activities on the Norwegian continental shelf, will continue to support welfare and reliable job opportunities. ONS provides an excellent opportunity to convey the story about the oil and gas industry — it is forward-looking, long-term and a promoter of sustainable development.

Oil was first discovered offshore Norway in the late 1960s, and production started in 1971. We have, during the last 30 years, continuously expanded our production capacity and will produce 3.1 million barrels/day of oil this year. Our internal oil consumption is limited, and thus we are ranked as the third-largest exporter of crude oil in the world.

Our gas exports have increased significantly over the same 30 years. Norway's gas exports totalled 50.5 billion standard cubic metres in 2001, an increase of about four per cent from 2000. Today, Norway is an important supplier of natural gas to Western Europe. We currently have a total market share of 12 per cent. This share is expected to increase in coming years.

Gas represents a more environmentally benign source of energy than both oil and coal, which adds to its future market potential.

These figures illustrate that the Norwegian continental shelf is a substantial petroleum province in a global context. Security of supply is of concern to any nation depending on imports of oil and gas. Our position as a reliable source of oil and gas is, therefore, an important factor.

It is important to observe that we see a significant potential for further development and production. I would like to bring to your attention the fact that Norway has the potential for a further 50 years of oil production and gas for an additional 100 years. To put it mildly, the prospects are good! To develop the oil and gas potential, there is a need to meet the challenges we are facing. These include deeper waters, smaller fields and environmental issues.

Let me turn to the role of innovation, which is a focal point for this year's ONS. As I have already explained, the oil and gas industry is doing well. However, in this dynamic industry, further progress depends on the development and deployment of new technology.

The main goals for the Norwegian government, when making technology a priority area, are to enhance value creation on the Norwegian continental shelf by cutting costs and increasing recovery; to maintain and further develop the petroleum industry based in Norway, and last, but not least, we consider technology advances to be instrumental in protecting the environment and improving safety and thereby contributing to sustainable petroleum activities.

One of the major principles of the Norwegian government has been to encourage links between the oil companies,

supply industry and research institutions. This has resulted in a strong cluster performance and has facilitated new technological solutions. Government funding has proven to be a catalyst in such a framework.

The Ministry of Petroleum and Energy, in co-operation with the industry and the Norwegian Research Council, is now aiming at a national strategy for research and development for oil and gas in the 21st century, named 'OG21'. This is to be achieved by a stronger and more unified system for R&D, demonstration and commercialisation in the petroleum sector. Faced with the growing complexity of offshore operations, technology and human capital will be the main drivers for value added. Consequently, future challenges demand a strengthened commitment to research and development.

Environmental sustainability

Perhaps the most important challenge the petroleum industry is facing today is environmental sustainability. The petroleum industry must be prepared to change and improve the way it operates its business, in order to successfully co-exist alongside other industries, such as fisheries, within the framework of sustainable development.

Human capital will be a problem, if the industry does not immediately face the issue of recruiting the next generation of petroleum employees and leaders. The average age in the industry is high and it is clearly dominated by what, in petroleum jargon, is called 'mature resources'! However, it should, in principle, not be hard to recruit new people, if we take a more pro-active approach and tell young people about all the exciting opportunities within this industry. Optimism is a justified key word in this respect. We need to get a constructive and positive message across.

The petroleum sector is faced with an increasingly competitive and demanding business climate. However, I am very optimistic about the future of the Norwegian continental shelf and the industry in general. Good results depend upon good co-operation between government, national and international actors. I look forward to meeting representatives from all areas of the industry at the ONS to discuss these issues.

Q & A: Oil exporters should maintain flexibility with production policy

*After delivering his statement, Steensnæs held an in-depth question-and-answer session with the journalists on the subject of Norwegian petroleum policy. His remarks relating to crude oil pricing and production are summarized here by **Keith Marchant**.*

Norway's Petroleum and Energy Minister, Einar Steensnæs, believes that leading oil exporters should maintain flexibility with production policy, and any action should be undertaken in a cautious manner and in consultation with other parties in the market.

Addressing journalists in Oslo earlier this month, he said that his government's basic premise with its production policy was to "avoid extreme prices, be it low prices or very high prices. I think it is in the common interest of both the importing countries, as well as the producing countries, that we should have oil prices at a decent level.

"As the third-largest exporter of oil, I think there is the possibility for Norway, as well as for the OPEC countries, Russia and Mexico, which (together) are the world's largest exporters, to observe the situation in the oil market and, if it is too turbulent, take steps and measures to avoid those extreme prices.

"When the Norwegian government decided on December 17 last year to cut production, it was to avoid too low prices. The price was then about $16/barrel and we had indications that it could go lower if there were no measures taken to balance the supply with the demand."

He said the joint production cuts had achieved their purpose of balancing the market in the post-September 11 situation of declining demand.

But the market was now in a "quite different situation", influenced by the political developments in the Middle East and, most recently, Venezuela, as well as the global economic recovery, which was occurring earlier than expected, particularly in the United States of America. There was much "uncertainty in the market, anxiety, psychology".

"The Norwegian government and I, as the responsible Minister, would like to observe the development in the market over more days to see if there is a need to increase production to have a better balance.

"We will also inform our partners, not only the producing countries, but also the importing countries. We are open in our assessments. There are no secrets or hidden agendas at all."

When asked what a "decent" oil price was, Steensnæs replied: "On principle, I would not indicate any such figure at all. I would leave it to the market to decide."

In recent years, he had seen situations where widely varying prices were considered as "decent", in accordance with the prevailing market conditions.

"My main responsibility is to avoid the extreme prices, like $30/b, like $10/b, if you like. I will also observe the dynamics in the market. Are we moving from $26/b upwards to higher prices? That would (influence) my decision. Or, as it was in the last autumn, $16/b could be a fair price, but we saw there was a dynamic for lower prices. It is not that easy just to say that we want $20/b … It is not the policy I want to follow.

"We know that oil prices are extremely influenced by different factors. I think it is unproductive, almost impossible to aim at a certain price, because, from one day to another, the price could differ by a dollar."

But, he added: "I think it is an important duty for any producing country to (take part in) a joint effort to avoid extreme prices, to know that that will be very harmful to the global economy. We had some experience in that respect in 1998, when the oil price was down to $10/b. I know a lot about that, being from the western part of Norway where we had shipyards and offshore industries that were severely punished by this low oil price."

He described Norway's relationship with OPEC as a "good" one, but added: "We have no interest in having any formal agreement with them, but we inform each other. That is important. Norway's decision about the production cut has been done on its own premises. We have unilaterally done that. Of course, the other producing countries accept the situation in the same way. We have a joint goal for this production cut. There could be a different assessment of the situation now. So, if Norway thinks it is necessary to suspend the cuts — it could be that other countries have a different opinion on that — and if we are convinced that this is necessary, we will do it."

When asked whether such an action would send a negative, damaging signal to the market, Steensnæs replied that Norway would tread cautiously. "We should not do anything in a rush," he said. "We should inform the market. We should consult our colleagues in the OPEC countries, as well as Russia and Mexico. And, if we do this in a decent way, I don't think this should be a problem at all."

He said his country could not refrain from acting "if we see that the prices are going high, up to $30/b, and are stable on that price. We have to do something."

Norway seeks early implementation of Kyoto Protocol, says senior environment official

André Støylen, State Secretary at the Ministry of the Environment, addressed the journalists on the topic of Norwegian climate change policy in Oslo on April 11. His speech is reproduced here.

Norway takes the threat posed by climate change seriously and views the entry into force of the Kyoto Protocol as a very important step to combat climate change. The Norwegian government intends Norway to be one of the first industralised countries to ratify the protocol. Accordingly, on March 22, the government submitted a proposition on ratification to the Norwegian parliament. At the same time, it presented a white paper on Norwegian climate policy.

I am fairly optimistic regarding the entry into force of the Kyoto Protocol. The ratification process is well under way in Europe and some other industrial countries such as New Zealand, and there is a little hope that it could enter into force by the summit in Johannesburg in August/September. We want to contribute to making this possible. However, we are fully aware that the ratification process is a tough and time-consuming exercise in countries like Japan and Canada, and that it may also take some time in Russia, which could lead to an entry into force later than Johannesburg.

The Norwegian commitment according to the Kyoto Protocol is a one per cent increase compared to 1990 levels. A business-as-usual scenario indicates that our emissions could be in the range of 18 to 26 per cent above the 1990 level in 2010 if no new measures are introduced. New measures are necessary for this reason in order to meet the Norwegian Kyoto commitment.

The Norwegian emission profile is special compared to many other industrialised countries. In 2000, CO_2 accounted for only 74 per cent of the total greenhouse gas emissions. Norway has a special composition of energy sources, industrial production and exports. Renewable energy sources (hydropower) supply 70 per cent of stationary energy use and about half of the total energy use, including all electricity. The potential for greenhouse gas emission reductions in the energy sector is therefore limited. The share of emissions from the petroleum sector (one fourth of CO_2) and industrial processes (one fifth of CO_2) is furthermore considerably larger than in other industrialised countries.

Norway intends to be one of the first industrialized countries to ratify the Kyoto Protocol, says State Secretary at the Environment Ministry, André Støylen.

The main policy instrument to reduce greenhouse gas emissions in Norway has been taxation. Norway has taxed CO_2 emissions since 1991. Today the CO_2 tax covers about 65 per cent of the total CO_2 emissions, the main exemptions being process industry and some energy related emissions from heavy industry. The overall tax level on fossil fuels is considerably higher than in most other countries. The petroleum sector has the highest tax level.

Proactive climate policy

The previous Norwegian government submitted a white paper on climate policy in June 2001. The present government endorses the main elements of the white paper, including the proposal to introduce a broad-based emissions trading system linked to the system under the Kyoto Protocol from 2008. However, the level of ambition for the climate policy in the period before 2008 is fairly low in the previous government's white paper.

The present government has announced a proactive climate policy and proposes the implementation of new national measures to achieve "demonstrable progress" by 2005, in accordance with the Kyoto Protocol. We consider it to be in Norway's interest to reduce its own greenhouse gas emissions. By starting the adjustment process now, we will be in a better position to meet tougher restrictions on emissions later.

We consider it important to provide a framework that will enable Norway to implement its climate-related commitments both in the Kyoto period and in

later commitment periods. By means of the policy proposed in the white paper, the authorities will encourage the investments needed to make production and consumption less greenhouse gas-intensive.

Domestic emissions trading

The government proposes that a quota-based domestic emissions trading system for greenhouse gases should be established and made mandatory from 2005. The emissions trading system is to apply to emissions of CO_2 and other greenhouse gases from entities that do not pay the CO_2 tax on most of their emissions. Energy-intensive and emissions-intensive industries will thus be obliged to surrender quotas equivalent to the quantity of greenhouse gases they emit that is not subject to a tax at present.

By introducing a domestic emissions trading system for emissions from sources that are not subject to the CO_2 tax wherever this is possible in practice, and at the same time continuing to levy the current CO_2 taxes, we will regulate almost all emission sources by means of climate policy instruments. As a result, we will have one of the world's most comprehensive regimes for the regulation of greenhouse gas emissions. Emissions of methane and nitrous oxide from the agricultural sector are the only major sources not subject to climate policy instruments — like in most other countries.

Including sectors that are currently subject to the CO_2 tax in the emissions trading system from the start might result — if quota prices are low — in somewhat higher emissions than maintaining the current CO_2 tax rates. It seems most likely that quota prices will be low or moderate in this period, so that sectors that are currently subject to the CO_2 tax might pay a lower price for their emissions within the emissions trading system.

We consider the proposed combination of policy instruments a more effective way of bringing about cuts in Norwegian emissions, given that quota prices are low. Norway would thus be applying an integrated set of policy instruments giving nearly all sectors an incentive to reduce their greenhouse gas emissions, where this is practically possible.

The main objective in introducing an emissions trading system at an early date is to stimulate further cost-effective action in Norway. However, the system must not include such strict requirements that enterprises are forced to close down by excessive climate-related costs before 2008, if they would be profitable after paying the international quota price during the first commitment period under the Kyoto Protocol. We will take these concerns into consideration when the elements of the emissions trading system are finalized and presented to the parliament in a proposition on the legal framework.

'As a major energy exporter, Norway faces different challenges from most European Union members.'

The overall ceiling for emissions quotas is to be based on a reduction of 20 per cent in emissions compared with the 1990 level for the same entities. The proposal includes adjustments of the overall emission ceiling if new entities are established or existing ones are expanded or closed down. In the period 2005-2007, the government proposes to issue quotas free of charge to entities for which participation in the system is mandatory.

In practice, these entities currently have unlimited quotas for which they do not have to pay. The government's proposal thus entails tighter control of emissions. All entities that are required to join the emissions trading system will have an incentive to reduce their emissions. If the target is to bring about a 20 per cent reduction in emissions, most of them will have to take steps to reduce their emissions, buy quotas in addition to those that are issued free of charge, or pay a penalty in the form of a fine if they fail to surrender the required volume of quotas.

Some entities will be able to do so much to reduce emissions that they can sell quotas they do not need themselves. There will be restrictions on resale of some of the quotas, so that entities cannot sell all their quotas and close down their operations.

In the case of emission sources for which no specific person or entity can be held responsible, or where it would be difficult and costly to assign responsibility, it is proposed to permit joint implementation at national level within the emissions trading system. The government will also make it possible to give credit for quotas from abroad that are valid under the Kyoto Protocol. The government proposes to specify fines for failure to surrender a sufficient volume of quotas. The amount of such fines will be set in order to strike a balance between achieving the target of emission reductions in Norway and preventing unreasonably high costs for entities for which the system is made mandatory before 2008.

It is Norway's intention to co-operate with other countries in order to develop an international emissions trading market. The Norwegian emissions trading system could be combined with systems in other countries.

The government proposes to expand the emissions trading system to other sectors from 2008 onwards, so that it becomes the main policy instrument under the Kyoto Protocol. Hence, from 2008, greenhouse gas emissions are to be regulated by a broad-based domestic emissions trading system that.

This system will include as many sources of emissions as practicable, including the petroleum sector. From 2008 onwards these sources will no longer be levied CO_2 taxes. This broad-based system will be linked to an international emissions trading system.

EU emissions trading

The European Union is in the process of drawing up a directive establishing a scheme for greenhouse gas emissions trading from 2005. The proposal for a directive is an important step towards making emissions trading a key policy instrument to combat climate change.

However, the emissions trading scheme proposed by the Commission does not meet Norway's needs. As a hydropower nation and a major producer and exporter

of energy with large emissions from the petroleum sector, Norway faces different challenges from most EU members. The various EU member states have somewhat differing interests as regards emissions trading, and it is therefore difficult to predict exactly what the system will be like when it is finalized.

On this basis, we have chosen not to wait until the EU has finalized an emissions trading scheme. Our proposal takes into account the fact that Norway already levies a CO_2 tax on emissions from the offshore petroleum industry and the transport sector, and limits the quotas-based system to sectors where emissions have so far been unregulated.

There are also other elements in the proposal from the Commission that could not very easily be adopted in Norway. The Commission's proposal only covers large plants. The limitation of 20 megawatts for energy production plants may lead to unjust competition in the petroleum sector offshore, where there are a number of energy plants about this size.

We are making active efforts to influence the process that is now taking place in the EU. It is particularly important that countries that wish to do so can include other gases and other sources than those proposed by the Commission in the system, and that they are allowed to implement comprehensive, broad-based emissions trading systems that allow unrestricted use of the Kyoto mechanisms from 2008.

The petroleum sector

The petroleum industry on the Norwegian continental shelf is a major source of greenhouse gas emissions, and emissions are expected to rise in the future unless further steps are taken to counteract this. In 2000 the petroleum sector accounted for about 20 per cent of the total Norwegian greenhouse gas emissions. The main source of CO_2 emissions from this sector is the combustion of gas in turbines during energy production. Flaring of natural gas is also an important source. It is expected that emissions will continue to rise until 2005 and then drop as a result of lower production and other factors.

Continued efforts to improve the efficiency of power generation and make energy use more efficient are needed to curb the expected rise in emissions. We will therefore take steps to facilitate power supplies from land to offshore installations. Various ways of doing this will be evaluated. Among other things, the government will consider different ways of co-financing cables and necessary infrastructure on shore.

> ***'The Norwegian government takes the climate change issue very seriously.'***

Further measures to reduce emissions from flaring on the continental shelf will also be evaluated. We will continue to levy the CO_2 tax on emissions from the petroleum industry until a broad-based domestic emissions trading system is introduced in 2008.

We will also strengthen research into the development of environmentally-friendly energy technology. Another target is to establish a framework that will make it possible to establish gas-fired power plants with CO_2 reduction technology.

Other policy instruments

The government considers that there is a need for other policy instruments to bring about reductions in emissions, in addition to the CO_2 tax and the emissions trading system. The white paper therefore also presents other instruments and measures to encourage emission reductions.

One of the government's targets is to reduce the use of mineral oils for heating by 25 per cent in the first commitment period under the Kyoto Protocol (2008–2012) compared with the average for the period 1996–2000.

One step in this direction will be to draw up a strategy for conversion from oil-fired heating to new renewable energy sources. This will include measures to encourage greater exploitation of biomass and methane from the agricultural sector for energy purposes.

It is also proposed to make much greater use of waste as a source of energy to replace fossil fuels than is the case today, thus reducing the quantity of biodegradable waste that is landfilled. A prohibition on all landfilling of biodegradable waste will be considered. The tax on final waste treatment will be reorganized and adapted to Norway's climate policy.

To summarise, the Norwegian government takes the climate change issue very seriously, and sees the importance of an early enter into force of the Kyoto Protocol. Norway will take a share of the responsibility at both national and global level for efforts to counteract global climate change.

Gathering relevant data in "real time" means minutes rather than days for decisions

Using motion sensors and immersive glasses, a three-dimensional display of an earth model is rotated, under the guidance of the controller, in an impressive virtual reality demonstration at the recently opened Schlumberger iCenter in Stavanger.

The purpose of the iCenter, Operations Supervisor Tyson Bridger told participants on the ONS 2002 press trip, is "to provide a connected environment, where individuals can capture, share and apply their collective knowledge to make optimal decisions — *in real time*." The real time data transfer meant that it was possible to get data from a depth of about 2,000 metres in the North Sea to the iCenter in about one second, he added. Use of such an electronic collaboration environment enabled decisions to be made within minutes — rather than hours or even days using traditional methods — by people who could be working in different parts of the world, with the right equipment installed.

New-generation technologies and work processes are allowing the exploration and production industry to construct wells more cost-effectively, efficiently and safely with higher production rates of oil and gas.

Success depends on making accurate, informed decisions during the crucial planning phase of a well. These decisions require access to high-quality oil field data, application of the latest computer programmes and close communication and collaboration between technical experts.

In an iCenter environment, a joint team of oil company and service company engineers and scientists works together in an electronic conference room equipped with computer and visualisation tools that allow three-dimensional viewing of the path of the well through the reservoir.

The team can then analyse the displayed data and information affecting the drilling process. Rotating the display in three dimensions permits the team to examine every aspect of the well to determine how it can be drilled as efficiently as possible, while avoiding potential hazards that cost time and money, and increase risk.

SP Libyan AJ voted world's top oil and gas exploration hotspot for third year running by UK consulting firm

Brussels — European oil exploration and production companies continue to view the Socialist People's Libyan Arab Jamahiriya as the world's top exploration hotspot, according to a survey carried out by British consultants Robertson Research.

Libya maintained its top ranking for the third consecutive year, despite unilateral United States sanctions against the country. The UK was placed second, Australia third, while Algeria and Iran tied for fourth place, with Egypt in fifth.

Libya has come under the investment spotlight since United Nations sanctions, which banned spare parts for pipelines and refineries, were suspended in 1999. Since then, the country has offered over 130 exploration blocks to energy companies.

European firms, backed by the European Union, are keen to strengthen their links with Libya and are in a much more favourable position than US companies, which were forced to abandon their holdings in 1986, but are now eager to return.

Foreign companies in Libya produce some 30 per cent of the country's 1.3 million barrels/day of oil output. Libyan reserves are put at 29.5 billion barrels.

In a related development last month, US business magazine *Forbes* became the latest in a long list of supporters arguing for the easing of US sanctions against Libya.

In an article on the magazine's Web site, *Forbes* observed that it has been more than 15 years since an American oil company operated in Libya.

In 1986, all four US oil firms then in the country pulled out after President Ronald Reagan ordered all American companies out of Libya.

"But now is the time to let them back in," opined the *Forbes* article. All four of the oil companies — Occidental Petroleum, Conoco, Marathon Oil and Amerada Hess — are eager to get back into Libya, it added.

The US State Department recently gave the firms the go-ahead to renegotiate terms under which Libya would hold their oil wells and other assets in trust, until they were allowed to return.

When forced out by Reagan's order, Marathon, Conoco and Amerada Hess owned wells that were pumping 400,000 b/d through a joint consortium called the Oasis Group, accounting for more than one-third of Libya's average crude output in 1986 of 1m b/d.

That lost pumping capacity has cost the Oasis Group as much as $5 billion in lost revenue over 15 years, according to Carlton Adams, a spokesman for Conoco, which is merging with another US firm, Phillips.

In 1985, more than 18 per cent of Conoco's 380,000 b/d of output originated in Libya. That same year, Amerada Hess relied on its Libyan operations for more than 15 per cent of its daily output, the *Forbes* article noted.

While US companies have been shackled by the Reagan-era sanctions, Europe's oil firms have been swarming back to Libya since 1999, when the United Nations suspended its sanctions against the country.

Libya has awarded five new exploration deals to European oil companies including TotalFinaElf, Repsol-YPF and Turkish Petroleum, and has plans to award more, with the hope of attracting $10bn in new oil investment by 2010. Germany's Wintershall has already asked Libya for permission to drill oil fields previously owned by the US companies.

"Like it or not, Libya's oil business is coming back, one way or another. The US can either let its oil companies get in on the game, or risk missing out," argued *Forbes*.

Nigeria LNG awards $1.9bn deal for two new trains to TSKJ

Amsterdam — Nigeria Liquefied Natural Gas (NLNG) has awarded a $1.9 billion contract for the engineering, procurement and construction of two new LNG trains at its Bonny Island plant to the TSKJ consortium.

The TSKJ consortium comprises four well-known engineering companies — France's Technip-Coflexip, Italy's Snamprogetti, Kellogg Brown and Root (KBR, a unit of Halliburton), and Japan's JGC Corporation.

The Group Managing Director of the state-run Nigerian National Petroleum Corporation (NNPC) and Chairman of NLNG, Jackson Gaius-Obaseki, signed the deal on behalf of the company, while the Chairman of KBR, Jack Stanley, represented TSKJ.

The two new trains, the fourth and fifth at the Bonny plant, will each boost Nigeria's LNG production capacity by four million tonnes/year and add an extra 500,000 t/y of liquefied petroleum gas (LPG). Eight additional LNG tankers will be needed to deliver the gas to buyers in Europe and the Americas.

The fourth train is due to come onstream in 2005 and the fifth in 2006. When both are up and running, the Bonny plant will have a total capacity of 17m t/y of LNG. Added to that will be 1.0m t/y of condensate and 2.3m t/y of LPG.

There are currently two trains already in operation and a third under construction at the Bonny site, all of which were handled by TSKJ. The consortium is currently finalizing the work on the third train, which is scheduled to be completed later this year.

"The expansion of the LNG project will, on completion, promote Nigeria to the league of the three largest LNG producers in the world, raising its share of the LNG market from seven per cent to 13 per cent," commented the NNPC Head.

"It implies growth in LNG in Nigeria, and a growth in supply of LNG to the world," he added, noting that with the plants in operation, Nigeria would succeed in monetizing its gas resources and solving the environmental problem of gas flaring.

It is estimated that Nigeria's gas reserves are about 159 trillion standard cubic feet. However, of the 3.8bn cu ft of gas which is currently being produced, only about 1.8bn cu ft is utilized, while the remaining 2.0bn cu ft is flared.

Agreements have also been signed with NLNG's existing gas suppliers to step up supplies in order to meet the requirements of the new trains.

The Shell Petroleum Development Company will supply an additional 143.23bn cu m of natural gas, bringing its total supplies for the five trains to 321.45bn

cu m/y. Agip will raise its gas supply to 140.64bn cu m/y, while Elf Petroleum Nigeria will supply 108.65bn cu m/y.

KBR's Stanley pointed out that the TSKJ group would prioritise transfer of technical know-how to Nigerians to boost the local content needed in the industry, and had already established a training centre at the project site to provide workers with specialised skills.

He expressed optimism that TSKJ would strive hard to have more local content in their operations, a move designed to develop the domestic oil industry and also for Nigerians to get the maximum benefit from the project.

Stanley said the award of the contract to the consortium was an indication of the continued prominence of the group in the global LNG business. Five companies had submitted bids for the project, and TSKJ had been selected based on the group's competence.

"Our bid was scrutinised by the technical advisers to NLNG and the board of the company and all were satisfied, based on our earlier success on trains one and two and the ongoing train three," the KBR boss noted.

"TSKJ will dedicate itself to pursuing the NLNG project in Nigeria, since the attention of the world has begun to turn to gas production and development and Nigeria remains a force to reckon with in gas availability," he said.

NLNG is a joint venture company, comprising the Nigerian National Petroleum Corporation (49 per cent), Anglo-Dutch giant Shell (25.6 per cent), France's TotalFinaElf (15 per cent), and Italy's Agip (10.4 per cent).

Qatar Petroleum to invest $15.7bn over the next five years

Doha — The corporate strategy of Qatar Petroleum (QP) calls for investment in excess of $15.66 billion over the next five years, according to QP Chairman and Minister of Energy and Industry, Abdullah Bin Hamad Al Attiyah.

QP's investments in the oil, gas, and petrochemical sectors had been designed to serve both the objective of diversification and income stability for Qatar, he told a meeting in Doha. The Minister noted that QP was also working on other projects that would give a boost to its investment programme.

Nonetheless, investments in Qatar's crude oil sector would continue to represent a major share of QP's portfolio. Over the next five years, the firm planned to spend over $3.5bn in this sector, which represented about 23 per cent of overall investments.

Currently, there was a programme that facilitated huge investments in the country's gas-rich North field, where proven reserves amounted to 500 trillion cubic feet, which was equivalent to about 80bn barrels of oil.

"This business will be our largest consumer of capital over the next five years. We are looking at an investment of about $4.67bn, which represents 29 per cent of our overall investments," Al Attiyah noted.

The principal strategy for the North field development was to pursue all market outlets — liquefied natural gas (LNG), pipeline gas exports, local markets, and gas-to-liquids (GTL) schemes.

The main elements of the strategy were to expand LNG production to about 35m tonnes/year from the current 14m t/y, and to boost pipeline gas output from about 1bn to 5bn cu ft/day.

Some six GTL projects that could result in production of about 400,000 b/d of mainly low-sulphur diesel fuel were under discussion, the Minister said.

For ethane, QP's immediate strategy was to develop and produce reliable and economic sources of the fuel to supply Qapco and Q-Chem. Further ethane production capability may be developed, but only if required by new market opportunities at Mesaieed, as part of the Dukhan raw associated gas project.

QP's overall investments in the natural gas liquids (NGL) sector in the next five years would total $550m, said Al Attiyah.

He added that the refined products business was now becoming one of the most important operations in the QP portfolio. Some $4.12bn, or 27 per cent of overall investments, would be made in this sector in the next five years.

The Minister went on to say that in the petrochemical sector, QP was looking at an investment of about $2.47bn over the period. The company would continue to invest and take majority share positions in a number of major new petrochemical joint ventures.

Some of the other projects being considered included a new polyethylene plant at Mesaieed, an aromatics complex based on feed from the Ras Laffan condensate refinery, a toluene di-isocyanate plant at Mesaieed, and a grassroots ammonia/urea complex at Ras Laffan.

Also being mulled were the expansion of the existing Q-Chem 1 steam cracker, the expansion of Qapco's ethylene and polyethylene plants, a QVC expansion, and the doubling of Qafac's methanol production capacity, he said.

Saudi Arabia awards major gas plant expansion project

New York — Saudi Aramco has awarded a major turnkey contract for the expansion of the Berri gas plant to Technip-Coflexip of France, it was announced last month.

The expansion project will enable the plant to handle additional output of sour gas from the Qatif field, which is currently under development.

Under the terms of the deal, Technip-Coflexip will provide a low-pressure gas sweetening unit, two new sulphur recovery units, and a new feed gas compressor.

It will revamp and increase the capacity of the existing propane refrigeration unit, upgrade the existing sulphur recovery units to meet higher recovery rates, upgrade inlet and flare facilities, and provide additional sulphur storage capacity. The existing utility systems will also be expanded to serve the new facilities.

The low-pressure gas sweetening capacity will thus be increased by 250 million cubic feet/day to a total of 871m cu ft/d for industrial consumption, while the sulphur recovery capacity will be increased by 1,330 tonnes/day to a total of 3,313 t/d.

Technip-Coflexip services will include project management, detail engineering, procurement of equipment and materials, construction management, construction, pre-commissioning, and assistance to commissioning.

The overall project will be carried out by Technip-Coflexip's engineering centre in

Rome, with the construction being handled by the group's local affiliate, Technip Saudi Arabia.

The project is scheduled to begin this month, with completion slated for November 2005. The contract falls within the framework of Saudi Arabia's programme for the development of the Qatif producing facilities.

Venezuelan President inaugurates new crude upgrading plant in Jose

Jose, Venezuela — Venezuelan President Hugo Chávez has formally inaugurated the Sincor crude upgrading plant at the Jose industrial complex, it was announced last month.

The inauguration brings the $4.2 billion Sincor strategic alliance to produce, upgrade and market extra-heavy crude from the Orinoco oil belt fully on stream.

"This is an achievement to show to the rest of the world," commented Chávez at the ceremony last month, shortly before departing for Monterrey, Mexico to attend the UN Conference on Financing for Development.

The Sincor project is one of several strategic alliances to explore and exploit the Orinoco oil belt and involves TotalFinaElf of France with a 47 per cent stake, state oil corporation Petroleos de Venezuela (PDVSA) with 38 per cent, and Statoil of Norway with 15 per cent.

Sincor is designed to produce some 200,000 barrels/day of extra-heavy 8.5° API crude from the Zuata area of the Orinoco oil belt, which will be converted into 180,000 b/d of lighter 32° API crude that will be known as Zuata Sweet for export.

Sincor's upgrader actually started production in January, but had not been officially opened until the formal ceremony last month.

During the upgrading process, Sincor will produce some 860 tonnes/day of sulphur that will be used in the fertilizer sector and 6,000 t/d of coke for use in the electricity and cement industries.

"Sincor has invested $4.2 billion in the project, which generated work for 30,000 persons over three years. What we are producing is Zuata Sweet — a new type of crude. All Venezuelans should be proud," said Sincor President, Frank Gygax.

"Sincor is an example of planning and fulfilment in each stage of a project. Last December, we completed the construction phase of the upgrader in the estimated time," he noted.

"The project was carried out with 69 per cent national participation, which demonstrates both the human, as well as the technical capacity, existing in Venezuela," he added.

Although the United States would be the main market for the new Zuata Sweet synthetic crude, Gygax said: "The crude is excellent quality and can go to practically any refinery in the world. There are no placement restrictions."

The inauguration ceremony of the upgrader was also attended by Energy and Mines Minister, Alvaro Silva Calderon, along with many top domestic and foreign oil industry representatives.

They including the Presidents of TotalFinaElf and PDVSA, Thierry Desmarest and Gaston Parra Luzardo, respectively; the Vice-President of Statoil, Richard Hubbard; the ambassadors of France and Norway, international banking executives, and Anzoategui State Governor, David De Lima.

Dolphin Energy awards midstream FEED deal on gas transmission pipeline

Abu Dhabi — Dolphin Energy Ltd (DEL) of the United Arab Emirates (UAE) has selected Halliburton unit Kellogg Brown and Root to carry out the midstream front-end engineering and design (FEED) work for the Dolphin project.

DEL said in a statement last month that Halliburton beat competition from three other companies which bid for the contract in October 2001.

The $3 million deal, to be completed in nine months, involves engineering, design and management support for the gas transmission pipeline, as well as gas receiving and metering facilities at Taweelah in Abu Dhabi and Jebel Ali in Dubai, and the riser platform.

The midstream FEED award follows the selection of Fugro Survey (Middle East) in

In brief

Norway reaffirms extension of cuts

BRUSSELS — Norwegian Oil Minister, Einar Steensnaes, has confirmed that Norway will stick with its policy of reducing oil output until the end of June "unless there is a dramatic development in the oil market." Steensnaes pointed out that the position of other non-OPEC nations that had pledged cuts was not crucial to Oslo's stand on future production levels. "We stand by our previous decision. We have no intention of changing the current plans to cut production for the first six months of this year," he said. Norway is the world's third largest oil exporter behind Saudi Arabia and Russia, and since January 1 this year it has implemented a 150,000 barrels/day cut in its output from a forecast 3.17 million b/d for the first half of 2002. Norway and four other non-OPEC producers — Angola, Mexico, Oman and Russia — committed to a total reduction in oil output or exports of 462,500 b/d from January 1.

Talisman starts output at Hannay field

BRUSSELS — Talisman Energy UK, a wholly-owned subsidiary of Canada's Talisman Energy, has announced first oil production from the Hannay field in the central North Sea. The field is currently producing 15,000 barrels/day from a single well, and has estimated reserves of 10 million b and a life expectancy of eight years. Hannay is located 13.5 km north-west of the Talisman-operated Buchan Alpha facility. The oil will be processed using the existing Buchan facilities and exported via the Forties pipeline system. The well initially tested at 21,900 b/d of crude, but will be produced at a lower rate of 14,000 b/d to 16,000 b/d, in order to maximise recovery from the reservoir. The partners in the field are Talisman Energy (the field operator) with an 85.72 per cent share, EDC (Europe) and First Oil Expro, with respective interests of 13.37 per cent and 0.91 per cent.

Alberta Energy invests $250m in Ecuador

QUITO — The Canadian oil company Alberta Energy has announced that it is planning to invest $250 million in enhancing crude oil production in former OPEC Member Country Ecuador. The target of the investment plan is to increase output from the company's field in the Tarapoa block. At present, production at the field is put at 50,000 barrels/day, and the Canadian company hopes to double this output level by the year 2003. Alberta Energy is also involved in a joint project with Italy's Agip, Occidental and Kerr McGee of the USA, and Spanish-Argentine group Repsol-YPF to construct heavy crude pipelines in Ecuador.

In brief

India's ONGC mulls overseas expansion

New Delhi — Indian firm ONGC Videsh Ltd (OVL), the overseas arm of India's state-owned Oil and Natural Gas Corporation (ONGC), is mulling the acquisition of stakes in two oil-producing fields in Sudan and Oman. OVL and another state-owned oil firm, the Indian Oil Corporation (IOC), is negotiating to take a 25 per cent stake in the Great Nile offshore block in Sudan. The China National Petroleum Corporation holds a 40 per cent interest in the Sudanese field, while Malaysia's Petronas has 30 per cent, Canada's Talisman possesses a 25 per cent stake and Sudan's national oil company has the remaining five per cent. OVL is also negotiating to buy a stake in block no 5 in Oman, talks for which were in the final stages, sources said. According to Iran's official Islamic Republic News Agency, agreements for the two blocks could be reached as early as this month.

Norway's Snøvhit gas project delayed

Brussels — Concerns expressed over the legality of a $115m tax subsidy have put on hold Norway's Snøvhit natural gas project in the Arctic, the largest industrial project in the area. The agency that monitors the European Economic Area agreement has questioned whether tax incentives will break rules about government subsidies. Norway's Statoil, which manages the project, said that work on the $4.5 million development has been suspended until the situation is clarified. "We cannot continue the project if we are not absolutely sure that the conditions set by the authorities are the conditions that will hold for the life of the project," said a project source. The development of the field by the end of 2006 would process up to 5.67 billion cubic metres of natural gas per year and includes a gas liquefaction plant, a natural gas power plant and a pipeline to the field.

Angola to study new LNG plant

Paris — French oil major TotalFinaElf said last month that it had signed an agreement to carry out a study to build a liquefied natural gas (LNG) plant in Angola. The study is to be undertaken in a partnership between the French company, Norway's Norsk Hydro, BP of the UK and ExxonMobil unit Esso on the one hand, and Angola's national oil company Sonangol and US giant ChevronTexaco on the other. The first set of partners will each take a 12 per cent stake in the project, while Sonangol will hold 20 per cent and Chevron Texaco will have a 32 per cent interest. The project study involves the construction of a one-train plant with a capacity of processing 4 million tonnes/year of LNG.

early February to carry out four separate contracts, worth a total of $5m, for technical surveys and environmental impact assessment studies.

A $10.3m contract for the upstream FEED work was awarded to a partnership of Foster Wheeler of the USA and Sofresid of France in mid-December last year.

The selection process for a second strategic partner in DEL is also moving at a fast pace. The UAE Offsets Group (UOG), the promoter and majority shareholder in DEL with a 75.5 per cent stake, has invited five oil majors to bid for up to 24.5 per cent of UOG's stake in Dolphin.

The existing strategic partner in DEL, France's TotalFinaElf, also holds a 24.5 per cent stake. One of the five firms invited — BP, Conoco, ExxonMobil, Occidental Petroleum and Royal Dutch/Shell — will be selected by mid-2002.

DEL is the development company responsible for implementing the $3.5bn Dolphin project, which involves the production, transportation and supply of natural gas from a dedicated area in Qatar's North field to the UAE.

Algeria's hydrocarbon exports down by over five per cent in 2001

Algiers — Algeria's hydrocarbon exports declined by 5.1 per cent last year, it was officially announced last month by the Energy and Mines Ministry.

A Ministry statement noted that total hydrocarbon exports in 2001 stood at 117 million tonnes of oil equivalent (toe), compared with 122.1m toe in 2000. The statement noted that the decline was essentially due to the cuts seen in OPEC production during the year.

It also pointed out that the added value of the sector had been reduced by 7.8 per cent in the year because of the fall in oil prices seen during the second half of 2001.

The Ministry noted that the production of liquefied natural gas and liquefied petroleum gas declined by 3.5 per cent from 2000 figures.

The country's hydrocarbons exports fetched $18.5 billion in 2001, compared with $21.1bn the previous year. Exports of non-oil products (principally phosphate and iron) were valued at $134m in the year.

Six hydrocarbon discoveries, including three in partnership with the national oil company, Sonatrach, and its partners, were made in 2001, as against eight discoveries (five by Sonatrach) in 2000. The Ministry said the discoveries totalled 27.5m cubic metres of oil and 10.7bn cu m of gas.

Also in 2001, the country recorded the signing of nine partnership agreements, related to an investment of over $200m, and the development of five deposits. Two calls for tender related to 10 exploration blocks over a surface area of 58,000 sq km were also made, the Algerian Press Agency reported.

Meanwhile, domestic consumption of natural gas in the country reached 20.5bn cu m in the year, representing 20 per cent of production. The Ministry said the realisation of the domestic gas distribution programme brought supplies to 82 localities, while 46 others were under construction and 14 others waiting to be started soon.

UN sees fall in Iraqi crude exports under its oil-for-food deal

UN, New York — Iraqi crude exports under the United Nations oil-for-food programme continued their recent declining trend towards the end of last month, according to the UN Office of the Iraq Programme (OIP).

The OIP is the UN agency that runs the oil-for-food programme, which allows Baghdad to use money from crude exports to purchase humanitarian relief.

In the week ending March 22, exports dropped sharply to 6.7 million barrels, and Iraq took in only about Euro 170m ($150m), the OIP said at UN headquarters.

"The previous week, exports had plummeted to 11.4m b, the figure itself a drop from the 14.2m b exported in the week before," it added.

Earlier in the month, the OIP said that a total of 134 contracts, covering 324m b of oil, had so far been approved under the current six-month phase of the deal, which expires in May. Iraq has exported 156m b, with total revenue estimated in excess of $2.7bn.

The OIP also said that the number of Iraqi import contracts blocked by the UN Security Council's Iraqi sanctions committee had fallen slightly to 2,093, worth a total of $5.27bn.

The sanctions committee released from hold 47 contracts worth $134m, but also placed on hold 37 new deals worth $79m.

In Baghdad, a spokesman for Iraq's electricity authority said the UN had blocked $1.5bn worth of contracts for equipment needed to help rebuild electricity infrastructure that was severely damaged during the 1991 Gulf conflict.

Since the start of the oil-for-food programme in December 1996, Iraq has exported about $52.3bn worth of crude oil, according to the OIP.

Iran's South Pars field begins production of LNG and condensate

Tehran — The Managing Director of the National Iranian Oil Company (NIOC), Mehdi Mirmoezi, has said here that production from the liquefied natural gas and condensate unit at the South Pars gas field's phases two and three had started.

The new production capacity was a "great accomplishment for the nation", said Mirmoezi, adding that the LNG production capacity was 12.5m cubic metres and 20,000 barrels/day of condensate.

The value of daily production was roughly $1 million, but with the inauguration of three more units in the fall, this would soon exceed a value of $4m, said Mirmoezi.

"Less than half of the total production value of the two phases, in current prices, will be paid out for the investment outlays of the field," he noted.

Mirmozei pointed out that operations in the field started in 1997 and had come to fruition after four years of hard work by domestic and foreign companies.

A total of 11,000 people, including 9,000 Iranians, were employed at the peak of operations in phases two and three of the field, he said.

In a related development last month, the Director of the Operations Zone at South Pars, Mohammad-Ali Yousefian, said here that contracts had been signed for the development of phases nine and ten of the field.

Executive operations on those projects were due to start soon, while phases 11 and 12 were at the tendering stage and preparations were being made to select a contractor for phases 13 and 14, he noted.

Yousefian said that, based on current estimates, some $14.5 billion in hard currency was needed for the implementation of phase 14 of the project. He added that $8bn out of the total sum had been invested in phases one through four of the scheme.

Implementation of the first eight phases of the project had so far created 18,000 jobs directly and 25,000 opportunities indirectly, while implementation of the first 14 phases of the project would create 50,000 jobs.

Executive operations on the first refining unit of phases two and three of South Pars had been completed by TotalFinaElf, Gazprom and Petronas, with an operational capacity of 500m cu feet/d of gas, 20,000 barrels/d of condensate, and 100,000 tonnes/d of sulphur. The gas condensate output of the unit was now being stored and would soon be exported.

Yousefian added that the first phase of the project, now being implemented by PetroPars, had made 78 per cent physical progress and would become operational in October, on schedule.

Two refining units, with a capacity of 1bn cu ft/d of gas, 40,000 b/d of condensate, and 200,000 t/d of sulphur were to be built in this phase, he added.

About 60 per cent of engineering services and operations on the first phase had been carried out by Iranian specialists. A 32-inch pipeline had been laid on a 150-km stretch of land for the transfer of energy from offshore to onshore destinations, Yousefian noted.

Kuwait establishes new firm to manage fields in the Neutral Zone

Kuwait — The Kuwaiti Oil Ministry has announced the setting up of a new company to take charge of managing the country's oil fields in its portion of the Neutral Zone, which it shares with Saudi Arabia.

In brief

USA, Canada boost energy co-operation
NEW YORK — US Energy Secretary, Spencer Abraham, and Canadian Natural Resources Minister, Herb Dhaliwal, met last month to discuss a range of energy issues and to strengthen the relationship on energy matters between the two countries. They agreed to broaden bilateral co-operation and to strengthen and expand North American energy markets on the basis of the North American Free Trade Agreement, to enhance the openness and transparency of energy markets, and to reduce and avoid market barriers and distortions. Abraham and Dhaliwal are due to co-chair a meeting of the G8 Energy Ministers in Detroit, Michigan, in early May, in advance of the G8 summit to be hosted by Canada on June 26-27 this year in Kananaskis, Alberta.

South Korea to join IEA
PARIS — The Paris-based International Energy Agency (IEA), which co-ordinates the energy policies of the industrialized countries, said last month that South Korea was ready to become a member of the 25-nation group. "South Korea has completed all steps required to become a full member of the IEA," an Agency statement said. The IEA's Executive Director, Robert Priddle, said that he heartily welcomed South Korea into the IEA, and he noted the country's robust economy and strategic position in East Asia. The accession of South Korea as the 26th member of the Agency was due to take place on March 26. The country formally applied for membership in April last year, and has already been accepted into the OECD, a prerequisite for joining the IEA. Basic principles for members of the IEA are to accumulate 90 days of forward consumption in oil stocks and to agree to implement demand-restraint policies and abide by emergency procedures in case of a serious oil shortage.

TotalFinaElf increases stake in Oseberg
PARIS — French oil group TotalFinaElf announced last moth that it had increased its holdings in several oil fields in the Norwegian sector of the North Sea, and now held 10 per cent of all fields within the Oseberg zone. The zone includes licences PL53, PL79, PL104 and PL171b. "The group now holds a 10 per cent interest in each of the four permits that make up the zone," the French company said in a statement. Production from the zone is put at around 380,000 barrels/day and TotalFinaElf's operations have now expanded into Oseberg South. The French group is the leading international producer in Norway, with output of around 400,000 barrels of oil equivalent/day.

In brief

Shell gets okay for Goldeneye field

BRUSSELS — Shell Expro, a unit of Anglo-Dutch oil giant Royal Dutch/Shell, has received approval from the British government to develop the Goldeneye gas and liquids field in the UK sector of the North Sea. The UK Energy Secretary, Brian Wilson, said that the field, which lies some 96 km offshore, would lead to "terrific new opportunities" for UK oil and gas. "The Goldeneye venture highlights the continuing development of the UK continental shelf and will be a significant contribution to the security of UK gas supplies," commented Wilson. The Goldeneye field is estimated to hold 500 billion cubic feet of gas reserves and 17 million barrels of condensate. Production is expected to begin towards the end of 2004.

Thai-Malaysia pipeline delayed again

KUALA LUMPUR — The trans-Thailand-Malaysia (TTM) gas pipeline project is to suffer another delay at the request of the Thai government, which wants to probe the environmental aspects of the scheme. The President and CEO of Malaysia's state-owned oil company Petronas, Mohammed Hassan Marican, said that Thailand had requested more time and so the project would have to be put on hold. Hassan added that if the TTM project took too long to approve, Petronas may opt for an alternative plan, as otherwise the giant trans-ASEAN gas pipeline (TAGP) project, of which the TTM is a part, might be affected. Last December, the Thai authorities approved the project, which involves constructing a 336-km gas pipeline and a gas separation plant between the Gulf of Thailand and Malaysia.

Elf Gabon reports drop in profit

PARIS — Elf Gabon, a unit of French oil giant TotalFinaElf, has reported a significant drop in its 2001 revenue and a fall in its net earnings, due to lower oil prices. A statement from the company said that revenues declined to $731.8 million last year, from $890.9m in 2000. At the same time, 2001 net income slipped back to $124.5m from $181.1m the previous year. Elf Gabon attributed the weaker performance to a deterioration of the oil price, which averaged $21.46/barrel in 2001, compared with $26.37/b for Gabon's crude in 2000. As a result, the company's capital expenditure fell to $43.7m last year, down from $48.1m a year earlier. Expenditure in the exploration and appraisal sector was slightly higher at $3.3m, but development spending was down to $39.5m from $44.8m in 2000. Funds generated from operations in 2001 totalled $203.7m, as against $269.6m the previous year.

The new firm, to be called the Kuwaiti Gulf Oil Company, will be an affiliate of the state owned Kuwait Petroleum Corporation (KPC).

Under-Secretary at the Oil Ministry, Issa Mohammed Al-Oun, was quoted by the Kuwaiti News Agency (KUNA) as saying that a general assembly meeting had appointed the Chairman and members of the board.

At the end of October last year, the Kuwaiti Cabinet approved a document signed by the Oil Ministry and the Arabian Oil Company (AOC) of Japan (which formerly handled things in the Kuwaiti portion of the Zone), stipulating the end of AOC's concession in January 2003.

The new company will be in charge of all oil activities, including exploration, drilling, development of fields, transportation, treatment of oil and gas, management of oil refineries, as well as performing all back-up tasks, marketing, and selling the state's oil and gas.

Al-Oun said the Ministry had endorsed a scheme to develop the company on a large scale, including embarking on exploration projects in the region and developing new fields. For example, the Cabinet had assigned a special team to develop the Al-Dorra oil field, in co-operation with Saudi Arabia, he said.

All issues involving the Ministry and the company had been settled, except for some matters related to financing, he said, adding that the agreement envisaged that AOC would continue to offer technical and consultative assistance to the new firm.

In September last year, Kuwait and Japan signed a memorandum of understanding, under which the concessions granted to the AOC since 1958 will be terminated on January 4, 2003.

The memo gives Kuwait the right to obtain funds from the AOC to finance projects in the divided zone at easy terms.

The new company will provide the AOC with no less than 100,000 barrels/day of crude oil from Kuwait's side of the Zone for export to Japan for a 20-year period.

The changes come as a result of a new clause in Kuwait's constitution that restricts the mining rights of foreign firms with regard to the country's natural resources.

AOC's role has been reduced to that of a contractor, requiring it to provide training and other technical services to the public firms that would hold the drilling rights. Under the earlier contract, the Japanese firm had drilling rights and was allowed to own the production facilities and produced oil.

Despite AOC's reduced role, company President Keiichi Konaga said that his firm could still achieve three main goals under the terms of the new agreement.

These were "substantial involvement in the Khafji oil field, a stable supply of oil to Japan, and a reasonable profit for us," the *Japan Times* quoted Konaga as saying.

Nigeria's oil reserves hit 30 billion barrels, announces Lukman

Abuja — Nigeria's crude oil and condensate reserves have reached the level of 30 billion barrels, according to the country's Presidential Adviser on Petroleum and Energy, Dr Rilwanu Lukman.

The announcement was made in an address delivered on Lukman's behalf to the Sixth Offshore West Africa conference by the Permanent Secretary at the Ministry of Petroleum Resources and Nigeria's OPEC Governor, Ms Amal I Pepple.

Nigeria's gas reserves have also risen to 159 trillion cubic feet, up from 120tr cu ft in 2000, a rise of 32.3 per cent, noted Lukman, who was OPEC Secretary General from 1995–2000.

About 11bn b of the new reserves were offshore, and the remaining 19bn b were onshore.

The offshore region would be able to contribute 1 million barrels/day to total oil output by 2003–04, said Lukman.

The offshore region is believed to have excellent prospects for future oil and gas production, and the Nigerian government would continue to encourage the stakeholders to boost their investments.

However, even though the deep offshore was very promising, the cost of funding projects there was high and the industry would continue to evolve alternative funding arrangements for the high-cost and difficult area.

Lukman disclosed that the industry was already test-running an alternative funding approach for a couple of the joint venture projects.

These were the $1bn EA offshore

project between the Nigerian National Petroleum Corporation (NNPC), Shell, Agip and TotalFinaElf and the $1.3bn Amenam/Kpono offshore project by a joint venture between the NNPC, TotalFinaElf and ExxonMobil.

Under the arrangement, the government is not required to contribute cash calls for the projects, but the companies are to seek funding for the projects, which is repaid when oil production begins.

The other areas which Lukman urged the oil companies to focus on include introduction of technology that will reduce cost of oil production, in view of the volatility of oil prices.

With the growing number of highly skilled Nigerians in the oil business, Lukman urged the companies to promote local content in all their operations, which would reduce operational costs and promote the growth of auxillary industries in the country.

Pertamina signs gas supply protocol with Malaysia's Petronas

Jakarta — Indonesian state oil and gas company Pertamina has signed a memorandum of understanding (MOU) with its Malaysian counterpart Petronas for the supply of gas, it was reported last month.

The MOU envisages work on a contract to supply 10 billion cubic feet/day of natural gas for 20 years from 2010 from the giant D-Alpha gas field in the East Natuna Sea.

With the signing of the MOU, both parties, along with field operator ExxonMobil, have started work on finalizing a gas sales deal from the field, which when fully developed could cost as much as $40 billion.

The D-Alpha field holds proven and probable reserves of between 140–220 trillion cu ft of natural gas. However, the reservoir has a high 72 per cent carbon dioxide content, according to Pertamina officials.

"We will start carrying out a feasibility study in April that will continue until the end of this year," the *Jakarta Post* quoted Pertamina's Upstream Director, Iin Arifin Takhyan, as saying.

According to official Pertamina estimates, 45tr cu ft of gas could be produced from the field, the largest single accumulation of gas in Asia.

The D-Alpha concession is 76 per cent held by ExxonMobil and 24 per cent by Pertamina under a production-sharing contract.

Under the terms of the MOU, Pertamina hopes to sell at least 13 per cent of its stake in the field to Petronas, according to media reports.

Qatar mulls possible merger of two major LNG producing firms

Doha — The Vice-Chairman and Managing Director of one of Qatar's two major LNG producing firms, QatarGas, Faisal Al-Suwaidi, has confirmed that "consolidation efforts" are being considered between his company and the country's other big LNG firm, RasGas.

However, no timeframe had been set for the merger of the two LNG companies, he told reporters in the Qatari capital Doha.

The consolidation efforts made business sense and would save lots of money for both QatarGas and RasGas, said Al-Suwaidi.

Although QatarGas's budgeted reduction targets for 2001 had been met, benchmark studies had revealed that the company's production costs per tonne of LNG were still higher than some of its competitors.

The company could not afford to let this situation continue for very long, as buyers were looking for cheaper LNG in the changed market situation.

Al-Suwaidi said that, this year, QatarGas intended to reduce its planned maintenance shutdown from 35 to 28 days. Last year, QatarGas made all its LNG deliveries on time, despite one vessel being out of service for about 76 days.

Regarding the firm's strategy for the next 10 years, he said the company was negotiating with multiple buyers for LNG sales from additional trains that would step up its production capacity to 19 million tonnes/year by 2010.

The de-bottlenecking contract awarded to a consortium of Chiyoda and Technip would enhance the combined annual capacity of the company's three LNG trains to 9.4m t/y.

In brief

Japanese firms sign three LNG deals
TOKYO — Japanese power and gas companies have signed three major contracts for liquefied natural gas imports from Malaysia, Australia and East Timor. The latest accord is an agreement between the Tokyo Electric Power Company (Tepco), Tokyo Gas and Phillips Petroleum to import gas from the proposed LNG plant in Darwin, Australia, which will process some 3.4 trillion cubic feet of natural gas from the Bayu Undan field into LNG. The 17-year contract, with a planned output of 3 million tonnes/year, will kick-start a $3 billion LNG plant, pipeline and field development programme in the Timor Sea, which is being jointly developed by Australia with the newly independent country of East Timor. LNG from Darwin will be delivered to Tokyo from January 2006. In a separate deal, Tepco and Tokyo Gas have also signed a deal to take 7.4m t/y for a 15-year period from Malaysia's Bintulu LNG complex, while under a third accord, Osaka Gas of Japan has agreed with the North West Shelf Group of Australia to import 1m t/y of LNG from 2004.

Sweden okays strict emission limits
BRUSSELS — The Swedish parliament has approved a four per cent reduction in the country's greenhouse gas emissions, far stricter than the measures required under the Kyoto Protocol on climate change. The plan aims to cut Sweden's emissions by four per cent from 1990 levels by 2012, through improved energy efficiency and changes in the use of fossil fuels. Industry sources pointed out that as Sweden was one of the lowest producers of carbon dioxide emissions in the European Union, the country could have actually increased emissions within the overall regional commitment to cut combined output. The Swedish move came as the EU summit in Barcelona ended with an agreement on energy liberalization and an agreement to ratify the Kyoto Protocol, despite its rejection by the United States.

US gasoline output hits new record
NEW YORK — United States refineries set a gasoline production record in February of more than 8 million barrels/day as deliveries (a measure of demand) went up by three per cent, the largest single increase since July last year, the American Petroleum Institute (API) has reported. February's gasoline production was 3.5 per cent higher than a year ago, the API's monthly statistical report noted. As in recent months, production of jet kerosene at 1.45m b/d was down by three per cent from a year ago, while output of distillate fuel oil, was down by nearly four per cent at almost 3.5m b/d.

March[1]

Crude oil price movements

The monthly price of OPEC's Reference Basket[1] rose for the third consecutive month during March. It made considerable gains, adding $3.75/barrel, or almost 20 per cent, with respect to the previous month; however, on a year-on-year basis, it was still five per cent lower. The hefty gains occurred during the whole month. It started the month by rising by $1.72/b to average $20.90/b; then it gained a further $1.56/b, to close at $22.46/b during the second week. The speed of the recovery slowed down during the third week; nonetheless, the Basket added another 83¢/b to average $23.29/b. In the fourth week, it increased by another 64¢/b and closed just below the $24/b mark (see **Table A**).

Looking at the seven crudes that compose the Basket, we find that they all registered gains in March. Tia Juana Light and Minas led the rise, with $4.10/b and $4.01/b; Dubai and Arabian Light followed, improving by $3.95/b and $3.86/b; and Isthmus and the Brent-related crude Bonny Light firmed, by $3.80/b and $3.46/b, respectively. Finally, Saharan Blend posted the lowest gain, rising by $3.11/b.

Crude oil prices improved considerably throughout the month, boosted by an array of bullish news. However, as the month progressed, it became evident that there was a great deal of speculation built into the prices. They strengthened at the beginning of the month, boosted by good macroeconomic figures in the USA. A report released on March 7 by the US Commerce Department revised 4Q GDP growth up to 1.4 per cent, from the previous 0.2 per cent. Meanwhile, market attention focused on the OPEC/Russia meeting in Moscow. Positive comments by OPEC's Secretary General, Dr Alí Rodríguez Araque, about the likelihood of Russia's extension of the pledged export cut into 2Q, supported prices. More positive news came from a bullish API stock report, which showed a sizeable drop in gasoline inventories, as well as a decline in distillate stocks. Later in the week, markets became concerned about comments by Robert Priddle, Executive Director of the International Energy Agency, who questioned Russia's degree of compliance with its pledged export cuts. Towards the weekend, benchmark crudes reached a six-month high on intra-day trading, on concern about the results of the UN-Iraq meeting on the issue of arms inspections.

Crude prices continued to firm during the second week, supported by more positive economic figures in the USA, as well as the ongoing decline in US gasoline stocks. Concern over the escalation of the crisis in the Middle East added to the bullish sentiment, pushing the NYMEX front-month contract to a five-month high. Meanwhile, the US Department of Energy's Energy Information Administration (DoE/EIA) revised its world oil demand forecast for 2002 down by 80,000 barrels/day to 420,000 b/d. Markets reacted positively to the announcement by OPEC, at its 119th Meeting of the Conference in Vienna, that it would maintain its current output levels.

Crude markets continued to strengthen during the second half of the month, but displayed volatility, as prices were influenced by bullish as well as bearish news. Crude oil posted solid gains at the beginning of the third week, breaking through the $25/b level, mainly on technical buying, although volumes in the futures market were on the light side. Subsequently, prices retreated on profit-taking. Meanwhile, the API report for the week ending March 15 showed a rise in crude oil stocks, while distillate and gasoline inventories fell. A rebound came later in the week, when prices posted hefty gains, boosted by heavy fund-buying, amid improved perceptions about the strength of the US economic recovery.

In the last week of the month, prices kept the upward momentum, with a very bullish market perception, according to the Commodity Futures Trading Commission's report, which showed that non-commercials had more than doubled their net long positions during the week ending March 19. Further support came from the inventory statistics released by both the

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

	February 02	March 02	Year-to-date average 2001	2002
Reference Basket	**18.89**	**22.64**	**24.36**	**19.83**
Arabian Light	19.47	23.33	23.53	20.41
Dubai	19.02	22.97	23.59	20.05
Bonny Light	20.30	23.76	25.70	21.12
Saharan Blend	19.73	22.84	26.22	20.65
Minas	18.91	22.92	25.01	20.13
Tia Juana Light	16.05	20.15	22.41	17.05
Isthmus	18.74	22.54	24.07	19.40
Other crudes				
Brent	20.22	23.73	25.76	21.02
WTI	20.67	24.35	28.78	21.43
Differentials				
WTI/Brent	0.45	0.62	3.02	0.41
Brent/Dubai	1.20	0.76	2.17	0.97

1. *This section is based on the OPEC Monthly Oil Market Report prepared by the Research Division of the Secretariat — published in mid-month and containing up-to-date analysis, additional information, graphs and tables. Researchers and other readers may download the publication in PDF format from our Web site (www.opec.org), provided OPEC is credited as source for any usage.*
2. *An average of Saharan Blend, Minas, Bonny Light, Arabian Light, Dubai, Tia Juana Light and Isthmus.*

API and the DoE, that revealed hefty stock declines in crude oil inventories, as well as in gasoline and distillate stocks.

US and European markets

Early signs of an economic recovery in the USA, OPEC's decision to leave output levels unchanged until at least its June Meeting, and fears of US-led military action against Iraq all contributed to pushing oil prices to a six-month high during March. Fuelling the price hike was persistent healthy demand for gasoline, which reduced inventories. Refinery utilization rates fell during the first half of the month, declining by 3.3 per cent in the first week and by a further 0.9 per cent in the second. However, refinery-run cuts then reversed their trend, on improved product demand and stronger refining margins. The second half of the month saw the refinery utilization rate recover by 1.2 per cent and 0.1 per cent, and it stood at 86.3 per cent on March 22. Nigerian and North Sea gasoline-rich grades drew healthy buying interest from the strength of gasoline demand; meanwhile, reduced availability of sour crudes like Maya, Mesa and Iraqi Basrah led to a drawdown of stocks. In Europe, early in the month, poor refining margins caused Russian crudes to seek other outlets and widened their differential to dated Brent. Later in the month, this situation reversed to some extent, due to healthy US gasoline demand.

Far Eastern markets

Cuts in OPEC's heavy sour regional crude supplies and several refinery outages, combined with heavy demand for gasoline and naphtha in Asia-Pacific, tightened the market and boosted spot prices of regional sour grades. Heavy naphtha demand in several Asia-Pacific countries, especially in Japan, following refinery maintenance in Saudi Arabia and the previous month's refinery accident in Kuwait, distorted regional crude oil differentials. Arbitrage opportunities, to move naphtha from both the US Gulf and the Mediterranean area to Japan, remained open.

Product markets and refinery operations

The sharp rally in crude oil markets translated into strong product prices in March, with the US gasoline market leading the way, as its lower refinery throughput brought about steep product stock-draws. The refinery utilization rate remained below 90 per cent in the USA and Eur-16 countries, despite a modest recovery in profits in the USA (see **Table B**).

US Gulf market

After their marginal-to-modest gains during the previous month, product prices rallied higher in March. There were two driving forces: the first was the sharp rise in crude prices, in direct relation to the gasoil price, in light of ample distillate stocks; and, secondly, there was a very low refinery utilization rate (86.6 per cent), whereby gasoline and fuel oil remained less well-supplied, lending support to prices. The average gasoline price enjoyed a massive gain of $7.34/b, underpinned by sustainable declines in US refinery throughput, a factor which has emerged since the second half of last year, in response to poor economics, thus reducing output of their main product, gasoline. This, in part, led to continuous falls in gasoline stocks for most of March. However, three other possibilities could not be ruled out: an upsurge in demand; the normal phenomenon of purging the winter grade, prior to the commencement of stricter summer gasoline specifications; and a combination of both factors. Nonetheless, regardless of the reason behind the weekly gasoline stock-draws, these weekly figures contributed considerably to a resurgence in gasoline

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

		Jan 02	Feb 02	Mar 02	Change Mar/Feb
US Gulf					
Regular gasoline	*(unleaded)*	22.63	22.65	29.99	+7.34
Gasoil	*(0.2%S)*	21.43	21.76	25.65	+3.89
Fuel oil	*(3.0%S)*	14.77	15.22	18.99	+3.77
Rotterdam					
Premium gasoline	*(unleaded)*	20.76	20.94R	25.74	+4.80
Gasoil	*(0.2%S)*	21.76	21.81	25.30	+3.48
Fuel oil	*(3.5%S)*	15.24R	15.52	17.91	+2.39
Singapore					
Premium gasoline	*(unleaded)*	20.95	24.11	27.88	+3.77
Gasoil	*(0.5%S)*	20.94	21.76	24.83	+3.07
Fuel oil	*(380 cst)*	16.19	17.14	19.42	+2.27

Table C: Refinery operations in selected OECD countries

	Refinery throughput *(m b/d)*			**Refinery utilization** *(%)*[1]		
	Jan 02	**Feb 02**	**Mar 02**	**Jan 02**	**Feb 02**	**Mar 02**
USA	14.67	14.61	14.34	88.5	88.2	86.6
France	1.67[R]	1.60	1.60	88.2[R]	84.5	84.4
Germany	2.20[R]	2.18	2.17	97.5[R]	96.4	95.9
Italy	1.81[R]	1.85[R]	1.74	79.4[R]	81.1[R]	76.4
UK	1.69[R]	1.67	1.62	95.0[R]	93.6	91.1
Eur-16[2]	12.19[R]	12.19[R]	11.93	89.3[R]	89.3[R]	87.4
Japan	4.35	4.42	*na*	91.0	92.3	*na*

1. *Refinery capacities used are in barrels per calendar day.*
2. *European Union plus Norway.*

na *Not available.*
R *Revised since last issue.*

Sources: OPEC Statistics, Argus, Euroilstock Inventory Report/IEA.

prices, given the approaching driving season. In contrast, a massive fall of 14 million barrels in middle distillate stocks during March made a minor contribution to soaring gasoil prices, as year-on-year distillate inventories showed a surplus of 10 per cent, or 18m b. Furthermore, distillate demand was weak, in a warm winter drawing to a close; preliminary governmental distillate demand figures, on a four-week moving average, were 1.3 per cent and 7.5 per cent below the previous month and year, respectively, clearly indicating the impact of lower refinery output on product stock levels, rather than increased demand. However, the surge in the crude market lent great support to the gasoil price, which rose by $3.89/b. The high-sulphur fuel oil price (HSFO) increased considerably, by $3.77/b, following gains in the low-sulphur (LFSO) grade, which was boosted by firm natural gas prices, generating a large utility purchase of LFSO in an already sustained fairly tightly supplied market.

Refining margins exceeded $1/b for the marker crude, WTI, registering the highest value in the past nine months. Good refining margins were largely attributed to the soaring gasoline prices, as the gasoline yield comprised about 56 per cent of total US refinery throughput (see **Table B**).

Despite a modest recovery in refining margins, US refinery throughput fell by 270,000 b/d to 14.34m b/d, reflecting continuous discretionary run cuts. The refinery utilization rate was 86.6 per cent, which was the lowest US refinery throughput in March throughout the last decade (see **Table C**).

Rotterdam market

Though product fundamentals remained bearish in the European market, due largely to sagging regional demand, the resurgence of crude prices pulled up all product prices in March. Gasoline and, to a lesser extent, fuel oil gained further from arbitrage trading to the US East Coast and the Asian market, respectively. Intensified transatlantic gasoline cargoes were induced by two supporting factors: one was the strong US gasoline market, and the other, an easy blending of European winter grade with methyl tertiary butyl ether to meet US summer specifications. Consequently, the gasoline price soared by $4.80/b. The gasoil price rose by $3.48/b, driven essentially by large crude gains, despite high end-user stocks in Germany and rising Russian distillate exports. The HFSO price increased by $2.39/b, assisted by several arbitrage opportunities to the Asian market during the first half of the month and prevailing high LFSO prices.

Refining margins fell further into negative territory, as the price of gasoil, which represents the main product of European refineries, lagged behind that of crude (see **Table B**).

Refinery throughput in Eur-16 (EU plus Norway) fell by 260,000 b/d to 11.93m b/d during March, in tandem with the start of regional turnaround maintenance, which is expected to take more capacity in the following month. However, a refinery utilization rate of 87.4 per cent was, surprisingly, at its highest level for two years (see **Table C**).

Singapore market

While demand for the heavy end of the barrel remained weak in the continued absence of the largest regional consumer, China, trading of light products in March was hardly hit by a sharp fall in imports from Indonesia, the largest regional buyer, following hikes in local retail prices in January and a recent flood in the Jakarta region, leaving tanks at higher levels. Nonetheless, product prices improved significantly, tracking hefty crude gains. Gasoline rallied by a further $3.77/b, supported, in part, by transpacific arbitrage to the US West Coast, after an unplanned refinery outage there and strong demand from the Middle East, despite Indonesia's low monthly purchase of just about 500,000 b, instead of 1m b. Gasoil gained a considerable $3.07/b, though Indonesia was totally absent from the market, instead of making its usual monthly purchase of distillates of 1.2–1.8m b. The fuel oil price surged by $2.27/b, aided by prevailing tight supply, which was exacerbated by the planned maintenance of South Korean refineries, the main regional supplier.

Refining margins turned negative, as strong crude prices ousted product price rises (see **Table B**).

In Japan, the refinery throughput stood at 4.42m b/d in February, a rise of 70,000 b/d from the previous month. The corresponding refinery utilization rate was 92.3 per cent, which was 2.4 per cent below the previous year's figure (see **Table C**).

The oil futures market

New York Mercantile Exchange WTI prices underwent a continuous rally in the first week of March, helped by stronger-than-expected US economic data and the prospect of a demand recovery. The high implied US gasoline demand data, which stood at 9.2m b/d, came as an additional indicator of the recovery. These bullish sentiments coincided with statements from OPEC's Secretary General, Dr Alí Rodríguez Araque, that the Organization would keep its production cuts in force until 2003, thereby giving the bulls in the market a stronger position, especially in light of a possible resumption of the Middle East conflict. Gasoline added further impetus to the rally, as refinery glitches in the USA and the threat of a Venezuelan oil workers' strike lifted gasoline prices, making its spread to crude surge to $8/b, thereby exerting a pull on WTI prices and lifting them to $23.71/b.

The rally extended through the early part of the second week and was supported by a rash of refinery snags and continued tension within the national oil company, Petróleos de Venezuela. Market readings of renewed Iraqi unease about the return of UN weapons inspectors added to the supply concern. An International Energy Agency report that pointed to a downward revision of 90,000 b/d in demand estimates for 2002, forced some selling in the market; but a US weekly inventory report cut the losses, causing a short covering rally on the back of unexpected draws on crude oil, gasoline and distillates. Some profit-taking, ahead of OPEC's Meeting of the Conference on March 15, and more conservative draws on US inventories, as reported by the country's Department of Energy, caused prices to slip temporarily, but they moved higher to $24.56/b, as OPEC delegates made mixed statements about the situation.

In the third week, although some of the price movements were attributed to technical buying and short-covering, the real sentiments were moved by gasoline. This product had witnessed a continuous

draw on inventories in the previous few weeks. Any refinery snag would lead to a price rise. Rumours of a shutdown of a 30,000 b/d gasoline reformer unit in New Jersey moved prices up by 66¢/b, and WTI reached $25.61/b.

A large number of non-commercial (large speculators) long positions, which totalled 52,224 crude contracts, was bearish for the market in the last week of March, especially since the previous rally was overdone, and the connection between the improving US economy and improved demand did not look that close. However, later in the week, US inventory data came to the rescue, showing a huge draw on crude and continuous draws on both gasoline and distillate stocks, thereby pushing WTI to $25.87/b.

The tanker market

OPEC area spot-chartering increased by 1.55m b/d to a monthly average of 13.07m b/d in March, assisted by an increase in fixture volumes to westbound destinations, amid uncertainty over a supply disruption. However, compared with the same period last year, the current level of OPEC fixtures remained at a deficit of 2.06m b/d, due to production restraint. Meanwhile, non-OPEC spot-chartering continued to maintain the high level of 11.26m b/d observed the previous month, being only 140,000 b/d lower and not far short of the OPEC level. As a consequence, global spot fixtures improved by a further 1.41m b/d to 24.33m b/d, but remained 1.51m b/d below the level in the corresponding month of 2001. The OPEC area's share of global spot-chartering regained some of the previous month's losses, rising by 3.45 percentage points to 53.72 per cent, although this level was 4.84 percentage points below the previous year's share. Most of the increment in OPEC chartering during March was attributed to a significant rise in spot fixtures from the Middle East on the westbound long-haul route, by 1.15m b/d to 2.59m b/d, while, on the eastbound route, they increased marginally by just 500,000 b/d to 4.17m b/d. Therefore, the share of Middle East westbound of OPEC total fixtures improved by a considerable 7.30 percentage points to 19.84 per cent, while the share of eastbound rose by just 0.06 percentage points to 31.89 per cent. Together, they accounted for 51.73 per cent of total chartering in the OPEC area, which was 7.36 percentage points above the previous month's level. According to preliminary estimates, sailings from the OPEC area declined by 1.56m b/d to a monthly average of 22.29m b/d. Sailings from the Middle East also decreased, by 500,000 b/d to a monthly average of 16.04m b/d, which was about 72 per cent of total OPEC sailings. Arrivals in the US Gulf Coast, the East Coast and the Caribbean declined in March by 720,000 b/d to a monthly average of 6.87m b/d, while arrivals in North-West Europe and Euromed moved lower by 560,000 b/d to 6.15m b/d and 680,000 b/d to 4.79m b/d, respectively. The estimated oil-at-sea on March 24 was 461m b, which was 12m b above the level observed at the end of the previous month.

Despite the prevailing active market in terms of fixture volumes, which was aggravated in the second half of March by charterers' concern over supply disruption, prompting them to move more oil on water, VLCC spot freight rates in the Middle East reached the bottom range, due to excessive tonnage availability. The monthly average freight rates for VLCC cargoes on the Middle East eastbound and westbound long-haul routes plunged by 16 points to Worldscale 35 and six points to W33, respectively, the lowest levels in the past two years; this was amid lower import volumes into the Asian market, due to the forthcoming refinery turnaround season and improved enquiries in the west. The steady active market for Suezmax tankers on the routes across the Atlantic, that had been witnessed the previous month, continued, with a significant improvement in fixture levels. Nevertheless, Suezmax tanker owners were unable to push freight rates high enough, as charterers started to combine cargoes in cheap VLCC tankers operating on the same routes, to put pressure on Suezmax rates. Therefore, freight rates on the routes from West Africa and North-West Europe to the US Gulf and East Coasts fluctuated in both directions during the course of the month, averaging gains of only five points to W68 and seven points to W73, respectively. Aframax freight rates for tankers operating on the short-haul routes weakened in March, except for the route across the Mediterranean, where the rates stabilized at the previous month's level of W121, with only a one point deficit. However, the monthly average freight rates along the Caribbean/US East Coast route witnessed the biggest drop of all types of crude tanker, plummeting by 24 points to W126, while, on the Mediterranean/North-West Europe route, they declined by seven points to W94. Freight rates for 70–100,000 dwt tankers on the route from Indonesia to the US West Coast declined by a further 13 points to W90.

The clean product tanker markets, in general, showed a softer trend, except for voyages heading to the Far East. Freight rates on the Middle East/Far East route improved by three points to W176, while, on the Singapore/Far East route, they rose by a significant 20 points to W196, helped by a surge in fixtures, especially in the last week of the month. However, on the routes across the Mediterranean and to North-West Europe, freight rates weakened by eight points to W158 and 14 points to W154, respectively. Similarly, freight rates from North-West Europe and the Caribbean to the US destinations declined by four points to W164 and 13 points to W149, respectively.

World oil demand

Estimate for 2001

World

A rather significant modification has been applied to 4Q figures since the last report, mostly due to downward adjustments to the most up-to-date data relating to all regions. However, minor upward revisions to 1Q, 2Q and 3Q estimates in total have mostly offset the revision to 4Q figures. Consumption for the year 2001 is, therefore, estimated to average 75.87m b/d, very close to the 75.88m b/d reported in the previous report and nearly 50,000 b/d higher than that of 2000. On a regional basis, demand is estimated to have decreased by 140,000 b/d in the OECD. However, it is likely to have risen by 139,000 b/d in the former CPEs (Other regions), due to a significant increase in FSU consumption, which has been partly

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

	1Q	2Q	3Q	4Q	Year
1998	2.77	3.02	3.18	3.20	3.04
1999	3.12	3.62	3.52	3.49	3.44
2000	3.97	4.13	4.47	4.01	4.14
2001[1]	4.30	4.71	4.83	4.38	4.56
2002[2]	5.00	5.37	5.10	5.05	5.13

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

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

	2000	4Q01	2001	Feb 02*	Mar 02*	1Q02	Mar 02/ Feb 02
Algeria	808	810	820	775	799	786	24
Indonesia	1,278	1,175	1,214	1,145	1,140	1,143	–5
IR Iran	3,671	3,481	3,665	3,324	3,383	3,358	59
Iraq	2,552	2,559	2,383	2,447	2,481	2,396	34
Kuwait	2,101	1,949	2,032	1,826	1,845	1,843	20
SP Libyan AJ	1,405	1,308	1,361	1,268	1,295	1,275	27
Nigeria	2,031	2,113	2,097	1,947	1,970	1,970	23
Qatar	698	634	683	589	602	596	13
Saudi Arabia	8,273	7,571	7,945	7,159	7,331	7,246	172
UAE	2,251	2,034	2,163	1,957	1,975	1,972	19
Venezuela	2,897	2,703	2,831	2,559	2,576	2,571	16
Total OPEC	**27,965**	**26,336**	**27,194**	**24,994**	**25,396**	**25,157**	**403**

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

offset by declines in China's and Other Europe's apparent consumption. Demand in the developing countries is also expected to have risen moderately, by 510,000 b/d.

On a quarterly basis, compared with the year-earlier figure, world demand grew by 0.98 per cent, or 744,000 b/d, to average 76.66m b/d in 1Q. It is estimated to have grown by 0.91 per cent, or 675,000 b/d, to average 74.73m b/d in 2Q. The 3Q and 4Q, however, are expected to have experienced negative growth. The reasons are decelerating economic growth in 3Q and 4Q and declining aviation fuel consumption in 4Q. The 3Q demand is now estimated at 75.69m b/d, about 487,000 b/d, or 0.64 per cent, less than that of 3Q00. Likewise, 4Q demand is expected to be 76.39m b/d, nearly 709,000 b/d, or 0.92 per cent, less than that in 2000.

OECD

Having grown by as little as 0.3 per cent in 2000, OECD product deliveries posted a decline of 140,000 b/d, or 0.29 per cent, to average 47.70m b/d in 2001. This drop would be the sum of a 193,000 b/d decline, a 135,000 b/d rise and a 82,000 b/d decline in North America, Western Europe and OECD Pacific, respectively. The considerable declines in the 3Q and, especially, 4Q are behind the yearly drop in 2001 demand in the OECD. In addition to the weakening GDP growth rate prospects in the OECD Pacific, the estimated lower aviation fuel consumption, especially in the USA, has been responsible for the overall reduced demand in the region.

Total OECD oil requirements in 4Q01 demonstrated a significant decline of 778,000 b/d, or 1.60 per cent, compared with the same period in 2000. This was the net result of drops of 790,000 b/d, or 3.23 per cent, in North America and of 20,000 b/d, or 0.23 per cent, in OECD Pacific requirements, which were partly offset by a rise of 32,000 b/d, or 0.21 per cent, in those of OECD Europe.

Developing countries

Oil demand in developing countries is now expected to experience a minor rise of 51,000 b/d, or 0.27 per cent, to average 18.84m b/d for the year. The estimated growth rate in consumption has been revised up slightly for the Asian group of countries, from the previous 0.46 per cent to 0.48 per cent. The fundamental factor behind the lack of growth in demand is that Asian regional GDP is projected to grow at a lower-than-anticipated rate. These economies are highly export-dependent and are extremely reliant upon the health of their trading partners. The demand growth rates for Middle East and Africa have not changed. However, the demand growth rate for Latin America has been revised down.

Other regions

In the former CPEs, apparent demand is estimated to grow by 139,000 b/d, or 1.52 per cent, to average 9.32m b/d for 2001; this is lower than the previous projection of 9.34m b/d. Trade and production data for 1Q have been revised, showing that apparent FSU demand rose by 7.01 per cent, or 259,000 b/d, compared with the year-earlier figure. The most recent assessments point towards growth of 2.92 per cent, or 107,000 b/d, in 2Q. For 3Q, a significant increase of 7.11 per cent, or 251,000 b/d, is expected in apparent consumption, coupled with another considerable rise of 4.83 per cent, or 202,000 b/d, in 4Q. Net exports during 1Q and 2Q were 335,000 b/d, or 8.45 per cent, and 581,000 b/d, or 14.08 per cent, higher than in the corresponding quarters of 2000. The 3Q and 4Q could have registered substantial gains, 364,000 b/d, or 8.15 per cent, and 372,000 b/d, or 9.28 per cent, respectively. The FSU's net oil exports in 2001 would, therefore, display an overall yearly average substantial rise of 414,000 b/d, equivalent to 9.98 per cent. The motives behind consistently rising exports seem to be relatively favourable oil prices and the need for more revenue, in order to service international loans. A considerable drop in Chinese apparent consumption is shown in indigenous production and trade data for the first three months of the year. Apparent demand declined by 355,000 b/d, or 7.53 per cent, during 1Q, according to the latest figures. Even though the decrease seems huge, one has to bear in mind that this comparison is made with 1Q00, when demand surged by record figures. Apparent demand in 2Q, however, demonstrated a significant rise of 594,000 b/d, or 13.59 per cent. This was

in line with the considerable recovery in total imports, which registered an impressive 44.46 per cent rise in 2Q. The 3Q consumption posted a 243,000 b/d, or 4.96 per cent, decline, followed by a similar fall of 186,000 b/d, or 3.94 per cent, in 4Q.

Forecast for 2002

Although all quarterly averages have been adjusted, the 2002 world demand forecast has undergone little change, at 76.22m b/d, compared with the previous month's forecast of 76.23m b/d. The average yearly increment has remained basically the same and now stands at 357,000 b/d, or 0.47 per cent, compared with the 346,000 b/d, equivalent to 0.46 per cent, mentioned in the previous report.

The estimated 2002 growth level is significantly higher than that of 2001. However, this assessment would be subject to further adjustment as more information becomes available on major factors, such as the economic growth outlook, the trend in air travel and aviation fuel consumption, and prices. On a regional basis, the highest average yearly volume growth is forecast at 175,000 b/d, or 0.93 per cent, for the developing countries, followed by 116,000 b/d, or 1.24 per cent, for the former CPEs and 66,000 b/d, or 0.14 per cent, for the OECD.

The figures indicate that there will be a gradual mild recovery in 1Q and then 2Q. The recovery is expected to continue at a higher and increasing pace in 3Q and 4Q, when world demand is forecast to rise by 227,000 b/d, or 0.30 per cent, and 1.002m b/d, or 1.31 per cent, respectively.

World oil supply

Non-OPEC

Figures for 2001

All the total non-OPEC supply figures for 2001 have been revised down since the last report. The yearly figure is down by 60,000 b/d to 46.48m b/d, and the quarterly figures by 50,000 b/d to 46.17m b/d, 80,000 b/d to 45.95m b/d, 100,000 b/d to 46.52m b/d and 20,000 b/d to 47.28m b/d, respectively. The yearly average increase is estimated at 750,000 b/d, compared with the 2000 figure, which has also been revised down.

Expectations for 2002

Our 2002 non-OPEC supply forecast has been revised up by 120,000 b/d since the last report and is expected to witness an increase of around 1.28m b/d, compared with the estimated figure for 2001. The expected 2002 quarterly distribution is estimated at 47.74m b/d, 47.27m b/d, 47.69m b/d and 48.35m b/d, respectively, resulting in a yearly average of 47.76m b/d.

The FSU's net oil export estimate for 2001 has been revised up by around 10,000 b/d to 4.56m b/d, compared with the last report. Our forecast for 2002 has also been revised up, by 60,000 b/d to 5.13m b/d.

OPEC natural gas liquids

The OPEC NGL figures for 1998–2002 remain unchanged from the last MOMR, at 3.01m b/d, 3.07m b/d, 3.23m b/d, 3.24m b/d and 3.26m b/d, respectively.

OPEC NGL production — 1998–2002

	m b/d
1998	**3.01**
1999	**3.07**
2000	**3.23**
1Q01	3.24
2Q01	3.24
3Q01	3.24
4Q01	3.24
2001	**3.24**
Change 2001/2000	0.02
2002	**3.26**
Change 2002/2001	0.02

OPEC crude oil production

Available secondary sources indicate that, in March, OPEC output was 25.40m b/d, which was 400,000 b/d higher than the revised February level of 24.99m b/d. Table 11 shows OPEC production, as reported by selected secondary sources.

Rig count

Non-OPEC

Rig activity slowed down in March, compared with February. North America was the major contributor, witnessing a drop in the rig count of 185. The major regional decrease occurred in Canada, by 122 to 311. The other significant decline in North America was observed in the USA, by 62 to 763.

OPEC

OPEC's rig count declined by three to 243 in March, compared with February. The major declines occurred in Venezuela and Indonesia, by five and three rigs, respectively.

Stock movements

USA

US commercial onland oil stocks displayed a further draw, when they moved down by a slight 4.8m b, or a rate of 170,000 b/d, to 996.6m b during March 1–29. The draw was largely confined to a decrease of 11.1m b to 119.7m b in distillates, as apparent distillate demand rose by about ten per cent, due to late winter heating oil requirements. Fuel oil and gasoline also contributed to the draw, when they moved down by 3.2m b to 34.6m b and by 1.2m b to 211.5m b, respectively, on lower fuel oil imports and relatively healthy demand, especially for bunker fuel.

Meanwhile, a sharp drop in gasoline output, together with declining imports, was behind a draw on this product's stocks. However, a continued build in crude stocks, which rose by a further 4.6m b to 325.1m b, due mainly to a considerable downturn in crude imports, especially during the week ending March 22, reduced the total draw. The overall level of stocks was 62.0m b above last year's figure.

During the same period, the US Strategic Petroleum Reserve (SPR) rose slightly, by 1.2m b to 560.9m b.

Western Europe

Commercial onland oil stocks in Eur-16 lost part of the previous month's unseasonable build in March, when they declined by 5.6m b, or a rate of 180,000 b/d, to 1,068.0m b. This seasonal draw resulted mainly from a moderate decrease in crude oil stocks, of 7.4m b to 432.7m b, due to lower imports. Fuel oil stocks were almost the only inventories to show a build, of 1.8m b to 112.1m b, on weak bunker demand, as well as closed arbitrage to Asia. Other major product stocks remained nearly unchanged, with only marginal movements in both directions. Total oil stocks remained slightly higher than the year-ago level.

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

	Dec 28, 01	Mar 1, 02	Mar 29, 02	Change Mar/Feb	Change Mar 29, 01	Apr 5, 02[2]
Crude oil (excl SPR)	**309.9**	**320.5**	**325.1**	**4.6**	**302.1**	**326.25**
Gasoline	207.9	212.7	211.5	–1.2	194.8	208.88
Distillate fuel	137.6	130.8	119.7	–11.1	106.1	122.50
Residual fuel oil	40.9	37.8	34.6	–3.2	39.0	35.28
Jet fuel	40.7	40.5	41.0	0.5	39.9	40.85
Unfinished oils	90.6	90.1	93.6	3.5	101.1	91.55
Other oils	181.5	168.9	171.1	2.2	151.4	*na*
Total	**1,009.2**	**1,001.4**	**996.6**	**–4.8**	**934.6**	**825.31**
SPR	549.0	559.7	560.9	1.2	542.2	*na*

1. At end of month, unless otherwise stated. 2. Data from API. *Source: US/DoE-EIA.*

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

	Sep 01	Dec 01	Feb 02	Mar 02	Change Mar/Feb	Mar 01
Crude oil	**436.6**	**436.0**	**440.1**	**432.7**	**–7.4**	**415.7**
Mogas	144.6	151.8	159.6	159.2	–0.3	154.6
Naphtha	26.0	26.4	24.2	24.2	0.0	23.0
Middle distillates	323.4	331.2	339.5	339.8	0.3	337.6
Fuel oils	121.0	119.1	110.2	112.1	1.8	126.2
Total products	**615.0**	**628.5**	**633.4**	**635.2**	**1.8**	**641.4**
Overall total	**1,051.6**	**1,064.5**	**1,073.6**	**1,068.0**	**–5.6**	**1,057.1**

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

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

	Sep 01	Dec 01	Jan 02	Feb 02	Change Feb/Jan	Feb 01
Crude oil	**118.0**	**113.4**	**100.3**	**97.0**	**–3.3**	**110.2**
Gasoline	13.8	12.3	14.1	15.3	1.2	14.6
Middle distillates	45.7	37.8	37.2	34.3	–2.9	32.0
Residual fuel oil	19.9	18.5	19.0	19.0	0.0	20.1
Total products	79.5	68.6	70.2	68.5	–1.7	66.7
Overall total[2]	**197.5**	**182.0**	**170.6**	**165.5**	**–5.1**	**176.9**

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

Japan

In February, commercial onland oil stocks were drawn down for the fourth consecutive month, as they decreased by 5.1m b, or a rate of 180,000 b/d, to 165.5m b. Crude oil and distillates contributed nearly equally to this draw, falling by 3.3m b to 97.0m b and by 2.9m b to 34.3m b, respectively. The draw on crude oil was due to an increase in refinery throughput of about two per cent in February, while rising demand was behind the draw on distillates. Gasoline abated this draw, rising by a slight 1.2m b, due to higher gasoline output and weak demand. Total oil stocks were 11.4m b below the year-ago level.

Balance of supply/demand

Both world demand and non-OPEC supply estimates for 2001 have been revised down by less than 100,000 b/d since the last report, to 75.9m b/d and 49.7m b/d, respectively. These revisions have resulted in a yearly average difference of 26.1m b/d, up by less than 100,000 b/d, compared with the last report, with quarterly distributions of 27.2m b/d, 25.5m b/d, 25.9m b/d and 25.9m b/d, respectively. The balances for the first three quarters have been revised down by less than 100,000 b/d to 900,000 b/d, 1.6m b/d and 1.3m b/d, respectively, while that of 4Q has been revised up by more than 100,000 b/d to 500,000 b/d. The 2001 annual average balance is estimated at 1.1m b/d. The 2000 balance remains unchanged at 1.1m b/d.

Table J shows no change to the world demand forecast for 2002 of 76.2m b/d, while total non-OPEC supply has been revised up by more than 100,000 b/d to 51.0m b/d. This has resulted in an expected annual difference of around 25.2m b/d, down by more than 100,000 b/d, compared with the last report, with a quarterly distribution of 25.7m b/d, 24.3m b/d, 25.0m b/d and 25.8m b/d, respectively. The balance for 1Q is estimated for the first time, at –600,000 b/d.

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

	1998	1999	2000	1Q01	2Q01	3Q01	4Q01	2001	1Q02	2Q02	3Q02	4Q02	2002
World demand													
OECD	46.8	47.7	47.8	48.9	46.5	47.5	47.9	47.7	48.7	46.4	47.3	48.6	47.8
North America	23.1	23.8	24.1	24.3	23.8	24.0	23.6	23.9	24.1	24.0	24.0	23.9	24.0
Western Europe	15.3	15.2	15.1	15.2	14.8	15.5	15.4	15.2	15.2	14.6	15.3	15.6	15.2
Pacific	8.4	8.7	8.7	9.4	8.0	8.1	8.8	8.6	9.4	7.9	8.0	9.0	8.6
Developing countries	18.2	18.6	18.8	18.7	18.8	19.1	18.8	18.8	18.8	18.9	19.2	19.2	19.0
FSU	4.3	4.0	3.8	4.0	3.8	3.8	4.4	4.0	3.9	3.7	4.1	4.4	4.0
Other Europe	0.8	0.8	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7
China	3.8	4.2	4.7	4.4	5.0	4.6	4.5	4.6	4.5	5.0	4.6	4.5	4.7
(a) Total world demand	**73.8**	**75.2**	**75.8**	**76.7**	**74.7**	**75.7**	**76.4**	**75.9**	**76.7**	**74.8**	**75.9**	**77.4**	**76.2**
Non-OPEC supply													
OECD	21.8	21.3	21.8	21.8	21.6	21.8	22.3	21.9	22.3	21.8	21.9	22.2	22.0
North America	14.5	14.1	14.2	14.2	14.3	14.5	14.7	14.4	14.8	14.6	14.6	14.7	14.7
Western Europe	6.6	6.6	6.7	6.8	6.5	6.6	6.9	6.7	6.7	6.5	6.5	6.9	6.7
Pacific	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.7	0.7	0.7	0.7
Developing countries	10.5	10.8	10.9	11.0	10.7	10.9	11.0	10.9	11.3	11.1	11.3	11.4	11.3
FSU	7.3	7.5	7.9	8.3	8.5	8.6	8.8	8.5	8.9	9.1	9.2	9.4	9.2
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
China	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4	3.4
Processing gains	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Total non-OPEC supply	44.5	44.6	45.7	46.2	46.0	46.5	47.3	46.5	47.7	47.3	47.7	48.3	47.8
OPEC NGLs	3.0	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3
(b) Total non-OPEC supply and OPEC NGLs	**47.5**	**47.6**	**49.0**	**49.4**	**49.2**	**49.8**	**50.5**	**49.7**	**51.0**	**50.5**	**51.0**	**51.6**	**51.0**
OPEC crude oil production[1]	27.8	26.5	28.0	28.1	27.1	27.3	26.3	27.2	25.2				
Total supply	75.3	74.2	76.9	77.5	76.3	77.0	76.9	76.9	76.2				
Balance[2]	1.5	-1.1	1.1	0.9	1.6	1.3	0.5	1.1	-0.6				
Closing stock level (outside FCPEs) *m b*													
OECD onland commercial	2698	2446	2525	2518	2592	2656	2624						
OECD SPR	1249	1228	1210	1210	1207	1205	1222						
OECD total	3947	3675	3735	3728	3799	3861	3846						
Other onland	1056	983	999	997	1016	1032	1029						
Oil on water	859	808	876	913	833	868	845						
Total stock	5861	5466	5610	5638	5648	5761	5720						
Days of forward consumption in OECD													
Commercial onland stocks	57	51	53	54	55	55	54						
SPR	26	26	25	26	25	25	25						
Total	83	77	78	80	80	81	79						
Memo items													
FSU net exports	3.0	3.4	4.1	4.3	4.7	4.8	4.4	4.6	5.0	5.4	5.1	5.0	5.1
[(a) — (b)]	26.3	27.6	26.9	27.2	25.5	25.9	25.9	26.1	25.7	24.3	25.0	25.8	25.2

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

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

Table J *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 31, while* ***Graphs One and Two*** *(on pages 30 and 32) show the evolution on a weekly basis.* ***Tables Three to Eight,*** *and the corresponding graphs on pages 33–38, 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
December 2001 to March 2002

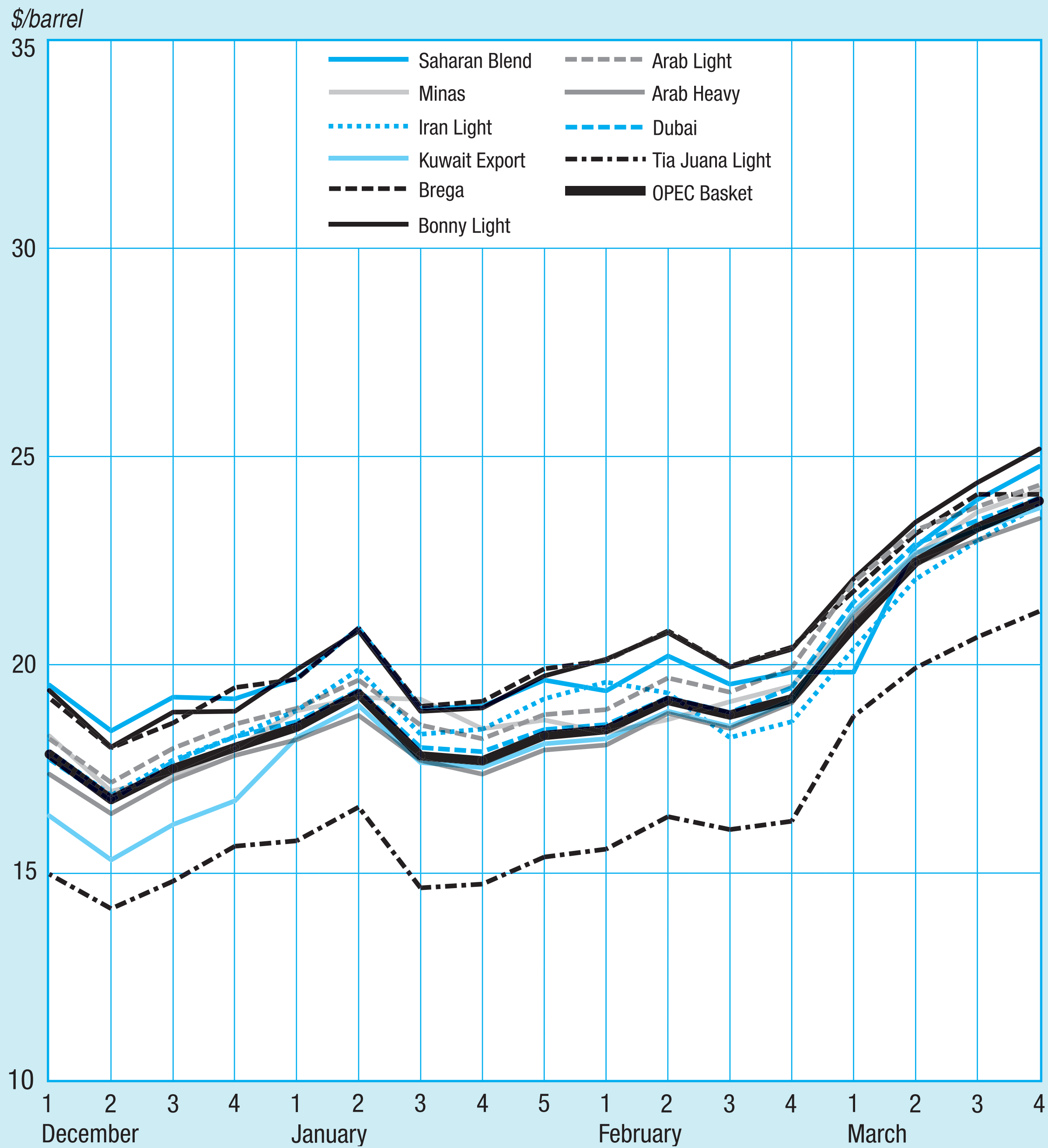


Table 1: OPEC spot crude oil prices, 2001–2002

($/b)

Member Country/ type of crude *(API°)*	2001 Mar 4Wav	Apr 4Wav	May 5Wav	June 4Wav	July 5Wav	Aug 4Wav	Sept 4Wav	Oct 5Wav	Nov 4Wav	Dec 4Wav	2002 Jan 5Wav	Feb 4Wav	March 1W	2W	3W	4W	4Wav
Algeria																	
Saharan Blend *(44.1)*	24.82	25.65	28.47	28.16	24.82	25.96	26.13	20.65	19.00	19.08	19.64	19.73	19.82	22.83	23.96	24.76	22.84
Indonesia																	
Minas *(33.9)*	25.64	27.64	28.21	27.86	25.32	24.82	24.59	19.53	18.29	17.64	18.88	18.91	21.20	22.64	23.66	24.18	22.92
IR Iran																	
Light *(33.9)*	23.58	24.05	25.58	25.80	23.78	24.68	24.54	20.04	17.64	17.69	18.95	18.95	20.38	22.05	22.97	23.83	22.31
Iraq																	
Kirkuk *(36.1)*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kuwait																	
Export *(31.4)*	22.03	22.50	24.03	24.25	22.47	23.13	22.99	18.49	16.09	16.14	18.11	18.69	21.28	22.68	23.24	23.76	22.74
SP Libyan AJ																	
Brega *(40.4)*	24.69	25.54	28.85	28.18	24.96	25.73	25.91	20.62	19.00	18.81	19.71	20.32	21.76	23.14	24.09		23.00
Nigeria																	
Bonny Light *(36.7)*	24.35	25.43	28.51	28.06	24.81	25.41	25.98	20.60	18.92	18.78	19.65	20.30	22.06	23.42	24.37	25.18	23.76
Saudi Arabia																	
Light *(34.2)*	23.77	24.24	25.77	26.17	24.03	24.92	24.73	20.16	17.82	17.99	18.83	19.47	21.98	23.23	23.79	24.31	23.33
Heavy *(28.0)*	22.57	23.15	24.60	24.88	22.61	23.77	23.63	19.36	17.00	17.21	18.00	18.61	21.13	22.43	22.99	23.51	22.51
UAE																	
Dubai *(32.5)*	23.67	24.06	25.40	25.86	23.45	24.70	24.37	19.93	17.62	17.60	18.54	19.02	21.50	22.90	23.46	24.00	22.97
Venezuela																	
Tia Juana Light[1] *(32.4)*	21.08	20.79	22.77	22.30	20.55	21.54	20.72	17.66	15.28	14.89	15.37	16.05	18.76	19.92	20.66	21.28	20.15
OPEC Basket[2]	**23.70**	**24.38**	**26.25**	**26.10**	**23.73**	**24.46**	**24.29**	**19.64**	**17.65**	**17.53**	**18.33**	**18.89**	**20.90**	**22.46**	**23.29**	**23.93**	**22.64**

Table 2: Selected non-OPEC spot crude oil prices, 2001–2002

($/b)

Country/ type of crude *(API°)*	2001 Mar 4Wav	Apr 4Wav	May 5Wav	June 4Wav	July 5Wav	Aug 4Wav	Sept 4Wav	Oct 5Wav	Nov 4Wav	Dec 4Wav	2002 Jan 5Wav	Feb 4Wav	March 1W	2W	3W	4W	4Wav
Gulf Area																	
Oman Blend *(34.0)*	23.26	23.82	25.55	25.53	23.61	24.44	24.49	19.93	17.67	17.87	18.54	19.06	21.56	22.96	23.52	24.02	23.02
Mediterranean																	
Suez Mix *(Egypt, 33.0)*	19.73	21.58	24.56	23.83	21.37	22.48	23.11	17.75	16.09	16.68	16.74	17.11	18.67	19.96	20.91	21.96	20.38
North Sea																	
Brent *(UK, 38.0)*	24.42	25.37	28.35	27.96	24.66	25.78	25.84	20.54	18.80	18.58	19.48	20.22	22.01	23.39	24.34	25.16	23.73
Ekofisk *(Norway, 43.0)*	24.34	25.38	28.45	27.59	24.55	25.70	25.73	20.35	18.70	18.51	19.35	19.88	21.54	22.98	23.96	24.90	23.35
Latin America																	
Isthmus *(Mexico, 32.8)*	22.60	22.86	24.62	24.25	22.67	23.86	23.49	18.94	16.61	16.73	17.42	18.74	20.98	22.28	23.11	23.80	22.54
North America																	
WTI *(US, 40.0)*	27.27	27.37	28.60	27.67	26.53	27.41	26.40	22.20	19.49	19.40	19.71	20.67	22.93	24.19	24.88	25.40	24.35
Others																	
Urals *(Russia, 36.1)*	21.72	23.60	26.46	25.60	23.08	24.46	25.05	19.80	17.83	18.37	18.58	18.95	20.79	22.20	23.10	23.80	22.47

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
December 2001 to March 2002

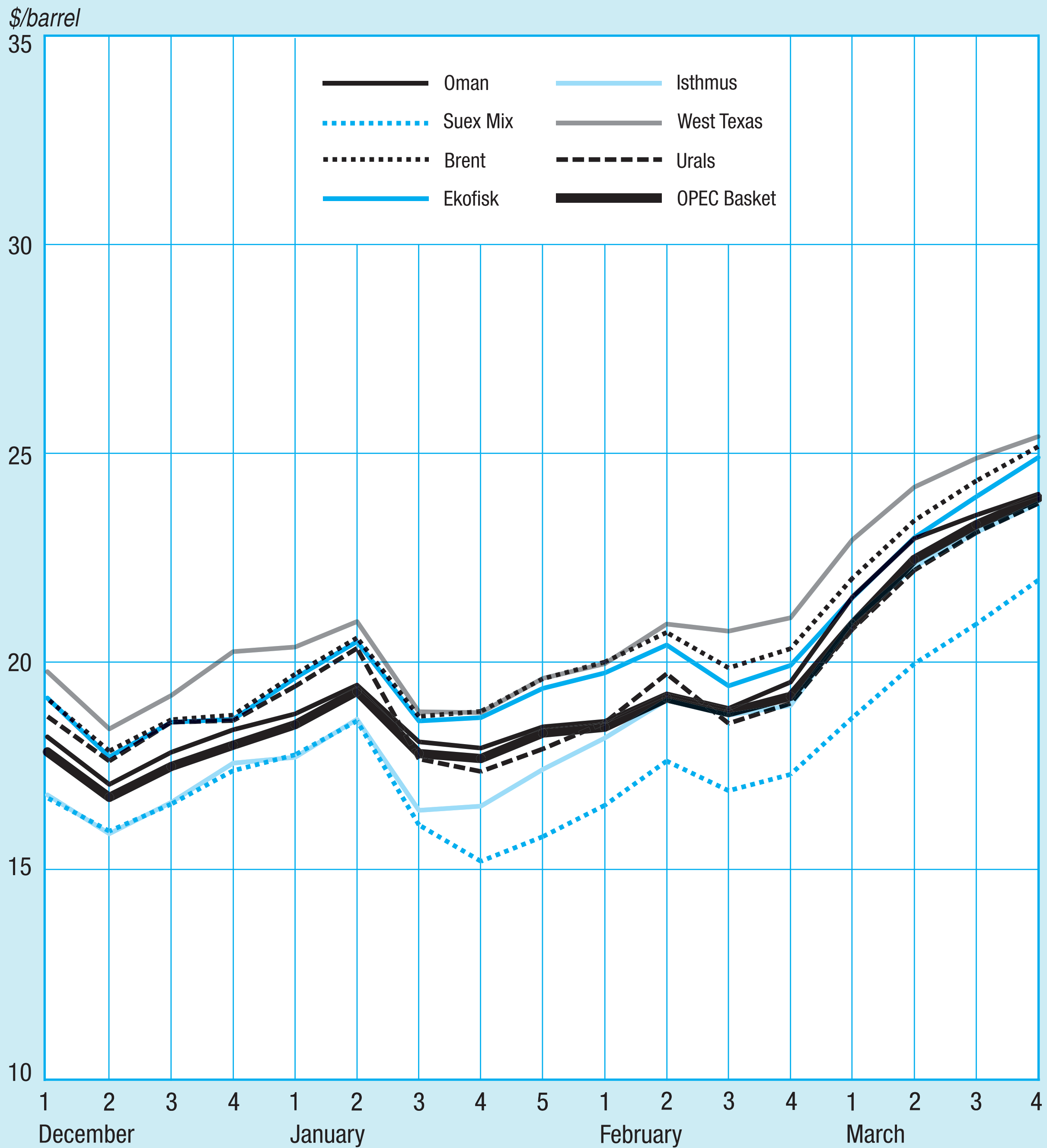


Table 3: North European market — bulk barges, fob Rotterdam *($/b)*

		regular gas	premium gas			fuel oil	
2000	**naphtha**	**unleaded 87**	**unleaded 95**	**gasoil**	**jet kero**	**1%S**	**3.5%S**
March	31.06	35.71	36.27	30.28	34.01	22.67	22.12
April	24.83	32.90	33.42	28.23	32.81	19.44	18.12
May	28.39	37.01	38.99	29.87	32.07	20.02	18.70
June	30.41	40.57	44.28	31.40	34.40	23.79	21.23
July	29.89	36.51	37.67	33.02	36.07	24.13	19.79
August	29.79	34.82	36.20	36.46	38.69	21.47	19.69
September	33.28	36.87	37.70	42.09	43.84	24.29	23.04
October	33.15	34.72	35.28	40.06	43.64	27.06	23.82
November	32.51	32.72	33.46	40.68	43.61	25.61	22.18
December	29.27	27.77	28.05	34.25	37.50	23.24	18.31
2001							
January	27.36	29.44	29.85	30.15	32.03	20.54	15.48
February	29.23	32.11	32.49	30.88	33.41	20.48	18.21
March	27.19	30.69	31.52	29.38	31.72	20.56	17.58
April	27.86	36.47	37.57	30.37	32.45	20.49	17.05
May	29.71	37.93	39.09	31.18	34.17	20.48	18.21
June	27.21	30.27	31.73	31.06	33.69	19.23	17.97
July	22.28	27.06	27.82	29.33	31.55	17.97	17.19
August	22.51	27.93	29.36	30.18	31.58	18.18	18.40
September	23.19	28.49	29.88	30.87	32.18	19.84	19.23
October	19.72	22.36	23.27	27.41	28.53	16.50	16.07
November	16.88	19.27	20.20	23.03	24.38	15.49	14.68
December	17.48	18.41	19.16	21.35	23.11	14.98	14.95
2002							
January	18.98	19.95	20.76	21.67	23.34	16.15	15.24
February	20.84	20.12	20.94	21.81	23.46	14.82	15.52
March	24.51	24.68	25.68	25.30	26.88	17.16	17.92

Sources: Until September 2000 Platt's Oilgram Price Report & Platt's Global Alert; as of October 2000 Reuters. Prices are average of available days.

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

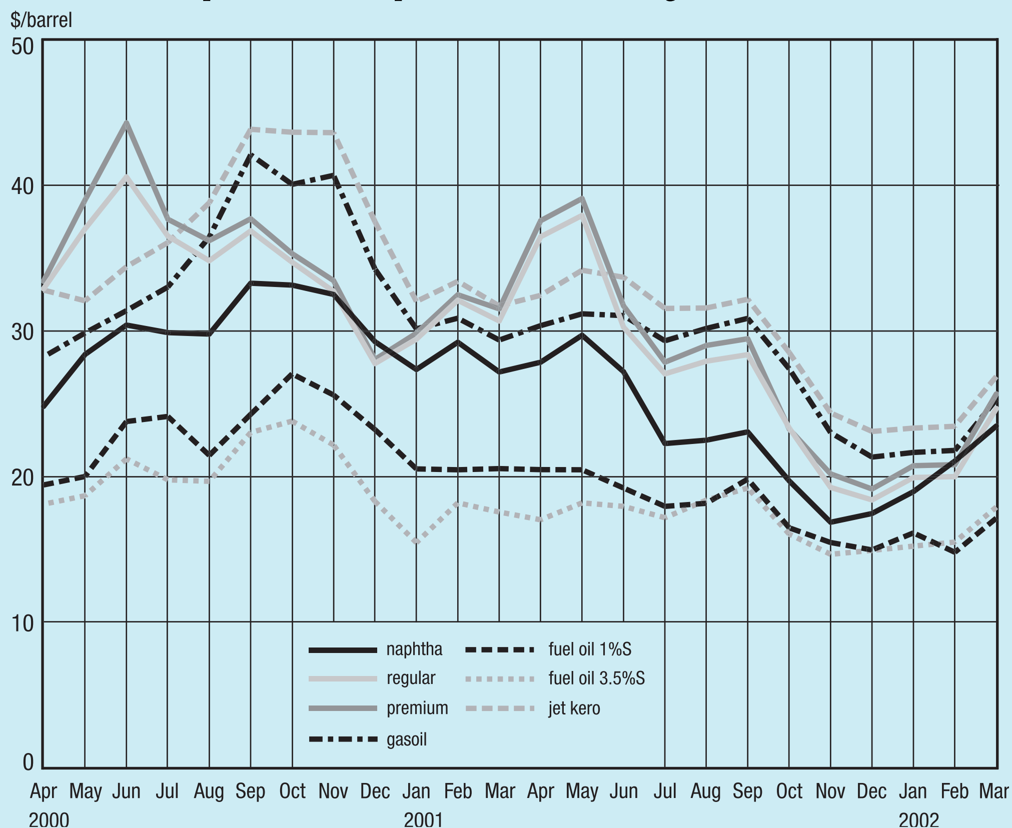


Table 4: South European market — bulk cargoes, fob Italy

($/b)

2000	naphtha	gasoline premium unleaded 95	gasoil	jet kero	fuel oil 1%S	fuel oil 3.5%S
March	29.65	36.27	29.63	32.31	22.40	21.27
April	23.41	32.77	26.69	31.16	19.28	17.09
May	27.01	38.38	29.15	29.67	20.52	16.51
June	28.93	44.06	30.14	31.99	24.50	19.95
July	28.26	38.25	32.92	34.18	23.20	18.76
August	28.14	36.67	36.09	36.60	20.85	17.85
September	31.58	37.87	41.97	41.89	25.00	21.49
October	32.48	37.20	41.53	41.85	27.16	23.58
November	32.47	33.57	40.44	40.33	24.71	19.47
December	27.74	27.79	34.92	35.99	23.46	17.96
2001						
January	26.35	28.76	27.32	28.73	20.13	14.35
February	26.04	31.89	31.32	29.11	18.80	16.86
March	24.13	30.53	27.55	27.89	18.39	16.28
April	27.07	36.43	29.00	28.28	19.23	14.96
May	29.54	39.45	29.37	29.72	19.39	15.84
June	27.15	32.21	30.98	29.40	17.71	15.89
July	21.95	25.55	27.77	27.15	17.73	15.59
August	22.26	26.60	*na*	27.74	18.20	16.93
September	23.46	29.93	*na*	29.36	18.99	17.44
October	19.14	23.55	*na*	23.61	15.61	15.07
November	16.22	19.41	*na*	20.54	13.61	12.48
December	16.91	19.11	*na*	19.16	15.15	13.15
2002						
January	18.01	19.89	22.37	19.53	17.65	14.00
February	19.46	20.06	21.29	19.74	15.62	14.88
March	23.59	24.07	24.15	22.82	17.62	16.90

Sources: Until September 2000 Platt's Oilgram Price Report & Platt's Global Alert; as of October 2000 Reuters. Prices are average of available days. na not available

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

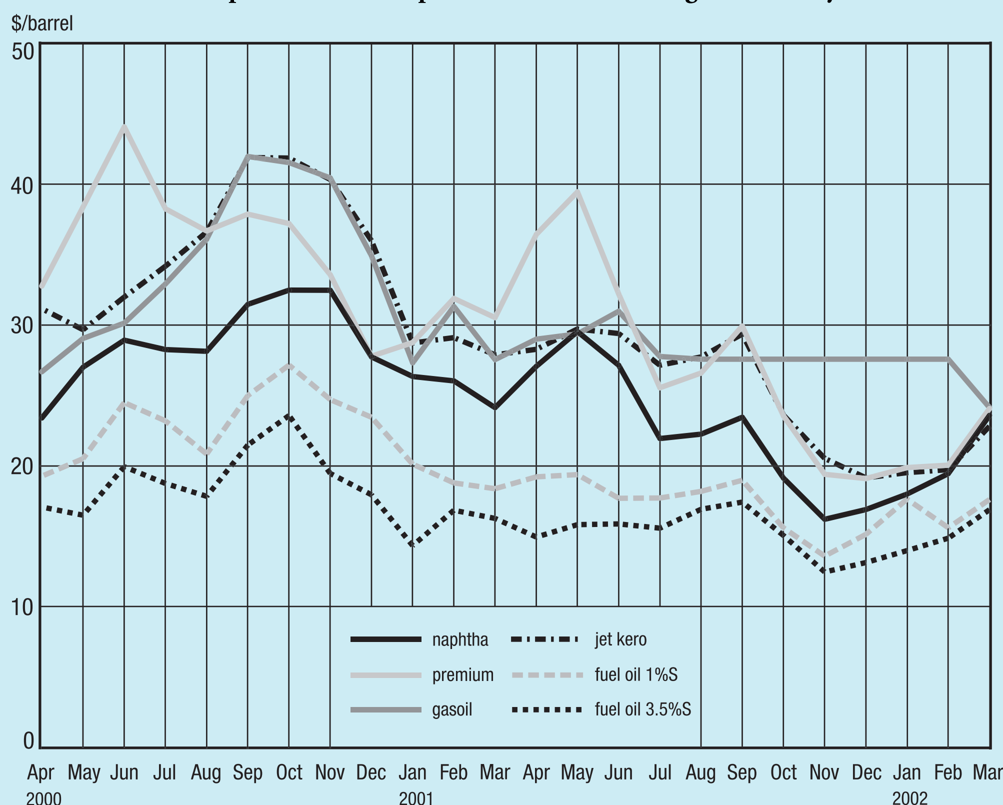


Table 5: US East Coast market — New York *($/lb, duties and fees included)*

2000	gasoline regular unleaded 87	gasoil	jet kero	fuel oil 0.3%S LP	fuel oil 1%S	fuel oil 2.2%S
March	37.10	32.01	34.31	27.07	21.06	20.87
April	30.35	30.16	32.20	26.81	20.98	19.85
May	37.17	31.39	33.26	28.66	24.59	21.86
June	40.12	32.62	33.69	30.69	27.11	23.20
July	36.04	32.53	34.42	29.28	24.44	22.20
August	36.33	37.17	38.59	29.48	24.50	21.57
September	39.90	41.25	43.80	37.21	29.42	25.39
October	39.83	41.04	42.86	36.86	29.51	25.96
November	39.56	43.46	45.52	35.43	28.66	25.26
December	30.96	39.52	40.97	34.59	25.63	22.04
2001						
January	34.81	35.51	36.03	33.09	25.40	22.34
February	34.68	32.99	34.90	31.51	23.38	19.73
March	32.96	31.12	32.91	27.61	23.31	20.30
April	39.78	32.83	33.92	27.82	22.80	17.47
May	39.06	32.48	35.60	27.84	23.09	18.58
June	30.07	31.74	32.92	24.89	20.22	17.64
July	28.69	29.31	30.10	23.71	19.33	16.72
August	32.56	30.80	32.88	23.69	20.14	18.23
September	31.61	30.71	31.77	24.02	20.24	19.80
October	25.15	26.40	26.84	20.70	17.91	16.97
November	21.68	22.97	23.63	20.28	15.98	14.97
December	21.73	21.90	22.52	20.01	16.52	15.28
2002						
January	22.90	22.53	23.63	19.23	16.07	15.22
February	23.24	22.71	24.20	18.09	14.94	14.46
March	29.31	26.70	27.23	21.79	19.35	18.91

Sources: Until September 2000 Platt's Oilgram Price Report & Platt's Global Alert; as of October 2000 Reuters. Prices are average of available days.

Graph 5: US East Coast market — New York

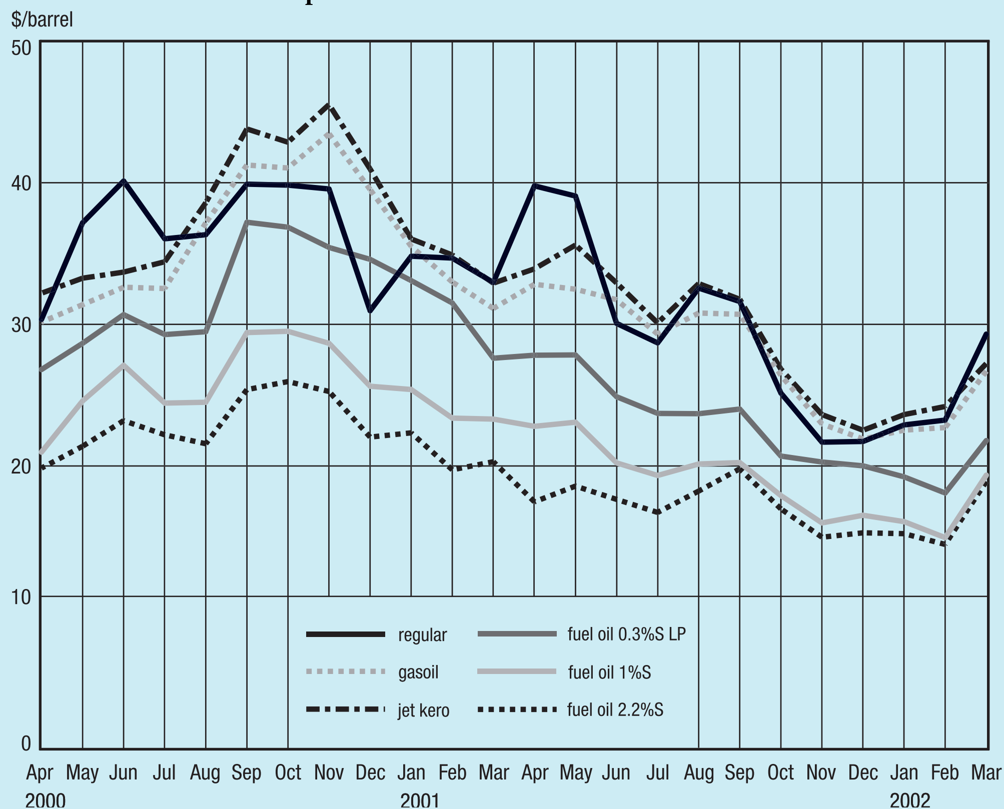


Table 6: Caribbean cargoes — fob *($/b)*

2000	naphtha	gasoil	jet kero	fuel oil 2%S	fuel oil 2.8%S
March	32.74	30.82	33.01	20.17	19.70
April	28.25	29.44	30.74	19.15	18.50
May	32.59	31.11	31.84	21.16	19.39
June	36.24	32.27	32.78	22.27	21.40
July	31.06	32.35	33.38	20.84	19.67
August	32.92	36.63	37.80	19.78	18.54
September	35.32	41.01	42.78	23.59	20.46
October	34.77	39.90	41.32	23.95	21.71
November	34.37	40.93	43.64	22.96	17.96
December	29.73	34.63	36.40	19.89	16.90
2001					
January	34.10	35.56	36.17	20.21	16.48
February	29.87	31.85	32.42	18.14	16.31
March	28.63	28.97	30.11	18.26	17.16
April	33.60	30.51	31.37	15.81	15.03
May	29.65	32.07	34.46	17.50	17.10
June	25.85	31.58	32.13	16.64	16.27
July	25.06	28.84	29.57	15.54	14.45
August	29.04	30.49	31.68	17.20	17.11
September	26.30	30.10	30.28	18.70	18.71
October	19.86	25.47	25.83	16.28	16.23
November	18.74	22.07	22.44	14.26	14.11
December	19.32	21.10	21.26	14.35	13.88
2002					
January	19.55	21.47	22.28	14.54	13.90
February	20.28	21.79	23.40	13.57	13.50
March	25.98	25.88	26.84	18.37	18.21

Sources: Until September 2000 Platt's Oilgram Price Report & Platt's Global Alert; as of October 2000 Reuters. Prices are average of available days.

Graph 6: Caribbean cargoes — fob

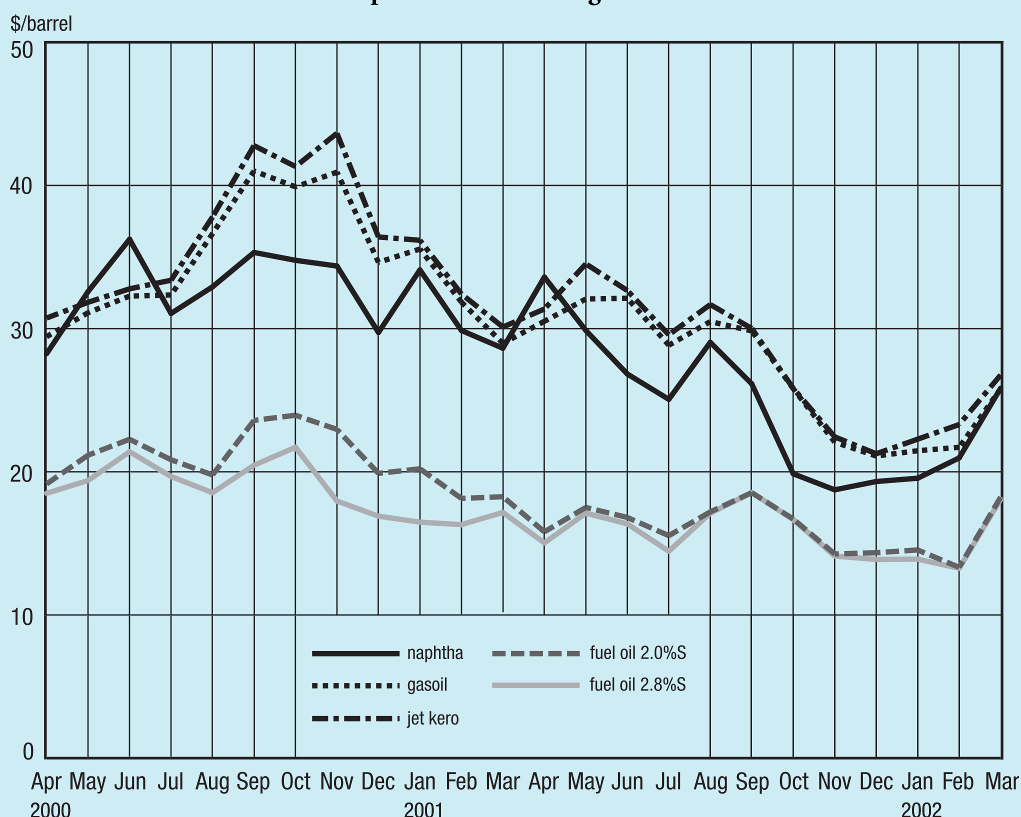


Table 7: Singapore cargoes *($/b)*

2000	naphtha	gasoline premium unleaded 95	gasoil	jet kero	fuel oil 0.3%S	fuel oil 180C	fuel oil 380C
March	29.08	32.58	32.94	32.37	25.85	24.66	24.69
April	25.01	28.01	26.73	27.99	24.54	22.13	22.39
May	27.27	31.90	28.12	29.09	26.62	23.62	23.60
June	28.13	33.08	30.69	31.23	26.78	25.30	25.31
July	27.80	36.05	31.86	33.25	25.45	22.00	22.09
August	30.19	38.31	37.46	37.98	27.08	21.57	21.64
September	34.53	35.05	40.13	42.21	28.44	24.81	24.87
October	33.50	33.03	38.96	43.30	26.77	26.35	26.55
November	30.43	32.96	34.85	39.88	26.50	24.36	24.49
December	25.52	29.97	29.61	32.92	24.45	19.78	19.74
2001							
January	25.50	30.02	28.41	29.70	22.54	18.37	17.99
February	27.83	31.33	27.57	30.48	22.68	19.91	19.69
March	27.43	29.88	26.83	28.72	22.43	20.08	20.04
April	28.14	32.76	29.80	30.25	22.60	20.48	20.47
May	28.89	32.64	30.79	30.74	23.72	22.02	22.07
June	27.57	26.89	30.00	30.84	25.11	20.26	20.16
July	24.38	24.36	28.54	28.93	24.08	19.03	19.19
August	24.33	26.68	28.71	29.37	21.03	20.70	20.94
September	24.67	29.47	29.44	31.05	20.38	21.74	21.85
October	20.58	22.23	25.53	25.92	19.10	18.53	18.72
November	18.15	20.75	21.87	22.40	15.84	15.47	15.46
December	18.36	22.61	20.11	21.77	15.78	16.15	16.44
2002							
January	19.20	20.95	20.94	22.77	16.30	16.04	16.19
February	21.86	24.11	21.76	22.54	16.83	16.99	17.14
March	25.97	27.88	24.83	25.23	17.28	19.22	19.41

Sources: Until September 2000 Platt's Oilgram Price Report & Platt's Global Alert; as of October 2000 Reuters. Prices are average of available days.

Graph 7: Singapore cargoes

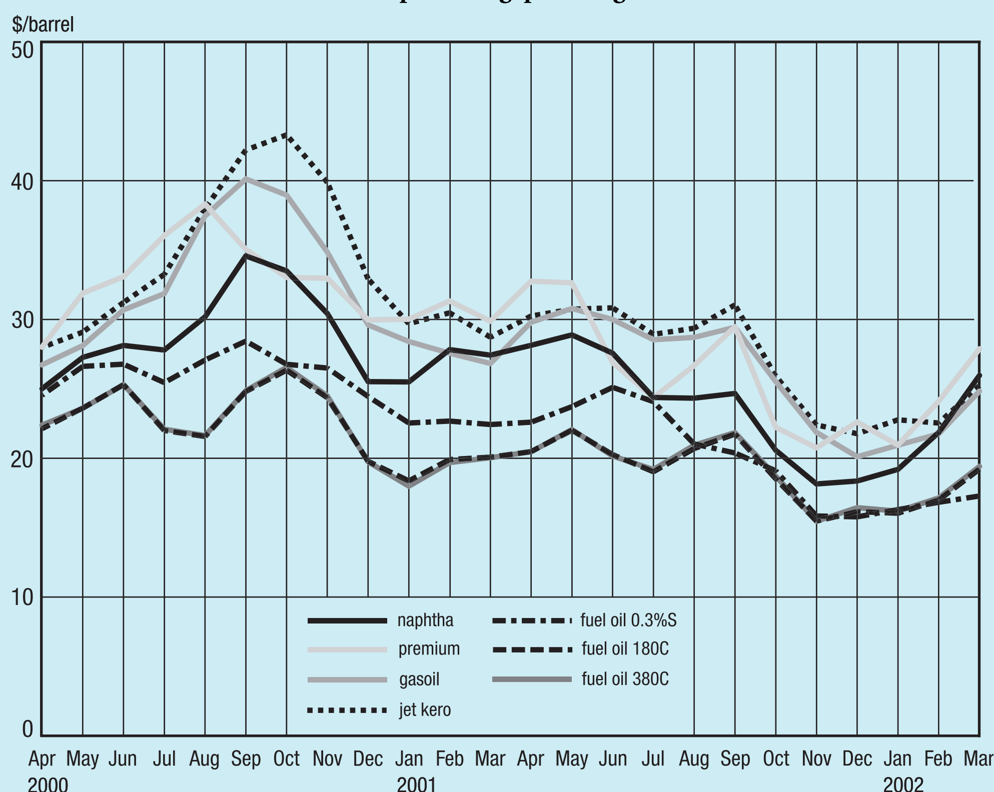
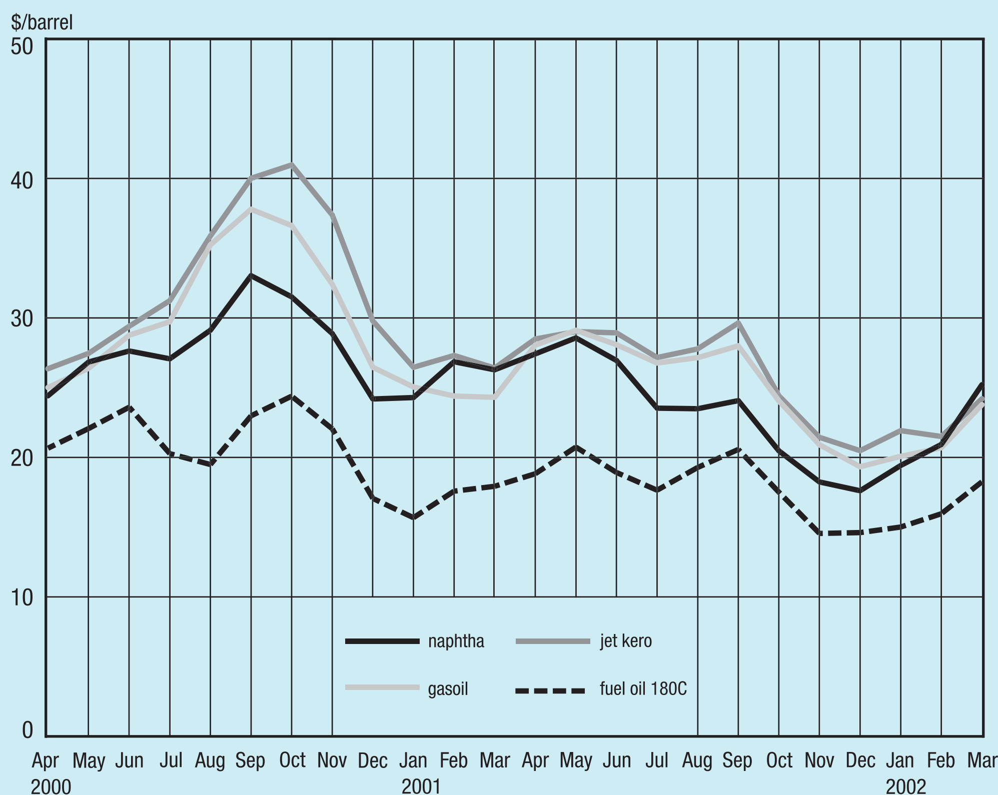


Table 8: Middle East— fob *($/b)*

2000	naphtha	gasoil	jet kero	fuel oil 180C
March	28.42	31.28	30.79	23.40
April	24.42	25.01	26.36	20.66
May	26.84	26.39	27.46	22.06
June	27.63	28.76	29.40	23.60
July	27.07	29.73	31.24	20.27
August	29.12	35.24	35.88	19.49
September	33.03	37.79	40.01	22.98
October	31.51	36.62	40.97	24.39
November	28.88	32.42	37.38	22.05
December	24.19	26.46	29.73	17.06
2001				
January	24.29	25.05	26.38	15.68
February	26.86	24.40	27.31	17.58
March	26.28	24.31	26.41	17.93
April	27.42	28.05	28.49	18.83
May	28.57	29.11	29.02	20.74
June	26.95	28.08	28.93	18.92
July	23.53	26.77	27.16	17.65
August	23.49	27.15	27.78	19.28
September	24.07	28.00	29.64	20.57
October	20.47	24.05	24.42	17.51
November	18.24	20.91	21.44	14.55
December	17.61	19.33	20.48	14.61
2002				
January	19.42	20.08	21.92	15.01
February	20.93	20.69	21.50	15.96
March	25.21	23.78	24.20	18.25

Sources: Until September 2000 Platt's Oilgram Price Report & Platt's Global Alert; as of October 2000 Reuters. Prices are average of available days.

Graph 8: Middle East — fob



UAE invests $16 billion to fuel growth and diversification

Abu Dhabi — The United Arab Emirates (UAE) invested nearly $16 billion in various sectors of the country in 2001 to spur growth and diversify its economy away from oil, according to the President of the Federation of the UAE Chambers of Commerce and Industry.

Saeed bin Jabr Al Suweidi, who is also Chairman of the Abu Dhabi Chamber of Commerce and Industry, said large investments by the public and private sectors had allowed the UAE to slash the oil sector's share in the economy and expand others sectors, mainly manufacturing.

At a meeting with a visiting Chinese delegation, he said the UAE economy had grown by 12 to 14 per cent over the past three years. Indicative of this growth was the rise in the industrial sector's share of the country's gross domestic product (GDP), which had peaked at 13.8 per cent in 2001 to become one of the main components of the economy.

Referring specifically to the value of trade between the UAE and China last year, Al Suweidi said it was around $2.8bn, stating that this should prompt both sides to work for a further expansion in "this strong economic and trade partnership".

"There is large scope for investment and economic cooperation between our countries, including (the sectors of) oil, petrochemicals, industry and services," Al Suweidi said during the meeting, which was also attended by the Governor of the Central Bank, Sultan Al Suwaidi, and the Assistant Under-Secretary at the Ministry of Petroleum and Mineral Resources, Saeed Ismail Al Khoory.

Al Suweidi said Abu Dhabi was a good base for Chinese commercial and investment activities in the Gulf and the Middle East because of its positive investment climate and its liberal economic policies, which made it a good strategic location for many businesses.

The Chinese delegation was headed by State Councillor, Wu Yi, who said the UAE had become the largest export market for China in the Middle East and the third biggest in the world after the United States and Japan.

"By the end of last year, nearly 400 Chinese companies were operating in the UAE and direct investment from the UAE crossed $40 million.

"The two countries have become strong partners and the Chinese government pays persistent attention to developing business relations with the UAE," she observed.

Middle East economic growth to remain slow until next year

London — The global economic growth currently under way in many parts of the world may not reach some of the Middle Eastern countries until next year, according to a report from the Economist Intelligence Unit (EIU) published in March.

The report predicted output around the world to rise to an average 2.7 per cent in 2002, compared with 2.3 per cent in 2001, when it ground to a halt in the final months of last year following the September 11 attacks on the United States.

The biggest increase in growth this year was expected for the USA, rising from 1.2 per cent to 2.2 per cent, and among emerging Asian countries from 3.4 per cent to 4.4 per cent.

There were also expectations of increases in output for Latin America, which saw the heaviest falls in 2001, and among sub-Saharan African countries.

The report indicated that falls in output this year were still forecast for Japan, the euro-zone countries and the transition economies.

The EIU report estimated that economic growth in the Middle East and North Africa would continue to fall in 2002 to 1.8 per cent, after suffering consecutive declines of 2.2 per cent in 2001 and 4.4 per cent in 2000.

The report suggested that countries in the Middle East would be held back by low oil prices, reduced income from tourism and continued nervousness by foreign investors, largely due to security concerns after September 11.

But in 2003, the report said growth in the Middle East would outdo the present US growth level and rise to 4.2 per cent, where it would remain for the next three years.

An anticipated longer-term impressive outlook for 2003 and 2006 for the Middle East contrasted with lower predicted economic growth rates for the USA, Japan and the European Union.

Kuwaiti petrochemicals company to market new product

Kuwait — The Petrochemical Industries Company (PIC) of Kuwait said it would soon market granular urea, according to a report by the Kuwaiti News Agency (KUNA) last month.

PIC Board Chairman and Managing Director, Saad Al-Shweib, said in the report that the firm planned to produce 650,000 tonnes per year (t/y) of the product and to increase output to 1.0 million t/y by 2003.

He noted that output of the product would open up new markets for Kuwait in Australia, Thailand, the United States, and Korea.

He added that the company would also soon conclude a study on the feasibility of increasing the production capacity of its polypropylene plant.

It was anticipated that polypropylene, used in the manufacturing of plastic, would be sold to new markets in Australia, the US, and in Europe, he noted.

In addition, Al-Shweib said the company planned to build its second olefins and aromatic derivatives plant, which would produce 300,000 t/y of styrene, 670,000 t/y of paraxylene, 460,000 t/y of low-density polyethylene, and 650,000 t/y of ethylene glycol.

These products are used in the manufacture of polyester textiles and many other plastic industries, he explained.

Al-Shweib said these two projects would further the com-

pany's standing among international petrochemical firms, as well as add to national resources and provide employment opportunities for qualified Kuwaitis.

He noted that an increase was expected in the demand for aromatic derivatives and olefins, pointing out that the company's present focus was to attract the private sector to invest in these industries.

The official indicated that the returns on investment offered in the petrochemical industry were lucrative.

US trade agency finances solar energy study in Algeria

Algiers — The Algerian office for agricultural concessions (GCA) and the United States Trade and Development Agency (USTDA) signed an agreement in the Algerian capital last month for the financing of a solar energy study.

Under the terms of the agreement, USTDA would fully finance a study on the use of solar energy for oil exploration drilling and for agricultural irrigation in southern Algeria.

The study, to be carried out by a US appraisal office, plans to use solar energy resources to produce electricity necessary to pump water for the development of agriculture.

Algeria has sizeable solar resources, covering the entire country.

Experts say the solar resources available in the country could satisfy the country's energy needs for agricultural development.

UAE projects fall in budget deficit for 2002

Abu Dhabi — The UAE announced a significant reduction in its budget deficit for the year 2002, compared to that of last year.

Announcing the 2002 budget of $6.325 billion, with a deficit $590 million, the UAE's Minister of State for Finance and Industry, Mohammed Khalfan bin Kharbash, said projected revenue for this year was estimated at $5.732bn.

"The budget reflects a healthy economy showing positive signs with higher income and controlled expenditure," Kharbash commented.

Kharbash said the main priorities in this year's budget was to support the education sector, improve health services, social security, electricity and water, as well as other infrastructural development.

He said three main highways would be constructed in the country — the Dubai-Ras Al Khaimah highway, the Dubai-Fujairah highway and the Idhin-Taweyeen highway in the Northern Emirates. Investment outlay for these projects was put at $216m.

"The government will continue to support higher education, the e-government initiative and work towards improving the financial system in the country by implementing the performance budgeting system and other government services," he explained.

He noted that priority would be given to develop the housing sector for nationals.

He said a sum of $439m had been allocated for higher education in this year's budget, a growth of 3.95 per cent over last year.

The biggest increase in allocation was to the higher colleges of technology.

Meanwhile, the health sector was allocated $459m, the same as last year, while the social security sector was due to receive $527m.

Of the $5.732bn projected revenue for 2002, the local Emirates' contribution was $3.737bn and internal revenues were $1.991bn (a rise of 8 per cent over last year).

The government's expenditure towards salaries was put at $2.226bn, services $767m, infrastructure $238m, investment costs $90m and autonomous departments $1.172bn.

Japan pledges loans for projects in Indonesia

Jakarta — The Japanese government has pledged loans totalling $1.3 billion to revive several large projects in Java that were suspended by the Indonesian government during the 1997 economic crisis, it was reported in the Indonesian capital last month.

The loans would be used to finance the development of the 1,300 megawatt Tanjung Bati B coal-fired power plant in Central Java and PT Trans Pacific Petrochemical Indotama's petrochemical project in East Java, the daily English-language *Jakarta Post* newspaper said, quoting the East Javanese Governor, Imam Utomo.

The loans were expected to be disbursed in June and September, according to the report.

Separately, the Japan Bank for International Co-operation has also finalised a yen-denominated loan of around $413 million for a gas pipeline connecting South Sumatra to West Java, the report said, quoting the state gas company, PT Perusahaan Gas Negara (PT PGN) President, WMP Simandjuntak.

A formal agreement for the loan would be signed in June or July, the report noted.

PGN would be using $73m from its own resources to finance the pipeline, Simandjuntak explained.

Venezuela's Carbones del Guasare reports record coal sales

Caracas — Carbones del Guasare, a unit of the state oil corporation Petroleos de Venezuela (PDVSA), has set record sales of 47 million tonnes of coal, PDVSA reported last month.

The company said the record was achieved recently when

Carbones del Guasare delivered a shipment of 54,700 tonnes of coal to the Indian ship, *Rani Padmini.*

Coal from the Guasare region in Zulia State, Western Venezuela, is considered to be a premium quality product and is widely accepted on many markets.

Guasare coal is currently exported to Morocco, Germany, Italy, Brazil, Holland, Mexico, Puerto Rico, Peru, Israel and the United States.

European firm awarded contract for Saudi acetic acid plant

New York — Technip-Coflexip has been awarded a contract for the design and construction of an acetic acid plant, due to be sited in the complex of the Arabian Industrial Fibres Company at the industrial city of Yanbu in Saudi Arabia.

The 30,000 tonnes/year plant will use new acetic technology based on the oxidization of ethane, which has been developed by the Saudi Arabian Basic Industries Corporation (SABIC) Research and Development Centre in Riyadh.

Technip-Coflexip's scope of work includes project management, engineering, procurement of equipment and materials, construction, pre-commissioning, and assistance for the commissioning and start-up.

The project will be carried out by the engineering centre of Technip-Coflexip, based in Rome, with the construction being handled by the group's local affiliate, Technip Saudi Arabia.

The plant is scheduled to go onstream at the beginning of the second quarter of 2004.

The acetic acid production will be used by Arabian industrial fibres as a feedstock to produce PTA, an intermediary product in the manufacture of polyesters.

QAFCO profits soar 63 per cent over target

Doha — The Qatar Fertiliser Company (QAFCO) achieved a net profit of $80 million in 2001, up by 16.5 per cent over the previous year.

The profit, the fourth largest in QAFCO's history, exceeded the budgeted target for 2001 by 63 per cent, the company said.

Outlining the company's results, QAFCO Managing Director, Khalifa Al-Sowaidi, said several factors contributed to the success seen last year.

He explained that enhanced exports and the successful implementation of cost-cutting measures had helped bring down operating expenses to $100m — around $9m below the estimated figure.

Regarding the company's output, Al-Sowaidi said all QAFCO plants set new production records last year.

Total urea output reached 1.68m tonnes/year, surpassing the budgeted figure of 1.60m t/y by five per cent and the previous year's urea production by 1.1 per cent.

QAFCO ammonia output last year amounted to 1.41m t/y, as against the 1.33m t/y listed in the budget plan, which was six per cent above target and 5.5 per cent in excess of ammonia production experienced in 2000.

The company's ammonia sales last year rose to 473,307 t/y, exceeding the budgeted figure by 16.6 per cent and surpassing the previous year's exports by 26.6 per cent.

Urea exports stood at 1.61m t/y in 2001, which was 1.8 per cent in excess of the set target, but 1.8 per cent below QAFCO's urea exports recorded the previous year.

The main importers of QAFCO ammonia in 2001 were India (with 59 per cent of the total) Jordan (nine per cent), the United States (seven per cent), Australia (seven per cent), Thailand (four per cent), Korea (four per cent), the Philippines (three per cent), Taiwan (three per cent), South Africa (three per cent), and Tunisia (one per cent).

QAFCO's main urea importers were Vietnam (20 per cent), the US (15 per cent), Australia (13 per cent), South Africa (10 per cent), Thailand (10 per cent), the Philippines (nine per cent), Japan (seven per cent), Canada (three per cent), Sri Lanka (three per cent), Sudan (one per cent), and other countries (nine per cent).

Ammonia and urea prices dipped slightly in 2001, hovering around the $135 per ton level for ammonia (as against $157/t in 2000) and $107/t for urea, compared with an average of $109/t the previous year.

Several factors had contributed to the downward trend in prices in 2001, QAFCO said. These included the emergence of new production capacity in Asia, the Middle East and Latin America, and the continued supply from the republics of the former Soviet Union, in addition to sagging prices for natural gas in the USA.

Algeria, Iraq to set up joint-venture companies

Algiers — Algeria and Iraq have agreed to set up two joint-venture companies for the production of pharmaceuticals and agricultural equipment, it was officially reported last month.

The announcement was made by the Algerian Minister of Industry, Abdelmadjid Menasra, at the end of an Algerian trade exhibition in Baghdad.

The event attracted around 100 Algerian public and private firms, representing various sectors, including energy, the mechanical industry, foodstuffs, electronics, and pharmaceuticals.

Menasra told a press conference that such trade events would be held more frequently in the future, and would comprise the largest range of Algerian products.

He said Algerian exports to Iraq were valued at around $450 million, noting that the volume of bilateral trade was set to rise in the coming years, thanks to the setting up of a free trade area between the two countries.

During his stay in Iraq, Menasra met several high-ranking officials, including the Vice-President, Taha Yassin Ramadan.

Indonesia's PT Timah to expand into coal mining business

Jakarta — Indonesian tin mining company, PT Timah, will take over several coal-mining companies in the Kalimantan region, in a bid to overcome a fall in income due to the currently depressed price of tin, the firm's new Managing Director, Thobrani Alwi, said last month.

"This is one of the strategies of expanding business. It does not mean we will change our core business, as coal is also a mining commodity," he noted.

Thobrani was named the new Managing Director of the company at an extraordinary shareholders' meeting, replacing Erry Riyana Hardjapamekas.

Thobrani explained the selection of the companies would be undertaken once the necessary due diligence had been carried out on a number of coal-mining companies in Kalimantan. He declined to say how much financing would be needed for the takeover.

Thobrani said the prospects for the coal business looked brighter than those of tin, especially because the price of tin currently stood at only $4,000/tonne and tin deposits on Indonesia's Bangka Island were only exploitable for up to a period of 10 years.

"Even if the price tops $5,300/t, like in the year 2000, exploitation of the tin deposits could last for six to seven years only," he pointed out.

Thobrani said he hoped the move to include coal in the company's portfolio could reap returns for PT Timah in two to three years' time.

PT Timah recorded a consolidated net profit of a meagre 36.8 billion rupiahs in 2001, 89 per cent lower than the previous year.

European firm wins contract for power project in Algeria

New York — ABB, the global power and automation technology group, last month won a $30 million contract from Algeria's national power company, Sonelgaz, to install five new electricity load dispatch centres and a related information technology (IT) system.

The contract calls for the provision of one national control centre, four regional centres, and a back-up centre.

The IT package includes computer systems, data acquisition terminals, and associated buildings.

The new load dispatch centres will use ABB's energy management system to control the 247 power stations and substations that make up the Sonelgaz electricity supply network.

"Improving Sonelgaz's capability to collect and monitor data through a fully integrated system will help them get the most out of their existing generation and transmission infrastructure," the Executive Vice-President and Head of ABB's Utilities Division, Richard Siudek, said.

"These new facilities will benefit our customers and consumers by providing better network quality, safety and cost savings," he added.

The new load dispatch centres are designed to improve the monitoring and control of Sonelgaz's power generation resources and transmission system. The centres are scheduled to start operation in early 2004.

Iran's petrochemical exports to earn $800m

Tehran — Iran's petrochemical exports have earned the country $753 million in revenue so far during the Iranian year that was due to end in March 2002. This figure was expected to top $800m by end of the period, it was reported in the Iranian capital last month.

The Managing Director of the Iran Petrochemical Commercial Company (IPCC), Mohammad Ehtiati, said the volume of petrochemical exports had exceeded four million tonnes this year, unchanged from the previous fiscal year.

The country's petrochemical exports were valued at $830m last year.

Ehtiati said the slump in oil prices in international markets, followed by a decline in the price of petrochemical products, were the main reasons behind the lower export revenues for the 2001 fiscal year.

He predicted there would not be a major change in petrochemical prices in international markets in fiscal 2002.

Ehtiati expressed hope that with several petrochemical development projects due to come onstream, coupled with higher production, the country's exports would reach a value of $1.0 billion next year.

"If market prices are restored to where they were in 2000, then exports could even exceed the $1.0bn mark," the IPCC official was quoted by the official Islamic Republic News Agency (IRNA) as saying.

He said that out of a total of 8.0m tonnes of petrochemicals produced by Iran on a yearly basis, of that 4.0m t where sold on the domestic market, while the remainder of the output was exported.

Ehtiati noted that by implementing a pre-sales plan, his company was able to line up $600m worth of financing from foreign sources this year, a significant proportion of which would come from European banks.

He said over 50 countries were the customers of Iranian petrochemical products, and 10 more were added to the list recently.

Ehtiati disclosed that discussions were underway with Saudi Arabia, the largest producer of petrochemicals in the region, to share expertise in such areas as the transfer of technology and marketing.

He said the Iranian company had plans to assign exclusive representations to 20 foreign companies that had already established themselves in countries where the IPCC was not active, such as in Turkey, Spain and Pakistan.

OPEC Fund's Governing Board holds its 98th Session in Vienna

In March, the Governing Board of the OPEC Fund for International Development held its 98th Session, at which it approved seven new loans totalling $76 million, and two grants totalling $345,000 aimed at supporting a literacy programme in Honduras and strengthening the social sector in Palestine. Also during the month, emergency assistance of $300,000 was extended to victims of the recent earthquake in Afghanistan.

No 30/2002
Vienna, Austria, March 14, 2002

OPEC Fund Governing Board holds 98th Session

The Governing Board of the OPEC Fund for International Development last month convened its 98th Session at the Fund's headquarters in Vienna, Austria.

Following adoption of the meeting's agenda, the Director-General of the Fund, HE Dr Y Seyyid Abdulai, reporting to the Board on the Fund's activities, indicated that on a cumulative basis, and as of the end of February 2002, $4,873.7 million had been approved in loans to the public sector and $3,116.1m disbursed. These loans, which were extended for project and programme financing and balance of payments support, as well as within the framework of the HIPC Initiative, number 913. All major economic and social sectors have benefited from the Fund's assistance, including agriculture, transportation, health, education, water supply and sewerage, industry, energy, etc.

OPEC Fund for International Development, Parkring 8, PO Box 995, 1011 Vienna, Austria. Tel: +43 1 515640; fax: +43 1 513 9238; tx: 1-31734 fund a; cable: opecfund; e-mail: info@opecfund.org; Web site: http://www.opecfund.org.

The Director-General further indicated that a total of twenty-three operations had been approved under the Fund's Private Sector Facility. As of the end of February 2002, cumulative commitments through this window totaled $111.7m.

In addition, the Fund has approved a total of 572 grants in support of various activities in the areas of technical assistance, food aid, emergency relief and research. Cumulative grant commitments, as of the end of February 2002, amounted to $252.1m, of which $170.4m has been disbursed. Moreover, the Fund has contributed, in grant form, substantial amounts to the resources of other international development institutions benefiting the South; these contributions total $971.8m, most of which has been disbursed. To date, the Fund has provided development assistance to 109 countries in Africa, Asia, Latin America and the Caribbean, the Middle East and Europe.

In last month's session, the Board approved seven public sector project loans totalling $76.0m. Details are as follows:

Country/project	*$ million*
Bangladesh	
Greater Rajshahi electricity	8.0
Cuba	
Almendares river basin rehabilitation	10.0
Morocco	
Water supply	15.0
Niger	
Public works II	10.0
Pakistan	
Provincial road sector development	15.0
Rwanda	
Umutara community resources and infrastructure development, phase II	8.0
Tunisia	
Higher Institute of Technology	10.0
Total	**76.0**

All of the above loans have a maturity of 20 years, including a grace period of five years, and carry interest at rates ranging from one per cent to 1.5 per cent, with the exception of the loans to Cuba, Tunisia and Morocco (middle-income economies) which bear interest rates of 3.5 per cent.

The projects will be co-financed with the governments of the beneficiary countries and with other donors including two OPEC aid institutions — the Arab Fund for Economic and Social Development and the Kuwait Fund for Arab Economic Development.

Other contributors include the Asian Development Bank, the government of India, international non-governmental organizations and the International Fund for Agricultural Development.

The Board also approved two new grants aimed at financing activities in the multi-sectoral and education sectors. They total $345,000 (see press releases nos 31 and 32/2002), and are broken down as follows:

— $150,000 in support of a literacy programme in Honduras;

— $195,000 towards an initiative to strengthen the social sector in Palestine.

The Board also discussed the Fund's Private Sector Facility; five new private sector investment proposals were approved; a number of pipeline proposals considered and policy papers examined. Additionally, a progress report was reviewed.

Within the context of the Enhanced Heavily Indebted Poor Countries (HIPC) Initiative, the Board approved two loans: Ethiopia ($6.6m) and Rwanda ($5.6m). The financing will help ease the debt burdens of the recipient countries.

Also in last month's session: the Board reviewed financial and budget matters; examined a report on the implementation of the Fund's organizational strengthening programme; considered a draft of the Fund's 2001 Annual Report; examined a progress report on ongoing grants; discussed a note on the completion of the 14th Lending Programme (2000–2001); examined a progress report on the implementation of the HIV/AIDS Special Account and looked at operations under active consideration in the public sector.

The next Governing Board Session will take place in Vienna, Austria on June 13, 2002.

No 31/2002
Vienna, Austria, March 14, 2002

Literacy programme in Honduras receives boost with $150,000 grant

The OPEC Fund for International Development has approved a grant of $150,000 in support of a ten-year programme aimed at boosting literacy levels among young people and adults in under-served areas of Honduras. Sponsored by the National Commission for Non-Formal Education, goals are to equip those excluded from the regular schooling system with the basic skills needed to enable them to integrate into the work force. In so doing, the aim is to strengthen the country's human resource base and, ultimately, reduce poverty.

Over the past decade, the government of Honduras, civil society and NGOs have tried hard to resolve Honduras' illiteracy problem by developing a 'non-formal' education system. Success, however, has been limited and coverage remains inadequate. In 1998, government established the Commission to fill this gap, and charged it with promoting an informal means of raising literacy among populations above the traditional school age. The Commission works hand-in-hand with other NGOs and institutions to realize its aims.

During the first year of the programme, literacy and basic education courses will be offered in departments experiencing the lowest levels of literacy, namely, Santa Barbara, Lempira, Copán Valle, Ocotepeque and Choluteca. The Commission will prepare and implement a professional training scheme based upon the participants' interests, needs, capabilities and community resources. Once a plan of action is established, some 1,700 volunteer educators will receive training in teaching methodologies and the use of learning materials, and will be rewarded with small grants based upon the number of students enrolled, and the number of days worked. Appropriate learning materials will be designed and supplied to beneficiaries of the programme. In the first year alone, some 25,000 people are expected to benefit from the programme. These successes will then be replicated in other needy areas of the country.

Data summary

Sector:
Education.
Programme:
Literacy and basic integral education for young people and adults in Honduras.
OPEC Fund grant:
$150,000
Beneficiary:
Republic of Honduras.
Total cost:
$614,820 (for 2002).
Co-financiers:
The National Commission for Non-Formal Education (the Commission); National Institute for Vocational Training (INFOP); and NGOs.
Executing agencies:
The Commission and INFOP.
Grant administrator:
OPEC Fund.
Programme duration:
Ten years (2002–2011).

No 32/2002
Vienna, Austria, March 14, 2002

Fund extends grants totalling $195,000 to help Palestine

The OPEC Fund for International Development has approved grant assistance amounting to $195,000 in support of two schemes aimed at addressing some of the immediate social needs of Palestinians affected by the ongoing violence in the West Bank and Gaza Strip.

Since the onset of the Intifada in September 2000, the Palestinians' living conditions have deteriorated drastically. Unemployment rates are rising, and movement restrictions imposed on the Palestinians have undermined their access to medical supplies, food and health care services. As part of its ongoing endeavors to improve living conditions and foster self-sufficiency among the affected population, the OPEC Fund has approved assistance to the following two operations:

Equipping the Mechatronic and Automation Laboratory at the Palestinian Polytechnic University (PPU) with an Integrated Mechatronic and Automation Unit (IMAU). PPU was established in 1978 as one of the leading higher educational institutions in Palestine, and turns out a number of highly qualified engineers and technicians each year. The IMAU will enable the university to provide advanced technical training for biomedical engineering students on the maintenance and repair of medical equipment. Strengthening the skills of the workforce in this area will help Palestinian hospitals cope with the rising numbers of conflict-related illnesses and injuries. A Fund grant of $120,000 will fully finance the cost of procuring the necessary equipment.

The Fund will also provide a $75,000 grant to the Hawwa Centre for Culture

and Arts, a non-profit NGO established in 1994. Proceeds will be used to help establish a charitable bakery in Nablus. With a production capacity of 2,500 kg of bread per day, of which 300 kg will be distributed free of charge to needy families, the bakery will create job opportunities for 15 poor women who are the sole wage earners of their households. Revenue generated will form a working capital for the bakery and contribute further to the Centre's activities.

Data summary

Sectors:
Health and multi-sectoral.
Projects:
1. Equipping the mechatronics lab of the Palestinian Polytechnic University (PPU) in Hebron.
2. Establishment of a charitable bread bakery in Nablus.
OPEC Fund grants:
1. $120,000
2. $75,000
Beneficiary:
Palestine.
Total costs:
1. $120,000
2. $40,000
Cofinanciers:
1. ——
2. Welfare Association, Hawwa Centre for Culture and Arts.
Grant administrator:
Arab Fund for Economic and Social Development.
Projects' duration:
Between 3–6 months.

No 33/2002
Vienna, Austria, March 29, 2002

Humanitarian aid extended to Afghan earthquake victims

The OPEC Fund for International Development has approved an emergency assistance grant of $300,000 to Afghanistan to help purchase relief items for victims of a series of earthquakes that stuck the country in March. With the most severe quake measuring 6.2 on the Richter scale, the death toll has reached 1,800, nearly 4,000 people have been injured and well over 30,000 people have lost their homes.

The majority of the damage has occurred at the quake's epicentre at the Baghlan Province in northern Afghanistan. According to latest reports, the town of Nahrin is almost completely destroyed. As a result of the coordinated approach among the Afghan authorities, UN agencies and non-governmental organizations, a large portion of affected population's most urgent needs have been met. Further international assistance, however, will be required to meet any potential shortages of emergency supplies. Additionally, as Nahrin is a drought-affected area, there is little likelihood this year of a harvest; therefore, primary focus will be placed on ensuring food security. Other areas of attention include establishing a plan for reconstruction and addressing the special needs of women and children.

The OPEC Fund's contribution to the aid effort will be used to help procure essential relief items, and will be channeled through the UN Office for the Co-ordination of Humanitarian Affairs.

March

Secretary General's diary

An official visit to Russia was organized by the Ministry of Energy of the Russian Federation, Moscow, Russian Federation, March 3, 2002.

A lecture on *OPEC's role in world oil market stability* was delivered at the Diplomatic Academy of Vienna, Vienna, Austria, March 20, 2002.

Secretariat missions

A symposium on *Scientific research and technology development in the Arab world* was organized by the Arab Science and Technology Foundation (ASTF), Sharjah, UAE, March 24–27, 2002.

Forthcoming OPEC Meetings

The *38th Meeting of the Ministerial Monitoring Sub-Committee (MMSC)* will be held at the OPEC Secretariat, Vienna, Austria, June 25, 2002.

The *120th (Extraordinary) Meeting of the Conference* will be held at the OPEC Secretariat, Vienna, Austria, June 26, 2002.

The *106th Meeting of the Board of Governors* will be held at the OPEC Secretariat, Vienna, Austria, August 20, 2002.

The *98th Meeting of the Economic Commission Board* will be held at the Secretariat, Vienna, Austria, September 9, 2002.

The *39th Meeting of the MMSC* will be held at the OPEC Secretariat, Vienna, Austria, September 17, 2002.

The *121st Meeting of the Conference* will be held at the OPEC Secretariat, Vienna, Austria, September 18, 2002.

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